

# Good Practices in **South-South and Triangular Cooperation** for **Sustainable Development** – Volume 4





Copyright: UNOSSC/UNDP, 2022  
All rights reserved

**United Nations Office for South-South Cooperation**

304 East 45<sup>th</sup> Street, FF 11th Floor  
New York, NY, 10017, USA

September 2022

**Disclaimer**

The views expressed in this publication are those of the author(s) and do not necessarily represent those of the United Nations, including UNDP, or the UN Member States. The designations employed and the presentation of materials on maps do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

# Executive summary

Unprecedented challenges have arisen in the first years of the Decade of Action for the delivery of the Sustainable Development Goals (SDGs) by 2030: the Covid-19 pandemic, climate crises and war in the Ukraine are among other hardships threatening progress. In these crucial times, South-South and triangular cooperation can be fundamental for ensuring we continue to move ahead in recovering losses and furthering the global commitment of leaving no one behind.

At the core of South-South and triangular cooperation is the understanding that exchanging knowledge, skills, experiences and lessons learned between and among countries of the global South serves as a powerful catalyst for development. These exchanges complement and may even improve traditional North-South cooperation and are a fundamental tool for inclusive global partnerships towards sustainable development.

Fulfilling its mandate and the commitments expressed in the BAPA+40 Outcome Document, the United Nations Office for South-South Cooperation works to record, systematize and facilitate access to development knowledge from and for the global South. The *Good Practices in South-South and Triangular Cooperation for Sustainable Development* publication series is the culmination of that mission and documents the incredible work that is currently happening in the global South.

Building on the successes of previous installments, the 4<sup>th</sup> volume of the Good Practices series further expands the body of knowledge on how development actors are utilizing South-South and triangular cooperation to accelerate progress towards the attainment of all 17 SDGs. This volume documents evidence-based good practices, showcasing over 130 development solutions that have demonstrated cross-boundary cooperation and knowledge transfer between countries of the global South and which are highly adaptable to local economic and social conditions. These cases come from over 50 partners, including Member States, intergovernmental organizations, United Nations entities and other development stakeholders.

The good practices herein highlight the spirit of multilateralism and camaraderie that characterizes South-South and triangular cooperation. An amazing array of sectors and countries are represented in this volume. From a training centre in Indonesia partnering with a food authority in the United Kingdom to share food packaging and labelling skills with technicians in 15 African, Caribbean, Central American and South American countries; to a United Nations-sponsored project for Chinese private investment in Africa that transformed into a permanent South-South chamber of commerce; to the training of medical physicists in regional centres in Asia and the Pacific who in turn trained their peers in neighbouring countries, the projects are impressive, creative and necessary.

While COVID-19, and other recent crises, have challenged our ambitious global agenda, it has also shown the importance of global solidarity. South-South and triangular cooperation can help us stay in the right track towards the achievement of the 2030 Agenda. We hope the sharing of this actionable knowledge will encourage development stakeholders to connect with the providers of the Good Practices in this volume to support their own efforts in adopting and scaling up innovative solutions and making strong collaborations that will advance the achievement of the SDGs.

# Acknowledgements

This publication was made possible through the collaborative efforts of the United Nations Office for South-South Cooperation (UNOSSC) and partners from Member States, UN entities, intergovernmental organizations (IGOs) and other development partners. It contains 132 good practices in South-South and triangular cooperation, grouped according to the 17 Sustainable Development Goals (SDGs).

We owe a major debt of gratitude to colleagues from the following partners, for their hard work and dedication. In particular, from Member States, we wish to thank: Julieta Aizcorbe from General Directorate for International Cooperation of Argentina; Gunel Hajiyeva and Etibar K. Kerimov from the Azerbaijan International Development Agency (AIDA); Shanjida Khan Shorna from Aspire to Innovate (a2i), an initiative from the Government of Bangladesh; Talita Vieira Antônio from the Municipal Secretariat of International Affairs of São Paulo, Brazil; Gloria Yáñez Figueroa from the Chilean Agency for International Development Cooperation (AGCID); Yang Liu from the China International Center for Economic and Technical Exchanges (CICETE); Sharon Ahcar Cabarcas from the Colombian Presidential Agency of International Cooperation (APC-Colombia); Hassan El-Nashar from the Egyptian Agency of Partnership for Development (EAPD); Cintantya Rastha from the Ministry of State Secretariat of Indonesia; Emil Ben Naftaly, from the Permanent Mission of Israel to the United Nations; Sujin Kim and Seolri Park from the Korea International Cooperation Agency (KOICA); Khaled Faisal Alkhaled, from the Kuwait Fund for Arab Economic Development; Helge Espe from the Norwegian Agency for Exchange Cooperation (Norec); Afonso Lages from the Permanent Mission of Portugal to the United Nations; and Güneş Aykut Ergüler from the Turkish Cooperation and Coordination Agency (TİKA).

From intergovernmental organizations, we wish to thank: Ahmad Nisar from the Commission on Science and Technology for Sustainable Development in the South (COMSATS); Niels Strazdins from the Commonwealth Secretariat; Hicham Boughdadi from the European Commission; Geovana Zoccal from the Global Partnership Initiative on Effective Triangular Co-operation (GPI); Viliame Kasanawaqa from the Pacific Islands Development Forum (PIDF); and Tahrira Khan from Partners in Population Development (PPD).

From UN entities, we wish to thank: Polina Tarshis from the United Nations Economic Commission for Europe (ECE); Ingrid Dispert from the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); Karim Khalil from the United Nations Economic and Social Commission for Western Asia (ESCWA); Michela Baratelli, Francesca Biasetton and Paulo Eduardo Palma Beraldo from the Food and Agriculture Organization of the United Nations (FAO); Laura Vai from the International Atomic Energy Agency (IAEA); Steve Codjo from the International Fund For Agricultural Development (IFAD); Anita Amorim and Duncan Chando from the International Labour Organization (ILO); Maria Urbina Ferretjans from the Pan American Health Organization (PAHO/WHO); Shriya Sundaram from the United Nations Capital Development Fund (UNCDF); Juliana Gargiulo, Jiangting (Tina) Hao and Goran Simunovic from the United Nations Development Programme (UNDP); Griet Ingrid Dierckxsens and Guoqin Wang from the United Nations Environment Programme (UNEP); Pradeep Paulose, Rana Pratap Singh and Sebastian Schrottenbach from the United Nations Industrial Development Organization (UNIDO); Zanofer Ismalebe from UNOSSC; Chun-Kit Steven Li, Gabriela Dutra, Gregory Rosa and Siyuan Chen from the World Food Programme (WFP); and Komal Allagh from the World Health Organization (WHO).

From non-state actors we wish to thank: Sreerupa Sengupta from the Goa Institute of Management; and Sumit Kumar Maji from the University of Burdwan.

The dedication and hard work of the core team were critical. The organization, of this document was supervised by Xiaojun Grace Wang, UNOSSC. Special thanks are extended to Shams Banihani, UNOSSC, for her overall coordination, research and technical review of the document; and Raphael Avelar, UNOSSC, the technical review on the original manuscripts and the coordination of the editing and design of the publication. Thanks also to Julia Stewart and the team at Prime Productions for their editorial support, and to Paolo Ciampagna for the design and layout of the final publication.

Finally, we express our thanks and gratitude to Achim Steiner, Administrator of the United Nations Development Programme, which hosts and supports the work of UNOSSC. Without his leadership this report would not have been possible.



# Table of contents

Executive summary .....	3
Acknowledgements .....	4



Makueni Agricultural Entrepreneurship Community Centre .....	10
Technical Extension and Application of Sustainable Aquaculture in Mozambique and Namibia .....	12
Family Farming Project in Guinea-Bissau .....	14
Public Education Infrastructure Development Project .....	16
Organic Farming for Improved Livelihoods .....	18
Enhanced Policy Environment for Inclusive Business in Southeast Asia .....	20
COVID-19 Stimulus Tracker: Global Observatory on Social Protection and Economic Policy Responses .....	22
Comprehensive Social Protection Reform Support Programme .....	24



Promoting Rural Development in Africa .....	26
Training of Trainers on Climate Field Schools .....	28
Online Training on Food Packaging and Labelling for African, Latin American and Caribbean Countries .....	30
Online Training on Principles and Applications of Integrated Pest and Disease Management for African, Latin American and Caribbean Countries .....	32
Triangular Cooperation Project for Promoting Agricultural Capacity Development in Paraguay .....	34
Small Farming – A Viable Business .....	36
Promotion of Sustainable Agriculture and Marketing through Youth Involvement .....	38
Micro-gardening and Greenhouse Construction .....	40
Drone-based Multispectral Imaging for Agricultural Development .....	42
Technical Knowledge Exchange in the Agri-food Sector Between Chad and Niger .....	44
Generation of Laws on Food Labeling in Latin America and the Caribbean .....	46
Cooperative Network of Wholesale Food Markets to Promote Efficient, Inclusive and Sustainable Food Systems .....	48
+Cotton Project .....	50
Consolidation of School Feeding Programmes in Latin America and the Caribbean .....	52
Sustainable Cage Aquaculture in West Africa .....	54
Knowledge Internship Programme in Semi-arid Regions of Latin America .....	56
CropWatch .....	58
Nurture the Future Project .....	60
South-South Cooperation Cloud School .....	62
Mainstreaming Nutrition-Hydroponics in School Feeding .....	64
China-Africa Rice Value Chain Development Initiative .....	66
WFP-FAO Joint Resilience Programme in Tanganyika, Democratic Republic of the Congo .....	68
Strengthening Resilience for Women Farmers and their Communities .....	70
CERFAM's Knowledge Exchange Platform (KEPT) .....	72
Improving Regional Capacities in Food Safety Monitoring in Latin America and the Caribbean .....	74
Improvement of Livelihoods and Nutritional Health in Mauritania .....	76



Capacity Building for the Prevention and Care of People with Kidney Disease .....	78
Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance in CARICOM Member States ...	80
Fighting COVID-19 .....	82
Alliance to Fight Avoidable Blindness .....	84
Surokkha COVID-19 Vaccine Management System .....	86
Long-term Care for the Elderly, with Emphasis on Long-term Care Facilities, Day Centres and Home Care .....	88
Promoting the Development of a Green Crop Protection Industry in South Africa .....	90
Egypt's Health Diplomacy .....	92
Promoting Sexual and Reproductive Health Education through Exchange of Expertise .....	94
Bringing additional technology to healthcare: Health Service Robots .....	96
Vaccination in Border Territories with an Intercultural Approach .....	98
Empowered Communities Against Antimicrobial Resistance .....	100
Cooperation Strategy for Chronic Kidney Disease of Non-Traditional Origin in Central America and the Dominican Republic .....	102
Virtual Health Library Network .....	104
Strategies for Prevention and Control of Arboviral Diseases .....	106
Safer and Cleaner Used Vehicles for Africa .....	108
Family Planning Accelerator project .....	110
Training of Radiation Medicine Professionals .....	112
Strengthening Medical Physics Education and Training .....	114
Siyakwazi Youth Network .....	116



E-learning for Healthcare Professionals in a Crisis .....	118
Chile Schools Programme in Latin America and the Caribbean .....	120
Indian Technical and Economic Cooperation Moves Online .....	122



Women's Leadership and Economic Empowerment in Africa .....	124
Houses of Empowered Women Initiative .....	126



Solar-powered Electric and Water Supplies .....	128
Management of Shared Water Resources in the Sahel Region .....	130
Addressing Water Pollution and Supporting Water Management in Arab Countries .....	132



Small Hydropower in Nepal .....	134
Hydropower Development Planning for South Asian Countries .....	136
South-South and Triangular Cooperation in Renewable Energy .....	138
Production of Eco Charcoal Briquettes .....	140
Barefoot College Sierra Leone .....	142
Global Network of Regional Sustainable Energy Centres for Small Island Developing States .....	144

**8 DECENT WORK AND ECONOMIC GROWTH**



The Dukkan Freelance Platform for IT Workers .....	146
Shaqo Abuur .....	148
China-Africa Business Council .....	150
Tourism for Women's Development in Uzbekistan .....	152
Training Plan for Popularizing Automobile Maintenance Technology .....	154
Capacity Building in Cultural Statistics for the Visibility of Uruguay's Cultural and Creative Industries.....	156
Strengthening the Capacities of Aviation Professionals in Paraguay.....	158
BRICS Knowledge Series on Transition to the Formal Economy .....	160
South-South and Triangular Skills Fair .....	162
Strengthening the Humanitarian-Development Nexus through Promotion of Decent Work in Refugee and Mixed Migration Contexts .....	164
Fellowship Training Programme on Decent Work.....	166
Commonwealth Connectivity Agenda for Trade and Investment.....	168

**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**



Electronic Phytosanitary Certificates.....	170
100% Online Electronic Apostille and Legalization .....	172
Transport and Trade Connectivity in the Age of Pandemics: Contactless, Seamless and Collaborative United Nations Solutions....	174
ESCWA Transport GIS Platform.....	176
Technological and Enterprise Upgrading Programme in Cuba .....	178
SDG 9 Accelerator .....	180
Establishing UNIDO Guiding Framework for Industrial Parks .....	182

**10 REDUCED INEQUALITIES**



The Agency for Sustainable and Operative Social Provision (DOST) Model by Azerbaijan .....	184
Reduction of inequalities with a focus on mainstreaming the perspectives of territory, gender and race/ethnicity.....	186
Protecting and Empowering Persons with Disabilities in the Context of the COVID-19 Pandemic .....	188
+Cotton Project.....	190

**11 SUSTAINABLE CITIES AND COMMUNITIES**



Implementation of Regional Development Instruments and Territorial Planning in the Dominican Republic.....	192
Promoting local government capacities to transition towards people-centred, smart and sustainable cities.....	194
Enhancing Early Warning Systems in the Caribbean .....	196

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**



Sustainable Coffee Production in Gorongosa National Park.....	198
Sustainable Textile Investment and Operations in Ethiopia.....	200
Sustainable Resource Management .....	202
Make the Case .....	204

	Establishment of China-Argentina Biogas Development and Cooperation Centre.....	206
	Value-Added Bamboo Processing Development in Vanuatu .....	208
	Egypt's Environmental Protection and Climate Change Mitigation Projects in Africa .....	210
	South-South Cooperation for Scaling Up Climate Resilient Value Chain Initiatives .....	212
	Strengthening Disaster Risk Management Institutional Frameworks and Capacities .....	214
	Climate Disaster Risk Financing Framework and Parametric Insurance .....	216
	Green Economy in PICs –Bamboo Development Initiative .....	218
<hr/>		
	Poverty Alleviation through Tilapia Industry Value Chain Development in Tanzania.....	220
	Closing the Loop: Scaling up Innovation to Tackle Marine Plastic Pollution in Southeast Asian Cities.....	222
	South-South Collaboration to Strengthen Statistics for Ocean-related SDGs .....	224
<hr/>		
	Challenges and Opportunities to Scale Up Payment for Ecosystem Services (PES) .....	226
	Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia.....	228
	Trees in Cities Initiative.....	230
	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD).....	232
	Desertification Control and Key Factor Regulation in Central and Western Asia.....	234
Piloting Desertification Control in Countries of the Great Green Wall in Africa .....	236	
<hr/>		
	Strengthening Capacities for the Identification of Victims of the Viet Nam War .....	238
	Excellence in Public Service Delivery in Azerbaijan – the case of ASAN Service .....	240
	myGov One-Stop Solution Portal.....	242
	Triangular Cooperation for e-Government Capacity Building Between Cameroon, Nigeria and the Republic of Korea .....	244
	Access to Justice through e-Services and Dematerialized Case Management.....	246
	DatAction .....	248
	Bwalo Lathu Platform to Support the Parliament of Malawi .....	250
	The Western Balkans Small Arms and Light Weapons Control Road Map.....	252
Enhancing Peace, Security and Stability in Africa .....	254	
<hr/>		
	International Cooperation Project Management (PCM) .....	256
	Reverse Linkage Project for Strengthening Artificial Insemination in Livestock .....	258
	The Aswan Forum for Sustainable Peace and Development.....	260
	UNDP Crowdfunding Academy.....	262
	Innovative Solutions in Response to the COVID-19 Crisis in Albania and North Macedonia .....	264
	Adaptation of 3PA to Urban and Displacement Settings.....	266
	COMSATS Joint Centre for Industrial Biotechnology.....	268
	ADELANTE 2.....	270
	Global Partnership Initiative on Effective Triangular Cooperation .....	272

Annex	
List of SDGs and targets.....	274



# Makueni Agricultural Entrepreneurship Community Centre



## Strengthening agricultural and entrepreneurial knowledge for women in Kenya

### CHALLENGE

COVID-19 has significantly impacted populations around the world, affecting jobs, food security and in some areas contributing to an unprecedented rise in the levels of extreme poverty. In Kenya, COVID-19 interrupted social and economic services that accentuating the vulnerability of families, transferring to them greater responsibilities regarding the quality of life of their members. A concrete example is that during school closures, breakfasts provided to schoolchildren were suspended, aggravating already precarious household economies and putting more pressure on families. This context has a greater impact on women, due to their gender disadvantages and large share of responsibilities for households and children, which only increased with the pandemic.

In Makueni County, Kenya, the main economic activity is agriculture. Most are family farms practicing subsistence agriculture. Farmers have seen their sales spaces diminish due to market closures and supply chain disruptions. There is a need to strengthen agriculture at the family level, with a focus on youth and women, so that they can obtain resources and generate economic activities.

### TOWARDS A SOLUTION

The Makueni Agricultural Entrepreneurship Community Centre project arose in response to a 2021 call from the Chile Fund Against Hunger and Poverty to address the impacts of the COVID-19 pandemic in the area. The Chile Fund Against Hunger and Poverty is an organization that seeks to contribute to the advancement of developing countries based on economic recovery and strengthening the social fabric, issues prioritized by Chile.

#### PROJECT NAME

Makueni Agricultural Entrepreneurship Community Centre

#### NOMINATED BY

Chilean Agency for International Development Cooperation (AGCID)

#### COUNTRIES/REGIONS/TERRITORIES

Chile, Kenya

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.4, 5.5

#### SUPPORTED BY

Chile Fund Against Hunger and Poverty

#### IMPLEMENTING ENTITIES

Ministry of Foreign Affairs (MINREL) of Chile, AGCID, United Nations Development Programme (UNDP) Chile

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

September 2021 – September 2022

#### LINK

[www.fondochile.cl](http://www.fondochile.cl)



The programme strategy for 2021 and 2022 is to strengthen family agriculture in Makueni County, targeting women and youth, to improve family livelihoods and the general economy of the area. By adopting a gender-focused approach, the project seeks to reduce inequalities between men and women.

The project was designed in a South-South cooperation, participatory manner by Chile's Patagonia Compassion Foundation together with Global Light Ministry, the Kenyan partner. Global Light Ministry facilitated links with the community and helped with implementation, from definition of the problem to the intervention strategy.

The Community Centre project is underway, with 122 women trained so far using 12 support videos made by one of the partners, Instituto Profesional (AIEP). The videos contain 36 hours of theoretical and practical training on agriculture entrepreneurship. The material was prepared in English and the contents were explained in the community's language for better understanding for better understanding.

A soil study was done to determine the most appropriate type of crops and their required fertilizers. Likewise, clearing and demarcation of the land was carried out. Of the beneficiary women, 12 were selected to form an Administration Committee for the community centre. This team holds the important role of organizing the community once the project is finished.

The Community Centre project adopts an innovative management model, in the sense that it opens a space for collaborative cultivation in a formal way among members of the community and bets on a new social institution in the community through the establishment of the Administration Committee, a direct contribution to strengthening intra-community links.

The role of the Community Centre as a space for gathering and sharing learned practices among women in the community, as well as that of the Administration Committee with its board, has gained special value when it comes to sustainability of the project. They will be crucial for the purposes of organizing future work, making alliances and forging agreements to promote sales of what is produced. It is considered a critical milestone to make a first sale before the end of the project, allowing the women to appreciate the results of their work and motivate them to continue with it. If the women can harvest products for household consumption and for sale before the end of the project, it will create a positive experience, encouraging participants to continue working the land and engaging in commercialization of the products harvested. The first trained group has already increased their harvests, encouraging 80 new people to register for the second training group.



#### CONTACT INFORMATION

**Carla Romo Labisch**

Programme Coordinator/Chile Fund Executive Secretary, AGCID  
cromo@agci.gob.cl

# Technical Extension and Application of Sustainable Aquaculture in Mozambique and Namibia



Contributing to the sustainable development of local aquaculture through technical consultations and capacity-building for smallholders and technicians

## CHALLENGE

Aquaculture plays an important role in providing employment, increasing income and ending poverty in some African countries. Mozambique and Namibia are rich with inland fishery resources and aquaculture. Aquaculture has been identified by the governments of both countries as a key industry for nutrition intake, food security and social progress. However, even though these countries have a large number of rivers, lakes, reservoirs, dams and streams and conducive climate conditions, the aquaculture industry has developed at a slow pace, with low production, limited quantities and high mortality of aquatic species. Some major constraints are lack of high-quality seed and feed, insufficient qualified and skilled human resources, poor aquaculture techniques, poor farm infrastructure and management, and lack of funding for aquaculture and related projects.

## TOWARDS A SOLUTION

The Technical Extension and Application of Sustainable Aquaculture in Mozambique and Namibia project was implemented by the Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences (FFRC) and the Department of Aquaculture of the Ministry of Fisheries and Marine Resources (MFMR) and the National Institute of Aquaculture Development (INAQUA) of Namibia and the Ministry of Fisheries of Mozambique. The project focused on making a valuable contribution to capacity building and sustainable industry development of the aquaculture sector in the two countries.

The project's five objectives were:

- ▶ increase understanding of the real needs of the two countries in aquaculture development;
- ▶ improve knowledge of local fish farmers and technicians on scientific fish farming through on-site technical consultations and well-targeted and needs-based training and sharing of scientific methods and techniques

### PROJECT NAME

Technical Extension and Application of Sustainable Aquaculture in Mozambique and Namibia

### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

### COUNTRIES/REGIONS/TERRITORIES

China, Mozambique, Namibia

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.2, 1.5, 2.1, 2.A, 8.5, 8.A, 14.2, 14.7, 17.6, 17.7, 17.9, 17.16

### SUPPORTED BY

Perez-Guerrero Trust Fund

### IMPLEMENTING ENTITIES

Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences (FFRC); National Institute of Aquaculture Development (INAQUA) and Ministry of Fisheries (MOF) of Mozambique; Department of Aquaculture (DOA) of the Ministry of Fisheries and Marine Resources (MFMR) of Namibia

### PROJECT STATUS

Completed

### PROJECT PERIOD

June 2013 – May 2014

### LINK

[www.ffrc.cn/info/1066/5603.htm](http://www.ffrc.cn/info/1066/5603.htm) (in Chinese)

[www.ffrc.cn/info/1066/5617.htm](http://www.ffrc.cn/info/1066/5617.htm) (in Chinese)





- with the farmers and other beneficiaries (who learned key technologies in scientific feeding, seed nursing, grow-out culture, hatchery and fish farm management, fish disease diagnosis and prevention, etc.);
- ▶ increase the confidence of managerial authorities to strengthen support for aquaculture (China provided successful experiences and practices in aquaculture which could be largely referred to and even borrowed by the two countries);
- ▶ facilitate Chinese fishery institutions and enterprises to cooperate with fishery institutions in the two countries to improve fishery facilities and develop feed, thus strengthening mutual cooperation and friendship; and
- ▶ share with participants more funding channels for developing the fishery industry.

Focusing on the above objectives, FFRC, one of the partner institutions of the Global South-South Development Center Project, in partnership with the Department of Aquaculture of the MFMR of Namibia, INAQUA and the Ministry of Fisheries of Mozambique, carried out on-site technical extension, capacity-building training and consultations in the aquaculture sector in Mozambique and Namibia.

Five experts from FFRC China were appointed to conduct two-week technical missions in Mozambique and Namibia to assist local smallholders with aquaculture development through improved practices and management. The experts demonstrated how to apply aquaculture practices, e.g., water test kits, fish nets, dissolved oxygen (DO) meters, etc. They gave professional suggestions and guidance to farmers and managerial personnel based on the difficulties encountered, keeping in mind feasibility. Basic theory and practical techniques of sustainable aquaculture development were discussed via lectures together with lab works, demonstrations and field practice, following by a “training of the trainers” session.

A total of 46 trainees from Mozambique and 42 trainees from Namibia took part, including local fishery technicians, extension officials and fish farmers. A Memorandum of Understanding (MOU) was signed between FFRC and INAQUA and another between FFRC and MFMR covering training of fish farming communities, collaborative research and technical assistance. These priorities displayed how all parties recognized the need and possibilities for sustainable long-term cooperation. Additionally, upon request of local parties, the expert mission group helped make connections with some notable fishery enterprises in China, especially in fish feed, fishery machines and feed machines, and negotiations between interested parties in the two countries and those enterprises have been ongoing.

The project activities increased local smallholder incomes and supplies of animal protein, promote fishery industry development and create job opportunities in Mozambique and Namibia. These outcomes are in line with SDG 1 (no poverty), SDG 2 (zero hunger) and SDG 8 (decent work and economic growth). The project also reduced marine fishery resources capture, contributing to the achievement of SDG 14 (life



below water). The active participation and joint efforts of various fishery institutions, authorities and local smallholders contributed to achieving SDG 17 (partnerships for the goals).

After the successful implementation of the project, FFRC followed up with the beneficiaries to track the outcomes and impacts of the project. Positive results included fish farmers in Northwest Namibia who learned how to ferment raw manure to fertilize ponds saw their pond water quality improve and farmers and technicians applied feeding techniques and started to feed fish at a fixed time, fixed location and fixed quantity, which is effective for feed-saving and disease prevention.

This project taught farmers and technicians how to scientifically fish farm and solved some local challenges. Most of the key methods were mastered by the beneficiaries, gradually promoting local aquaculture industries via self-reliance and ensuring sustainability of the project. The project ultimately increased the knowledge and techniques of local smallholders and technicians, promoted the development of inland fish farming and improved livelihood levels.

Undoubtedly this successful initiative in South-South cooperation is a positive example for other developing countries, especially in Africa. It ultimately stimulated the fishery and aquaculture industries in Mozambique and Namibia, boosting food security in the countries, and thus helped with poverty alleviation in Africa. Through the successful demonstration and extension work, a cooperation bridge was built between these developing countries allowing deeper communications.

#### CONTACT INFORMATION

##### Dr. Jing Xiaojun

Director, International Cooperation Division, Freshwater Fisheries Research Center, Chinese Academy of Fishery Sciences  
jingxiaojun@ffrc.cn

# Family Farming Project in Guinea-Bissau



## Promoting poverty reduction and better food production for nutritional security

### CHALLENGE

The recent civil war has negatively affected the farming sector in Guinea Bissau. It damaged large areas of arable land and displaced thousands of farmers from their areas of work. Frequent drought and flooding in low-lying areas have had a disastrous effect on the country's agricultural sector and other environmental issues have negatively impacted food production. These difficult conditions facing the agricultural sector in Guinea-Bissau threaten the livelihoods and food security of smallholder family farmers.

### TOWARDS A SOLUTION

Supported by the Kuwait Fund for Arab Economic Development (KFAED) and the International Fund for Agricultural Development (IFAD), the Family Farming Project introduces an integrated approach to family farming in rural areas in North and East Guinea-Bissau through strengthening agriculture, providing integrated markets and food and addressing climate change. These actions are in accordance with the priorities set by the government in its 2019-2024 Strategic Plan, which emphasizes increasing the income and dietary diversity of rural families in a sustainable manner. The project contributes to six of the Sustainable Development Goals (SDGs): 1, 2, 5, 8, 13 and 17.

The project involves forming water and natural resource user associations and supporting and rehabilitating infrastructure in agricultural areas, including 175 kilometres of road and rehabilitating irrigation and drainage facilities for about 17,500 hectares of agricultural land. The project will also increase market opportunities (by a proposed thirty percent) by modernizing three semi-wholesale markets, five weekly markets and two crop collection centres. Moreover, 1,200 rural small enterprises, mainly cooperatives, will be supported to raise the nutritional value of crops and improve incomes, including of women, youth, people with special needs, returning migrants and smallholders. A project management unit will be created and will prepare designs and supervise project implementation.

#### PROJECT NAME

Family Farming Project in Guinea-Bissau

#### NOMINATED BY

Kuwait Fund for Arab Economic Development

#### COUNTRIES/REGIONS/TERRITORIES

Guinea-Bissau, Kuwait

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 2.1

#### SUPPORTED BY

Kuwait Fund for Arab Economic Development (KFAED), International Fund for Agricultural Development (IFAD), Government of Guinea-Bissau

#### IMPLEMENTING ENTITIES

Government of Guinea-Bissau, IFAD

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2022 – 2025

The project is expected to increase the income of 80 percent of the targeted producers by developing cultivation on 14,000 hectares of highlands and 3,500 hectares of lowlands, diversifying production and increasing average productivity by up to 30 percent. In addition, 50 percent of targeted households are expected to see improvements in their food security.

IFAD's role is project implementation, jointly with the government of Guinea-Bissau, and follow up. This includes collecting information and preparing studies in cooperation with water users and farmers associations and analysing natural resources for the purpose of selecting roads and markets to be rehabilitated. The studies and data will form the basis for preparing the required designs, supervision and implementation services. IFAD will also provide education and training services to farmers in the areas of agriculture, irrigation, marketing and other services covered by the project.

A substantial challenge faced by this new project was evaluating the project virtually during the covid-19 pandemic shutdown period. The Kuwait Fund held numerous virtual meetings to acquire the needed information and work with IFAD, which helped to access many details related to the project and exchange information.

Low-income developing countries can adopt this project under certain conditions. It requires a clear project strategy, a feasibility study and clear goals of what are the benefits of financing the project and what are the social and economic returns expected from the project.

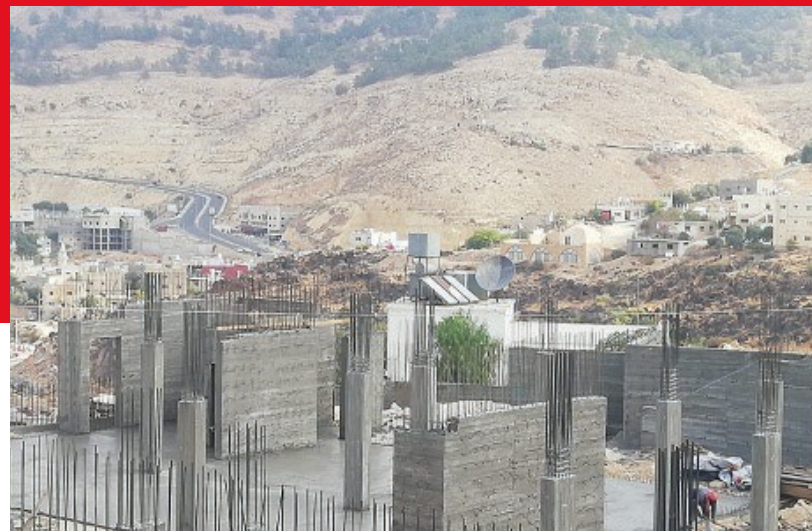
---

## CONTACT INFORMATION

### **Khaled F. Alkhlaed**

Regional Manager for International Organizations, KFAED  
Alkhlaed@kuwait-fund.org

# Public Education Infrastructure Development Project



## Providing a good environment for students at all levels of education

### CHALLENGE

According to UNICEF (2020), overcrowding in classrooms in Jordan, especially in urban areas, is a major barrier to children's schooling. While there is an ambitious goal to universalize KG2 (pre-primary education), this has not been accompanied by realistic planning or adequate budget allocations to ensure the supply of KG2 services across the country. Sufficient classroom space is not available to accommodate all the KG2-age children (age five) in Jordan. As such, the educational infrastructure is under mounting pressure due to the large increase in numbers of students, making further investments in both physical and human resources necessary.

### TOWARDS A SOLUTION

Education is one of the main drivers for development for every country. The success of development plans depends significantly on the educational system's ability to create human resources capable of operating and managing the elements of development and achieving social security and political and economic stability.

This project, Public Education Infrastructure Development Project (First Stage), supported by the Kuwait Fund for Arab Economic Development (KFAED), falls within one of the main priorities for the Government of Jordan. The goal is to create the appropriate educational environment for students in the project areas by alleviating classroom overcrowding and reducing the number of rented school buildings. The project is part of the strategic plan of the Ministry of Education in Jordan (2018-2022), which aims to improve the safety and quality of school infrastructure and reduce overcrowding in schools to improve the educational environment through building modern and accessible school buildings.

#### PROJECT NAME

Public Education Infrastructure Development Project

#### NOMINATED BY

Kuwait Fund for Arab Economic Development (KFAED)

#### COUNTRIES/REGIONS/TERRITORIES

Jordan, Kuwait

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.2, 4.1, 5.1, 17.4

#### SUPPORTED BY

Kuwait Fund for Arab Economic Development; Ministry of Public Works and Housing, Jordan

#### IMPLEMENTING ENTITIES

Government of Jordan

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2020 – 2022

The project contributes to the achievement of SDG 1 (ending poverty), SDG 4 (quality education), 5 (gender equality) and 17 (partnership for the goals).

The project consists of establishing nine schools, each containing 12 to 18 classrooms, in selected project areas. The area of each school ranges from 2,420 to 4,625 square metres, each building consisting of three or four floors. The project includes civil, electrical and sanitary works necessary for the construction of administration buildings, classrooms and science labs, and the provision of necessary health services and facilities for schools. The project also provides consulting services for the design and supervision of implementation. The first stage of the Public Education Infrastructure Development Project has been completed. KFAED offers co-funding towards construction of the buildings together with the required infrastructure (designs, electrical, water, sanitation, etc.). The Government of Jordan is providing modern curricula, training teachers and covering staff costs.

Developing countries with comparable contexts could implement similar projects. It is important that such projects start with a distinct project strategy, a feasibility study and an understanding of the long-term development benefits of financing such a project. The benefits are the social and economic returns of educating children from an early age, which is shown to help overcome development challenges in a country, such as poverty, poor education attainment and high illiteracy rates.

---

#### **CONTACT INFORMATION**

**Mr. Khaled F. Alkhlaed**

Regional Manager for International Organizations, KFAED  
Alkhlaed@kuwait-fund.org





# Organic Farming for Improved Livelihoods



## Establishing an organic seaweed fertilizer production plant and donation of equipment for a cleaner coastline

### CHALLENGE

In 2021, Kenya suffered from a sharp increase in fertilizer costs, making agricultural production more difficult and increasing food prices across the country. The major problem was an inadequate supply of fertilizer from producer countries. Although the Kenyan government attempted to resolve this problem through fertilizer subsidies, there is still room for sustainable solutions by contributing to the production sector. In-country production of seaweed fertilizer is particularly useful as, in addition to the fertilizer shortage, other problems include youth unemployment and sea pollution.

### TOWARDS A SOLUTION

To address the challenges above, the TİKA Nairobi Program Coordination Office built an organic liquid seaweed fertilizer plant in Mombasa, Kenya, in partnership with a community-based organization, the Pwani Marine Conservationists. The project objective was to reduce farmer production costs (thus increasing their incomes), create job opportunities in Kenya, reduce marine pollution and create sustainable and environmentally friendly recycling methods. These goals are in line with SDG 1 (end poverty), SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities), SDG 12 (responsible consumption and production) and SDG 14 (life below water).

The support provided by TİKA covered the entire production process of liquid seaweed fertilizer. TİKA donated a motorboat for the collection of seaweed, tools and equipment for processing the seaweed and producing fertilizers and a tuk-tuk (a three-wheeled transport vehicle) to transport the product from the beach to the Pwani Marine Conservationists production centre, which is staffed mostly by young employees. The group initially carried out their operations, without any equipment, using a small space in a group member's house; with TİKA's support, the operations were moved to a new location with adequate space (four acres) to accommodate equipment for

#### PROJECT NAME

Organic Farming for Improved Livelihoods

#### NOMINATED BY

Turkish Cooperation and Coordination Agency (TİKA)

#### COUNTRIES/REGIONS/TERRITORIES

Kenya, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.1, 8.2, 10.1, 10.2, 12.2, 12.5, 14.1, 14.2, 14.7

#### SUPPORTED BY

TİKA

#### IMPLEMENTING ENTITIES

TİKA Nairobi Program Coordination Office and Pwani Marine Conservationists

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

September – December 2021

#### LINK

<https://bit.ly/3zZwNwe>



the different stages of the production process. The project methodology was very simple. The motorboat collected seaweed, the tuk-tuk transported the seaweed to the production plant and at the plant the seaweed was processed with the machines and equipment donated by TİKA. After the production process was complete, the Pwani Marine Conservationists sold the final product to farmers at affordable prices. The project included the construction of a demonstration farm, where the organic seaweed fertilizers were tested and displayed for sale.

This project achieved the overarching goal of introducing organic seaweed fertilizer to the Kenyan market. Through the project, the capacity of the Pwani Marine Conservationists was strengthened and the standardization documents (KEBS certification) required to sell in the Kenyan market were obtained. The product became the first 'Made in Kenya' organic seaweed fertilizer. Furthermore, the organization acquired Control Union Certification enabling them to market and sell their product to the European Union. As an important bonus, beneficiary communities can enjoy clean coastal shores, improving the environment for their fishing and other sea activities, and new job opportunities.

The project partner, Pwani Marine Conservationists, is a CBO based in Mombasa, has experience in marine life and organic agricultural production. Due to the success of the project during the initial phase, it was handed over to this local organization, which continues running the organic liquid seaweed fertilizer plant and has expressed satisfaction with the fertilizer's quality. Marine Conversionists market the organic seaweed under the brand name Morganiqs Liquid Seaweed Fertilizer and continue creating job opportunities. New members have joined the group, working at different stages along the production line—from collection of seaweed, steering the boat (a coxswain and his crew), to driving the tuk-tuk and assisting in marketing and distribution of the final product.

The project reached outside of the mainstream approach to fertilizer supply in Kenya. Not only were supply chain and cost issues addressed, but the new project is innovative and 100% natural. The liquid seaweed fertilizer is produced through a fermentation process that does not require any additional chemicals and does not generate any hazardous waste, making it eco-friendly. The project is sustainable as the use of seaweed as the base of the fertilizer ensures there are no raw material input problems, allowing continuous income and even the opportunity to expand the market, taking advantage of Kenya's 640-kilometre coastline.

Producing organic seaweed fertilizer may be a useful and cost-effective solution for other countries with coastlines that require inexpensive and continuous access to fertilizer to improve agricultural production.



#### CONTACT INFORMATION

Strategy Development Department, TİKA  
sgdb@tika.gov.tr

# Enhanced Policy Environment for Inclusive Business in Southeast Asia



## Supporting government action to promote inclusive business models



### CHALLENGE

To meet the ambitions of the 2030 Agenda for Sustainable Development, the private sector will need to play a greater role in supporting development objectives. Inclusive businesses offer the opportunity to address development challenges and leave no one behind. Inclusive businesses are companies that provide goods, services and livelihoods on a commercially viable basis, either at scale or scalable, to people living at the base of the economic pyramid making them part of the value chain of companies' core business as suppliers, distributors, retailers and customers.

Inclusive business models provide great opportunities to support the achievement of the Sustainable Development Goals. However, businesses may not necessarily build these models due to lack of awareness, constraints in terms of access to finance and knowledge, inadequate business conditions and lack of incentives to make more risky or long-term investments. Hence, it is important to increase awareness, opportunities and conditions for these business models to emerge and develop.

Governments can play a key role in building enabling environments that incentivize and enable firms to develop inclusive business models. However, this is a relatively new and niche concept and governments are not aware of why and how to promote inclusive business.

### TOWARDS A SOLUTION

To address the challenge above, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the Inclusive Business Action Network (iBAN), with financial support from GIZ, jointly implemented the Enhanced Policy Environment for Inclusive Business in Southeast Asia programme to support ASEAN governments to establish environments that incentivize and enable the private sector to develop inclusive business

#### PROJECT NAME

Enhanced Policy Environment for Inclusive Business in Southeast Asia

#### NOMINATED BY

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

#### COUNTRIES/REGIONS/TERRITORIES

Cambodia, Indonesia, Malaysia, the Philippines, Viet Nam and ASEAN as a whole

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.4, 8.3

#### SUPPORTED BY

DA11, German Agency for International Cooperation (GIZ)

#### IMPLEMENTING ENTITIES

ESCAP and the Inclusive Business Action Network (iBAN)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

February 2019 – December 2021

#### LINK

<https://bit.ly/3C7TUY4>



models. These models aim to provide market opportunities to enterprises, livelihood opportunities to populations and access to affordable essential goods and services for low-income and marginalized groups. Achieving these goals will help governments lift people out of poverty at scale.

Since this is a relatively new area, few countries have policies or programmes to support inclusive business. A key objective of the programme was to generate awareness among government officials and business officials of the opportunities that inclusive business models offer and to convince them that this is an area in which it is worth investing. This required providing not only evidence but also examples of what other governments have done, as policymakers are interested in emulating, or at least exploring, what other countries have done.

The programme worked with five governments in Southeast Asia (Cambodia, Indonesia, Malaysia, the Philippines and Viet Nam) as well as with the ASEAN community as a whole.

The programme was carried out in partnership with the Inclusive Business Action Network (iBAN) and ESCAP, as well as with the ASEAN Secretariat for work at the ASEAN level, and with national government counterparts at the national level. Each agency complemented each other, iBAN provided its knowledge on inclusive business promotion, ASEAN supported the policy discussions and building an ASEAN agenda around inclusive business in ASEAN, ESCAP was the implementing partner and brought its expertise in supporting policy change in the region and intergovernmental discussions.

Policy work at the ASEAN level was led by the ASEAN Secretariat, within the ASEAN Coordinating Committee on Small- and Medium-sized Enterprise Development, with iBAN and ESCAP providing substantive expertise and supporting the work. Opportunities were seized regarding the rotating annual chairmanship of ASEAN. Partners worked closely with the government counterpart holding the ASEAN chairmanship (Thailand in 2019, Viet Nam in 2020, Brunei-Darussalam in 2021) to bring the promotion of inclusive business to the ASEAN agenda and to host the annual ASEAN Inclusive Business Summit. The annual ASEAN Inclusive Business Summits helped build a common understanding among ASEAN stakeholders. The promotion of inclusive business in the ASEAN agenda resulted in a progressive recognition of inclusive business and the endorsement by ASEAN economic ministers of the [Guidelines for the Promotion of Inclusive Business in ASEAN](#).

The programme identified Member States that were already promoting inclusive business, such as the Philippines, and supported sharing their experiences and concepts at the sub-regional level. The inclusive businesses discussions at the ASEAN level encouraged other governments to explore the potential of promoting inclusive business (e.g., conduct national landscape studies) in their own countries. The learnings from these landscape studies as well as an ASEAN study was fed back into regional discussions and generated support for the endorsement of the regional Guidelines for the Promotion of Inclusive Business in ASEAN.

These guidelines provided a strong policy reference for government officials seeking to promote inclusive business in their countries.

The programme saw impressive results in terms of policy change, even within a limited time frame of three years. While at the start of the programme only the Philippines had a programme to support inclusive business, now Cambodia has a strategy to promote inclusive business and the Prime Minister of Viet Nam has adopted the 2022-2025 Programme on Support for Private Enterprises in Sustainable Business. In 2022, Malaysia is implementing a number of activities to promote inclusive business and is seeking to expand activities further in 2023.

That governments have adopted policies and programmes is a critical means to support the sustainability of the programme. In addition, work was done to generate awareness among other institutions and engage them in the process, particularly the private sector, including the ASEAN Business Advisory Council, but also civil society organizations and academia.

To support the systemic, cross-country transfer of good practices and knowledge and further encourage sustainability, the programme was complemented with a training programme, led by iBAN, on inclusive business promotion for government officials and business representatives from each of the 10 ASEAN countries

Knowledge products were produced during the programme (three national landscape studies (Cambodia, Malaysia and Viet Nam), two shorter studies (Indonesia and Philippines), a regional study and the report *Frontiers of Inclusive Innovation: Formulating technology and innovation policies that leave no one behind*. These knowledge products provide valuable information that allows for cross-country learning and insightful reflections on how to promote inclusive business.

Overall, this is an excellent practice that can be translated to other contexts where there is a well-established sub-regional group, creating opportunities to discuss inclusive business policies and practices within the agenda of the sub-regional group and build strong partnerships among members

---

## CONTACT INFORMATION

### Marta Pérez Cusó

Economic Affairs Officer, Trade, Investment and Innovation Division, ESCAP  
Marta.perezcusos@un.org

# COVID-19 Stimulus Tracker: Global Observatory on Social Protection and Economic Policy Responses



## Framework to support immediate socioeconomic responses to the COVID-19 pandemic and future shocks

### CHALLENGE

During the COVID-19 pandemic, countries responded with various social protection packages to mitigate the impact of lockdowns, closed educational establishments and public institutions and fully or partially suspended non-essential business activities. However, little information on such measures was shared among countries to encourage peer learning, strengthen policymaking capacities and improve government readiness to formulate similar effective responses to future shocks, including social protection for informal sector workers and the most vulnerable populations in the world.

### TOWARDS A SOLUTION

To address this challenge, the United Nations Economic and Social Commission for Western Asia (UNESCWA) developed the COVID-19 Stimulus Tracker: Global Observatory on Social Protection and Economic Policy Responses based on the United Nations framework for an immediate socioeconomic response to exogenous shocks. This was made possible through the Strengthening Social Protection for Pandemic Response project supported by the United Nations Department of Economic and Social Affairs (DESA) and implemented by the United Nations five regional commissions and the United Nations Conference on Trade and Development (UNCTAD). The aim of the Tracker is to help the global community better understand and compare social protection and economic policy support measures across regions and countries, assess equity and adequacy of policy responses and strengthen capabilities and readiness of governments to inform policy against shocks in the future.

The Tracker collects and presents COVID-19-related social protection and economic policy responses of governments of 193 countries and economies. It includes the measures taken by other entities (e.g., international financial institutions and United Nations entities) in the case of conflict-affected

#### PROJECT NAME

COVID-19 Stimulus Tracker: Global Observatory on Social Protection and Economic Policy Responses

#### NOMINATED BY

United Nations Economic and Social Commission for Western Asia (ESCWA)

#### COUNTRIES/REGIONS/TERRITORIES

All United Nations Member States

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.3, 10.4

#### SUPPORTED BY

ESCWA, United Nations Economic Commission for Africa (ECA)

#### IMPLEMENTING ENTITIES

ESCWA with member countries, ECA

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

June 2020 – June 2022

#### LINK

<https://tracker.unescwa.org/>

countries. It includes quantitative and qualitative data on 44 policy measures clustered around seven categories: social assistance; social insurance; loans and tax benefits; labour market; health-related support; financial policy support; and other general policy support. The concept makes it possible to understand both social protection and economic policy support measures and analyze how these impact the well-being of societies. It highlights gender responsive measures and those that directly benefit from the care economy.

Most importantly, the Tracker's real-time "harvesting" of policy announcements enables its visitors to access up-to-date information on country-level policy interventions in response to the crisis and thereby serves as inspiration to learn from other countries with similar contexts through South-South learning. The Tracker's dynamic visualization enhances peer learning through a user-friendly platform. Its creation builds on engagement with other regional commissions and adopts regional and sub-regional classification to facilitate access. The Tracker gathered information until December 2021 with mapping of about 6,600 COVID-19 stimulus policy responses. Based on the findings of the Tracker, a [global policy brief](#) was developed to inform about the highlights of COVID-19 policy responses across countries and regions, which was discussed by a global panel at a high-level political forum in 2021.

To ensure the sustainability of the tool, the Tracker is now part of several tools that ESCWA makes available to member countries to allow them to learn from each other, especially useful for those countries with similar socioeconomic conditions, so that they might formulate well-informed national policies. The Tracker is considered an adaptable tool that can allow better and more efficient responses to future shocks.

---

## CONTACT INFORMATION

### **Niranjan Sarangi**

Senior Economic Affairs Officer and Project Coordinator of the COVID-19 Stimulus Tracker, ESCWA  
sarangi@un.org

### **Mona Fattah**

Social Affairs Officer, ESCWA  
fattahm@un.org

# Comprehensive Social Protection Reform Support Programme



## Using experiences and best practices from Latin America for social protection reform implementation in the Arab Region

### CHALLENGE

The countries of the Arab region – while being mostly heterogenous in their socio-economic and demographic contexts and conditions – continuously aim to reform their social protection systems and programmes in line with the SDGs. These reforms, in large part, either reflect changing macro-economic conditions that necessitate greater efficiency of social protection spending (e.g., in oil-producing countries) and/or an enhanced understanding of vulnerabilities, for example those related to life-cycle risks, like ill-health and old age of informal workers, etc. Such changes and realizations require additional efforts by governments to enhance the effectiveness of their social protection programmes.

The challenges these countries face in identifying reforms needed in social protection programme design, delivery mechanisms and organizational set-up, and related reform pathways, are not unique. Establishing comprehensive, standardized country profiles of social protection systems and reforms taking place in Arab region countries enables cross-country and cross-regional learning to inspire identification of reform options and helps identify ways to address specific social protection implementation bottlenecks.

In addition, the process of developing such a comprehensive, high-resolution picture of a country's current social protection system along the lines of a template shaped by best practices from the global south has the potential to trigger broader systemic reforms and can shift the perception of social assistance being a "lost" social expenditure to being a productive investment in a country's human capital.

Peer-to-peer exchange between social policymakers and programme managers from different countries and regions has the potential to significantly catalyse progress towards reforming social protection systems,

### PROJECT NAME

Comprehensive Social Protection Reform Support Programme

### NOMINATED BY

United Nations Economic and Social Commission for Western Asia (ESCWA)

### COUNTRIES/REGIONS/TERRITORIES

Algeria, Bahrain, Chile, Egypt, Indonesia Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, State of Palestine, the Philippines, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.3, 10.4

### SUPPORTED BY

ESCWA, International Policy Centre for Inclusive Growth (IPC-IG)

### IMPLEMENTING ENTITIES

ESCWA, Member State representatives, IPC-IG

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

October 2021 – October 2026

### LINK

[www.unescwa.org/reforming-social-protection-systems](http://www.unescwa.org/reforming-social-protection-systems)

changing them from merely cushioning the socio-economic fall-out of internal and external shocks to becoming key building blocks of an integrated economic and social policy, that intentionally tries to reduce income inequalities and promote economic growth.

## TOWARDS A SOLUTION

The Comprehensive Social Protection Reform Support Programme, implemented by the United Nations Economic and Social Commission for Western Asia (ESCWA), engages the Arab region in South-South cooperation with Latin American countries and institutions, among others, to identify best practices, experiences and expertise available in these regions and use these conceptually and practically to provide technical support to ESCWA's 20 member states. This programme hopes to catalyse greater social protection inclusiveness at the systems level (for example by extending social protection coverage beyond the poorest of the poor) and stronger integration of social protection at the programme level by exploring efficiency gains during implementation phases. This approach ultimately will support country efforts to accelerate achievement of SDG 1.3 (implement social protection systems) and SDG 10.4 (equal access to ownership, basic services, technology and economic resources).

For its implementation, the programme collaborates with the International Policy Centre for Inclusive Growth (IPC-IG), which is jointly established and financed by UNDP Brazil and the Brazilian Government via its Ministry of Foreign Affairs. ESCWA and IPC-IG have been collaborating since late 2021 on two workstreams, as described below.

- ▶ A standardized template is being created for collecting detailed and comparable social protection system and reform information from ESCWA member states. The template – which will ultimately produce country profiles – will not just offer a detailed picture of the status quo of a country's social protection system and its components across design, delivery mechanism and organizational set-up, it will also guide authors, who are government officials in collaboration with local experts, to identify and propose recommendations for reform needs and related options. The county profiles will benefit from IPC-IG's rich experience in developing social protection country profiles and from wider Latin American experiences in planning and implementing social protection reforms.
- ▶ The programme is collaborating with UNICEF to make existing online micro-courses developed by IPC-IG on social protection (on the basics of social protection, adaptive social protection, integrated information systems, social protection programming and social protection for rural communities) available for the Arabic-speaking world. UNICEF arranges for translation of the English versions into Arabic via a commercial provider and ESCWA conducts a technical review of the translations to ensure the accurate and consistent use of the appropriate technical terminology in Arabic.

In regard to South-South cooperation, the programme draws directly from Latin America's practical experiences and best practices in social protection programming developed in Latin American countries. Countries of

the Latin America region have been pioneers in developing innovative solutions to effectively and efficiently extend social protection to vulnerable groups and are sharing this knowledge with ESCWA member States.

For example, to support Egypt's Ministry of Social Solidarity to enhance the effectiveness of its national conditional cash transfer programme, the programme is establishing peer-to-peer learning events, among others, with Chile's Ministry of Social Development and Family. Chile's national conditional cash transfer programme, Ingreso Ético Familiar (Family Ethical Income), is considered to be the global best practice for effective referral arrangements and case management of beneficiaries. This approach is of relevance to Egypt's flagship programme to reduce inequality, for instance in terms of access to education and health services.

Peer-to-peer exchanges are also planned with Indonesia's Ministry of Social Affairs, which implements the national conditional cash transfer programme in that country. The conditional cash transfer programme features a comprehensive implementation manual, which contributes greatly to standardized implementation of the programme across the archipelago. The approach therefore could also be of relevance for large (geographically and in terms of number of beneficiaries and implementation staff) programmes, like Takaful and Karama.

Peer-to-peer experiences, arranged by ESCWA, between Jordan's National Aid Fund and experts from Kuwait's Ministry of Social Affairs on effective and efficient beneficiary identification and registration and on effective social assistance grievance redress mechanisms have been successfully implemented (see pictures below). Targeted peer-to-peer exchanges to address specific implementation and reform bottlenecks have been agreed upon with Egypt's Ministry of Social Solidarity (addressing effectiveness of the cash transfer programme's conditionality implementation) and Jordan's Ministry of Planning and International Cooperation (addressing extension of social health insurance to informal and unemployed workers).

In terms of sustainability, the act of undertaking this programme in itself has the potential to trigger initial stimuli for change and reform, which can be followed up independently by the participating countries. For example, following a first successful visit of experts from Kuwait's Ministry of Social Affairs to Jordan's National Aid Fund, the two parties agreed to arrange for future exchanges.

The template for gathering data on social protection systems and reforms is universal and can be replicated and adapted for other regions, and it can be used, for example, for capacity development purposes.

---

### CONTACT INFORMATION

**Marco Schaefer**  
Chief of Social Protection Section, ESCWA  
marco.schaefer@un.org





# Promoting Rural Development in Africa



## Sharing Egypt's experiences in agricultural development, irrigation, food security and women's empowerment to improve rural livelihoods in Africa

### CHALLENGE

Considering that 60 percent of the African population resides in rural areas, Egypt has always considered improving the livelihoods of rural communities to be a priority for development of the continent. Among the development challenges facing these rural communities are poor sanitation, limited supplies of clean water, limited access to quality healthcare, the need for assistance to explore their resources and the need for access to expertise in agriculture and modern irrigation techniques.

Rural development not only impacts villages and surrounding areas, but it also affects urban areas. If rural communities offer better living conditions and the potential for sustainable futures for youth, it can decrease urban migration, which brings its own host of problems. Moreover, improving the value chain of agriculture products makes local products more accessible and positively affects the prices in markets all over the country.

### TOWARDS A SOLUTION

To address the above challenges, Egypt formulated a portfolio to contribute to rural development in Africa that involves three mechanisms: 1) agriculture support (model farms, irrigation and skills training); 2) sharing of good practices (in agriculture, irrigation, food security and water management); and 3) improvement of rural water sources. These mechanisms help communities adopt the latest techniques in irrigation and more efficiently utilize their water resources.

The first mechanism includes three programmes. The first is the Joint Model Farms Programme which is an agreement between the Government of Egypt and eight countries (Algeria, the Democratic Republic of the Congo, Eritrea, Niger, Sudan, Togo, the United Republic of Tanzania and Zambia) to

#### PROJECT NAME

Promoting Rural Development in Africa

#### NOMINATED BY

Egyptian Agency of Partnership for Development (EAPD)/Egyptian Ministry of Foreign Affairs

#### COUNTRIES/REGIONS/TERRITORIES

All countries in Africa

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.5, 6.1, 8.3, 17.9

#### SUPPORTED BY

Egyptian Embassies in Africa in collaboration with the Ministries of Foreign Affairs in their respective countries and other relevant Egyptian national institutions, such as the Egyptian Ministry of Agriculture, Egyptian Ministry of Irrigation, and Egyptian Ministry of Health

#### IMPLEMENTING ENTITIES

EAPD

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2014 – Ongoing

#### LINK

[www.facebook.com/eapd.gov.eg](http://www.facebook.com/eapd.gov.eg)

provide technical expertise for creating and managing model farms. The model farms serve as business incubators, aiming to improve seed strains to ensure food security and to improve local agricultural value chains. The model farms also increase work opportunities for communities and hope to contribute to stemming internal migration and illegal immigration from Africa to Europe.

The second programme improves irrigation systems on existing farms, reducing water waste and improving agricultural output in terms of both quality and quantity. EAPD, the Egyptian Ministry of Irrigation and an Egyptian company (Arab Contractors), with the collaboration of South Sudanese authorities, are cultivating a farm in West Gazal State, South Sudan, using new irrigation and water management techniques. The new techniques are hoped to have a positive impact for the society and the environment.

The third programme improves the skills and techniques of smallholder farmers in Africa. The project was implemented in Sudan and Kenya and had positive results on the beneficiary communities.

The second mechanism focuses on sharing Egypt's experiences through triangular cooperation initiatives with the United Nations World Food Programme (WFP) and other countries in Africa. This involves the creation of an electronic platform where Egyptian institutions share their good practices in the fields of agriculture, irrigation, food security and water management. The platform will be an interactive space where agriculture experts in Egypt and the rest of Africa will meet, exchange expertise and analyse challenges and solutions through cooperation, with the goal of leaving no one behind.

The third mechanism improves water sources for rural communities. EAPD, the Egypt Ministry of Irrigation and Egyptian companies have implemented four projects in Nile Basin countries to contribute to preserving water, adding new water resources, simplifying access to clean water and improving water quality. The four projects are:

- ▶ drilling underground wells (South Sudan, Sudan, Tanzania, Uganda);
- ▶ building rain water reservoirs (South Sudan, Tanzania, Uganda);
- ▶ flood risk prevention (Uganda); and
- ▶ weed control in the Nile River (Sudan, Uganda)

The projects completed to date have brought a number of positive results on the ground. First, and importantly, the projects have helped the sustainability of villages by improving their capacities to respond and mitigate natural challenges and climate change. They have also had an influence in societies. For instance, when a village has a nearby source of water, like an underground well, that can affect the education rate of children, especially girls, as families often send girls in the morning to fetch water. When the water sources are nearby, children, and especially girls, have more time for studies. In addition, the projects can be seen as a baseline for other infrastructure projects. For example, the control of weeds in the Nile improves the quality of water, thereby enhancing the ability of communities to implement agricultural projects in the area.



This project is replicable but does require strong coordination among the partners involved to ensure its success. Coordination should not be only among the different ministries, but also needs to be between the public and private sectors.

#### CONTACT INFORMATION

**Ambassador Mohamed Khalil**  
Secretary General, EAPD  
info@eapd.gov.eg



# Training of Trainers on Climate Field Schools



## Helping farmers in the Asia-Pacific region adapt to climate change

### CHALLENGE

Climate change has made climate conditions around the world more extreme and highly unpredictable. For farmers, especially those in the global South who are heavily impacted by climate change, the inability to predict weather conditions can lead to crop loss and poor productivity. Farmers need to know how to adapt to climate variability so they can sustain their crops and livelihoods.

The challenge is how to translate technical climate terms and adaptability models into accessible language and training that farmers can understand and implement. Strong partnerships are needed among countries with similar issues to support farmers in this shifting situation in order to support the achievement of sustainable development.

### TOWARDS A SOLUTION

Indonesia and the Colombo Plan have established strong partnerships to address development challenges faced by Colombo Plan member countries through South-South and Triangular cooperation (SSTC). The partners work together to resolve issues related to climate change and address women's empowerment and family planning.

In the field of climate change, Indonesia has been conducting a Training of Trainers on Climate Field School programme. The programme is managed by Indonesia's Meteorology, Climatology and Geophysical Agency (BMKG) in close collaboration with extension workers of the Ministry of Agriculture and farmers. The programme strives to bridge the gap between the technical nature of climatology and farmers' ability to use climate information to improve and protect crop production. Through Training of Trainers,

#### PROJECT NAME

Training of Trainers on Climate Field Schools

#### NOMINATED BY

Ministry of State Secretariat, Indonesia

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, Indonesia, Lao People's Democratic Republic, Myanmar, Nepal, Papua New Guinea, Sri Lanka, Philippines, Viet Nam

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 17.9, 17.16

#### SUPPORTED BY

Colombo Plan

#### IMPLEMENTING ENTITIES

Ministry of State Secretariat, Meteorology, Climatology and Geophysical Agency of Indonesia (BMKG)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2019 – Ongoing

#### LINK

<https://colombo-plan.org/capacity-building-programme/>



agricultural sector professionals from countries around the region gain the skills needed to help farmers in their home countries interpret climate information and apply the information in everyday use.

To date, 58 participants from nine countries (Bangladesh, Indonesia, Lao PDR, Myanmar, Nepal, Papua New Guinea, Sri Lanka, Philippines and Viet Nam) have taken the course. The training has been conducted twice, in 2019 and 2021, and more training is planned for the future. Through this collaboration, Indonesia supports the achievement of SDG 2 (zero hunger) and SDG 17 (partnership for development goals).

The training involves in-class sessions, during which resource persons deliver lectures on various topics related to climate and agriculture. Participants also have the opportunity to observe and use the tools to measure climate and weather and learn how to use that information for crop production. At the end of the programme, participants create an action plan for addressing climate and agriculture issues in their countries. Through implementation of the action plans, the knowledge learned is transferred to farmers in countries across the region, ensuring the sustainability of the programme.

Due to the COVID-19 pandemic and with tight restrictions on international travel to Indonesia, the 2021 course was conducted online. Despite the suspension of the hands-on training portion of the course, participants were still enthusiastic. The hands-on experience was replaced with active learning for participants. Nevertheless, implementing the programme offline is more effective as participants are more engaged and able to practice what they learn during their training in Indonesia.

To assess the effectiveness of the programme, participants provide feedback and suggestions for improvements in the future. Communications are maintained with programme alumni to follow up on the progress of their action plan implementation and to measure the impact of the programme in beneficiary countries. The programme has been successful in improving the capacity of farmers, particularly on three indicators, namely: (i) the ability to disseminate to other farmers; (ii) the ability to access weather information; and (iii) the ability to apply their knowledge in managing rice fields. Under each indicator, farmers have become able to conduct various activities, such as disseminating their knowledge through personal or group discussions, accessing weather information via android smartphones and applying newly learned farming techniques for better crop production.



This programme highlights the importance of upgrading the skills and knowledge of agricultural trainers and extension workers so that they can disseminate valuable climate information and agricultural techniques to farmers, helping the latter adapt to climate change.

#### CONTACT INFORMATION

**Mrs. Noviyanti**

Head of Bureau for Foreign Technical Cooperation  
Ministry of State Secretariat, Indonesia  
ktsst@setneg.go.id



# Online Training on Food Packaging and Labelling for African, Latin American and Caribbean Countries



## Strengthening South-South and triangular cooperation in the agricultural sector

### CHALLENGE

The food needs of growing global populations mean that there is a higher demand for food production. Agricultural packaging is needed for farmers and agricultural producers to deliver food to consumers. Packaging protects food products from microbial contamination and water and air infiltration. Labelling also plays an important role as it informs the consumer about the product's ingredients and nutrition.

The use of appropriate packaging technology is an important factor for horticultural products that are categorized as perishable goods. They are generally easily contaminated by bacteria, sunlight and odors. For this reason, it is necessary to ensure physical protection, barriers, nutritional and sensory characteristics and composition or grouping in the packaging to maintain quality while providing added value. Packaging and labelling of products must be carefully managed. It should be harmonized with international standards, which aim to protect consumer health. Some developing countries experience difficulties in accessing information and training needed for agricultural product packaging and labelling.

### TOWARDS A SOLUTION

To address the above challenge, the Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) collaborated with the Government of Indonesia to organize training related to food labelling and food packaging. This is part of a series of training sessions supported by Indonesia to develop agricultural sectors in other developing countries using a South-South cooperation modality.

#### PROJECT NAME

Online Training on Food Packaging and Labelling for African, Latin American and Caribbean Countries

#### NOMINATED BY

Ministry of Foreign Affairs, Indonesia

#### COUNTRIES/REGIONS/TERRITORIES

Belize, Burundi, Colombia, Costa Rica, El Salvador, Ethiopia, the Gambia, Honduras, Indonesia, Kenya, Madagascar, Nicaragua, Panama, Rwanda, Suriname, United Republic of Tanzania

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 17.16

#### SUPPORTED BY

Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC)

#### IMPLEMENTING ENTITIES

Ministry of Agriculture, Indonesia

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

October 2021 – November 2021

#### LINK

<https://youtu.be/9tRmHXvBoig>  
<https://youtu.be/Gj6W4gBC04Y>

Experts from the Ministry of Agriculture of Indonesia teamed up with the Halal Food Authority of the United Kingdom to deliver virtual training sessions to 27 beneficiaries in 15 countries around the world (Belize, Burundi, Colombia, Costa Rica, El Salvador, Ethiopia, Gambia, Honduras, Kenya, Madagascar, Nicaragua, Panama, Rwanda, Suriname, the United Republic of Tanzania). Participants included government officials, farmers, business owners and education institutions. Using e-learning techniques, training materials were provided and discussions held, with Q&A sessions.

Through the training, the participants received guidance on: (i) increasing competitiveness through packaging and labelling; (ii) basic knowledge of packaging types and designs for small- and medium-sized enterprises; (iii) halal food packaging and labelling; (iv) requirements regarding food labelling; and (v) design using an open-source application.

Packaging should consider brand selection to facilitate identification from other similar products, as a means of promotion, and increase consumer confidence. Attractive packaging design is very important in marketing efforts, considering the characteristics (for vegetables and fruits), packaging classification (disposable, multistrip, and semi-disposable) and levels (primary, secondary and tertiary).

The training introduced international regulations regarding food labelling and gave participants new perspectives on how goods produced by small- and medium-sized businesses can be export oriented. The training provided examples of graphic design through software applications, focusing on form and content of packaging, product information, legal aspects including copyright issues and selection of packaging materials to serve the purpose of marketing the products. The 'smart intelligence packaging' method was introduced which is economical but environmentally friendly. This method will help with competitiveness during marketing and is a sustainable practice.

One module covered halal certification of products. The module discussed how to increase consumer confidence by specifying the composition of the ingredients, including appropriate packaging, and which ingredients fall under the halal category as determined by the Halal Authority. The halal certification module was deemed useful as halal products are not yet a popular topic in Africa or South America and the Caribbean.

Through this training, participants gained the packaging and labelling knowledge for the purpose of marketing agriculture products which can be implemented in their own countries. In the end, to the training should boost the agricultural productivity and incomes of small-scale food producers and provide opportunities for value addition and non-farm employment, as targeted by SDG 2.3. Furthermore, the partnership between the Indonesia and NAM CSSTC is in line with the concept of global partnerships for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share



knowledge, expertise, technology and financial resources to support the achievement of the sustainable development goals in all countries, in particular developing countries, as targeted by SDG 17.16.

As the training took place during the Covid-19 pandemic, this training was conducted online using e-learning and video materials and participants interacted online with the trainers. Although the virtual nature of the training was out of necessity, it was realized that online training is in fact environmentally friendly and cost effective, allowing even greater geographical reach for participation, and thus may be a long-term solution for training and sharing across nations and regions.

The training is considered relatively easily replicable and could be extended widely through online, hybrid or full offline settings.

#### CONTACT INFORMATION

**Ms. Maria Renata Hutagalung**

Director of International Development Cooperation  
Ministry of Foreign Affairs, Indonesia  
dit.kspi@kemlu.go.id



# Online Training on Principles and Applications of Integrated Pest and Disease Management for African, Latin American and Caribbean Countries



## Improving agricultural productivity and rural livelihoods through South-South Cooperation

### CHALLENGE

The food needs of growing global populations mean that farmers are expected to grow more crops on their existing agricultural area to meet the demand. To achieve this, agricultural technology needs to constantly be improved to minimize crop losses and at the same time to safeguard the environment. One method to address these issues is Integrated Pest Management.

Integrated Pest Management involves considering all existing strategies of pest control and other measures to discourage the growth of pests, while minimizing the harm to human health. Efforts have been made to handle plant pests by developing farming methods, the use of resistant crops, the use of pesticides and the use of biocontrol agents such as antagonists, parasitoids and predators but more effort is needed. Integrated Pest Management (IPM) is a control strategy that takes ecological control into account, so that control is not unnecessarily perturbed and causes no great loss to achieve maximum returns in crops growing.

### TOWARDS A SOLUTION

In response to the above challenge, the Ministry of Foreign Affairs and Ministry of Agriculture of the Government of the Republic of Indonesia collaborated with the Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC) to organize an online training course on "Principles and Applications of Integrated Pest and Disease Management." Experts from the Ministry of Agriculture shared their expertise in a virtual training session.

Through the Integrated Pest Management training, participants carefully analysed available approaches for pest control and how to integrate suitable measures to hinder the growth of pest populations. Participants learned



#### PROJECT NAME

Online Training on Principles and Applications of Integrated Pest and Disease Management for African, Latin American and Caribbean Countries

#### NOMINATED BY

Ministry of Foreign Affairs, Indonesia

#### COUNTRIES/REGIONS/TERRITORIES

Barbados, Belize, Burundi, Colombia, Costa Rica, Ecuador, Ethiopia, Guatemala, Indonesia, Madagascar, Malawi, Mauritius, Panama, Rwanda, Senegal, South Africa, Suriname, United Republic of Tanzania

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 17.16

#### SUPPORTED BY

Non-Aligned Movement Centre for South-South Technical Cooperation (NAM CSSTC)

#### IMPLEMENTING ENTITIES

Ministry of Agriculture, Indonesia

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

August 2021 – September 2021

#### LINK

<https://youtu.be/IDPxf2JpEU>  
<https://youtu.be/FdvzILWp0>

how the Integrated Pest Management concept stresses the growth of healthy crops that disrupt agroecosystems as little as possible and promotes natural pest management. This method helps prevent crop loss while safeguarding the environment.

The specific objectives of the training course on pest and disease management were to:

- ▶ review recent developments in integrated pest and disease management;
- ▶ share experiences in the application of integrated pest and disease management; and
- ▶ identify issues, impediments and opportunities in the application of integrated pest and disease management.

This training was attended by 53 participants from 17 countries (Barbados, Belize, Burundi, Colombia, Costa Rica, Ecuador, Ethiopia, Guatemala, Madagascar, Malawi, Mauritius, Panama, Rwanda, Senegal, South Africa, Suriname, the United Republic of Tanzania), who were mostly government officials and farmers.

During the training, participants were introduced to topics such as the importance of agroecosystem ecology as the basic element of integrated pest management and tactics and methods of control using integrated pest management. Participants learned techniques and tactics to manage agriculture for populations with low economic levels and how to prevent negative effects on the environment, humans and wildlife. Pest and disease control strategies were introduced, including cultural, physical, biological and chemical methods. Organic plant pesticides were promoted as an alternative to chemical pesticides as botanical pesticides offer little danger to the environment and human and animal health. Participants also learned to produce and process various environmentally safe fertilizers.

The goal of the training was to enable participants to learn how to prevent crop loss and boost agricultural productivity and thus improve the incomes of small-scale food producers in SDG 2.3. The partnership between Indonesia and NAM CSSTC for organization of this training enhanced global partnerships for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, as targeted by SDG 17.16.

As this took place during the Covid-19 pandemic, the training was conducted online using e-learning and video materials and participants interacted online with the trainers. Although the virtual nature of the training was out of necessity, it was realized that online training is in fact environmentally friendly and cost effective, allowing even greater geographical reach for participation, and thus may be a long-term solution for training and sharing across nations and regions.

The training is considered relatively easily replicable and could be extended widely through online, hybrid or full offline settings.



## CONTACT INFORMATION

**Ms. Maria Renata Hutagalung**

Director of International Development Cooperation  
Ministry of Foreign Affairs, Indonesia  
[dit.kspi@kemlu.go.id](mailto:dit.kspi@kemlu.go.id)





# Triangular Cooperation Project for Promoting Agricultural Capacity Development in Paraguay



## Enhancing the poverty-reduction capacity of sustainable agriculture in Paraguay through triangular cooperation with Argentina and the Republic of Korea

### CHALLENGE

Paraguay is a traditional agricultural-based country with favourable climate, soil and topography and an economic structure centred on primary industries, such as agriculture and livestock farming. The country's agriculture and livestock products account for more than 60 percent of total annual exports and more than 10 percent of GDP, playing an important role in Paraguay's economy.

Paraguay considers agricultural competitiveness an important contribution to its economic development. There are two categories of farmers who can have a direct role in leading agricultural competitiveness: large-scale, land-based corporate farmers, whose numbers are few, and poor family farms and small-scale farmers, who make up the great majority and who rely on narrow margins.

Taking a long-term perspective, the country is aware that to ensure sustainable economic and social development it is necessary to strengthen capacities and self-reliance of family farms and small-scale farmers.

### TOWARDS A SOLUTION

To meet this challenge, KOICA formed a triangular cooperation project with Argentina and Paraguay. This new project falls within an ongoing project, the Sustainable Agriculture and Rural Development in Paraguay project (2015-2023/US\$ 7 million).

Argentina is a suitable partner as its climate, environment, soil and major crops are similar to Paraguay and the two countries share the same language. Argentina also has accumulated knowledge and experience in increased

#### PROJECT NAME

Triangular Cooperation Project for Promoting Agricultural Capacity Development in Paraguay

#### NOMINATED BY

Korea International Cooperation Agency (KOICA)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Paraguay, Republic of Korea

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.4, 2.4

#### SUPPORTED BY

KOICA, General Directorate for International Cooperation of the Ministry of Foreign Affairs, International Trade and Worship of Argentina (MOFA-Argentina)

#### IMPLEMENTING ENTITIES

KOICA, General Directorate for International Cooperation of MOFA-Argentina

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

June 2019 – December 2022

#### LINK

<https://bit.ly/3BDmJeP>  
<https://bit.ly/3oQCZI9>

efficiency and productivity and agricultural technology, making it competitive in the global market.

KOICA provides technology, human resources and financing for the project activities. The KOICA Paraguay Office facilitates management and provides financial support for Argentine experts dispatched to Paraguay. The General Directorate for International Cooperation of the Ministry of Foreign Affairs and Worship of Argentina (MOFA-Argentina) is an aid provider and pivotal partner of Paraguay, and for this project contributes material resources and finances. As the beneficiary partner, Paraguay, through its Ministry of Agriculture and Livestock (MAG-Paraguay), is responsible for providing the staff to be trained and ensuring they follow-up with farmers after completing their training, as well as monitoring and communication within the triangular cooperation.

Through this project, agricultural experts from Argentina are sharing cultivated crop management skills with MAG-Paraguay officials to improve the production scale of Paraguay's small-scale farmers. Knowledge and skills being shared cover topics such as soil and rain-water management, post-harvest systems, organizational reform for value chains, transaction cost reduction, sustainable production methods and business model creation.

Five workshops are being held in 2022. A total of 128 officials from MAG-Paraguay have participated in workshops (as of time of writing) to be qualified extension officers. Participants are learning about improving agricultural systems, crop varieties, commercialization and added value of products and project cycle management skills. Next, the MAG-Paraguay officials are assigned to transfer those skills and capabilities to small-scale farmers and family-run farms within the country.

The project aims to increase farm household incomes and decrease poverty, thereby improving the overall social-economic development in Paraguay's rural areas. With improved capacities of small-scale farms and family farms, the country can become more competitive in the global agricultural market.

This project contributes to SDG2 (end hunger, achieve food security and improved nutrition and promote sustainable agriculture) through improving the skills of Paraguayan public officials who are expected to transfer those skills and knowledge to small-scale farmers and family farmers ensuring project sustainability. It contributes to SDG1 (end poverty), through strengthening crop production capabilities and self-reliance of small-scale farmers.

As rural development with a focus on agriculture is required in many Latin American countries, such triangular cooperation could be applied in other countries in the region or expanded as a regional project.

---

#### CONTACT INFORMATION

**Ms. Seolri Park**  
Partnership officer, KOICA  
shellypark@koica.go.kr



# Small Farming – A Viable Business



## Promoting small farming as a viable business by organizing smallholder farmers to utilize their social capital and promote their collective action in the agricultural supply chain

### CHALLENGE

A high number of people live in poverty in both Bangladesh and India. The economy in Bangladesh is fundamentally based on agriculture, with two-thirds of the population engaged in or indirectly dependent on agricultural activities, while half of India's workers rely on agriculture. The effects of climate change are intensifying food insecurity and the instability of people's livelihoods in countries around the world, including these two.

Small-scale farmers, in particular, face political and socio-economic challenges that include changing agricultural and market dynamics and maintaining a sustainable livelihood strategy. Growing crops using conventional methods is no longer possible in many places across Bangladesh and India. Farming is also not seen as a profitable and exciting career path for young people. In addition, as a consequence of the covid-19 pandemic, the need to integrate digital tools and agriculture technologies in the agriculture sector increased. This may actually make the work more attractive to young people and help farmers solve some of the challenges they face in the fields.

### TOWARDS A SOLUTION

The WAVE-DHAN partnership from Bangladesh and India, supported by the Norwegian Agency for Exchange Cooperation (Norec), promotes transformation of small-scale farming into viable cooperative businesses by organizing smallholder farmers, taking advantage of their social capital and collective action in the agricultural supply chain. This youth-led project encourages young farmers to engage in agro-entrepreneurship through exploring and making use of digital tools, creating opportunities for employment.

The partner organizations exchange personnel and share a common project through which they focus on, among other things, goat rearing

#### PROJECT NAME

Small Farming – A Viable Business

#### NOMINATED BY

Norwegian Agency for Exchange Cooperation (Norec)

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, India, Norway

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.1, 2.3, 2.4, 2.a, 2.c, 5.a, 5.b, 8.2, 8.3, 8.5, 8.6, 9.3, 9C, 16.6, 16.7, 17.16, 17.6, 17.7, 17.8, 17.15, 17.17

#### SUPPORTED BY

NOREC

#### IMPLEMENTING ENTITIES

WAVE Foundation, Bangladesh and DHAN Foundation, India

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

August 2017 – December 2022

#### LINK

<https://bit.ly/3P6DT7O>

<https://bit.ly/3cU2or8>

<https://bit.ly/3Q1ciWC>

<https://bit.ly/3PZwVma>

<https://bit.ly/3BBH9EZ>





and management and household farm establishment. Goat-rearing is a proven and resilient means of poverty alleviation for small farmers which requires a relatively small investment. In the context of South Asia, goat rearing is dominated by women and their control over livestock is socially recognized. The project has also promoted climate smart agriculture practices, by designing training materials and training farming communities.

During the COVID-19 pandemic, it became evident that upgraded digital working methods and tools for the agriculture sector were needed. In the first stage of the project, the partnership developed an app that connects farmers and experts across Bangladesh with the goal of improving agricultural efficiencies and helping with climate change adaptation, among other assistance. The WAVE Foundation in Bangladesh then shared this digital tool with their partner Dhan Foundation in India.

This knowledge exchange between the two partners, including the sharing of best practices in agriculture and livestock development, has stimulated learning and promotion of improved livelihoods and innovation. The project is building linkage with stakeholders, including young professionals, organization staff, young community leaders, farmers, agro business personnel, resource persons, government officials, and private sector representatives in both Bangladesh and India.

The main project methodology is exchange of personnel to transfer and share knowledge and skills between the two organizations. The partnership adopted the below strategies to accelerate a successful outcome and achieve the SDGs:

- ▶ mutual decision-making;
- ▶ adaptation and usage of suitable media and tools for communication;
- ▶ knowledge exchange in physical, virtual and hybrid mode;
- ▶ engagement and capacity development of management, staff and relevant stakeholders; and
- ▶ building community ownership.

From the beginning, the partnership has shared responsibilities. The interaction on finalizing the nature and scope of knowledge exchange has been ongoing through online and offline correspondence encouraging both formal and informal communication. There were significant concerted actions of partnership such as establishment and strengthening of 16 local Farmers Producers Organizations (Krishi Moarcha), a Black Bengali Goat Training Manual, an FPO Monitoring Tool, and an Online Goat Rearing Advisory Tool. The project cooperation, partnership and personnel exchange has been a cross-cultural experience that has stimulated a broader global understanding as well.

A main outcome achieved in the project is the expansion to 16 districts with 550 farmers associated with FPOs. This has given a great outreach for online goat advisory services. In the value chain process, from production to marketing, community farmers have been sensitized about digital tools. So far, the exchange programme has included 16



professionals alongside a significant number of staff that have participated and executed the project from both organizations.

This good practice has created sustainability, effectiveness and cooperation over the years. It has helped develop responsible young leaders and sensitized community farmers, bringing positive changes and promoting sustainable development. In terms of replication and adaptation, using digital tools to sensitize and organize farmers is highly relevant for other similar organizations.

In terms of the outreach of the organizations in India and Bangladesh, the young professionals engaging in exchanges share their knowledge with larger teams, educating field teams and stakeholders about a wide range of strategies and technologies. The process helps draw feedback and set strategies to replicate the learning in new contexts and to derive ideas to implement similar types of projects in other working areas. A key lesson learned is the importance of reciprocity for strengthening coordination and communication during physical and digital exchanges within a partnership.

#### CONTACT INFORMATION

##### **Nazma Sultana Lily**

Project Coordinator, Small Farming - A Viable Business, and Assistant Director, WAVE Foundation  
lily@wavefoundationbd.org  
+8801707081393

##### **Amalie Senneset**

Programme Adviser, Norec  
amalie.senneset@norec.no



# Promotion of Sustainable Agriculture and Marketing through Youth Involvement



## Increasing youth participation in sustainable agriculture and agricultural market value chains for improved food security in Kenya and Zimbabwe

### CHALLENGE

With rapidly rising populations in Kenya and Zimbabwe, of which youth account for 67.7 percent and 75.1 percent respectively, food needs are likewise rapidly increasing, especially in rural areas. However, most of the food in these two countries is produced by smallholder farmers who are aging. These older farmers are less likely to adopt new technologies needed to sustainably increase agricultural productivity and ultimately feed the growing populations.

Thus, there is a need to engage youth populations in agriculture. However, agriculture remains unattractive to most youth and is perceived as a career of last resort, one of drudgery and low monetary returns. Information on access to markets and production factors, including land and financing, remain extremely limited, hindering meaningful and adequate engagement of youth in agriculture in both countries.

### TOWARDS A SOLUTION

The Promoting Sustainable Agriculture and Marketing through Youth Involvement (PSAMY) project, supported by the Norwegian Agency for Exchange Cooperation (Norec), employs knowledge sharing between Kenyan and Zimbabwean youth to increase youth participation in sustainable agriculture and agricultural value chains and marketing. The project is anchored within SDG 1 (ending poverty), SDG 2 (zero hunger) and SDG 8 (productive employment and decent work for all). As with all NOREC exchange projects, this also targets SDG 17 (strengthened partnerships for the goals).

The project started during the COVID-19 pandemic which affected physical exchanges, hence necessitating participants from both Kenya and Zimbabwe to use digital technology to exchange knowledge on sustainable agriculture

#### PROJECT NAME

Promotion of Sustainable Agriculture and Marketing through Youth Involvement

#### NOMINATED BY

Norwegian Agency for Exchange Cooperation (Norec)

#### COUNTRIES/REGIONS/TERRITORIES

Kenya, Norway, Zimbabwe

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1a, 1b, 2.3, 2.4, 2.5, 8.2, 8.4, 8.6, 12.2, 12.4, 13.1, 13.3, 13.b, 17.2, 17.6, 17.7

#### SUPPORTED BY

Norec

#### IMPLEMENTING ENTITIES

Participatory Ecological Land Use Management (PELUM) Kenya and Farmers Association of Community Self Help Investment Groups (FACHIG) Zimbabwe

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2022 – December 2022

#### LINK

[www.pelumkenya.net](http://www.pelumkenya.net)



and marketing. PELUM Kenya, a civil society organization, under the regional PELUM umbrella which has membership in 12 countries in East, Central and Southern Africa, shares their expertise in sustainable agriculture practices, including soil health, agroforestry, pasture management, integrated pest management, water conservation, seed saving, and more. In turn, participants from Zimbabwe recruited by FACHIG, a civil society organization, share their expertise on agricultural produce value addition, entrepreneurial strategies, marketing and marketing dynamics, financial management, existing opportunities in agricultural value chains and sales. All the youth participants are trained in leadership and partnership building.

Project participants are recruited from local agricultural colleges, and are poised to pursue careers in the agricultural sector. They receive targeted training related to sustainable agricultural practices and value-added chains relevant to small-scale farm holders. The project participants in turn train established small-scale farmers on these “modern” approaches to help them adopt more sustainable, productive and profitable practices.

The process of creating this South-South knowledge exchange involved inputs from the two organizations at the highest-level which allowed for ownership of ideas in the project document and will support the sustainability of the proposed actions. FACHIG and PELUM Kenya developed a joint proposal clarifying the roles of each partner and expectations and agreeing on modalities for working and communicating. The partners then developed a training schedule for participants in both countries.

The PSAMY project strengthens participants’ skills in disseminating knowledge to farmer groups on sustainable agriculture, value chain and marketing and formation of market associations. Adopting sustainable farming practices and improving the ability to market produce can improve farm incomes. The implementing institutions are increasing their institutional knowledge on sustainable agriculture practices and innovations and market association and value chain development. The partnering of the institutions in the two countries led to increased networking and collaboration.

Resorting to digital technology for the exchanges due to the pandemic showed that knowledge and experience can indeed be shared through digital platforms and communication channels, even for training of trainers.

To promote sustainability, participants are transferring the knowledge and skills gained to their member organizations, farmer groups and other youths. The participants in the programme are also training other staff members and lead farmers to create a broader institutional memory. To further ensure sustainability, the digital platform will remain active after the end of the project to allow people to access the step-by-step project, including through online videos and recorded training sessions.



The youth in the project communities harbour misconceptions about the opportunities available in agriculture. When presented with the chance to learn and contribute to agricultural development in their communities, the response from the young participants has been very positive. A lesson learned by the project partners is to consider alternative methods of operating in times of disaster to ensure continuity of collaborations. This project is highly replicable in any part of the world where agriculture is a mainstay of the economy and opportunities to connect digitally are present.

#### CONTACT INFORMATION

**Rosinah Mbenya**

Country Coordinator, PELUM Kenya  
rosinah@pelumkenya.net; +254 724 760 438

**Tebetena Woldemariam**

Senior Programme Adviser, Norec  
tebetena.woldemariam@norec.no





# Micro-gardening and Greenhouse Construction



## Innovative model uses micro-gardening, drip irrigation and greenhouses to improve agricultural capacities and production

### CHALLENGE

Agriculture is a key economic sector in Kenya, making up 33 percent of the nation's gross domestic product (GDP), and is an important source of food supplies to the country. However, agricultural production in Kenya faces many challenges, including climate change (such as changes in precipitation and long periods of drought), outdated technologies, lack of sufficient equipment, shortage of arable land, disease, pests, lack of theoretical knowledge and limited access to markets. Solutions that are sustainable, adaptable and innovative are needed to overcome these barriers to efficient and optimal agricultural production in Kenya.

### TOWARDS A SOLUTION

To address the challenges above, the TİKA Nairobi Programme Coordination Office implemented the Greenhouse Construction and Micro-Gardening project which introduces a micro-model that supports practical and theoretical knowledge on adaptable solutions for better agriculture production. The project was implemented at four boarding high schools (two girls' schools and two boys' schools) for agricultural production in Nairobi, Kenya. The project provided the schools with greenhouses, drip irrigation systems, water tanks, plant support systems, tomato seedlings, micro-gardening units, protective clothing, pesticide spraying equipment and school benches. Students in young farmers' clubs were trained on greenhouse production and gained theoretical and practical agricultural knowledge.

The project partner, Nairobi City County Assembly, has a mission of advancing economic, social, cultural and political aspirations of the people of Nairobi City County through robust legislation, prudent oversight and responsive representation. The Agriculture Committee at the Nairobi City County Assembly regularly monitors the project and advises the schools accordingly. The outcomes thus far have shown the project to be successful.

#### PROJECT NAME

Micro-gardening and Greenhouse Construction

#### NOMINATED BY

Turkish Cooperation and Coordination Agency (TİKA)

#### COUNTRIES/REGIONS/TERRITORIES

Kenya, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 4.4, 4.7, 12.2, 12.a

#### SUPPORTED BY

TİKA

#### IMPLEMENTING ENTITIES

TİKA Nairobi Programme Coordination Office and Nairobi City County Assembly

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

August 2021 – December 2021

#### LINK

<https://bit.ly/3bs3QRg>



The first harvest at the schools was used to feed students, teachers and other school staff. The students in the Agriculture and Young Farmers Club are continuously gaining both theoretical and applied knowledge and skills on agriculture production through maintaining the greenhouse and micro-gardens. This project creates immediate knowledge transference from teachers to students, raising awareness among parents and eventually spreading out into the larger community. Furthermore, this project has shown characteristics of easy replicability in terms of adoption of greenhouses by parents and teachers on their farms, as well as adoption of micro-gardening units in the balconies of their houses.

This is the first micro-gardening project in schools in Kenya. Using drip irrigation systems for the micro-gardens is an added value of the project. As an indirect outcome, a supermarket chain is selling the micro-gardening units with drip irrigation systems to customers who would like to implement the project in their own homes and gardens.

The project supported the high school students to access adequate and safe nutrition from fresh fruits and vegetables and decreased their spending on food. These goals are in line with SDG 2 (zero hunger). The project provided opportunities to generate income for the high school students contributing to SDG 1 (no poverty), SDG 8 (economic growth) and SDG 4 (quality education). The project model was easy to adopt, creating a conducive environment for individuals (especially students, their parents and teachers of the beneficiary schools) to adopt the new techniques and practices. As the number of people trained in micro-gardening and greenhouse farming and management increased, the potential exists to improve the condition of institutions and small farming enterprises. This contributes to SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities).

The project has three sustainability factors: firstly, there will always be new groups of students taking up hands-on agriculture lessons and benefitting from this practical knowledge; secondly, there is always a need for food in the schools and the greenhouses and micro-gardening units will continuously meet this need; thirdly, the knowledge and skills acquired by individuals through this project creates self-sufficiency in their lifetime through a continuous source of income if they intend to get into farming and this knowledge can also be transferred to others by these individuals. Due to the sustainable nature of the project, it can be easily replicated by other organizations and countries. The project model having been adopted by the private sector highlights its added value, general acceptance and adaptability.

#### CONTACT INFORMATION

Strategy Development Department, TİKA  
sgdb@tika.gov.tr





# Drone-based Multispectral Imaging for Agricultural Development



## Detection of surface reflection and vegetation indices for multi-purpose evaluation

### CHALLENGE

Azerbaijan has been developing its rural economy to balance its oil-dependent economic structure since 1995. The country has effectively employed market mechanisms and reformed land and agricultural structures. Farming that during the Soviet period was based on collective ownership has been replaced with private ownership-based production structures within the framework of a privatization programme.

Yet, various problems in the agricultural sector remain; mainly, lack of efficient crop production, low mechanization, lack of technical legislation and investment, lack of quality seeds, insufficient artificial insemination points in husbandry, insufficient forage crops, inadequate agricultural structures in production and control and general managerial problems related to decision-making and implementation processes in agricultural production.

### TOWARDS A SOLUTION

To solve some of these challenges, a wider use of technology is needed to improve agricultural outcomes. For instance, by the time human observation notices changes or damage to crops, it may be too late to take precautions. Using technology based on visible light and near infrared (NIR) spectra, natural formations can be identified and changes recognized long before symptoms develop. The images for this are taken with cameras mounted in unmanned aerial vehicles (UAVs, or drones). Due to the numerous benefits provided by UAVs, their use in agriculture has been increasing rapidly. Remote sensing systems can be used to monitor plants and detect disease agents, pests, weed flora and water stress. Damage rates and harvest time can be determined, along with yield estimations. Vegetation can be evaluated in terms of quality and quantity using related indices.



#### PROJECT NAME

Drone-based Multispectral Imaging for Agricultural Development

#### NOMINATED BY

Turkish Cooperation and Coordination Agency (TİKA)

#### COUNTRIES/REGIONS/TERRITORIES

Azerbaijan, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 2.4, 2.5, 9.5, 15.1, 15.5, 15.7, 15.8

#### SUPPORTED BY

Republic of Türkiye Ministry of Culture and Tourism

#### IMPLEMENTING ENTITIES

Azerbaijan Agricultural Innovation Center, Ankara University of Türkiye

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

October 2021 – November 2023

#### LINK

<https://bit.ly/3Js9P5h>



To address the challenges in Azerbaijan, the Drone-based Multispectral Imaging for Agricultural Development project, supported by the Turkish Cooperation and Coordination Agency (TİKA), makes use of unmanned aerial vehicles (UAVs), especially in regions that are risky in terms of weather and soil conditions, pesticides, faulty spraying, etc., for crop status examination, disease and pest detection, analysis of plant stress levels, yield estimation and weed detection. The UAVs capture higher resolution images and are faster and more cost-effective than conventional systems.

By using drones, together with complementary software and hardware, the project allows the:

- ▶ creation of indices for plant identification;
- ▶ creation of indices for disease detection and agricultural spraying with drones;
- ▶ detection of harmful pests and weeds;
- ▶ analyses of soil structure and characteristics; and
- ▶ detection of abiotic and biotic stress-induced symptoms.

To implement the project, TİKA donated two drones (a multispectral drone and an agricultural spraying drone) and mapping and image analysis software to the Agricultural Innovation Center of Azerbaijan. This equipment is being used in disease agent detection, pest detection, determination of damage rates, weed flora detection, water stress detection, harvest time detection and yield estimation through images taken with cameras on the UAVs. The drones take high-resolution photos of hundreds of hectares of land in a single flight. Imaging through the UAVs can be completed in a shorter time than traditional work, using less human and labour resources. UAVs are capable of photographing even in cloudy weather conditions, when satellite photographs are not available. Aerial activities are supported by ground studies. Although TİKA's part of donating the drones and training the relevant personnel has been completed, the use of gadgets and know-how in other research activities and studies by the Agricultural Innovation Center of Azerbaijan will continue.

In addition to determining surface reflections and vegetation indices for multi-purpose evaluation, training on agricultural spraying with drones is carried out, including training on the use of both the hardware and the software. The Agricultural Innovation Center provides physical facilities, has obtained legal permissions for drone flights and designates the experts to participate in the training.

So far, three Azerbaijani experts were trained on UAVs over five days in December 2021, held in Ankara, Türkiye, and 22 experts received UAV A1 category pilot training in Azerbaijan in April 2022.

For the project's sustainability, Azerbaijan Ministry of Agriculture Science and Innovation Center and Azerbaijani farmers will be able to continue their training and research with the drones provided. Other training programmes are planned for different instructors and in different areas of UAVs used in agriculture, both in Azerbaijan and Türkiye.



The results from the analysis of the drone data obtained are expected to be collected in scientific articles, making them available to countries around the world. Upon assessing the need and availability of a recipient country or institution, this project may be replicated. Research and preparations have already begun for replicating the project in more countries.

#### CONTACT INFORMATION

**Strategy Development Department, TİKA**  
sgdb@tika.gov.tr

# Technical Knowledge Exchange in the Agri-food Sector Between Chad and Niger



Study tour to exchange experiences on providing financing to farmers and small- and medium-sized enterprises in the agri-food sector

## CHALLENGE

The agricultural and agri-food sector in Chad faces several challenges. At the state level, structural mechanisms put in place do not work well, and the business environment is difficult. Banks and monetary financial institutions are severely limited with their credit offers to small- and medium-sized enterprises (SMEs) due to the difficult economic and political environment, as well as the insecurity that prevails in certain areas of the country.

Beneficiaries have significant deficits in technical capacities, non-existent or very weak training in entrepreneurship, poor practice of good governance, material and financial constraints, poor partnership development and low production capacity. Most beneficiaries are operating in the informal sector and are struggling to develop.

Specifically related to financing for SMEs, constraints include:

- ▶ the structures in place do not respond to the financing needs of the beneficiaries (SMEs, women and young people);
- ▶ SMEs who are economically deficient have difficulties accessing financial services (banking and microfinance); and
- ▶ financing structures find it difficult to deal with SMEs in terms of management and cost, because SMEs do not meet the conditions of acceptable profitability.

## TOWARDS A SOLUTION

To address the issue of financing SMEs linked to the agro-food chain in Chad, a knowledge exchange on financing models for SMEs took place between Chad and Niger. The exchange was based on a financing mechanism model of the Agricultural Bank of Niger. This South-South and Triangular cooperation study tour was funded by and facilitated by the Food and



### PROJECT NAME

Technical Knowledge Exchange in the Agri-food Sector Between Chad and Niger

### NOMINATED BY

Food and Agriculture Organization of the United Nations (FAO)

### COUNTRIES/REGIONS/TERRITORIES

Chad, Niger

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 17.6

### SUPPORTED BY

FAO South-South and Triangular Cooperation Division (PST)

### IMPLEMENTING ENTITIES

FAO

### PROJECT STATUS

Completed

### PROJECT PERIOD

October 2020 – November 2021



Agriculture Organization of the United Nations (FAO), with the other partners participating in a needs assessment, workshops and the study tour.

The study tour was preceded in Chad by a capacity needs assessment exercise which involved the consultation of 67 SMEs, key ministries (Agriculture, Livestock, Finance and Budget, Environment, Women, Vocational Training and Small Trades) and technical and financial partners. Mapping was done of relevant stakeholders and a roadmap drawn up for implementing lessons learned, including adoption of an action plan. Terms of Reference were drawn up for the study tour. The needs assessment and ToR were validated through a national workshop which gathered representatives of SMEs, state and non-state actors. The study tour took place from 10 to 16 October 2021 and was made up of seven members, primarily senior officials in charge of finance and agriculture. The tour included group meetings, individualized meetings between institutions of the same nature, field visits and sharing of documentation.

The working methodology adopted was that for each activity or meeting, there was an introduction of the mission, the objectives and the centres of interest by the head of the mission, presentation of the participants, presentation of the experience by the institution, followed by discussions and a summary of the results of the meeting.

During the study tour, good practices and innovations in financing of farmers and agricultural and food SMEs in Niger were identified. Specifically discussed were the situations of agri-food SMEs, the mechanisms, approaches and financing models developed in Niger, the experiences of financing producer organizations and SMEs and the lessons learned and problems met. Opportunities were identified for partnership and collaboration between Chad and Niger in financing agricultural and food operators and SMEs.

Following the study tour, the Government of Chad organized a restitution workshop which resulted in preparation of a roadmap on financing of agricultural holdings and SMEs, capacity building of farmers' organizations and economic and vocational inclusion of women and young people in the agricultural and food sectors.

Priority actions proposed include a capacity building programme for producer organizations and SMEs, the establishment of an agricultural bank, the adoption of agriculture risk management mechanisms, the formation of chambers of agriculture, the design of a remote agricultural advisory system, and the setting up of an incubator centre for start-ups and SMEs to support job creation and income-generating activities. To this end, an ad hoc committee at the Ministry of Agriculture has been established.

The financing models seen in Niger were new for Chad and have the potential to help meet the challenges and address the bottlenecks in this area. The study tour paved the way for future partnership opportunities between Chad and Niger, such as supporting Chad to create



an agricultural bank through the sharing of legal documentation, exchanges on practical arrangements, etc., and the creation of the chambers of agriculture.

The Chadian mission drew several lessons from the exchange, namely, the relevance of South-South cooperation, the significant support of the state in the promotion of these initiatives, the significant role of the private sector, the importance of appropriation by the beneficiaries, the complementarity and synergy between different funding mechanisms, the commitment of all stakeholders in capacity building programmes, the excellent collaboration between institutions, the need for an appropriate organizational and management framework, and finally, the need for commitment and determination as major success factors.

#### CONTACT INFORMATION

**Hassane Mamoudou**  
Policy Officer, FAO Chad  
hassane.mamoudou@fao.org

# Generation of Laws on Food Labeling in Latin America and the Caribbean



## Improving national food labelling legislation to better inform consumers

### CHALLENGE

According to the FAO Food and Nutrition Security Outlook 2021, one in four adults in Latin America and the Caribbean suffers from obesity. In all countries in the region, the figures for food insecurity, obesity and overweight are higher for women than men. The number of overweight boys and girls under five years of age has increased in the last 20 years. In 2020, the prevalence was 7.5 percent, 2 percentage points above the world average.

If these trends continue, the region will not achieve the goal of SDG 2 that by 2030 statistics on overweight boys and girls under 5 years of age remains below three percent. Overweight and obesity have important economic, social and health repercussions for countries as they cause a reduction in productivity and an increase in disability and premature mortality, among other problems.

### TOWARDS A SOLUTION

The programme for the Generation of Laws on Food Labeling in Latin America and the Caribbean supports countries to generate labeling laws that allow consumers to be better informed, promoting healthier food consumption and reducing malnutrition in all its forms in the region.

The programme is executed by the Parliamentary Front against Hunger (PFH) in Latin America and the Caribbean. This is a plural network of legislators committed to achieving SDG2 in 21 countries in the region. PFH in Latin America and the Caribbean receives permanent support from the Food and Agriculture Organization of the United Nations (FAO), through the Hunger-Free Latin America and the Caribbean Initiative (financed by the Spanish Agency for International Development Cooperation (AECID)), and the "Mesoamerica without Hunger AMEXCID-FAO" programme, financed by the Mexican Agency for International Development Cooperation (AMEXCID).

#### PROJECT NAME

Generation of Laws on Food Labeling in Latin America and the Caribbean

#### NOMINATED BY

Food and Agriculture Organization of the United Nations (FAO) and the Parliamentary Front against Hunger (PFH) in Latin America and the Caribbean

#### COUNTRIES/REGIONS/TERRITORIES

Spain and Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Paraguay, Peru, Panama, Uruguay and other Latin America and Caribbean countries

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.2, 3.4

#### SUPPORTED BY

FAO, Spanish Agency for International Development Cooperation (AECID), Mexican Agency for International Development Cooperation (AMEXCID), and nine countries in which the programme has an impact

#### IMPLEMENTING ENTITIES

PFH in Latin America and the Caribbean

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

March 2016 – March 2025

#### LINK

[parlamentarioscontraelhambre.org](http://parlamentarioscontraelhambre.org)



The Generation of Laws on Food Labeling in Latin America and the Caribbean programme addresses SDG2, in particular, target 2.2 (by 2030, end all forms of malnutrition) and SDG3, in particular, target 3.4 (reduce by one-third premature mortality from non-communicable diseases through prevention and treatment).

The work methodology is based on an exchange of experiences, through meetings and seminars, of national chapters of PFH, with the support of FAO and the Spanish and Mexican cooperation agencies. Exchange of experiences and dialogue has been promoted, articulating and disseminating the evidence and good practices of countries that have already carried out these policies. This has included regional, sub-regional and national political dialogue and parliamentary discussions of food labeling laws. PFH and FAO have sought to systematize these exchanges and the available evidence through publications that have been made available to the countries. The most recent of these publications (soon to be released) is a guidance note on "Nutrition labeling on the front of the container in Latin America and the Caribbean."

Since 2016, labeling has been a point of discussion in all the political spaces and meetings of PFH in Latin America and the Caribbean, and at least twice a year in their regional forum and in their annual planning meeting. Follow-up and technical assistance provided helped raise awareness in the parliamentary world. After legislation was approved in the first adoption country, Chile, in 2017, this experience was shared in subsequent meetings of PFH in countries throughout the region, which allowed PFH to respond in a concerted manner to some productive sectors that have resisted the advance of food labeling policies.

Several countries in the region now have food labeling laws, such as [Chile](#), [Colombia](#), [Ecuador](#), [Mexico](#), [Peru](#), [Argentina](#) and [Uruguay](#) (Presidential Decree). Costa Rica, Dominican Republic, Guatemala, Honduras, Panama and Paraguay are working on bills on the matter. At the regional level, the Latin America and the Caribbean Parliament (PARLATINO) approved the [Framework Law for Latin America on the regulation of advertising and promotions of food and non-alcoholic beverages aimed at children and teenagers](#) and the [Model Law on the Labeling of Processed and Ultra-processed Food Products for Consumer Human Rights and Health Protection](#) that is in the process of being updated.

One of the most innovative elements of this good practice has been the permanent work of parliamentarians from different countries providing knowledge and experiences, but also working together with academia, especially through an alliance between the PFH and the [Right to Food Observatory](#), an academic network of 90 universities throughout the region that has included food labeling policies within its Annual Call for Research on the Human Right to Adequate Food. The process has also involved civil society, consumer associations and other stakeholders interested in the topic.



Thanks to this successful policy work, more countries have joined and benefit from the experience of others, constantly improving this type of legislation and increasing the consumption of healthier products. In Chile, the first country in the region to pass this type of legislation, a [study by the University of Chile, Diego Portales University and the University of North Carolina](#) shows that between 2015 and 2017 the consumption of sugary drinks decreased by 23.7 percent and purchases of bottled water, diet beverages and fruit juices with no added sugar increased by 5 percent.

The greatest impact of this good practice is the scaling up of food labeling laws throughout the region, a process that continues to develop. Its sustainability is assured as the efforts of PFH are expected to continue and regional agreements have been strengthened, for example, the Parliamentary and Ibero-American Pact for Food Security with Gender Equality (which PFH is promoting).

To continue replicating this good practice in the region of food labeling policies and promotion of responsible consumption and production to reduce malnutrition in all its forms, it is necessary to deepen political commitment at the highest levels, to continue the cooperation of PFH with FAO, AMEXCID and AECID and to support more technical assistance and facilitate continued South-South cooperation among Latin American and Caribbean countries.

## CONTACT INFORMATION

### Jairo Flores

Chief coordinator, Parliamentary Front against Hunger in Latin America and the Caribbean  
contacto@parlamentarioscontraelhambre.org; Luis.lopez@fao.org

# Cooperative Network of Wholesale Food Markets to Promote Efficient, Inclusive and Sustainable Food Systems



## Partnership between wholesale food markets throughout Latin American to strengthen technical capacities and exchange experiences

### CHALLENGE

Wholesale markets play a strategic role in the food supply of cities. These markets are key to guaranteeing a varied and healthy diet, promoting food culture, maintaining a functioning agri-food system and ensuring the food security of the population. Strengthening the development of wholesale markets is a priority in a context of growing urbanization, recurrent economic and health shocks, an environmental crisis and changing food demand patterns.

In the Latin American and Caribbean region, an estimated 300 public and private wholesale food markets exist, of different sizes and organizational forms. These are important economic units in terms of direct and indirect job creation and rural and urban development, fulfilling a significant role in national economies and in the daily life of cities.

Development of wholesale food markets is, however, a complex process involving varied stakeholders with different and possibly contradictory objectives. Supporting an upgrading process requires a tailored approach for each wholesale food market, considering the specifics of each project (creation, relocation or modernization), the state of the food economy, supply chain maturity and peculiarity and legal and fiscal frameworks.

### TOWARDS A SOLUTION

The Food and Agriculture Organization of the United Nations (FAO) Regional Office for Latin America and the Caribbean and the Latin American Federation of Wholesale Markets (FLAMA) established a joint, regional, South-South cooperation strategy to improve management of and promote the modernization of wholesale markets. The strategy seeks to enhance wholesaler efficiency, contribute to guaranteeing quality food, especially for the most vulnerable and food-insecure populations, and more strategically transform agri-food systems.

#### PROJECT NAME

Cooperative Network of Wholesale Food Markets to Promote Efficient, Inclusive and Sustainable Food Systems

#### NOMINATED BY

Food and Agriculture Organization of the United Nations (FAO), Federación Latino Americana de Mercados de Abastecimiento (Latin American Federation of Wholesale Markets - FLAMA)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.2.c, 8.3, 11.a, 12.3

#### SUPPORTED BY

FAO Regional Office for Latin America and the Caribbean (FAO-RLC)

#### IMPLEMENTING ENTITIES

FAO-RLC, FLAMA

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

November 2018 – Ongoing

#### LINK

<https://bit.ly/3STed1f>

Specifically, the initiative aims to ensure the proper functioning of wholesale markets for basic food products and their derivatives and to facilitate timely access to information on markets (SDG2). The initiative promotes development-oriented policies that support productive activities, entrepreneurship, creativity and innovation and fosters the formalization and growth of micro, small and medium-sized enterprises. It supports positive economic, social and environmental linkages between urban, peri-urban and rural areas by strengthening national and regional development planning (SDG 11), encourages sustainable consumption and production patterns and reduces food losses in production and supply chains (SDG 12).

Between 2019 and 2022, eight surveys of whole food markets in the region were conducted, with 134 markets participating. The surveys analysed the main structural issues that interfere with market functions, provided insights on the dominant trends in various aspects of product supply, demand and prices, learned about the state of food distribution and supply chains at a territorial level and generated proposals for improvement.

The Wholesale Market Communities of Practice (CoP) held 16 meetings, bringing together over 1,100 participants from 19 countries, including technicians and managers of markets, public institutions, non-governmental organizations and international organizations. At the meetings, participants shared experiences through the presentation of 38 lectures and thematic exhibitions, which was an important collection of knowledge. Participants discussed paths followed in the search for solutions for business and market development. They identified common problems and jointly found some solutions that could be applied to similar markets in different countries.

The project resulted in an extensive variety of technical products and publications, available as a public good, based on direct research and the exchange of experiences among the countries involved. These include eight bulletins (published in Spanish and English), three analytical technical studies and four audio-visual productions, available on the FAO-RLC website. A database was created with geo-referenced information for each market and an image database of markets with usage authorization available to FAO national offices and the public sector in the countries; this is unparalleled in other regions of the world.

Several technical cooperation and technical assistance projects were established as strategies to counter the consequences of Covid-19, like the following: the modernization of wholesale and retail markets toward price transparency, improvement of digitalization and efficient management, reduction of food loss and waste, food banks, food safety and quality, traceability, circular economies and stimulus of family household agriculture.



This initiative was based on three pillars: 1) institutional articulation; 2) generation of evidence and sharing of information; and 3) dialogue and the search for and systematization of evidence among different actors in the food system. It is an example of a good practice that can be replicated in other regions of the world and deepened in Latin America. The FAO-FLAMA alliance strengthens national capacities and promotes improved intersectoral and institutional work methodologies. The sharing of good practices across countries contributes to achieving the 2030 Agenda for Sustainable Development.

Seven countries have requested specific FAO technical support for the development, improvement and South-South cooperation of wholesale and retail markets; these are: Argentina (whole food market networks, food loss and waste, circular economies), Colombia (food loss and waste), Mexico (whole food market characterization), Panama (retail), Paraguay (market digitalization), Peru (retail and urban supply) and Uruguay (management and rules).

## CONTACT INFORMATION

**João Intini**  
Policy Officer, FAO Regional Office for Latin America and the Caribbean  
Joao.Intini@fao.org



# +Cotton Project



## Social technologies adapted for cotton producers in Latin America and the Caribbean to improve production, income, services and inclusion

### CHALLENGE

In Latin America and the Caribbean, most cotton farmers work on small farms using traditional and manual methods to produce and harvest cotton. Small farmers depend on the hard work of their families to produce the food they eat and grow income-generating products, such as cotton. However, the low-tech methods used on these farms and lack of investment are not always well-suited to modern farming needs, such as controlling pests and disease and harvesting and processing cotton.

The lack of up-to-date and adapted high-yield farming equipment in small-holder farms limits output and farmers' ability to meet the growing needs of their communities and markets. In diversified production schemes, farmers need access to new technologies and equipment to manage their farms, knowledge on cultivating food and cotton for added value, ways to generate income, access to rural services and concepts that can enhance their living and productive conditions.

### TOWARDS A SOLUTION

To address the challenges above, the Food and Agriculture Organization of the United Nations (FAO), the Brazilian International Cooperation Agency (ABC) and seven partner countries (Argentina, Bolivia, Colombia, Ecuador, Haiti, Paraguay and Peru) are jointly implementing a South-South and triangular cooperation initiative, the +Cotton project, to strengthen the technical, management and organizational capacities of cotton farmers and technicians from crucial institutions in the sector, with a focus on environmental, social and economic sustainability.



#### PROJECT NAME

+Cotton Project

#### NOMINATED BY

Food and Agriculture Organization of the United Nations (FAO) Regional Office for Latin America and the Caribbean

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil, Colombia, Ecuador, Haiti, Paraguay, Peru

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.3, 1.4, 1.a, 2.1, 2.3, 2.4, 2.a

#### SUPPORTED BY

FAO, Brazilian Agricultural Research Corporation (EMBRAPA), National Institute for Agricultural and Forestry Innovation (INIAP), National Institute of Agricultural Research (INIAP), National Institute for Agrarian Innovation (INIA), Paraguayan Institute of Agricultural Technology (IPTA), Colombian agricultural research corporation (AGROSAVIA).

#### IMPLEMENTING ENTITIES

FAO, Brazilian International Cooperation Agency (ABC; affiliated to the Ministry of External Relations)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

September 2018 – December 2022

Participating countries benefit from Brazil's experience in promoting cotton production systems that use technology and innovation, such as cotton seeders, harvesters, ginning machines, digital agriculture and certified cotton seeds.

At the country level, the project is implemented by FAO and ABC via government institutions, such as ministries and other agencies, technical and research institutions and universities. The four main areas of action are social innovation, inclusive markets, sustainable technologies and strategic alliances. A work plan identifies each country's requirements, and with technical assistance from Brazilian cooperating institutions and the regional and national coordination of the +Cotton project, the activities take place. The knowledge and technology offered by Brazil covers priority areas in the cotton value chain, from production to processing.

Through the +Cotton project, more than 100 Colombian students received training in digital and precision agriculture methodologies. More than 2,000 technicians were trained in Bolivia, Colombia, Ecuador, Paraguay and Peru on various topics, including good agricultural practices (soil preparation, seeding, fertilization, use of certified seed, technical irrigation, integrated pest management, growth control, harvesting and green manure) and technologies (mechanical seeders, drones, ginning, harvesters and cotton processing). More than 40 pieces of harvesting equipment were validated in field tests to measure adaptability to conditions in Ecuador, Paraguay and Peru. Ginning equipment was validated in Paraguay and Ecuador and irrigation efficiency technologies (tensiometers and IoT based equipment) in Peru. A single-line cotton picker for small areas is also under development; this is an innovation developed by the Brazilian Agricultural Research Company (EMBRAPA) that has already been validated in Brazil and implemented in Paraguay.

By accessing these technologies and training, partner countries have increased cotton production, improved farmer incomes and added value by selling cotton fibre that is now ginned, processed and stored rather than selling the raw product directly after harvesting. Average yield increased by 41 percent, water use for irrigation decreased by 50 percent and profitability compared to neighbouring cotton crops increased by 53 percent, with a 100 percent profitability for food crops.

For the project to be sustainable, countries must invest in infrastructure and training for cotton farmers. Partner countries indeed made advancements in formulating national cotton plans and improving their competitiveness strategies. In Bolivia, the +Cotton project supported the elaboration of a National Programme for Bolivian cotton production. Peru likewise developed a National Cotton Plan under the leadership of the Ministry of Agrarian Development and Irrigation, together with the +Cotton Project and Piura University. Colombia positioned cotton as one of the government's ten priority crops in the National Development Plan of the Ministry of Agriculture and Rural Development.



Because of the productive similarities and needs of other countries in the region, the +Cotton project is replicable not only in Latin America and the Caribbean but possibly also in other world regions, such as Africa and Asia. Incorporating more countries in this cooperation and promoting the wider exchange of technologies and knowledge among countries can further strengthen the project, and ABC is already working on such an expansion.

The lessons learned included that addressing the basic needs of rural agriculture and populations relies on government commitment and focus on rural agricultural technologies that foster independent innovation, enrich field pilots, improve production and enhance farm management. This requires government guidance, market leadership and social participation in an integrated and balanced environment and demands access to the internet and agricultural information and the involvement of farmers and rural associations.

#### CONTACT INFORMATION

**Adriana Gregolin**  
Regional Project Coordinator, FAO  
adriana.gregolin@fao.org



# Consolidation of School Feeding Programmes in Latin America and the Caribbean



## Using the Sustainable Schools methodology to strengthen and consolidate school feeding programmes

### CHALLENGE

The Latin American and Caribbean region faces many food security challenges. According to the Regional Overview of Food Security and Nutrition in 2021, during the COVID-19 pandemic, hunger reached a total of 59.7 million people. In addition, 40 percent of the region's inhabitants, or 267 million people, experienced moderate or severe food insecurity in 2020. Meanwhile, the number of obese and overweight people, including children under 5, is increasing. UNICEF data from 2021 ([www.unicef.org/lac/en/reports/childhood-overweight](http://www.unicef.org/lac/en/reports/childhood-overweight)) shows that almost four million children are overweight in the region.

These numbers reflect a lack of access to healthy diets and the low quality of food, mainly among the most vulnerable populations, in a context of rising food prices. To reverse this scenario, strengthening national school feeding programmes is an essential strategy. School feeding programmes serve 85 million students per day in the Latin America and Caribbean region. For many children, school meals represent the healthiest meal of their day, allowing the consumption of fresh and local products. Thus, schools support food security and have become a crucial place to guarantee the human right to adequate food for children in many countries.

### TOWARDS A SOLUTION

Over the past decades, Brazil's level of development in food and nutrition security, supported by successful public policies, has helped the country eradicate hunger, improved the human right to adequate food and strengthened rural development and family farming. This has made Brazil a reference source for the region. With this in mind, the Brazil-FAO International Cooperation Programme was initiated in 2008, and continues today, as a means for the Brazilian Cooperation Agency of the Ministry of Foreign Affairs

#### PROJECT NAME

Consolidation of School Feeding Programmes in Latin America and the Caribbean

#### NOMINATED BY

Brazil-FAO International Cooperation Programme, through the Brazilian Cooperation Agency (ABC) from the Ministry of Foreign Relations, the National Fund for Educational Development (FNDE) from the Ministry of Education and FAO

#### COUNTRIES/REGIONS/TERRITORIES

Belize, Brazil, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Paraguay, Peru, Saint Lucia, Saint Vincent and the Grenadines

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.3, 1.4, 1.a, 1.b, 3.d, 2.1, 2.2, 2.3, 2.A

#### SUPPORTED BY

Brazilian Cooperation Agency (ABC) affiliated with the Ministry of External Relations (MRE), National Fund for Educational Development (FNDE) from the Ministry of Education (MoE) and the Food and Agriculture Organization of the United Nations (FAO)

#### IMPLEMENTING ENTITIES

Brazil-FAO International Cooperation Programme in partnership with the government of the participating countries

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

June 2018 – November 2023

#### LINK

<https://bit.ly/3BEhlla>

(ABC/MRE) and the Food and Agriculture Organization of the United Nations (FAO) to share experiences and knowledge from Brazil with other countries in the region.

To help countries in the region strengthen their school feeding policies, the Consolidation of School Feeding Programmes in Latin America and the Caribbean project was established, using the Sustainable Schools methodology, engaging 15 countries in the region. This initiative contributes to the achievement of several Sustainable Development Goals, including SDG 1 (no poverty), SDG 2 (zero hunger), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 8 (decent work and economic growth), SDG 12 (responsible consumption and production) and SDG 17 (partnerships for the goals).

The Sustainable Schools methodology was jointly designed with the government of each country to establish a reference for sustainable school feeding programmes and invites the participation of national and local technical teams from related government ministries (mainly education, health, agriculture, planning and social development).

The Sustainable Schools methodology has six components: inter-institutional and inter-sectoral articulation; social participation; adequate infrastructure; food and nutrition education with educational school gardens; healthy and tasty menus; and public purchases of food from family farms. The components were developed in pilot schools and cities selected by governments respecting the context of each country. The pilot schools constitute learning laboratories for school feeding programmes seeking a scaling up at the national level.

To enhance the sustainability of the process, each country organizes an inter-sectoral technical committee, drawing upon technicians from various ministries (especially health, education and agriculture) that follow up the process and facilitate dialogue and discussions on implementation of the school feeding programme. Later, the country delimits the responsibilities of each party. The Brazil-FAO International Cooperation shares the Brazilian experience and offers technical assistance in terms of monitoring and guiding and supporting implementation of the methodology in each country. The Brazil-FAO International Cooperation also facilitates policy dialogue and exchanges of experiences among the countries involved.

Governments at all levels, national, departmental and municipal, are involved in the programme, with each having different roles and responsibilities and contributions. School feeding is consolidated as a state policy, guaranteeing, among other benefits, resources for its execution. Since the work of the Brazil-FAO Cooperation on school feeding began in the region, five countries adopted specific laws on school feeding: Bolivia, Ecuador, Guatemala, Honduras and Paraguay. El Salvador is drafting a school feeding law proposal. These laws are important to ensure and guarantee the institutionalization, implementation and sustainability of school feeding programmes in countries.



As a result of the initiative's dialogue among countries, a South-South network was created, the Sustainable School Feeding Network (RAES), that meets regularly. A virtual space was created for participants to share experiences and exchange knowledge.

Dialogue with the countries showed the importance of school feeding to reduce school evasion and dropout, improve learning and school performance and tackle hunger and malnutrition. In addition, these programmes, which directly purchase from family farms, are an important instrument to break the cycle of hunger and poverty and to improve the livelihoods of smallholder farmers by allowing them to sell their fresh products in favourable conditions, generating income for local families.

Data produced by the Brazil-FAO International Cooperation Programme shows that 23,000 Sustainable Schools are in operation in 2021, benefiting 1.6 million students and around 9,500 family farmers throughout 15 countries. The Sustainable Schools address the impacts of crises and instability, help improve the quality of school feeding programmes and guarantee the provision of healthy school meals to more students. The Sustainable Schools methodology supports the elaboration and implementation of specific laws that can strengthen the institutionalization and sustainability of national school feeding programmes.

Guatemala, for instance, adopted a school feeding law based on the Sustainable Schools methodology. The Sustainable Schools experience had raised awareness among parliamentarians and government actors of the importance of school feeding. The country approved its law in 2017 to ensure the right to adequate food to students, guaranteeing the provision of school meals to over two million students over 180 school days per year, with healthy diets in public and private schools, and facilitating the purchase of food from family farms.

## CONTACT INFORMATION

### Najla Veloso

Project Coordinator, Consolidation of School Feeding Programmes in Latin America and the Caribbean, FAO  
najla.veloso@fao.org

# Sustainable Cage Aquaculture in West Africa



## Improving livelihoods by introducing cage aquaculture to rural communities in Ghana and Nigeria

### CHALLENGE

Food insecurity is widespread in Africa. In 2020, 281.6 million of the continent's inhabitants were undernourished, an increase of 89.1 million since 2014 (FAO, 2021). COVID-19 worsened food shortages, as food and agriculture value chains suffered from drastic lock-down measures to contain the pandemic's spread.

Ghana and Nigeria, in West Africa, depend on fish as major sources of animal protein. Ghana relies on its fishery sector to meet the growing population's protein requirement, but in recent years marine production has faced a 30 percent decline due to overexploitation (FAO, 2016). In Nigeria, the region's most populous country, fish account for around 40 percent of the nation's protein intake (FAO, 2018). Rapid population growth is increasing the supply-demand gap in Nigeria which could further exacerbate nutrition challenges – 58 percent of the population already suffer from moderate or severe food insecurity (World Bank, 2019).

Both Ghana and Nigeria have numerous water bodies that have the potential for greater aquaculture production using cage culture, thus reducing dependence on capture fisheries and the supplementation of domestic fish catch with imported fish. Cage culturing can enable rural farmers to grow fish without necessarily owning land and in water bodies in which draining and seining would normally be impossible.

### TOWARDS A SOLUTION

The Promoting Sustainable Cage Aquaculture in West Africa (ProSCAWA) project is a China-IFAD South-South and Triangular Cooperation Facility-funded intervention. Implemented by WorldFish, a CGIAR partner research institution, the project empowers and transforms the livelihoods of small-holder farmers in West Africa through the adoption of sustainable technologies and provision of capacity building training in cage aquaculture.

#### PROJECT NAME

Sustainable Cage Aquaculture in West Africa

#### NOMINATED BY

International Fund for Agricultural Development (IFAD)

#### COUNTRIES/REGIONS/TERRITORIES

Ghana, Nigeria

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 2.1, 2.3, 2.4, 12.2, 14.4, 17.6

#### SUPPORTED BY

China-IFAD South-South and Triangular Cooperation Facility

#### IMPLEMENTING ENTITIES

WorldFish; ProSCAWA Fish Hub, Ghana; Orisha Farms, Nigeria

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

April 2020 – September 2023

#### LINK

<https://bit.ly/3pcAhXn>





The project objectives are to improve the productive capacities of rural populations in the two countries by enabling them to undertake sustainable aquaculture that will increase productivity of their water-bodies and to strengthen the environmental sustainability and climate resilience of their economic activities through application of climate-smart technologies and products across the aquaculture value chain.

Aquaculture is vulnerable to a combination of climatic factors, such as global warming, rainfall variation, flood, drought, temperature fluctuation and salinity changes. Considering the vulnerability of fish production to the impact of climate change, tilapia farming is one possible strategy for adaptation. Tilapia is tolerant to low water levels and poor water quality, making tilapia cage farming possible in a wide range of water environments, from fresh to brackish water.

The project promotes knowledge-based solutions sharing and investment opportunities through collaboration between Chinese firms and local institutions in Ghana and Nigeria. For its implementation, the project selected two private sector farms in Ghana and Nigeria to support the development of cage sites, which serve as demonstration and teaching units for rural residents, including women and youth.

To date, six cages each in Nigeria and Ghana have been fabricated locally and 12 cages procured from Chinese suppliers. The offloading and construction of the cages created an income source and temporary employment opportunities for at least 20 community members around the project sites. In Nigeria, more than 50,000 pieces of Tilapia fish seedling were mobilized for the demonstration site and 1,770 kilograms of nursery and grow-out fish feed was procured. Each project site acquired a boat to allow for accessibility and to carry out routine management practices when the cages are stocked with fingerlings. WorldFish provided electronic weighing scales and water-quality monitoring test kits to monitor water quality parameters (such as pH, temperature and dissolved oxygen) and the growth of fish.

To ensure local ownership and sustainability, the project offers capacity building activities, such as basic aquaculture training to equip labourers with the requisite technical skills to effectively carry-out day-to-day operations on fish farms and ultimately become well-trained supervisors of general fish farm operations and management. A blended learning approach has been adopted, that includes face-to-face instruction, instructional storytelling, slide shows, question and answer sessions and site visits to local fish farms for practical training. In Ghana, English was combined with the local Twi and Ewe languages during instruction to ensure a better understanding of concepts.



So far, 71 farmers have been trained across Ghana and Nigeria on best practice management for cage aquaculture and the project is targeting 900 additional beneficiaries by 2023. For further capacity building, exchange visits are planned to Egypt, Kenya and Mozambique for experience sharing and networking on aquaculture technologies and business.

The introduction of tilapia cage farming as climate smart aquaculture for optimum utilization of available water bodies for producing aquatic foods will increase incomes and create jobs within rural communities in the two countries. Smallholder farmers' access to new technologies, such as better yielding seed, quality fish feed and fish processing, is of great benefit to rural economies.

---

#### CONTACT INFORMATION

**Steve Codjo**

South-South and Triangular Cooperation Consultant, IFAD  
s.codjo@ifad.org

# Knowledge Internship Programme in Semi-arid Regions of Latin America



## Youth-led intergenerational knowledge sharing

### CHALLENGE

Rural youth in Latin America face greater disadvantages than their urban counterparts, having lower levels of education and income and more difficult labour integration. The situation is even more complicated for women, indigenous people and Afro-descendant communities. Although rural youth can be central actors in development, as they are more likely to embrace new approaches and technologies, public policies for youth often adopt an urban perspective. This increases the exclusion and social vulnerability of youth in rural areas.

In addition, rural youth tend to enter the labour market earlier than their urban peers and often are in low-productivity jobs with lower incomes and less social security coverage. In countries with a projected increase in rural populations, greater attention to rural youth is critical to mitigate, among other things, pressure on land and natural resources and stem urban migration. It is therefore necessary to map and promote successful practices targeting this demographic and focus on the intergenerational sharing of knowledge that will support youth empowerment and capacity for political and social dialogue.

### TOWARDS A SOLUTION

Contextualized education and the valorization of local knowledge are two important pillars for a sustainable and fertile environment for the development of rural youth. With these priorities in mind, the Semear International Programme, an initiative funded by the International Fund for Agricultural Development (IFAD) and implemented by the Inter-American Institute for Agriculture Cooperation (IICA), and the Latin America Semiarid Platform joined forces to design an internship programme. This joint programme targets rural youth in three semi-arid regions in Latin America: the Trinational

#### PROJECT NAME

Knowledge Internship Programme in Semi-arid Regions of Latin America

#### NOMINATED BY

International Fund for Agricultural Development (IFAD)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil, Colombia, El Salvador, Nicaragua, Paraguay

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.4, 1.5, 2.3, 2.4, 2.5

#### SUPPORTED BY

IFAD, Inter-American Institute for Agriculture Cooperation (IICA), Semear International, Latin America Semiarid Platform/International Land Coalition

#### IMPLEMENTING ENTITIES

IFAD, IICA, Semear International, Latin America Semiarid Platform

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2020 – 2022

#### LINK

<https://bit.ly/3zVwnYQ>



Chaco, the Central American Dry Corridor and the Brazilian Semi-arid. The programme's objective is to mobilize and expose young leaders to practices in rural economic and social systems related to their areas of interest.

The initiative is tailored to demands identified by the youth themselves, and emphasizes access to land, agroecology and gender equality in rural areas. After selected interns undergo practical field experiences, it is hoped that they will adapt and replicate the knowledge they have captured in their home context, thus strengthening the youth role as agents of change, promoting dynamic rural economic growth (SDG2) and improving the food and nutritional security of their communities (SDG1). The internship programme focuses on enabling a continuous flow of knowledge exchange among participants and is building a regional network.

National and international youth commissions were created to govern the programme. These two levels of participatory governance are important forums to coordinate and validate programming decisions. The International Commission, composed of 14 young people from Argentina, Bolivia, Brazil, El Salvador and Paraguay, hold regular virtual meetings, with the chairing responsibility alternating among the countries. Both the international and national commissions worked for a year and a half on the programme's modalities, defining themes of interest, recipient communities, participant profiles, duration and selection processes. The main thematic areas focused on access to land, natural resources, social economy, original peoples and agroecology (SDGs 2.3, 2.4, and 2.5). The participant selection process took place in the second half of 2021; of 24 applications evaluated, 10 candidates were selected.

The first group of three Brazilian young women farmers travelled to Tolima, Colombia, on March 2022. Over the course of 15 days, they were exposed to experiences in agroecology, building associations, cooperativism and social economy. They visited eight communities, were immersed in the daily routine of their host families and visited processing facilities located within the communities. The second group of seven young farmers from Argentina, Brazil, Bolivia, Paraguay, El Salvador and Nicaragua is scheduled to start their internships in the second half of 2022.

The programme allows participants to exchange information on aspects of their daily lives and common challenges and opportunities. It contributes to the establishment of strong bonds among the commission members, the visited communities and the selected interns, directly empowering a group of 20 young people. The initiative is expected to have a positive spillover effect on at least 2,400 indirect beneficiaries.

The sustainability and scaling-up of the initiative are directly linked to the diverse and established network of partners supporting the programme, in particular the members of the Latin American Semi-Arid Platform. Also, since the programme began, the youth have highlighted the importance of deepening the learning process among peers and



of ensuring adequate time and conditions are in place to assimilate the knowledge from other semi-arid regions.

The importance and relevance of rural youth and their role as agents for economic, social and political change are indisputable. It is vital to continue to empower this group by investing in initiatives that promote intergenerational knowledge sharing and rural development, which is essential to fight hunger and poverty in all its aspects (SDGs 1 and 2). The Internship Programme in the Semi-arid Regions of Latin America is a powerful example of a transformational programme designed, led and implemented by youth, taking their needs into account and contributing to mitigating the challenges arising from this group.

## CONTACT INFORMATION

**Julio Worman**  
Programme Analyst, IFAD  
j.worman@ifad.org



## Cloud-based agricultural monitoring platform for food security in the Zambezi River Basin

### CHALLENGE

Achieving the zero hunger Sustainable Development Goal (SDG 2) is a huge challenge for most developing countries, especially those in sub-Saharan Africa. The Zambezi River Basin region of Africa has long faced severe food shortages due to low investments in agricultural technology and fertilizers, poor infrastructure and abnormal climate events, such as drought and flooding.

Timely and accurate agricultural information on crop growth conditions, production outlook and impact assessment of disasters is crucial for farmers and decisionmakers, yet it is generally difficult to obtain due to the lack of agricultural monitoring systems. To establish such agriculture monitoring systems usually requires large financial inputs, long-term maintenance costs, human resource commitments and advanced observation technologies, which constitutes a heavy burden for countries of the Zambezi River Basin. Cost-effective systems for crop monitoring and yield forecasting are needed in the Zambezi River Basin. In particular, cropland data at fine resolution is essential data for agricultural monitoring. However, such fine resolution data has been lacking in the Zambezi River Basin due to limitations of technologies and satellite data.

### TOWARDS A SOLUTION

CropWatch, a remote sensing-based global agricultural monitoring platform integrates cloud computing and Earth Observation techniques, and can be used for monitoring and yield forecasting in developing countries. CropWatch was built by the Aerospace Information Research Institute (AIR) of the Chinese Academy of Sciences. The platform provides users with customized modules of agricultural monitoring information to carry out independent agricultural monitoring.

#### PROJECT NAME

CropWatch

#### NOMINATED BY

United Nations Environment Programme-International Ecosystem Management Partnership (UNEP-IEMP), China

#### COUNTRIES/REGIONS/TERRITORIES

China, Mozambique, Zambia, Zimbabwe

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.a, 13.1

#### SUPPORTED BY

UNEP, National Natural Science Foundation of China (NSFC), World Bank, CropWatch4GEOGLAM project

#### IMPLEMENTING ENTITIES

Aerospace Information Research Institute (AIR) under the Chinese Academy of Sciences (CAS)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2016 – December 2022

#### LINK

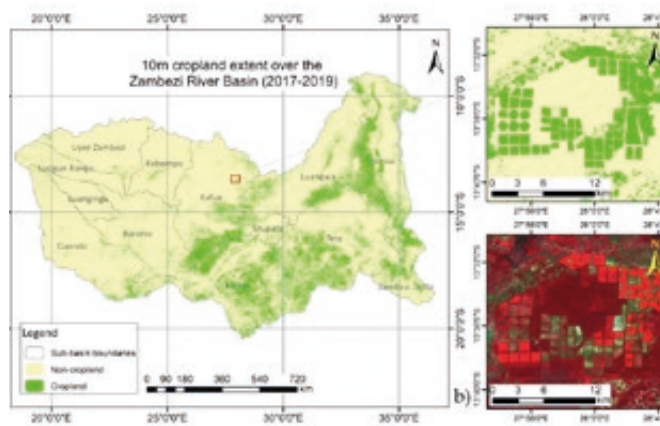
<https://bit.ly/3oPNViV>

Under facilitation of the United Nations Environment Programme (UNEP), the National Natural Science Foundation of China (NSFC), UNEP-IEMP, WorldBank and CropWatch4GEOGLAM, the project team developed a UNEP-NSFC joint research project for the Zambezi River Basin to apply CropWatch technology for cost-effective crop monitoring and yield forecasting. Since 2016, the CropWatch team, together with partners from Mozambique, Zambia and Zimbabwe, have carried out capacity building efforts in the Zambezi River Basin. Participants from Mozambique, Zambia and Zimbabwe attended a series of training courses in China and the Zambezi River Basin, during which they learned cropland mapping at fine resolution using machine learning methods and high-resolution satellite data and how to use the CropWatch platform.

As the Zambezi River Basin spans a large area, a smart phone application and training course materials were distributed to local experts so they can collect field sample data in an efficient way. After the training, the CropWatch team worked with experts from the University of Zambia, the University of Zimbabwe, the Catholic University of Mozambique, the Ministry of Agriculture of Zambia and the Ministry of Agriculture and Rural Development of Mozambique to map the cropland in Mozambique, Zambia and Zimbabwe at 10-metre resolution using machine learning methods. In 2019, the dataset was handed over to the ministries of agriculture of the three countries and data support for agricultural cropping planning has continued. The data will help strengthen the ability of farmers and the countries to respond to abnormal weather and improve food security outcomes.

CropWatch was customized in particular for Mozambique on three aspects: language localization (Portuguese), adaptation of administrative units and the monitoring period and model calibration according to local conditions. The customized CropWatch Cloud provides detailed information covering national, provincial, district and county administrative units. The models in the customized agricultural monitoring cloud platform were calibrated using locally obtained ground-measured data using the smart phone app to ensure suitability for Mozambique's agricultural practices. Improved and adjusted CropWatch indicators, models and whole systems were adapted to Mozambique's agricultural practices. The customized CropWatch Cloud and capacity building process not only improved the monitoring capacity of scientific and technical workers in Mozambique, but also promoted ownership and innovation of agricultural monitoring. It offers a unique opportunity for the country to monitor their agriculture without considering storage and computational resources.

This cloud platform solution can be replicated in other developing countries and regions as it provides customized agricultural monitoring systems, helping to improve agricultural monitoring capabilities and sustain agricultural development on a larger scale.



### CONTACT INFORMATION

**Hongwei Zeng**

Associate Professor, Aerospace Information Research Institute, CAS  
 zenghw@aircas.ac.cn





# Nurture the Future Project



## The way forward to tackle childhood obesity and malnutrition in the 21<sup>st</sup> century

### CHALLENGE

Currently, one in three people in the world struggle with being overweight or obese and one in nine people face hunger. With the COVID-19 pandemic, these numbers are increasing. These problems affect people's health and quality of life, cause several illnesses and bring social and economic consequences to families, communities and governments. Multiple, complex factors beyond personal decisions strongly influence dietary choices and patterns.

National nutrition policies should have the effect of improving the availability, affordability and acceptability of healthy diets for the most vulnerable. Policies should be able to scale-up to pragmatically contribute to reducing the risks of nutrition-related illnesses and, in tandem with policies in other areas (SDG 17: partnership for the goals), work towards achieving SDG 2 (end hunger).

### TOWARDS A SOLUTION

In 2016, the Nutrition for Growth (N4G) Summit held in Rio de Janeiro, Brazil, enabled a first collaboration between the World Food Programme Centre of Excellence Against Hunger in Brazil (WFP CoE Brazil) and the Brazilian Ministry of Health. The collaboration led to joint activities to support countries of the global South to meet their N4G commitments.<sup>1</sup>

<sup>1</sup> The N4G commitments focus on priority areas to galvanize greater investment in nutrition: integrating nutrition into universal health coverage, transforming food systems to promote safe, sustainable and healthy foods for people and planet, innovative financing and effectively addressing malnutrition in fragile and conflict affected contexts. In the case of Brazil, the World Food Programme N4G commitment was to utilize the Centre of Excellence against Hunger in Brazil to support the commitment by the government of Brazil to create and facilitate a Nutrition Resource Hub, as a model of South-South cooperation.

#### PROJECT NAME

Nurture the Future Project

#### NOMINATED BY

World Food Programme Centre of Excellence Against Hunger Brazil (WFP CoE Brazil)

#### COUNTRIES/REGIONS/TERRITORIES

Brazil, Colombia, Peru

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.1, 2.2, 17.4

#### SUPPORTED BY

Ministry of Health of Brazil

#### IMPLEMENTING ENTITIES

WFP CoE Brazil, Brazilian Ministry of Health, Brazilian Cooperation Agency

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2020 – February 2023

#### LINK

<https://centrodeexcelencia.org.br/en/nutrir-o-futuro/>



WFP CoE Brazil served as a platform to share knowledge and respond to South-South learning requests from countries committed to scaling up their nutrition programmes. Building on the Summit experience and countries' demands, the two institutions designed a multisectoral partnership project, named Nurture the Future, with other Latin American peers to support countries to adopt policy apparatuses to tackle the multiple burden of malnutrition.

The Nurture the Future project was conceived in 2020 to help policy-makers in Brazil, Colombia and Peru tackle malnutrition in school-aged children. It gained momentum in the second half of 2020, as there was a striking increase in malnutrition rates (undernutrition, overweight, obesity, etc.) in Latin America due to COVID-19 outbreak response measures, making this South-South collaboration pivotal. The pandemic motivated the project partners to collaboratively support governments to renew their commitments to the Sustainable Development Goals (SDGs), especially the eradication of all forms of hunger by 2030 (SDG 2), in line with the United Nations Decade of Action on Nutrition, through partnerships and cooperation (SDG 17).

Throughout 2021, the Nurture the Future project worked with Brazil, Colombia and Peru to strengthen knowledge sharing and capacity building related to their actions to reduce the multiple burdens of malnutrition, despite the restrictions imposed by the COVID-19 pandemic. The adoption of a virtual and agile work methodology between WFP and the governments of Brazil, Colombia and Peru allowed horizontal knowledge production and event organization in this difficult context so that they could continue pursuing the SDGs. Project scheduling and tracking tools, central communications and standards for virtual project management and for work and event production were key to the production of informative and easy-to-understand videos for advocacy in the countries. International, regional and national dialogues on the topic took place, with the participation of government entities and other United Nations agencies. These mutual exchanges generated robust guidance materials, such as technical documents on the prevention of childhood obesity in Brazil, Colombia and Peru, and laid the foundation for policy-makers to make educated decisions on getting back on track to achieving SDG 2 (2.1 and 2.2).

Virtual projects often require complex decision-making mechanisms; the Nurture the Future project established a strong network between ministries of health in the three countries to jointly achieve their Decade of Action on Nutrition targets. This is facilitated by translating the robust knowledge content into easy-to-understand communication and marketing materials (social media videos, cards, visual guides, etc.).

Last year in Brazil, for example, the WFP CoE became a signatory to a national commitment to prevent childhood obesity, supporting a national campaign on the theme with several actions to curb the advancement of childhood obesity in the country. The Brazilian National Strategy for Prevention and Attention to Childhood Obesity (Proteja),

a Brazilian real 80 million (US\$ 16 million) strategy, was inspired by and presented recommendations of the WFP CoE policy brief Childhood Obesity: Strategies for Prevention and Care, which had been launched on digital platforms by the project in early 2021. Colombia and Peru have been advancing their promotion of the consumption of natural and fresh foods, mainly in the implementation of regulatory measures, such as frontal nutrition labelling. WFP throughout Latin America, together with its member states, is at the forefront in developing a number of accessible, easy-to-understand guidance tools and social media materials to reach all and prevent malnutrition-related diseases, especially overweight and obesity.

The Nurture the Future project has yielded innovative solutions, such as disseminating the evidence-based material in easy-to-understand videos via Instagram, WhatsApp and other social media, to reach both general populations and food and nutrition policymakers. This knowledge sharing through social media played a big role during COVID-19 to keep government SDG commitments on track. Knowledge exchange with the global community was further ensured through: a) the production and dissemination of evidence-based materials; b) South-South cooperation, learning and policy dialogue activities; and c) technical support through remote assistance.

Much of the project's success is credited to its horizontal and participatory engagement model and the commitment from partner governments to disseminate the knowledge materials through their networks. The approach adopted by the project, namely, to produce easy-to-understand materials based on technical collaborative evidence creation among partner countries, expanding South-South nutrition knowledge sharing beyond United Nations, governmental and academic personnel to children, parents and local policymakers by synthesizing it to their comprehension can be replicated in other countries using communication and social media strategies, production and marketing and a 'hands-on' commitment between partner communication and technical teams. These days, digital marketing is a must for any global south project to scale-up, connect with its audience's interests, and eventually lead to action.

---

## CONTACT INFORMATION

### Gregory Rosa

Programme Associate, WFP CoE Brazil  
gregory.rosa@wfp.org

# South-South Cooperation Cloud School



## Comprehensive thematic online learning for eradicating extreme poverty

### CHALLENGE

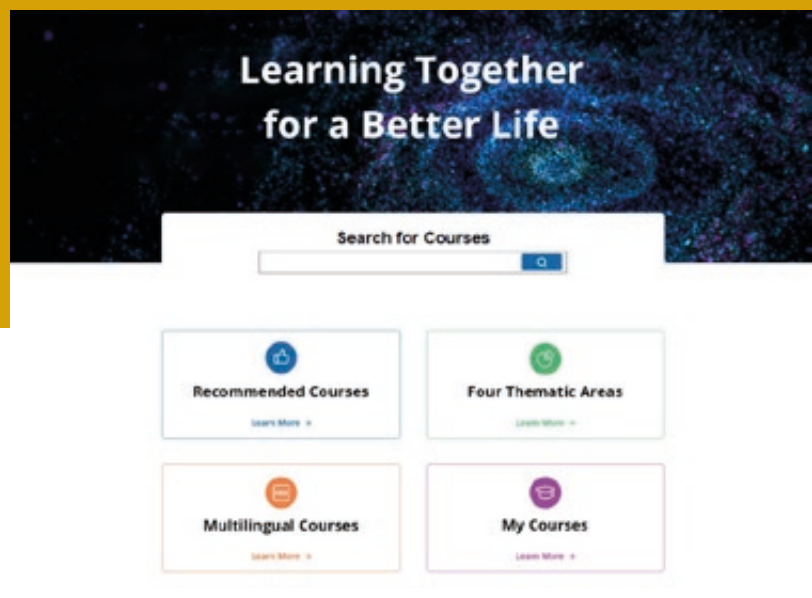
The world's largest developing country, China, has achieved the Sustainable Development Goal (SDG) of eradicating extreme poverty (SDG 1) ten years ahead of schedule, making a great contribution to both SDG 1 and SDG 2 (zero hunger).<sup>1</sup> With the rising demand for China's vetted knowledge on food security, nutrition improvement, poverty reduction and rural transformation, knowledge sharing of China's experiences and technologies has greatly expanded.

However, the global COVID-19 pandemic severely limited China's field-level engagement and knowledge exchange activities with other developing countries. Remote access to the successful experiences of Chinese institutions and smallholder farmers in the process of rural development was needed.

### TOWARDS A SOLUTION

To address this challenge, the World Food Programme Centre of Excellence for Rural Transformation in China (WFP CoE China) built the WFP-China South-South Cooperation Cloud School. This virtual school meets the needs of people in the digital age for knowledge sharing and mutual learning. The Cloud School is concretizing WFP's efforts to create a systematic e-learning process through South-South cooperation. The school is being shaped into an online learning centre for in-depth, comprehensive and continuous courses on knowledge of WFP CoE China's thematic areas and beyond. An open and inclusive space, the Cloud School offers training courses to participants at policy, institutional and grassroots level, reaching policymakers, technical practitioners and smallholder farmers alike. As all teaching and learning activities take place offline, the Cloud School allows for organized yet individually paced, self-learning curricula.

<sup>1</sup> <https://bit.ly/3QvS0Vy>



### PROJECT NAME

South-South Cooperation Cloud School

### NOMINATED BY

WFP Centre of Excellence for Rural Transformation (WFP CoE China)

### COUNTRIES/REGIONS/TERRITORIES

Africa, Arab States, Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.1, 2.2, 2.3, 2.4, 2.A, 17.6, 17.8, 17.9

### SUPPORTED BY

Ministry of Agricultural and Rural Affairs of the People's Republic of China, China Internet Information Center

### IMPLEMENTING ENTITIES

WFP CoE China

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

April 2022 – Ongoing

### LINK

[www.wfpchinacoe.net/node\\_8028436.shtml](http://www.wfpchinacoe.net/node_8028436.shtml)

While, this digital South-South cooperation exercise came about due to the impact of COVID-19, it was found that the offline nature of the school created an enabling environment for users to post queries, share solutions and connect with each other to discuss food security, nutrition improvement, poverty reduction and rural transformation issues. Various strategic and technical partners of WFP CoE China are engaged for long-term cooperation on the Cloud School. Government departments share policy references and universities and research institutes provide technology and knowledge. Strategic partners include the Ministry of Agricultural and Rural Affairs, the National Food and Strategic Reserves Administration, the Ministry of Ecology and Environment, the Ministry of Emergency Management and the China Foreign Languages Publishing Administration. Technical Partners include the National Disaster Reduction Center of China, the National Center for Climate Change Strategy and International Cooperation, the Chinese Academy of Tropical Agricultural Sciences, the Henan University of Technology, the Northwest Agriculture and Forestry University, the Fujian Agriculture and Forestry University and the Nanjing Agricultural University.

Courses of the Cloud School primarily correspond to WFP CoE China's four thematic areas and three value chain development areas, which are:

- ▶ value chain development for smallholders;
- ▶ post-harvest loss management and food systems;
- ▶ disaster risk reduction and climate change resilience;
- ▶ innovative poverty alleviation initiative;
- ▶ rice value chain development;
- ▶ Juncao (a new category of grasses) value chain development; and
- ▶ cassava value chain development.

In alignment with WFP CoE China's three-tier scope of work, the courses are tailored to the below three categories that meet different demands.

- ▶ Policy in China: Introducing policy references to government officials, policymakers and senior agricultural experts in terms of food security, poverty reduction, green development and rural transformation in China.
- ▶ Training of Trainers (TOT): Targeting know-how transfers by providing affordable and applicable technology courses to technical extension practitioners and trainers of farm workers, so as to reach a wider number of smallholders.
- ▶ Learning by doing: Showcasing practical skills and hands-on techniques to field practitioners and smallholder farmers.

The Cloud School serves as a supply and demand-based digitalized tool that makes solutions and good practices accessible, affordable, available and transparent. Based on WFP CoE China's practice in South-South and Triangular cooperation in previous years, knowledge sources are channelled properly from the demand side and better categorized in the knowledge hub.

In 2022, 85 courses will be uploaded to the Cloud School to benefit developing countries with knowledge sharing on food security, nutrition improvement, poverty reduction and rural transformation. In the long run, the Cloud School will seek continuous expansion of the curriculum, making it available in multiple languages, and will grow enrolment in its bid to become a flagship initiative. For its sustainability, the website is operated with steady funding from the Ministry of Agricultural and Rural Affairs and technical support from an Internet Information Center.

---

## CONTACT INFORMATION

**Dr. Yan Jia**  
Head of South-South Cooperation, WFP China  
yan.jia@wfp.org

# Mainstreaming Nutrition-Hydroponics in School Feeding



## Increasing access to nutritious food for school learners and local communities through the application of hydroponics and sack farming

### CHALLENGE

In Zambia, food production decreases during the lean season, the period between harvests that lasts from October to March, leading to food price increases and food insecurity at the household level. In 2019, most regions were hit by prolonged dry spells, resulting in a 60 percent reduction in maize production. The lean season also has a negative impact on meals provided to learners by imposing a higher cost on school feeding programmes and limiting the food diversity of the school meals.

To encourage access to education and improve nutritional status of communities, the Ministry of General Education of the Republic of Zambia (MoGE) funds and implements a national home-grown school meals programme with technical support from the World Food Programme (WFP). The home-grown school meals programme is the country's largest food safety net and benefits around 1.9 million children in 5,100 primary schools. The number of districts covered increased from 39 in 2019 to 70 in 2022.

### TOWARDS A SOLUTION

To improve the nutritional aspect of the national home-grown school meals programme, WFP and MoGE are piloting the techniques of hydroponics and sack farming at Zambian schools. Applying these techniques can diversify the diet provided by the school meals programme. Students learn the techniques in the greenhouse gardens of their school and then share them with their local communities. The spill-over effects of communities adopting hydroponics and sack farming introduces alternative crops to the local markets which has the potential to create additional income for smallholder farmers and boost community-level responsiveness to climate change.

#### PROJECT NAME

Mainstreaming Nutrition-Hydroponics in School Feeding

#### NOMINATED BY

World Food Programme (WFP) Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

#### COUNTRIES/REGIONS/TERRITORIES

Libya, Zambia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 4.2, 13.1

#### SUPPORTED BY

Ministry of General Education of the Republic of Zambia (MoGE)

#### IMPLEMENTING ENTITIES

WFP

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2020 – Ongoing

#### LINK

<https://bit.ly/3zweuyu>





The specific objectives of integrating hydroponic and sack farming into school feeding programmes are to: 1) improve the production of nutritious foods in schools through innovative and sustainable farming methods and therefore contribute to improving child nutrition; 2) increase access to fresh food for learners, contributing to food and nutrition education; 3) transfer knowledge and skills on hydroponic technologies; and 4) diversify sources of income for schools by selling the products grown in the greenhouse gardens.

Hydroponics is a soilless cultivation technique that enables plant growth in areas which are non-fertile, arid or have limited space or access to land. The main advantages are needing 90 percent less water compared to traditional soil gardening and saving up to 70 percent of the space. In hydroponic gardens, vegetables (such as tomato, lettuce and Chinese cabbage) can be grown all along the year, ensuring a stable supply of nutritious foods for school meals. With sack farming, crops are grown in nutrient-rich soil mixed with manure in a sack, thus crops can be produced within limited spaces and where soil fertility is poor.

The below three types of techniques used in the greenhouse gardens have been implemented by the programme.

- ▶ Deep-water culture systems with multiple tanks (constructed from brick and cement) inside a greenhouse. Floating beds are covered in plastic sheets and plants are anchored in net pots within Styrofoam plates.
- ▶ Grain bags (sacks) inside a greenhouse that are filled with growing medium and black soil and charcoal dust. Vegetables are normally grown in sacks.
- ▶ A combined system, in which one section of a greenhouse has grain bags and the other the deep-water culture system.

Up to the first quarter of 2022, 71 schools in 16 districts had created the combined system of greenhouse gardens, benefiting more than 45,000 learners. All gardens are fully operational and planted with various vegetables. The garden produce is directly supporting the school feeding programmes with balanced and diversified meals. The garden products have also generated additional income to financially support the running of the gardens (inputs and maintenance) and school meal programmes. Part of the production is sold to local communities, especially during school holidays and the lean season. In general, sales in the lean season have provided more income to the schools as food prices are higher at that time.

As an example, in a primary school with 1,288 learners in Gwembe, a town in the Southern Province of Zambia, a greenhouse garden was constructed with the support of the local community. A committee was founded with teachers, community members and pupils to oversee, manage and sustain the operations of the garden. Since the first harvest of vegetables on 16 February 2021, the school has produced over 787.4 kilograms of vegetables, of which 474 kilograms were channelled to school meals and 313.4 kilograms were sold to local communities. The



school generated US\$ 231, which was used to buy inputs to maintain and sustain the garden.

The engagement of surrounding communities has been key to the successful and sustainable implementation of the hydroponic school gardens, paving the way for local ownership of the initiative. In Zambia, communities have contributed to the construction and management of the gardens. As the gardens are run by the schoolchildren primarily on school days, the support of local communities during school holidays is essential. As a spill-over benefit, the hydroponic and sack farming techniques have been transferred to local communities through their support to the gardens, strengthening their capacities in alternative farming and therefore improving community livelihoods.

This practice can easily be replicated as it does not require fertile soil or access to large plots of land to grow crops. Nevertheless, it is necessary to ensure that schools and producers have the knowledge required to create the systems correctly. Otherwise, crops could fail. It is worth noting that the cost of setting up is high. However, nearly half of the set-up costs can be recovered within the first year if the system is prepared successfully.

This replicable practice has been shared with other countries in Africa. Namibia is implementing this system under their national school feeding programme. Burundi has expert support to assess opportunities in hydroponics. Libya has begun investigating the potential for the replication of such practices in their context. In May 2022, a Libyan government delegation conducted an official study visit to Zambia to learn more about the project. The South-South study visit included exchanges between Libyan government officials and their Zambian counterparts, visits to greenhouse gardens at primary schools and discussions with local authorities.

#### CONTACT INFORMATION

**Chun-Kit Steven Li**  
Knowledge Management Officer, CERFAM  
Chunkit.li@wfp.org

# China-Africa Rice Value Chain Development Initiative



## Improving the rice value chain in Côte d'Ivoire through Sino-Ivorian exchanges

### CHALLENGE

As the third largest rice producer in West Africa, Côte d'Ivoire has made remarkable progress in rice production, from around 2 million tons in 2010 to almost 3.5 million tons in 2017. Yet, Côte d'Ivoire still relies heavily on importation to satisfy its domestic consumption of this grain. National rice production is below 50 percent of demand over the last three decades despite policies fostering the rice sector.

Due to the climate constraints, especially low rainfall and the lean season, the northern region has a lower capacity of rice production than the southern region in Côte d'Ivoire. Lack of knowledge and adequate technologies leads to high post-harvest losses and limited access to market. Therefore, the smallholder producers cannot provide sufficient quality rice product to satisfy the national market.

### TOWARDS A SOLUTION

The China-Africa Rice Value Chain Development Initiative is a South-South project to further develop the rice value chain in northern Côte d'Ivoire. Through exchanges with Chinese experts and the introduction of Chinese equipment, such as threshers and tractors, local stakeholders benefit from Chinese experience at policy, technical and technological levels to strengthen their capacities.

Prior to project implementation, two missions were conducted to better understand the needs of target groups and identify the expertise required for the exchange. In June 2020, CERFAM visited a demonstration site, which had been created by a group of Chinese experts in 1995, to understand their technical assistance and training in seed production, rice production and irrigation in Southern Côte d'Ivoire. Another mission took place in northern

#### PROJECT NAME

China-Africa Rice Value Chain Development Initiative

#### NOMINATED BY

World Food Programme Centre of Excellence for Rural Transformation (WFP China CoE), Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

#### COUNTRIES/REGIONS/TERRITORIES

China, Côte d'Ivoire

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.4, 1.5, 2.1, 2.3, 2.4

#### SUPPORTED BY

United National Office for South-South Cooperation (UNOSSC), China International Centre of Economic and Technical Exchanges

#### IMPLEMENTING ENTITIES

WFP, WFP China CoE and CERFAM

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

March 2021 – May 2022

Côte d'Ivoire, during which CERFAM visited local communities and the implementing non-governmental organizations and conducted a basic needs assessment for rice production and post-harvest management in the region.

To kick off the collaboration, a multi-stakeholder dialogue was organized in June 2021 with representatives from UNOSSC, CERFAM, and WFP China CoE to explain what China could offer to Côte d'Ivoire in terms of support to the country's rice value chain development.

In November 2021, a joint mission from the Africa Rice Center, CERFAM and the Ivorian Agency for the Development of the Rice Sector conducted a needs assessment, identifying the gaps and requirements of rice producers in the northern part of the country. An on-site training on post-harvest management was provided to local stakeholders, including government authorities, non-governmental organizations and communities, to reduce rice losses after harvest.

To better mechanize rice production and processing in the north of Côte d'Ivoire, Chinese equipment was procured. A four-day virtual training session was organized by Chinese experts to explain the application of the equipment and share techniques in rice threshing and processing. A Training-of-Trainers approach was used so that the techniques and knowledge acquired by participants, especially local non-governmental organizations and local authorities, could be further disseminated at the community level, ensuring the project's sustainability. After each class, participants could raise further questions regarding the techniques and technologies mentioned in the training. According to the post-training survey, participants found the training very useful. Most participants stated that the techniques and knowledge acquired were applicable to their work in the north of Côte d'Ivoire. The participants expressed an interest in further learning from China on aspects such as processing, production and harvesting.

A regular dialogue mechanism was launched in April 2022 to promote knowledge and technical exchanges between stakeholders from Africa and China. The objectives of the dialogue mechanism are to: 1) share rice-related organizational engagements in China and Africa; 2) exchange experiences and lessons learned in rice value chain development; 3) identify opportunities in Sino-African collaboration on rice value chain development at technical and policy levels; and 4) forge partnerships between China and African countries in knowledge exchanges and capacity strengthening. The first exchange in April 2022 was attended by more than 80 experts from government and research institutions.



The design and implementation of this initiative focuses on two key criteria of good practice, as defined by CERFAM: 1) partnership and multi-sectorality; and 2) innovation. By adopting an integrated approach with different partners (government, research institutions and local non-governmental organizations), capacities at both local and national levels were strengthened. The introduction of new Chinese equipment and techniques offered alternatives to local stakeholders for rice production and post-harvest management.

As the neighbouring countries in West Africa face similar challenges in rice production and post-harvest management, this practice could be replicated to develop their rice value chains. It is planned to scale up the initiative in Côte d'Ivoire and replicate the initiative in Guinea to create a greater impact on rice value chain development in the region.

#### CONTACT INFORMATION

**Chun-Kit Steven Li**  
Knowledge Management Officer, CERFAM  
Chunkit.li@wfp.org



# WFP-FAO Joint Resilience Programme in Tanganyika, Democratic Republic of the Congo



## Building social cohesion and socio-economic resilience of smallholder farmers and vulnerable populations



### CHALLENGE

The Democratic Republic of the Congo (DRC) is one of the most fertile countries on earth, with the potential to feed all its inhabitants and export food commodities. The country has approximately 80 million hectares of arable land – the second largest cultivable area in the world after Brazil – and approximately 50 percent of the African continent's water resources. Despite its vast natural resources, the country faces the largest hunger crisis in the world.

According to the findings of the 18th Integrated Food Security Phase Classification, 21.8 million people in DRC currently face severe food insecurity. In Tanganyika Province alone this number reaches 1.5 million people. The country continues to experience prolonged conflict, particularly in the eastern region, contributing to large-scale population displacements, disrupted agricultural activities and impeding access to markets, schools and healthcare. In Tanganyika Province, clashes between armed groups and inter-ethnic conflicts, further aggravated by the impact of recurring agricultural and climate shocks such as erratic rainfall, floods and landslides, have led to massive population displacement, livelihood disruption and have devastated the economy and social fabric. One particular challenge is women's illiteracy; in DRC the adult literacy rate is only 66.5 percent for women (compared to 88.5 percent for men).

### TOWARDS A SOLUTION

To respond to the various challenges and needs of the vulnerable population in Tanganyika Province, in 2016 the World Food Programme (WFP) joined hands with the Food and Agriculture Organization of the United Nations (FAO) to launch an integrated programme to build community resilience and strengthen agricultural value chains. The programme contributed to economic recovery, building stronger resilience to major shocks and stabilizing the target areas by fostering peace.

#### PROJECT NAME

WFP-FAO Joint Resilience Programme in Tanganyika, Democratic Republic of the Congo

#### NOMINATED BY

World Food Programme (WFP) Regional Centre of Excellence against Hunger and Malnutrition (CERFAM), Côte d'Ivoire

#### COUNTRIES/REGIONS/TERRITORIES

Côte d'Ivoire, Democratic Republic of the Congo

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.4, 1.5, 2.1, 2.3, 2.4, 4.2, 13.1

#### SUPPORTED BY

Food and Agriculture Organization of the United Nations (FAO), Search for Common Ground, Government of Sweden

#### IMPLEMENTING ENTITIES

FAO, WFP

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

January 2016 – December 2021

#### LINK

<https://bit.ly/3zWJqcB>





The programme uses a multi-sectoral approach through a strong partnership with several stakeholders, notably sister United Nations agencies (WFP and FAO), government at central, provincial and local levels, international and national non-governmental organizations and local communities, creating synergies and building on complementarities. A coordination mechanism was established at national and local levels between the various stakeholders to facilitate programme implementation.

The programme adopted an integrated approach, covering four aspects connected to livelihood rehabilitation and poverty reduction. First, the capacities of smallholder farmers were strengthened to locally produce, handle and sell quality agricultural commodities at reasonable prices. Second, technical training was provided to local communities to restore productive assets and boost agricultural production. Infrastructure, such as roads, were built to facilitate access of producers to markets. Finally, farmer organizations received support to strengthen their capacities, such as in financial management.

The programme focused on gender equality and women's empowerment. Activities to this end included functional literacy training and financial services, income diversification support and capacity strengthening to implement alternative income-generating activities. The creation of Dimitra Clubs enhanced women's leadership and ensured their participation in decision-making processes both at household and community levels.

To build peace and mitigate conflicts, awareness raising sessions and community dialogue were organized to strengthen inclusive community engagement and enhance gender equality. Staff members from different ethnic groups were included in the field project. To facilitate access to rural finance opportunities as a means of sustainable resilience, community-based saving and loans initiative was launched under the programme. Up to the end of 2020, the programme achieved numerous results. To support community-based organizations, 720 farmer organizations were established and their capacities strengthened (with women representing 30 percent of the management committees of these farmer organizations). Twenty Early Warning Committees, 22 Peace Committees, 146 Dimitra Clubs and the Community Radio of Kabalo were created to enhance discussion and trust between ethnic groups.

In terms of agricultural value chain development, 10,518 beneficiaries participated in trainings through 141 Farmer Field Schools in 2020. 386,085 metric tonnes of agricultural products were stored and marketed and 199,660 metric tonnes were sold. Sixty percent of the participating farmer organizations engaged in collective sales. Four community storage facilities and two community markets were constructed, 100 kilometres of feeder roads were rehabilitated using a Food Assistance for Assets approach. Finally, 100 percent of the beneficiaries adopted improved post-harvest management techniques and around 77 percent of farmer organizations now have access to appropriate storage units.

Results in women's empowerment included over 800 awareness-raising campaigns organized to combat discrimination and gender-based violence. Eight hundred women were supported in income-generating activities. Over 8,000 women can now read, write and calculate after attending literacy training. The functional literacy training coupled with Dimitra Clubs<sup>1</sup> helped women build their confidence and become active community members, some even occupying management positions in community and farming organizations. For 90 percent of the women, their conditions in communities changed, and community social assets improved.

Through the programme, financial capacities of the target groups improved. Now, 88 percent of farmer organizations have access to 348 operational village saving and loans associations. Over US\$ 51,000 was saved and US\$ 17,000 credit was granted to members.

To ensure the sustainability of such a programme, a few key aspects need to be addressed. First, the capacity of local communities must be strengthened, if they are to become self-reliant. Second, local communities and authorities must be actively engaged in the project. Investment in infrastructure and facilities are likewise key to sustainability.

To replicate the programme's practices, it is necessary to consider that fundamental origins of inequalities and social injustice between men and women are enshrined in illiteracy, exclusion of women from decision-making processes and unequal access to assets. To better understand the gender context in the project implementation areas and address the problem, a diagnosis of specific gender issues was conducted in both territories by the project team. Based on the results of this study, the activities of the gender equality component of the project were fine-tuned to better respond to the specific needs of the beneficiaries. These activities are important, and serve as mechanisms to trigger the improvement of the social and economic status of women, reinforce peaceful cohabitation and promote gender equality.

Some of the practices in this programme were shared with countries in Africa, such as the creation of the Dimitra Clubs. Other countries with similar contexts of conflict and large population displacement, such as Niger, investigated the potential to replicate the clubs. To date, more than 6,000 Dimitra Clubs, with 180,000 members have been established in eight sub-Saharan African countries. Further South-South exchanges can enhance dialogue among countries in Africa to learn from this experience and adapt it to other countries.

## CONTACT INFORMATION

**Chun-Kit Steven Li**  
Knowledge Management Officer, CERFAM  
Chunkit.li@wfp.org

1 Dimitra Clubs, according to FAO, "are voluntary, informal groups for women, men and youth to discuss common problems and determine ways to address them by acting together and using local resources. Agriculture is a common theme, but other topics include climate change, education, health, infrastructure, nutrition, peace and women's status."

# Strengthening Resilience for Women Farmers and their Communities



## Supporting women's agricultural groups for the sustainability of school feeding, women's empowerment and food security in northern Côte d'Ivoire

### CHALLENGE

In Côte d'Ivoire, food production is carried out by family farms that operate in limited agricultural areas for self-subsistence. Some 14 percent of households in the agricultural sector are food insecure. In the north, the sector is faced with numerous constraints linked to insufficient water, low level of application of technical itineraries and mechanization, climate change, high post-harvest losses, its informal character and poor structuring of farmer organizations.

Socio-cultural barriers also limit women's access to land, participation in decision-making and productive assets. The country ranked 153rd in the Gender Inequality Index in 2019.<sup>1</sup> If women had the same access as men to resources, the yield of their farms would rise by 20 to 30 percent, increasing the total agricultural production in developing countries from 2.5 to 4 percent.<sup>2</sup>

### TOWARDS A SOLUTION

Launched in 2017, the Strengthening Resilience for Women Farmers and their Communities initiative aims to improve livelihoods and strengthen the resilience of rural households in Northern Côte d'Ivoire by supporting and promoting sustainable food production, reducing arduousness and working time for women's groups, improving post-harvest handling, food processing and preservation, improving product marketing for better incomes and supporting school canteens with the supply of local products.

1 United Nations Development Programme. 'Gender Inequality Index Data', *United Nations Development Programme Human Development Reports*: <http://hdr.undp.org/en/content/gender-inequality-index-gii> (accessed on 26 October 2021)

2 Ministère de l'Agriculture et du Développement Rural, Côte d'Ivoire. 'National Programme of Agricultural Investment of the Second Generation': <http://extwprlegs1.fao.org/docs/pdf/IVC176030.pdf> (accessed on 26 October 2021)

#### PROJECT NAME

Strengthening Resilience for Women Farmers and their Communities

#### NOMINATED BY

World Food Programme (WFP) Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

#### COUNTRIES/REGIONS/TERRITORIES

Côte d'Ivoire

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 4.1, 4.2, 4.5, 5.1, 5.5, 5.A, 5.B, 8.2

#### SUPPORTED BY

Louis Dreyfus Foundation, Latter Days Saints Charities, Ministry of Agriculture and Rural Development of Côte d'Ivoire, Directorate of School Canteens, National Agency for Support to Rural Development (ANADER), Bureau de Formation et de Conseil en Développement (BFCD), Bureau de Vente des Producteurs (BVP)

#### IMPLEMENTING ENTITIES

WFP

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2017 - Ongoing

#### LINK

<https://bit.ly/3JWFFqR>



The project activities fall under the following four components.

- ▶ **Increase and diversify production:** focusing on the nutritional aspect, this component includes material and equipment support for market gardening and the cultivation of high value-added crops. Training on good cultivation practices (ploughing, sowing, maintenance, application of fertilizers and herbicides) are provided for each crop; fence screens are distributed to communities to protect crop fields; and irrigation kits and maintenance of existing wells are provided for water access.
- ▶ **Improve processing and marketing capacities:** Aiming to increase income and reduce post-harvest losses, this component includes the supply of processing equipment and training on equipment management and marketing techniques to assist local populations in transforming their raw products into marketable products with minimized post-harvest losses.
- ▶ **Strengthen organizational and structuring capacities:** Activities on this component focus on training within community life, development and application of legal documents, roles and responsibilities of elected officials and simplified accounting management. Beneficiary groups are supported to obtain government approval through relevant ministries. In addition, the World Food Programme (WFP) promotes functional literacy as a project strategy.
- ▶ **Nutrition sensitive support:** The activities mainly raise awareness of 1) smallholder farmers on diversifying their food consumption and production by introducing crops with nutritional values; 2) local communities on behaviours in favour of maternal and child health (exclusive breastfeeding, complementary feeding from diverse local foods, access to drinking water, hygiene and sanitation, nutrition for pregnant and breastfeeding women, prenatal consultations, use of impregnated mosquito nets, vaccination, etc.); 3) local communities to reinforce their capacities of screening for malnutrition in children under five in their community; 4) community leaders, cooperatives, religious leaders, men and women through community radios and forums for the promotion and adoption of Essential Nutrition Actions.

To coordinate actions and activities between key partners (local and national authorities, WFP, local non-governmental organizations (NGOs) and communities), regular meetings are held among them to ensure the project progress and to address challenges. Local NGOs oversee on-the-ground technical supervision and communication with local communities, making sure their needs are well conveyed to project teams for timely responses. The engagement of local and national authorities is necessary for the long-term support to the local communities, especially after the withdrawal of the project.

Between 2019 and 2020, the initiative has benefitted more than 4,800 producers, 93 percent of them women. The results indicated an increase of 600 percent in agricultural production and 135 percent in income of smallholder farmers due to the newly introduced products, such as tomatoes and onions.

For the school year 2019-2020, 48 tons of locally produced food were offered to schools by local communities, covering 20 percent of their



total needs and reaching 11,000 pupils. More than 3,000 school pupils (52 percent are girls) have been able to have a more nutritious diet with good quality supported by the target farmer groups since 2017. The support of the female producers is well recognized by their communities, improving their status in both their families and communities. Twenty farmer groups with 2,059 producers supported by the WFP are enrolled in a local e-commerce platform, a user-friendly innovation tool which connects local farmers and customers through mobile phones. The usage of the platform goes beyond target communities as the neighbouring communities also wish to foster the sale of their products. From September to December 2020, 77 tons of products were sold through the platform.

The documentation of this experience on the Knowledge Exchange Platform (KEPT) of the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM) offers this experience for African countries to be replicated, respecting adaptations and context for different countries. To benefit from the experience of this initiative, the target areas of the project will be turned into demonstration sites for the purpose of learning and sharing of the experience with other countries in the region which are struggling to set up similar initiatives. Stakeholders from neighbouring regions and countries will be invited to exchange with the project target groups and visit the initiative. The initiative provides a combination of improving resilience and creating alternative local purchase for an institutional programme which are key areas of interest for the countries in the region to understand and apply to their context. The demonstration site will also include a South-South cooperation initiative aiming at strengthening the rice value chain in the region, which is ongoing and will create synergies and complementarities. The local producers and stakeholders are benefitting from the provision of Chinese post-harvest equipment and technical training from Chinese experts to transform their value chains. The region will be a hub for South-South learning and sharing to improve food security and nutrition.

#### CONTACT INFORMATION

**Ms. Christiani Buani**

Head of Operations Management Unit, CERFAM  
Christiani.buani@wfp.org

# CERFAM's Knowledge Exchange Platform (KEPT)



## An innovative knowledge exchange platform to fight hunger and malnutrition

### CHALLENGE

Africa is home to many indigenous, innovative good practices on food security and nutrition. However, due to the lack of joint and coordinated efforts by most stakeholders, the inexistence of platforms on which to save them and the lack of methodological expertise that would allow for an efficient data collection process, many good practices have been left undocumented or unshared. If these good practices are not documented and shared, regional and national efforts to fight hunger and malnutrition could prove to be less effective and less efficient. It is therefore important to increase countries' access to successful good practices, improving the effectiveness, efficiency and sustainability of programmes and policies in African countries.

### TOWARDS A SOLUTION

Since its establishment, the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM) has prioritized the identification, documentation and promotion of good practices to combat all forms of hunger in African countries. This regional hub for exchanges, partnership building and South-South cooperation is a partnership between the Government of Côte d'Ivoire and the World Food Programme (WFP).

As part of its knowledge management strategy, CERFAM developed a Knowledge Exchange Platform (KEPT) which serves as a repository of good practices, expertise and exchanges to facilitate the identification, documentation and exchange of good practices on food security and nutrition in Africa and to share them with stakeholders (e.g., governments, development partners, food producers, etc.).

#### PROJECT NAME

CERFAM's Knowledge Exchange Platform (KEPT)

#### NOMINATED BY

World Food Programme (WFP) Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

#### COUNTRIES/REGIONS/TERRITORIES

Africa

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.1, 2.2, 2.3, 2.4

#### SUPPORTED BY

Government of Côte d'Ivoire, WFP

#### IMPLEMENTING ENTITIES

CERFAM

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2020 – Ongoing

#### LINK

<https://kept.coe.civ.wfp.org/>





KEPT is the first repository of its kind in Africa. Specifically, the objectives of KEPT are to:

- ▶ strengthen knowledge of, and access to, good practices and lessons learned, which are assessed and recommended by external experts through a rigorous validation process;
- ▶ offer expertise in different focus areas related to food security and nutrition to replicate good practices; and
- ▶ allow technical exchanges with experts on good practices.

These services are provided through four components of KEPT: 1) an interface for the submission of practices and a repository of good practices; 2) a roster of thematic experts in each African country; 3) a forum enabling experts and users to exchange information and ideas; and 4) an interface to allow follow-up on the implementation of good practices when replicated or scaled up.

To access the services of KEPT, users sign up either as generic users or as technical experts. Generic users can submit and review good practices and participate in discussions on the forum, while technical experts can review good practices and provide technical assistance for good practice replication when requested.

Submitting good practices and promising innovations on KEPT opens an opportunity for submitters to test their interventions by receiving a comprehensive analysis of their practices and the opportunity to review, understand and improve their initiatives. The nine key criteria for documenting good practices on KEPT are effectiveness, efficacy, relevance, innovation and learning, feasibility, accountability, replicability, partnership and multi-sectoriality, and sustainability. The process of good practice submission is based on a methodology for identifying and documenting good practices developed from an in-depth literature review and multiple consultations with various partners. The process has five steps: 1) preliminary questionnaire; 2) quantitative questionnaire; 3) qualitative questionnaire; 4) technical clearance; and 5) publication on KEPT.

Once the good practice is validated, it is published on KEPT with its associated analysis report, as a good practice and made accessible to the public. If the good practice does not meet the requirements, recommendations are shared with the practice submitter for further review. This is expected to advise on next steps of the development of practice or replication.

The benefits of KEPT are multiple. First, it creates a robust documentation of good practices and assists in archiving expert knowledge and skills. Second, it fosters mutual learning and sharing of experiences among stakeholders on how to fight hunger and malnutrition by capturing previous experiences and lessons learned. Third, the replication and scaling up of good practices will undoubtedly have a real impact on the livelihoods of target groups. KEPT hopes to help practitioners avoid previous mistakes, be exposed to new ideas and get inspired by the successes of similar initiatives.

KEPT is a strong South-South tool that allows continual exchange and learning among a wide variety of stakeholders in Africa. It promotes the dissemination of African good practices and make them accessible to inform programme and policy design and implementation. KEPT is building a network of experts who can provide technical assistance to countries for improving, replicating and strengthening good practice communication and interaction among countries and partners. KEPT currently features 24 good practices (documented and under analysis) and has a stable of more than 50 experts. One example of a good practice that was shared on KEPT and subsequently implemented is cassava value chain development. The practice was scaled up in the Republic of the Congo with technical assistance of CERFAM's experts, resulting in more than 180 Congolese producers benefited from skills transfer from Ivorian and Beninese experts on machine production and cassava processing.

As an innovation knowledge exchange platform, KEPT uses digital technology to facilitate knowledge collection, sharing and learning among a variety of practitioners and across sectors into concrete action, thereby helping stakeholders achieve SDG2 (zero hunger) and other SDGs. The documented practices can be replicated in other countries in Africa.

---

#### CONTACT INFORMATION

**Christiani Buani**

Head of Operations Management Unit, CERFAM  
christiani.buani@wfp.org



# Improving Regional Capacities in Food Safety Monitoring in Latin America and the Caribbean



Enhancing the safety of food to protect human health and increase economic growth and prosperity

## CHALLENGE

Toxic residues in agricultural food products and contamination that can occur during harvesting, packaging and storage processes pose a real and potential danger to the health of consumers. Many countries in Latin America and the Caribbean face significant challenges in preventing and controlling the levels of these residues and contaminants to ensure that food is safe for human consumption and that it meets the required standards for export. International agreements require food products destined for export to be certified by accredited laboratories to safeguard consumers from the risk of exposure to chemical and natural contaminants associated with agricultural production.

## TOWARDS A SOLUTION

From 2014 to 2021, the International Atomic Energy Agency (IAEA), in partnership with the Food and Agriculture Organization of the United Nations (FAO), supported 19 countries in Latin America and the Caribbean to build and strengthen the capabilities of national laboratories to use nuclear techniques to accurately analyse the level of chemical contaminants and pesticide residues in food products.

The project contributed to protecting the environment and enhancing the safety of food for human consumption in the region. It also helped increase export opportunities, maximized the capacity of local laboratories and reduced reliance on outsourcing to accredited laboratories abroad, saving both time and money. The project directly contributed to SDG targets 2.1 (universal access to safe and nutritious food) and 3.9 (reduce mortality from environmental pollution).

### PROJECT NAME

Improving Regional Capacities in Food Safety Monitoring in Latin America and the Caribbean

### IAEA TECHNICAL COOPERATION FUND

International Atomic Energy Agency (IAEA)

### COUNTRIES/REGIONS/TERRITORIES

Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.1, 3.9

### SUPPORTED BY

IAEA Technical Cooperation Fund

### IMPLEMENTING ENTITIES

IAEA, Food and Agricultural Organization of the United Nations (FAO)

### PROJECT STATUS

Completed

### PROJECT PERIOD

2014 – 2021

### LINK

[www.iaea.org/services/networks/ralaca](http://www.iaea.org/services/networks/ralaca)

The project transferred expertise, technology and methodologies that built national and regional capacities in food safety. It was implemented through expert missions, training courses and meetings that enabled regional exchanges of expertise and experiences.

In particular, technical know-how on the use of nuclear and conventional analytical techniques was transferred to five reference laboratories in Chile, Colombia, Mexico, Panama and Uruguay and equipment was procured by the IAEA. These five laboratories took the lead in analysing and assessing the physical infrastructure and competences of other, less advanced laboratories in the region. Based on an initial assessment, the five main laboratories were furnished with the necessary equipment and consumables and the other laboratories received expertise and capabilities in specific techniques and methods through staff training.

Capacity was built in sampling, quality control, statistical treatment and interpretation of analytical results, laboratory accreditation, equivalence of food control procedures and mutual recognition of results. This helped harmonize analytical standards and control methods in line with international standards to enhance the validity of the data produced.

To date, 13 of the participating laboratories have been accredited in food safety for export and are now able to produce high-quality data with reference to over 100 inorganic contaminants, pesticides, mycotoxins and veterinary drugs in food products. These laboratories have established an independent non-profit network, the Network of Analytical Laboratories in Latin America and the Caribbean (RALACA). The network serves as a knowledge hub for laboratories in the region and, via a digital platform, enables the sharing of expertise and resources to advance capacities for monitoring and evaluating and fosters communication between stakeholders, including decisionmakers. Data produced by these laboratories informs policies and good practices in the agricultural and industrial production of food sectors and have led to a reduction in the use of chemical fertilizers. These positive outcomes ensure the sustainability of the project.

Currently, RALACA is active in Spanish and Portuguese speaking countries of the Latin America and the Caribbean region, and provisions have been made to open the network to English-speaking countries of the Caribbean.



Based on the results achieved, the IAEA launched another regional project in 2020 to establish a common repository for timely, accurate, reliable and secure data in the area of food safety. To facilitate evidence-based risk assessment, the database follows the example of the European Food Safety Agency (EFSA) and is expected to be managed and controlled by the RALACA network. Regional partners, such as the Inter-American Institute for Cooperation on Agriculture (IICA), the International Regional Agency on Agricultural Health (OIRSA) and the Caribbean Agricultural Health and Food Safety Agency (CAHFSA) are partner organizations in the initiative.

#### CONTACT INFORMATION

**Nicola Schloegl**  
Programme Management Officer, IAEA  
N.Schloegl@iaea.org

# Improvement of Livelihoods and Nutritional Health in Mauritania



## Using an integrated approach to strengthen the resilience of local communities

### CHALLENGE

The Sahel region faces unprecedented challenges, one of which is the negative effects of climate change on vulnerable populations. Similarities of these challenges throughout the region highlight the importance of fostering South-South exchanges and dialogue among Sahelian countries to allow solutions to be identified that can be adapted to different contexts.

One village in Mauritania, Gourejima, which is home to 1,200 inhabitants, has been hit by consecutive droughts and low rainfall. These climate challenges have been preventing residents from exploiting the land and bringing negative impacts on agricultural production and livestock farming, leading to the deterioration of the livelihoods of the community. The situation worsened with the COVID-19 pandemic, resulting in reduced supplies of food commodities, declines in consumption, reduced job opportunities in urban areas and systematic indebtedness.

### TOWARDS A SOLUTION

To address this challenge and to pilot a possible solution to be scaled up throughout the country and the Sahelian region, the World Food Programme (WFP), with the support of the United Nations Children's Fund (UNICEF), World Vision and the German Federal Ministry for Economic Cooperation and Development (BMZ), launched the initiative "Improvement of Livelihoods and Nutritional Health in Mauritania." The initiative hopes to mitigate the effects of climate change, facilitate access of target groups to land, empower women and promote gender equality, reduce tensions between farmers and herders and create production and income-generating opportunities for target groups.

#### PROJECT NAME

Improvement of Livelihoods and Nutritional Health in Mauritania

#### NOMINATED BY

World Food Programme (WFP) Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

#### COUNTRIES/REGIONS/TERRITORIES

Côte d'Ivoire, Germany, Mauritania

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 4.2, 13.1

#### SUPPORTED BY

UNICEF, World Vision, German Federal Ministry for Economic Cooperation and Development (BMZ)

#### IMPLEMENTING ENTITIES

World Food Programme (WFP)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2018 – 2023

#### LINK

<https://bit.ly/3CbcezH>





Using a multisectoral approach, the initiative has assembled stakeholders from non-governmental organizations, government and development partners at all levels to help with implementation. Participatory community planning takes place to provide a clear understanding of the needs and challenges faced by the local populations and is a platform for local community, partners and authorities to exchange ideas, identify problems and constantly adapt programmatic responses to the needs of the target groups.

The initiative addresses a number of challenges. The first is restoration of productive assets. A stone dike was built to allow flood retreat farming, contributing to better water management in the community, and land was restored using “half-moon” basin techniques to improve agricultural production and livestock farming. Half-moon basins are dug with pickaxes and shovels to form an approximately three-metre half-circle in which earth and manure are mixed. The basins collect rainwater that would not be absorbed by the ground otherwise allowing crops to grow; this is an important system to prevent desertification, recover desert lands and preserve crops.

To prevent and treat moderate acute malnutrition, the initiative provides nutritional supplements to pregnant and breastfeeding women and to children under-five. The community platform GASPA<sup>1</sup> was created to set up integrated multisectoral interventions, including mapping of pregnant and breastfeeding women, training of community health agents and procurement of necessary tools for activity implementation and platform management. The initiative also supported an ambulatory recovery centre for malnutrition and nutrition awareness-raising activities to further support the target groups in the long term.

A school feeding programme is also part of the initiative. School children receive morning porridge and hot meals at noon, which increases concentration on their studies and ensures that the children eat nutritious foods during the day. Other activities include gardening zones for the production of fresh produce all year to encourage diversification of household food consumption and the restoration of fencing.

So far, the initiative has contributed to improving the community’s resilience and been a strong example for continuity of similar actions in the region. Focusing not only on transferring technologies but also on teaching local stakeholders how to pursue the activities, the initiative built sustainable bases for local economic and social development.

Key results of the initiative include: the stone dyke contributed to an increase of cultivable land from 8 hectares to 24 hectares; 13 hectares of half-moon basins were created, of which 8 hectares is dedicated to agriculture and 5 hectares to pastoralism. The increased cultivable land was provided to the community households based on their size. In 2020, beneficiary groups sold one-third of their production, resulting in US\$ 550 in income. This income was invested in the purchase of 20 carts and livestock. The carts reduced the time needed to collect water and wood



from two to three hours per day to 30 minutes. Beneficiaries reported that children had more time for school and households spent more time together. In addition, thanks to the cash received by the community, three wells were constructed for livestock farming and gardening. Ensuring empowerment and ownership of the activities by the whole community is crucial to the initiative’s sustainability. Local authority and state decentralized service involvement is also essential for its success and sustainability. A focus was placed on enhancing social cohesion and promoting good governance. The intervention contributed toward reduced migration while lessening the number of conflicts between breeders and farmers caused by transhumance. A greater food supply in the local market and improved school attendance are results that need to be sustained.

The practices implemented in this project have a high potential for replication among Sahelian countries. However, it is essential that activities are designed based on the local context and the needs identified during participatory community planning sessions.

#### CONTACT INFORMATION

**Chun-Kit Steven Li**  
Knowledge Management Officer, CERFAM  
Chunkit.li@wfp.org

1 Groupe d’apprentissage et de suivi des pratiques d’ANJE (Alimentation du Nourrison et du Jeune Enfant)



# Capacity Building for the Prevention and Care of People with Kidney Disease



## Prevention, early diagnosis and care of kidney disease in Paraguay

### CHALLENGE

Latin America is experiencing one of the world's highest growth rates of chronic kidney disease (CKD). Paraguay, in particular, has a high prevalence of the disease. In recent years, the country has seen an increase in risk factors for kidney disease, resulting in an increase in patients in the National Renal Health Program of the National Institute of Nephrology and increased admissions of people in kidney dialysis. This has a significant budgetary impact on public health, especially when treatments such as dialysis and kidney transplants are required. Paradoxically, chronic kidney disease can be easily diagnosed with a routine laboratory test, which is very inexpensive. If detected early, the aforementioned complications can be avoided.

With the increase in demand for specific treatments, such as dialysis, inhabitants of areas of Paraguay that border Argentina often seek those treatments from health institutions in Argentina, generating health migration practices and causing uprooting and greater social vulnerability of this population. Given these circumstances, working towards strengthening capacities for the prevention and care of kidney patients in the Paraguayan public sector can improve this situation, helping to resolve inequity in access to kidney health services.

### TOWARDS A SOLUTION

This project Strengthening Capacities for the Prevention and Care of People with Kidney Disease, led by the National Programme for the Comprehensive Approach to Kidney Diseases (PAIER) of the Ministry of Health of Argentina, seeks to train Paraguayan health professionals in different specialties in the prevention, early diagnosis and care of kidney disease. With the objective of contributing to SDG 3.4 (reduce mortality from non-communicable diseases and promote mental health), the project aims to reduce premature mortality

#### PROJECT NAME

Capacity Building for the Prevention and Care of People with Kidney Disease

#### NOMINATED BY

Government of Argentina, Government of Paraguay

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Paraguay

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.4, 17.9

#### SUPPORTED BY

Argentine Fund for International Cooperation (FO.AR)

#### IMPLEMENTING ENTITIES

Argentina: Directorate-General for International Cooperation (Ministry of Foreign Affairs, International Trade and Worship), Ministry of Health; Paraguay: Ministry of Health and Social Welfare

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2018 – 2022



from non-communicable diseases by one-third through prevention and treatment. The Argentine Fund for International Cooperation (FO. AR) developed this project within a framework of bilateral cooperation between Argentina and Paraguay.

The target group of the project is medical and health professionals in Paraguay, including doctors, nurses, biochemists, nutritionists, psychologists, social workers, kinesiologists, dentists, physical education teachers, health promoters and health agents.

The project, jointly developed by the Ministries of Health of Argentina and Paraguay, focuses on preventive actions for kidney disease and its risk factors, promoting early detection and thus helping to prevent kidney deterioration. It aspires to strengthen the work of the National Institute of Nephrology of Paraguay and establish the problem of kidney diseases and their possible prevention in the public sphere, encouraging patients to undergo tests for early detection.

To carry out this project, the following strategies are used: application of guidelines for the detection of kidney disease; training of human resources for the prevention, diagnosis and timely treatment of kidney disease; and training in Argentina of surgeons from Paraguay on making vascular access for chronic dialysis.

With the COVID-19 pandemic, the work strategy was re-conceived, and in 2021, 100 health professionals from different locations in Paraguay were trained virtually through the course "Promoting self-management in people with chronic diseases and non-communicable diseases." This training provided tools to health personnel so that they could educate kidney patients not only about risk factors that cause kidney disease but also about self-management of the condition. This training contributed to the sustainability of the project. The virtual nature of the training made it possible to train more professionals than expected, not only from one city, but also to expand to different locations in the country. What's more, the target group was diversified and expanded, incorporating primary health care professionals.

In 2022, to finalize the project, 500 openings were granted to carry out two additional virtual courses. Also, field training activities will be carried out for the preparation of arteriovenous fistulas for general surgeons at the Julio Perrando Hospital, in Resistencia, Chaco Province, Argentina.

The positive preliminary results of the project and the degree of adherence and interest of the trained health personnel demonstrate the potential of this activity to be applicable to other regions and countries with similar demands.

---

## CONTACT INFORMATION

### **Victoria Armayor**

Diplomatic officer, General Directorate of International Cooperation, Ministry of Foreign Affairs, International Trade and Worship, Argentina  
v jy@mrecic.gov.ar

# Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance in CARICOM Member States

3 GOOD HEALTH AND WELL-BEING



Effective surveillance, prevention and management of AMR to improve global public health

## CHALLENGE

Antimicrobial agents play a critical role in reducing morbidity and mortality due to communicable diseases. The emergence and spread of antimicrobial resistance (AMR) is a matter of increasing concern and has been identified as a major concern to global public health. Furthermore, AMR is recognized not only as a major public health problem, but also as a development issue because of its huge economic impact worldwide.

Accurate, reliable and timely laboratory testing for AMR is an essential component of effective disease surveillance, prevention and management. As such, it was identified as an area which requires strengthening among the Caribbean Community (CARICOM) member states.

## TOWARDS A SOLUTION

After having identified the need to reinforce capacities in detecting and reporting AMR within Caribbean countries, the Pan-American Health Organization (PAHO), together with the Argentinian Malbrán Institute and CARICOM, formulated in 2018 a triangular cooperation initiative to face this challenge. The project supported and partially funded by the Argentine Fund for International Cooperation (FO.AR) was titled Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance in CARICOM Member States. The project received financial support both from the Pan American Health Organization (PAHO) and FO.AR and was carried out from 2019 through December 2021. It is worth noting that the project continued implementation even during the peak of the COVID-19 pandemic, having switched from onsite training to virtual online training.

## PROJECT NAME

Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance in CARICOM Member States

## NOMINATED BY

Ministry of Foreign Affairs, International Trade and Worship of Argentina, Ministry of Health of Argentina, Pan American Health Organization/World Health Organization (PAHO/WHO), Caribbean Community (CARICOM)

## COUNTRIES/REGIONS/TERRITORIES

Argentina, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago

## SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.3, 3.d

## SUPPORTED BY

PAHO/WHO; Ministry of Foreign Affairs, International Trade and Worship of Argentina (FO.AR programme)

## IMPLEMENTING ENTITIES

Ministry of Health of Argentina (ANLIS- Malbrán Institute); Ministry of Agriculture, Livestock and Fisheries (SENASA - National Service for Agri-food Health and Quality); Ministries of Health of participating CARICOM Countries; World Organization for Animal Health (OIE)

## PROJECT STATUS

Completed

## PROJECT PERIOD

2019 – 2021

## LINK

[www.paho.org/CCHD](http://www.paho.org/CCHD)





The project supported CARICOM's strategic policy plan on health and helped Caribbean countries to achieve compliance with international health regulations by strengthening capacities to conduct high quality testing for the detection of AMR, collate and analyze AMR laboratory data and use the laboratory results to monitor trends and improve prescribing practices and AMR prevention, interventions and policies.

This project also contributed to implementation of the Global Antimicrobial Surveillance System (GLASS) developed by the World Health Organization (WHO), as part of global efforts to monitor the burden of disease and impact of interventions related to AMR.

The project objectives included improving the capacity for diagnosis and characterization of AMR in clinical, veterinary and food laboratories, establishing national programmes for external quality assurance of AMR diagnosis, implementing a system of AMR data sharing in the Caribbean region and promoting and enhancing the use of AMR data for public health actions.

From 2019 to 2021: over 300 nurses, physicians and laboratory specialists from seven Caribbean countries were trained in specimen collection; 119 participants from 12 countries successfully completed virtual training in AMR detection and surveillance; 12 countries joined a laboratory external quality assurance programme led by the Malbrán Institute in Argentina; and 10 professionals from Barbados, Jamaica, Suriname and Guyana were trained on-site at various collaborating Argentine institutions, among others results.

In line with the project strategy to promote horizontal partnerships by working in networks, the Pan American Health Organization (PAHO) network called Red Latinoamericana de Vigilancia de la Resistencia a los Antimicrobianos (Latin American Antimicrobial Resistance Surveillance Network, or ReLAVRA) was expanded to incorporate the Caribbean countries. ReLAVRA, with its 25 years of experience in AMR surveillance, provides a unique opportunity for CARICOM member states to benefit from other countries' experience and share knowledge, good practices and successful initiatives in the fight against AMR, building on strengths of South-South cooperation and ensuring the sustainability of the project.

While the COVID-19 pandemic resulted in competing priorities due to the emergency and brought about many operational challenges for project implementation to all partners, it also increased the project's importance due to the significant impact of the appearance of new drug-resistant infections in the region.

At the end of the project, reinforced regional ties successfully contributed to building capacity for AMR diagnosis and surveillance among 14 CARICOM member states, proving once again that horizontal cooperation is undoubtedly one of the best approaches to provide a rich exchange of experiences.



Finally, in addition to the technical expertise shared and capacity-building activities performed, the project built a strong network of multidisciplinary professionals within the Caribbean region, with keen interest in AMR, which will last beyond the project duration.

#### CONTACT INFORMATION

**Victoria Armayor**

Diplomatic officer, General Directorate of International Cooperation- Ministry of Foreign Affairs, International Trade and Worship, Argentina  
vjj@mrecic.gov.ar



## Towards the universal access to COVID-19 vaccines and a global response to end the pandemic

### CHALLENGE

The disparity between developing and developed countries in terms of distribution of COVID-19 vaccines prevented the world from achieving the complete elimination of the pandemic. Moreover, it further hampered progress in the realization of the 2030 Agenda for Sustainable Development.

The need for the adoption of the resolution “Ensuring equitable, affordable, timely and universal access for all countries to vaccines in response to the COVID-19 pandemic,” initiated by the Republic of Azerbaijan on behalf of Non-Aligned Movement (NAM) member states, was born out of the common recognition that a global emergency like the COVID-19 pandemic required a global response. Yet, the low availability of COVID-19 vaccines and medical supplies in low- and middle-income countries proved that there was still much to be done in this respect.

### TOWARDS A SOLUTION

At the beginning of the COVID-19 pandemic, Azerbaijan, chairing the Non-Aligned Movement and the Organization of Turkic-Speaking States, was among the first countries actively engaged in mobilizing efforts of the wider international community, in the spirit of multilateralism, cooperation and solidarity, to address the pandemic and its negative consequences through a number of successful undertakings. These were:

- ▶ setting an international agenda to fight COVID-19 in developing and least developed countries, especially in NAM and Organisation of Islamic Cooperation (OIC) member-states;
- ▶ providing financial support to international organizations; and
- ▶ delivering medical items, equipment and financial support to foreign governments bilaterally.

At the initiative of the President of the Republic of Azerbaijan H.E. Mr. Ilham Aliyev, several important events took place, including the Summit of the

#### PROJECT NAME

Fighting COVID-19

#### NOMINATED BY

Azerbaijan International Development Agency (AIDA), World Health Organization (WHO)

#### COUNTRIES/REGIONS/TERRITORIES

More than 80 countries in the Americas (Central and Southern America as well as surrounding regions), Africa, Asia, Middle East and other regions

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.b, 3.c, 3.3, 17.6, 17.14, 17.16

#### SUPPORTED BY

Government of Azerbaijan

#### IMPLEMENTING ENTITIES

WHO, AIDA

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2020 – Ongoing

#### LINK

[www.aida.mfa.gov.az/en](http://www.aida.mfa.gov.az/en)

Turkic Council in April 2020, the Summit of the Non-Aligned Movement in May 2020 and the Special Session of the United Nations General Assembly at the level of the heads of state and government in December 2020. The overlapping purpose of the events was to bring to global attention the undesirable effects of COVID-19, identify common positions and strategies to respond to the pandemic both collectively and individually, and mobilize global efforts.

Meetings took place amid the persisting challenges related to uneven access to quality, safe, effective and affordable COVID-19 vaccines around the world. Azerbaijan highlighted the fundamental role of the United Nations system in coordinating the global response to control and contain the spread of COVID-19 and in providing support to states and the crucial leading role played by the World Health Organization. These important initiatives contributed to the adoption by the United Nations Human Rights Council and the General Assembly in March and December 2021, respectively, the resolution titled “Ensuring equitable, affordable, timely and universal access for all countries to vaccines in response to the COVID-19 pandemic.”

As a sign of solidarity, provided financial and humanitarian assistance to about 80 countries both directly and through international organizations to support their fight against the coronavirus in different areas, including health, education, social well-being, food and security.

The Government of Azerbaijan allocated US\$ 10 million to the World Health Organization, US\$ 1 million to ISESCO, US\$ 1 million to UNESCO and US\$ 300,000 to the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) to support global efforts in fighting the spread of the pandemic, especially in developing and least developed countries. So far, nearly 60 countries in Africa, Asia, Latin America and other regions have been provided with medical items and equipment through WHO to enable national health institutions to deliver public health services to their citizens.

Azerbaijan recognized the vital importance to maintain the continued functioning of health systems and strengthening primary health care in all aspects necessary for an effective public health response to the pandemic. Measures in this regard included ensuring the continuation of uninterrupted vaccination programmes with a view to achieving universal health coverage.

During his speech at the high-level thematic debate on “Universal vaccination in combatting COVID-19” organized by the President of the United Nations General Assembly on 25 February 2022, President Aliyev announced that Azerbaijan will donate one million additional doses of vaccines to 14 NAM member states. Mr. Aliyev noted that the Non-Aligned Movement stands ready to continue its active engagement in advancing international solidarity, which would allow the soonest possible elimination of the pandemic and an effective recovery process. In this regard, NAM would come up with new results-oriented initiatives on addressing post-COVID-19 recovery needs.

Concerning bilateral aid, Azerbaijan through its national donor institution, the Azerbaijan International Development Agency (AIDA), provided financial, humanitarian and medical aid to over 20 countries, some of which received Azerbaijan’s aid several times consecutively. Furthermore, the government donated vaccines to five more countries. In total, both bilaterally and multilaterally Azerbaijan spent over US\$ 30 million to support global efforts in fighting the spread of COVID-19 and its consequences around the world. Foreign governments and international organizations continue requesting the government for additional financial, medical and humanitarian aid. It is expected that the volume of aid and beneficiaries will grow further. Azerbaijan’s international support for combatting COVID-19 has been recognized at a number of international events and within reports of international organizations. Such a practice, which included a three-fold approach to fighting COVID-19, namely setting an international agenda and providing aid both bilaterally and multilaterally, was innovative within the framework of the Non-Aligned Movement in the sense that it encompassed a comprehensive approach that had visible and tangible targets and promoted results-oriented actions in combatting the coronavirus.

---

## CONTACT INFORMATION

### **Etibar Karimov**

Programme Director, AIDA, Ministry of foreign Affairs of the Republic of Azerbaijan  
e\_kerimov@mfa.gov.az



# Alliance to Fight Avoidable Blindness



## Campaign to uphold the right to sight in Africa

### CHALLENGE

Worldwide, more than 40 million people have completely lost their sight and over 300 million are partially sighted. It is estimated that 15.3 percent of the world's blind population reside in Africa. Approximately 26.3 million people in the African region have a form of visual impairment. Of these, 20.4 million have low vision and 5.9 million are estimated to be blind.

Evidence indicates that the magnitude of avoidable blindness caused by communicable diseases like trachoma and onchocerciasis (river blindness) and ophthalmological complications in measles is decreasing, whereas noncommunicable age-related eye conditions (e.g., cataracts, glaucoma and diabetic retinopathy) are increasing. Due to the cost and shortage of qualified ophthalmologists and health facilities, people often cannot afford medical care and treatment.

### TOWARDS A SOLUTION

To address this issue, the Azerbaijan International Development Agency (AIDA), within the framework of strategic cooperation with the Islamic Development Bank (IsDB), has supported since 2012 the IsDB-initiated Alliance to Fight Avoidable Blindness in 14 African countries. The main project partners in addition to IsDB and AIDA, are the national campaign countries (Benin, Burkina Faso, Chad, Cameroon, Cote d'Ivoire, Djibouti, Guinea, Libya, Mali, Mauritania, Mozambique, Niger and Somalia), the Egyptian Agency of Partnership for Development, the Humanitarian Relief Foundation (Türkiye), the Nadi Al-Basar North African Center for Sight and Visual Science, and the Prevention of Blindness Union (Saudi Arabia).

#### PROJECT NAME

Alliance to Fight Avoidable Blindness

#### NOMINATED BY

Islamic Development Bank (IsDB), Azerbaijan International Development Agency (AIDA)

#### COUNTRIES/REGIONS/TERRITORIES

Benin, Burkina Faso, Chad, Cameroon, Cote d'Ivoire, Djibouti, Guinea, Libya, Mali, Mauritania, Mozambique, Niger, Somalia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.c, 17.3, 17.6, 17.16, 17.9

#### SUPPORTED BY

IsDB, AIDA

#### IMPLEMENTING ENTITIES

Nadi Al-Basar North African Center for Sight and Visual Science, Prevention of Blindness Union (Saudi Arabia)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

First phase 2009 – 2016; second phase 2016 – 2023

#### LINK

[www.aida.mfa.gov.az/en](http://www.aida.mfa.gov.az/en)





This long-term and successful campaign addresses a very important challenge, especially in sub-Saharan Africa, as cataracts are one of the most widely spread eye diseases in these countries, coupled with a lack of local ophthalmologist surgeons. Under the AIDA initiative, Azerbaijani ophthalmologists from the National Eye Centre participated in the campaign by sharing knowledge and experience with their colleagues from several African countries.

During the first phase of the campaign from 2009 to 2016, over 244,000 people in Africa received eye examinations and more than 49,000 patients who had partially or fully lost their eyesight regained their vision following cataract surgery carried out free of charge (so far, total numbers combined of the first and the second phase, over 300,000 patients have been screened and 60,000 operated on). In addition, 177 African doctors attended professional training making the provision of medical services by local specialists sustainable. Not only is regaining vision important for daily living, but importantly allows beneficiaries to work and earn a living.

In 2016, the project partners reviewed the successes of the campaign's first phase and prepared objectives and prospects for a second phase in which cooperation is being enlarged and the beneficiaries reached is expanding. Over a five-year period ending in 2023, the Alliance to Fight

Avoidable Blindness plans to:

- ▶ realize 1.5 million cataract surgeries;
- ▶ prepare four national intervention programmes for the correction of refractive errors;
- ▶ carry out eye examinations on 10 million schoolchildren to detect ocular refractive errors and supply corrective glasses when necessary;
- ▶ enhance the capacities of six glaucoma treatment centres in member countries;
- ▶ enhance the capacities of at least three regional training centres; and
- ▶ enhance the capacities of 90 eye care specialists.

Since joining the Alliance to Fight Avoidable Blindness, Azerbaijan has allocated nearly US\$ 1.5 million to support the delivery of eye health services in African countries, meeting SDGs 3, 8, 10 and 17. Official government institutions of beneficiary countries, including Chad, Cote d'Ivoire and Niger, have expressed their gratitude for Azerbaijan's support to the Alliance.

This project's longevity and strong partnerships bode well for its continued sustainability. For instance, ophthalmologists with the National Eye Centre Azerbaijan, which has been operating for more than 70 years and providing the Azerbaijani population with high-level medical services, and other leading ophthalmological centres in Azerbaijan have expressed readiness to contribute to future campaigns and assist ISDB member countries to increase the capacity of their medical specialists.

---

## CONTACT INFORMATION

### **Etibar Karimov**

Programme Director, AIDA, Ministry of foreign Affairs of the Republic of Azerbaijan  
e\_kerimov@mfa.gov.az

# Surokha COVID-19 Vaccine Management System



## A digital system to manage the Covid-19 vaccination programme in Bangladesh

### CHALLENGE

Like the rest of the world, Bangladesh has been heavily impacted by the COVID-19 pandemic. With the outbreak of COVID-19, the country faced challenges in procuring essential supplies within a severely constrained global supply chain. Under this critical situation, Bangladesh acted quickly and started a mass vaccination campaign, setting an ambitious target of vaccinating 80 percent of its population (over 138 million people).

Challenges to the campaign included ensuring supply management within a short time, tracking the vaccination programme through technology and training healthcare workers all over the country within the timeline. Most rural populations in the country live below poverty level, have limited access to the internet and may not have the digital devices needed to register for vaccination. Digital literacy and understanding of the mass campaign presented other operational challenges.

### TOWARDS A SOLUTION

To address the challenge above, the Government of Bangladesh developed the Surokha platform to manage the COVID-19 vaccination roll-out. This online system is used to register citizens, issue vaccination cards, schedule management and provide Smart Vaccination Certifications and global verification of the certificates, the latter of which are playing a vital role in travelling abroad. This initiative is contributing to SDG 3 (ensure healthy lives and promote well-being for all at all ages).

The Surokha system is a public service innovation moving service delivery closer to the doorsteps of citizens, especially important during the COVID-19 emergency situation. The objective of this new system is primarily to ensure that all citizens have access to vaccines through online self-registration, and to improve the quality of government services and allow for transparency and accountability through the use of information technology.

#### PROJECT NAME

Surokha COVID-19 Vaccine Management System

#### NOMINATED BY

Information and Communication Technology Division, Government of Bangladesh

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.8, 9.5

#### SUPPORTED BY

Department of Information and Communication Technology, Information and Communication Technology Division, Government of Bangladesh

#### IMPLEMENTING ENTITIES

Department of Information and Communication Technology and Directorate General of Health Services of the Government of Bangladesh

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

November 2020 – Ongoing

#### LINK

<https://surokha.gov.bd/>



A transparent database was created of recipients of the COVID-19 vaccine, which supports statistics gathering related to the COVID-19 vaccine and is helping the government make informed decisions about the vaccine roll-out and for future health emergencies. To ensure coverage of all beneficiaries, the system was implemented in collaboration with and engagement of a number of government institutions, which conferred ownership to a variety of actors and secured a proper roll-out. The system was designed by the country's expanded programme on immunization (EPI), management information system (MIS), Directorate General of Health Services (DGHS), which cooperated with the Department of ICT.

Many governmental and non-governmental organizations have engaged with the system, including the Ministry of Education, Directorate of Secondary and Higher Education and the University Grant Commission. Using the Surokkha system, foreign diplomats, foreign nationals and migrant students are reached through the Ministry of Foreign Affairs, migrant workers through the Bureau of Manpower, Employment and Training and special needs children through the Ministry of Social Welfare. All the country's district, sub-district and union-level offices are aligned with the system.

The Surokkha system initially targeted priority groups, people in urban areas and other densely-populated areas. Now, the system targets all metropolitan areas, sub-districts and villages for all citizens 12 years of age and above. Vaccines are available to everyone, including persons in refugee camps, at no cost. To extend the initiative to those who do not have digital access (internet and digital devices), volunteers are working at more than 5,000 union digital centres throughout the country. On-the-spot registration and vaccination are available for disabled and senior citizens.

At time of writing, about 100 million people had registered on the platform using national identity cards, passports and birth certificates to receive the first, second and third doses of vaccines. As of March 2022, approximately 200 million doses of COVID-19 vaccine had been administered through the Surokkha system.

The Surokkha system proved scalable and secure and enhanced the government's monitoring and decision-making capability. The system is one its kind in terms of execution, from developing the system to implementing it, involving a number of government ministries and keeping fixated on the single goal of achieving maximum vaccination. Through the Surokkha system, the government has been able to successfully implement and manage COVID-19 vaccination, a huge milestone. The system found easy ways to reach mass numbers of people and to motivate their active involvement through digital centres in areas lacking access to digital devices and where digital literacy is low. The government's engagement in media outreach, including social media, played a vital role.



Due to the success of the Surokkha system, the Director General of Health Services is interested in using the system for routine child vaccinations to cover 45 million children under the expanded programme on immunization (EPI). This system has the potential to be transferred and adapted to other countries as well, particularly since the system is already available in both English and Bengali. However, it does require recipient countries to have the right digital infrastructure.

#### CONTACT INFORMATION

**Rezaul Maksud Jahedi**

Director General, Department of ICT, Government of Bangladesh  
jahedi6076@gmail.com  
+8801711166328



# Long-term Care for the Elderly, with Emphasis on Long-term Care Facilities, Day Centres and Home Care



## E-learning diploma to improve the quality and availability of long-term care for the elderly in Latin America and the Caribbean

### CHALLENGE

According to data from the World Health Organization (WHO), about 12 percent of elderly people in Latin America and the Caribbean have some degree of dependency, meaning they require attention and assistance to carry out daily activities. The same data estimates that this number will triple by 2050 (WHO, 2015<sup>1</sup>).

Demand for elderly care in the region will only increase in the coming decades, which gives rise to the need both immediately and in the future to strengthen health systems and train health personnel to care for older people in long-term care facilities, day care and home care. This will aid in achieving SDG 3 (good health and wellbeing) and SDG 4 (quality education).

### TOWARDS A SOLUTION

To address the growing need for elderly care in the Latin America and Caribbean region, and to strengthen the quality of care provided, the project created an e-learning Diploma for Long-term Care for the Elderly, with Emphasis on Long-term Care Facilities, Day Centres and Home Care. This specialization in elderly care targeted health professionals from Chile and Ibero-America. The e-learning methodology of the course ensured that the training could reach professionals and technicians from nine Latin American countries, namely Argentina, Bolivia, Brazil, Chile, Costa Rica, Dominican Republic, Paraguay, Peru and Uruguay. The combination of compulsory and complementary readings, conferences and synchronous classes with experts, tutorials and group and individual work allowed the training to be applicable to the work context of each student and benefitting the health systems of all countries involved.

#### PROJECT NAME

Long-term Care for the Elderly, with Emphasis on Long-term Care Facilities, Day Centres and Home Care

#### NOMINATED BY

Chilean Agency for International Cooperation for Development (AGCID)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil, Chile, Costa Rica, Dominican Republic, Paraguay, Peru, Uruguay

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.c, 4.3

#### SUPPORTED BY

National Service for the Elderly, Chile; AGCID; Pontifical Catholic University of Chile; Institute for Caregiving Research, Chile; Ibero-American Social Security Organization, Spain; Ibero-American General Secretariat, Spain

#### IMPLEMENTING ENTITIES

Pontifical Catholic University of Chile through their programme for the elderly (PAM-UC) and their centre for old age and aging (CEVE-UC) in collaboration with the Millenium Institute for Caregiving Research (MICARE)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

October 2021 – May 2022

#### LINK

<https://aulavirtual.oiss.org/course/view.php?id=73>

<sup>1</sup> <http://doi.org/10.1787/4dd50c09-en>





The project was participatory and each project partner played an important role in the development and roll out of the e-training, as described below.

- ▶ Project coordination was jointly shared among the National Service for the Elderly (SENAMA), the Ibero-American General Secretariat (SEGIB) and the Chilean Agency for International Cooperation for Development (AGCID) for the evaluation and selection of technical experts to produce the course contents and for financially supporting the development of the e-learning modules.
- ▶ The Pontifical Catholic University of Chile and the Ibero-American Organization of Social Services (OISS) supported the construction, development and content management of the on-line platform activities.
- ▶ The Pontificia Universidad Católica de Chile and SENAMA conducted the technical and expert review of the training modules.
- ▶ Activity design was based on collaboration among various institutions, including OISS, which made available its virtual classroom platform (Moodle) and a technical team to support the platform; this lowered costs, facilitated its implementation and widened the project scope.

This high-level, quality academic activity was carried out over eight months, with the participation of more than 10 international expert teachers and lecturers, reaching 270 students from the nine countries. Students were divided into 27 expert tutoring groups allowing spaces for the exchange of experiences and good practices among students.

The project contributed to promoting learning opportunities with a gender approach (SDG 4, Target 4.3). Of the total applications received, 77 percent were women, highlighting their greater labour force participation in the field of elderly care in the region, as well as the barriers to access to training in this field. Of the 270 scholarships available, 209 were awarded to women (77.4 percent).

The course contributed to of the training of socio-health personnel (SDG 3, Target 3c), with 54 percent of the scholarships being awarded to professionals and technicians from long-stay establishments for the elderly (ELEAM), day centres and home care collaborators of SENAMA. Of the remaining 46 percent of the scholarships, 37 percent went to professionals and technicians working in care programmes run by foundations and NGOs and 23 percent to professionals and technicians working in health centres and hospitals. Of the 270 students enrolled, 222 completed the course and received a formal training certification.

The students finished the course by conducting an intervention applied in their work context, which contributed to project sustainability and with benefits that can be observed in the medium term.

The activities and contents of the diploma continue to be available on the OISS Moodle platform, enabling it to be replicated at any time.

Lessons learned with this project are described below.

- ▶ Offering a tutoring system focused on communication not only supports the academic outcomes but also monitors performance throughout the activity, raises alerts and provides support when necessary.
- ▶ A flexible evaluation system is important for training that targets working professionals, including allowing new deadlines and making help facilities available for those who have difficulties during the academic activity or who face situations of force majeure.
- ▶ It is beneficial to include activities that generate space for dialogue and exchange of experiences, conducted in the presences of recognized experts in the field.
- ▶ In the Latin American and Caribbean region, efforts are needed to improve the integration of Portuguese-speaking students.
- ▶ Standardize the selection criteria for professionals and technicians who apply for scholarships so that the levels of personal commitment and participation from each applicant are similar.
- ▶ Be aware of the need for a strategy to address time zone differences that allows the synchronous participation of students from different countries.

The initiative addressed the challenge of an increasing demand for elderly care, a global challenge shared by all countries, regardless of their specificities and level of development. The academic activity facilitated access to new care models and approaches applicable for each specific context. It will be important to continue to address the theme of long-term elderly care in the Latin America and Caribbean region (as well as elsewhere around the world), as this will remain a significant development challenge.

---

## CONTACT INFORMATION

### Gladys Gonzales Alvarez

Head of Social Services Unit, Territorial Management and Coordination Division, National Service for the Elderly, Chile  
ggonzalez@senama.gob.cl

# Promoting the Development of a Green Crop Protection Industry in South Africa



## Technology transfer package for developing environmentally friendly bio-insecticides in South Africa

### CHALLENGE

The agriculture sector plays a key role in the development and stability of the South African economy and influences the entire southern Africa sub-region. However, agricultural development has occurred unequally around the country. In some areas, the levels of agricultural development have not progressed due to old techniques used by farmers. Also, disease and insect pests often cause crop losses in these areas, dealing a fatal blow to local agriculture. To prevent pests and disease, smallholder farmers often buy low-quality pesticides, which pose risks to the environment.

Pesticide pollution has been a problem since the world's first generation of pesticides came into being in the 1940s. Persistent organic pollutants (POPs) are being replaced and banned around the world, and highly active, broad-spectrum, less toxic pesticides and their user-friendly and environmentally friendly pesticide formulations are gradually being marketed, vastly reducing the problems associated with the production and use of pesticides. But these advances have not yet benefited most developing countries. Hence, an urgent need exists to introduce and promote environmentally friendly and safe pesticide formulations in developing countries, including southern Africa.

### TOWARDS A SOLUTION

The Technology Transfer Package for Developing an Environmentally Friendly Bio-insecticide of Emamectin Water Dispersible Granule Formulation in South Africa project addressed various challenges facing the pesticide industry in South Africa. The project supported technical cooperation between Nantong Pesticide Formulation Development Centre (NPFC) in China and the Villa Crop Protection Academy (VCPA) in South Africa to develop an environmentally friendly bio-insecticide.

#### PROJECT NAME

Promoting the Development of a Green Crop Protection Industry in South Africa

#### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

#### COUNTRIES/REGIONS/TERRITORIES

China, South Africa

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 2.a, 3.9, 9.5, 9.b, 13.b

#### SUPPORTED BY

China South-South Development Center Project

#### IMPLEMENTING ENTITIES

Nantong Pesticide Formulation Development Centre (NPFC) of China, Villa Crop Protection Academy (VCPA) of Republic of South Africa

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

January 2014 – December 2015



Through this project, NPFC designed a new bio-insecticide formulation recipe based on the local context and needs and created a technology transfer package for the VCPA. The technology transfer package helped VCPA replace old polluting insecticide formulations based on persistent organic pollutants (POPs), thereby promoting the national development of a green crop protection industry in South Africa.

The project helped to protect the environment, promote human health, end hunger and achieve food security for the South African population while promoting sustainable practices in the pesticide industry, contributing to the achievement of Sustainable Development Goals (SDGs) 2 (zero hunger), SDG 3 (health) and SDG 13 (climate action). The project also contributed towards SDG 9 (infrastructure, industrialization), since it promoted the development of the pesticide industry in South Africa by training technicians and providing technical solutions to address challenges and increase production.

Experts from NPFC visited South Africa to collect information about pesticides and the formulations being used, thereby completing a feasibility study on the Water Dispersible Granule formulation to replace the old polluting formulations (Wettable Power and Emulsifiable Concentrate) in the market. The experts also visited Nufarm Australia, Ltd. and the Du Pont Agricultural Company to understand the water dispersible granule pesticide formulation laboratory and pilot plant equipment, instruments, surfactants and adjuvants used for the bio-insecticide of Emamectin water dispersible granule formulation research, development and pilot plant unit.

A research and development team was established for the project. Two NPFC formulation chemists completed the research on the Emamectin water dispersible granule formulation recipe in about 12 months, which involved recipes, processing, analytical methods and quality standardization of the formulation.

This project helped South Africa replace partially persistent organic pollutants (POPs), which is in line with the Stockholm Convention on POPs and the Rotterdam Convention on Prior Informed Consent, and to a certain extent, contributed to the restoration of local agricultural land and surrounding ecological environments. It helped ensure food security and biological safety and the sustainable development of the agricultural community.

The project trained more than 10 technicians using a Training of Trainers model, which was of particular importance in terms of the sustainability of the project, as it not only improved the R&D capabilities of the technicians, but the continuity of extension activities after the project was completed benefitted the wider local population.



The research results of this project and empirical models of technical cooperation could be disseminated as good practices in developing countries, particularly in the southern region of Africa. The fact that NPFC is a state-owned, non-profit, self-sufficient organization with many years of experience in research and development of environmentally friendly pesticide formulations was an important factor in getting access for South Africa to the new green technology in agriculture. Not only was the project a successful technology transfer initiative but it also demonstrated the benefits of South-South cooperation based on equality and mutual benefit.

#### CONTACT INFORMATION

**Xu Yayun**  
Project Assistant, NPFC  
nantongxyy@163.com



# Egypt's Health Diplomacy



## Cross-border collaboration and policy coordination to improve the health sector in Africa



### CHALLENGE

Global health has been facing unprecedented threats, especially with the eruption of unknown diseases, most notably the recent COVID-19 pandemic. This has put extra pressure on health care systems and infrastructure around the world, where risk is being intensified in already weakened, underdeveloped regions, in particular within Africa.

In many parts of the African continent, health services are already limited, with severe shortage in remote and border areas for many reasons, among which are poor governance and insecurity. These factors put local communities at maximum risk, not just for common infectious diseases but also unforeseen ones. Therefore, it is critical to address two major aspects in this regard, namely the provision of basic healthcare services, especially for deprived areas and the improvement of existing services in other areas. To achieve this goal, resources must be directed towards the promotion of good health and well-being, development of sustainable health infrastructure, boosting of knowledge and expertise and the accurate collection of data.

### TOWARDS A SOLUTION

The health sector is one of many topics in the scope of work of the Egyptian Agency of Partnership for Development (EAPD). EAPD prioritizes cooperation with all developing countries, especially in Africa, to boost the quality and availability of health services through multiple interconnected approaches, all of which fall under the umbrella of what is known as Health Diplomacy. Health Diplomacy is the practice by which governments and non-state actors attempt to coordinate global policy solutions to improve global health, and its significance is highlighted especially after the eruption of the COVID-19 pandemic. EAPD approaches in this area incorporate a number of elements, such as capacity building programmes, medical aid, provision of experts, medical convoys, mobile clinics, health education, telemedicine and establishing or supporting health facilities spread across many countries.

#### PROJECT NAME

Egypt's Health Diplomacy

#### NOMINATED BY

Egyptian Agency of Partnership for Development (EAPD)

#### COUNTRIES/REGIONS/TERRITORIES

All African countries, other countries around the world

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.1, 3.2, 3.a, 3.c, 4.7

#### SUPPORTED BY

Government of Egypt

#### IMPLEMENTING ENTITIES

EAPD, Ministry of Foreign Affairs of Egypt

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2014 – Ongoing

#### LINK

<http://eapd.gov.eg/en/initiatives/health-sector.html>





Within capacity building, the EAPD offers training and courses covering various topics in the field of health to improve capabilities and readiness in the field of health. These programmes are organized in collaboration with distinguished public and private health institutions in Egypt and topics include Health Quality Assurance, Nursing Care, Health Economics, Women's Health, Early Diagnosis of Breast Cancer, Infection Control and Fighting Infectious Diseases.

EAPD delivers medical aid to many countries. Since 2014, 94 batches of medical assistance have been delivered to over 37 countries, including many African countries and Afghanistan, Albania, Armenia, Indonesia, Ukraine, Yemen, and others. These medical aid batches help countries become more resilient in fighting systemic health conditions, enhance local health system readiness and make up for shortages of supplies. Batches include medical equipment and material (sutures, bandages, masks, gloves, etc.), medications, vaccines and devices. Examples include having sent infection control kits and oxygen tanks to Zambia, medication and medical equipment to Sierra Leon and spare parts for the dialysis units in the military hospital in Burundi. Within the context of fighting COVID-19, the EAPD offered multiple batches of equipment, medication and vaccines listed by the World Health Organization (WHO) as necessary to counter the spread of infection.

EAPD entered a cooperative agreement with the International Vaccine Institute in South Korea to build better capacities and resilience against disease. This collaboration boosts efforts to help other countries deal with threats and challenges to their health systems, especially through the provision of efficient doses of vaccines. This is exceptionally important for developing countries, mainly in Africa, where health infrastructures are significantly underdeveloped and where people are at highest risk. As an example, the EAPD provided several countries with batches of important vaccines, such as meningococcal vaccines to Togo, cholera vaccines to Niger and Zambia and meningococcal and hepatitis B vaccines to Burundi.

Regarding EAPD's promotion of health diplomacy, health personnel are dispatched to work in their fields within programme countries, according to local needs. This includes doctors of various specialties, nursing staff and assistants. These experts are dispatched on a short-term or long-term basis to provide quality health services to local communities and help train counterparts in the country of assignment. For example, EAPD has dispatched a dentist to work in the Egyptian-Gaboni Center in Gabon, an internal medicine consultant to Uganda and a surgeon to Burundi.

EAPD dispatches medical convoys to underdeveloped areas and regions with fragile health situations in Africa. This is done through a response mechanism that assists with urgent humanitarian crises, among which are health emergencies. Such convoys help maintain the availability of basic health services to local communities. The medical convoys dispatched by the EAPD undertake several functions, including urgent surgical interventions. They also provide diagnostic and treatment approaches to widespread health conditions, covering all specialties. EAPD also sends mobile clinics to various areas within programme countries with the aim of reaching out to the remote and border areas and areas suffering from a lack of standing health institutions. These

mobile clinics offer flexible and viable options for treating isolated and vulnerable groups as well as newly displaced populations. At the same time, they offer the opportunity for local communities to receive highly regarded and efficient health services in the fields of priority to the local population. These mobile clinics are dispatched in coordination with reputable and world-class health providers in Egypt.

Realizing the importance of education in creating better futures, health education comes at the top of EAPD priorities. EAPD provides full scholarships for African students in the medical field at Egyptian public and private universities, such as Cairo University and Ain Shams University. These scholarships cover all fields of the health sector and at the time of writing 22 students were studying in Egypt.

Under the commitment of expanding Health Diplomacy, the EAPD established a network of health facilities around the African continent, including hospitals, polyclinics and departments. These facilities provide high quality health services to the local communities of these countries. The most recent strategy is to convert these institutions into comprehensive health facilities that not only provide basic health services, but also act as hubs for drug distribution, stockpiling health supplies and training centres for local staff.

As a qualitative leap in offering better quality health services and sharing expertise among health workers around the globe, telemedicine has been included in EAPD approaches to boost the promotion of good health for everyone. EAPD collaborates with globally pioneering medical corporations in the field of telemedicine. Currently, EAPD is surveying the prospects of supplying African countries, either through Egyptian health facilities within these countries or through their national institutions, with the equipment, tools and operating systems needed to establish a modern infrastructure for telemedicine services. Those systems would be connected with a network of expert consultants in different specialties to provide diagnostic and treatment services for the local populations in these countries.

The EAPD programmes gain sustainability and credibility, and are helping make progress on the Sustainable Development Goals, through partnerships with some of the best national institutions in Egypt and programme countries (beneficiaries). Partners include the Children Cancer Hospital 57357, Magdy Yacoub Heart Foundation, Urology and Nephrology Mansoura Center (Mohammed Ghoneim Center), and most recently the Egyptian General Authority of Healthcare.

---

## CONTACT INFORMATION

### Hassan El-Nashar

Triangular Cooperation Desk Officer, EAPD  
lenashar@yahoo.com



# Promoting Sexual and Reproductive Health Education through Exchange of Expertise



Improved sexual and reproductive health conditions for target communities through exchange of good practices

## CHALLENGE

Good health is a human right and a precondition for a meaningful life. Good health is important to fight poverty and ensure sustainable development and economic growth. Management of puberty changes, sexually transmitted infections and menstrual hygiene of youth and adolescents is a challenge in several least developed countries in South Asia. In Bangladesh and Nepal youth and adolescents are facing sexual and reproductive health challenges due to a lack of services and inadequate knowledge of sexual and reproductive health rights (SRHR).

The national curriculum in both countries includes sexual and reproductive health, however, religious and social taboos create an environment where issues of SRHR are associated with stigma, leading to a lack of basic health support, gender discrimination in education and negative psychosocial repercussions. These challenges are amplified by the effects of climate change and the COVID-19 pandemic. Responding to these issues requires awareness-raising, quality education and significant behavioural change, to ensure that no one is left behind.

## TOWARDS A SOLUTION

The project Promoting Sexual and Reproductive Health Education through Exchange of Expertise, owned and implemented by Agrogoti Sangstha in Bangladesh and Aawaaj in Nepal, and supported and facilitated by the Norwegian Agency for Exchange Cooperation (Norec), aims to diminish prevailing taboos associated with sexual and reproductive health and improve the transnational sexual and reproductive health conditions of youth and adolescents in Satkhira, Bangladesh, and Kathmandu, Nepal.

### PROJECT NAME

Promoting Sexual and Reproductive Health Education through Exchange of Expertise

### NOMINATED BY

Norwegian Agency for Exchange Cooperation (Norec)

### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, Nepal, Norway

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.7, 5.3, 4.3, 4.5, 5.6, 17.6, 17.9, 17.16

### SUPPORTED BY

Norec

### IMPLEMENTING ENTITIES

Agrogoti Sangstha, Bangladesh, Aawaaj, Nepal

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

November 2018 – April 2025

### LINK

<https://bit.ly/3P3LOTh>



The key methodologies used for this project are systematic transnational cooperation, mutual exchange of professional staff and best practices, within a framework of institutional South-South and Triangular cooperation. The implementing partner organizations, Agrogoti Sangstha and Aawaaj, face similar transnational development challenges as other civil society organizations working with SRHR. Utilizing virtual platforms, the partners co-created the project using an innovative design built on reciprocity for both partners' mutual benefit. The partners' goals are to improve their capacities to implement projects and to enhance sexual and reproductive health education and knowledge in their target communities. The organizations exchange best practices on both management and policy, also achieving positive change in the culture and practices within the organizations. Recognition of the value of the partners' knowledge in the partnership confers ownership, participation and sustainability of results. Ownership is further translated to the community level through a participatory approach ensuring long-term sustainable practices.

The project focuses on three areas of SRHR: menstrual hygiene management; sexually transmitted infections; and puberty education. The expertise developed through knowledge sharing is reflected in the individual organization's intervention areas, bringing visible sustainable change at the community level, with strong local ownership.

In this collaboration, partners prioritize youth involvement. Young professionals are recruited for one-year intervals as a core input to the project; throughout the project period a total of 36 young professionals will be recruited. An additional 80 young volunteers have so far been capacitated as change agents on peer-to-peer knowledge sharing. This is an effective approach to disseminate information, break taboos, create mass awareness and develop sustainable conditions of SRHR. Using a participatory approach, the young professionals work together with teachers generating an educational environment that attends to SRHR of the youth and adolescents.

To facilitate conducive environments for implementing the project, Menstrual Management Corners, separate toilets and waste management systems are being established in ten educational institutions. The project has developed a complete training module on SRHR in three languages based on a collaborative analysis of transnational perspectives. The module has been accepted and replicated by various governmental organizations, non-governmental organizations and international organizations, increasing the sustainability of the project impact (SDG target 3.7).

The project model is effective and has among other successes resulted in five updated policies in each partner organization (SDG 17.16). Compared to a baseline of 25 percent, 75 percent of the organization's staff have been capacitated to identify behavioural change in communities on issues related to SRHR (SDG 3.7). This has led to 36 percent of the target population in Satkhira, Bangladesh (baseline 9.7 percent) and



34.5 percent of the target population in Kathmandu, Nepal (baseline 5 percent) gaining adequate information on menstrual hygiene management, sexually transmitted infections and puberty education (SDG 3.7).

This model of reciprocal exchange of skilled personnel within a variety of sectors is a highly versatile model to upgrade skills, knowledge and capacity. It is inherently participatory and technically feasible. The model used in this project is replicable for similar organizations and easily adaptable for other South-South and Triangular cooperation efforts wishing to collaborate to overcome development challenges related to the SDGs.

## CONTACT INFORMATION

### Abdus Sabur Biswas

Executive Director, Agrogoti Sangstha, Bangladesh  
 agrogoti@gmail.com  
 +8801715608864

### Irada Gautam

Executive President, Aawaaj, Nepal  
 iradapg@gmail.com





# Bringing additional technology to healthcare: Health Service Robots



## Greater access to healthcare during the COVID-19 pandemic through adoption of new technology in Trinidad and Tobago

### CHALLENGE

In March 2020, Trinidad and Tobago implemented its first public health measures to mitigate the spread of the COVID-19 pandemic by instituting a nationwide lockdown. This included closing the country's borders and limiting movements of citizens within the country. To ensure that the health care system was not overburdened, the government took a series of measures to manage COVID-19 cases.

However, even as these steps were taken, Trinidad and Tobago still sought mechanisms to continue to provide health services to the population without unduly exposing clients and health workers to the coronavirus. The nationwide curtailment of movement and services led to limitations on the delivery of health services, and there was a risk that overwhelmed health systems would leave patients without important physical and mental health services.

### TOWARDS A SOLUTION

Recognizing the importance of continuing to provide physical and mental health services, the government focused on how to maintain access to healthcare while reducing the workload of frontline workers and their risk of infection through the High and Low Technology (HALT) Project, of which one output is the introduction of health service robots.

The HALT Project is complementary to the Government of the Republic of Trinidad and Tobago's efforts to address the pandemic and has four outputs: 1) a telemedicine service deployed; 2) eight mobile healthcare robots deployed; 3) 55,000 washable masks distributed; and 4) 50 accessible hand hygiene stations set up.

#### PROJECT NAME

Bringing additional technology to healthcare: Health Service Robots

#### NOMINATED BY

Pan American Health Organization/World Health Organization (PAHO/WHO), Trinidad and Tobago Country Office

#### COUNTRIES/REGIONS/TERRITORIES

Rwanda, Trinidad and Tobago

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.4, 3.8, 3.d, 9.1, 9.5, 9.a, 9.b, 10.3, 17.6, 17.7, 17.8, 17.9, 17.16, 17.17

#### SUPPORTED BY

United Nations Country Team, PAHO/WHO and India-United Nations Development Partnership Fund managed by the United Nations Office for South-South Cooperation (UNOSSC)

#### IMPLEMENTING ENTITIES

PAHO/WHO Trinidad and Tobago, Ministry of Health of Trinidad and Tobago

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

October 2021 – September 2022





The HALT Project aims to minimize the impact and challenges of COVID-19 by using technology to increase access to physical and mental health care, reduce transmission through more-available personal protective equipment and hygiene facilities and lowering the risk of infection through public education. The HALT Project contributes to the achievement of the Sustainable Development Goals (SDG) by working toward the good health and well-being of the population (SDG 3), while encouraging the development of industry, innovation and infrastructure (SDG 9), as the country strives to reduce inequalities (SDG 10).

The HALT Project is funded by the India-United Nations Development Partnership Fund, managed by the United Nations Office for South-South Cooperation (UNOSSC), totaling US\$ 1 million over This fund's goal form partnerships among developing countries to advance human-centric sustainable development around the world, with a priority on small island developing states affected by disaster.

Project partners and contributors are the Pan American Health Organization/World Health Organization (PAHO/WHO) in Trinidad and Tobago and the United Nations Country Team in Trinidad and Tobago who helped facilitate the exchange of best practices, challenges and benefits that were part of the Rwanda process. Representatives from the Ministries of Health of Rwanda (the Rwanda Biomedical Team) and Trinidad and Tobago and the University of Trinidad and Tobago participated in the meeting.

To understand the operation of health service robots, the Trinidad and Tobago team examined a model presented by Rwanda, which had successfully introduced health service robots into their health system in 2020 with United Nations support. Exploratory research was done to understand the local context and to define a baseline of how health service robots could be used in Trinidad and Tobago. The University of Trinidad and Tobago undertook two critical needs assessments, one on the global use of health service robots, particularly during a pandemic, and the second on local stakeholder engagement, including a case study on the Rwanda experience.

Some of the critical information provided during the meeting included the importance of high-level support and advocacy and having a strong communication and change management strategy. This aims to minimize resistance and increase knowledge of how health service robots support and enrich health service delivery. A unique piece of information was the concept of giving the robots culturally appropriate names to make them more relatable to the public. Also, patients shared their stories with their communities and thus, through word-of-mouth, the robots became more acceptable to the general public.

The development of a "pandemic policy" by Rwanda was another tool that assisted in the fast-tracking of decisions and actions, allowing the procurement and distribution of the health service robots. Building Rwandan health personnel capacities to maintain and programme the robots was also crucial. In Rwanda, the health service robots were

used for temperature screening, recording vital signs, delivering video messages, mask detection and collecting data. Rwanda also procured robots to perform decontamination services in health facilities and at the Kigali International Airport. Rwanda reported that the robots played a valuable role in the fight against COVID-19 and that their operation in the most infectious wards reduced the exposure of medical staff risks by allowing them to avoid direct contact with patients.

The Trinidad and Tobago Team identified the importance of developing a change management approach, including a communication plan to achieve the acceptance of the health service robots by the community. The needs assessments carried out by the University of Trinidad and Tobago for PAHO/WHO identified preferred services for the health service robots to undertake in the local health facilities and recommended for their use. The best practices of Rwanda are being adapted to the local context. It is fully expected that collaboration with Rwanda will continue during the implementation of the project.

To aid in moving the country closer toward implementation of the health service robot portion of the HALT Project, the University of Trinidad and Tobago formulated a costed implementation plan and identified a cross section of stakeholders that need to be involved in the process to ensure the institutionalization of their use. Capacity building for healthcare workers and the local universities, including the critical technology transfer component, are essential parts of execution and sustainability of the initiative.

It is anticipated that the introduction of health service robots will be the start of the technological transformation of the health sector in Trinidad and Tobago, which can lead to wider opportunities for the country to be a repository for the development and production of health service robots for countries across the Caribbean region.

---

## CONTACT INFORMATION

### Dr. Paul Edwards

Adviser, Health Systems and Services, PAHO/WHO, Trinidad and Tobago  
edwardsp@paho.org

# Vaccination in Border Territories with an Intercultural Approach



## Joint initiative between Andean Countries to vaccinate indigenous peoples in transborder territories against COVID-19

### CHALLENGE

Significant challenges remain to materialize the right to health in indigenous populations due to geographical, cultural, economic and linguistic barriers. The main strategy to control the COVID-19 pandemic is vaccination, but in transborder areas of the Amazonia region there are four main challenges: 1) low population density; 2) long distances from services; 3) transborder nature of the area and population; and 4) cultural barriers that include language differences and local reliance on traditional medicine and customs.

The logistics in transporting vaccines and maintaining the cold chain in that context together with the remoteness of health services and huge gaps in health sector human resources together with the low perception of population on the results produced by the vaccine require an integrate approach of the countries involved.

### TOWARDS A SOLUTION

To overcome the COVID-19 pandemic and achieve the 2030 Agenda, with a specific focus on SGD 3, four countries of the South American Andean subregion (Bolivia, Colombia, Ecuador and Peru) came together to guarantee access to vaccines to their populations in transborder territories. The initiative focuses on indigenous peoples and particular attention is being paid to implementation using an intercultural approach.

In January 2021, the Pan American Health Organization/World Health Organization (PAHO/WHO) Subregional Programme for South America (SAM) was provided a grant by the Presidential Agency for International Cooperation (APC-Colombia), to partner with the Ministries of Health of Bolivia, Colombia, Ecuador and Peru and the four PAHO/WHO Country Offices in a joint operation to close the gaps in vaccination of indigenous populations living in shared transborder areas. The best way to guarantee adequate

#### PROJECT NAME

Vaccination in Border Territories with an Intercultural Approach

#### NOMINATED BY

Pan American Health Organization/World Health Organization (PAHO/WHO) Subregional Programme for South America (SAM)

#### COUNTRIES/REGIONS/TERRITORIES

Bolivia, Colombia, Ecuador, Peru

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.8, 10.2

#### SUPPORTED BY

PAHO/WHO SAM, Ministries of Health of Peru, Ecuador, Colombia, Bolivia and Brazil, the Presidential Agency for International Cooperation (APC-Colombia), German Agency for Development Cooperation (GIZ), Andean Health Organization (ORAS-CONHU), Amazon Cooperation Treaty Organization (ACTO)

#### IMPLEMENTING ENTITIES

Ministries of Health of Peru, Ecuador, Colombia and Bolivia, PAHO/WHO

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2021 – December 2022

#### LINK

[www.youtube.com/watch?v=0QkLTkd9noo](https://www.youtube.com/watch?v=0QkLTkd9noo)



immunization coverage of this population on the move was to coordinate and share information between countries and local health services in border areas.

The objective of the initiative is to contribute to leaving no one behind and directly to SDG 3 (ensure healthy lives and promote well-being for all at all ages), and its target 3.8 (achieve universal health coverage for all).

The 'Exchange Platform for Mitigation, Containment and Vaccination against COVID-19 Amazonian Indigenous Peoples' was built by the Ministry of Health of Peru, with the support of the German Agency for Development Cooperation (GIZ) in Peru, the PAHO/WHO Subregional Programme for South America, the Andean Health Organization and the South American Amazon Cooperation Treaty Organization. This platform supports the collection and assessment of vaccination experiences with Amazonian indigenous populations in border areas, facilitating South-South knowledge exchanges. Virtual seminars were held on the Exchange Platform from July to December 2021 and experiences on health systems shared with the objective of preparing to vaccinate against COVID-19 in the Andean countries taking into account the perspective of the Ministries of Health, indigenous leaders, international cooperation and local authorities.

These seminars were attended by hundreds of people, including representatives of international cooperation agencies, governmental authorities, indigenous leaders, civil society, academia and the general public. The Platform and seminars served as key instruments to share national vaccination rates, strategies, protocols and instruments implemented by each country and the challenges faced. Consequently, countries could adapt their strategies by integrating other countries experiences and lessons learned. A common ground between countries was achieved through prioritizing an intercultural approach, integrating traditional medicine and practices and preparing communication materials with clear language and images.

The initiative helped achieve more efficient mitigation and containment measures against COVID 19, including vaccination coverage, in trans-border areas through horizontal cooperation and coordinated activities between the countries of the subregions that decided to join forces and share their expertise and lessons learned during the pandemic.

Operating such an exchange platform to achieve an effective coverage of Amazonian Indigenous population led to the below lessons learned.

- ▶ Multiple countries working together can successfully address immunization coverage of populations living near borders.
- ▶ For a successful vaccination, culturally appropriate health services are required.
- ▶ Gaps in human resources need to be addressed using innovative solutions, such as the recruitment of health promoters and/or intercultural liaisons, where flexibility in contracting and recruitment are recommended features, as well as involvement of universities and human resource training centres.
- ▶ Participation of indigenous communities in local governance of the initiative through their leaders using intercultural dialogue is vital to achieving greater vaccination compliance.
- ▶ South-South cooperation in health can play a catalytic role in promoting and facilitating the work of national and local governments, indigenous communities, civil society organizations and academia to build resilient and culturally relevant health systems.

Through this horizontal cooperation, partner countries shared analyses of challenges and management of health access at border areas in a collective and harmonized way and systematized lessons learned. Strong involvement of governments and indigenous organizations, including the appropriation of processes by governmental programmes and sub-regional integration mechanisms, contributes to the sustainability of this initiative. This experience can be replicated in other parts of the Americas, or anywhere in which there are hard-to-reach populations in shared border areas.

---

## CONTACT INFORMATION

### **Dr. Paolo Ballardelli**

Director, Sub-Regional Programme for South America, PAHO/WHO  
balladep@paho.org

# Empowered Communities Against Antimicrobial Resistance



Platform for open and diverse dialogue to engage communities of Latin America and the Caribbean in the fight against this major public health problem

## CHALLENGE

Antimicrobial resistance (AMR) is an increasing threat to the effective treatment of an ever-increasing range of infections. AMR results in reduced efficacy of antibacterial, antiparasitic, antiviral and antifungal drugs, and is increasingly rendering the treatment of patients at imminent risk, costly or even impossible. The impact of AMR is often felt hardest by the most vulnerable populations, as it can result in prolonged illness and increased mortality. However, little is known about the impact of AMR at the community level, especially from a One Health perspective. So far, experiences addressing AMR from a community perspective are scarce. Good practices (e.g., hygiene, food safety, vaccinations, natural remedies for the treatment of diseases) and their possible impact on the prevention or containment of AMR are not well documented.

AMR is poised to impede attainment of the Sustainable Development Goals (SDG), not only restricting achievement of SDG3 (good health and well-being), but also impacting SDG1 (poverty reduction), SDG 10 (reduced inequalities), SDG8 (economic growth), SDG 6 (clean water and sanitation) and SDG2 (food safety and security). Several of the SDGs depend upon the sustained availability of affordable and effective antibiotics. At the same time, AMR could also undermine Universal Health Coverage (UHC) due to the increased costs of second or third-line drugs, longer treatment times and increased hospitalizations.

## TOWARDS A SOLUTION

Empowering communities through social participation is central to effectively tackling the complex One Health challenge of AMR. Communities in all countries have an important role to play in many aspects of the cross-sectoral AMR response: from awareness-raising to contributing to enhanced communications and strengthening One Health approaches – such as improving

### PROJECT NAME

Empowered Communities Against Antimicrobial Resistance

### NOMINATED BY

Pan American Health Organization/World Health Organization (PAHO/WHO)

### COUNTRIES/REGIONS/TERRITORIES

All of Latin America and the Caribbean, with the following countries playing a particularly active role in the first event and its products: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Peru, Venezuela

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.2, 1.3, 1.4, 2.1, 2.3, 2.4, 3.d, 3.d.2, 3.d.3, 5.c, 6.1, 6.2, 6.3, 6.a, 6.b, 8.1, 12.4

### SUPPORTED BY

PAHO/WHO

### IMPLEMENTING ENTITIES

PAHO/WHO, ReAct Latin America, Florida International University

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

January 2021 – Ongoing

### LINK

<https://bit.ly/3Q1iRsg>  
[munidadesempoderadas.reactlat.org](http://munidadesempoderadas.reactlat.org)





responsible and appropriate antimicrobial use in both animals and humans – at the local level. In 2019, the United Nations Inter-Agency Coordination Group (IACG) emphasized the criticality of community work in AMR, by “providing political, financial and technical support to civil society organizations to enhance their engagement, including to work effectively with governments and to ensure that their efforts are aligned with and contribute to evidence-based national policies and approaches.”<sup>1</sup>

From that need, was born the collaboration between PAHO/WHO’s Antimicrobial Resistance Special Program, Communicable Diseases and Environmental Determinants of Health (CDE/AR), PAHO/WHO’s Health Promotion Unit and ReAct Latin America to stimulate community participation under a One Health approach. PAHO/WHO and ReAct jointly developed an engagement strategy for key actors across sectors, elaborated a first event and calling for stories from communities related to AMR and antimicrobial use. PAHO/WHO’s established technical cooperation with governments in Latin America and ReAct’s extensive networks of civil society organizations and groups active at the community level combined together to bridge the gap between policy and the community. Florida International University facilitated the dissemination of event information. Launched in November 2021 during the World Antimicrobials Awareness Week, a four-day virtual regional dialogue between community and civil society members, non-governmental organizations, academics, representatives of governments and international organizations, took place to discuss tackling AMR. Through a powerful combination of poetry, music, presentations and discussions, this dialogue sought to capture, share and learn from different community experiences with addressing the pandemic and glean relevant lessons for how to better engage communities and enable active participation to address AMR more effectively.

In the lead-up to this meeting, a contest collected stories about community-level infection prevention and control, antimicrobial use and bacterial resistance in Latin America. More than 2,100 people registered for the event. While most participants were from the Americas region (Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Vincent and the Grenadines, Trinidad and Tobago, United States of America, Uruguay and Venezuela), cross-regional dialogue was also achieved with the participation of 18 non-regional countries (Australia, Belorussia, Brunei, Denmark, Egypt, France, India, Indonesia, Ireland, Italy, Jordan, Kenya, South Africa, Spain, Sweden, Switzerland, Tanzania and Togo).

Participant profile professions were very diverse, including social worker, nurse, doctor (general practitioners and specialists), economist, biologist, professor, educator/teacher, student, veterinarian, pharmacist, health care administrator, biochemist, architect, lawyer, environmental administrator, journalist, microbiologist, AMR advisor, agricultural engineer, communicator, among others. The platform offered an opportunity to share communication and education materials, operational plans, policy briefs and document good practices on community organization and AMR relevant multisectoral work between countries of the region and with other parts of the world.

The dialogue closed with a declaration from all signatory participants recognizing the depth of the AMR problem and the need to learn from and empower communities to actively share their knowledge and practices to work together to tackle AMR. Specifically, the declaration requested that governments take steps to promote active community involvement in One Health and use the process of development and implementation of intersectoral national AMR action plans to strengthen community contributions and engagement and take stock of and share lessons about successful examples of community practice – from health systems and research centres – at the local and national levels.

Given its success, the Empowered Communities Against AMR will continue to grow, maintaining an annual dialogue and developing communication and education workshops throughout the year. It will actively identify, document and disseminate examples, strategies and plans for community engagement on AMR. 2022 activities are focused on the importance of youth and education in building awareness about AMR, preventing infections and using antimicrobials responsibly.

Other regions may benefit from this initiative that stems from the recognition of the value of work carried out by civil society in areas and sectors related to AMR and requires mapping of and engagement of these groups and organizations to link their efforts to current strategies to counter AMR and address other health challenges.

---

## CONTACT INFORMATION

### Nathalie El Omeiri

Advisor, Antimicrobial Resistance Special Program, Communicable Diseases and Environmental Determinants of Health, PAHO/WHO  
elomeirin@paho.org

1 Interagency Coordination Group on Antimicrobial Resistance. Report to the United Nations Secretary General, “NO time to wait: Securing the future from Drug-Resistant infections,” April 2019.



# Cooperation Strategy for Chronic Kidney Disease of Non-Traditional Origin in Central America and the Dominican Republic



## Supporting health, well-being and decent work for agricultural and other workers in Central America and the Dominican Republic

### CHALLENGE

Chronic kidney disease of non-traditional origin (CKDnT) in Central America, also known as Mesoamerican nephropathy, is a clinical and epidemiological phenomenon that especially affects agricultural communities and that has been linked to specific crops, such as sugar cane, as well as to subsistence agriculture. In Costa Rica and Guatemala, CKDnT has been detected in workers in other economic areas, such as construction. CKDnT has been found in populations that migrate between or within countries to perform seasonal work—populations that tend to be particularly neglected and that lack access to health care (Wesseling, et al., 2020<sup>1</sup>). The disease has been recognized as a serious public health problem, and a priority issue, associated with occupational risks, especially heat stress.

A survey of social actors on the current CKDnT situation in Central American countries and the Dominican Republic, conducted with the support of the Pan American Health Organization/World Health Organization (PAHO/WHO) in 2021, identified the male population, and men between the ages of 20 and 55 in particular, as most affected. Agricultural workers (working with sugar cane, and in Costa Rica also with rice, melon and oranges), migrants, contingent workers and construction workers are most affected<sup>2</sup> and lack access to health systems and social security as a result of their working conditions.

1 Wesseling, C., Glaser, J., Rodríguez-Guzmán, J., Weiss, I., Lucas, R., Peraza, S., da Silva, A.S., Hansson, E., Johnson, R.J., Hogstedt, C., Wegman, D.H., Jakobsson, K. "Chronic kidney disease of non-traditional origin in Mesoamerica: a disease primarily driven by occupational heat stress." *Rev Panam Salud Publica*. 2020 January 27;44:e15. doi: 10.26633/RPSP.2020.15. PMID: 31998376; PMCID: PMC6984407.

2 Source: Survey of Social Actors on the Current CKDnT Situation in the Central American Countries and the Dominican Republic. PAHO 2021, pending publication.

### PROJECT NAME

Cooperation Strategy for Chronic Kidney Disease of Non-Traditional Origin in Central America and the Dominican Republic

### NOMINATED BY

Pan American Health Organization/World Health Organization (PAHO/WHO), Secretariat of the Council of Ministers of Health of Central America (SE-COMISCA)

### COUNTRIES/REGIONS/TERRITORIES

Belize, Costa Rica, Dominican Republic, El Salvador, Honduras, Guatemala, Nicaragua, Panama

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 3.4, 8.3

### SUPPORTED BY

SE-COMISCA, PAHO/WHO Central American (CAM) Subregional Program

### IMPLEMENTING ENTITIES

Ministries of health of the countries of Central America and the Dominican Republic, Technical Commission on Chronic Diseases and Cancer (CTCC) in Central America

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

2018 – 2022



## TOWARDS A SOLUTION

To address this challenge, since 2018, at the initiative of the integration bodies of the Central American countries, and with support from PAHO/WHO technical cooperation through the Central American Subregional Program (CAM), a series of steps have been promoted to define a strategy based on scientific evidence for the Central America region and Dominican Republic to tackle the CKDnT epidemic.

The Technical Commission on Chronic Diseases and Cancer (CTCC), guided by the Secretariat of the Council of Ministers of Health of Central America (SE-COMISCA) and formed by the eight Central America Integration System (SICA) countries (Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama) with technical cooperation from PAHO/WHO through the CAM Subregional Program, has been meeting weekly or bimonthly over five years to share information on good practices, success stories and progress from different countries.

A group of multidisciplinary experts were organized (the ad-hoc group of CKDnT), who serve as focal points for the eight SICA countries to share and exchange information on each countries' challenges, solutions and progress, while taking care to recognize specific and unique factors at play in individual countries and the varying levels they have reached in addressing CKDnT. A situation analysis of CKDnT in the subregion was carried out with the support of PAHO/WHO. Scientific evidence was exchanged to build nine streams for the strategy and their objectives, activities, goals and indicators.

The first draft of the Strategy for Chronic Kidney Disease of Non-Traditional Origin in Central America and the Dominican Republic was finalized in May 2022 and approved by COMISCA in June 2022.

In addition to a finalized strategy, the exchanges among SICA countries achieved the below results.

- ▶ Clinical and epidemiological case definitions for CKDnT in the Central American subregion.
- ▶ Progress on strengthening epidemiological surveillance systems to improve the recording of mortality, prevalence and case monitoring.
- ▶ Signature of COMISCA Resolution 27–2018, spotlighting the issue of kidney disease in the SICA subregion to define actions for preventing this disease.
- ▶ A public health situation analysis of CKDnT in Central America and the Dominican Republic, including follow-up actions, was produced in 2021 with the support of PAHO/WHO focusing on surveillance of CKDnT, prevention policies and strategies for the promotion of kidney health, knowledge about access to health services, including alternative treatments and transplants, and review of the regulatory framework in relation to the health of populations at risk and social protection of patients with CKDnT.

- ▶ Agreement among the SICA countries to promote the health of workers in agriculture and other occupations who endure long working hours with high exposure to heat, lack of opportunity to rest in the shade and lack of access to adequate hydration, by seeking programmes to improve their working conditions.
- ▶ Some countries made notable advances for target populations. For example, in Costa Rica technical work and intersectoral and inter-institutional advocacy led to approval of a decree that regulates the working conditions of agricultural populations and incorporates mandatory compliance with regulations on shade, rest and water (Decree No. 39.147-S-MTSS) and hydration standards (Decree No. 39589-S), which support these preventive actions in the workplace. This achievement is the result of research and work on CKDnT with CTCC.

This experience can be replicated in other regions where climate and working conditions similarly affect workers' health. To ensure sustainability of the initiative, political commitment is needed along with robust and defined teamwork that includes multidisciplinary actors from across countries of a subregion, supported by leadership of government health officials at ministerial level, SE-COMISA, along with strong technical support of PAHO/WHO.

---

### CONTACT INFORMATION

#### **Katiuska Alvayero**

Consultant in support of the implementation of strategic cooperation in Central America and the Dominican Republic, CAM Subregional Program, PAHO/WHO  
alvayerkat@paho.org

# Virtual Health Library Network



## A consolidated virtual space for facilitating the access to scientific health information and evidence in Latin American and Caribbean countries

### CHALLENGE

Similar to other sectors, decision-making processes in health are more efficient and effective when underscored by quality information sources. However, especially in developing countries, limited accessibility to information often hampers the development of such processes. The democratization of access to and visibility of scientific knowledge in all countries is crucial for the formulation of quality health policies around the globe.

Open and equitable access to information, knowledge and scientific evidence are also essential for the advancement of research, education and health care systems. It is therefore necessary that regional and global strategies are created that contribute to fostering democratic access and effective use of information and up-to-date knowledge.

### TOWARDS A SOLUTION

For over two decades, the Virtual Health Library Network (VHL) has been creating, organizing and disseminating information and scientific and technical evidence in the health sector primarily for use in the Latin American and Caribbean region, but also spilling over to other parts of the world, especially Portuguese-speaking countries. This information management model, based on collaborative work and networking in a decentralized system, has improved access to health information and scientific evidence for users in health-related fields, contributing to narrowing the gap between knowledge and practice.

The VHL model, and its methodologies and technologies for the management and operation of information sources and flows, was conceptualized by the Latin American and Caribbean Center on Health Sciences Information of the Pan American Health Organization/World Health Organization (BIREME/

#### PROJECT NAME

Virtual Health Library Network

#### NOMINATED BY

The Latin American and Caribbean Center on Health Sciences Information (BIREME), PAHO/WHO

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Barbados, Belize, Brazil, Bolivia, Costa Rica, Cuba, Chile, Colombia, Dominica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Haiti, Jamaica, Mexico, Mozambique, Nicaragua, Panama, Paraguay, Peru, Portugal, Puerto Rico, Spain, Suriname, Trinidad and Tobago, Uruguay, Venezuela

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.8, 17.6

#### SUPPORTED BY

PAHO/WHO and the Ministry of Health of Brazil

#### IMPLEMENTING ENTITIES

BIREME/PAHO/WHO in coordination with PAHO/WHO Country Offices and National Institutions and the Technical Cooperation Departments, when applicable

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

1998 – ongoing

#### LINK

<https://bvsalud.org/>





PAHO/WHO), the regional coordinator of the VHL network. developed the conceptual model of the VHL and the methodologies and technologies for the management and operation of VHL information sources and flows. Moreover, based on the collaborative network model, with decentralized operation, the VHL is developed by health institutions that share responsibility for producing and publishing the contents that are available through the VHL Portals. The content is generated, selected and systematized by a network of institutions and information professionals. In partnership with BIREME/PAHO/WHO, national institutions facilitate and coordinate permanent events and forums for sharing information, knowledge and experiences that can be referenced from one country to another and boost effective cooperation in capacity building at local, regional and global levels.

BIREME promotes exchange between producers, intermediaries and users of health information at the VHL and offers technical cooperation for the development of national capacities for the management and operation of a VHL instance. The VHL methodologies and technologies are available to any institution or organization that intends to construct a VHL based on the principles of the VHL model. The collective nature of the project ensures that the VHL operates autonomously and can continue operating throughout different national contexts, constituting a public good. To evaluate instances of the VHL Network in the adoption of methodologies, technologies and good practices recommended in its guide (<http://red.bvsalud.org/wp-content/uploads/2021/11/EN-opas-guia-bvs-2021-p3-v3.pdf>), a structure of evolution at successive levels was developed. The passage through every level is necessary to reach full maturity in the adoption of the VHL Model. The evaluation process is done through self-assessment.

The technical feasibility of the VHL model and its sustainability has been ascertained by 24 years of uninterrupted activity and 67 VHL instances (at national, thematic, institutional and regional levels), many of them developed independently, based on the principles established by BIREME, with its support and periodical advice. The VHL cooperation network has more than 2,000 participants and the VHL system is being applied and used by 30 countries in Latin America and the Caribbean, Portugal, Spain and Mozambique. It is in use in the ePORTUGUESe network for Portuguese speaking countries. The English-speaking Caribbean countries also have a sub-regional initiative, the MedCarib network, that provides visibility and dissemination of health information produced by and with a focus on the Caribbean.

The VHL has been recognized as a novel and innovative approach to provide low- and middle-income countries with quality information and knowledge in health through South-South cooperation in a short time and with a very low budget. The VHL Network contributes to SDG 3 (good health and well-being); SDG 4 (quality education); SDG 10 (reduced inequalities); and SDG 17 (partnerships for the goals).

The democratization of access to and visibility of scientific knowledge on health in countries is the project's most important achievement. By 2021, the VHL Regional Portal registered around 21 million sessions and 59 million pageviews, accessing a collection of 33+ million bibliographic records, of which 15+ million are available in full text. In 2021 alone, more than 12.5 million users from countries around the world accessed the VHL via the Regional Portal (<http://bvsalud.org>).

The VHL Model can be applied and replicated and its methodology and technology are openly available at: <http://red.bvsalud.org/modelo-bvs/en/>.

---

## CONTACT INFORMATION

**Carmen Verônica Mendes Abdala e/ou Silvia Almeida de Valentin**  
Manager of Information Production Sources/Cooperative Information Services / Manager of Administration and Planning, BIREME/PAHO/WHO  
[abdalave@paho.org](mailto:abdalave@paho.org) / [valentins@paho.org](mailto:valentins@paho.org)

# Strategies for Prevention and Control of Arboviral Diseases



## Technical cooperation for the strengthening of national capacities for epidemiological surveillance systems and clinical management of dengue, chikungunya and Zika in Andean countries

### CHALLENGE

Dengue is the most prevalent arbovirus in the Americas. The trend in numbers of cases of this disease in the Americas has been increasing, with epidemics occurring every three to five years, the most recent being in 2019 with more than 3.1 million reported cases, resulting in 1,773 deaths. In addition, other endemic arboviruses, such as chikungunya and Zika circulate simultaneously, posing a constant challenge to health services in terms of clinical diagnosis, proper management of cases and proper reporting for epidemiological surveillance.

The dengue case fatality rate for Andean countries in 2021 was 0.08 percent.<sup>1</sup> Reducing deaths due to dengue to 0.05 percent or less (and reducing deaths due to other arboviral diseases) is one of the impact goals of the PAHO Strategic Plan 2020-2025.<sup>2</sup> This requires the strengthening of national technical capacities for clinical management of arboviral diseases and improvement of national epidemiological surveillance systems so that early warning of the occurrence of cases can generate the necessary actions to prevent and control transmission.

### TOWARDS A SOLUTION

This initiative aims to reduce the case fatality rate due to dengue and other arboviral diseases in the Andean countries. In 2020, PAHO/WHO began a collaboration with the Andean Health Organization-Hipólito Unanue Agreement (ORAS-CONHU) to strengthen national technical capacities for the prevention and control of arboviral diseases in Bolivia, Colombia, Chile, Ecuador, Peru and Venezuela. This collaboration falls under the framework of the Integrated Management Strategy for the Prevention and Control of Arboviral Diseases, approved by PAHO/WHO

1 Pan American Health Organization. PLISA Health Information Platform for the Americas. Reported cases of dengue fever in the Americas. Washington, D.C.: PAHO; no date. Available from: [www3.paho.org/data/index.php/en/mnu-topics/indicadores-dengue-en/dengue-nacional-en/252-dengue-pais-ano-en.html](http://www3.paho.org/data/index.php/en/mnu-topics/indicadores-dengue-en/dengue-nacional-en/252-dengue-pais-ano-en.html).

2 Pan American Health Organization. Strategic Plan of the Pan American Health Organization 2020-2025: Equity at the Heart of Health. (Official Document: 359). Washington, D.C.: PAHO; 2020. Available from: [www.paho.org/en/documents/paho-strategic-plan-2020-2025](http://www.paho.org/en/documents/paho-strategic-plan-2020-2025).

### PROJECT NAME

Strategies for Prevention and Control of Arboviral Diseases

### NOMINATED BY

Pan American Health Organization/World Health Organization (PAHO/WHO), Andean Health Organization-Hipólito Unanue Agreement (ORAS-CONHU)

### COUNTRIES/REGIONS/TERRITORIES

Bolivia, Chile, Colombia, Ecuador, Peru, Venezuela

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.3, 3.d

### SUPPORTED BY

PAHO/WHO

### IMPLEMENTING ENTITIES

PAHO/WHO and ORAS-CONHU

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

March 2020 – December 2024



Member States in September 2016 through Resolution CD55.R6<sup>1</sup> This project contributes to SDG 3 (good health and well-being), specifically with targets 3.3 (communicable diseases) and 3.d (national and global health risks).

In collaboration with ORAS-CONHU, virtual cooperation spaces (VCS) have been created using informatics tools that allow for the automated generation of different epidemiological analyses, situation rooms and epidemiological bulletins, strengthening the epidemiological surveillance of dengue, chikungunya and Zika. Each country has its own VCS, and in addition a VCS was developed for the Andean subregion, which allows not only an integrated analysis of what happens in each country and in border areas, but also a more fluid communication between them to address the epidemiological situation of these three arboviruses at a subregional level.

Another aspect of technical cooperation between the group of Andean countries, promoted through ORAS-CONHU, is strengthening national capacities for clinical diagnosis and management of dengue, chikungunya and Zika cases. This is carried out through three key lines of work described below.

- ▶ The creation of national networks of clinical experts in arboviral diseases, under the direction of the Ministries of Health in each country, which are responsible for conducting clinical training at the local level.
- ▶ A continuing education programme, for which there is a regional virtual classroom in the PAHO/WHO Virtual Campus of Public Health. In addition to discussing current and complex topics on dengue, chikungunya and zika, as part of this programme, users have access to didactic material that can be used during training processes carried out through national networks of clinical experts in arboviral diseases. The virtual classroom allows a fluent and direct communication between professionals and experts from different countries, for example to consult about clinical cases (atypical, severe or complicated cases). A total of 31 professionals from Bolivia, Colombia, Chile, Ecuador, Peru and Venezuela are registered in the virtual classroom.
- ▶ An online self-learning course on clinical diagnosis and management of dengue, which is available free of charge on the PAHO/WHO Virtual Campus of Public Health. This course, as of mid-2022, had more than 67,000 registered health professionals (of whom 70 percent had already passed the course), out of which 31,265 are from Andean countries.

These three lines of work in the clinical area, enjoy high political and technical commitment, fostering permanent exchanges between professionals, technical teams and managers at different levels within each country and between countries in the Andean subregion.

This increases human resources and response capacities, based on best practices and experiences, and leads to greater calls for exchange and technical cooperation. Combined with systematic and joint follow-up by ORAS-CONHU and PAHO/WHO, this gives the project vitality and sustainability. The impact of these three lines of work is being measured through a decrease in the dengue case fatality rate, previously noted. Technical and political sustainability of the work is also reflected in agreements established between ORAS-CONHU and PAHO/WHO and the incorporation

of dengue and arboviruses in the political agenda and proposed five-year plan of Andean health ministers in 2022. The establishment of VCS facilitates that use epidemiological information simultaneously and in real time (including a situation room of arboviral diseases in Andean countries, which can be accessed by technical staff and managers from these countries) is of great value for decision-making.

South-South cooperation principles have been adopted and are ensuring that thematic areas related to maternal, child and adolescent health communications, climate change and other transmissible diseases are being incorporated into a common work agenda.

Financial and technical sustainability is further strengthened through a cooperation agreement between PAHO/WHO and the United States Centers for Disease Control and Prevention for surveillance of arboviruses over the three years 2022 to 2024, through which countries of the Andean subregion are direct beneficiaries. This is improving surveillance systems and development of new tools for analysis and control response in real time.

Through South-South cooperation, and working together with the ORAS-CONHU, the below lessons have been learned.

- ▶ ORAS-CONHU represents one more channel, in addition to PAHO/WHO, to bring the issue of dengue to the forefront of political and health agendas in the countries.
- ▶ The creation and use of a common work scenarios maximizes efforts to achieve communal goals. This has allowed PAHO/WHO to maximize the use of resources to provide a strong response to prevent and control arboviral diseases.
- ▶ PAHO/WHO has served as a catalyst for technical cooperation, bringing experience and good practices from other regions to the Andean countries.
- ▶ In conjunction with ORAS-CONHU, a workspace has been created that facilitates the technical cooperation provided by PAHO/WHO and the exchange of experiences between Andean countries.
- ▶ The close collaboration between the PAHO/WHO Subregional Program for South America (SAM) and the Communicable Diseases and Environmental Determinants of Health/ Neglected, Tropical and Vector Borne Diseases (CDE/VT) technical team for arboviral diseases has allowed adequate coordination with ORAS-CONHU to guarantee technical cooperation, and cooperation among Andean countries.

This initiative can be replicated effectively in regions in which subregional health organizations exist (for example COMISCA in Central America and MERCOSUR in South America) that can support and guarantee an additional method of making arboviral diseases part of the political and health agenda in the countries.

## CONTACT INFORMATION

**José Luis San Martín**

Advisor, dengue and other arboviral diseases, PAHO/WHO  
sanmartj@paho.org

1 <https://iris.paho.org/handle/10665.2/31412>.

# Safer and Cleaner Used Vehicles for Africa



## Importing quality used vehicles to increase African road safety and improve environmental standards

### CHALLENGE

There is an absence of global and/or regional used-car trade standards which are fundamental to reducing road traffic deaths and greenhouse gas emissions. In 2018, Africa imported over 1.45 million used light-duty vehicles, most of which were more than 15 years old and offered low levels of vehicle safety features. Africa accounts for 60 percent of global road fatalities, while having only 2 percent of the world's vehicles. <sup>1</sup>

By 2050, the African vehicle fleet is set to grow four to five times and 80-90 percent of this growth will come from the import of used vehicles. These vehicles provide no environmental protection and pose a threat to global greenhouse gas emissions. To achieve the Sustainable Development Goals (SDGs), periodic technical inspections of cars in Africa are needed to decrease fatal accidents by overcoming technical defects and to reduce gas emissions by ensuring that vehicles are well-functioned.

### TOWARDS A SOLUTION

To address the above challenge, the project Safer and Cleaner Used Vehicles for Africa sets an agreed minimum requirement for the trade of used cars by both exporting and importing countries to reverse the excessive quantities of low-quality used cars that are imported to Africa, and that are contributing to high road traffic deaths and environmental pollution. The project is also establishing inspection and monitoring frameworks in countries, including compliance systems to ensure used vehicles meet agreed standards and policies.

#### PROJECT NAME

Safer and Cleaner Used Vehicles for Africa

#### NOMINATED BY

United Nations Economic Commission for Europe (UNECE)

#### COUNTRIES/REGIONS/TERRITORIES

Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, European Union, Japan, Tunisia, Uganda, United States of America

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.6, 11.2, 13.2

#### SUPPORTED BY

United Nations Road Safety Fund (UNRSF), United Nations Environment Programme (UNEP), UNECE, Federation Internationale D'Automobile (FIA), International Motor Vehicles Inspection Committee (CITA), International Transport Forum (ITF), United Nations Economic Commission for Africa (UNECA), World Health Organization (WHO), Arab Maghreb Union (AMU), Economic Community of West African States (ECOWAS), East African Community (EAC), Southern African Development Community (SADC), Economic Community Of Central African States (ECCAS)

#### IMPLEMENTING ENTITIES

UNEP, UNECE

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

June 2020 – December 2022

#### LINK

<https://bit.ly/3BE5Z7c>

<sup>1</sup> <https://roadsafetyfund.un.org/projects/safer-and-cleaner-used-vehicles-africa>.





This project supports SDG 11 (sustainable cities and communities) and SDG 13 (climate action). The project also raises public awareness through media training and capacity building for key stakeholders, including policymakers, vehicle inspectors, customs officers and administration civil servants.

To implement the project, the United Nations Road Safety Fund (UNRSF) partners joined forces as co-creators and co-implementers to address the challenges faced from different angles. The United Nations Economic Commission for Europe (UNECE) hosts the global leading regulatory body for vehicles to support exporting countries in adopting used car standards and promotes international cooperation for development in Africa. The United Nations Environment Programme (UNEP) supports African importing countries and helps them to adhere to a minimum level of United Nations regulations for used vehicles and supports the formulation of related national regulations. The Economic Community of West African States (ECOWAS) helps with economic integration in Africa. The Federation Internationale D'Automobile (FIA) Foundation supports global road safety advocacy and philanthropy, while the International Motor Vehicles Inspection Committee (CITA) leads on vehicle inspection and compliance issues worldwide and has the required expertise to develop the required technical compliance training and systems in importing African countries. The International Transport Forum (ITF) is one of the leading vehicle data organizations.

Through South-South cooperation and knowledge transfer between the countries and organizations involved, national and regional stakeholders have been trained on effective communication on policy development, means of enforcement and benefits of regulating used cars. UNEP launched the 'Safer and Cleaner Used Vehicles' website to facilitate open access to information on the issue and the initiative.

As a result of this project, a regionally harmonized vehicle directive was adopted in September 2020 by Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. The directive stipulates that from 1 January 2021 all vehicles imported, both new and used, both petrol and diesel, must comply with a minimum of Euro 4/IV vehicle emissions standards, meaning petrol cars can produce CO, total hydrocarbons and NOx (nitrous oxide) emissions of no more than 1.0, 0.10 and 0.08 grams/kilometres, respectively. All light-duty vehicles imported have an age limit of five years with a ten-year implementation period, which by default means that used car fleets will have life-saving vehicle safety features that necessarily accompany newer model used cars.

This system change has already greatly reduced emissions of air pollutants and greenhouse gases by up to 90 percent. A UNEP report on the Global Trade in Used Vehicles has raised awareness on the scale of the safety problem. In addition, the regulatory reform supported Gambia, Nigeria and Togo to revise and align their national clean fuels and vehicle standards to the regionally agreed directives and assisted the East Africa sub-region in the harmonization and implementation of their vehicle regulations.



Apart from the above innovative policy change that improves competitive advantages of these countries, the project reinforces capacity building to ensure its long-term sustainability, including review of the regulatory frameworks in place in the main used vehicle exporting countries, review of the digital exchange of vehicle information to prevent falsification of vehicle documentation and establishment of a set of minimum performance requirements of vehicles at the time of construction and minimum performance requirements at the time of export.

In summary, this project limits air pollution by adoption of regionally harmonized emission standards, reduces road fatality and injury by establishment of an inspection and monitoring framework and supports national and regional capacity building for policy development, inspection and enforcement by training, information and communication. With shared lessons learned in east Africa, and with UNRSF serving as a convenor, it is highly probably the project can be replicated in other countries, especially in the remaining African countries.

#### CONTACT INFORMATION

**Anastasia Metzger**  
Programme Assistant, UNRSF Secretariat  
Anastasia.Metzger@un.org



# Family Planning Accelerator project



## Improved access to quality family planning services using South-South learning exchanges



### CHALLENGE

A 2020 needs assessment in Nepal revealed that the modern contraceptive prevalence rate (mCPR) has stagnated at 43 percent among all married women. 57 percent of women delivered in a facility, while 31.5 percent of women have an unmet need for family planning during the postpartum period. Nepal's Ministry of Health was facing the challenge of how to ensure that women who wish to delay or avoid future pregnancies have the ability to do so by using safe and effective contraceptive measures.

In Sri Lanka, the mCPR is 54 percent. A review of the National Family Planning programme in 2016 showed that stock-outs for contraceptives was common, resulting in women and couples not having access to contraceptives of their choice. The need was identified to improve the Logistics Management Information System (LMIS) to prevent stock-outs of reproductive health commodities.

### TOWARDS A SOLUTION

This initiative is part of the Family Planning Accelerator project of the World Health Organization (WHO), implemented by the WHO Department of Sexual and Reproductive Health and Research, with the UNDP-UNFPA-UNICEF-WHO-World Bank Special Programme of Research, Development and Research Training in Human Reproduction. The initiative supports partners and Ministries of Health to improve access to quality and rights-based family planning services in countries.

Through the initiative, Nepal was assisted to integrate family planning services in a decentralized environment using a life cycle approach to improve postpartum family planning (PPFP) uptake. Sri Lanka was assisted to convert its paper-based Logistics Management Information System (LMIS) to a web-based logistics management of family planning commodities for

#### PROJECT NAME

Family Planning Accelerator project

#### NOMINATED BY

World Health Organization (WHO)

#### COUNTRIES/REGIONS/TERRITORIES

Nepal, Sri Lanka

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.1, 3.7

#### SUPPORTED BY

WHO

#### IMPLEMENTING ENTITIES

Nepal: Adventist Development and Relief Agency, Ministry of Health and Population, DFID Nepal, Ipas, Knowledge Success, Nepal CRS Company, Nepal Health Sector Support Programme-Department for International Development, Province 5, UNFPA, USAID, Visible Impact, WHO Nepal; Sri Lanka: Family Health Bureau, Family Planning Association of Sri Lanka, UNFPA, WHO Sri Lanka

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2019 – November 2022

#### LINK

<https://gh.bmj.com/content/bmjgh/7/5/e008691.full.pdf>



better reporting of stock-outs. Improvements in the quality of family planning services through this project contributes to attainment of SDG goals 3 (good health and wellbeing) and 5 (gender equality).

A reciprocal South-South learning exchange took place between Nepal and Sri Lanka using a five-step methodology: preparation, planning, exchange, implementation of lessons learned and dissemination of results. The exchange was facilitated by WHO and Knowledge Success. Due to the COVID-19 pandemic, the learning exchanges were conducted virtually.

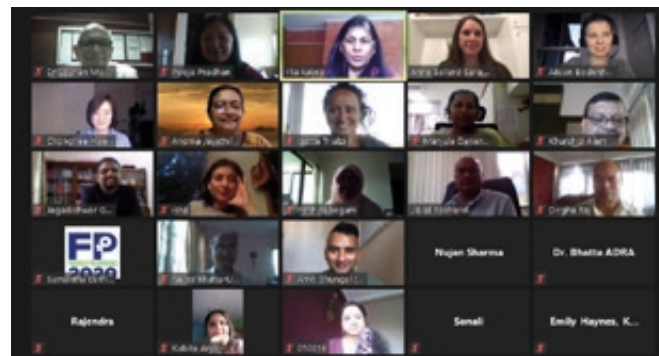
Both countries identified their learning needs, in accordance with their national family planning policies and plans. Nepal's learning need was to improve the organization of clinical services to strengthen the integration of PFP with a focus on provincial level ownership and the practical 'how-to' provide reproductive health services throughout the life-cycle. Sri Lanka's learning need was to transform a paper-based logistic management system to an electronic-LMIS (e-LMIS) for contraceptives to enable district and central levels commodity security.

A series of meetings were organized between the two country teams to share their best practices and learning needs. These were followed by in-country meetings to absorb the information gained and implement the lessons learned. The discussions during the meetings were led by the Ministries of Health in both countries. The partners in Nepal were the Ministry of Health and Population, including provincial health officials, academia, professional societies, WHO, UNFPA, USAID, DFID, Ipas and Marie Stopes. In Sri Lanka, the partners were the Family Health Bureau of the Ministry of Health, UNFPA, the Family Planning Association of Sri Lanka, Sri Lanka College of Obstetricians and Gynaecologists and WHO. Both countries crafted their objectives and developed a monitoring system to track progress. By December 2021, both countries began implementing the learnings.

The key achievements are described below.

An advocacy tool for PFP was designed in Nepal. This was used to conduct policy dialogue with policymakers and programme managers in two provinces. The Ministry of Health and Population allocated 2.1 million rupees for all seven provinces to initiate and strengthen PFP in 20 referral hospitals. Three indicators to monitor PFP uptake are proposed for inclusion in the Demographic Health Survey (DHS) and the National Health Facility Survey (NHFS). This will help improve the availability of family planning counselling and contraceptive services during the antenatal and postpartum period, which in turn will help women secure their rights to decide freely and for themselves whether when and how many children they want to have.

In Sri Lanka, a dedicated page on the reporting system of contraceptive commodities at different levels was included in the District Health Information Software 2. It was piloted in nine districts of the Northern and Eastern Provinces and scaled up to all 28 health districts. The Officers



in Charge of Regional Medical Supplies Divisions were trained on the new formats and the web-based platform. This will ensure availability of contraceptives in health facilities, thus reducing unmet family planning needs in the country.

The lessons learned from the project are listed below and should be considered by other countries wanting to replicate this initiative.

- ▶ The learning objective of the South-South Learning Exchange must be clear, specific and in accordance with the country plans and needs.
- ▶ The Ministry of Health and stakeholders should lead the process of the South-South Learning Exchange. This is beneficial not only for obtaining their guidance but to ensure their support to implement the lessons learned.
- ▶ The use of an in-built monitoring system is critical from the start to track progress. This can be done by using tools like monthly reports, meetings, post-meeting participant questionnaires and after-action reviews.
- ▶ Countries facing common challenges and seeking to achieve common goals can make faster progress through shared learning and experiences.

## CONTACT INFORMATION

**Dr. Rita Kabra**  
Technical officer, WHO  
kabrar@who.int



# Training of Radiation Medicine Professionals



## Enhancing access to quality cancer diagnosis, treatment and therapy in Africa through a skilled and competent workforce

### CHALLENGE

Cancer rates are rising rapidly in Africa, a trend that is set to become more pronounced over time due to population growth and the aging of the continent's population. Most African countries do not have the capacities to respond effectively to this crisis. One of the major challenges for addressing the cancer burden in the region has been a limited skilled health workforce in radiation medicine, in particular medical physicists.

A recent survey conducted by the International Atomic Energy Agency (IAEA) with the participation of 212 health centres in 21 African countries identified a significant lack of medical physicists in radiology and nuclear medicine. Only 26.8 percent of the 212 health centres surveyed are equipped with an adequate number of medical physicists. 11 countries do not have a single institution with sufficient medical physicists.

### TOWARDS A SOLUTION

To address this challenge, IAEA is implementing a regional education and training initiative in radiation oncology, radiation therapy and medical physics to increase the number of competent and skilled radiation medicine professionals in Africa. The initiative is conducted in the framework of a series of technical cooperation projects and will strengthen Africa's capacities for cancer diagnosis, treatment and therapy, thus supporting SDG 3.4 (non-communicable diseases) and SDG 8.8 (worker safety and protection).

The initiative simultaneously facilitates the provision of education and training responding to the specific needs of individual countries, and the development of national and regional education and training curricula in radiation medicine. A core curriculum for education and training in radiation, clinical oncology and radiotherapy was prepared at the beginning of the initiative

#### PROJECT NAME

Training of Radiation Medicine Professionals

#### NOMINATED BY

International Atomic Energy Agency (IAEA)

#### COUNTRIES/REGIONS/TERRITORIES

Algeria, Angola, Benin, Brazil, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Ethiopia, Gabon, Ghana, Italy, Kenya, Libya, Madagascar, Mauritius, Mauritania, Mali, Morocco, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Senegal, Sierra Leone, South Africa, Sudan, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.4, 8.8

#### SUPPORTED BY

IAEA Technical Cooperation Fund

#### IMPLEMENTING ENTITIES

IAEA

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2018 – 2023

#### LINK

<https://bit.ly/3St0RJ2>





that serves as a basic minimum requirement for training programmes and training institutes in Africa.

Selected training institutes in countries in Africa and outside of Africa are providing long-term and short-term academic and clinical training in radiation oncology, radiation therapy and medical physics. Candidates from participating countries that do not have training programmes available locally (Angola, Burkina Faso, Ethiopia, Libya, Madagascar, Mauritania, Namibia, Nigeria, Rwanda and Uganda) are accessing academic and clinical training in countries with well-established training programmes within and outside the continent (Brazil, Egypt, Ghana, Italy, Kenya, Morocco, Senegal and South Africa).

To date, 40 people have been trained, significantly boosting the human resource capacity in this field in Africa. 21 radiation medicine professionals have received or are currently attending long-term academic training: nine radiation oncologists have been placed in Brazil, Ghana, Senegal and South Africa; six radiation therapy technicians have been placed in Egypt, Ghana and Morocco; and six medical physicists are in Morocco and at the Abdus Salam International Centre for Theoretical Physics in Italy. Several fellows have already completed their training and have begun to apply their new skills in their home institutions. T19 medical physicists from Benin, Cote d'Ivoire, Ethiopia, Kenya, Libya, Mauritania, Niger, Sierra Leone, Sudan, Uganda, and Zimbabwe are fully trained.

Special emphasis has been placed on medical physics to enhance the overall safety and effectiveness of nuclear medicine and diagnostic radiology services in Africa through dose optimization and appropriate quality assurance programmes. A comprehensive and thorough assessment of the human and physical infrastructure in the region has resulted in the identification of three countries — Algeria (for French-speaking countries), Egypt (for Arabic speaking countries) and Ghana (for English speaking countries) — with the capacity to deliver quality long-term clinical training in radiology and nuclear medicine medical physics in line with the African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology (AFRA) harmonized syllabus in medical physics. This syllabus serves as a reference in the formulation of Member States' long-term national clinical training programmes related to medical physics in radiotherapy, nuclear medicine and radiology.

Through this initiative, Africa has become the first region to develop a harmonized quality control programme based on IAEA guidance for effective implementation of quality assurance among institutions, which ensures the sustainability of the project. The harmonized protocol provides a practical guide for the execution of quality control (QC) tests for radiography, fluoroscopy, mammography, computed tomography and gamma camera SPECT systems and establishes a common basis for data collection and analysis, results and experience sharing. The participating countries have also been equipped with the necessary QC equipment and tools to build their capacities to implement the



harmonized QC programme. The QC programme is already being implemented in imaging centres in eight African countries (Algeria, Egypt, Ethiopia, Ghana, Kenya, Senegal, Uganda and Zambia). Based on the results of the project, other regions are now considering the development of similar protocols.

#### CONTACT INFORMATION

**Valentina Varnabova**  
Programme Management Officer, IAEA  
V.Varnabova@iaea.org

# Strengthening Medical Physics Education and Training



## Helping countries in Asia and the Pacific meet public health needs by training medical physicists

### CHALLENGE

In radiation medicine, the role of medical physicists is critical to ensuring the safe and effective delivery of medical services, such as diagnostic radiology, nuclear medicine and radiation oncology for the diagnosis, treatment and therapy of cancer, cardiovascular diseases and other non-communicable diseases. To be able to carry out their duties, medical physicists require both academic preparation and extensive clinical training.

Over the years, the expansion of technically sophisticated radiotherapy services and the strengthening of radiation safety requirements have presented a challenge to medical physicists in Asia and the Pacific. The region was already facing a shortage of qualified medical physicists due to limited and costly education and training opportunities, in addition to significant brain drain, which often depleted already scarce domestic healthcare resources.

Medical physicists are uniquely placed to address needs in increasingly technically sophisticated service delivery, as well as basic safety requirements, including shielding and occupational and patient safety. Unfortunately, the needs of the medical physics workforce are not always met in the Asia Pacific region, and the future expansion in radiation medicine services will place further stress on the current medical physics workforce.

### TOWARDS A SOLUTION

To overcome such difficulties, between 2014 and 2017 the International Atomic Energy Agency (IAEA) implemented a regional project to strengthen and consolidate education and training for medical physicists via the establishment of online and face-to-face programmes at the tertiary level.

#### PROJECT NAME

Strengthening Medical Physics Education and Training

#### NOMINATED BY

International Atomic Energy Agency (IAEA)

#### COUNTRIES/REGIONS/TERRITORIES

Australia, Bangladesh, Cambodia, China, Fiji, India, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, New Zealand, Palau, Philippines, Singapore, Sri Lanka, Thailand, Viet Nam

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.8, 3.4, 3.c, 8.8

#### SUPPORTED BY

IAEA Technical Cooperation Fund

#### IMPLEMENTING ENTITIES

IAEA, medical physics centres in participating countries

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2014 – 2017

#### LINK

<https://bit.ly/3A0KNqG>

<https://bit.ly/3P2sAgA>



The project was planned and implemented under one of the IAEA's mechanisms to promote South-South and Triangular cooperation: the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific (RCA), whose main scope is to ensure the sustainability of results by being constant with knowledge and experience sharing across the region, eventually strengthening the contribution of nuclear science and technology to socio-economic development.

The key goal of the project was to bring the skills, competence and practical experience of all medical physics centres in the region to the same level, and for this collaboration to continue beyond the period of project implementation. To ensure this, the project started with a gap analysis, facilitated by IAEA experts, to assess existing resources and needs in terms of infrastructure, education, training and medical physics guidelines of all the participating hospitals and institutes in the 22 countries taking part in the project.

Based on the findings of the gap analysis, common standards for post-graduate education and clinical training in medical physics and criteria for professional recognition of qualified medical physicists were defined. An e-learning platform (Advanced Medical Physics Learning Environment, AMPLE) was then established.

A series of pilot e-learning-supported clinical training programmes were launched, targeting both advanced and emerging countries in the region, contributing to the sustainability of the project. Medical physicists from Bangladesh, India, Indonesia, Philippines, Singapore and Thailand were in this way provided with the opportunity to learn from regional centres with more experience.

Once the pilot was completed, AMPLE was launched across all RCA member countries. Medical physicists from countries that participated in the pilot trained their peers in neighbouring countries.

More than 200 medical physicists were trained. Over 200 junior clinical medical physicists and 300 supervisors and content developers are now using AMPLE, building and strengthening the capacities of participating countries to apply the newest standards and guidelines for medical physics.

The implementation of the project has resulted in the improvement of the quality of radiation medicine, the safety of health care workers and ultimately improved the health care services in the region, contributing to the attainment of SDG 3 (good health and well-being) and SDG 8 (decent work and economic growth).

Drawing on the standards and guidelines established by the project, Myanmar, for instance, founded the Myanmar Medical Physicist Association (MMPA), contributing to the development of a four-year Radiation Technologist Bachelor Programme as part of the education



and training programme for radiation technologists at the University of Medical Technology at Yangon, teaching approximately 10 students per year.

Building on the achievements of this project, the IAEA launched another regional project in 2018 to further strengthen medical physics through enhancing the functionality and usability of AMPLE. A fellowship training programme, allowing specialists to train in subspecialties, was introduced giving the possibility to universities and medical physics centres for education and training across the Asia and Pacific region to establish critical partnerships.

AMPLE, which is now widely used around the region, can be accessed through the IAEA's CLP4NET e-learning platform, and medical physicists from all RCA countries can register through their national RCA coordinator or representative to undertake online education in their specialty. The standards and guidelines for medical physics are also available on the IAEA website.

---

#### CONTACT INFORMATION

**Sinh Hoang**  
Programme Management Officer and RCA Coordinator, IAEA  
V.Hoang@iaea.org



# Siyakwazi Youth Network



## Advancing youth sexual and reproductive health and rights advocacy through civil society–government partnership in South Africa

### CHALLENGE

Despite the existence of a comprehensive legal and policy framework for Sexual and Reproductive Health and Rights (SRHR), South Africa faces challenges of youth inclusion in the provision of SRHR services. These services include family planning, maternal health, preventing and treating sexually transmitted infections including HIV/AIDS, abortion and health information sharing.

Barriers to accessing SRHR services by South African youth are mainly related to cost, the non-youth-friendly attitude of staff, inaccessibility of clinics, limited privacy and confidentiality. Other factors include fear of judgment, social norms and perceptions of young people's agency and rights to SRHR, and structural barriers, including physical and communication barriers at health care facilities that hamper access, including for young people living with disabilities. There is growing recognition for the need to address the problem of access to SRHR services by youth in South Africa.

### TOWARDS A SOLUTION

The Siyakwazi Youth Network (SYN) works to produce a generation of youth advocates and leaders in SRHR in South Africa. SYN is grounded in the recognition of youth as civil society activists with the capacity and power to be significant agents of positive change. It focuses on improving the SRHR outcomes of young people in South Africa and encouraging youth to meaningfully engage as active citizens, particularly in decision-making contributing to the attainment of SDG 3 (good health and well-being).

The Siyakwazi Youth Network was created in 2015 as a platform for dialogue among young people to increase understanding of SRHR issues and forge a collective voice. The first SRHR-related network in South Africa, SYN brings youth concerns to the fore through sustainable support and tangible

#### PROJECT NAME

Siyakwazi Youth Network

#### NOMINATED BY

Department of Social Development, South Africa

#### COUNTRIES/REGIONS/TERRITORIES

South Africa

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.7, 5.6

#### SUPPORTED BY

Department of Social Development, South Africa

#### IMPLEMENTING ENTITIES

Partners in Sexual Health (PSH), Department of Social Development (DSD), South Africa

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2015 – Ongoing

#### LINK

[www.psh.org.za/siyakwazi-youth](http://www.psh.org.za/siyakwazi-youth)



interventions. It promotes youth agency through creating a critical mass of youth who can critically analyze and interrogate policies and engage in SRHR advocacy. SYN creates and sustains mentorship and coaching through training to build capacity for the execution of national and province-specific advocacy plans and initiatives.

The network is a civil society–government partnership. SYN was initiated by the Partners in Sexual Health (PSH) in collaboration with the National Population Unit (NPU) and Provincial Population Units (PPUs), located in the national and provincial offices of the Department of Social Development (DSD), and the National Youth Development Agency (NYDA) in South Africa. The partnership arrangement is based on the principle of ‘voluntary trust-based partnership’ that recognizes trust as an essential component. The partnership is grounded in win-win principles and the need to leverage different capacities of the partner organizations. It complements the Department of Social Development’s activities to achieve its strategic plans through PSH’s capacity for community organizing and its technical capacity for training on advocacy of SRHR issues. Additionally, PSH facilitates the formulation of action plans for youth on advocacy and implementation of these plans. Engagement with Department of Social Development provincial offices ensures inclusion of provincial population units, so that young people have access to provincial population offices to support the implementation of action plans. SYN creates a platform to amplify the voices of youth on SRHR issues and some SYN youth work with communities to identify issues that are relevant to them and conduct activities to advocate for change. Advocacy activities are implemented through existing local institutions, such as traditional leadership structures, schools and youth parliamentarians. The network is facilitated by a youth Steering Committee through various social media and other platforms, like radio. SYN applies an all-inclusive approach that promotes diversity and inclusion and avoids discrimination based on gender, race, social marginalization and sexual orientation.

Since December 2016, SYN has registered more than 10,000 youth members. SYN has created an environment in which young people can interact and engage both with each other as well as with experts on SRHR matters, including sharing experiences and practices through increased access to SRHR information and knowledge. The network has disseminated SRHR information via a variety of platforms, including a regular newsletter *BecauseWeCan*, social media platforms and the Siyakwazi radio station. Additionally, SYN facilitated the establishment of a number of youth-led movements. Examples of policy influence include SYN contributions towards the Southern Africa Development Community (SADC) SRHR Framework Strategy. The Network has created an environment in which young people interact and engage both with each other as well as with experts on SRHR matters, including sharing experiences and practices through increased access to SRHR information and knowledge. The deployment of youth representatives in key national decision-making structures in South Africa through SYN advocacy may positively impact future streams related to youth development.



Regarding sustainability, a notable characteristic of SYN is its relative success despite limited funding. A key success factor of the SYN model is that it falls within the broader Because We Can! (BWC) youth movement ([www.psh.org.za/bwc-movement](http://www.psh.org.za/bwc-movement)) which covers eight countries in Southern Africa and has ownership by a wide range of stakeholders. Under the umbrella of the Because We Can! movement, SYN has been shared with other countries in the region through South-South cooperation, including Botswana, Eswatini and Namibia.

The replicability of the SYN in other contexts is subject to several fundamentals that need to be in place. Conducive policy environments coupled with high levels of political will are needed. Also, traditional, cultural and religious norms often pose a significant challenge to the advancement of youth SRHR initiatives in Africa and hinder dialogue on more sensitive SRHR issues in relation to promoting youth agency. There is a deep need for appreciating these socio-cultural dynamics.

#### CONTACT INFORMATION

**Tahrima Khan**  
Senior Program Officer, PPD  
[tahrima@ppdsec.org](mailto:tahrima@ppdsec.org)

# E-learning for Healthcare Professionals in a Crisis



## Online education and training for Bangladeshi healthcare professionals to enable them to provide accurate information on and raise awareness of the COVID-19 pandemic



### CHALLENGE

The coronavirus has spread through the entire world and emerged as a major public health threat. In response, the government of Bangladesh, including the Directorate General of Health Services and Institute of Epidemiology, Disease Control and Research, raised a national-level alert and implemented wide-range, multiagency public health measures under World Health Organization guidelines to fight against the pandemic. However, a lack of public awareness and widespread panic and anxiety related to this unknown illness among citizens posed unique challenges and an enormous threat to the health and well-being of populations.

As COVID-19 was a new disease, its causes, symptoms and remedies were unclear. It was vital to brief healthcare professionals to equip them with proper information and WHO guidelines on the virus as soon as possible to strengthen their preparedness to address the pandemic situation and increase public awareness. Since the community of doctors, nurses, midwives, volunteers and healthcare providers in Bangladesh who needed to be briefed in the shortest amount of time was numerous and widely dispersed, it was impossible to provide physical training to all of them, posing a challenge on how to communicate the latest updates and guidelines to medical professionals.

### TOWARDS A SOLUTION

To address this challenge, an e-learning platform was used to bring training processes online, making training available to all medical professionals in Bangladesh, including those in remote areas. Called MuktoPaath, the platform had been developed in 2016 by the Government of Bangladesh's Aspire to Innovate (a2i) Programme in its Information and Communications Technology (ICT) division. The use of an e-learning platform not only avoided the need for physical classroom attendance (problematic at any rate in the

#### PROJECT NAME

E-learning for Healthcare Professionals in a Crisis

#### NOMINATED BY

Aspire to Innovate (a2i) Programme

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.d., 4.3, 8.3

#### SUPPORTED BY

Aspire to Innovate (a2i) Programme

#### IMPLEMENTING ENTITIES

a2i Programme, Government of Bangladesh; United Nations Development Programme (UNDP) Bangladesh

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

February 2016 – Ongoing

#### LINK

<https://bit.ly/3QBQPE4>

early phases of the pandemic) but also saved time and costs. This made it possible to spread awareness of and respond to COVID-19 within a short time during this crucial period.

During the pandemic, the Directorate of Health Services gave permission to ten government, non-government institutes and organizations to disseminate information and training to prevent spreading misinformation. With guidance from the Directorate General of Health Service (DGHS), several institutions used MuktoPaath as their only training-learning platform.

To use MuktoPaath, medical professionals registered online and participated in courses. After completion of the course, learners took an online quiz and after successfully passing the assessment were awarded a certificate accredited by a relevant governing institution, nongovernmental organization or ministry, etc. MuktoPaath provided quality training to 285,000 healthcare professionals in sixteen core courses under the health category during the COVID-19 pandemic period (to date), including doctors, nurses and volunteers, contributing to the increased physical and economic well-being of people in Bangladesh.

This platform contributes to SDG 3 (good health and well-being), target 3.d (strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks). As an e-learning platform, MuktoPaath targets SDG 4 (quality education) by ensuring access for all healthcare professionals to quality training, and SDG target 4.4 (substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurs). Other goals addressed are SDG 8 (decent work and economic growth) and SDG target 8.3 (promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation).

MuktoPaath is the largest e-learning platform in Bangladesh. MuktoPaath is a multidimensional platform that partners with relevant institutions. Through MuktoPaath, almost two million participants have enrolled in courses on topics including health and awareness, education, information technology, entrepreneurship, journalism, personal development, etc. For all types of target groups there are all manner of courses available. In addition to medical professionals, the platform has been used by teachers, students, youths, employees, professionals, civil service officers, lawyers, journalists, entrepreneurs, agriculturists, fresh graduates, migrant workers, homemakers and more.

Throughout the lockdown stages of the pandemic, virtual participation increased dramatically. In collaboration with the Directorate of Primary Education under the Ministry of Primary and Mass Education, MuktoPaath also launched online courses focusing on the professional development of teachers, attracting over 185,000 enrollees. Apart from that, professional training was provided to government officials, doctors, nurses, volunteers and lawyers.



আকাশ আমার পাঠশালা

The project is sustainable in that the certificates received upon successful completion are government accredited, which benefits the learners by improving their ability to gain decent employment. It is an innovative platform with unique features making it readily accessible for underprivileged and less educated communities. For instance, the course content can also be accessed offline, making it easier to use for people with limited access to or poor internet connections.

Through MuktoPaath, professionals and citizens in Bangladesh were able to access online training from anywhere at any time. MuktoPaath was an effective and inclusive platform for education and training during crisis. This can act as a model for national and international policymakers on how to ensure peoples' access to quality knowledge and competencies, not only in the case of future pandemics or crises, but in general. The Government of Bangladesh has noted that a blended learning approach, with 'face-to-face' teaching and learning being complemented by e-learning and e-training, may be the future of quality education. MuktoPaath, with its e-learning platform success stories, can act as a long-term solution to achieving the educational goals of Bangladesh. MuktoPaath's e-learning and training framework can be replicated in other countries, specifically least developed countries where time, cost and physical presence are major barriers to providing quality education and training. Government-level collaboration should be possible with the MuktoPaath team offering technical guidance in implementing the initiative in interested countries.

#### CONTACT INFORMATION

##### **Md. Afzal Hossain Sarwar**

Policy Specialist, a2i Programme  
sarwar@a2i.gov.bd  
+8801715153793

##### **Asad-Uz-Zaman**

Innovation Specialist, a2i Programme  
asad.zaman@a2i.gov.bd  
+8801712092922

# Chile Schools Programme in Latin America and the Caribbean



## Collaboration and training to strengthen teacher capacities to improve student learning

### CHALLENGE

The interruption of in-person classes and the closure of schools during the COVID-19 pandemic have been devastating to learning. Two out of three students are unable to read or understand texts appropriate for their age, increasing “learning poverty,” learning deficiencies and not reaching a minimum level of reading comprehension (World Bank, 2021). This requires updating of teachers’ skills to address the learning gaps of the students.

### TOWARDS A SOLUTION

From 2019 to 2021, the “Chile Schools Programme” of the Centre for Advanced Research in Education (CIAE) in Chile provided technical guidance and helped design and implement training and education activities in schools in 12 Latin American and Caribbean countries (Argentina, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama and Peru). This South-South cooperation programme promoted integration and collaboration between schools in Latin America to generate a collaborative community for strengthening the capacities of teachers to improve learning for students, particularly from low-income families.

Using a virtual platform, the programme promoted exchanges between teachers from participating countries and served as a repository of learning and training materials on various teaching methods. The online training was facilitated by teaching professionals who fostered exchanges between different educational communities of the participating countries and who reviewed and managed the preparation of the material that was made available to the community.

#### PROJECT NAME

Chile Schools Programme in Latin America and the Caribbean

#### NOMINATED BY

Agencia Chilena de Cooperación Internacional para el Desarrollo (AGCID)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.a, 4.c

#### SUPPORTED BY

AGCID

#### IMPLEMENTING ENTITIES

Centre for Advanced Research in Education (CIAE) at the University of Chile; Chilean embassies

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2019 – 2021

#### LINK

[www.escuelaschile.cl](http://www.escuelaschile.cl)



In its first stage, Learning Management, the programme formulated a common understanding of the strengthening of classroom interactions to improve student learning. Next, through a Disciplinary Deepening stage, the programme worked directly with teachers to enhance their pedagogical practice in fundamental curricula areas, such as language and mathematics as these are vital for the development of knowledge and skills in students. Finally, through Training of Trainers, the programme capacities were installed in schools to improve educational practices. In this stage, the schools incorporated at the beginning of the programme participated in special courses and virtual meetings, at which topics of interest to that community were addressed and South-South exchanges took place.

Observation and feedback of classes, given both by managers and peers, stimulated the professional development of teachers in their school community, thus improving their classroom practices with the end goal of improving student learning in the region. The programme fostered This exercise. for example, showed the importance of the use of time effectively in the classroom.

The work with the Chilean Schools around the Observation and Feedback of classes was key to deliver relevant and pertinent information to teachers, thus improving their practices in the classroom - which emerges as a tool that allows teachers and school directors to exercise. The math class observation workshop identified keys that allow enriching the work in the classroom.

Between 2019 and 2021, eight training programmes were offered for a total of 220 teachers and/or directors from 55 participating schools, benefiting 14,346 students in pre-school, primary and secondary education.

With extraordinary financing from the Government of Chile, in 2021 the programme was able to offer highly professional technical support to 40 schools in 12 countries, resulting in 161 fully equipped computers, totaling US\$ 135,000 invested by Chile through South-South cooperation. The programme amplified the leadership of the Chilean Embassies on education in each country, and strengthened relations with local education institutions and international cooperation authorities.

The programme model was sustainable, as this horizontal cooperation experience has been an opportunity to work collaboratively with schools, provided concrete tools for school improvement and engaged in mutual learning and sharing of experiences among participating professionals. As a result of the Chilean Schools Programme, a new educational curriculum has been incorporated in Argentina, Ecuador, El Salvador and Honduras.

---

## CONTACT INFORMATION

### **Carolina Requena Cuadra**

Programme Coordinator, CIAE, University of Chile  
carolina.requena@ciae.uchile.cl  
56 - 229782777

# Indian Technical and Economic Cooperation Moves Online



## India's long-standing skills development programme helps countries around the world close skills gaps

### CHALLENGE

According to the World Economic Forum, skills gaps are major contributing factors to underemployment and unemployment. Skills deficiencies and inequities are expected to further intensify with the fourth industrial revolution, with skills training being a major driving force in the knowledge economy. The rapid changes and advances in technology make updated and requisite skills even more important.

The lack of appropriate skills among many youth around the world is a cause of great concern, especially for countries of the global south. Lack of adequate skills adversely affects the quality and quantity of industrial output. Skill deficits not only make individuals unemployable but they also hamper national economic growth and development. In the context of the constantly evolving world of work, capacity building and bridging the skills gap are among the greatest challenges facing the global community.

### TOWARDS A SOLUTION

The Indian Technical & Economic Cooperation (ITEC) & e-ITEC Programme of the Ministry of External Affairs of the Government of India has been addressing skills development since 1964. Regional cooperation and developmental assistance have always been at the heart of Indian foreign policy in the spirit of "Vashudaiva Kutumbakam" (the whole world is one family). India's developmental partnerships have ranged from providing credit, developmental and humanitarian grants, technical consultancy, disaster relief, academic scholarships and capacity-building training.

The ITEC programme builds capacities of nationals belonging to ITEC partner countries. Presently, 161 countries from Asia, Africa, East Europe, Latin America, the Caribbean, the Pacific and small island states are ITEC partners. A digital platform, e-ITEC, is a newer extension of ITEC capacity building



### PROJECT NAME

Indian Technical and Economic Cooperation Moves Online

### NOMINATED BY

Development Partnership Administration, Indian Technical and Economic Cooperation Programme, India

### COUNTRIES/REGIONS/TERRITORIES

India and 161 ITEC partner countries in Asia, Africa, East Europe, Latin America, Caribbean and the Pacific

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

4.3, 4.4, 4.5, 8.6

### SUPPORTED BY

Ministry of External Affairs, Government of India

### IMPLEMENTING ENTITIES

Development Partnership Administration, Indian Technical and Economic Cooperation Programme, Ministry of External Affairs, Government of India

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

1964 – Ongoing

### LINK

[www.itecgoi.in/index#](http://www.itecgoi.in/index#)  
[www.itecgoi.in/about\\_e-ITEC](http://www.itecgoi.in/about_e-ITEC)

initiatives, which was established in the wake of the Covid-19 pandemic. With Covid-19 lockdowns and restrictions, the various ITEC training programmes could not be conducted in physical mode which necessitated the introduction of e-ITEC. However, the benefits of providing training in a cost-effective manner, the possibility of training a large number of students from a wide range of geographies and the high participation rate from member countries made the e-ITEC initiative sustainable going forward.

The ITEC programme encompasses both civilian and military training, including study tours and deputation of Indian experts in foreign countries for consultation to promote development activities. Each financial year, a substantial number of scholarships are granted to ITEC partner country nationals for capacity building. About 14,000 scholarships were provided in 2019-2020 alone. The training courses for capacity building are organized by the premier public and private institutions in India, such as the Indian Institute of Technology, Indian Institute of Science, Indian Institute of Foreign Trade, Lovely Professional University, National Institute of Technology, Post Graduate Institute of Medical Education and Research and others. Training courses of varied duration on topics, such as agriculture, engineering and technology, environment, renewable energy, government functioning, human resource development, women's empowerment, entrepreneurship, health, etc., are offered under e-ITEC as well as onsite ITEC programmes. In addition to these traditional courses, training on emerging issues, such as virtual reality, cyber technology, artificial intelligence, nanotechnology, the Sustainable Development Goals and more are also being offered. More recently developed training programmes are covering power generation, gas distribution, digital leadership, auditing in an IT environment, environmental impact assessment, disaster management, corporate governance and solid waste management.

Its inception, ITEC was a bilateral initiative. Over time, the programme has been collaborating with a variety of regional, multilateral and international organizations around the world, among them the Association of Southeast Asian Nations (ASEAN), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, the Mekong-Ganga Cooperation, the African Union, the Afro-Asian Rural Development Organization, the African Parliament, the Caribbean Community, the World Trade Organization, the United Nations Economic Commission for Africa, and the Indian Ocean Rim-Association for Regional Cooperation and India-Africa Forum Summit. Collaboration with such a wide variety of organizations makes ITEC truly a South-South and Triangular cooperation initiative.

Over the years, the ITEC programme has trained more than 200,000 participants. In 2021, 170 e-ITEC courses were conducted by 68 Indian institutions with approximately 5,600 participants from 83 countries of the global South. Sixty-seven country-specific courses were conducted under the e-ITEC initiative during 2021. The designing of customized courses and programmes by ITEC as requested by partner countries makes this initiative innovative and highly demanded.



The ITEC initiative is extremely adaptable and India has encouraged other Asian countries, such as Malaysia (through the Malaysian Technical Cooperation Programme) and Thailand (through the Thailand International Cooperation Agency) to start similar initiatives. Offering training in highly demanded traditional subjects, emerging technologies and country-specific customized courses has helped ITEC to be sustained for more than five and half decades. The initiative's adaptation to digital platforms under e-ITEC will ensure that this novel initiative continues to exist for many years to come and to help countries around the globe make progress toward the Sustainable Development Goals.

#### CONTACT INFORMATION

##### Sumit Kumar Maji

Assistant Professor, The University of Burdwan  
2009sumitbu@gmail.com; skmaji@com.buruniv.ac.in

# Women's Leadership and Economic Empowerment in Africa



## Training women in economic empowerment and leadership to advance gender equality, transform communities and reduce poverty

### CHALLENGE

Women's development, empowerment and equality are critical to achieving all the Sustainable Development Goals (SDGs). The United Nations General Assembly resolution (2011) on women's political participation stressed the need to "provide women with the tools, skills and capacity to be effective in their leadership roles." As in many parts of the world, women in Africa face many challenges in their pathway to economic development and leadership.

Impediments to women's development and leadership opportunities include social and cultural barriers, traditional gender roles, the low status of women in many societies as reflected in the multiple roles and expectations of women in the domestic sphere and limited access to educational and employment opportunities. The small number of women in Africa in leadership positions across sectors, from business to science to politics,<sup>1</sup> is both an indicator of these barriers and a barrier itself, with a particularly low rate of African women enrolled in secondary and tertiary education, formal employment and decision-making positions.

Sustainable development is only possible when women and men enjoy equal opportunities to reach their potential, thus the economic and political empowerment of women is a powerful instrument for reducing poverty and advancing communities and nations.

### TOWARDS A SOLUTION

Israel's Agency for International Development Cooperation (MASHAV) considers the empowerment of women a critical and central component of its development policy. To address the challenges noted above, MASHAV

#### PROJECT NAME

Women's Leadership and Economic Empowerment in Africa

#### NOMINATED BY

Agency for International Development Cooperation (MASHAV), Ministry of Foreign Affairs of Israel

#### COUNTRIES/REGIONS/TERRITORIES

Israel, Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Somalia, Uganda, Zimbabwe

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.5; 5.7; 5.8; 5.9, 8.2; 8.3; 8.5

#### SUPPORTED BY

MASHAV

#### IMPLEMENTING ENTITIES

MASHAV; UN Women East and Southern Africa Regional Office (ESARO); Kenyatta University

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2013 – 2019

<sup>1</sup> With some notable exceptions; according to the Pew Research Center (18 March 2019) Rwanda had the highest number of females in the national legislature in the world.



and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) Eastern and Southern Africa Regional Office (ESARO) collaborated from 2013 to 2019 on training and sharing tools for women's leadership and economic empowerment. The goal of this work was to drive accelerated, equitable and sustainable development in Africa, while taking into consideration increasing challenges and complexities, influenced by both local and global developments.

The main areas of cooperation included economic empowerment of women (paying attention to women in agribusiness and technology), capacity building and training in agro-business development and the design and running of leadership development programmes in the East and Horn of Africa regions and in Israel. In addition, MASHAV provided counselling for the establishment of the Africa Centre for Transformative and Inclusive Leadership (ACTIL), a joint venture between MASHAV and UN Women, in partnership with Kenyatta University.

UN Women mobilized groups of women from countries in the region to participate in the programme, provided greenhouse kits to the groups and covered the costs of agro-technology exchange visits to Israel. MASHAV provided technical assistance in the form of skills transfer and training in agro-business and assisted participants to gain direct exposure and learning from exchanges of good practices and approaches of partner countries, Israel and international organizations.

The ACTIL centre was established in 2014 in Nairobi, Kenya, and MASHAV was able to support ACTIL based on its model already implemented in Israel, the Golda Meir MASHAV-Carmel International Training Center (MCTC), which was one of the first training centres in the world dedicated to the advancement of women. Following ACTIL's request, MASHAV designed a tailor-made study tour in Israel for forty ACTIL professionals to present programmes and good practices, including professional visits to Israeli women's organizations involved in the advancement of women at all levels. The next step was to share experiences for planning and executing a pilot training programme for African women leaders, which took place in Nairobi.

During the period of the partnership, ACTIL designed and provided training in transformational leadership to women politicians, senior officials in public service and women in agri-business from Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Somalia, Uganda and Zimbabwe. Of note, seven courses on the economic and political empowerment of women were designed and carried out in Israel, with a total of 166 women and 13 men attending, and several leadership and entrepreneurship training sessions took place at ACTIL in Kenya.

ACTIL has become a vibrant and innovative training centre and its inspirational vision was noticeably shared by parties involved in this successful initiative. The leadership competencies of upcoming and existing leaders, especially women and youth, in politics, business, government

and society were built, making the trainees "agents of change" and having a multi-level ripple effect, extending to families, communities and countries. MASHAV's consultancy missions to Kenya to provide technical advice and support in setting up efficient systems of operation, structure and design for training programmes helped maximize ACTIL's impact and ensured its sustainability.

---

## CONTACT INFORMATION

### **Shuli Kurzon van Gelder**

Director Planning, Evaluation and Partnerships, MASHAV  
Shuli.Kurzon@mfa.gov.il

# Houses of Empowered Women Initiative



## Improving economic opportunities for women in Columbia

### CHALLENGE

Within the context of the COVID-19 pandemic, the working conditions of women in Colombia deteriorated dramatically and gender gaps widened. The unemployment rate for women reached 26.2 percent in July 2020, 10 percentage points higher than the unemployment rate for men, an inequality gap between that doubled compared to the previous year.

Additionally, the pandemic increased the levels of gender-based violence against women and girls, which has an impact on society, as it represents an obstacle not only to the achievement of equality, but also to sustainable development and peace. Given the above, it is a priority to promote productive strategies for women to acquire new technological and vocational knowledge and training related to their economic and social well-being.

### TOWARDS A SOLUTION

To address this challenge, the Turkish Cooperation and Coordination Agency (TİKA), provided support to the project Casas de Mujeres Empoderadas (Houses of Empowered Women). This programme was led by the Vice Presidency of the Republic of Colombia and managed through the Presidential Council for Equality of Women of the Vice Presidency. The objective is to generate employment opportunities for women throughout different regions in the country, decrease gender-based violence and contribute to closing inequality gaps between men and women.

Through the project, TİKA supported the installation of ten ICT classrooms and donated the necessary office equipment and furniture for the Houses. Houses were established in the cities of Pasto (Nariño), Riohacha (Guajira), Buga (Valle del Cauca), Cúcuta (Norte de Santander), Quibdó (Chocó), Tunja, Monteria, Envigado, Ibague and Inírida. Using modern technologies, these

#### PROJECT NAME

Houses of Empowered Women Initiative

#### NOMINATED BY

Turkish Cooperation and Coordination Agency (TİKA)

#### COUNTRIES/REGIONS/TERRITORIES

Colombia, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.4

#### SUPPORTED BY

TİKA, Vice Presidency of the Republic of Colombia, Presidential Council for Equality of Women

#### IMPLEMENTING ENTITIES

Vice Presidency of the Republic of Colombia, Presidential Council for Equality of Women of the Vice Presidency

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

May 2020 – September 2020

#### LINK

[www.equidadmujer.gov.co/cme/Paginas/default.aspx](http://www.equidadmujer.gov.co/cme/Paginas/default.aspx)

facilities offer training and support to women on entrepreneurship, employability, science, technology, engineering and mathematics (STEM subjects). Mothers attending the vocational courses can access day care in the same facility for their children.

These learning spaces also help reduce the risks of gender violence and provide legal and psychosocial advice in case of violence. The Houses support the Women Free of Violence strategy in the regions, and as such women receive psychological support related to their struggles. initiative, to date, has benefited more than 10,000 vulnerable women from different regions of Colombia.

The training that the beneficiary women receive in the ICT classrooms not only strengthens their vocational skills and creates and supports their businesses, but it allows women to participate in productive leadership strategies and increases their self-esteem.

To ensure the sustainability of the project, each House receives support from a local authority (government or mayoral office). With access to technological tools, women are able to promote their enterprises and obtain better jobs within the framework of the new requirements of the fourth industrial revolution. Gaining new capacities will have an incredibly positive impact, giving these Colombian women the chance to take advantage of the opportunities offered by the digitization of the economy, which was accelerated by social confinement during COVID-19.



#### CONTACT INFORMATION

Strategy Development Department, TIKA  
sgdb@tika.gov.tr

# Solar-powered Electric and Water Supplies



## Accelerating clean energy access to reduce inequality in isolated villages of Indonesia and Timor-Leste

### CHALLENGE

While Indonesia has a high accessibility to electricity rate of about 98 percent (2018 figure), electricity access in rural, mountainous and remote areas of the country remains low, with a large gap between rural and urban regions. In Timor-Leste, the electricity supply rate in rural areas and villages is about 79 percent (2018 figure), leaving many residents in rural areas without electricity. In Timor-Leste, about 40 percent of the population also lacks access to clean water. These difficulties persist due to a lack of financing and basic infrastructure in the countries. Both Indonesia and Timor-Leste are seeking ways to increase the electricity supply rate and improve equitable access to energy for its populations.

### TOWARDS A SOLUTION

This project addresses inequalities in access to electricity and water for isolated and vulnerable communities in Indonesia and Timor-Leste. The project uses eco-friendly technologies to fill electricity and water gaps in remote areas by providing solar lamps and solar-powered water pumps. Communities are also instructed in the use and timely maintenance of the technologies.

The Korea International Cooperation Agency (KOICA) offices in Indonesia and Timor-Leste facilitate the project by providing experts, overall management, financial support and regular monitoring. The United Nations Development Programme (UNDP) in Indonesia and Timor-Leste manages the project and keeps close communication with the cooperating partners. The Ministry of Energy and Minerals of Indonesia, as a beneficiary partner, offers administrative support within Indonesia, while providing technical support for Timor-Leste to enhance accessibility to clean water. The Ministry of State Administration Timor-Leste, likewise a beneficiary partner, offers

#### PROJECT NAME

Solar-powered Electric and Water Supplies

#### NOMINATED BY

Korea International Cooperation Agency (KOICA)

#### COUNTRIES/REGIONS/TERRITORIES

Indonesia, Republic of Korea, Timor-Leste

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

6.1, 7.2, 13.2

#### SUPPORTED BY

KOICA, United Nations Development Programme (UNDP), Government of Indonesia

#### IMPLEMENTING ENTITIES

KOICA offices in Indonesia and Timor-Leste, UNDP, The Ministry of Energy and Minerals Indonesia (MEMR), Human Resources Development Agency of Indonesia (BPSDM)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2020 – December 2024

#### LINK

[www.accesstoenergy.org/en](http://www.accesstoenergy.org/en)





administrative support, such as domestic resolution of legal issues, procurement procedures in accordance with domestic law and human resources needed for the project.

To select the project sites in Indonesia and Timor-Leste, KOICA communicated with local organizations with expertise in the sector and, in cooperation, conducted a full survey of each country. Through this survey, 23 Indonesian villages and 25 Timor-Leste villages were identified for electricity support. Eleven of the 25 villages in Timor-Leste were also identified for improved access to clean water.

In Indonesia, appropriate solar power plants are being constructed in the 23 villages in consideration of the area's technological status. A Highly Efficient Solar Lamp System is being installed in the 25 villages in Timor-Leste, which is a system that accumulates energy during the day for nighttime use by households and facilities (according to the 2021 annual report, 187 households had received the lamps out of 1,684 households targeted, benefiting 1,007 people). Solar water pumps will be installed in the 11 Timorese villages needing water, sending water to storage tanks and wells close to residences. A start-up Renewable Energy Service Company will be established in each community to install and maintain the infrastructure.

The Highly Efficient Solar Lamp System was developed by the Ministry of Energy and Mineral Resources of Indonesia for distribution in low-income and off-grid households and is a highly successful national project. The system includes a 20-watt peak capacity solar panel, 4 LED lights and batteries that can operate for a maximum of 60 hours. Being delivered throughout Timor-Leste under this South-South and Triangular cooperation project allows Indonesia to transfer its sustainable technology to a neighbouring country.

To ensure the sustainability of the project, the Indonesian Ministry of Energy's Human Resources Development Agency prepared a technical training course on the solar lamp technology and a certification system for Timor-Leste experts. Indonesia will also be available for continuous instruction related to operation and maintenance and will conduct field trips to share knowledge on how to operate and maintain the system distributed to Timor-Leste. As the infrastructure will be operated by village-owned enterprises, this will become a regular source of income for the community, further assisting its sustainability. It is expected that this project's actions and successful experiences with South-South and Triangular cooperation will trigger further technical interactions between Indonesia and Timor-Leste, in particular targeting underprivileged areas.

This project addresses SDG 7 (access to affordable, reliable, sustainable and modern energy for all) by contributing to power equality through the supply and distribution of solar lamps. The project contributes to SDG 6 (availability and sustainable management of water and sanitation for all) by installing solar water pumps. It responds to SDG 13 (take urgent action to combat climate change and its impacts) by utilizing renewable energy.

---

#### CONTACT INFORMATION

**Seolri Park**  
Partnership Officer, KOICA  
shellypark@koica.go.kr



# Management of Shared Water Resources in the Sahel Region

6 CLEAN WATER AND SANITATION



## Adding the groundwater dimension to transboundary water management to enhance decision-making

### CHALLENGE

Reliable access to clean water for drinking, agriculture and sanitation is one of the biggest challenges facing the 135 million people who live in the semi-arid Sahel region. Despite a series of droughts and consistently low rainfall over the past few decades, the Sahel is home to rich bodies of water — hidden underground.

Population growth, climate change and land use are putting pressure on water resources and raise the question of how to ensure the safety and sufficiency of water for food production and human use. While groundwater supplies have the potential to offer long-term access to clean water, the right scientific tools are needed to understand more about this resource.

### TOWARDS A SOLUTION

The International Atomic Energy Agency (IAEA) technical cooperation project “Adding the Groundwater Dimension to the Understanding and Management of Shared Water Resources in the Sahel Region,” which began in 2012, trained scientists from 13 Sahel countries (Algeria, Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal and Togo) on water sampling for isotope analysis in order to carry out a detailed survey of groundwater supplies.

The area studied included parts of five major transboundary aquifer systems in the Sahel: the Lullemeden Aquifer System, the Liptako-Gourma-Upper Volta System, the Senegalo-Mauritanian Basin, the Lake Chad Basin and the Taoudeni Basin. Over 2,000 water samples have been collected from different aquifers over an eight-year period during both the dry and humid seasons. These research activities led to the creation of the first broad overview of groundwater in the Sahel, covering an area of five million square kilometres. Following extensive training in water sampling and analysis focused

#### PROJECT NAME

Management of Shared Water Resources in the Sahel Region

#### NOMINATED BY

International Atomic Energy Agency (IAEA)

#### COUNTRIES/REGIONS/TERRITORIES

Algeria, Benin, Burkina Faso, Central African Republic, Chad, Cameroon, Ghana, Mauritania, Mali, Niger, Nigeria, Senegal, Togo

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

6.5

#### SUPPORTED BY

IAEA Technical Cooperation Fund with extrabudgetary support from Japan, New Zealand, Republic of Korea, Sweden and the United States of America

#### IMPLEMENTING ENTITIES

IAEA, United Nations Educational, Scientific and Cultural Organization (UNESCO), relevant river basin authorities (the Niger Basin Authority, the Lake Chad Basin Commission, the Volta Basin Authority, the Liptako-Gourma Integrated Development Authority and the Organization for the Development of the Senegal River), German Federal Institute for Geosciences and Natural Resources

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2012 – 2025

#### LINK

<https://bit.ly/3JywmNG>



on isotopic techniques, the scientists applied their new skills to interpret data and develop national reports. The science-based reports were made available to national water authorities, enabling better decision-making in the water sector.

The project supported a comprehensive approach to integrated sustainable groundwater management. By building sustainable capacities in water sampling and isotope hydrology, the IAEA enabled Sahel countries to study the features of the main aquifers and the interaction between water bodies, to assess the vulnerability of groundwater to pollution and understand the impact of climate change on water availability.

The project has recently reported the first characterization of deep aquifers and the degree of interconnection with shallow aquifer units. It has also been possible to develop a tritium distribution map of the Sahel region to indicate areas with more favourable groundwater replenishment rates, but also of higher vulnerability to water pollution. The map was shared with the United Nations High Commissioner for Refugees (UNHCR) as an input to modelling future conflict areas in the Sahel.

The project is currently supporting 15 PhD students and one postdoctoral fellow to interpret the data generated and to provide greater scientific insight into the results obtained thus far. A new group of 10 PhDs, 5 MScs and 2 postdoctoral fellows has just been approved. This strategy represents a significant investment in human resources required for sustaining the utilization of isotope hydrology in characterizing and monitoring groundwater.

The project was implemented in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), relevant river basin authorities (the Niger Basin Authority, the Lake Chad Basin Commission, the Volta Basin Authority, the Liptako-Gourma Integrated Development Authority and the Organization for the Development of the Senegal River), and the German Federal Institute for Geosciences and Natural Resources. The project was supported by Japan, New Zealand, the Republic of Korea, Sweden, and the United States.

The project provided a platform for effective South-South collaboration on technical and management issues at both the basin and subregional levels. It resulted in the first-ever comprehensive overview of groundwater characteristics in the Sahel region. The data provided valuable information for the countries, including on the origin, recharge sources and flow patterns of the aquifers and on contamination levels in the basins. This information, gathered in a collaborative manner, supported evidence-based decision-making by policymakers on shared water resource management. Water resource management capacities in the region were enhanced, and an active and engaged network of local counterparts was established.

The project has entered a third phase scheduled to be implemented from 2022 to 2025 to further integrate the management of groundwater resources in the Sahel countries. This builds on the two previous



projects which ran from 2012 to 2017 and 2018 to 2021. The third phase is expanding the good practices learned in the Sahel to a group of countries in the south of the continent who will investigate selected shared water resources. The project is making use of the IAEA Water Availability Enhancement (IWAVE) methodology. IWAVE methodology consists of gap analysis and stakeholder consultation, the development of an optimal strategy for groundwater management and the identification of essential technical capacities in which to invest. The technical and management capabilities resulting from this follow-up project are expected to provide core leadership and expertise for the sustainable management of shared water resources in the Sahel and contribute to the achievement by the project countries of (access to water and sanitation) plans and targets.

This initiative's adoption of South-South cooperation mechanisms and modalities not only built capacities at national and regional levels, but created a network that can provide constant support and assistance, fostering sustainability of results.

---

#### CONTACT INFORMATION

**Neil Jarvis**  
Section Head, TCAF, IAEA  
n.jarvis@iaea.org



# Addressing Water Pollution and Supporting Water Management in Arab Countries

6 CLEAN WATER AND SANITATION



## Training and collaboration for improved water management in arid to semi-arid areas

### CHALLENGE

Water scarcity, drought and salinity are among the most challenging environmental constraints facing people and their livelihoods in arid and semi-arid regions of the world. Most Arab countries who are party to the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology (ARASIA) are located in arid to semi-arid areas, where water availability is limited and water resources are mostly groundwater.

Groundwater is often hidden deep in aquifers, permeable rocks and sediment and is extracted using pumping wells. Often, aquifers can be renewable water resources, slowly replenished by rainfall infiltration over hundreds up to many thousands of years. A growing global population, coupled with more intensive agriculture and increasing industrial use, have led to an ever-rising demand for groundwater. Added to this in the ARASIA region are threats emanating from seawater intrusion which exacerbates the deterioration of groundwater quality and threatens this vulnerable water resource.

Most Arab countries can suffer from severe water shortages over several years. This is characterized by small quantities of rainfall and high evaporation rates from surface water bodies. This challenge is expected to be more serious in the future because of environmental and climatic changes, which will create long dry seasons, most lasting for several years.

The dependence on limited groundwater resources in countries of ARASIA is a major challenge that can be addressed by better understanding the water origin and size of the freshwater aquifers and their interaction with surface water. With water consumption rising as populations expand, and in some areas, uncontrolled pollution and unregulated water use, in addition to the effects of climate change which has been affecting rainfall and

### PROJECT NAME

Addressing Water Pollution and Supporting Water Management in Arab Countries

### NOMINATED BY

International Atomic Energy Agency (IAEA)

### COUNTRIES/REGIONS/TERRITORIES

Iraq, Jordan, Kuwait, Lebanon, Saudi Arabia, Syria, the United Arab Emirates, Yemen, Oman, Qatar

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

6.3

### SUPPORTED BY

IAEA Technical Cooperation Fund

### IMPLEMENTING ENTITIES

IAEA

### PROJECT STATUS

Completed

### PROJECT PERIOD

2014 – 2022

### LINK

<https://bit.ly/3zxWzHz>  
<https://bit.ly/3JzUq2X>





evapotranspiration in aquifer recharge areas, building water and soil management capacities is essential to secure the lives and livelihoods of people in ARASIA.

## TOWARDS A SOLUTION

Two consecutive regional IAEA technical cooperation projects helped Arab countries in the Asia and Pacific region (ARASIA) improve the management of groundwater resources. These were the Using Environmental Isotopes and Natural Radioactivity in the Assessment of Ground Water Quality and the Assessing Water Resources Pollution by Using Chemical and Environmental Isotope Techniques projects. The projects enhanced national capabilities of participating ARASIA countries to develop programmes for quality assessment of groundwater resources. This was done through training to improve the understanding of groundwater dynamics in selected areas in the region. The projects contributing to the attainment of SDG 6.3 (improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials).

The regional projects were implemented through close coordination between national counterparts, technical officers and an IAEA Programme Management Officer. More than 27 capacity-building activities under the two projects were undertaken, as well as procurement of specific equipment to enhance infrastructure related to water management. Participants came from Iraq, Jordan, Kuwait, Lebanon, Saudi Arabia, Syria, Oman, Qatar, the United Arab Emirates and Yemen, and were supported by experts from the IAEA and external experts. The training built and/or strengthened capacities in the use of chemical, radio isotope and stable isotopic techniques for the assessment and monitoring of groundwater quality, including identifying sources of contamination, such as saline intrusion and naturally-occurring levels of radioactivity.

The project countries collaborated to gather historical data from groundwater wells in selected study areas, conducted sampling at selected sites, performed chemical and radioactive content analysis, analysed environmental isotopes and interpreted data. The countries networked and collaborated to share national knowledge and technical capabilities for the integrated management of their water resources.

The project was implemented within the framework of a regional agreement supported by the IAEA that promotes sharing of knowledge and expertise, networking and collaboration among countries, the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology. Regional technical cooperation projects are highly effective channels for the transfer of knowledge and expertise among countries and help to address common challenges in a region. ARASIA countries shared detailed reports of their national fieldwork and knowledge to build on achievements of these collaborative projects.

Thanks to this collaborative approach, it was possible to establish a database of chemical and radioactive isotopes in water in the region, which contributed to the determination of the age and recharge mechanism of water from groundwater wells. The findings of the projects provided data for informed decision-making, namely in Jordan and Syria, as well as providing an evidence base for informed resource management decisions that would enhance sustainable, integrated management of the region's water resources. The national investigations in participating member states generated data and information that will be available as the basis for policy-making in groundwater resources management. The importance of information dissemination was recognized, and this was effectively implemented by most of the member states in the form of scientific publications and presentations at international scientific conferences and symposia.

These projects presented the opportunity for member states to benefit from the technical infrastructure of other ARASIA members to assess water quality and improve their water management programmes. This experience in South-South cooperation, gained through these and similar projects, enhanced human resource capacity and expertise and improved infrastructural capabilities for improved management of water resources in the region and boosted the ability to recommend to policymakers suitable remedial actions if needed.

---

## CONTACT INFORMATION

### Linda Eid

Programme Management Officer, Technical Cooperation Division for Asia and the Pacific, IAEA  
l.eid@iaea.org

# Small Hydropower in Nepal

7 AFFORDABLE AND CLEAN ENERGY



## Capacity building and technology innovation to support this sustainable energy source in Nepal and other South Asian countries

### CHALLENGE

Nepal, a mountainous land-locked country, is one of the world's least developed countries, with a GDP per capita of US\$ 956 and GDP growth rate of 8.5 percent in 2020.<sup>1</sup> The country has abundant hydro resources and small hydropower (SHP) has become the main source of power generation for rural electrification in the country. Small hydropower technology is robust and can have a life of almost 50 years with low maintenance costs.

Nepal has the potential to develop more SHP projects, but small hydropower plants in Nepal do not last long. A lack of skills and training, technological innovation and systematic regulation, including policy guidance and technical standards, are challenges for sustainable development of SHP in Nepal.

The local SHP industry requires, firstly, capacity building on small hydropower technology and management; secondly, technology transfer on safety production and equipment optimized technology, especially abrasion-cavitation protection technology for hydraulic machinery; and thirdly, establishment of a complete technical standard system for small hydropower.

### TOWARDS A SOLUTION

Supported by the Global South-South Development Center Project (GSSDC) and implemented by the International Center on Small Hydro Power (ICSHP) (the latter being a public, non-profit institution under the auspices of the United Nations Industrial Development Organization, China's Ministry of Water Resources and Ministry of Commerce), this project was initiated to develop appropriate green SHP mechanisms so that Nepalese stakeholders could learn about the relevance of innovative technology. This was to promote inclusive and sustainable growth, in accordance with the Sustainable Development Goals.



#### PROJECT NAME

Small Hydropower in Nepal

#### NOMINATED BY

China International Centre for Economic and Technical Exchanges (CICETE)

#### COUNTRIES/REGIONS/TERRITORIES

China, Nepal

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

7.a, 7.b, 9.5, 9.b

#### SUPPORTED BY

Global South-South Development Center Project (GSSDC), International Network on Small Hydro Power of China, Nepal Academy of Science and Technology

#### IMPLEMENTING ENTITIES

International Center on Small Hydro Power (ICSHP)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

July 2019 – December 2021

<sup>1</sup> <https://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/524/index.html>



Project activities included joint research and pilot demonstrations of relevant technologies and standard systems for clean and sustainable SHP. The project enhanced awareness to improve SHP management and technology in Nepal and helped remove obstacles to SHP technology transfer.

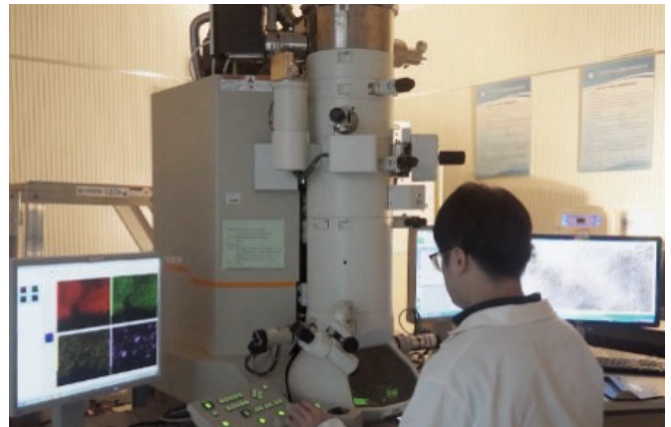
During implementation, ICSHP cooperated closely with the local implementing counterpart, the Nepal Academy of Science and Technology. ICSHP organized a team of professionals who supported the daily management, evaluation and coordination of the project. Meanwhile, the Nepal Academy of Science and Technology identified professionals and experts for collaboration with ICSHP to ensure a comprehensive understanding of the conditions, needs and specific focus areas to guarantee the success of the project.

Project activities included personnel visits, site investigations, training, seminars, on-the-job training, standards compilations and joint scientific research activities. Beneficiaries were government officials, SHP experts, professional technicians, private owners and college students. The capacity building provided to the Nepalese counterparts was to ensure the sustainability of the project as advancing in-country skills will aid in the long-term development of SHP in Nepal.

Specifically, a three-day training workshop on Small Hydropower Technology was held in Katmandu for 35 local hydropower management staff and technicians. A two-day virtual Technical Training Workshop on Small Hydropower was organized to cope with the suspension of international travel caused by the global COVID-19 pandemic, attended online by over 30 local stakeholders, including engineers, technicians and college students. Some of the training courses on key technologies were video recorded to strengthen capacity building for local stakeholders.

A potential site for a small hydropower plant was selected to carry out a feasibility study for demonstration of innovative technologies locally and even for extensive application nation-wide in Nepal. The key technology of thermal spraying abrasion-cavitation protection coating for small hydropower was introduced in Nepal through the project as a technology transfer.

A notable innovative approach of the project was the establishment of a Joint Research Center for Small Hydropower Technology in Nepal. This platform will allow long-term cooperation between Nepal and China on high-level scientific research to enhance the scientific innovative capacity of small hydropower in both countries. Through the Joint Research Center, problems can be solved, barriers removed and practitioners can stay informed on small hydropower knowledge and innovative technologies. The Joint Research Center will undertake capacity building activities, such as personnel exchanges, training workshops, technical seminars and exchange visits for technicians.



The Joint Research Center is considered fundamental for the long-term sustainability of the development of small hydropower, not only in Nepal but also around the southern Asian region. Since other southern Asian countries are facing similar barriers in developing small hydropower, this project can be introduced and replicated effectively in these countries through South-South technology transfer and bilateral technical cooperation.

It is hoped similar collaborations can be continued in the future in neighbouring countries both for development of the conventional small hydropower industry and also for the promotion of more ecologically sound small hydropower by utilizing Chinese experiences and achievements in this sector. Countries in this region will be invited to participate in the International Standard on Small Hydro Power, which is led by ICSHP, for knowledge sharing and practical guidance on the further development of small hydropower.

#### CONTACT INFORMATION

**Qiu Dale**  
Programme Officer, ICSHP  
dlqiu@icshp.org



# Hydropower Development Planning for South Asian Countries

7 AFFORDABLE AND CLEAN ENERGY



## Development planning and off-grid demonstration projects to develop clean energy

### CHALLENGE

With the rapid economic development of South Asian countries, power supplies are often insufficient and are no longer meeting the needs of production and consumption, constraining further socioeconomic development. Meeting energy needs is a regional challenge. A high dependence on fossil fuels has negative impacts on the ecological environment and affects climate change, leading to disasters such as drought, soil erosion, flooding, etc. South Asian countries have abundant water resources, but competent expertise in integrated hydropower planning and management and off-grid power generation technologies are insufficient.

Throughout the world, an increasing focus is being put on developing clean energy, including hydropower, to achieve the goal of accessing affordable, reliable and sustainable energy and to mitigate climate change caused by the heavy dependence on fossil fuels. Hydropower development on rivers can help regulate and improve the integrated management of water resources, accelerate the efficient and rational development and utilization of green hydro-energy and protect the ecological environment, thus promoting the sustainable social and economic development of countries.

However, hydropower development involves not only the technical expertise of hydropower exploitation itself, such as geological and hydrological investigation, hydropower plant design and construction, energy distribution, etc., but also entails comprehensive and often multi-state requirements related to water utilization, water supply, irrigation, shipping, fisheries, ecological protection, etc.



### PROJECT NAME

Hydropower Development Planning for South Asian Countries

### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

### COUNTRIES/REGIONS/TERRITORIES

Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka, China

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

7.1, 7.A, 13.1, 13.3, 13.b, 17.6, 17.9, 17.16

### SUPPORTED BY

Perez-Guerrero Trust Fund (PGTF)

### IMPLEMENTING ENTITIES

National Research Institute for Rural Electrification, Ministry of Water Resources, China; Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power (HRC)

### PROJECT STATUS

Completed

### PROJECT PERIOD

April 2016 – November 2019

### LINK

[www.hrcshp.org/en/new/2017/201704251.html](http://www.hrcshp.org/en/new/2017/201704251.html)





## TOWARDS A SOLUTION

To tackle the complex technical and political issues related to the development of hydropower, Nepal and other South Asian countries recognized the need to deepen international cooperation. Funded by the Perez-Guerrero Trust Fund (PGTF) for South-South cooperation, the Hydropower Development Planning for South Asian Countries project improved conceptual awareness and capacity building for the development planning of hydropower resources in the South Asian region. The project facilitated technology transfer and promoted the accessing of remote communities with electricity to achieve SDG 7 (affordable and clean energy), SDG 13 (climate action) and SDG 17 (partnerships for the goals).

Project strategies included promoting bilateral and multilateral cooperation between China and South Asian countries, technology and information exchange, research and development, project demonstration and database creation. The project began by ensuring stakeholder buy-in through knowledge development, exchange and drawing up formal agreements. In 2017, a three-day seminar on “Hydropower Development Planning for South Asian Countries” was held in Kathmandu, Nepal, attended by 24 officials from Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka. The seminar included technical lectures, power station visits and cooperation talks. A cooperative resolution and memorandum of understanding were signed with the Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power (HRC) and participating partners to enhance R&D collaboration, share hydropower data resources and to help policymakers in countries facilitate hydropower development, especially through off-grid projects.

Following this groundwork, two off-grid demonstration hydropower plants were built and became operational in 2019, the Tara Khola plant (2×190kW) in Nepal and the Rangar-II plant (2×225kW) in Pakistan. The building of the off-grid demonstration projects effectively resolved local power shortages in the areas. For instance, the installed power capacity has been increased from 50kW to about 430kW in Nepal. A database (using QGIS software) was established on small hydropower and rural electrification in India, Nepal, Pakistan and Sri Lanka.

To ensure the stability and reliability of the off-grid small hydropower systems, a specially developed High-Pressure Unit was adopted for quick response of the turbine-generator set regulation, which is innovative. Moreover, the linkage of the High-Pressure Unit and the Electronic Load Controller system is low cost, simple, reliable and highly replicable. The database will support South Asian countries to carry out hydropower development planning and deepen cooperation, thus sustaining hydropower development in the region. The project received strong support from the Ministry of Energy and the Ministry of Science and Technology of Nepal, the Chinese Embassy in Nepal and other South Asian authorities, resulting in good social responses, further boosting its sustainability and replicability in the region.



The project’s methodology of promoting mutually beneficial cooperation and knowledge sharing among stakeholders as a first step, followed by technology transfer, demonstration sites and data collection, to promote hydropower development is applicable to the entire South Asia region and can be applicable to other regions of the world as well.

### CONTACT INFORMATION

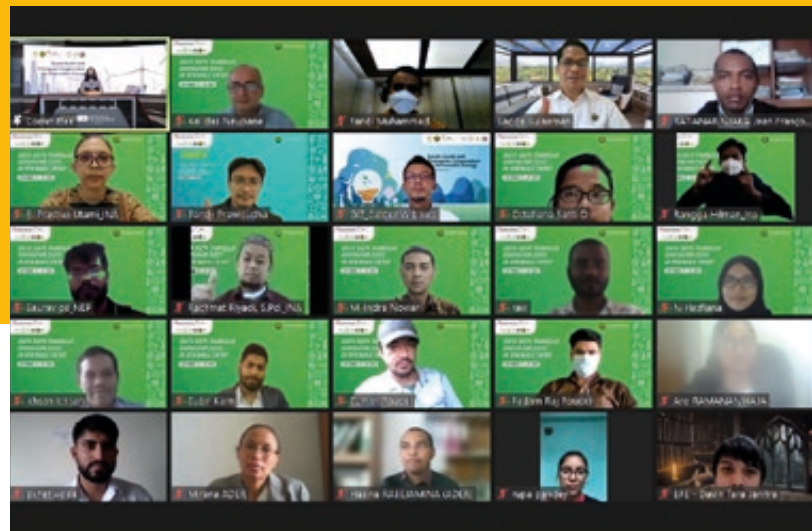
#### Lin Ning

Chief of Division of Foreign Affairs and Training of HRC  
National Research Institute for Rural Electrification, Ministry of Water Resources of China /Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power  
nlin@hrcshp.org /jshi@hrcshp.org  
WeChat: frank-linning /sdrshi



# South-South and Triangular Cooperation in Renewable Energy

7 AFFORDABLE AND CLEAN ENERGY



## Indonesian leadership in strengthening collaboration to meet renewable energy needs in the region

### CHALLENGE

With rising global energy consumption, the potential for renewable energy is of interest for countries around the world as not only can it help meet energy needs for social and economic development, but it is an effective tool for mitigating the effects of climate change. However, many countries, particularly in the global South, lack sufficient technology and resources for renewable energy development.

The need for renewable energy sources will keep increasing in the coming decades as the imperative to reduce greenhouse gas emissions intensifies. Therefore, it is important that countries focus on investing in and planning for renewable energy development. To achieve this, countries of the global South need to establish partnerships with each other and the North that benefit all parties by improving renewable energy. Such cooperation is required to achieve many of the Sustainable Development Goals (SDGs), in particular SDG 7 (affordable and clean energy) and SDG 17 (partnership for the goals).

### TOWARDS A SOLUTION

Indonesia is an important player in South-South cooperation, contributing to international development through various means. One of them is by conducting capacity-building programmes for fellow developing countries to facilitate meaningful knowledge and experience exchanges. Indonesia implements numerous capacity-building programmes in fields such as renewable energy, climate change, agriculture, health and gender equality. In the field of renewable energy, Indonesia often partners with the German development cooperation agency GIZ as Germany puts renewable energy high on its global development agenda and renewable energy is a key concern in its official development cooperation.

#### PROJECT NAME

South-South and Triangular Cooperation in Renewable Energy

#### NOMINATED BY

Ministry of State Secretariat, Indonesia

#### COUNTRIES/REGIONS/TERRITORIES

Germany, Indonesia, Madagascar and Nepal

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

7.2, 17.9, 17.16

#### SUPPORTED BY

Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)

#### IMPLEMENTING ENTITIES

Ministry of State Secretariat and Ministry of Energy and Mineral Resources, Indonesia

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2021 – 2023



The South-South and Triangular Cooperation in Renewable Energy (SSTC RE) initiative is a joint Indonesian-German project that strengthens country capacities for policy planning for implementation of the 2030 Agenda in Indonesia and other countries of the global South. The initiative is designed to create and strengthen cross-country partnerships for renewable energy development through knowledge and experience sharing and understanding how to utilize triangular cooperation in the sector.

The initiative is implemented in close coordination with the National Coordination Team of South-South Cooperation of Indonesia. Activities are covering strategic areas on renewable energy, such as mini-grid, off-grid and renewable energy utilization for non-electricity fields, along with cross-cutting approaches, including public-private partnerships and mainstreaming gender in renewable energy, which is in line with the spirit of Leaving No One Behind in the 2030 Agenda.

In 2021, two renewable energy knowledge sharing activities took place (virtually due to COVID-19 travel restrictions), with 51 attendees in the first round and 33 returning for the second round (of whom 23 in total were women), from Indonesia, Madagascar and Nepal. At these virtual conferences, speakers from the energy sector and country representatives shared knowledge and experiences in harnessing renewable energy in their countries, identified challenges and discussed good practices and innovations. Participants provided feedback and suggestions to improve the initiative going forward.

This first phase of the initiative enabled participants to identify potential areas of collaboration, learn from each other, discuss innovations and potentially identify and implement best practices to improve renewable energy in their home countries. The goal is for countries to establish more and deeper partnerships that can lead to concrete results in renewable energy development. The initiative is expected to continue to conduct training and build strong partnerships among participants in the field of renewable energy.

---

#### CONTACT INFORMATION

**Noviyanti**

Head of Bureau for Foreign Technical Cooperation, Ministry of State Secretariat, Indonesia  
ktsst@setneg.go.id



# Production of Eco Charcoal Briquettes

7 AFFORDABLE AND CLEAN ENERGY



## Promoting alternative clean energy to preserve human health and protect the environment in Tanzania

### CHALLENGE

Universal access to clean and modern cooking fuels and technology is an integral element of ensuring that the broader aims of SDG 7.1 (affordable and clean energy) are achieved by 2030.

Eighty percent of the population of the United Republic of Tanzania depend on wood for cooking due to its affordability, accessibility and versatility. While wood fuel is a low-cost option for cooking, it has negative health affects (lungs, skin and eyes) and environmental impacts, such as air pollution, deforestation and land degradation. Tanzania has lost about a quarter of its vegetation due to deforestation due to cooking activities and developmental deforestation.

### TOWARDS A SOLUTION

To address this challenge, the Turkish Cooperation and Coordination Agency (TİKA) implemented the Production of Eco Charcoal Briquettes initiative to support the United Republic of Tanzania in transitioning to energy-efficient practices. The initiative's main purpose is to create an alternative to burning wood for cooking by introducing eco charcoal briquettes made of trash and agricultural waste as an affordable, sustainable and clean energy option. This will help prevent deforestation and air pollution, thus contributing to climate action. Moreover, the initiative tackles unemployment, especially of the most vulnerable, such as youth, single mothers, widows and differently-abled persons, who now work as garbage collectors and eco charcoal briquette sellers.

To initiate the work, TİKA worked closely with local authorities to conduct an effective public awareness campaign explaining the benefits of eco charcoal briquettes over wood burning through public demonstrations, workshops, seminars, community meetings and door to door campaigns.

#### PROJECT NAME

Production of Eco Charcoal Briquettes

#### NOMINATED BY

Turkish Cooperation and Coordination Agency (TİKA)

#### COUNTRIES/REGIONS/TERRITORIES

United Republic of Tanzania, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

7.a, 13.3

#### SUPPORTED BY

TİKA

#### IMPLEMENTING ENTITIES

Ilala Municipal Council, Jitegemee Maarifa Group Mbuyuni

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

June 2021 – December 2021





TİKA set up two eco charcoal briquettes workshops in partnership with Jitegemee Maarifa Group Mbuyuni, a local non-governmental organization, under the Ilala Municipal Council. Over 100 of the organization's members were trained as trainers by the council on the importance of using eco charcoal briquettes, how to use the equipment and make eco charcoal briquettes, create a brand name, implement a marketing strategy and manage a workshop. After the training programme, these trainers went door to door to train other community members in Ilala and Temeke Districts to expand the outreach and ensure the project's sustainability. As the project areas have limited resources, project participants were provided with eco charcoal briquette cookers to make the briquettes and eco charcoal briquettes were made available to households to try out the new technology.

Since the implementation of the project in 2021, 1,000 people have been trained by the trainers and 500 households have already switched to eco charcoal briquettes due to their affordability and durability. It is anticipated that another 2,500 people will be trained and switch to eco charcoal briquettes in the next three years.

Turning household waste into eco charcoal briquettes was a challenge, as it is a major task to change people's mindset from a traditional method that they have been using for so many years to a new method. However, through this project, the target communities learned the importance of preserving the environment and how to collect and separate garbage and convert it into eco charcoal briquettes. Beneficiaries have started to see garbage from a different perspective, as not just something to dispose of but to treat it as a valuable asset and resource for energy production and income generation.

Currently, there is a high demand for eco charcoal briquettes in Tanzania due to its affordability and durability as urban and rural communities are necessarily transitioning from traditional charcoal use to alternative sources of fuel for cooking. It is projected that the impacts of the project are likely to grow over the years since the government is putting restrictions on cutting trees to make charcoal, giving incentives to government institutions, businesses and households to use alternative sources, such as eco charcoal briquettes.

As the project progressed, the major challenge was to change people's mindset from a traditional method that they have been doing for so many years to a new method. The best way to overcome this challenge was not only to train people, but also providing them with free necessary tools i.e., special eco charcoal briquettes cooker and eco charcoal briquettes for them to try in their households.

Because of the positive results and impacts that this pilot project generated in the field, the project's lessons learned and knowledge will be shared with other TİKA programme coordination offices in neighbouring countries so that they can adapt and scale up this good practice. This practice is easily adaptable as it requires only simple equipment, short-term on-the-job training and the project's raw materials are household and agricultural waste, which can be collected daily at little cost.



#### CONTACT INFORMATION

Strategy Development Department, TİKA  
sgdb@tika.gov.tr



# Barefoot College Sierra Leone

7 AFFORDABLE AND  
CLEAN ENERGY



## An exemplary model in affordable energy generation for resource-constrained countries

### CHALLENGE

Among the poorest countries in the world, Sierra Leone has struggled from a decades long civil war, the Ebola epidemic, the COVID-19 pandemic, natural disasters and global adversities caused by climate change. The country is challenged on every developmental front, and its acute energy shortage is a serious difficulty. Lack of access to reliable and affordable energy impedes the country from developmental progress (including promotion of industries, employment creation, facilitation of education and health services, etc.) and the high cost of fuel imports drains the economy.

Though the government and development partners have attempted to adopt aggressive planning measures to address energy issues, the country continues to encounter many obstacles in the technical, economic, social, environmental and political spheres. Within these existing constraints, a cost effective, manageable and local resource-based energy solution is urgently needed. and UNIDO intervened in 2012 to address the challenge by strengthening Barefoot College with an innovative business model.

### TOWARDS A SOLUTION

In response to the urgent need for energy access and mass employment in Sierra Leone, in 2012 the United Nations Industrial Development Organization (UNIDO), under the Ministry of Energy of the Government of Sierra Leone, began supporting the Barefoot Women Solar Energy Association, now better known as the Barefoot College. This falls under UNIDO's role as a key implementing partner for the government's flagship programme of rural electrification through solar energy. While the Barefoot concept originated in 1972 in India, and over 50 such projects were initiated around the world, the Barefoot College under the Ministry of Energy in Sierra Leone has been exemplary and recognized globally.



#### PROJECT NAME

Barefoot College Sierra Leone

#### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

#### COUNTRIES/REGIONS/TERRITORIES

Austria, China, Ghana, Guinea, India, Liberia, Mali, Sierra Leone, South Africa

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 5.b., 4.a.1, 7.1, 9.2

#### SUPPORTED BY

UNIDO, Sunshine Fellowship Austria, Ministry of Energy of Sierra Leone, Barefoot India

#### IMPLEMENTING ENTITIES

UNIDO

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2012 – Ongoing

#### LINK

[www.youtube.com/watch?v=3i4tVuEZxmE&t=5s](https://www.youtube.com/watch?v=3i4tVuEZxmE&t=5s)



The model consists of three elements: (i) utilizing South-South and triangular cooperation principles that emphasize local resources and capabilities; (ii) engaging multiple projects and partners; and (iii) collaboration that assures successful and incremental business reforms, performing purposeful demonstrations for smooth transitions and attaining visible and sustainable transformation results.

Prior to the Barefoot College being formally registered in 2010 in Sierra Leone, some of the organization's women members were trained on solar PV assembly by Barefoot India (2008 to 2010) and even earlier, from 2002-2005, the Sunshine Fellowship in Austria trained the women on entrepreneurship. The project initially struggled to operate due to limited funding. UNIDO joined the project in 2012 with an innovative business model that first generated funds to kick-start activities and generate working capital. UNIDO involvement helped broaden its networks and add capacity building and entrepreneurial activities, including marketing and promotional activities. UNIDO provided ICT and audio-visual equipment (computers, laptops, printers, television sets, DVD players, internet modems and extra view DSTV receivers) and supplied fans and deep freezers for retailing of beverages and water at the Barefoot College as a means of generating extra income.

Over a decade, the Barefoot College has been creating opportunities for rural people, primarily illiterate women, while establishing sustainable businesses and bringing electricity to the countryside, including to hospitals, health centres and schools across Sierra Leone. Today, in addition to solar PV system training, the college trains students in ICT, greenhouse technologies, soapmaking, tailoring, woodworking, upholstery, welding and steel work. Further entrepreneurship activities, like a bakery, computer and printing services, repair services and community farming, have enhanced the school's ability to generate resources.

Employing South-South cooperation methods, the project enlisted India and China to provide knowledge and expertise on solar PV technologies to the Barefoot College. These countries helped strengthen business expansion, together with other supporting partners. Over the years, the Barefoot College has received researchers from Ghana and India and has hosted exchange visits from Ghana, Guinea, Mali and South Africa. The College's expertise has been shared with other African countries through conferences. Neighbouring Liberia has benefited from group training and neighbouring Guinea assisted with project execution.

The Barefoot College has contributed significantly to improved energy policies in Sierra Leone, with strategies being adopted that include electrifying rural health centres and schools with solar power, increasing the renewable energy portion of the total country energy mix and removing taxes on solar PV imports.

The Barefoot College in Sierra Leone is a South-South and Triangular cooperation model that has been field-tested, is cost-effective and



strongly supports the 2030 Agenda. This ongoing initiative contributes to the sustainable development agenda 2030 through several SDGs, in particular addressing: SDG 7.1 (ensure universal access to affordable, reliable and modern energy services) by promoting solar photovoltaic (PV) systems for energy generation; SDG 1 (no poverty) through the creation of thousands of job opportunities, increasing rural incomes and improving livelihoods; SDG 3 (good health and well-being) by electrifying hundreds of rural health and maternity centres; SDG 4 (quality education), by providing solar power to hundreds of schools; SDG 5 (gender equality) by promoting women's social and economic empowerment and livelihoods through training, workshops and entrepreneurship; and SDG 9 (industry, innovation and infrastructure) by creating a support structure for micro enterprises and services throughout the country and creating thousands of employment opportunities.

Based on the model of multiple projects and multiple partnering, Barefoot College Sierra Leone has grown much bigger than its initial phase, adding to the sustainability of the initiative. Like-minded partners, in addition to UNIDO, Barefoot India and Sunshine Fellowship Austria, have included the United Nations Development Programme (UNDP), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Office for Project Services (UNOPS), the World Bank, the European Union and others, and have allowed the initiative to garner alternative sources of income and support. The multiple project, multiple partner strategy makes the initiative highly resilient to challenges, such as paucity of resources, political interference, disasters and the latest being the COVID-19 pandemic.

Developing countries that wish to accelerate clean and renewable energy access and catch up technologically, narrowing global energy divides, have learned from Sierra Leone's experience and can continue to exchange and grow from this ongoing project.

#### CONTACT INFORMATION

**Rana Pratap Singh**  
Industrial Development Officer, UNIDO  
r.p.singh@unido.org





# Global Network of Regional Sustainable Energy Centres for Small Island Developing States

7 AFFORDABLE AND CLEAN ENERGY



## Promoting sustainable energy and circular economy solutions “from the region for the region”

### CHALLENGE

Successful strategies of small island developing states (SIDS) to cope with emergencies, such as climate change, oil price fluctuations and most recently the COVID-19 health and economic crises, require a rapid diversification to new sectors, industrial upgrading and leapfrogging to circular economy and sustainable energy solutions. However, by looking at the moderate growth rates of sustainable energy product and service markets in SIDS, it becomes obvious that SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure) and SDG 13 (climate action) cannot be attained by 2030 in business-as-usual scenarios.

The deployment of renewable energy and energy efficiency solutions remains hindered by a broad range of demand and supply-side barriers, including policy and regulation, qualification, knowledge management, investment and business promotion. Regionally, energy transition efforts tend to remain uncoordinated between SIDS, and common barriers and opportunities are not addressed jointly for the benefit of all. Duplication, fragmentation and lack of agenda-setting in regions leads to inefficient use of international funding. Moreover, in several SIDS, the inability of the domestic private sector to supply quality sustainable energy products and services is an issue for the long-term sustainability of the energy transition. Equipment and expertise remains imported from outside and the local value creation in terms of jobs and income generation remains low. Moreover, internationally supplied renewable energy systems are not maintained due to the absence of local business models and energy companies.



### PROJECT NAME

Global Network of Regional Sustainable Energy Centres for Small Island Developing States

### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

### COUNTRIES/REGIONS/TERRITORIES

Antigua and Barbuda, Bahamas, Bahrain, Barbados, Belize, Cabo Verde, Comoros, Dominica, Dominican Republic, Fiji, Grenada, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Marshall Islands, Federated States of Micronesia, Mauritius, Nauru, Palau, Papua New Guinea, Samoa, São Tomé and Príncipe, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Solomon Islands, Suriname, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

7.1, 7.2, 7.3, 7.a, 7.b, 9.1, 9.2, 9.4, 9a, 13.2, 13.3, 13.b

### SUPPORTED BY

UNIDO, Austria, Norway, Spain

### IMPLEMENTING ENTITIES

UNIDO, Economic Community of West African States (ECOWAS), Southern African Development Community (SADC), Economic Community of Central African States (ECCAS), Caribbean Community (CARICOM), Pacific Community (SPC), Small Island Sustainable Energy and Climate Resilience Organisation (SIDS DOCK)

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

2010 – Ongoing

### LINK

[www.gn-sec.net](http://www.gn-sec.net), [www.ccreee.org](http://www.ccreee.org), [www.sicreee.org](http://www.sicreee.org), [www.pcreee.org](http://www.pcreee.org), [www.ecreee.org](http://www.ecreee.org), [www.sacreee.org](http://www.sacreee.org), [www.cereeeac.org](http://www.cereeeac.org), [www.rcreee.org](http://www.rcreee.org), [www.sidsdock.org](http://www.sidsdock.org)





## TOWARDS A SOLUTION

To make regional cooperation on energy and climate a priority, the United Nations Industrial Development Organization (UNIDO), working in partnership with various regional economic communities (listed above in the Metadata section) and through initial seed funding from the Austrian Government, launched the Global Network of Regional Sustainable Energy Centres (GN-SEC) programme. Since 2010, UNIDO has been assisting the member states of regional bodies to establish and operate regional sustainable energy centres to promote energy and climate transitions that are “from the region for the region.”

The GN-SEC centres address barriers to development of sustainable energy product and service markets by supporting economies of scales, equal progress and encouraging joint cooperation between countries. Using cross-border approaches and methodologies, the centres complement and accelerate national efforts in the areas of policy, regulation, standards, qualification, knowledge and facilitation of investment and entrepreneurship. Moreover, they serve as knowledge resource facilities and provide advice to Member States on how best to manage transitions towards sustainable energy.

The network has particularly reached out to small island developing states (SIDS) and is currently covering 34 of the world’s 38 SIDS. The creation of the network was announced for the first time as a Samoa Pathway Partnership<sup>1</sup> by UNIDO and the Small Island Sustainable Energy and Climate Resilience Organization (SIDS DOCK) on the margins of the Third International Conference on Small Island Developing States, held in September 2014 in Apia, Samoa. The network contributes to implementation of the UNIDO SIDS Strategy (2019-2025), adopted by the UNIDO General Conference in 2019.

The institutions that have been established to serve SIDS include the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) in Barbados, the SICA Centre for Renewable Energy and Energy Efficiency (SICREEE) in El Salvador, the Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE) in Tonga, the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in Cape Verde, the Regional Centre for Renewable Energy and Energy Efficiency for Arab States (RCREEE) in Egypt, the Southern African Centre for Renewable Energy and Energy Efficiency (SACREEE) in Namibia and the Central African Centre for Renewable Energy and Energy Efficiency (CEREAC) in Angola.

Under the GN-SEC platform, UNIDO facilitates SIDS-SIDS and triangular cooperation on sustainable energy and circular economy issues and adapted island solutions. There is a lot to learn from each other and plenty of opportunities for the replication of adapted island solutions. Some of the centres have achieved remarkable progress, to the benefit of SIDS. For example, PCREEE and CCREEE have developed regional policy frameworks on electric mobility for the Caribbean and Pacific

and provide implementation support for national actions. To decouple industrial development from fossil fuel import dependency and greenhouse gas emissions, most of the SIDS are heading towards smart and integrated power systems that combine renewable energy, battery storage, electric mobility and innovative digital business models.

Another example is the CARICOM Energy Knowledge Hub, which was established by CCREEE and is the first GIS based regional sustainable energy information system. This hub provides data “from the region for the region.” Moreover, CCREEE is supporting energy ministries and utilities in developing Integrated Resources and Resilience Plans, which are taking climate change impacts and cross-sectoral interlinkages better into account. To support Member States, project promoters and financiers to achieve bankability of projects, CCREEE established a dedicated Project Preparation Facility.

In support of young local cleantech start-ups and entrepreneurs, PCREEE established a dedicated sustainable energy entrepreneurship facility. ECREEE has formulated an internationally unique regional policy for gender mainstreaming in the sustainable energy sector, which is approved by ECOWAS governments and is currently being implemented via national action plans, including in Cabo Verde and Guinea Bissau.

In 2021, UNIDO and SIDS DOCK, in partnership with the GN-SEC centres covering SIDS, launched the Online Capacity Building Program on Sustainable Energy Solutions for Islands. Composed of nine modules, the online training programme offers in-depth knowledge and practical exams on the following energy issues and technologies: solar photovoltaics, solar thermal, ocean energy, bioenergy, energy efficiency and thermal optimization in buildings, mini-grids, energy storage, e-mobility and climate change. The courses are free-of-charge and island experts can participate either through self-learning or guided training. Currently, the programme is available in English, Portuguese and Spanish. The course also applies a train-the-trainer approach, which helps national institutes to incorporate the tool into their curricula and contributes to the sustainability of the initiative.

---

### CONTACT INFORMATION

#### **Martin Lugmayr**

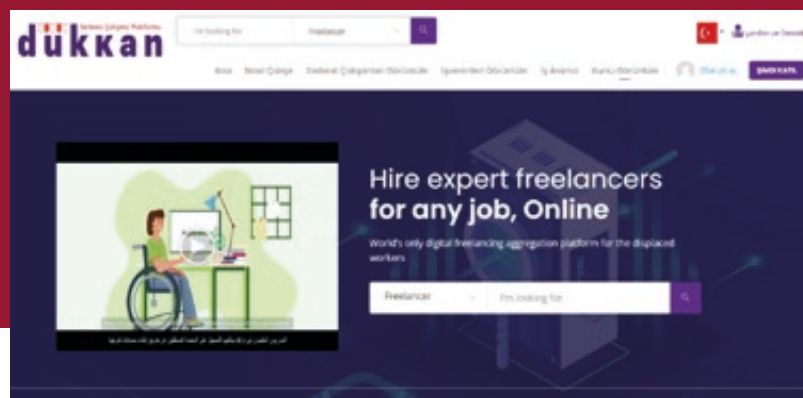
Sustainable Energy Expert / GN-SEC Coordinator, Department of Energy, Energy Systems and Infrastructure Division, UNIDO  
m.lugmayr@unido.org

1 <https://sustainabledevelopment.un.org/partnership/?p=7639>  
<https://sustainabledevelopment.un.org/partnership/?p=7504>



# The Dukkan Freelance Platform for IT Workers

8 DECENT WORK AND ECONOMIC GROWTH



## Replicating e-commerce innovation in Bangladesh to assist Syrian refugees in Türkiye

### CHALLENGE

Syrian refugees living in Türkiye encounter many livelihood challenges as a result of their relocation to a new country. One of the main challenges is the social tension between Syrian refugees and the host Turkish community is competition over job opportunities. Secondly, the skills that Syrian refugees have often do not match the needs of the job market because of the language barrier, lack of documentation and requirement for a work permit. The Covid-19 pandemic and related shrinking economy made the conditions even harsher for Syrian refugees in Türkiye seeking decent livelihood opportunities.

### TOWARDS A SOLUTION

To develop an efficient ecosystem for the e-commerce industry, the government of Bangladesh established the world's first integrated and assisted rural e-commerce platform. Called ekShop, this platform gathered all major national e-commerce players and brought them to the country's "last mile" by integrating them into a single platform. This is creating and facilitating digital livelihood opportunities for disadvantaged groups with basic and advanced computer skills. This initiative helps achieve SDG 8 (decent work and economic growth).

Urban and rural merchants are able to connect and collaborate with effective e-commerce and logistics players to facilitate shipment and with the potential for global escalation. ekShop utilizes union-level delivery points to penetrate hard-to-access areas and government and human resources to create a decentralized supply chain. It enables sellers by offering a single point of entry to all e-commerce platforms. ekShop also leverages ESCROW, a financial arrangement to temporarily hold money for a transaction before the transaction has been finalized to ensure maximum security for an e-commerce transaction.

### PROJECT NAME

The Dukkan Freelance Platform for IT Workers

### NOMINATED BY

United Nations Development Programme (UNDP) Türkiye

### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, Türkiye

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 8.3, 8.5, 8.6, 8.9, 10.1, 10.2, 10.4

### SUPPORTED BY

UNDP Türkiye, UNDP Crisis Bureau, UNDP Bangladesh Aspire to Innovate (a2i) Programme, Government of People's Republic of Bangladesh

### IMPLEMENTING ENTITIES

UNDP

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

January 2022 – March 2023

### LINK

<https://dukkkan.work/>



By democratizing access to markets and financing, ekShop boosts disadvantaged entrepreneurs by taking a previously complex and expensive service and making it free and much more convenient. ekShop's aggregated online marketplace has allowed small businesses, mom-and-pop stores and the ubiquitous *mudir doka*n (small grocery stores, typically offering fast-moving consumer goods, like snacks and lifestyle products) to enter the growing e-commerce sector.

The ekShop model has received much international recognition, including the 2020 WSIS (World Summit on the Information Society) champion award, 2019 AICTA (The Asia Pacific ICT Alliance Awards), United Nations facility fund competition in 2019, and BRH (Bangkok Regional Hub) catalytic fund winner in 2020. ekShop is seen as the logistic backbone of the e-commerce industry in Bangladesh.

After observing the success and impact of the ekShop initiative in Bangladesh, UNDP Türkiye approached UNDP Bangladesh to create a similar platform based on the model in Türkiye for Syrian refugees using the local word *dukkan*, which means "shop." Dukkan is a platform for freelance workers targeting Syrian refugees that have ICT skills. Many Syrian refugees are university graduates and have ICT skills and many non-governmental organizations in Türkiye organize ICT courses for refugees, thus the number of Syrian refugees in Türkiye who can perform as freelancers is relatively high.

The platform's main aim is to match Syrian refugee freelancer profiles with demand from outside of Türkiye, mainly Bangladesh and Arabic-speaking countries. To achieving this purpose, outreach was conducted to reach Syrians with ICT skills while UNDP Türkiye and UNDP Bangladesh established relations with the private sector, the platform's candidate clients.

A media outreach campaign advertises Dukkan and its promise for the private sector in Arabic-speaking countries. As of writing, 97 freelancers and 14 clients are registered on the platform and many others await registration. Projects submitted on the platform have been delivered with high success rates.

With Dukkan, Syrian refugees in Türkiye can find job opportunities from anywhere in the world. Since the platform targets mainly Arabic-speaking customers, this solution helps prevent social tension between refugees and the host community. Importantly, freelancers can adopt anytime as their working hours, hence, disadvantaged groups, such as single parents, women and individuals with a disability, can earn an income by freelancing using the platform.

The Dukkan platform is easily replicable and can be adapted to different languages and situations. Establishing relationships with the private sector in target countries is vital to the platform's success.

---

## CONTACT INFORMATION

### Ece Beyazit

Project Associate, UNDP  
ece.beyazit@undp.org  
+90 312 454 1100

### Asad-Uz-Zaman

Strategy and Innovation Specialist, a2i Programme  
asad.zaman@a2i.gov.bd  
+880 1712092922



## Virtual job and skills platform for real-time data-based policy planning to mitigate unemployment in Somalia

### CHALLENGE

Somalia is home to the youngest population in Africa. 81.5 percent of the population is under the age of 35, with a youth unemployment rate (14 to 29) of 67 percent—one of the highest rates in the world. Women, internally displaced persons (IDPs) and returnees are the most vulnerable communities impacted by the COVID-19 pandemic, according to [recent research](#) published by the Raagsan Policy Center. In addition, in Somalia, the informal economy dominates and recruiting and hiring practices are not transparent. The Somalia National Development Plan explicitly emphasizes “sustainable, inclusive growth through the digital economy.” Yet, prior to this project, intelligence platforms did not exist in the country to connect young people and other vulnerable populations with skills providers, job providers, academia and policymakers.

Digital platforms can be extremely helpful in addressing the challenges of inequality and stigma by breaking down barriers to obtaining employment, especially those that youth and vulnerable groups face. In the context of the COVID-19 pandemic, with widespread adoption of work-from-home set ups and greater acceptance of virtual work and communications, a digital platform for skills seekers, job seekers and private sector engagement would allow Somalia to have a more resilient social economic response to some of the above challenges.

Such digital platforms help achieve the Sustainable Development Goals, specifically SDG 8 (decent work and economic growth), including 8.5 (full employment and decent work with equal pay) and 8.6 (promote youth employment, education and training) and SDG 4 (quality education).



### PROJECT NAME

Shaqo Abuur

### NOMINATED BY

United Nations Development Programme (UNDP) Somalia, Ministry of Communications and Technology (MoCT), Somalia

### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, Federal Republic of Somalia

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

4.3, 4.4, 4.5, 8.5, 8.6

### SUPPORTED BY

UNDP Chief Digital Office (CDO) and Aspire to Innovate (a2i) Programme Bangladesh, South-South Network for Public Service Innovation

### IMPLEMENTING ENTITIES

MOCT Somalia, UNDP Somalia

### PROJECT STATUS

Completed

### PROJECT PERIOD

May 2021 – October 2021

### LINK

<http://shaqoabuur.net/>  
<https://digitalx.undp.org/>





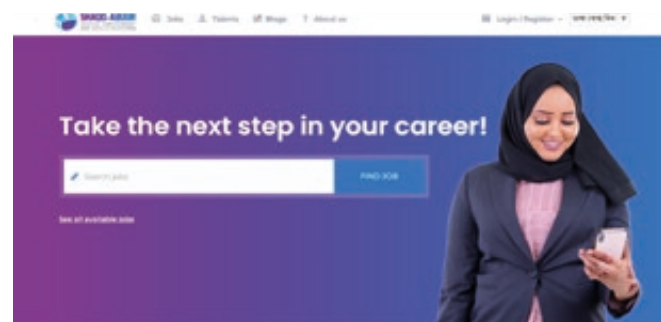
## TOWARDS A SOLUTION

Somalia and Bangladesh share similar contexts in youth unemployment with two million youth joining the labour force each year. To address these similar problems in Bangladesh, a recent government initiative, the National Intelligence for Skills, Education, Employment and Entrepreneurship (NISE), is a matchmaking platform for unemployed youth, skills service providers (public and private) and industries to minimize the supply-demand gap by facilitating market-driven skills development and offering increased access to decent work opportunities. For youth, NISE offers self-assessment, career counselling and guidance, information on occupation-based skills and the ability to apply online for courses, jobs and apprenticeships. For the skills service providers, the platform helps manage course enrollment mentors and monitors their skills development activities online. They may also obtain labour market information and forecasting of emerging job demands to identify market-driven occupations and establish industry linkages. For employers, NISE helps with advertising job vacancies targeting the right audience, attracting skilled youth and building up a supply-demand relationship with the skills providers so that information can be shared among them on emerging job opportunities, skilled human resources and market-driven skills. For decisionmakers, the NISE platform generates real-time data to help with data-driven planning and decision-making to address supply and demand gaps.

This platform in Bangladesh has made a significant contribution to mitigating youth unemployment and been acclaimed both nationally and globally. In 2020, NISE received the world's most prestigious ICT award called the World Summit on the Information Society (WSIS) Prize in the e-employment category by the International Telecommunication Union (ITU). It was declared a best practice by the UNDP Chief Digital Office (CDO), also in 2020 (<https://digitalx.undp.org/>).

Having seen the impacts of the NISE platform in Bangladesh and its prospects, the United Nations Development Programme (UNDP) in Somalia, in collaboration with the Ministry of Communications and Technology (MOCT) of Somalia, approached Bangladesh to customize the platform for Somalia's context. To do this, the UNDP Chief Digital Office programme Digital X provided technical support and the a2i programme from Bangladesh shared knowledge and technical support. The name of the platform was localized to Shaqo Abuur, meaning "youth employment service." The Shaqo Abuur platform was launched at the World Congress on Information Technology (WCIT) in 2021 in Dhaka, Bangladesh, by the Minister for Communications and Technology of Somalia and the State Minister of Bangladesh.

The first of its kind in Somalia, the digital platform is successfully connecting young Somali job seekers, job sites, training institutions, government, industries and academia with data intelligence and analytics. Shaqo Abuur creates a marketplace for youth and private sector companies and even reaches those in the regional and international diaspora interested in accessing the value-for-money Somali market of highly skilled professionals. The platform's data-driven approach



helps adapt and focus the growing number of IT and engineering training efforts to be more market-driven and builds a foundation for securing professional pathways for young Somalis going into digital jobs. Importantly, it addresses skills mismatches in the labour market, thus mitigating the country's unemployment challenges. When youth are equipped with appropriate skills and training, they can secure decent and gainful employment, receive pay equal to their skillsets and ensure skilled and safe migration.

The platform has been identified by other southern countries for replication in their country's context. For instance, UNDP Jordan, in collaboration with the Ministry of Digital Economy and Entrepreneurship in Jordan, is currently adopting the NISE platform to the national context with technical support from the UNDP Crisis Bureau.

### CONTACT INFORMATION

#### Sherif Eltokali

Innovation Specialist, Accelerator Lab, UNDP Somalia  
sherif.el.tokali@undp.org and  
+20 1000771085

#### Asad-Uz-Zaman

Strategy and Innovation Specialist, a2i Programme  
asad.zaman@a2i.gov.bd  
+880 1712092922

# China-Africa Business Council

8 DECENT WORK AND  
ECONOMIC GROWTH



## Converting a United Nations project into a long-standing public-private platform for South-South and triangular cooperation

### CHALLENGE

After China's Reform and Opening Up process, the country experienced fast growth and development. Throughout this process, China forged a comprehensive strategic relationship with the African continent and today China and Africa have a deep friendship.

In 2004, then Secretary-General of the United Nations, Kofi Annan, visited China and saw first-hand the achievements under the "West China Development Policy." The Secretary-General proposed the establishment of a China-Africa Business Council, which would focus on facilitating Sino-Africa cooperation, promote private Chinese investment in African countries and facilitate sustainable development through economic collaboration and South-South and triangular cooperation.

Despite being the least developed continent, Africa presents immense economic development prospects. Attracting the right foreign investment into the right sectors, thus, has the potential to boost Africa's job creation and economic growth.

### TOWARDS A SOLUTION

The China-Africa Business Council (CABC) project was jointly established by the United Nations Development Programme (UNDP), China International Center for Economic and Technical Exchanges (CICETE) and the Guangcai Program. The China-Africa Business Council functions as a specialized and internationalized platform to facilitate China-Africa economic and trade cooperation, promote private Chinese investment in Africa and serve as a model for China-Africa South-South cooperation.

After six years (2005-2011) of sponsorship from UNDP and UNOSSC, the council converted itself into a marketing-based chamber of commerce, dedicated to assisting the Chinese private sector seek opportunities in African



### PROJECT NAME

China-Africa Business Council

### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

### COUNTRIES/REGIONS/TERRITORIES

China and all 54 countries in Africa

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 8.3, 8.9, 9.1, 9.2, 9.3, 9.4, 9.8, 17.3, 17.10, 17.18

### SUPPORTED BY

UNDP, the United Nations Office for South-South Cooperation (UNOSSC), CICETE, Global South-South Development Center Project

### IMPLEMENTING ENTITIES

China-Africa Business Council

### PROJECT STATUS

Completed

### PROJECT PERIOD

2005 – 2011 (project ended, but SSTC continues)

### LINK

<http://en.cabc.org.cn/>



countries. This public-private partnership under a South-South cooperation framework contributes to many Sustainable Development Goals (SDGs), particularly SDG 8 (decent work and economic growth), SDG 17 (partnership for the goals) and SDG 9 (industry, innovation and infrastructure).

As of February 2022, CABC had over 2,000 business and service company members, covering 54 countries in terms of trading and 45 African countries in terms of investment. In total, member company accumulated investment exceeds US\$ 16 billion, created a total of 110,000 local jobs and has generated over 1.6 million direct and indirect local employment places.

CABC has grown from a project to an established non-profit organization (chamber of commerce) for business cooperation which has facilitated the private sector's engagement and contribution to South-South and triangular cooperation remarkably. CABC has implemented South-South cooperation projects with 12 institutions from 10 African countries (Ethiopia, Kenya, Liberia, Madagascar, Mauritius, Rwanda, Senegal, South Africa, Tanzania and Zambia). For example, CABC implemented the Promoting the Africa's Broadcast Television Dubbing Skills Project in Tanzania in 2016, the Accessibility of Financial Services and the Private Sector in Africa Project in 2018 and the Proposal for Comprehensive Solutions for City Waste Management in Senegal in 2020.

Cooperation in South-South projects involves research, training programmes and communications in fields such as technology, construction, industrial building, environmental governance, financial services and other public-private partnership projects. CABC harnesses the advanced technologies of Chinese enterprises to boost community economic development in Africa. The fulfilment of Chinese enterprises' social responsibility is closely integrated with South-South cooperation. Member company achievements include providing digital TV services to more than 50 million people (10 million households) in 30 African countries and supplying artemisinin medicines to more than 100 million patients in 22 African countries, anti-malaria mosquito nets to 300 million people in nearly 20 African countries and 400 million mobile phones to more than 300 million people across Africa.

CABC was established at a time when much of the cooperation between China and African countries was government-to-government relations. Investment projects at that time were often hand-picked and mostly engaged state-owned enterprises. Thus, the CABC was initiated to create a more sustainable path for investment, facilitating more private companies to invest in Africa, led by real market interest. The fact that CABC went on to become a self-funded membership-based chamber and has continued to grow steadily and attract the 2,000 companies taking part today is evidence that this model is not only successful, but also extremely sustainable in the long run.



Going forward, CABC plans to stay true to its original principles of China-Africa cooperation and is dedicated to helping African countries achieve the SDGs and to supporting a business community that is based on a shared future for mankind.

#### CONTACT INFORMATION

##### Xiaofeng Bai

Executive Deputy Secretary General, China-Africa Business Council  
baixiaofeng@cabc.org.cn





# Tourism for Women's Development in Uzbekistan



## Improving sustainability and equity in the tourism sector through Sino-Uzbekistan experience-sharing and capacity building

### CHALLENGE

In the past three decades Uzbekistan, a landlocked developing country, has experienced significant population growth, while facing persistent problems with high unemployment, gender inequalities in the labour market and slow economic development.

Employment in the informal economy accounts for 49.4 percent of the labour force. Youth and women face particular difficulties in achieving well-paid work. Statistics from an International Labour Organization report show that in 2018 youth employment in Uzbekistan was almost double the overall rate and the ratio of women's wages to men's wages was 64.8 percent. The country has had significant out-migration since 2009, with 2.6 million Uzbekistani nationals currently working abroad. Thus, the country has a pressing need to develop greater employment opportunities, particularly within the formal sector.

As a crossroads of the ancient Silk Road, Uzbekistan has a rich cultural heritage and many historical sites. Thus, the tourism sector in Uzbekistan has significant potential for promoting widespread employment and economic growth.

### TOWARDS A SOLUTION

Tourism has been a source of equitable employment in many countries, with statistics from the World Tourism Organization showing that women account for 54 percent of tourism workers, with a smaller gender wage gap than other industries and a greater number of women in leadership roles. Tourism, therefore, can play a greater role in addressing unemployment and gender inequality problems and drive socioeconomic growth in Uzbekistan.

#### PROJECT NAME

Tourism for Women's Development in Uzbekistan

#### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

#### COUNTRIES/REGIONS/TERRITORIES

China, Uzbekistan

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.2, 1.a-b, 1.4, 5.1, 5.5, 5.a-c, 8.2, 8.3, 8.5, 8.9, 10.1, 10.3, 11.4, 12.9

#### SUPPORTED BY

Global South-South Development Centre Project, the Ministry of Tourism and Sports of the Republic of Uzbekistan, the Tourism Development Institute of Uzbekistan and the Agency for Cultural Heritage of Uzbekistan, Uzbekistan Committee on Women and Gender Equality, Uzbekistan State Tax Committee, the Green & Smart Energy Organization (GSEO)

#### IMPLEMENTING ENTITIES

Chongqing Training Center for International Cooperation (CTCIC)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

September 2020 – December 2021

#### LINK

<https://bit.ly/3Ah49lf>





The China-Uzbekistan Tourism Promotes Poverty Reduction, Employment and Women's Development in Uzbekistan project supported growth of sustainable forms of tourism in Uzbekistan. The Chongqing Training Center for International Cooperation (CTCIC) from China coordinated project operations and managed the formulation and implementation of project activities. The Ministry of Tourism and Sports of the Republic of Uzbekistan, the Tourism Development Institute of Uzbekistan and the Agency for Cultural Heritage of Uzbekistan acted as partners and focal points for project activities in the country. Various other Chinese and international organizations and institutions, such as the National Cultural Heritage Administration of China, the Central Academy of Culture and Tourism Administration of China, the China Foundation for Cultural Heritage Conservation, the World Tourism Alliance, Peking University and the Beijing Palace Museum, provided support and contributed to the project's successful implementation.

A high-profile group of Chinese experts participated in and supervised the project activities, offering feasible solutions, exchanging professional knowledge and ensuring valuable contributions on the matters of poverty alleviation, gender equality promotion and economic growth for the beneficiary parties. Beginning with analysis of a questionnaire answered by 53 senior representatives of Uzbekistan's tourism industry, the expert team identified the main challenges, opportunities and weaknesses for further development in the tourism sector. Building on this analysis, the expert team published 13 reports and conducted 21 demand-oriented online capacity-building training sessions with a total attendance of 620 officials, experts and tourism professionals from Uzbekistan. Topics covered during the training included measures to improve visitor experiences, how to create new jobs in museums and cultural heritage sites, digitalization to raise the skill level of tourism workers and driving public engagement in historic sites. In-depth experience sharing took place from community-based tourism projects, discussing how to achieve positive impacts on female and rural employment and economic development.

The project concluded with the hosting of an international symposium "Cultural Heritage Preservation and Tourism Promotion in Uzbekistan: From Theory to Action," which gathered more than 20 top experts and 300 attendees from China, Uzbekistan and neighbouring countries to share the results of the project activities, promote concrete actions to drive investment in selected Uzbekistan cultural heritage sites and promote the widespread use of advanced cultural heritage preservation and management techniques as a catalyst for employment creation, poverty alleviation and sustainable tourism development. Participants included experts from prestigious institutions and organizations, including the Uzbekistan Academy of Sciences, Silk Road International University of Tourism and Cultural Heritage, Tsinghua University, Peking University, Northwestern University (China) and the Palace Museum.

The project significantly contributed to enhancing Sino-Uzbekistan exchange and dialogue, establishing a stable and long-lasting cooperation mechanism that will continue to produce beneficial and meaningful results and paved the way for further actions on sustainable tourism



development, poverty reduction, gender equality and economic growth in both countries. In recognition of the project's contributions towards China-Uzbekistan cooperation in tourism development, poverty reduction, employment and women's development, three members of the expert team were appointed as honorary advisors to Uzbekistan's Tourism Development Institute.

Beyond the project, a permanent onsite working team was established in Tashkent, Uzbekistan, to maintain direct contact with the project team and the Chinese experts to assist with carrying out further actions over the medium and long-term. With their cooperation and based on the capacity building workshops conducted during the project, the Tourism Development Institute held a further series of six training activities on-site in Uzbekistan, which imparted skills to 823 participants. Based on the business and professional skills developed during these sessions, 105 people from seven villages of the Qashqadaryo Region, 53 of whom were women, successfully opened ten guest houses catering to tourists. Tourism managers learned from the anti-epidemic measures adopted at scenic spots across China to better manage the safe re-opening of destinations in Uzbekistan.

Largely conducted online owing to COVID-19 pandemic travel restrictions, the meetings, training workshops and symposiums organized under the project framework demonstrated a new model for international cooperation and a successful and replicable example of South-South collaboration. While focused specifically on cooperation in cultural heritage and tourism, the collaboration methods adopted by the Chinese and Uzbekistan experts to jointly analyze local conditions and conduct appropriate training sessions will be highly relevant for future international projects in many fields.

## CONTACT INFORMATION

**Jiang Yan**  
Administrative Assistant, CTCIC  
lauren@igseo.org  
+86 23 61 24 4990

# Training Plan for Popularizing Automobile Maintenance Technology

8 DECENT WORK AND ECONOMIC GROWTH



## Improving automobile industry after-sales service in developing countries

### CHALLENGE

In recent years, market competition in the automobile industry in developing countries is becoming increasingly fierce. Automobile users not only have higher demands for the performance of automobiles, but also have increasingly refined requirements for automobile after-sales service. Moreover, the dependence on and demand for automobiles in many countries has increased significantly, leading to the need for rapid and precision automobile maintenance.

However, many developing countries lack up-to-date technical knowledge, ability and experience with vehicle repair and technicians often do not understand the working principle and repair points of new energy vehicles.

To promote the sustainable development of the automobile industry and economic growth in developing countries, updated vocational skills training in automobile manufacturing and maintenance is urgently needed. Through mutual learning, experience sharing and transfer of technical knowledge the competitiveness of local automotive industries can be enhanced. In particular, effective automobile maintenance skills training can support job creation and increase individual incomes, especially for young people.

Technological exchange and cooperation can accelerate technological transformation and the progress of existing enterprises, thereby decreasing technology gaps between developing and developed countries, forming more open and harmonious competition patterns and increasing employment opportunities in participating countries.



### PROJECT NAME

Training Plan for Popularizing Automobile Maintenance Technology

### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

### COUNTRIES/REGIONS/TERRITORIES

China, Colombia, Democratic Republic of the Congo, South Africa, United Arab Emirates

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 9.2

### SUPPORTED BY

China South-South Development Center Project

### IMPLEMENTING ENTITIES

Jiangxi Association for International Economic Cooperation, in partnership with Jiangxi Jiangling Motors Import and Export Co. Ltd. (JMI)

### PROJECT STATUS

Completed

### PROJECT PERIOD

October 2010 – October 2013



## TOWARDS A SOLUTION

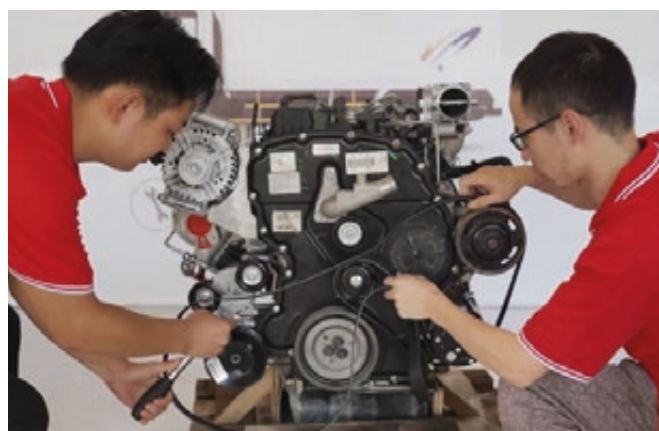
The project “Training Plan for Popularizing the Automobile Maintenance Technology,” implemented by the Jiangxi Association for International Economic Cooperation and led by Chinese automobile manufacturer JMC, enhanced mutual technical exchanges and cooperation between China and developing countries (Angola, Bangladesh, Columbia, the Democratic Republic of the Congo, Ecuador, Egypt, Lao PDR, Peru, Philippines, South Africa, United Arab Emirates and Viet Nam). This was done through automobile technical training and support and service management training. This South-South project enabled participating countries to fill in technical and management gaps and improve the levels of national automobile manufacturing and vehicle after-sales service.

As one of the largest enterprises in China’s commercial vehicle industry (and all industries in China), JMC has extensive theoretical knowledge and rich experience with auto repair and service. The Jiangxi Association for International Economic Cooperation, with its experience in cooperation initiatives, forged contacts and exchanges with various international and domestic non-governmental organizations and enterprises. The methodology used in this project was to first prepare and compile needs-based automobile repair technology training materials according to the situation and reality of the beneficiary countries, including parts catalogues, repair manuals, warranty manuals and typical fault teaching materials. This was followed by vehicle technical training for automobile technicians and after-sales service managers in the beneficiary countries, using a Training of Trainers model. JMC dispatched three or more experts to beneficiary countries, delivering automobile maintenance technology training to hundreds of local technicians in 13 countries.

For continuous improvement in automotive repair skills and service in project countries and to boost the sustainability of the initiative, starting in 2012, JMC moved the technical training online. 28 online training sessions were held, reaching more than 150 trainees. To improve the quality and effectiveness of the online training, JMC produced a number of video training courses, including introduction to the use of special diagnostic instruments for automobile maintenance, disassembly and assembly demonstration of a diesel engine, fault diagnosis guidance of vehicle electrical systems, repair ideas of typical fault cases, and others.

Generally speaking, the capabilities in vehicle repair technology and service improved in the project countries. Trainees transferred the new knowledge into practical operations of local technical units, laying a solid foundation for further localized training of automobile repair and service teams.

This is a replicable project as the project methodology and implementation plan can be implemented in automobile service industries in other developing countries, and the training contents and methods can be adjusted according to the specific needs of each country.



### CONTACT INFORMATION

#### Sun Jiangjiang

Chairperson, Jiangxi Association for International Economic Cooperation  
879561471@qq.com  
+86 13627084581



# Capacity Building in Cultural Statistics for the Visibility of Uruguay's Cultural and Creative Industries



## Colombia's contribution to the visibility of cultural and creative industries in Uruguay

### CHALLENGE

In Uruguay, since the 1990s, efforts have been made to measure the contribution of culture in terms of production and employment. Three important studies have been carried out on this subject, in 2009, 2012 and most recently in 2019. These measurement efforts have deepened the knowledge of Uruguay's cultural and creative sectors.

However, these studies were partial, and the country does not have a complete timeline of information for all sectors. This remains a challenge as the information is scattered across different offices and agents that work in Uruguay's cultural and creative industries. Therefore, Uruguay has a need to update and systematize information on the contribution of cultural and creative industries (CCI) to national employment and GDP in the country.

### TOWARDS A SOLUTION

The Capacity Building in Cultural Statistics for the Visibility of Uruguay's Cultural and Creative Industries initiative seeks to share the knowledge of the Colombian Cultural Information System to improve the methodology for measuring and analyzing economic indicators of cultural and creative industries in Uruguay that have had international recognition since 2013. Colombia had previously completed a similar knowledge transfer process with Costa Rica as part of its South-South cooperation activities and projects.

In 2021, the Ministry of Education and Culture of Uruguay requested that the Ministry of Culture of Colombia also share this good practice with their country to help Uruguay determine the true impact of cultural and creative industries on GDP. This work is in pursuit of SDG 8 (decent work and economic growth and SDG 5 (gender equality).

#### PROJECT NAME

Capacity Building in Cultural Statistics for the Visibility of Uruguay's Cultural and Creative Industries

#### NOMINATED BY

Government of Colombia

#### COUNTRIES/REGIONS/TERRITORIES

Colombia, Uruguay

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.5, 8.3

#### SUPPORTED BY

Ministry of Culture of Colombia

#### IMPLEMENTING ENTITIES

Ministry of Education and Culture of Uruguay

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

November 2021 – April 2023

#### LINK

<https://bit.ly/3Q5tYjQ>  
<https://bit.ly/3zHtoll>



The initiative is being carried out through virtual meetings with representatives of Colombia's cultural and creative government institutions sharing their data collection methodologies with Uruguay, particularly touching on statistical models used to calculate income generation and methodologies for measuring the value generated by the audiovisual, performing arts and phonographic sectors. It is expected that in 2022, the initiative will measure the impact of cultural and creative industries on the country's foreign trade. Uruguayan technical staff have been supported to prepare a work plan to improve the methodology currently used in the country.

This is a great opportunity for knowledge transfer and exchange of experiences, and is being done in such a way that the model from Colombia is being adapted and improved according to the needs and challenges of Uruguay. The quantification of the value generated from culture and the "orange" economy is a relatively new concept in the region. Having a successful model in the region to follow is allowing Uruguay to direct its policies in an efficient way to encourage the productive growth of the cultural and creative economy.

The initiative can be sustainable in the long term should (following positive results) the practice be institutionalized, which would continually demonstrate the value of the sector and give relevance to this type of measurement. By promoting women's inclusion in the sector, greater participation can be ensured, which would generate more employment, adding even more importance to measuring the sector's economic contributions.

This initiative can be adapted to other productive sectors and fields. Clear differentiation of the various population groups active in a productive sector, such as women and the LGTBQ+ community, can help improve the understanding of the economic performance of the sector. A proposed suggestion of this initiative is to form an inter-institutional work strategy for satellite accounting of the cultural and creative economy in Uruguay.



#### CONTACT INFORMATION

**Juan Felipe Parra**

Information and Knowledge Team Leader, Ministry of Culture of Colombia  
[jparrao@mincultura.gov.co](mailto:jparrao@mincultura.gov.co)



# Strengthening the Capacities of Aviation Professionals in Paraguay

8 DECENT WORK AND ECONOMIC GROWTH



## Sharing the expertise of the Republic of Korea and Brazil in the field of aircraft maintenance to meet national and sustainable development goals

### CHALLENGE

The Paraguayan government has specified the transportation sector as a major development task in its 2030 National Development Plan. Development in the transportation sector, particularly the aviation segment, is urgently needed for intraregional exchanges and the transportation of people and goods in Paraguay. One specific area for improvement is large aircraft maintenance, repair and overhaul (MRO), which is a labour-intensive and high value-added industry.

The absence of a national full-service carrier signals that the aviation industry is underdeveloped in Paraguay and that there is a shortage of decent work in the aviation industry. This, along with a low domestic demand, means that the foundation of the aviation industry is weak. Moreover, as the aviation competitiveness of neighbouring countries, such as Bolivia, improves, the competitiveness of Paraguay's aviation industry is further weakened and is highly dependent on the stability of neighbouring countries' economies. Due to these circumstances, Paraguay's aviation industry and the training of professionals to sustain it are part of the government's national development plan.

### TOWARDS A SOLUTION

To address this challenge, the Korea International Cooperation Agency (KOICA) designed a triangular cooperation project titled "Strengthening the Capacity of Aviation Professionals in Paraguay" together with the National Service of Industrial Learning (SENAI) of Brazil and the National Directorate of Civil Aeronautics of Paraguay (DINAC) (the beneficiary partner). The objective is to foster an aviation industry workforce and increase economic productivity in the aviation industry in Paraguay. This includes the establishment of an instruction system for aviation workers and improvement of aviation safety. KOICA, which benefits from Korea's comparative advantage in large aircraft maintenance, repair and overhaul (MRO), offers financial support, plays a

#### PROJECT NAME

Strengthening the Capacities of Aviation Professionals in Paraguay

#### NOMINATED BY

Korea International Cooperation Agency (KOICA)

#### COUNTRIES/REGIONS/TERRITORIES

Brazil, Paraguay, Republic of Korea

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 8.3, 9.b

#### SUPPORTED BY

KOICA; National Service of Industrial Learning (SENAI), Brazil

#### IMPLEMENTING ENTITIES

KOICA, SENAI

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

February 2021 – February 2023

#### LINK

<https://bit.ly/3BKb9OR>  
<https://bit.ly/3BOtIXI>



facilitating role, dispatches experts and does monitoring and management in general. The National Service of Industrial Learning (SENAI) of Brazil, which brings expertise in small aircraft MRO and is the only educational institution approved to provide education and training to the Brazilian Air Force, provides instruction to the National Directorate of Civil Aeronautics of Paraguay (DINAC). DINAC gave administrative support for selecting and dispatching personnel to participate in the SENAI aviation maintenance instructor training course. Meanwhile, SENAI developed appropriate training materials for DINAC, arranged on-site activities, provided training materials and shared part of the training budget. These important comparative advantages of the implementing partners combine to ensure the achievement of the project goals.

To initiate the project, KOICA conducted a feasibility study to assess the triangular project and its partners' qualifications. After SENAI completed its preparations for the training courses, six Paraguayan aviation maintenance personnel were selected and over a year period successfully finished three modules (practical training on conventional engines, reaction engine training and training on airframes) to build more national expertise in aircraft MRO as instructors. Even though the SENAI training has concluded, each party is committed to continue the triangular cooperation on a regular basis until February 2023, with SENAI planning to develop more modules for Paraguayan aircraft MRO personnel.

The Project Implementation Unit meets on a regular basis with selected appropriate personnel from each party to increase ownership and allow close consultation. By sharing the progress of each step of the project through these regular briefing sessions, issues and challenges can be responded to appropriately and a smooth cooperative system is being maintained.

This project contributed to the achievement of SDG 8 (decent work and economic growth) and SDG 9 (resilient infrastructure, industrialization and innovation) by strengthening the skills and experiences of Paraguayan aviation maintenance personnel and experts through systematic training.

The sharing between countries of tailored training resources through established and reputable institutions is sustainable and replicable in aviation and other sectors. Once Paraguay's capacity in aviation maintenance is improved, this has the possibility of spilling over to other countries in the region, especially considering the geographical proximity and linguistic similarities.

---

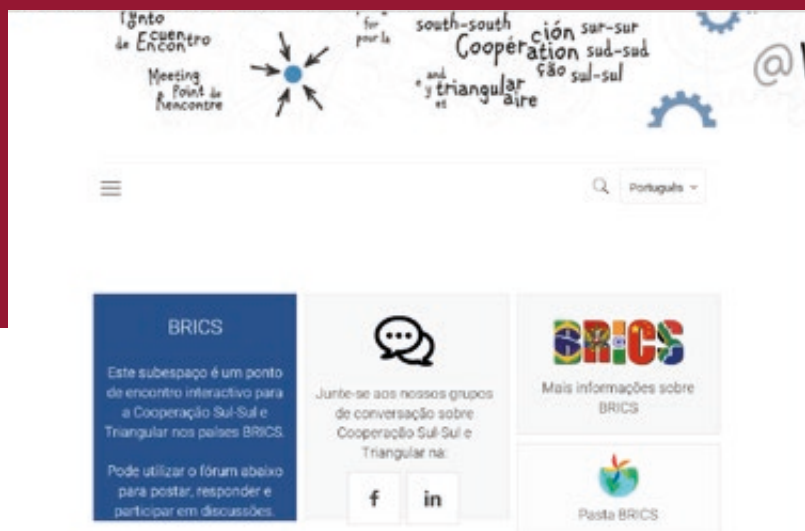
## CONTACT INFORMATION

### Seolri Park

Partnership Officer, KOICA  
shellypark@koica.go.kr

# BRICS Knowledge Series on Transition to the Formal Economy

8 DECENT WORK AND ECONOMIC GROWTH



## South-South cooperation for work formalization in the context of COVID-19

### CHALLENGE

More than 6 in 10 workers and 4 in 5 enterprises in the world operate in the informal economy (ILO).<sup>1</sup> Contrary to forecasts, informality has not diminished over time and is even increasing in many countries. The pandemic has underscored the fact that many women and men in the informal economy need the uninterrupted ability to earn an income to feed themselves and their families, as most of them cannot rely on income replacement or savings in times of shutdown or slowing economies. Not working and staying home for most informal workers means losing their jobs and their livelihoods. “To die from hunger or from the virus” was the all-too-real dilemma faced by many informal economy workers in the context of the COVID-19 pandemic.

### TOWARDS A SOLUTION

To address the above challenges, the International Labour Organization (ILO) developed the BRICS Knowledge Series on Transition to Formal Economy. The series helped participants from BRICS<sup>2</sup> countries (Brazil, Russia, India, China and South Africa) understand the crucial importance of identifying current and future challenges within a broader policy framework that work as a barrier to formalization. Through the series, participants acquired and shared knowledge, including successes and lessons learned during implementation. The series was designed in the follow-up to the Indian Presidency of BRICS in 2021. This is important for this activity, as it was coordinated by the ILO New Delhi office, and it reaffirmed the importance of Indian South-South cooperation in the context of BRICS.

#### PROJECT NAME

BRICS Knowledge Series on Transition to the Formal Economy

#### NOMINATED BY

International Labour Organization, India

#### COUNTRIES/REGIONS/TERRITORIES

Brazil, China, India, South Africa, Russia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.3

#### SUPPORTED BY

ILO HQ (South-South Cooperation contribution through ILO's regular budget contribution to development cooperation), ILO India, ILO China, The Ministry of Human Resources and Social Security of People's Republic of China (MOHRSS), International Training Centre of the ILO (ITCILO)

#### IMPLEMENTING ENTITIES

ITCILO Turin, ILO

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

January 2021 – December 2021

#### LINK

[www.southsouthpoint.net/themes/brics/](http://www.southsouthpoint.net/themes/brics/)

<sup>1</sup> [www.ilo.org/global/topics/employment-promotion/informal-economy/lang-en/index.htm](http://www.ilo.org/global/topics/employment-promotion/informal-economy/lang-en/index.htm)

<sup>2</sup> BRICS is the association five major emerging economies: Brazil, Russia, India, China and South Africa





The past few years have seen active development cooperation between ILO and the governments and private sector from BRICS countries. BRICS countries require and expect capacity building initiatives that are tailored to their country contexts and complement their expertise. Successive BRICS summits have stressed that to implement ILO Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy requires country-specific coordinated actions and capacity building.

This innovative e-learning knowledge series was designed using a learner-centred approach with the objective of involving participants, including members of think tanks, research institutions, tripartite constituents of the ILO (governments, workers and employer organizations), the United Nations system and the South Centre. The six-week training session was highly interactive and used different methods to make the content interesting and relevant, including PowerPoint presentations, moderated discussions, role play and group work. To overcome the challenge posed by the COVID-19 pandemic, the knowledge series adopted virtual methodologies. Over 150 people participated and benefitted from the training.

A series of papers and good practices were prepared by ILO and the consultants working for the programme on formalization of the informal economy in the context of BRICS. The key document, Informality and the potential for south-south cooperation between BRICS, was authored by Santosh Mehrotra, reflecting on the Indian presidency of BRICS in 2021 and the concrete recommendations that could stem from this appointment.

The main recommendations are: 1) arrive at a consensus that informality is a serious enough issue to deserve greater attention; 2) undertake an assessment and diagnostics of informality in BRICS countries and set up a technical group for mutual learning and support in this regard; 3) review and enforce national laws and regulations and other measures to ensure appropriate coverage and protection of all categories of workers and economic units; 4) adopt integrated policy frameworks, included in national development strategies or plans, that facilitate transitions to the formal economy; 5) undertake systematic reviews in respect to Covid-related measures, and how well countries supported informal enterprises and workers; and 6) ILO to prepare a project or programme that supports these activities in BRICS countries.

The involvement of ILO tripartite constituents from all BRICS countries makes the initiative sustainable given the key role they play in policy formulation regarding decent work. The knowledge series will be an annual event, rotating based on the BRICS presidency. In 2023, the knowledge series will be hosted by China.

---

#### CONTACT INFORMATION

**Snehal Soneji**  
Head of EPAP, ITC-ILO  
s.soneji@itcilo.org

**Anita Amorim**  
Head, Emerging and Special Partnerships, ILO  
amorim@ilo.org

# South-South and Triangular Skills Fair



## Knowledge, skills and technology sharing and exchange for participants around the globe

### CHALLENGE

To transition to a digital economy and create opportunities for jobs-rich growth around the world requires the availability of skilled workforces, efficient labour market facilitation and enabling business environments. However, many of the developing world's young people lack the skills most in demand in the digital economy and are unable to access suitable training opportunities and job matching services. Meanwhile, job creation in the private sector is insufficient and decent entrepreneurial opportunities can be hard to find.

The COVID-19 pandemic accelerated the pace of digital transition and its impact on national labour markets. Strengthening recovery processes after the current crisis requires governments, employers and workers to find and create opportunities for innovative approaches to learning and training under a "new normal" scenario.

In Africa, in particular, young people do not lack the capacities and talents to engage with the digital world, but lack access to digital equipment. During COVID-19, this particular challenge became more apparent, with social partners facing challenges adapting to greater virtual reality needs, due to the price of equipment.

### TOWARDS A SOLUTION

Contributing to the global response to this rapid change toward a digital economy, the International Labour Organization (ILO) organized a South-South and Triangular Skills Fair to identify and promote innovative approaches to real-world skills and lifelong learning challenges and build partnerships across the global South with a focus on Africa, the Americas

#### PROJECT NAME

South-South and Triangular Skills Fair

#### NOMINATED BY

International Labour Organization (ILO)

#### COUNTRIES/REGIONS/TERRITORIES

Global

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

4.3, 8.2

#### SUPPORTED BY

ILO HQ, ILO's Inter-American Centre for Knowledge Development in Vocational Training (CINTERFOR), African Union, African Development Bank (AfDB), International Telecommunications Union (ITU)

#### IMPLEMENTING ENTITIES

International Training Centre of the ILO (ITCILO)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

March 2020 – May 2021

#### LINK

[www.ilo.org/skills](http://www.ilo.org/skills)  
[www.southsouthpoint.net](http://www.southsouthpoint.net)

and Arab States. The Virtual Skills Fair enhanced participants' creative capacity to find solutions to the specific development needs of the participating regions.

Given COVID-19 pandemic restrictions, the Skills Fair was necessarily conducted virtually on the V-fairs platform, using Augmented Reality and 3D features. Using the virtual infrastructure, on-line summits were organized with exhibition booths (market fairs, knowledge fairs) for large audiences. Over 1,000 people attended the V-Fair. The virtual format allowed a broad range of participants from around the world to engage with experts and to network around the themes of the forum. To adapt for some sub-regions, due to the need for a basic level of internet connectivity and computer literacy, pre-training sessions were necessary.

The Virtual Skills Fair promoted and strengthened the exchange of experiences, encouraged the pooling, sharing and use of technical and other resources and supported capacity building for partnership negotiation of participant countries and institutions. The Virtual Skills Fair identified innovative solutions for specific skills development challenges exacerbated by the COVID-19 pandemic, such as a skills development simulator created by the Skolkovo Innovation Center of Russia.

The Virtual Skills Fair integrated a Technology Fair, as a contribution to driving innovation, technology development and transfer, especially in overcoming the impact of COVID-19 on skills development. Participants had the opportunity to present innovations and engage and exchange knowledge and experiences directly with others to broaden their networks and build partnerships.

A series of webinars under the Skills Fair highlighted the thematic areas of skills need anticipation, quality apprenticeships and vocational training. Webinars also addressed sectoral approaches to skills development, focusing on agro-processing, agriculture, construction, infrastructure, oil and gas, textile and garments and tourism and hospitality.

The virtual reality and 3D technology used for the Virtual Skills Fair has been positively piloted and can now be brought to scale in the next biennia and replicated in future training. While this fair became virtual due to the sanitary requirements of the global pandemic, the virtual nature of such fairs allows for broader and more cost-effective participation than might be possible with in-real-life events. However, it is important to adapt online events to the varied digital capacities of participants.

As a direct and positive result of the Virtual Skills Fair event, six new partnerships were developed across thematic areas (apprenticeships, the rural economy and competency-based standards) among partners from Brazil, the Democratic Republic of the Congo, India, South Africa, Switzerland, the United Republic of Tanzania and Viet Nam. Additional results included the collection in one location of good practices on skills development with a focus on the Americas, Africa and Arab States.

The South-South and Triangular Skills Fair reaffirmed that partnerships are fundamental to strengthening the capabilities of societies and addressing the skills needed for the future of work.

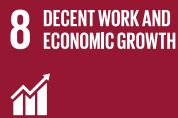
---

## CONTACT INFORMATION

**Snehal Soneji**  
Head of EPAP ITC-ILO  
s.soneji@itcilo.org

**Anita Amorim**  
Head, Emerging and Special Partnerships, ILO  
amorim@ilo.org

# Strengthening the Humanitarian-Development Nexus through Promotion of Decent Work in Refugee and Mixed Migration Contexts



## Cross-regional cooperation on refugee economic integration in Türkiye and Colombia

### CHALLENGE

At the time of the project, Türkiye was hosting the largest number of refugees in the world – four million – for the seventh year in a row. The vast majority, close to 3.6 million, originated from Syria, while 400,000 are Afghans, Iranians and Iraqis. Meanwhile, Colombia was hosting more than 1.7 million refugees and migrants from Venezuela due to the complex socio-economic and political situation in that country.

In the context of COVID-19, many migrant and refugee workers, particularly women, faced even greater difficulties, with increasing unemployment, lack of social protection and worsening working conditions. With refugee populations facing similar challenges, Colombia and Türkiye decided to join forces to improve the status of refugee workers.

### TOWARDS A SOLUTION

To address the challenge, the International Labour Organization (ILO) supported the “Strengthening the Humanitarian-Development Nexus through the Promotion of Decent Work in Refugee and Mixed Migration Contexts” initiative. This initiative provided tripartite partners (governments, workers and employers) from Colombia and Türkiye a platform to exchange knowledge and experiences on how to promote access to decent work for migrants and refugees. Building on the two countries’ experiences receiving large-scale refugee and mixed migratory flows from neighbouring countries, exchanges were facilitated to support efforts to design inclusive labour market policies, with a specific focus on COVID-19 response.

During this exercise, ILO facilitated the assessment of ongoing and past interventions in Türkiye to analyse their replicability and possible improvement in Colombia and vice versa. This was requested by the Government of Colombia, as well as workers and employers in the country. The Turkish participants,

#### PROJECT NAME

Strengthening the Humanitarian-Development Nexus through Promotion of Decent Work in Refugee and Mixed Migration Contexts

#### NOMINATED BY

International Labour Organization (ILO)

#### COUNTRIES/REGIONS/TERRITORIES

Colombia, Türkiye

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.7, 10.3

#### SUPPORTED BY

ILO

#### IMPLEMENTING ENTITIES

ILO Ankara, ILO Colombia, ILO Turin Training Centre

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

March 2020 – June 2021

#### LINK

<https://bit.ly/3bVMHQ5>



in line with the principle of mutual benefit (SSTC, BAPA +40), felt that Türkiye's ILO tripartite constituents could learn from the initiative.

More than 30 tripartite constituents from both countries participated. Three main themes were discussed: 1) labour market governance; 2) inclusive employment policies; and 3) the informal labour market and access to social protection for migrant and refugee workers and host communities.

Capacity development activities were offered through webinars and exchanges among the tripartite partners, with support from the ILO International Training Centre (ITCILO). The virtual webinars used innovative and engaging pedagogical e-moderating methodologies. In discussion sessions, good practices for inclusion of refugees in the labour market were shared, as well as innovative solutions, ranging from registering and formalizing migrants and refugees (for example, with temporary work permits), delivering courses on non-discrimination, language and cultural adaptation, simplifying access to social protection and social security, among other topics.

The initiative supported tripartite partners to adopt development approaches to strengthening the resilience of refugees, migrants and host communities to overcome labour market challenges, while at the same time complementing humanitarian interventions. The good practice promoted the achievement of the 2030 agenda, in particular SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities). Furthermore, it supports the concepts of leaving no one behind and ensuring human rights for all, providing a powerful basis for inclusion.

---

## CONTACT INFORMATION

### **Numan Ozcan**

Director, ILO Ankara  
ozcan@ilo.org

### **Joel Alcocer**

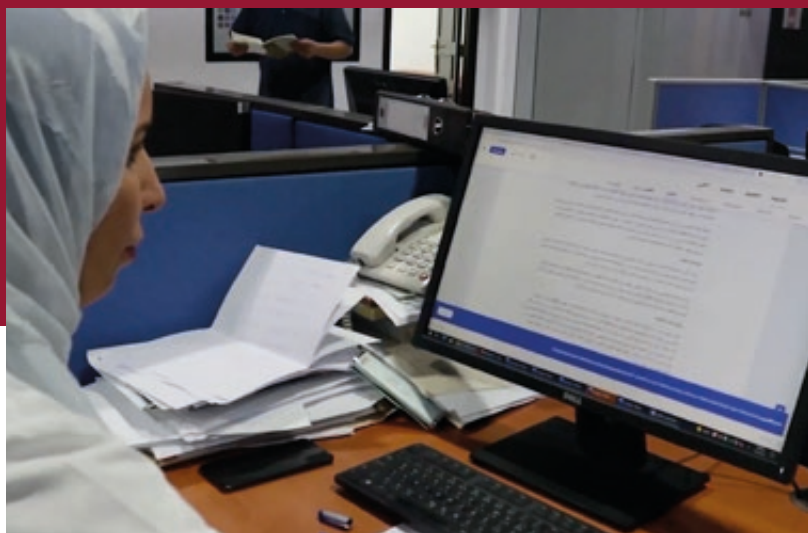
Manager ITCILO Development Investment Programme  
J.Alcocer@itcilo.org

### **Anita Amorim**

Head, Emerging and Special Partnerships, ILO  
amorim@ilo.org

# Fellowship Training Programme on Decent Work

8 DECENT WORK AND ECONOMIC GROWTH



## Building the capacities of journalists in the Arab region to communicate labour-related issues using a human-centred approach

### CHALLENGE

It is rare for Arab media outlets to cover pressing labour-related stories. Issues related to decent work do not receive adequate or in-depth coverage in the region. Journalists who specialize in labour and work issues are scarce. Capacity training in this area is needed to address this thematic gap in media coverage.

### TOWARDS A SOLUTION

ILO developed a fellowship training programme to promote a more robust, comprehensive and human-centred approach to reporting on labour markets and decent work in the Arab region. The programme emphasized cooperation to amplify communication across the region ILO worked collaboratively with academic, policy, civil society and media institutions to implement the fellowship programme.

The programme methodology supported journalists from different countries to share and learn from each other's experiences and adapt good practices. Participants received scholarships to create stories in a variety of formats (in-depth reports, articles, videos and blogs) on labour and decent work issues. The reports produced by the journalists were widely publicized by the ILO Regional Office for Arab States on all communication platforms, thus promoting ILO results to numerous stakeholders.

Twenty-five journalism fellows attended two days of intensive training and peer learning through a workshop conducted by media organizations and supported by an ILO technical specialist. The fellows then passed their knowledge to peers in media organizations in their home countries, positively influencing the journalistic narrative on World of Work issues and multiplying the benefits of the knowledge and experience the fellows gained.

### PROJECT NAME

Fellowship Training Programme on Decent Work

### NOMINATED BY

International Labour Organization (ILO)

### COUNTRIES/REGIONS/TERRITORIES

Iraq, Jordan, Kuwait Lebanon, Saudi Arabia, United Arab Emirates

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.7

### SUPPORTED BY

ILO SSTC regular budget contribution to development cooperation (RBTC) for Arab states

### IMPLEMENTING ENTITIES

ILO Regional Office for Arab States

### PROJECT STATUS

Completed

### PROJECT PERIOD

May 2021 – December 2021

### LINK

<https://bit.ly/3QAN6Gs>



As part of the programme, a panel event titled “Ethics in Reporting on Labour Market Issues” was held at the Arab Reporters for Investigative Journalism (ARIJ) Annual Forum 2021. A set of ethical reporting guidelines for journalists on reporting on labour market issues in the Arab region was launched by the ILO.

Through the programme, participating journalists built their capacity to cover pressing labour-related issues that are not receiving adequate coverage in the region and shared their newly acquired knowledge with colleagues in their media organizations. Thus, the programme made inroads in building a generation of journalists that are knowledgeable about ILO’s human-centred approach to achieving social justice and decent work mandates, labour standards, fundamental principles and rights at work, and the centrality of decent work to successful economic, social and environmental policies and realization of the SDGs.

This good practice contributed to strengthening ILO’s position as a global centre of excellence for knowledge on the world of work.

---

#### **CONTACT INFORMATION**

**Salwa Kanaana**

Regional Communication and Public Information officer for Arab States,  
ILO  
kanaana@ilo.org

**Anita Amorim**

Head, Emerging and Special Partnerships, ILO  
amorim@ilo.org



# Commonwealth Connectivity Agenda for Trade and Investment

8 DECENT WORK AND  
ECONOMIC GROWTH



## Commonwealth Connectivity Agenda for Trade and Investment

### CHALLENGE

Developing countries across the Commonwealth<sup>1</sup> face numerous challenges and barriers to improving their trade and investment environments, accessing new economic growth opportunities and providing high quality employment to current and future generations.

In the short and medium terms, these barriers include rising food and energy prices, supply chain and logistics disruptions, ongoing debt concerns and lingering effects of the COVID-19 pandemic, as well as low vaccination rates and the prospect of new variants and outbreaks. Among Commonwealth countries, least developed countries and small states are highly impacted by these challenges given their often heavy economic dependence on the services sector and existing structural issues and vulnerabilities.

The Commonwealth draws membership from every geographic region and level of development of the world, imparting on the association a unique role in supporting global growth, creating employment and facilitating the sharing of best practices and learnings among its diverse membership.

Commonwealth members are already closely linked through familiar administrative and legal systems, similarities in business, commercial and legislative practices and through large and dynamic diaspora communities. These linkages can provide tangible commercial benefits for traders and investors in Commonwealth countries.

<sup>1</sup> The Commonwealth is a voluntary association of 56 independent and equal countries, including both advanced economies and developing countries, with 32 of members being small states, including many island nations. Source: <https://thecommonwealth.org/about-us>.

### PROJECT NAME

Commonwealth Connectivity Agenda for Trade and Investment

### NOMINATED BY

Commonwealth Secretariat

### COUNTRIES/REGIONS/TERRITORIES

Antigua and Barbuda, Australia, Bahamas, Bangladesh, Barbados, Belize, Botswana, Brunei Darussalam, Cameroon, Canada, Cyprus, Dominica, Eswatini, Fiji, Republic of The Gambia, Ghana, Grenada, Guyana, India, Jamaica, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Maldives, Malta, Mauritius, Mozambique, Namibia, Nauru, New Zealand, Nigeria, Pakistan, Papua New Guinea, Rwanda, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Samoa, Seychelles, Sierra Leone, Singapore, Solomon Islands, South Africa, Sri Lanka, Tonga, Trinidad and Tobago, Tuvalu, Uganda, United Kingdom, United Republic of Tanzania, Vanuatu, Zambia

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 8.3, 9.1, 9.2, 9.3, 9.a, 9.b

### SUPPORTED BY

Commonwealth Secretariat

### IMPLEMENTING ENTITIES

Commonwealth Secretariat

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

June 2018 – Ongoing

### LINK

<https://thecommonwealth.org/connectivity-agenda>





## TOWARDS A SOLUTION

Experience sharing and peer-to-peer learning can be an effective way to address some of the challenges noted above. The Commonwealth Connectivity Agenda (CCA) was launched in 2018 as a platform for countries to exchange best practices and experiences on trade and investment and to support technical assistance and capacity building for reform. CCA dialogue and initiatives are structured around five clusters: physical connectivity; digital connectivity; regulatory connectivity; business-to-business connectivity; and supply-side connectivity.

CCA builds on the advantages of the Commonwealth by providing a platform to support structured dialogue, networking and collaboration on trade and investment. Engagement takes place across institutions, regulators, policymakers and businesses and facilitates learning from other member countries' experiences, the sharing of knowledge and ideas and the realization of common development goals.

The CCA is guided by the principles that cooperation efforts should:

- ▶ be pragmatic and practical, leading to credible results;
- ▶ consider the needs of small and vulnerable economies and least developed countries;
- ▶ avoid duplication of initiatives that other organizations are already implementing;
- ▶ add value in areas of engagement; and
- ▶ adopt a progressive approach towards a long-term vision for closer trade and investment ties.

Using a bottom-up approach, Commonwealth members initially undertook national consultations on priority areas of the CCA Declaration and opted-in to cluster(s) of interest. The focus then shifted to peer-to-peer exchanges and pan-Commonwealth action to address challenges and opportunities across the five clusters, with progress examined during Commonwealth trade minister meetings.

The consensus priorities identified by members across the five clusters are described below.

- ▶ **Digital connectivity** would focus on supporting the development of national digital economies, led by South Africa and the United Kingdom.
- ▶ **Physical connectivity** would support identification of best practice in digital infrastructure development, led by The Gambia.
- ▶ **Regulatory connectivity** would focus on improving regulatory regimes to support trade and investment, led by Barbados.
- ▶ **Supply-Side connectivity** would focus on facilitating the participation of all member states in global value chains, with a focus on agriculture and fisheries, led by Vanuatu.
- ▶ **Business-to-Business connectivity** would focus on supporting public-private dialogue to ensure the views of the private sector are kept at the centre of Commonwealth members cooperation, led by Bangladesh.

In delivering these workstreams, a three-pronged approach was agreed by member states to increase institutional capacities and support policy reform in these work areas, whereby the CCA would: 1) convene member states through an open, multisectoral and platformed cluster approach to technical working groups; 2) equip policymakers with evidence and tools, including technical papers, private and public sector surveys, policy tools and case studies written by government policymakers for government policymakers; and 3) provide advisory services to member states to support the implementation of lessons learned through policymaking and regulatory reform, and facilitate cross-regional policy exchanges.

Guided by the CCA Action Plan, 80 interventions have been delivered since 2019, 68 of which are complete and 12 are ongoing. Highlights of the interventions are:

- ▶ cross-regional knowledge transfers on how digital technologies can enhance infrastructure operations and capacity (participants were The Gambia, Ghana, Kenya, Malawi, New Zealand, Pakistan, Trinidad and Tobago and the United Kingdom);
- ▶ capacity building on how to devise policy tools to promote micro, small and medium enterprise integration in agribusiness value chains through policy experience sharing (participants were Malawi, Samoa, Tonga and Vanuatu); and
- ▶ peer-to-peer learning exchanges on private sector development and business environment improvements (participants were small island developing states in the Pacific and Africa).

CCA's initiatives collectively contribute to SDG 8 (decent work and economic growth) and SDG 9 (industry, innovation and infrastructure) through innovative, digitally-oriented approaches for experience sharing and peer-to-peer learning between developing Commonwealth member countries. The Agenda is creating sustainable, replicable and adaptable work programmes that can be scaled across all regions of the Commonwealth.

By engaging through the Commonwealth Connectivity Agenda, member countries are mainstreaming inclusive and sustainable trade as a cross-cutting issue while recognizing the importance of integrating small, vulnerable and least developed countries into the world economy, especially those in sub-Saharan Africa, the Caribbean and the Pacific.

---

### CONTACT INFORMATION

#### Kirk Haywood

Head, Commonwealth Connectivity Agenda, Commonwealth Secretariat  
k.haywood@commonwealth.int

# Electronic Phytosanitary Certificates

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



8 DECENT WORK AND ECONOMIC GROWTH



## Knowledge exchanges on e-Phyto design and implementation to facilitate trade and promote economic growth

### CHALLENGE

A phytosanitary certification system is used by countries that export goods to attest that their consignments meet the phytosanitary requirements of the importing countries. This process specifically facilitates international trade of plants, plant products and other regulated articles by providing an internationally agreed certification and following related procedures.

An electronic form of this certificate will eventually replace phytosanitary certificates in paper form and will create opportunities to facilitate phytosanitary exchanges in an innovative, cost effective and globally harmonized electronic environment. E-Phyto, the electronic version of a paper phytosanitary certificate, reduces the possibility of fraudulent documentation for international trade, improves efficiency and speeds up the process of releasing the goods exchanged between countries. Electronic certificates are expected to promote economic growth of participating economies through lower certification costs and facilitate trade.

Several countries are already developing electronic certification. Argentina and Australia are among the world leaders of this initiative and both can benefit from sharing their experience and lessons learned not only with each other, but to promote trade and economic growth throughout the Latin America and South Pacific regions.

### TOWARDS A SOLUTION

The e-Phyto and Trade Modernization project emerged in 2017 as a result of a strategic cooperation project between Argentina and Australia. As part of the High-Level Strategic Dialogue on Agriculture (DEANA) carried out on the side lines of the G20 Agriculture Ministers' Summit held in Buenos Aires in July 2018, Argentina and Australia committed to advancing cooperation

#### PROJECT NAME

Electronic Phytosanitary Certificates

#### NOMINATED BY

Directorate-General for International Cooperation, Ministry of Foreign Affairs, International Trade and Worship of Argentina

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Australia, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Vietnam

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.4, 9.4

#### SUPPORTED BY

Government of Argentina, Government of Australia, Plant Health Committee from South America (COSAVE), Inter-American Institute for Cooperation on Agriculture (IICA)

#### IMPLEMENTING ENTITIES

Argentina's National Service of Health and Agri-food Quality (SENASA), Australia's Department of Agriculture and Water Resources (DAWR)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

March 2017 – March 2023

#### LINK

<https://bit.ly/2D1rrGH>  
<https://bit.ly/3c3qYWy>  
<https://bit.ly/3AwYZI6>



in this area, including enhancing their leadership in their respective regions and strengthening their alliance and position as advocates of fair and rules-based international trade.

The e-Phyto and Trade Modernization project has completed two stages already and a third one is being developed. The project's responsible and implementing institutions are Australia's Department of Agriculture and Water Resources (DAWR) and Argentina's National Service of Health and agri-food quality (SENASA). Financial support comes from DAWR and the Argentine International Fund for Cooperation (FOAR). Several missions have been carried out by Argentine and Australian experts since 2017. National and regional seminars were held with participants from neighbouring countries also taking part in the initiative.

The first phase of the project, taking place in 2017 and 2018, was an "Exchange of experiences in electronic phytosanitary certification systems." The objective was to forge a strong collaborative relationship between Argentina and Australia in e-Phyto and to improve institutional capacities for the development and operation of this type of certification through intergovernmental cooperation for regional benefit. This was achieved through a visit of two Argentine experts to Australia in July 2017 and a visit of an Australian expert to Argentina in September 2018.

In parallel, the first e-Phyto workshop for the Latin America Region was held in Buenos Aires. The Plant Health Committee from South America (COSAVE) and the Inter-American Institute for Cooperation on Agriculture (IICA) provided financial support for the workshop. The workshop was attended by 78 participants from 17 Latin American countries (Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay) and Canada, in addition to experts from Australia, the United States and Viet Nam and representatives from the private sector.

Presentations were made on e-Phyto, inter-regional collaboration, trade facilitation, the Hub, the National Generic System, and other topics. Participants presented the e-Phyto situation in their country and their needs for which Argentina could collaborate based on what was learned in the exchange with Australia. This workshop increased the understanding of e-Phyto in the region, based on knowledge gained during Argentina's visit to Australia.

The second phase, "Electronic phytosanitary certification," took place in 2019 and 2020. The objective was for Argentina and Australia to lead the regional uptake of e-Phyto as a focal driving force and to improve institutional capacities for the implementation of electronic phytosanitary certification. This phase involved the visit of two Argentine experts to Australia in February 2019 and a visit of an Australian expert to Argentina in February 2020. In this phase, Argentina and Australia acquired new knowledge on the linkage between DAWR and private systems, improvements in Plant Export Management Systems (PEMS), integration between public and private systems and traceability in grains, authentication, security and communication protocols, functioning

and links between RegPOV and CertPOV and the use of Standard International Trade Classification (SITC) and linkages with each establishment's own traceability systems.

During this second phase a workshop was held with the Argentine private sector in Buenos Aires in February 2020 that helped involve the private sector in electronic phytosanitary certification. The private sector conducted some case studies to evaluate the impact of e-Phyto in their processes. The workshop was attended by 18 people from the Argentine private sector and experts from DAWR and SENASA. Introductory presentations were made on e-Phyto, the functioning of the HUB, the Generic System and the Australian experience linking the public and private sectors. Live demonstrations were done of the exchange through the HUB of the Phytosanitary Certificate and an explanation provided of the tools available to SENASA that could complement the electronic certification.

The first two project stages were instrumental in recognizing the similarities in the export and import certification procedures in Australia and Argentina, and the disadvantages faced by the agencies of both countries and the possibility of sharing their experiences to solve them. Both were South-South and triangular cooperation good practices since they led to the systemic, cross-country transfer of good practices and knowledge between two or more countries of the South for their mutual benefit. Moreover, these project phases addressed various challenges facing implementation of the e-Phyto system, providing innovative solutions based on the experiences and technical knowledge already achieved by Argentina and Australia. These project phases demonstrated progressive solutions to pressing development challenges and how effective collaboration between developing countries can improve their competitive advantages.

A third stage of the project is currently under way that will work on, among other things, supporting Latin American countries that have expressed interest in opting for the Generic e-Phyto National System, such as Cuba, Dominican Republic, Guatemala and Mexico.

The e-Phyto and Trade Modernization project contributes to the achievement of SDG 9 (industry, innovation and infrastructure) and SDG 8 (decent work), not only for the Argentine and Australian populations, but also for other countries in the Latin American and Asia Pacific regions. Specifically, it entails the creation of jobs, since a network of suppliers linked to e-Phyto technology solutions are needed to carry out this new system. Additionally, the project promotes the economic growth of participating economies through lower certification costs and trade facilitation.

---

## CONTACT INFORMATION

### Victoria Armayor

Diplomatic officer, General Directorate of International Cooperation, Ministry of Foreign Affairs, International Trade and Worship, Argentina  
vjj@mrecic.gov.ar

# 100% Online Electronic Apostille and Legalization

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## Sharing Colombia's effective e-government system with other countries in the region



### CHALLENGE

Before 2012, in Colombia, apostille and legalization procedures needed to be processed in-person at Ministry of Foreign Affairs dependencies, within which the use of physical resources, such as computer equipment, printers, workstations and service modules, were required, and which depended on the availability of trained personnel on specific days and working hours. This was inconvenient to users, incurred high operating costs and expended administrative and infrastructure resources. Moreover, the traditional method led to a greater chance of human error and third-party manipulation of the documents.

To speed up and centralize its systems, strengthen the transparency of its institutions and provide better services to its community, from 2012-2016 Colombia conducted a digital transformation of its apostille and legalization processes. The Department of Information and Technology Management of the Ministry of Foreign Affairs of Colombia locally developed a software to enhance and simplify the apostille and legalization processing methodology. Not only did the new digital procedures reduce expenses but it also improved public national entity interoperability.

Similar challenges with slow and outdated apostille and legalization systems existed in other countries in the region. An efficient way to improve their systems was also needed, and some countries looked to Colombia for support.

### TOWARDS A SOLUTION

The 100% Online Electronic Apostille and Legalization initiative, spearheaded by Colombia, offers a technological solution that optimizes the use of technical, human and infrastructure resources. Colombia's methodology is an integrated technology platform that centralizes everything related to apostille

#### PROJECT NAME

100% Online Electronic Apostille and Legalization

#### NOMINATED BY

Government of Colombia

#### COUNTRIES/REGIONS/TERRITORIES

Colombia, Dominican Republic, Honduras

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

9.b, 16.6

#### SUPPORTED BY

Department of Information and Technology Management of the Ministry of Foreign Affairs of Colombia

#### IMPLEMENTING ENTITIES

Ministry of Foreign Affairs of the Dominican Republic, Ministry of Foreign Affairs of Honduras

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

Dominican Republic: April 2018 – July 2020;  
Honduras: November 2019 – August 2021

#### LINK

<https://bit.ly/3Q4nF09>





and legalization processes, making the procedure more accessible to a country's citizens and foreign requesters from anywhere around the world, available 24/7, without mediation. The system increases the reliability of documents, as rather than being physically signed by a third-party, they are digitally inspected, approved and signed via the web page of the country's overseeing body (e.g., Ministry of Foreign Affairs). This initiative contributes to SDG 9 (industry, innovation and infrastructure) and SDG 16 (peace, justice and solid institutions).

The impact evaluation system consists of a quarterly measurement of non-conforming apostille and legalization products and surveys that measure the level of user satisfaction. A goal of 0.8 percent was established for non-conforming products. In Colombia, the last quarter of 2020 obtained a 0.1 percent non-conforming rate and a 93.7 percent user satisfaction rate (out of a 90 percent target).

Cooperation initiatives to share this innovative technology were conducted between Colombia and the Dominican Republic from 2018 to 2020 and between Colombia and Honduras from 2019 to 2021.

Colombia contributed to strengthening the capacities of the Ministry of Foreign Affairs of the Dominican Republic through the development of the software which was adapted to that country's specific needs. This resulted in a complete online apostille service for the country. In Honduras, despite the Covid-19 pandemic precluding in-situ visits to examine the infrastructure, essential knowledge and processes were able to be shared virtually with the Honduran Ministry of Foreign Affairs. (At the time of writing, a second phase for the technical visits to Honduras were pending.)

Colombia's methodology has proven to be sustainable over the long-term as the digitalized apostille and legalization process has been operating effectively since the country's full achievement of digitalization in 2016. Following installation and implementation of the software, a return to in-person or further mediation has not been required. A further indication of sustainability is that Colombia was recognized by the Permanent Bureau of The Hague for the Apostille Convention as a worldwide pioneer and its model as an innovative practice for the issuance of electronic apostilles using information and communication technologies.

This initiative is replicable as Colombia continues to offer to share its e-apostille expertise to other countries interested in improving their procedures through digitization, via a South-South cooperation model. The recommended project structure is a two-phase implementation: an in-person phase followed by a virtual phase. This allows a progressive implementation of the digital transformation of the procedures. The model can be adapted to any interested country once the minimum economic and technological resources are confirmed to exist. In this regard, it is suggested that interested countries carry out a preliminary study to verify the necessary pre-conditions to proceed.

---

## CONTACT INFORMATION

### Fulvia Benavides

Director of Consular Affairs, Immigration and Citizen Service, Ministry of Foreign Affairs of Colombia  
fulvia.benavides@cancilleria.gov.co

# Transport and Trade Connectivity in the Age of Pandemics: Contactless, Seamless and Collaborative United Nations Solutions

9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



## Digital and Sustainable Trade Facilitation: Global Report 2021

Based on the United Nations Global Survey  
on Digital and Sustainable Trade Facilitation



## Fostering regional cooperation to preserve transport and trade connectivity

### CHALLENGE

Unprecedented measures to halt the spread of COVID-19 through lockdowns, travel restrictions and social distancing disrupted land, sea and air cargo, affecting international transport and logistics services and trade routes, resulting in soaring trade and transport costs around the globe.

Border agencies faced the challenge of expediting imports, exports and transit, while ensuring epidemic prevention and providing adequate customs clearance and compliance controls of goods and transport personnel. Disruptions associated with the pandemic are giving rise to a plethora of legal issues affecting traders and transport providers (e.g., delays and performance failure, liability for breach of contract, frustration/force majeure). The rise of unilateral and coordinated restrictions or easing of lockdowns also jeopardized the progress in economic integration and transport and trade connectivity, weakening global, regional and sectoral cooperation mechanisms at the time when they are needed the most.

### TOWARDS A SOLUTION

Cognizant of the unprecedented connectivity challenges caused by the pandemic, the project "Transport and trade connectivity in the age of pandemics: Contactless, seamless and collaborative United Nations solutions" was created. Implemented by six United Nations agencies, ECE, ESCAP, UNCTAD, ECA, ECLAC and ESCWA, and supported by UNDESA, the project equipped governments with the means to adopt common approaches to address pandemic-related trade and transport challenges across global and regional supply chains that had the potential to reverse progress made in the Sustainable Development Goals, in particular, SDG 8 (decent work and economic growth), SDG 9 (industry, innovation and infrastructure) and SDG 17 (partnerships).

#### PROJECT NAME

Transport and Trade Connectivity in the Age of Pandemics:  
Contactless, Seamless and Collaborative United Nations Solutions

#### NOMINATED BY

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

#### COUNTRIES/REGIONS/TERRITORIES

Global

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 2.b, 3.8, 5.5, 8.2, 8.3, 9.1, 14.2

#### SUPPORTED BY

United Nations Department of Economic and Social Affairs  
(UNDESA)

#### IMPLEMENTING ENTITIES

United Nations Economic Commission for Europe (ECE), ESCAP,  
United Nations Conference on Trade and Development (UNCTAD),  
United Nations Economic Commission for Africa (UNECA), United  
Nations Economic Commission for Latin America and the Caribbean  
(ECLAC), United Nations Economic and Social Commission for  
Western Asia (ESCWA)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

May 2020 – June 2022

#### LINK

<https://unttc.org/>



To that end, the project focused on implementing United Nations solutions to immediately help governments (targeting customs, other border agencies and port authorities) and the business community worldwide to keep transport networks and borders operational to facilitate the flow of goods and services, while containing the further spread of the COVID-19 virus. Project activities centred around United Nations standards, guidelines, metrics, tools and methodologies clustered into three broad groups of solutions: contactless (digital trade and transport), seamless (trade facilitation) and collaborative (regional and sectoral cooperation). While the first two clusters heavily relied on global norms and standards for trade and transport facilitation, the third fostered regional and sectoral cooperation, ensuring that regional specificities and challenges were highlighted and addressed.

Given the unprecedented scale of the connectivity disruptions and experiences, the project used surveys, existing professional networks and all project meetings to solicit input and feedback from the project beneficiaries. The project was developed in stages, starting with data collection and analytical work and progressing towards capacity building.

This was the first United Nations-wide project in trade and transport connectivity bringing together ESCAP and UNCTAD with four other United Nations regional commissions (those for Africa, Europe, Latin America and the Caribbean, and Western Asia). This approach ensured both global reach and regional presence, international cooperation and exchange of knowledge and good practices from all over the world.

The project facilitated South-South exchanges covering transport issues. It supported ten ASEAN Member States to review their COVID-19 responses in transport and identify best practices to be adopted as regional guidelines: "COVID-19 Response and Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN." The study resulted in the identification of crisis response provisions in regional, subregional and bilateral transport agreements that could be incorporated into existing and future transport agreements of ESCAP Member States. The analytical and capacity building work of ESCAP on smart transport solutions along the Asian Highway Network prompted similar capacity building initiatives for countries that are members of the African Highway Network.

In the area of trade, the project supported adding a component on trade facilitation in times of crisis to the United Nations Global Survey on Digital and Sustainable Trade Facilitation, to support evidence-based policymaking for sustainable and resilient trade facilitation, including overcoming trade disruptions caused by pandemic and crisis. Additional readiness assessments were conducted for cross-border paperless trade, identifying gaps and good practices, and contributing to regional discussions for advancing cross-border paperless trade for efficient trade procedures. The project supported the Global Initiative on Model Provisions for Trade in Times of Crisis and Pandemic in Regional and Other Trade Agreements (IMP), including production of a handbook

exploring options for provisions that could be used in regional trade agreements to better guide how trade could be conducted during future crises; the handbook was distributed at global and regional dialogues, including the WTO Public Forum in September 2021 and the Global Course on Negotiating Regional Trade Agreements for Trade in Times of Crisis and Pandemic.

The sustainability of these initiatives has been ensured through mainstreaming the results of the project and follow-up activities into the ESCAP intergovernmental processes on regional trade and transport cooperation. This includes the Fourth Ministerial Conference on Transport held in Bangkok and online from 14 to 17 December 2021 and its outcome documents, the ministerial declaration and the new Regional Action Programme on Sustainable Transport Development (2022-2026), and the 7th Interim Intergovernmental Steering Group on Cross-border Paperless Trade Facilitation, held in April 2022, setting the foundation for the implementation of the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific. The project established a joint portal ([unttc.org](http://unttc.org)) to disseminate the results and the best practices of the project. The portal will be jointly maintained by ESCAP, UNCTAD and other regional commissions.

---

#### CONTACT INFORMATION

**Soo Hyun Kim**  
Economic Affairs Officer, ESCAP  
[kim51@un.org](mailto:kim51@un.org)



# ESCWA Transport GIS Platform

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



8 DECENT WORK AND ECONOMIC GROWTH



## A tool for analysis and follow-up of transport network and facility performance in the Arab region



### CHALLENGE

A primary challenge contributing to low economic integration in the Arab region are limited and antiquated railway systems. The Arab region has only 7 kilometres of railroad per 100,000 persons, compared to 40 in the European Union, 70 in and 15 as a world average. The region's road infrastructure is likewise underwhelming. The region has 220 kilometres of road-way per 100,000 persons, compared to 2,000 in the European Union and the United States and 875 as a world average. The region also suffers from poor transport services, with 57 percent lost time due to stops at borders and 38 percent extra invisible costs.<sup>1</sup>

Arab states tend to assess their transport networks in isolation of the overall regional network and integration goals. Evidence-based policymaking in relation to infrastructure is needed throughout the region and road and rail planning and projects need to take regional connectivity and integration into consideration. Without strategic infrastructure, the region cannot meet its decent work and economic growth potential.

### TOWARDS A SOLUTION

The ESCWA Transport Geographic Information System (GIS) Platform provides ESCWA Member States with the capacity to monitor the performance of their own transport networks and facilities in the context of the overall regional transport network and regional integration landscape. With this tool, policymakers in the region can make appropriate decisions based on gaps and potential connectivities illustrated through the GIS facility.

Due to the broad nature of the challenge, the project is leveraging a multi-stakeholder approach and partnered with the Islamic Development

#### PROJECT NAME

ESCWA Transport GIS Platform

#### NOMINATED BY

United Nations Economic and Social Commission for Western Asia (ESCWA)

#### COUNTRIES/REGIONS/TERRITORIES

Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, State of Palestine, Sudan, Syria, Tunisia, United Arab Emirates, Yemen

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.1, 8.3, 8.9, 9.1, 9.3, 9.4

#### SUPPORTED BY

Islamic Development Bank (IsDB)

#### IMPLEMENTING ENTITIES

ESCWA, Islamic Development Bank (IsDB), United Nations Economic Commission for Europe (UNECE), Center for Western-Mediterranean Transportation Studies (CETMO)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2019 – 2023

#### LINK

<https://bit.ly/3JNBUZI>  
<https://bit.ly/3bMyK7h>

<sup>1</sup> ESCWA vision for a multimodal transport system in the Arab region 2017.





Bank (IsDB), the United Nations Economic Commission for Europe (ECE) and Center for Western-Mediterranean Transportation Studies (CETMO) to develop the GIS tool.

The project produced a GIS tool and is training national focal points in ministries of transport of ESCWA Member States to use the tool for analysis. A regional workshop entitled “Corridors for Vital Connectivity in the Arab Region” was conducted to initiate the project, which was followed by finetuning of the tool. Next, four regional capacity building workshops targeted national focal points to enable the monitoring of national transport networks and facilities and their transboundary connectivity contributions.

This project has enabled countries across the region to learn from each other through South-South exchanges on data collection and analysis required to assess the status of road and rail transport networks. With upgraded data collection and analysis capacities, the ministries of transport can better identify specific infrastructure gaps that require addressing in order to upgrade the performance of their national transport networks and associated facilities, not only in terms of quality of construction, but ensuring the added value of regional connectivity.

The project identified regional and global benchmarks for Member States to consider and has utilized open-source applications to enable cloud storage, thus making remote access possible by national focal points of Member States. This helps to level the playing field among Member States whose information technology capabilities vary.

By streamlining and standardizing missing links and gaps against the movement and flows of goods the project is helping the region enhance its regional integration and performance. The project’s sustainability is assured through the continuous integration of the tool within the International Transport Infrastructure Observatory managed by ECE in cooperation with other regional commissions. The tool will be regularly followed up at annual meetings of the ESCWA committee on transport and logistics.

The tool was identified as a suitable component of the global initiative on International Transport Infrastructure Observatory (ITIO), under development jointly by UNECE and other regional commissions. Thus, the system created by ESCWA has not only enabled the Arab region to become better positioned for much-needed regional integration, but also to connect more effectively with other regions of the world.

## CONTACT INFORMATION

### Yarob Bader

Regional Advisor on Transport and Logistics, ESCWA  
badr3@un.org



# Technological and Enterprise Upgrading Programme in Cuba

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## Enhancing industrial performance and competitiveness of local beneficiaries operating in the fertilizer and agriculture machinery sectors

### CHALLENGE

Cuba is endowed with abundant natural resources, including soil and water, as well as human capital. Yet, a significant constraint to agricultural productivity is low production capacity as a result of longstanding technological and infrastructural insufficiencies and limited access to fertilizers.

The country faces major challenges in overhauling the prevailing agricultural models. The country's agricultural sector could benefit from capacity building, allowing them to adopt good practices in production, quality control and distribution. One important requirement to improve agricultural production in this context is availability and application of fertilizers.

### TOWARDS A SOLUTION

From 2016-2022, the United Nations Industrial Development Organization (UNIDO) implemented the Technological and Enterprise Upgrading Project that focused on technological upgrading and modernization of Cuban enterprises operating in the agro-chemical and agricultural machinery production sub-sectors. Based on its long-standing cooperation with Cuba, the Russian Federation supported the UNIDO Country Programme for Cuba (2016-2020) by providing funding for this project.

The project intervention included a series of activities to fine-tune the production process of an innovative fertilizer that supplies nutrients that are directly absorbed and assimilated by plants. An innovative organic liquid fertilizer (CBFERT/Vitaplic foliar) was developed by a local agro-chemical institution, the Chemical Engineering and Research Centre (CIQ). This fertilizer has been recognized as an agrochemical and scientific breakthrough for its technical relevance and efficiency in addressing the country's key food security issues.



#### PROJECT NAME

Technological and Enterprise Upgrading Programme in Cuba

#### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

#### COUNTRIES/REGIONS/TERRITORIES

Cuba, the Bolivarian Republic of Venezuela, Russian Federation

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 2.4, 9.1, 9.2, 9.5, 9.a, 9.b

#### SUPPORTED BY

Government of the Russian Federation

#### IMPLEMENTING ENTITIES

UNIDO

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2016 – June 2022

#### LINK

<https://bit.ly/3bKFPVW>



As an initial step, development of a sectoral strategy for technological and business upgrading of agrochemical products and agricultural machinery was finalized, paving the way to industrial modernization of pilot liquid fertilizer and agro-machinery production plants, including the establishment of modern production processes. This was followed by a roadmap for the development and implementation of liquid fertilizer production and application systems in Cuba. In this way, the project supported the entire agricultural value chain by targeting production in two fertilizer plants: the calcium nitrate production plant of the chemical company 'Revolución de Octubre' EMPREQUIM, located in Nuevitas, Camagüey; and the pilot plant for production of CBFERT/VITAPLIC Foliar ecological liquid fertilizer at the Chemical Engineering and Research Center (CIQ) in Havana. The machinery and technologies procured as part of the project's technological modernization efforts largely originated from developing countries.

To ensure the long-term sustainability of the project, training, on-the-job coaching and study tours for national counterpart representatives and project beneficiaries were conducted throughout the country. Participants received guidance and advisory services on a regular basis. Additionally, the project creating an international branding, marketing and value chain strategy for calcium nitrate and CBFERT/VITAPLIC Foliar fertilizers to facilitate exposure of this local innovation to the export market (primarily other developing economies in the Latin American and Caribbean region).

Tested over multiple staple crops, CBFERT application resulted in up to a 65 percent yield increase compared to international reference samples. Notably, liquid formulations are considered highly appropriate, allowing precise dose measurement and better access to plants. Acknowledging its quality and impressive effect on yields, the Ministry of Agriculture has requested to increase the production of the liquid fertilizer to meet the national demand and to support the import-substitution model adopted by the Cuban government. As a result, CBFERT/VITAPLIC Foliar production saw a twenty-fold increase in demand and production in 2021 with a potential of forty-fold increase is expected for 2022.

In addition to upgrading and modernizing technological enterprises in Cuba's agriculture sector, the project helps the country achieve food self-sufficiency and import substitution. The project's long-term goal is to satisfy 90 percent of the local demand for liquid fertilizers, thereby boosting the country's agricultural productivity and competitiveness. The project enhanced South-South and triangular cooperation, *intel alia*, through several "spill over" effects related to the development and implementation of liquid fertilizer production and application systems throughout Cuba with significant replication potential in other countries of the Latin America and Caribbean region that have similar development profiles.



The project introduced various good practices in effective industrial modernization in the agricultural sector that have a significant replication potential in other developing countries facing similar challenges. Based on the expert network established by the project in Cuba, negotiations have been initiated with Venezuelan partners – creating synergies with the UNIDO project Industrial Upgrading and Modernization Program for the Bolivarian Republic of Venezuela – regarding an R&D partnership with a focus on the area of innovative fertilizer production.

#### CONTACT INFORMATION

**Farrukh Alimdjano**  
Project manager, UNIDO  
F.Alimdjano@unido.org



## A one-stop-shop for Latin American and Caribbean stakeholders to collaborate and speed up national actions on industrialization and innovation

### CHALLENGE

According to UNIDO's SDG 9 Industry Index scores, the average score for the Latin America and Caribbean (LAC) region decreased from 0.286 in 2000 to 0.237 in 2018, indicating limited progress made by countries compared to the rest of the world.

Manufacturing – embedded in SDG 9 – plays a key role in the region, with current sustainability and technological intensity challenges needing to be addressed urgently to mitigate the impact of production expansion on the environment and to increase skilled employment. The COVID-19 outbreak hit all manufacturing businesses hard regardless of size, however, small enterprises faced greater challenges due to their vulnerability and limited financial resources.

### TOWARDS A SOLUTION

To address the challenges above, UNIDO is implementing the SDG 9 Accelerator initiative. This initiative will increase awareness among policymakers and key stakeholders in the LAC region on the challenges and opportunities derived from the achievement of SDG 9 and build partnerships to leverage efforts on priority industrial sectors in the region. The SDG 9 Accelerator enhances the exchange of information, such as statistics on national SDG 9 performance, available tools, funding and capacity building offers to support countries in the achievement of SDG 9.

The SDG 9 Accelerator directly supports the achievement of inclusive and sustainable industrialization in the LAC region, which in turn drives sustained economic growth, decent jobs and income creation (SDG 8); helps reduce inequalities (SDGs 5 and 10), while increasing resource and energy efficiency (SDGs 6, 7, 11, 12) and reducing greenhouse gas and other pollutant emissions, including from chemicals (SDGs 13, 14, 15).



#### PROJECT NAME

SDG 9 Accelerator

#### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Honduras, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

9.2, 9.3, 9.4, 9.b, 12.2, 12.5, 17.16

#### SUPPORTED BY

UNIDO Trust Fund for Latin America and the Caribbean

#### IMPLEMENTING ENTITIES

UNIDO

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

March 2020 – March 2025

#### LINK

<https://open.unido.org/projects/M4/projects/190105>





Through three components, a regional network of contacts, a knowledge sharing platform ([www.sdg9accelerator.org](http://www.sdg9accelerator.org)), and partnerships through South-South and triangular cooperation, UNIDO's SDG 9 Accelerator consolidates a regional network of policymakers and key national stakeholders to exchange knowledge, discuss common challenges and identify collaboration opportunities, maximizing the use of available resources in the region to achieve sustainable and inclusive industrial development.

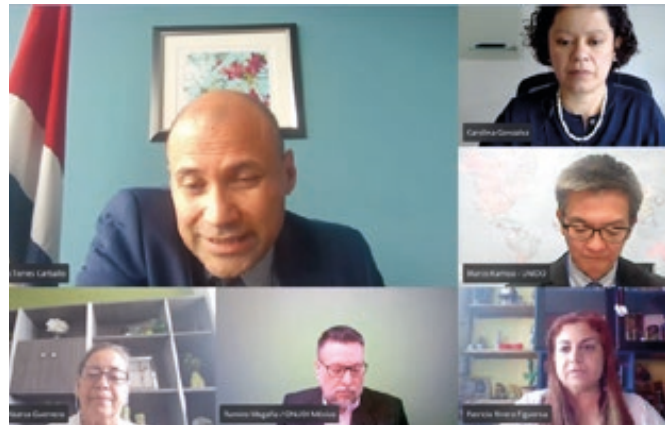
In 2021-2022, the SDG 9 Accelerator, in cooperation with Costa Rica's Ministry of Economy, Industry and Commerce, delivered a pilot Training Programme on Circular Economy for small- and medium- sized enterprises in the plastics sector in Costa Rica. This initiative involved a series of webinars with national and international experts, through which participants gained a deeper understanding of the relevance of the circular economy among plastics entrepreneurs, the industrial sector, governments and key stakeholders in Latin America, enhancing the promotion of solutions and opportunities offered by the circular economy and highlighting its contributions to the SDGs.

Notably, private sector representatives of the plastics industry working on sustainable initiatives found an open space to exchange knowledge and perspectives with colleagues and national governments. This programme will be used for capacity-building activities in other countries and as an information source for the region since all sessions can be viewed on the SDG 9 Accelerator platform, allowing participants to contact organizers and experts.

This initiative held within the innovative mechanism of the SDG 9 Accelerator illustrates a successful joint effort between UNIDO and the LAC countries to engage in South-South cooperation and promote regional knowledge and experience sharing, thereby fostering progress by innovation. Following UNIDO's Member States requests to replicate this pilot project, other international cooperation activities will be organized.

Meanwhile, national ministries of industry and economy are exchanging key policy documents in areas that can accelerate their actions towards the achievements of SDG 9 using the SDG 9 Accelerator platform. International entities, development agencies, national industry chambers and education institutions are sharing their technical cooperation offers and knowledge products within the SDG 9 platform as well to achieve a more significant impact in the region. This multistakeholder knowledge network is the first in the LAC region entirely dedicated to a Spanish-speaking audience.

In 2022, UNIDO will begin implementing a tripartite mechanism to deliver South-South and triangular technical cooperation to promote the exchange of knowledge and expertise on industrial development in LAC. As part of the pilot experiences, governments and companies will be selected to participate in the exchange of best practices and knowledge transfer.



#### CONTACT INFORMATION

##### Diego Masera

Chief, Regional Coordination Division for Latin America and the Caribbean and Deputy Director, Department of Regional and Field Coordination, UNIDO  
[d.masera@unido.org](mailto:d.masera@unido.org) / [lac@unido.org](mailto:lac@unido.org)



# Establishing UNIDO Guiding Framework for Industrial Parks

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## Promoting sustainable industrial parks via South-South and triangular industrial cooperation platform

### CHALLENGE

Many developing countries struggle with insufficient infrastructure and low integration into global and regional markets. Premature de-industrialization has been increasingly noticeable in developing countries, in which the manufacturing sector shows a decreasing share of gross domestic product (GDP).

Establishing competitive industries and increasing the productivity of the industrial sector is crucial for tackling socio-economic challenges in these countries. Industrial parks help developing countries overcome constraints that hinder industrialization, such as limited access to information, technology, finance, infrastructure, as well as weak regulatory institutions and high production and transaction costs. Industrial parks can be important tools for inclusive and sustainable industrialization, and therefore help achieve national progress on the Sustainable Development Goals, in particular Goals 6, 8, 9, 11, 12 and 13.

Despite the potential of industrial parks to advance industrialization and the goals, developing countries may have limited capacities to plan and implement them. The creation and administration of industrial parks requires a collaborative multi-stakeholder approach based on strong stakeholder engagement and solid partnerships, which is missing in many countries.

### TOWARDS A SOLUTION

Through its projects, assisted by a cross-disciplinary team of experts, UNIDO assists Member States to tackle various aspects related to industrial parks.

As a foundational support to Member States, UNIDO, with technical and financial support from the Government of China, prepared international guidelines for industrial parks and conducted in-depth country specific studies on industrial park development in China, Ethiopia and Peru. The



#### PROJECT NAME

Establishing UNIDO Guiding Framework for Industrial Parks

#### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

#### COUNTRIES/REGIONS/TERRITORIES

China, Ethiopia, Peru

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2, 8.3, 8.4, 9.1, 9.2, 9b

#### SUPPORTED BY

Government of China

#### IMPLEMENTING ENTITIES

UNIDO

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2018 – 2022

#### LINK

<https://bit.ly/3Pf0hM1>



guidelines for industrial parks were prepared based on international best practices and serve as a guide and reference tool for stakeholders. The publication was validated by partner institutions, including the Food and Agriculture Organization of the United Nations (FAO), the European Investment Bank, the Export-Import Bank of China (Exim Bank), the private sector and academia.

The project Establishing a UNIDO Guiding Framework for Industrial Parks is also supporting the development of specialized guidelines for agro-food parks, prepared in collaboration with the African Development Bank, FAO, Exim Bank, the African Union Development Agency (AUDA-NEPAD), the African Export-Import Bank and Mahindra Consulting Engineers Limited, among others. The main objective of these guidelines is to provide stakeholders, such as governments, enterprises, donors and financial institutions, with appropriate guidance and practical tools and to enhance the contribution of agro-food parks and sustainable food systems towards the SDGs.

In the same spirit, UNIDO worked with the Chinese Academy of International Trade and Economic Cooperation (CAITEC) to consolidate experiences and best practices of industrial park development in the country, which resulted in a comprehensive study titled “The Experiences and Best Practices of Industrial Park Development in the People’s Republic of China.” The study serves as a reference for developing countries and economies in transition to develop their own industrial parks based on the successful model of industrial parks in China.

UNIDO organized several international events through which it provided a unique global platform for knowledge exchange and enhanced dialogue on the industrial park development agenda in the United Nations Decade of Action. For example, UNIDO, jointly with the Ministry of Production of Peru and the National Association of Industries of Peru, organized the International Conference on “Industrial Parks for Inclusive and Sustainable Industrial Development,” during which participants shared best practices and lessons learned on the management and development of industrial parks and presented successful models to be replicated worldwide. Another event, titled “Promoting Sustainable Industrial Parks and Low-Carbon Urban-Industrial Development for Inclusive and Sustainable Industrialization” brought together stakeholders who exchanged knowledge on various aspects of industrial parks and showcased their contributions to the SDGs and the 2030 Agenda. Similarly, two international industrial park workshops and study visits were organized in China in partnership with the Ministry of Commerce and CAITEC.

As part of supporting Member States with industrial park initiatives, UNIDO has created an innovative, integrated global knowledge platform, the Sustainable Industrial Park Platform ([sipp.unido.org](http://sipp.unido.org)). This platform is creating and disseminating knowledge and best practices and strengthening networking among institutions and experts. The platform hosts e-learning training courses for government officials and other stakeholders to enhance industrialization and strengthen economies in target countries through developing industrial parks.



UNIDO plans to further deepen cooperation with Member States and various partners to effectively utilize the potential of industrial parks to drive new sustainable pathways towards industrialization and for a better and faster Covid-19 recovery for the international community.

---

#### CONTACT INFORMATION

**Jie Zhao**

Chief of the Asia and the Pacific Regional Coordination Division, UNIDO  
[J.ZHAO@unido.org](mailto:J.ZHAO@unido.org)

# The Agency for Sustainable and Operative Social Provision (DOST) Model by Azerbaijan



Innovative public service solutions aiming at user satisfaction, improved services for vulnerable groups and the overall welfare of the population.

## CHALLENGE

Prior to the establishment of the Agency for Sustainable and Operative Social Provision (DOST Agency) under the Ministry of Labour and Social Protection of Population (MLSPP) of the Republic of Azerbaijan, several issues in the delivery of public services in the fields of labour, employment and social protection were of serious concern. These included the main methodological and procedural guidelines that were based on outdated approaches, which resulted in constant and recurring problems in the process of providing social services. Also, the old model caused long queues, wasted time, disregarded citizens' opinions and complaints, required documents to be collected from several authorities and decentralized the delivery of services.

Accordingly, a vital need arose for restructuring and optimizing the processes of service provision. The use of advanced technologies and methodologies for provision of social services, a strategic approach to setting goals and objectives that meet the requirements of a rapidly changing environment, continuous human resource development and a focus on institutional development were the main criteria for a successful transformation and the smooth transition to digital service provision in the country.

## TOWARDS A SOLUTION

To address these problems and requirements, the MLSPP adopted innovative solutions that unified all social service provision processes and introduced "single-entry-point" principles. To develop the new concept, experiences of 14 countries, such as Australia, Brazil, Canada, Chile, China, Denmark, France, India, Mongolia and Norway, were used as benchmarks.

The DOST Agency covers over two million people through its five service centres and provides 154 labour and social security services free of charge.

### PROJECT NAME

The Agency for Sustainable and Operative Social Provision (DOST) Model by Azerbaijan

### NOMINATED BY

Australia, Brazil, Canada, Chile, China, Denmark, France, India, Mongolia, Norway

### COUNTRIES/REGIONS/TERRITORIES

Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.1, 5.2, 5.5, 5.b, 10.2, 10.4, 16.3, 16.5, 16.6, 16.10, 16.b, 17.7, 17.9, 17.14, 17.16, 17.17

### SUPPORTED BY

Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan

### IMPLEMENTING ENTITIES

four DOST service centres in Baku, DOST Center in Absheron District, DOST Center for Inclusive Development and Creativity

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

August 2018 – Ongoing

### LINK

[www.dost.gov.az](http://www.dost.gov.az)





The new system has gathered the databases of twenty executive authorities under one umbrella, eliminated red tape and bureaucracy and brought to zero the risks of corruption and bribery. These changes have boosted the population's well-being, strengthened public attention to vulnerable groups by implementing innovative solutions and maximized citizen satisfaction with the government's service delivery, improving the citizen-state relations via good governance.

Moreover, the DOST Agency has built effective external relations to ensure multi-institutional and coordinated provision of services. To this end, the Central Coordination Unit (CCU) was established to provide 26 services from more than 20 governmental organizations and public agencies to the family members of the martyrs and to war veterans through the "single-entry-point" platform in DOST centres. Following the Rules of State Monitoring in the Field of the Rights of Persons with Disabilities (2020), the DOST Agency presides over the multisectoral Commission on the Implementation of State Monitoring on the Rights of Persons with Disabilities and conducts state monitoring in this field and reports to the Cabinet of Ministers.

By 2025, all responsibilities for the provision of social services will be transferred to the DOST Agency. According to the DOST Concept 2020-2025 plan and its budget forecast, to strengthen the financial sustainability of the Agency, it is envisaged to introduce new paid services and ensure the reduction of human resource and infrastructure costs by providing most services remotely.

Institutional sustainability factors of the new system include its legitimized institutional and legislative framework, the "single-entry-point" model, an effective monitoring and evaluation system, and lowered financial burden to the government due to decreased administrative costs. For users the system is sustainable as it offers a modernized Call Center, service passports and manuals (description of service delivery mechanism) and offers a list of home-based and mobile services.

To achieve the SDGs, the DOST Agency follows the principles of universality, inclusivity and accessibility in its operations for all. The DOST Agency supports gender equality in service delivery, implements various projects with a focus on social protection and employment of women and promotes gender equality in its human resource policy. The DOST Agency cooperates with local and international institutions to promote sustainable growth, ensure access to technologies and knowledge and safeguards the rights of vulnerable groups. DOST has already received several international recognitions and awards, such as the ISSA "Best Practice Award for Europe – 2022," competition Certificates of Merit, Honorary Diploma of the International Association of Pension and Social Funds and the ESN European Social Services Awards 2021 in the "Technology Tools" category.

## CONTACT INFORMATION

### Svetlana Popova

Deputy Head of International Relations Department, Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan  
Svetlana.popova@sosial.gov.az  
+99412 541 97 77

# Reduction of inequalities with a focus on mainstreaming the perspectives of territory, gender and race/ethnicity



## Utilization of data disaggregation to promote efficient public policies that combat inequalities in cities

### CHALLENGE

According to the Economic Commission for Latin America and the Caribbean (CEPAL), the COVID-19 pandemic seriously affected women, as women represent more than 60 percent of informal workers in the region. It was also noted that most countries in the region do not data disaggregation by ethnicity and race, creating significant difficulties in assessing the impacts of the pandemic on the Afro-descendant population. The South American region has complex social categories that can affect inequalities and privilege, such as gender, race, religion, age, etc.

It is extremely important and relevant for countries in the Latin America and Caribbean region to enhance methodologies for the synthesis and production of disaggregated indicators in order to formulate policies that can combat inequality. Exchange of experiences between cities in this region can help improve statistical collection and analysis.

### TOWARDS A SOLUTION

To tackle the challenges above, the municipal governments of São Paulo and Niterói (Brazil), La Paz (Bolivia) and Buenos Aires (Argentina) collaborated on a South-South cooperation project titled Reduction of Inequalities with a Focus on Mainstreaming the Perspectives of Territory, Gender and Race/Ethnicity. Through the project, gaps were discussed and solutions proposed on the creation of disaggregated indicators with a focus on territory, gender and race/ethnicity in order to promote public policies that tackle inequality by raising awareness and training of civil servants. The main Sustainable Development Goals addressed were SDG 10 (reduced inequalities), SDG 5 (gender equality) and SDG 11 (sustainable cities and communities).

#### PROJECT NAME

Reduction of inequalities with a focus on mainstreaming the perspectives of territory, gender and race/ethnicity

#### NOMINATED BY

Municipal Secretary of International Relations

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bolivia, Brazil

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.1, 5.2, 5.4, 5.6, 5.c, 10.2, 10.3, 10.4, 10.5, 11.3, 11.b, 11.c

#### SUPPORTED BY

Mercociudades

#### IMPLEMENTING ENTITIES

municipal governments of São Paulo and Niterói (Brazil), La Paz (Bolivia) and Buenos Aires (Argentina), South America Local Government Network Mercociudades

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

February 2021 – March 2022

#### LINK

<https://bit.ly/3pcs59m>



The project integrated gender, race/ethnicity and territory perspectives in a cross-cutting way to the municipal instruments of planning, budgeting and management of public policies, seeking to measure the existing levels of inequality and create bases to implement policies to promote equality in local governments.

Three participatory technical workshops were organized by civil servants involved in the process of data disaggregation from the participating cities, allowing an in-depth exchange of experiences about the mechanisms that each city used to produce disaggregated data related to race/ethnicity, territory and gender, creating a space for debate about difficulties, strengths and good practices. The activity resulted in substantial documentation of the state of the art on data disaggregation in all four cities, creating better clarity on their status quo and what knowledge they wanted to obtain.

A sensitivity noted throughout the dialogue between the cities was that the issue of race/ethnicity was actually discussed very little during the workshops. To fill this gap, lessons were offered to better capacitate civil servants on the theme of race/ethnicity equality, with a special focus on more assertive policymaking, enabling deepening the monitoring and evaluation of data based on this bias.

The experiences presented showed the potential of using statistical information to guide the design and implementation of public policies and the difficulties from the perspective of the 2030 Agenda, with concern for equity in access of the most vulnerable populations according to their place of residence, race/ethnicity or gender. The discussions also demonstrated the difficulties in producing social indicators with the granularity, territorial and sociodemographic periodicity necessary for monitoring and evaluation of public policies and programmes. An interest and cooperation between academic institutions, social movements and public administration in the creation of technical solutions and public policies was highlighted.

As the diagnosis process used by the technical workshops proved fruitful, a demand arose to continue to learn about the experiences of policies to reduce inequalities. This was made possible through virtual missions, conducted on the platform Zoom and live streamed on Youtube, through which officers of the four cities shared their implementation processes for policies and mechanisms, while also presenting the major difficulties faced. This inspired the city representatives, finding complementarity in their challenges and strengths, and boosted the possibility of jointly enhancing their capacities to reduce inequalities.

The final activity was the elaboration of the document Mercociudades: Cooperación Sur-Sur that systematized the methodologies, activities and results obtained to guide and inspire others. The project and its materials can be replicated by different cities and in various instances and processes. The publication, in particular, offers cities crucial information regarding disaggregated indicators and its different process,



allowing them to incorporate the diagnoses resulting from this data in monitoring and evaluation reports on implementation of the 2030 Agenda and SDGs, and further strengthening South-South cooperation.

#### CONTACT INFORMATION

**Luiza Debrassi**

Advisor, Municipal Secretariat of International Affairs of the City of São Paulo  
luizadebrassi@prefeitura.sp.gov.br



# Protecting and Empowering Persons with Disabilities in the Context of the COVID-19 Pandemic



## Capacitating persons with disabilities during the pandemic and beyond

### CHALLENGE

The Asia-Pacific region is home to an estimated 690 million persons with disabilities, many of whom encounter barriers to full and effective participation in society. The COVID-19 pandemic has exacerbated existing inequalities and hindered progress towards achieving disability-inclusive development and the Sustainable Development Goals (SDGs). Persons with disabilities are at great risk of being left behind the COVID-19 response and recovery. In addition, the COVID-19 crisis has put the resources of governments and civil society organizations (CSOs) under strain. Many organizations, including organizations of persons with disabilities (OPDs), may lack the institutional and financial capacities to fully address the diverse needs of persons with disabilities during the pandemic and beyond. In this context, it is critical to mainstream disability rights and inclusion into both short- and long-term COVID-19 responses, so as to ensure persons with disabilities have continued and improved access to essential information, support and services.

### TOWARDS A SOLUTION

With financial support from Rehabilitation International, ESCAP is implementing a project on supporting and empowering persons with disabilities in the context of the COVID-19 pandemic. ESCAP has fostered close partnerships with OPDs and CSOs to advance disability-inclusive development during the pandemic and beyond thereby substantially contributing to the fulfilment of SDG 10 on reducing inequalities and of SDG 17 on partnerships. The project consists of two components:

**A dedicated web page on COVID-19 and disability inclusion** has been developed by ESCAP to enable persons with disabilities, policymakers and other stakeholders to access timely information and resources on the pandemic. The web page includes: (1) a database on disability-inclusive government responses to the pandemic by ESCAP members and associate members in the Asia-Pacific region; and (2) a database comprising more than

#### PROJECT NAME

Protecting and Empowering Persons with Disabilities in the Context of the COVID-19 Pandemic

#### NOMINATED BY

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, China, India, Malaysia, Thailand

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

10.2, 17.16, 17.17

#### SUPPORTED BY

Rehabilitation International

#### IMPLEMENTING ENTITIES

ESCAP

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

July 2020 – June 2022

#### LINK

<https://www.maketherightreal.net/covid-19>





240 disability-related resources developed by governments, CSOs and United Nations entities, including those in accessible formats.

**Seed-funding and technical assistance for pilot initiatives** have been provided by ESCAP to five OPDs and CSOs, including the Asia-Pacific Development Center on Disability (APCD) in Thailand, the Centre for Disability in Development (CDD) in Bangladesh, the National Council for the Blind, Malaysia (NCBM), Samarthyam in India and Zhumadian Disabled Persons' Federation (ZDPF) in China.

ESCAP has supported partner institutions in incorporating both disability and gender perspectives into the design and implementation of the pilot initiatives. Its partners have delivered essential support and services – such as community-based mental health services, vocational skills training and referrals to social protection programmes – to persons with disabilities to mitigate the adverse impacts of the pandemic. These pilot initiatives serve demonstrative purposes as case studies and prototypes for potential adaptation, replication and scale-up by other CSOs and local governments. Good practices and lessons learned could also inform policymaking in future pandemic crisis responses.

The following tangible results were achieved through the implementation of pilot initiatives:

- ▶ **APCD** has enhanced the capacity of persons with intellectual disabilities to lead healthy, food-secure and independent lives during and after the pandemic in Thailand. Monthly online meetings were organized to promote peer learning and exchange and training workshops.
- ▶ **CDD** has advanced inclusive community-based mental health services for persons with disabilities in Bangladesh. Twenty peer-responders, including 14 persons with disabilities, were recruited and trained to provide mental health support to 772 persons with disabilities through door-to-door visits, group sessions and teleservices. Training in inclusive community-based mental health programming and technical support visits were conducted for six OPDs from different locations in Bangladesh. Moreover, an exposure visit to project locations by government representatives and a national-level dialogue were organized to facilitate the integration of disability perspectives into the Action Plan of the National Mental Health Strategy 2020-2030.
- ▶ **NCBM** has promoted disability-inclusive digitalization in national legislation and enhanced the capacity of persons with disabilities to advocate for digital rights in Malaysia. More than 20 persons, including those with diverse disabilities, were trained in web accessibility auditing, accessible publishing, gender-disability intersectionalities and strategic advocacy. In addition to conducting a survey to assess the situation of persons with disabilities, particularly women and girls with disabilities, during the pandemic NCBM delivered technical support to the Intellectual Property Corporation of Malaysia and issued press statements urging the government to accede to the Marrakesh

Treaty.<sup>1</sup> Notably, Malaysia passed the Copyright (Amendment) Act 2021 in December 2021 and acceded to the Marrakesh Treaty in March 2022.

- ▶ **Samarthyam** has strengthened the capacities of OPDs, community networks and government agencies to integrate disability rights and inclusion into institutional and community structures and mechanisms in the state of Rajasthan, India. Training in disability-related legislation, policies, campaigns and programmes was delivered to 27 OPD members and 18 government officials. District-level accessibility audit teams were formed to undertake audits of 35 key government buildings. The initiative also increased the participation of women with disabilities in OPDs and community networks, with 26 OPD representatives and 19 self-help group members trained in gender equality and women's empowerment. Furthermore, six district-level monitoring committees were established to address disability issues.
- ▶ **ZDPF** has improved the livelihoods and well-being of persons with disabilities in Zhumadian City, China, thereby enhancing their resilience to contingencies and crises. A mechanism was developed to monitor and track the socio-economic status of persons with disabilities in four project locations. Persons at risk of falling back into poverty were referred to relevant government entities for further support services. ZDPF provided training in vocational skills to more than 300 persons with disabilities, covering the areas of agricultural technologies and techniques, animal breeding, straw painting and crocheting, among others. Twelve self-help and mutual support groups were established to catalyse the sustained employment of persons with disabilities.

To promote the sharing of innovative approaches and broaden South-South cooperation, ESCAP has invited the above-mentioned project partners to share their experiences in empowering persons with disabilities in the context of the pandemic at regional events, such as the Regional Forum on Advancing Disability-inclusive Development on 3 December 2021.

In line with the spirit of “nothing about us without us”, the partnerships with OPDs and CSOs have maximized the participation of persons with disabilities in project design and implementation, ensuring the relevance of activities to the needs on the ground. The project has enhanced linkages of community-level initiatives with policymaking and programming at the subnational and national levels, creating a long-term impact on disability-inclusive development beyond the COVID-19 pandemic.

## CONTACT INFORMATION

**Ms. Cai**  
Chief, Gender Equality and Social Inclusion Section, Social Development Division, ESCAP  
caic@un.org

1 The Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, administered by the World Intellectual Property Organization.



## Blockchain technology and trilateral South-South cooperation for the socioeconomic inclusion and digitalization of the cotton sector in Latin America

### CHALLENGE

For the last two decades, the Peruvian cotton value chain has suffered from low competitiveness, a trend highlighted by decreased cotton productivity and by a downturn in quality, a decline in textile and apparel production and limited access to markets.

In Peru, 100 percent of cotton production comes from family farmers who are directly affected by access to certified seeds, regular technical assistance, quality supplies, access to mechanization technologies and digitization of production. Moreover, access to markets is limited to the extent that there is a disarticulation between cotton producers and the textile industry, which has led to an increase in cotton imports into the country for the manufacture of yarn and garments; on the other hand, due to the lack of traceability and fibre quality levels the positioning of Peruvian fibre in regional and international markets is problematic.

In this context, the blockchain pilot in Peru aims to implement traceability and transparency systems that provide evidence of the quality of cotton fibre; to improve registration and control systems for cotton cultivation by family farmers; to enhance the articulation among the actors in the cotton chain; and to implement a traceability system that recognizes the origin of Peruvian cotton from seed to garment. All of which will have a positive impact on sustainable development thereby bridging the gap of cotton family farmers' access to digital technologies for traceability and for better entry to markets providing added value to their products.

### PROJECT NAME

+Cotton Project

### NOMINATED BY

Food and Agriculture Organization of the United Nations (FAO)

### COUNTRIES/REGIONS/TERRITORIES

Peru, Brazil

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

9.4, 10.3

### SUPPORTED BY

FAO Regional Office for Latin America and the Caribbean, Brazilian Cooperation Agency (ABC), the United Nation Economic Commission for Europe (UNECE)

### IMPLEMENTING ENTITIES

FAO, Creditex and Costach cooperative, Cat's Pyjamas

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

January 2021 – July 2022

### LINK

<https://bit.ly/3bY4I5S>  
<https://bit.ly/3dy2tkT>

## TOWARDS A SOLUTION

The FAO Regional Office for Latin America and the Caribbean, through the +Cotton project supported by the Brazilian Cooperation Agency (ABC), jointly with the United Nations Economic Commission for the Europe (UNECE), are implementing a pilot project for traceability and transparency of the cotton value chain in Peru based on blockchain technology, integrating cotton family farming, the national textile-garment industry and an international fashion company. Technological innovation contributes to the reduction of socioeconomic gaps and the inclusion of cotton family farmers in differentiated markets thereby adding value to their production. In this context, the digitalization of agriculture in the cotton-textile-garment sector is the basis for a more inclusive and sustainable value chain in the transition to a circular economy. Through South-South cooperation established by the Government of Brazil, FAO and the Government of Peru, the +Cotton Project seeks to share good practices and knowledge for the improvement of the cotton sector.

UNECE facilitates the Blockchain Platform and technical assistance for the implementation of the technology. FAO contributes to coordinating the actors at field level and provides technical assistance to family farmers cooperatives for sustainable production practices and better capacities to market access, including the sharing of good practices from Brazil and other countries in the Latin American region.

The blockchain pilot allows the testing of technologies for inclusive cotton value chains, a process which integrates the productive link to verify the important step of tracking the product transformation and adding value to the cotton production to the benefit of all actors. It is the first pilot in the Latin American region to implement blockchain technology allowing the tracing of the cotton and the DNA marker technology with molecular marking of the fibre thereby diminishing the technological gap for cotton family farmers.

The pilot involves three main actors in producing, transforming and commercializing apparel collection:

The Costach cooperative, consisting of around 5,200 families in the Piura region, northern Peru, produces 10 tons of cotton fibre. Creditex, a private company, heads the entire process from the ginning, spinning, dyeing, weaving to the final elaboration of the products. Creditex has around 1,460 employees; and at the end of the chain is the company, CAT's Pyjamas, which is in charge of the placement of the products, offering the final product, a luxury pyjamas collection in the US market. The sustainability of the initiative is based on an unprecedented dialogue among cotton producers and the industry to improve the technology and the search for new partners.

The initiative, through the traceability of all the transformation processes of the cotton, provides evidence of sustainability standards and certifications for the mitigation of sustainability hotspots. In particular the use of chemicals according to the OekoTEX 100 certification and the social



compliance of the garment manufacturer, certified by the Worldwide Responsible Accredited Production (WRAP) certification. Both certifies were mapped through the blockchain platform of the pilot.

Improving transparency and traceability has become a priority for the apparel and footwear industry to increase its ability to manage its value chains more effectively; to identify, mitigate and address environmental, human rights and labour rights impacts; to combat product counterfeiting; and to manage business risks. Currently, many companies have limited insight into the network of trading partners within their value chain. Most can identify and track their immediate suppliers (level one), but information is often lost, as per a UNECE study showing that only 34 percent of fashion companies implement tracking and tracing in their supply chain – and most only reach level one (UNECE, 2019).

One lessons learned was the importance of supporting initiatives for the digital education of farmers, including in the use of apps and in the development of capacities to generate digital contents when appropriating the requisite technologies, including increased access to open-source technologies. Public-private alliances also need to be generated to facilitate access of connectivity infrastructure in rural areas.

Innovation, traceability and transparency initiatives should support family cotton farming through: planned production based on contract farming; access to credit; incentives for exports and domestic consumption; technical assistance and rural extension; agricultural innovation; and a chain that shares risks and profits, based on principles of fair trade and focused on consumer preferences. It is essential that Peru and other countries in the Latin America and Caribbean region continue to encourage competitive strategies in markets, such as traceability and transparency, thereby contributing to sustainability and to scaling up these initiatives to the regional level through ensuring inclusiveness.

### CONTACT INFORMATION

#### Adriana Gregolin

Regional Coordinator of +Cotton Project, FAO Regional Office for Latin America and the Caribbean  
adriana.gregolin@fao.org

# Implementation of Regional Development Instruments and Territorial Planning in the Dominican Republic



## Triangular cooperation between Chile and Spain in support of Regional Development and Territorial Planning in the Dominican Republic

### CHALLENGE

Similar to other countries in the region, the Dominican Republic suffers from a lack of effective governance when it comes to territorial planning and land use. That has led to numerous issues, including to a lack of coordination among different governing bodies and to an inability to reduce regional inequalities. Such lack of coordination also means that there was an inadequate coordination and orientation of public investment that led to inefficient resource allocation and the perpetuation of old challenges. More specifically, the southwestern part of the country suffers from poverty, social conflicts, greater risks and vulnerabilities to natural hazards and border-related issues along the border with the Republic of Haiti.

### TOWARDS A SOLUTION

The project, entitled "Implementation of Regional Development Instruments and Territorial Planning in the Dominican Republic", was executed in collaboration with the Ministry of Economy, Planning and Development of the Dominican Republic; the Chilean Agency for International Cooperation for Development; the Undersecretary of Regional and Administrative Development of Chile; and the Spanish Agency for International Development Cooperation.

The overarching goal was to contribute to the strengthening of the institutional framework for regional development and land-use planning in the Dominican Republic. The intervention strategy focused on South-South knowledge transfers, on the exchange of experiences through training and on the construction of methodological instruments for the elaboration of regional development and a land-use plan.

#### PROJECT NAME

Implementation of Regional Development Instruments and Territorial Planning in the Dominican Republic

#### NOMINATED BY

Chilean Agency for International Cooperation for Development (AGCID)

#### COUNTRIES/REGIONS/TERRITORIES

Chile, the Dominican Republic, Spain

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

11a, 17a

#### SUPPORTED BY

Fondo Mixto de Cooperación Triangular Chile España (Mixed Triangular Cooperation Fund Chile-Spain)

#### IMPLEMENTING ENTITIES

Dominican Republic: Ministry of Economy, Planning and Development; Chile: Chilean Agency for International Development Cooperation; SubSecretariat of Regional and Administrative Development; Spain: Spanish Agency for International Development Cooperation

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

December 2017 – April 2020



First, the regulatory institutional and competence frameworks were reviewed to identify the competence mandates that would allow a regional presence of the governing body and making these instruments operational. Subsequently, materials (guides) were designed for the elaboration of the Regional Plan for Territorial Planning and Development, based on a logical and methodological framework, with a view to facilitating the elaboration of Plans in other regions, standardizing an innovative methodology in the regulatory framework and in planning, and determining the territory to planning scales that did not exist until the beginning of the Project.

The decision-making process in the preparation and approval of instruments was identified, establishing comprehensive governance as part of a process of dialogue and coordination. This experience is in the process of technical-formal validation for said instruments, allowing the promotion of prioritized strategic areas to be inserted in the planning and budget.

The Regional Development Council, with the support of the project, made progress in its adaptation to the current legal framework, structure, roles and responsibilities and in the awareness and induction of key actors. However, the country is in the process of organizing elections which has resulted in a temporary suspension of decision-making in that regard.

The capacity-building process, based on "learning by doing", strengthened inter-institutional dialogue and decision-making for territorial planning. The technical teams of key institutions were trained in this matter. This exercise made it possible to broaden the political and technical knowledge of key actors at the territorial level and to consolidate public-private alliances.

The Pilot Region (southwest) resulted in a first inter-institutional exercise, which included a participatory approach based on prospective and strategic scenarios. It was based on a process of gathering information and on sectoral and public consultations in the territory that made it possible to assess the characteristics of the regions thereby allowing the exploration of modern methodologies and technologies.

A management structure was established to define the oversight and resources for its implementation, monitoring and follow-up, as proposed in the Guide. Governance is based on multistakeholder interactions, budgetary allocations and connectivity with territorial planning and regional development thereby allowing an evaluation to be made on the effectiveness in the territory of the proposed implementation structure.

With a process of pre-diagnosis, validation and socialization, the territorial diagnosis was carried out with regional dialogues, sectoral consultations and open public consultations to identify the needs, obstacles and opportunities in the pilot locality. This makes citizens visible as part of a new model of governance that takes into account the public and private vision of regional development.

The management rested on a tripartite Coordination and Follow-up Committee, made up of the partners, to learn about the progress in management, which allowed detecting opportunities for improvement in compliance with the work schedule. The multidisciplinary and inter-institutional interaction guaranteed a comprehensive approach, which focused on guaranteeing the expected outcomes in the base planning of the initiative. The formulation of Regional Plans for Territorial Planning and Development can be replicated in the Dominican Republic or in other countries thereby safeguarding conditions of governance, management and inter-institutional exchanges.

To guarantee political participation and involvement in future formulation initiatives, it is necessary to incorporate key political players and decisions-makers right from the planning and pre-diagnosis phases, so that they can be involved early in the strategic aspects and investment initiatives in the territory, namely those collected in the public and sectoral consultation phase. The design of procedures for the formulation, validation, approval and implementation of regional planning is put forward in accordance with the Methodological Guide for Formulation carried out within the project framework. Prioritized investment in consultation with the territory must be harmonized with the National System, and an automated mechanism may be established for the registration of public investment projects located in the territory in question.

---

#### CONTACT INFORMATION

**Jorge Ibáñez**  
Geographer, SUBDERE  
[jorge.ibanez@subdere.gov.cl](mailto:jorge.ibanez@subdere.gov.cl)

# Promoting local government capacities to transition towards people-centred, smart and sustainable cities



## Supporting cities in economies in transition in the national quest to be people-centred, smart and sustainable

### CHALLENGE

The cities of Bishkek, Kyrgyzstan; Nur-Sultan, Kazakhstan; Tbilisi, Georgia; Grodno, Belarus; and Podgorica, Montenegro all face similar challenges in their paths towards sustainable development. That includes an insufficient capacity of city governments to develop evidence-based policies for smart sustainable development at the local level, and an insufficient capacity to facilitate funding for developing urban infrastructure projects. These challenges prevent cities from achieving the Sustainable Development Goals (SDGs), and threaten the achievement of the 2030 Agenda at the local level.

### TOWARDS A SOLUTION

The UNDA 12th tranche project on innovative financing for sustainable smart cities works with governments in four different UNECE subregions – Eastern Europe (Belarus), South-Eastern Europe (Montenegro), Caucasus (Georgia) and Central Asia (Kazakhstan and Kyrgyzstan) – to support the transitions of beneficiary countries towards smart and sustainable cities. The goal is to promote implementation of Goal 11 and other urban-related SDGs of the 2030 Agenda for Sustainable Development.

As part of the project, UNECE works to improve local capacity to develop and implement sustainable urban policies through: (i) evaluation of cities' performance and the drafting analytical smart sustainable cities profiles; (ii) capacity-building activities to promote evidence-based policies and vertical and horizontal coordination among different government agencies, with the participation of the cities' public; (iii) policy to support city governments in acquiring funding to support smart sustainable cities projects.

#### PROJECT NAME

Promoting local government capacities to transition towards people-centred, smart, sustainable cities

#### NOMINATED BY

United Nations Economic Commission for Europe (UNECE)

#### COUNTRIES/REGIONS/TERRITORIES

Belarus, Georgia, Kazakhstan, Kyrgyzstan, Montenegro

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.9, 6.1, 6.2, 7.3, 11.1, 11.3

#### SUPPORTED BY

United Nations Development Account (UNDA)

#### IMPLEMENTING ENTITIES

UNECE

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2020 – December 2022

#### LINK

<https://bit.ly/3JTbT6n>

The project supports the development of the smart sustainable cities profiles through the application of the UNECE/ITU Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC), a United Nations standard developed by UNECE and ITU in 2015. The KPIs for SSC consist of 91 indicators at the intersection of three dimensions of sustainability (economy, environment, and society and culture) and information and communication technologies. The cities performance is evaluated against the indicators; based on the evaluation, cities profiles are developed which include concrete policy recommendations to the cities, including for concrete urban infrastructure projects. Following the development of the cities profiles, UNECE organizes capacity building activities for the local governments to promote their capacity on evidence-based urban policies, including on urban data collection, analysis and use of the data in the decision-making.

The project also supports cities with policy advice and capacity building for raising external funding to support urban infrastructure projects. For instance, in Bishkek, Kyrgyzstan, based recommendations of the city smart sustainable city profile, a key priority for funding was identified: improvement of the informal settlements which are part of the city. Following that, UNECE has conducted a survey to map the informal settlements and then partnered with the Cities Development Initiative for Asia (CDIA) to design a pre-feasibility study aimed at the integrated upgrading of five informal settlements and for job creation. As the CDIA is working on the pre-feasibility study during 2022, UNECE is engaged to mobilize partnerships with international financial institutions capable to finance the upgrading of informal settlements beyond the pre-feasibility study phase.

In Podgorica, Montenegro, UNECE supported the preparation of a report on “Formalizing the Informal: Challenges and Opportunities of Informal Settlements in South-East Europe” which contains an analysis of the challenges of informal settlements in the city. A concrete policy package, an investment programme or an action plan at city level will be developed by the local government with the support of UNECE to promote smart sustainable urban development.

In Tbilisi, Georgia, in June 2019, UNECE organized a joint training workshop with the Government of Tbilisi, Georgia – namely, the Ministry of Regional Development and Infrastructure, the Ministry of Economy and Sustainable Development and the Georgian Land Registry – on evidence-based housing and urban policies and sustainable infrastructure. As a result, the partners have agreed to develop a joint initiative on urban planning of housing and infrastructure in cities.

The project uses a participatory approach. Through local workshops with the engagement of local stakeholders and in cooperation with the relevant central government institutions, the project is creating a vision for smart sustainable urban development in the five pilot cities. The project supports innovative approaches and digital transformation in countries with economies in transition, through the growing use of e-government, e-governance, e-participation and e-inclusion that has been driven by digitalization.



To ensure project sustainability, UNECE engages regularly with the local authorities through weekly meetings with city governments thereby ensuring continuity, knowledge transfer and sustainable capacity-building.

#### CONTACT INFORMATION

##### **Gulnara Roll**

Regional Advisor, Forests, Land and Housing Division, UNECE  
 Gulnara.Roll@un.org  
 +41 76 238 4597





# Enhancing Early Warning Systems in the Caribbean



## Improving regional disaster preparedness through South-South Cooperation

### CHALLENGE

The Caribbean region is highly prone to natural hazards, such as hurricanes, floods, volcanic and seismic activities, droughts, and wildfires. The increasing impact of climate change and the risks posed by a range of natural, environmental and technological hazards are among its most critical development problems. The need for further action to address preparedness capacities reinforces Early Warning Systems (EWS) and fosters exchanges and collaboration among countries and linkages with regional institutions. A people-centred multi-hazard early warning system empowers individuals and communities to act with sufficient time and in an appropriate manner to reduce the possibility of personal injury and illness, loss of life and damage to property, assets and the environment. It is a fundamental part of the disaster risk reduction approach and plays a recognized role in the Sustainable Development Goals: SDG 11 on promoting sustainable cities and communities and SDG 13 on addressing climate change.

### TOWARDS A SOLUTION

The increasing frequency and intensity of disasters impact reinforces the need of implementing EWS and foster exchanges and collaboration among countries and linkages with regional institutions. Therefore, five countries in the Caribbean – i.e. Antigua and Barbuda, Dominica, Dominican Republic, Saint Lucia and Saint Vincent and the Grenadines – set out to improve their EWS counting on technical advice from Cuba through South-South cooperation. An effective early warning system contributes to resilience, reduces vulnerability, and minimizes the loss of life and economic impact of a hazardous event, playing a key role in disaster risk reduction in the Caribbean region. Therefore, it contributes to achieve the SDG target of 11.5 related to “reduce the number of deaths and the number of people affected by disasters and decrease the direct economic losses relative to the global gross domestic



#### PROJECT NAME

Enhancing Early Warning Systems in the Caribbean

#### NOMINATED BY

United Nations Development Programme (UNDP)

#### COUNTRIES/REGIONS/TERRITORIES

Antigua and Barbuda, Cuba, Dominica, Dominican Republic, Saint Lucia, Saint Vincent and the Grenadines

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

11.5, 13.5

#### SUPPORTED BY

European Civil Protection and Humanitarian Aid Operations (ECHO)

#### IMPLEMENTING ENTITIES

UNDP, Caribbean Disaster Emergency Management Agency (CDEMA) and the International Federation of the Red Cross and Red Crescent Societies (IFRC)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2017 – 2020

#### LINK

<https://bit.ly/3Agux4R>



product caused by disasters,” and SDG target 13.3 related to improving awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

This initiative aimed to increase access to EWS tools and knowledge at the regional, national and local levels, through the development, improvement and adaptation of models, methodologies and toolkits. It is supported by two consecutive 18-month projects financed by ECHO and implemented by UNDP, in coordination with CDEMA and the IFRC. The project followed four key steps for effective South-South knowledge transfer: (i) Strengthening the capacities of the offering country (Cuba) to transfer knowledge, which included the systematization of the conceptual, methodological, technical and institutional aspects of the proposals (EWS Toolkit), the training of the technical experts on pedagogical skills and the establishment of coordination mechanisms among the Cuban entities involved; (ii) Defining the demand, based on gaps and needs assessments, whereby the countries requesting cooperation select the most suitable options from the Cuban EWS Toolkit and reached agreements on potential areas of collaboration; (iii) Preparation of solutions packages by Cuba and recipient country governments, including the definition of a Priority Action Plan (i.e. objective, activities, resources and budget), adaptation, implementation and transfer; (iv) Systematization and communication, to create and share knowledge capturing the South-South cooperation activities and offering them within and beyond the region.

With Cuban Government support – which included training missions to Cuba, remote technical assistance, and implementation missions of Cuban officers – the requesting countries were able to carry out the following actions:

- ▶ Antigua and Barbuda developed the Common Alert Protocols (CAPs) digital tools, testing them through community simulations and drills.
- ▶ Dominica produced a hazards, vulnerability and risks study/methodology in the Rousseau River basin, while training an in-country technical team in this methodology.
- ▶ The Dominican Republic implemented numerical forecasting for flash flooding by using a free and open software.
- ▶ Saint Lucia produced a hazards, vulnerability and risks study for intense rains and coastal floods in the Dennery community, while training an in-country technical team.
- ▶ Saint Vincent and the Grenadines promoted a volunteer river observers’ system, including community-based equipment and trainings.

Each action is innovative by itself and has leveraged pertinent knowledge among countries sharing similar contexts (e.g. weaknesses and need for capacity-building) and exposure to similar hazards. Furthermore, this promotes an important and growing trajectory of coordination and harmonization across the region.

This initiative has strengthened regional and national capacities in preparedness and prompt action. The five countries have advanced in policymaking and programming for early warning systems. Multiple



stakeholders, including community members and vulnerable groups, were involved in the process, broadening the understanding and ownership of early warning and preparedness and integrating national and community levels.

Lessons learned from the South-South cooperation initiative undertaken in the Caribbean may contribute to the global knowledge pool. These include a precise definition of the demand, the packaging of the offer based on the “know how” and the adaptation of the tools to the local context and needs. The experience highlights the importance of carefully considering the key steps for effective knowledge transfer. Main challenges are related to the need of a results-based planning approach that measures the impact of the South-South cooperation initiative, the need for a sustained investment to promote sustainability and the institutionalization of the transferred capacities.

#### CONTACT INFORMATION

**Jeannette Fernández**

Disaster Risk Reduction and Recovery Team Leader, Regional Hub, Panama, UNDP  
jeannette.fernandez.castro@undp.org



# Sustainable Coffee Production in Gorongosa National Park

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



## Implementing a sustainable coffee production system to mitigate the effects of deforestation and the pressure of climate change, and to improve rural livelihoods and food security

### CHALLENGE

Agricultural production in Mozambique, particularly family production, is crucial for food and nutritional security and the well-being of the population. Although the productive potential is great, the current systems fall far short of needs and of potential.

According to the Poverty Reduction Strategy Plan, increasing access to production factors, particularly for women, and making appropriate technologies available are priority challenges. On the other hand, the weak commercialization of agricultural products is a disincentive to the intensification of production, which limits the growth of family income. The challenge to improve access to markets involves improving the infrastructure network, post-harvest handling, storage, conservation and the processing of products.

### TOWARDS A SOLUTION

The agreement for the implementation of the triangular cooperation project, entitled “Sustainable Coffee Production in Gorongosa National Park”, was signed between Camões, I.P., the Brazilian Cooperation Agency (ABC), and the Ministry of Land, Environment and Rural Development of the Republic of Mozambique (MITADER), as well as by the implementing entities of the three countries, Parque Nacional da Gorongosa, Mozambique (PNG), Instituto Superior de Agronomia, at the Universidade de Lisboa, Portugal (ISA/UL) and Universidade Federal do Espírito Santo, Brasil (UFES), based on the institutional partnership for research work on coffee between Brazil and Portugal, now with the mutual aim of supporting the development of Mozambique. The project was defined jointly, using a locally adapted methodology, enabling effective cooperation between the parties and interaction with the community.



#### PROJECT NAME

Sustainable Coffee Production in Gorongosa National Park

#### NOMINATED BY

Agência Brasileira de Cooperação (ABC); Camões – Instituto da Cooperação e da Língua, I.P. (Camões, I.P.); Ministério da Terra, Ambiente e Desenvolvimento Rural, de Moçambique (MITADER).

#### COUNTRIES/REGIONS/TERRITORIES

Brazil, Mozambique, Portugal

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 2.4, 5.a, 13.1

#### SUPPORTED BY

Agência Brasileira de Cooperação (ABC) Camões – Instituto da Cooperação e da Língua, I.P. (Camões, I.P.), Instituto Superior de Agronomia, at the Universidade de Lisboa (ISA/UL), Universidade Federal do Espírito Santo, Brasil (UFES), Parque Nacional da Gorongosa, Mozambique (PNG)

#### IMPLEMENTING ENTITIES

ISA/UL, UFES, PNG

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

November 2017 – November 2022

#### LINK

[www.tricafe.org](http://www.tricafe.org)





The main objectives of the Project are as follows: The creation and implementation of a sustainable coffee production system, namely, through the rational use of water and fertilizer resources, a coffee culture with shading and cultural intercropping (SDG 2 – 2.4); mitigating the effects of deforestation and the pressure of climate change predicted for the current century – analysing the resilience of the plant material (coffee trees) in the context of expected climate change in the region and select elite genotypes best adapted to regional conditions (SDG 2 – 2.4 and SDG 13 – 13.1); and promoting agribusiness and increasing the income and food security of rural families (SDG 2 – 2.3):

- ▶ Through empowering the different actors (farmers and their associations, technicians, traders, students, researchers and teachers) across the coffee value chain, giving special attention to women, so that they too can contribute to supporting their families (SDG 2 – 2.3 and SDG 5 – 5.a).
- ▶ Developing training activities for farmers and technicians, providing access to academic and research studies and promoting the training of local human resources (SDG 2 – 2.3).
- ▶ Promoting the commercialization process, with links to transport, storage and commercialization companies, and the promotion and marketing of the Gorongosa coffee brand in terms of quality, sustainability and the commercial market (SDG 2 – 2.3).

The Portuguese and Brazilian teams have worked closely with local partners and identified the research and advanced training activities for human resources. These teams have a long tradition of collaboration in coffee production systems, in analysing the behaviour of coffee in the face of constant climate change and in its improvement, supported by a strong component of technical-scientific research, which includes human resources training.

The accumulated experience of the two teams has allowed for the solid implementation of the Gorongosa Café triangular cooperation project, continuing work already started under the Gorongosa Restoration Project, supported by the Mozambican Government.

The main results achieved by the end of 2021 were as follows:

- ▶ Through the combination of research, capacity-building and advanced training, it was possible to expand the production system, increasing the cultivated area and the number of coffee plants and native shade trees.
- ▶ The project made a direct contribution to the income of 876 families and created 324 seasonal and 17 permanent jobs.
- ▶ 876 farmers (representatives of 876 families) received training and benefited from extension services in the areas of production, harvesting and post-harvesting techniques.
- ▶ 17 technicians from PNG benefited from various training actions relating to various aspects of the coffee value chain.



- ▶ 2 PhD students and 10 Masters students, whose dissertations cover various aspects of the coffee value chain, have promoted the creation of local critical mass to ensure the sustainable relaunch of coffee growing in Mozambique.
- ▶ Around 17 tons of green coffee were produced for sale.

One of the expected results of the project is the development of a Good Practices Manual, which is currently being produced and will be presented to the beneficiaries at the end of the project to ensure its sustainability.

The success of this project is attributable to all the partners who focused on the outcomes. The work methodologies made it possible to reach consensus in terms of planning, project management and the definition of guidelines.

Moreover, the nexus between sustainable use of natural resources, preservation of biodiversity and community development guarantees its sustainability.

#### CONTACT INFORMATION

**Carla Rodrigues**  
 Head of Strategic Partnerships, Camões, I.P.  
 Carla.Rodrigues@camoes.mne.pt

# Sustainable Textile Investment and Operations in Ethiopia

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



## Triangular cooperation to promote environmental, social and governance knowledge and good practices in manufacturing industries for sustainable investment and operation

### CHALLENGE

The primary focus of the textile industry of Ethiopia is on production and, to some extent, on the quality of production, while less attention is assigned to Environmental, Social and Governance (ESG) for sustainability –namely saving resources, environmental protection and compliance at all levels of the textile and garment industries – and to public institutions. There is a lack of clear and uniform ESG standards that conform to international markets and no formal system or practice of compiling good ESG practices and preparedness for scaling up; there is also a gap in implementing ESG-related policies, proclamations, regulations and a lack of awareness among industry management staff on complying with national and international buyers' ESG requirements in terms of stringent compliance requirements relating to environmental, social and governance factors.

### TOWARDS A SOLUTION

The project on “Sustainable Textile Investment and Operation in Ethiopia” aims to promote ESG performance in the local textile enterprises and foreign direct invested (FDI) industries; to upgrade the capacity of the national regulatory body through trainings and improved ICT applications for performance monitoring; and to create an easy information access platform for international buyers and manufacturers. The project also aims to contribute to the achievement of the following Sustainable Development Goals (SDGs): primarily SDG 12: responsible consumption and production patterns; and others – SDG 5: achieve gender equality; SDG 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; SDG 9: foster and promote inclusive and sustainable industrialization; SDG 13: climate action; and SDG 17: strengthen the means of implementation and revitalize the global partnership for sustainable development.



#### PROJECT NAME

Sustainable Textile Investment and Operations in Ethiopia

#### NOMINATED BY

United Nations Industrial Development Organization (UNIDO)

#### COUNTRIES/REGIONS/TERRITORIES

China, Ethiopia, Germany

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.1, 5.5, 8.8, 9.2, 12.6, 12.4, 12.a, 13.1, 17.6, 17.7

#### SUPPORTED BY

Ministry of Commerce (MofCom), China; the Federal Ministry for Economic Cooperation and Development (BMZ), Germany

#### IMPLEMENTING ENTITIES

UNIDO, the German Agency for International Cooperation (GIZ), China National Textile and Apparel Council (CNTAC), Ethiopian Textile Industry Development Institute (ETIDI)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

July 2020 – September 2022

#### LINK

<https://open.unido.org/projects/ET/projects/190414>





The project will develop an interactive online platform that will be used to promote the textile industries based on their scores relating to ESG performance, including two main components: 1. documenting best ESG practices and establishing an open access digital platform for sharing best practices; and 2. upgrading the technical capacity of the FDI textile and garment industries, local SMEs and their counterparts, thereby improving the target industries' ESG performance and upgrading the capacity of ETIDI and the Ethiopian Textile and Garment Manufacturers' Association to provide reliable and consistent technical support to the target industries.

The project is implemented by UNIDO, in cooperation with United Nations Global Compact( UNGC), ETIDI, CNTAC and GIZ. The CNTAC is guided by UNIDO, in cooperation with UNGC, to implement key capacity-building activities, especially in the adaptation of Asian good practices to the Ethiopian textile and garment sectors, for South-South cooperation in the transfer of knowledge. ETIDI provides an in-kind contribution to local technical activities. GIZ works as another technical arm to formulate triangular cooperation supporting the training activities to overcome transnational development challenges.

The Project Steering Committee (PSC) is composed of representatives of involved counterparts, both at private and public sector levels. These include the Ethiopian Ministry of Trade and Industry (MoTI), ETIDI and ETGAMA; CNTAC, GIZ and UNIDO. To ensure complementarity of activities and monitoring accuracy, the PSC is included in the oversight structure of the Programme for Country Partnership (PCP) for Ethiopia through its reporting after each PSC meeting to the PCP Ethiopia High-Level Joint Steering Committee.

With the current project implementation, UNIDO has successfully conducted many planned activities to achieve the SDG targets. Five Ethiopian institutions strengthened their ESG knowledge, 32 public and private actors gained awareness/knowledge, 5 online and hybrid capacity-building activities were provided, and one analytical and statistical publication produced. Specifically, 30 companies including the foreign direct invested and local companies in Ethiopia were promoted to adopt sustainable practices supporting SDG 12 of sustainable consumption and production; and the gender-balanced participation of target beneficiaries were promoted throughout the project implementation to support SDG 5; 15 firms benefited from improved management practices and 28 actors participated in enhanced collaboration settings (clusters, networks) to support SDG 8 and SDG 9; one United Nations inter-agency mechanism and 5 other key partnerships were developed in support of the SDG 17 goals.

The project is promoting an innovative triangular collaboration based on South-South cooperation to promote good practices and to transfer knowledge from Asian countries to Ethiopia and to potentially other African countries. UNIDO leveraged the expertise of CNTAC in Asia and GIZ's experiences in the relevant sectors in the Asia-Pacific region and in the global context to enhance this triangular cooperation. The local private sector and professional organizations were also well synergized.



The project was designed to set up systems and approaches to ensure the sustainability of project interventions in the textile value chains. The project is aligned with existing national textile industrial development priorities. The project is to ensure national leadership and ownership, in close collaboration with the national government coordinating agency, thereby ensuring that project initiatives, lessons and best practices can easily become focal areas for the government to build upon in their future plans and programmes; and to ensure multi-stakeholder participation and consultation.

The project fosters a high degree of participation and engagement with stakeholders from both the private and public sectors to ensure high-level support and a powerful sense of ownership; to avoid duplication; and to maximize past investments and programmes. The project builds on existing capacities and networks in agro-industry development and adopts a long-term approach. The project supports the promotion of policy frameworks for long-term policy change and the development of critical capacities for implementing ESG principles at the national level.

Developing an approach for the replication of achievements and good practices in other countries or industries in Africa or Asia has been identified as one of the project outputs. The project team members plan to develop strategies aimed at understanding the national and sectoral context in regard to the shifting global value chain and post-pandemic recovery. Now that a knowledge hub and training modules have been established from the current project, further financial and technical support would make it possible to extend good practices more widely and to adapt them to similar situations or settings in the region.

---

#### CONTACT INFORMATION

**Jinjiang Yan**  
Industrial Development Officer, UNIDO  
j.yan@unido.org  
+43 6767216568

# Sustainable Resource Management

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



## Applying a new approach to ensure sound social, environmental and economic outcomes in the production and use of natural resources

### CHALLENGE

The paradox of using natural resources capital, such as minerals, energy and water, is that it provides social benefits while simultaneously jeopardizing social well-being. These resources are essential for sustainable development, yet the production and use of natural resources have several negative social and environmental impacts. Countries will not be able to achieve a genuinely sustainable future unless this paradox is addressed. The paradox of unsustainable resource production and consumption patterns derives from the fundamental flaw in seeing the natural resource base in a fragmented manner and trying to develop them in silos. The world had relied on a seemingly concrete, yet highly flawed, “commodity model” to develop and use its natural resources. This spurious commodity model has led to the inefficient use of natural resources, immense negative environmental impacts, including of carbon footprints, and waste problems. The overall effects has meant declining public acceptance of such activities.

### TOWARDS A SOLUTION

Sustainable management of natural resources is a vital requirement of the 2030 Agenda for Sustainable Development, without which none of the 17 goals can be achieved in actuality. SDG 7 on affordable and clean energy and SDG 12 on responsible consumption and production are two interconnected goals – both at the foundation of sustainable development. SDG 6 on clean water and sanitation and SDG 13 on climate action are also relevant here for these SDGs concern the natural wealth of nations and are vital to realizing all other goals.

The development and use of natural resources are often a paradox. A resilient and sustainable supply of natural resources, including critical raw minerals, is essential for sustainable energy, mobility and digital transitions. Yet the supply and use of natural resources are accompanied by widespread social, environmental and economic impacts. They are often seen as a “resource curse”. If the world is to deliver on climate change and attain the 2030 Agenda for Sustainable Development objectives, countries need to drastically change their approach to production and to the use of natural resources.

To deliver on quality-of-life aspirations, countries require integrated solutions that deliver on the environmental, economic and social dimensions. Governments,



#### PROJECT NAME

Sustainable Resource Management

#### NOMINATED BY

United Nations Economic Commission for Europe (UNECE)

#### COUNTRIES/REGIONS/TERRITORIES

Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Serbia, Tajikistan and Ukraine

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

6.5, 7.1, 7.2, 12.2, 13.1

#### SUPPORTED BY

UNECE

#### IMPLEMENTING ENTITIES

UNECE, Ministries of Energy and Mining, State Commissions on Mineral Resources, Universities and NGOs (Regular Budget supported by RPTC funds, UNDA 12th Tranche Project “Integrated energy and water resource management in support of sustainable development in South-East Europe, Eastern Europe and Central Asia” (UNECE/lead, ESCAP/ implementing partner); and UNECE component of global UNDA Project “Global Initiative towards the post-Covid-19 resurgence of the MSME sector

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

January 2018 – December 2021

#### LINK

<https://bit.ly/3Pf6jfd>



industry, researchers and civil society stakeholders from Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Serbia, Tajikistan and Ukraine cooperated and shared the best integrated and sustainable management practices of energy, raw material and water resources to ensure positive social and environmental outcomes. The use of global standards accelerated the achievement of SDG 7 on access to affordable, reliable, sustainable and modern energy and of SDG 12 on sustainable consumption and production patterns.

The project, entitled “Sustainable Resource Management”, implemented by UNECE promoted the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) as the framework for sustainable management of natural resources, such as minerals, anthropogenic resources, renewable energy and groundwater. The standards also apply to future resources such as hydrogen and ammonia. UNFC and UNRMS made it possible for beneficiary countries to manage their overall resource base as an integrated whole thereby ensuring good environmental-social-economic outcomes. This new paradigm of optimizing resource efficiency and progressing toward a circular economy has provided a balanced development of natural resources and the realization of the codependent SDGs 6, 7, 12 and 13.

The project was aimed to help Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Serbia, Tajikistan and Ukraine, which are all countries with similar economies in transition, to identify best practices, measures and procedures relevant to sustainable energy transition with a particular focus on the cross-cutting nature of the natural resource. The beneficiary countries inherited a common approach from the former Soviet Union and, therefore, could collaborate well in exchanging concepts and best practices in reforming natural resource management.

However, they did not have the necessary policy and regulatory infrastructure to enable progress on these fronts. Therefore, the project assisted the development of national guidelines for integrated energy and water resources management in beneficiary countries and supported the implementation of Sustainable Development Goals 6 and 7.

To achieve the objectives, the beneficiary countries collaborated and shared their experiences in applying the UNECE’s new “nexus” approach to identify and promote integrated planning, management and governance of natural resources across sectors and spatial scales. The nexus approach used a generic and scale-independent method for identifying a nexus pathway, primarily based on experiences with water and energy-related nexus activities carried out in the region. UNECE developed the nexus approach by integrating existing tools on natural resource management, especially in food, forests, water, energy and raw materials.

UNFC, the framework for socially and environmentally referenced information on resources, and UNRMS, the system to assure continuous alignment to the 2030 Agenda for Sustainable Development, were developed by UNECE for integrated management of resources. The standards were combined with good practices guidance developed by UNECE in other areas such as food, water and forests to build a robust approach for a non-siloed and comprehensive approach to sustainable resource management. The approach was used by the Ministries of Agriculture, Water Management, Environment, Energy and Mining to coordinate joint action. Kazakhstan created an integrated Ministry of Ecology, Geology and Natural Resources, combining smaller ministries working hitherto in isolation.

A prime example of the nexus pathway approach, through a process anchored in a multi-stakeholder dialogue, allows proposing actions and measures based on identified nexus challenges and intersectoral linkages and evaluating how they have been addressed. South-South collaboration is essential to the nexus approach of integrated resource management. For

example, water resources are shared among Kazakhstan, Kyrgyzstan and Tajikistan. Transboundary collaboration is necessary for the judicious use of precious water. Value addition could be better leveraged for other resources if there was strong South-South collaboration.

All the six beneficiary countries contributed to improved sustainable and integrated natural resource management in the project. The Ministry of Energy and the Ministry of Ecology, Geology and Natural Resources, Kazakhstan, harmonized the national petroleum classification to UNFC under step 74 of the National Transition Plan. The Ministry of Natural Resources, Ecology and Technical Safety, Kyrgyzstan, considered the accelerated implementation of UNFC and UNRMS principles as a priority for the country. Tajikistan expects to align its policies with Commonwealth of Independent States regional collaboration.

Since 1997, Ukraine has mandated the use of UNFC as the foundation of its national resource management. With this collaboration, Ukraine has aligned itself with the latest version of UNFC, making it up to date with international standards and comparable globally. Bosnia and Herzegovina and Serbia are revising their resource policies and strategies, and UNFC and UNRMS are expected to be included.

The project supported the development of an innovative natural resource nexus approach. The Natural Resource Nexus approach considers the complex interactions and feedback loops between human and natural systems affecting the natural resource base, such as energy, food, land, materials and water. Transport and trade are also considered as two other sectors relevant to the nexuses. A unique nexus approach that integrates UNECE tools and instruments, such as UNFC and UNRMS, ensures integrated and sustainable approaches to natural resource management that can be applied at all scales and transcend traditional “silos”.

Beneficiary countries are planning to establish International Centres of Excellence in Sustainable Resource Management to support the continued, effective implementation and application of UNFC, UNRMS and the nexus approach. Policy and regulatory interventions are being recommended to further strengthen the methods implemented through the project.

The best practices and experiences from this activity fed into the development of UNFC and UNRMS. Therefore, all the procedures are captured in a concrete standard like UNFC, recommended by ECOSOC for worldwide use, and the new standard of UNRMS, hence replicable to any country or region. The outcomes also informed the United Nations Secretary General’s Policy Brief on “Transforming the Extractive Industries for Sustainable Development” and the terms of reference of the United Nations Working Group on Transforming the Extractive Industries for Sustainable Development.

The collaborative work on this challenging topic has led to the formulation of a few lessons learned, such as the following ones:

- ▶ The need to integrate circular economy principles at all stages
- ▶ Ensuring the alignment of all public and private finances to support a just transition
- ▶ Mitigating environmental impacts through the availability of green technologies

## CONTACT INFORMATION

### Oleg Dziubinski

Regional Advisor, UNECE  
oleg.dziubinski@un.org

### Harikrishnan Tulsidas

Economic Affairs Officer, UNECE  
harikrishnan.tulsidas@un.org  
+41 779910022



# Make the Case

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



## Student competition to scale up solutions for Asia's plastic crisis

### CHALLENGE

According to an OECD Report (2022) on *Economic Drivers, Environmental Impacts and Policy Options*, the world is producing twice as much plastic waste as two decades ago, with the bulk of it ending up in landfills, incinerated, or leaking into the environment, and only 9 percent successfully recycled. (Source: [OECD Report](#)). As per an estimate published by the Central Pollution Control Board of India, the country generated 3.3 million metric tonnes of plastic waste in 2018-2019. While increase in plastic waste is definitely a cause of alarm. Another problem is lack of an effective solid waste management system in all the states of India. UNDP – India remarked that that only one fourth of the plastic waste is recycled.

The Government of India has undertaken several initiatives to reduce and recycle plastic waste, but more is yet to be done. In this alarming situation, it is essential to look for out-of-the-box solutions for plastic waste management and to encourage discussions on tackling the problem of plastic pollution. Several NGOs and private companies have launched initiatives to reduce and recycle plastic waste in India. The need of the hour is greater awareness about these initiatives for scalability and replicability across cities of India.

### TOWARDS A SOLUTION

Considering the above situation, the *Make the Case* competition was launched in 2020. It was conceptualised and implemented by the Centre for Social Sensitivity and Action (CSSA), the Goa Institute of Management, in collaboration with Commitments Accelerator for Plastic Pollution (CAPP), the Ocean Recovery Alliance (ORA) and the Indian Plastic Institute (IPI).

The objective of the competition was to generate awareness about and discuss ways to tackle plastic waste in India. The aim was to nudge youth to take an interest in issues related to sustainable development and make them



#### PROJECT NAME

Make the Case

#### NOMINATED BY

Goa Institute of Management

#### COUNTRIES/REGIONS/TERRITORIES

China, Curaçao, India, Fiji

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.9, 4.7, 12.5

#### SUPPORTED BY

Chellaram Foundation

#### IMPLEMENTING ENTITIES

Centre for Social Sensitivity and Action (CSSA), Goa Institute of Management, Commitments Accelerator for Plastic Pollution (CAPP), Ocean Recovery Alliance (ORA) and Indian Plastics Institute (IPI)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

Season 1: November 2020 – March 2021  
Season 2: December 2021 – April 2022

#### LINK

<https://cappindia.in/seasonone/>  
<https://cappindia.in/>





the green crusaders in their respective institutions. The other major objective of the competition was to showcase the power of Public-Private Partnership for tackling plastic waste in India. The competition also attempted to bring attention to the very best initiatives which can be replicated across the country, quickly and fairly easily, and avoid wasting valuable time and resources trying to “reinvent the wheel.” Moreover, the competition served as a platform for showcasing innovations that generate plastic waste reduction results; and to provide global recognition to organizations who are working towards building a sustainable society.

The completion was rolled out into two seasons:

In Season 1, the competition focused on programmes and innovations that have already been put into practice and have the potential to be scaled, rather than focusing on entirely new start-up concepts. Over 165 teams registered for this competition. The final round of the competition was held on March 2021 where 11 teams received the awards. The award consisted of a prize money, an opportunity for internship with CAPP and the publication of a case study in the reputed journal of the Indian Plastics Institute.

The award money of US\$5,000 was sponsored by the Chellaram Foundation. The award money was distributed among 11 teams. This apart, the winning case studies were published.

As part of the competition, a panel discussion was also organized to better connect with the industry experts and stakeholders who are doing outstanding work in the sphere of waste management and recycling of the plastic waste in India. After the competition, the student groups also created a five-episode web series comprised of interviews from organizations whose initiatives had been displayed in the final round of the competition.

The success of Season 1 of the competition led the organizers to expand the dialogue on sustainability and plastic recycling among youth beyond the territories of India. In Season 2, the competition saw participation from students from India and the Indian subcontinent. In Season 2, the scope of Make the Case Competition was expanded to include three themes

Theme 1: Identify and showcase an existing proven project/programme that reduces plastic waste near a waterway

Theme 2: Identify and share a new/recent innovation for industry to scale

Theme 3: Identify a plastic waste problem in your locality: Suggest an innovative and sustainable solution

Over 50 teams registered for the second phase of the competition. In the final round 5 teams received the awards (certificate of participation and opportunity for internship). The top 5 case studies will be published in the reputed journal of Indian Plastics Institute.

The competition gave wider publicity to the organizations whose work was showcased by the students. The high-impact work of these organizations was published in the reputed journal of the Indian Plastic Institute to ensure greater outreach of the best practices in plastic waste reduction in India. CAPP (one of the collaborating partners) has launched a similar competition (Make the Case – Asia) in China, in association with City University of Hong Kong. Curaçao and Fiji, have expressed interest in replicating the ‘Make the Case’ competition for the Caribbean and Pacific Islands.

In both seasons, the case study competition provided the participating students an opportunity to put their leadership skills into action and to strengthen their communication, teamwork, networking, presentation, and strategic skills. The purpose of the competition was to educate students about sustainability in an innovative way. It allowed students to research on sustainability and interact with organizations working on solid waste management to gain first-hand knowledge about plastic pollution, recycling plastic waste and its contribution to labour and economy.

The competition followed a design-thinking approach taking students on a sensing journey and giving them the opportunity to ideate and produce strategies for scalability and replicability of high impact initiatives on reducing plastic waste and plastic recycling. The competition “flips the script” of traditional learning within the classroom – it allows students to learn from the field and nudges them into thinking out of the box.

The competition is unique as it combines knowledge generation, knowledge transfer and action. The learnings from the competition have shown that plastic waste has a significant implication for public health. Also, the high impact initiatives highlighted by the winning teams showcase how recycling of plastic waste leads to employment generation and production of products which are low cost and can be used in settings where resources are scarce, thereby having a positive effect on many sustainable development goals.

The Make the Case competition was conceptualized to expand the dialogue on sustainability and sustainable development both within and beyond GIM. This competition allowed GIM to work with new national (IPI) and international collaborators (CAPP and Ocean Recovery Alliance). Moreover, the competition helped create resource materials for knowledge transfer on plastic waste and reuse and recycling of plastic waste in India.

---

#### CONTACT INFORMATION

**Prof. Divya Singhal**

Chairperson, Centre for Social Sensitivity and Action, Goa Institute of Management  
divyasinghal@gim.ac.in

# Establishment of China-Argentina Biogas Development and Cooperation Centre

13 CLIMATE ACTION



## Promoting biogas development through bilateral cooperation

### CHALLENGE

According to the Food and Agriculture Organization of the United Nations, the outbreak of the COVID-19 pandemic, regional conflict and severe drought raised the market prices of crops, energy and fertilizer and caused food insecurity, which will increase poverty and hunger. Climate change has a direct impact on agricultural production, regarding which methane emission is the major cause. In 2020, despite the impact of the COVID-19 pandemic on the global economy, the growth of methane concentration in the atmosphere hit a record high, of which 60 percent came from human activities, such as animal husbandry. The pollution from animal waste in developing countries, such as Argentina, has caused social and health problems to both human communities and animal health.

Despite the rising awareness of applying biogas technology for environmental, energy, and economic benefits from the government and the public, Argentina still faces barriers that inhibit biogas development. This includes the gap between available technical professionals and the growing demand; the present process that restricts biogas fermentation due to the untreated high ammonia content in feedstock; the poor lab facilities for chemical analysis; the limited land application practices of digestate; and the lack of a platform for joint action and information-sharing.

### TOWARDS A SOLUTION

To tackle the above challenges, the project entitled “Establishment of China-Argentina Biogas Development and Cooperation Centre,” supported by the Ministry of Agriculture and Rural Affairs, China, was launched in response to achieving the 2030 Sustainable Development Goals and the United Nations’ call for a post-pandemic green recovery. The project is also a response to United Nations advocacy of One Health among the environment, animals and human beings, which consists of environment-friendly production



#### PROJECT NAME

Establishment of China-Argentina Biogas Development and Cooperation Centre

#### NOMINATED BY

China International Centre for Economic and Technical Exchanges (CICETE)

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, China

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 3.9, 4.4, 8.2, 11.3, 13.3, 17.7

#### SUPPORTED BY

Ministry of Agriculture and Rural Affairs, China

#### IMPLEMENTING ENTITIES

Biogas Institute of Ministry of Agriculture and Rural Affairs (BIOMA) of China, National Institute of Agricultural Technologies (INTA) of Argentina

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2021 – December 2023

#### LINK

<https://bit.ly/3Pih15i>



through pollution control and chemical reduction, renewable energy capture through biogas utilization and a sustainable living environment.

The project aims to enhance human and institutional capacity in upgrading technologies and public awareness of biogas application as a way out to tackle climate change, energy shortages and chemical fertilizer overuse through partnership establishment based on activities that include joint research, training courses, seminars and pilots.

The project was jointly implemented by the Biogas Institute of Ministry of Agriculture and Rural Affairs (BIOMA), P.R.China and the National Institute of Agricultural Technologies (INTA), Argentina. The partnership between the two institutes is rooted in the trust built by Argentine participants of SSC training courses at BIOMA. Based on Argentina's demand for organic waste treatment and utilization, BIOMA and INTA reached an agreement on promoting biogas development and cooperation as a pathway to meet the challenges of an increased demand for pollution control professionals in the rapidly growing animal husbandry industry, the high ammonia content in feedstock and limited opportunities for digestate application.

This demand-driven project is a milestone with systematic planning and comprehensive upgrading of biogas collaboration. During the three-year implementation from 2021 to 2023, the project provides best practices through training, discussion, innovation and demonstration and in-depth technical cooperation.

The outputs of the first year in 2021 include the completion of a Report on Biogas Development Potential in Argentina, two joint laboratory tests and test reports, "Laboratory study on the inhibition release in biogas fermentation process (BMP Test)" and "Laboratory Study: Experiment for strawberry planting using digestate". The tests were done by both BIOMA and INTA in parallel.

BIOMA plays a role of remote control and advice on test plan development, schematic guidance, and deviation correction. In 2022, further relevant studies on biogas purification and digestate application on pasture crop planting are being replicated in a larger scale, along with a training course and a seminar for Argentinian participants. In 2023, the technologies integrated from the experimental tests will be applied in an ongoing biogas plant for demonstration.

The parallel tests and joint study on the potential for biogas development in Argentina have brought together expertise and professionals in both China and Argentina for shared benefits in green development. As a bilateral platform the project shows its robust added value and sustainable impact from country to region. Owing to the smooth progress, the project has drawn interest from international organizations and government sectors. As a follow up, another project on green agriculture cooperation between China and Argentina was established with sponsorship from the Chinese Government. The new project connects the past, taken as a basis, and future demand to extend and upgrade the first project.



In the project, gender balance and racial equality can be seen in the composition of participants from both countries. Continuing education and regular and irregular exchanges were conducted from time to time. Knowledge- and information-sharing has formed the basis for fostering biogas professionals for the whole industry.

The project can be replicated if some conditions are met.

- ▶ First, an absolute demand assessment could be conducted in advance to identify the gaps between present available resources and the real demand and potential. The report on biogas development potential in Argentina works as a basis for the organization of further activities and projects.
- ▶ Second, mutual understanding and trust are crucial for the establishment of partnerships in bilateral projects. Subcontracting is necessary to specify the scope of work for each party.
- ▶ Third, mobilization of resources could involve expertise, provision of equipment and raw materials and in-kind inputs.

## CONTACT INFORMATION

### Long Yan

Biogas Institute of Ministry of Agriculture and Rural Affairs (BIOMA)  
longyanbioma@qq.com





# Value-Added Bamboo Processing Development in Vanuatu

13 CLIMATE ACTION



## Creating a value-added bamboo agro-industry for improving rural livelihoods

### CHALLENGE

Vanuatu is a small least developed island country. World Bank figures indicate that the country's GDP growth in 2020 and unemployment rate in 2021 were 6.8 percent and 2.2 percent respectively. The service sector is the main contributor to GDP followed by the agriculture and industry sectors on a smaller scale. The domestic industry is quite weak. The country relies on imports for over 90 percent of its commodities. The country also faces several challenges to its food security, unsustainable natural resource management, degradation of ecosystems and an increasing frequency and intensity of extreme weather events, including cyclones, floods, and a rise in the sea-level. Moreover, most rural housing is made from bamboo, and the main energy sources include woodburning and charcoal, which puts even more pressure on the country's forest resources.

### TOWARDS A SOLUTION

The Value-Added Bamboo Processing Development in Vanuatu project aims to develop a value-added bamboo sector as a new green alternative for the agro-industry to address the aforementioned social, economic, and ecological challenges, considering the unique advantages of bamboo, such as fast growth, strong-renewing, short-cycle and big-biomass.

Three Chinese experts from the China National Bamboo Research Center (CBRC) were deployed in Vanuatu to assess the bamboo sector situation, and to organize a bamboo furniture workshop to build the capacities of bamboo producers. A three-week-long hands-on training was conducted on how to make bamboo furniture by using China-made hand tools and Chinese bamboo technology /expertise. Twenty local artisans and small business owners were trained to make bamboo furniture streamlined from the selection of bamboo, to apply eco-friendly treatment of the material, to design products, to bend furniture by fire and to assemble it.

#### PROJECT NAME

Value-Added Bamboo Processing Development in Vanuatu

#### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

#### COUNTRIES/REGIONS/TERRITORIES

China, Fiji, Timor-Leste, Vanuatu

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.1, 1.5, 5.1, 8.2, 9.5, 12.2, 13.1, 13.3, 15.2, 17.6, 17.9

#### SUPPORTED BY

Government of China, Government of Vanuatu, China South-South Development Center Project, United Nations Industry Development Organization (UNIDO)

#### IMPLEMENTING ENTITIES

China National Bamboo Research Center (CBRC)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2016 – 2019

#### LINK

<https://bit.ly/3PvhCRO>





Training workshops on bamboo furniture and curtain production were also organized locally. Samples of bamboo products were shipped to raise public awareness of the bamboo industry. To ensure the sustainability of the initiative, four training manuals were compiled on bamboo furniture, propagation skills and cultivation knowledge to ensure technical expertise transfer.

Furthermore, two on-site field missions were conducted by CBRC experts to support the government of Vanuatu in formulating the strategic plan of Bamboo Sector Development in Vanuatu (2018-2028). The Strategic Plan mapped out an area of 56,9862 ha bamboo plantation to be developed and improved, of which 55,677 ha was for bamboo charcoal production, 903 ha for housing, 180.7 ha for bamboo furniture and 225.5 ha for bamboo curtain and handicrafts. Six bamboo species were identified for introduction from China to Vanuatu to upgrade its quality of bamboo plantation to meet the demands of production of high-value bamboo products.

The project implementation involved the participation of multiple international partners, including the CBRC, the Department of Industry at the Ministry of Trade, Tourism, Commerce and Industry of Vanuatu, the Department of Forest of the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity of Vanuatu, under the sponsorship of both the Governments of China and Vanuatu, the China South-South Development Center Project and UNIDO.

Through these partnerships, the project fostered innovative solutions by creating an alternative bamboo agro-industry to solve ecological challenges imposed by over logging to meet high and rigid demands of fuel charcoal, furniture and other necessary daily products and to maximize limited land resources.

The project is sustainable for such island countries as Vanuatu since bamboo production is characterized by much lower costs when compared to other products which depend mainly on imports. Bamboo is also a versatile material, which can be used by people in both rural and urban areas. It also substitutes other materials, such as plastic which damages and pollutes the environment, and wood which leads to deforestation. Additionally, the increase in the supply of bamboo can contribute to larger availability of sustainable and affordable housing, and bamboo charcoal can replace woodburning and charcoal.

The project has been successfully replicated in other Pacific Island countries with rich and untapped bamboo resources and facing similar challenges, including Fiji and Timor-Leste. The bamboo sector should make a significant contribution to rural development through exploring their rich bamboo resources since those technologies are easy to learn, simple to operate, small to input and fast to return.



## CONTACT INFORMATION

### Dr. Ding Xingcui

Professor and Director  
International Cooperation Division, CBRC  
dxc01@hotmail.com, 13805791796@163.com



# Egypt's Environmental Protection and Climate Change Mitigation Projects in Africa

13 CLIMATE ACTION



## Contributing to environmental protection and climate change mitigation in the Democratic Republic of the Congo and Uganda

### CHALLENGE

Climate change is now affecting every country on every continent, disrupting national development plans and economic policies. People are experiencing its significant impacts, including changing weather patterns, rising sea levels, desertification, floods and droughts. This highlights the urgent need to immediately, comprehensively and collectively address climate change as a new threat to international peace and security.

Falling behind in addressing climate change in some countries, especially in significantly underdeveloped ones, is hampering the realization of the Sustainable Development Goals. This is particularly the case in fragile contexts, where local populations are already suffering from challenges, such as poverty, inaccessibility to education and an absence of proper health services.

### TOWARDS A SOLUTION

The Egyptian Agency of Partnership for Development (EAPD) contributes to environmental sustainability through the provision of funds and expertise to implement projects that help mitigate challenges in the areas of environment and climate change. Under EAPD's mandate of addressing the pressing issues of developing countries and enhancing South-South cooperation in confronting contemporary challenges to peace and security, the Agency has developed an action plan that underscores its priorities in that regard. Contributing to global efforts towards addressing the detrimental effects of climate change, EAPD is focused on issues of environmental protection, climate change, rising sea levels, decarbonization and renewable energy.

Within this context, EAPD established a Rain and Climate Change Prediction Centre in the Democratic Republic of the Congo as a step towards enhancing the country's capacity in dealing with the impacts of climate change. Established through a collaboration between the EAPD and the Egyptian

#### PROJECT NAME

Egypt's Environmental Protection and Climate Change Mitigation Projects in Africa

#### NOMINATED BY

Egyptian Agency of Partnership for Development (EAPD) at the Egyptian Ministry of Foreign Affairs

#### COUNTRIES/REGIONS/TERRITORIES

Democratic Republic of the Congo, Uganda

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

13.1, 13.2, 13.b

#### SUPPORTED BY

Egyptian embassies in coordination with the Government of the Democratic Republic of the Congo

#### IMPLEMENTING ENTITIES

EAPD

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2021



Ministry of Irrigation, the Centre has been equipped with the latest rain forecasting systems, serving as a centre for the study of climate change in the Democratic Republic of the Congo. Contributing to SDG 13 (Climate Action), the project aims to boost the country's capabilities in the management and operation of national water resources, enabling the local authorities to design accurate response measures to natural disasters.

The Centre uses satellite technology and advanced numerical models to simulate the natural hydrological behaviour of rivers and to predict rain and floods and it develops studies on climate change and its impact in the country. The flood early warning system also contributes to minimizing the risks and impacts of floods. The establishment of such a Centre in the capital of the Democratic Republic of the Congo, Kinshasa, stems from Egypt's keenness on transferring Egyptian expertise in the field of integrated management of water resources to its partners in the Nile Basin countries, in order to build national capacities and maximize the efficient use of water resources.

In another contribution of Egypt to environmental protection and climate change mitigation – the EAPD has established the Busia Solar Plant in Uganda. The project is part of the firm commitment of the Egyptian Government to boosting green energy production and minimizing carbon emissions and to supporting its partners in the global South in following suit. Through partnering with the Arab Organization of Industrialization, affiliated with the Egyptian Government, the EAPD implemented this project under the umbrella of bilateral cooperation.

The Busia Plant project is a significant addition to the energy network in Uganda, where the amount of energy it provides reaches 4 megawatts, and it will be connected to the Ugandan national electricity grid so that the energy generated by the plant is of maximum benefit to other regions. The support provided by the project to the energy sector in Uganda is rooted in the firm belief in the importance of diversifying energy sources and increasing reliance on clean and renewable energy in facing and adapting to the repercussions of climate change on the continent. This is especially the case at a time where Egypt is preparing for its presidency of the next round of the Conference of the Parties to the United Nations Framework Convention on Climate Change COP27, which it hosts this year.

The implementation of the above-mentioned projects has encouraged other developing countries, predominantly in Africa, to seek deeper regional cooperation on green energy, environmental protection and climate change, thereby raising public awareness of the importance of including these topics in national development plans.



#### CONTACT INFORMATION

**Hassan El-Naashar**  
Triangular Cooperation Desk Officer, EAPD  
lenashar@yahoo.com





# South-South Cooperation for Scaling Up Climate Resilient Value Chain Initiatives



## Enhancing agricultural adaptation by learning from successful Climate Resilient Value Chains (CRCVs) in four Asian countries

### CHALLENGE

Climate change is increasingly impacting the viability of commercial ventures as drought, floods and other severe weather events multiply. Rising temperatures can hinder the production of raw materials, create new obstacles to transport and logistics and damage essential utilities and infrastructure. These in turn lead to other challenges, such as higher prices for goods and services, reduced livelihoods and food insecurity. The 2021 Climate Check Report by Deloitte Global estimates that one in four organizations worldwide are affected by climate-related events.<sup>1</sup>

Agribusinesses, particularly in developing countries, are highly vulnerable to climate hazards with constraints ranging from lowered yields and livestock productivity to reduced profitability and limited market access. In countries of the Mekong region comprising Cambodia, China, Lao PDR, Myanmar, Thailand and Viet Nam, despite rapid economic growth, inequalities persist in food-producing communities due to the severe negative impacts of climate change on agricultural value-chains. In addition, food production is facing stricter requirements with increased awareness and preference from consumers for sustainable methods of production.

### TOWARDS A SOLUTION

In response to the above challenges, the China-IFAD SSTC Facility is supporting the Scaling up Climate Resilient Value Chain Initiatives (SSCVC) project. It is aimed at generating structured learning around climate change adaptation in the agribusiness sector across four countries – Cambodia, China, Lao PDR and Viet Nam, which share similar cultural, natural and socioeconomic conditions. The objectives of the project were to: (i) facilitate the identification and development of climate resilient value chain initiatives among farmer groups and processing units; and (ii) build capacity and develop knowledge

### PROJECT NAME

South-South Cooperation for Scaling Up Climate Resilient Value Chain Initiatives

### NOMINATED BY

International Fund for Agricultural Development (IFAD)

### COUNTRIES/REGIONS/TERRITORIES

Cambodia, China, Lao PDR, Viet Nam

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 2.4, 13.1, 13.3, 13.b, 17.6

### SUPPORTED BY

China-IFAD South-South and Triangular Cooperation (SSTC) Facility

### IMPLEMENTING ENTITIES

Centre of Agrarian System Research and Development (CASRAD) in Viet Nam; Agricultural Information Institute (AII) from Chinese Academy of Agricultural Sciences (CAAS) in China, National Agriculture and Forestry Research Institute (NAFRI) in Lao PDR, and Centre for Policy Studies (CPS) in Cambodia

### PROJECT STATUS

Completed

### PROJECT PERIOD

November 2019 – June 2022

### LINK

<https://bit.ly/3PN0WVs>

<sup>1</sup> <https://bit.ly/3Pl7zy0>





on successful climate smart value chain good practices for future use and for replication and scaling up by all stakeholders involved. The project contributed to SDG 13 and indirectly supported SDGs 1, 2 and 17.

The main innovation is the regional approach adopted to identify and disseminate knowledge, good practices and technologies in support of climate change resilience, based on the premise that climate change affects businesses and communities beyond their fence lines and national borders. The project ensured that the documented Climate Resilient Value Chains (CRVC) technologies and practices were relevant to the four target countries and could be further replicated and scaled-up through creative collaborations among the stakeholders; or leveraged as tools during future project implementation in the region. Overall, the initiative strengthened South-South solidarity and two-way learning and cooperation among the four target countries.

For an effective partnership, a dual approach was applied. On the one hand State-owned research institutions from the four countries – the Centre of Agrarian System Research and Development (CASRAD) in Viet Nam; the Agricultural Information Institute (AII) from the Chinese Academy of Agricultural Sciences (CAAS) in China, the National Agriculture and Forestry Research Institute (NAFRI) in Lao PDR, and the Centre for Policy Studies (CPS) in Cambodia – acted as the national counterparts and key service providers. As these were usually the national think-tank in the field of agriculture and rural development, their role facilitated operations and contributed to policy advocacy. On the other hand, the implementing partners cooperated closely with the IFAD country offices and ongoing IFAD projects for good practice documentation, capacity-building and dissemination. This increased opportunities for continuous investment support, replication, scaling up and post-project sustainability.

Overall, 96 best practices related to climate smart agricultural production, climate tolerant processing and preservation technologies were documented and packaged as different knowledge products, such as handbooks, posters, leaflet and flyers and videos. They addressed recurring challenges in the region, such as drought, saline water intrusion and food insecurity. For example, in Viet Nam, smallholder farmers have developed an innovative model where giant shrimps were raised in rice fields. This had the combined benefit of preserving water resources, improving nutrition and generating larger and more stable incomes. Other examples include the model of mulberry-fish pond agriculture, eco-tourism and cultural conservation from China which are being replicated in Viet Nam to develop new livelihoods for aquaculture farmers; the Shan tea production and online marketing practices in the northern region of Viet Nam which can be adopted in Lao PDR; models of organic coconut production, processing and consumption from Viet Nam, of coffee cultivation from Lao PDR, and of Ginseng Production from Cambodia which could be implemented in China.

The selection of the good practices went through a Participatory Action Research (PAR) process, undertaken by multiple stakeholders

– farmers, representatives of processing units and enterprises, government officers and IFAD staff. As such, the knowledge generated from the SSCVC project could benefit not only the four target countries, but also other countries and communities in similar environments that are facing similar challenges.

To mitigate the effects of the COVID-19 pandemic and related travel and meeting restrictions, the project adopted new delivery models for capacity-building and training. They included three training of trainers sessions and five workshops through virtual modes, hybrid meetings grouping online and offline participants at local training venues, avideo clip-based case study and a group discussion for online and hybrid training. Online chat groups, social media and internet links were leveraged for consultation, survey, dissemination and communication, through which farmers learned new climate resilient techniques, processes and methods. Some practices demonstrated were drip and sprinkle irrigation, animal feed fermentation, solar energy drying facilities during drought and saline water intrusion in wintertime.

Overall, the project achieved the following results:

- ▶ 4 national institutions (CASRAD, AII, NAFRI and CPS) from the four participating countries received capacity building to provide CRVC
- ▶ 50 government staff increased their capacity for effective policy and operational support of CRVC
- ▶ 4,043 smallholder farmers were provided CRVC techniques and technologies resulting in increased income

There are important lessons from this project that must be highlighted. Key among them is the necessity to anchor development projects in a regional context, as opportunities often exist to create synergies between adjacent countries when addressing global challenges, such as climate change or food security. This allows for the formulation of holistic approaches that consider the challenge and all the available resources to solve the common problems faced by communities in the target regions.

China and Viet Nam have recommended that in furtherance of their mandates, the national institutions of the four countries should work together to scale-up the SSCVC project. Collaboration with other governments and donors to further promote adoption and replication of the documented practices is envisaged, as is the replication of results in neighbouring countries like Thailand by research institutes and international NGOs.

## CONTACT INFORMATION

**Steve Codjo**

South-South and Triangular Cooperation Consultant, IFAD  
s.codjo@ifad.org



# Strengthening Disaster Risk Management Institutional Frameworks and Capacities



## Addressing the root causes of vulnerability and structural factors of socioeconomic stress in vulnerable communities

### CHALLENGE

The climate variability in Angola is characterized with periods of lack of rain or excess of rainfall. This, combined with other high vulnerability conditions, results in an almost permanent disaster situation, or a cycle of droughts and floods episodes, in the southern region of Angola. Climate change is also exacerbating this chronic disaster risk situation.

Reducing disaster risk, and thus adapting to climate change and variability, is highly relevant for the southern region and for the country. Working on the causes of vulnerability implies addressing structural factors of socioeconomic stress in the communities, which will represent a direct contribution to sustainable development at both local and national levels. The main risk factors are taken into account in sectoral development priorities, such as poverty reduction, gender equity, food and nutrition security, water management and others. It is also key to addressing political and institutional vulnerability, which includes lack of governance capacities at different levels, limited knowledge and misperceptions about disaster risk.

### TOWARDS A SOLUTION

This UNDP Project on “Strengthening Disaster Risk Management Institutional Frameworks and Capacities,” is part of the EU-financed FRESAN (Strengthening Resilience and Food and Nutrition Security in Angola) Programme that aims at addressing the underlying causes of food and nutrition insecurity and Disaster Risk Management (DRM) and Climate Change Adaptation in a comprehensive way, focusing on the institutional and organizational vulnerability factors that were pre-identified.

2019 marked the start of the UNDP FRESAN project. This project builds on previous work by UNDP that it started in 2012 with the National Civil Protection System, particularly with the intersectoral National Civil Protection Commission (CNPC).

#### PROJECT NAME

Strengthening Disaster Risk Management Institutional Frameworks and Capacities

#### NOMINATED BY

United Nations Development Programme (UNDP)

#### COUNTRIES/REGIONS/TERRITORIES

Angola, Mexico

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 11.5, 11.b, 13.1, 13.2, 13.3

#### SUPPORTED BY

European Union (EU)-financed Strengthening Resilience and Food and Nutrition Security in Angola (FRESAN) Programme and UNDP

#### IMPLEMENTING ENTITIES

Angola Provincial Civil Protection Commission (CPPC); the Municipal Civil Protection Commission (CMPC); Local Government of Huila, Cunene, Namibe in Angola and select communities

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2019 – 2023

#### LINK

<https://bit.ly/3Qr5jGF>

<https://bit.ly/3KcJCNj>



Since 2012, UNDP has been assisting in enhancing the capacity of the National Civil Protection System, particularly that of the intersectoral CNPC for DRM and resilience building at national and decentralized levels. In 2019, the UNDP FRESAN project has continued with these efforts using a twofold strategy:

- ▶ Development of technical capacities of Provincial Civil Protection Commissions (CPPC) in DRM and resilience-building.
- ▶ Reinforcement of resilience capacities for early warning in vulnerable communities and in those most exposed to climate fluctuations.

The project has supported the three target provinces of Cunene Huila and Namibe in producing six contingency plans for disasters affecting the region. The Project employs South-South and Triangular cooperation to support the development of DRM institutional capacities and frameworks in Angola:

- ▶ Seven key Angolan Civil Protection staff (from the three target provinces) have benefited from an International Labour Organization training course on DRM and Sustainable Local Development every year for four years. This course provides a platform for South-South and Triangular cooperation and a global network of DRM practitioners, including those from Latin American and African countries. The Deputy Commander of Civil Protection and Firefighters of Huila attended the course and noted that it was during the training and the exchange with colleagues from the Chiapas region in Mexico that the initiative in creating Disaster Risk Reduction Committees in Huila province first arose, thereby learning from Chiapas' successful approach of creating DRR committees.
- ▶ The project has supported groups of technical staff from Angolan Civil Protection, including three key staff from the project target provinces in Angola (Cunene, Huila and Namibe), to attend the Master's course in Comprehensive Risk Management and Civil Protection in the "Escuela Nacional De Protección Civil" in Mexico, Campus Chiapas. Chiapas is considered a global learning centre and has pioneered the approach of creating community DRR committees that the Civil Protection and UNDP want to replicate in Angola.
- ▶ The exchange of experience with Mexico in decentralized DRM and local early warning systems has facilitated several South-South experience replication visits to the National Commander of Civil Protection to Chiapas, Mexico, as Chiapas is one of the pioneers in this type of strategy of creating DRR communities. In 2021, facilitated by UNDP, a formal Memorandum of Cooperation was signed and is being finalized with the Secretary of State for Civil Protection of Chiapas, Mexico.

In August 2021, two Angolan civil protection senior staff visited Chiapas, and they also attended the master's course. They worked with the Secretary of State for Civil Protection of Chiapas to obtain further contributions and to improve the Memorandum of Cooperation, as well as to obtain support in the design of the implementation of Local Disaster Risk Management Committees in Angola. As a result, knowledge from Chiapas is being applied and replicated in the creation of DRR community committees in Angola – already 14 communities have been created and trained in Cunene province and 8 more are ongoing.



A key element for the Project's success is the solid partnerships at both international and national levels. As recognized through previous experiences, both "whole-of-government" and "whole-of-society" approaches are needed to address human needs in disaster-prone communities, thus intersectoral collaboration and partnerships continue to be critical. In order to promote sustainability of the results delivered under the Project, the Project is implemented to enhance the already existing national and provincial systems and mechanisms, while avoiding the creation of unsustainable add-on parallels. From the beginning, the project promotes national and provincial leaderships and ownerships of DRM-related interventions. The approach foresees a transition of such interventions to an autonomous DRM structure and a strategy to upscale the interventions of the project in the southern provinces to other provinces of Angola.

The project contributes to the implementation of SDGs 1, 2, 11, 13 & 16; the LDC Graduation Strategy of Angola, the Sendai Framework for DRR 2015-2030, and several national strategies: Angola's Intended Nationally Determined Contribution (INDC) in the framework of the National Strategy for the Implementation of UNFCCC and the Kyoto Protocol, the National Strategy for Climate Change 2018-2030, the Strategy to Fight Poverty (SFP), the National Adaptation Programme of Action (NAPA) and Long Term Strategy for Development of Angola (2025).

#### CONTACT INFORMATION

**João Angelo Neves**  
Project Manager, UNDP  
joao.a.neves@undp.org  
+244 938 717 760





# Climate Disaster Risk Financing Framework and Parametric Insurance



## Building the resilience of vulnerable populations in Fiji against climate disasters through parametric micro-insurance

### CHALLENGE

Fiji is ranked the 14th most hazardous country in the world according to the *WorldRiskIndex 2021*. The South Pacific nation is highly vulnerable to extreme weather events and has limited financial capacity to cope. In 2016, the economic disruption caused by Tropical Cyclone Winston wiped out one-fifth of Fiji's GDP.<sup>1</sup> Back-to-back cyclones in December 2020 and February 2021 destroyed hundreds of homes and agricultural assets.<sup>2</sup> Low-income households suffer the most during these events and the situation is exacerbated by the lack of climate and disaster risk finance and insurance (CDRFI) instruments in Pacific markets. Access to parametric micro-insurance serves as a livelihood protection for farmers, fishers and small businesses, helping protect them from loss of income or business interruptions that might occur when a disaster strikes.

### TOWARDS A SOLUTION

To address this persistent development challenge, the United Nations Capital Development Fund (UNCDF), in partnership with the Government of Fiji, launched the Developing Climate Disaster Risk Financing Framework and Parametric Insurance in Fiji project in September 2020. The project equipped governments and communities with tailored CDRFI solutions to build resilience and support recovery against extreme climate shocks.

Project implementation was led by UNCDF in close partnership with the Fijian Government, Reserve Bank of Fiji and other public and private sector stakeholders. The project addressed SDG1 (no poverty), SDG5 (gender equality), SDG13 (climate action) and SDG17 (partnerships for the goals).

1 <https://bit.ly/3vDji3X>

2 <https://bit.ly/3bqaS9j>

#### PROJECT NAME

Climate Disaster Risk Financing Framework and Parametric Insurance

#### NOMINATED BY

United Nations Capital Development Fund (UNCDF)

#### COUNTRIES/REGIONS/TERRITORIES

Fiji, India

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 1.a, 1.b, 5.1, 5.a, 13.1, 13.3, 17.6, 17.9, 17.15, 17.16, 17.17, 17.18

#### SUPPORTED BY

India, through the India-United Nations Development Partnership Fund, managed by the United Nations Office for South-South Cooperation (UNOSSC)

#### IMPLEMENTING ENTITIES

Ministry of the Economy, Government of Fiji (Climate Change and International Cooperation Division) and the United Nations Capital Development Fund (UNCDF)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

September 2020 – June 2022

#### LINK

<https://bit.ly/3QgFcBV>  
<https://bit.ly/3Q0W3Jk>  
<https://bit.ly/3P38WBc>





The project introduced a market-based parametric micro-insurance product to the Fiji market in August 2021. The target beneficiaries included women, farmers, fishers, MSMEs, people with disabilities and other vulnerable groups. The project provided beneficiaries with immediate liquidity post catastrophic events, such as cyclones, so that they can recover faster and build back their livelihoods. During project implementation, insurance was distributed through cooperatives and associations with wide community reach and networks. However, insurance products will soon be offered directly – both online and through mobile apps – even to customers who do not belong to a cooperative. The project's strong linkages with Fiji's private insurers, and the government's backing, was highly useful to achieve this latter goal.

The project used a host of digital solutions to increase access and effectiveness. For instance, a digital client relations management platform, iOnboard, connected members to their cooperatives. Similarly, mobile money wallets allowed clients to make digital payments. Both these solutions will be further expanded for the next phases.

The project worked with MicroSave Consulting, which has its head office in India, to assist implementing partners with their marketing, awareness and outreach plan and activities. This collaboration helped improve the financial capabilities of individuals and enabled informed decision making on climate disaster risk instruments.

The programme worked with research partners at the University of the South Pacific, the University of the West Indies and the United Nations University Institute for Environment and Human Security to create a research cooperation arrangement focusing on vulnerability and CDRFI solutions for small-island developing states. This cooperation produced high quality, peer-reviewed research and action-oriented and evidence-based policy briefs and reports, contributing to the development of the next iteration of the product during a potential scale phase. These research reports will be published in 2022.

Within the first six months, over 1,300 households signed up for the insurance (of which 32 percent were women). In 2021, the Fijian Government granted a VAT-exemption (9 percent originally, now 15 percent) on premiums for the product before it was officially deployed to the competitive market. Such a landmark policy announcement will provide financial relief to low-income households and micro-enterprises, further improving accessibility and uptake.

To further strengthen South-South cooperation, the project promoted partnerships with India through linkages with insurance companies, FinTechs, InsurTechs and other technology service providers. While Fiji has a relatively strong insurance industry, climate disaster risk insurance is a new concept. The Indian insurance industry on the other hand has well developed parametric insurance solutions, especially for crops and livestock farmers. The public and private sector in Fiji benefit from partnering with insurance stakeholders in India to build their own capacities



and gain a better understanding of how to maximize the impact of such interventions. An example is the project enlisting the services of M/S Weather Risk Management Services which modelled the first parametric insurance product in Fiji and is providing capacity building training to various partners in Fiji.

Due to the initial achievements of the project and using the learnings from Fiji, UNCDF is now planning to replicate the insurance deployments in Tonga and Vanuatu, two other vulnerable small island developing states.

#### CONTACT INFORMATION

**Krishnan Narasimhan**  
Programme Manager, UNCDF  
krishnan.narasimhan@uncdf.org



# Green Economy in PICs – Bamboo Development Initiative



## Establishing a Bamboo Centre in Fiji to serve as a focal point for bamboo-related activities and to revive the bamboo industry in the Pacific

### CHALLENGE

The Pacific Islands Development Forum (PIDF) considers Bamboo as a vital resource in the Green Economy. Bamboo is potentially a key component of the Green Economy's transformation. Its presence in several Pacific Island countries and its versatility could offer Pacific people sustainable solutions to their needs. It could also become an important source of employment and income for communities that are currently underemployed.

In the Pacific region a few attempts in bamboo-related activities have been made, but many have not been followed up. There have been several trainings provided in relation to bamboo in both propagation and utilization, but although this kind of skills training is important, it is not enough. These skills need to be coupled with other trainings, such as simple business principles or financial management. In addition, the lack of planting materials for most of the introduced species has stymied the development of the local bamboo industry.

### TOWARDS A SOLUTION

In Pacific Island countries (PICs), Bamboo Development contributes to the achievement of the Sustainable Development Goals (SDGs). Bamboo Centres serves as a national focal point for bamboo-related activities such as botanical and agricultural research, mapping of bamboo habitats, advocacy work, research in innovative applications (such as paper and cloth making), training in propagation and the skills required in the industry's many applications, and establishing policy that promotes the industry's growth.

Bamboo grows well in the Pacific, and there is enough variety to suit a wide range of applications. Fiji, for example, has 20 species of bamboo (only one of which, *Schizostacyum glaucifolium*, is indigenous), including species that grow extremely long and are strong enough for use in the construction

#### PROJECT NAME

Green Economy in PICs – Bamboo Development Initiative

#### NOMINATED BY

Pacific Islands Development Forum (PIDF)

#### COUNTRIES/REGIONS/TERRITORIES

Fiji, Tonga, Vanuatu, Federated States of Micronesia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.5, 2.4, 4.4, 5.b, 7.2, 8.5, 8.9, 9.a, 11.c, 12.b, 13.1, 13.b,

#### SUPPORTED BY

International Network for Bamboo and Rattan, Pacific Agribusiness Research Development Initiative (PARDI), Ministry of Forestry of Fiji, Ministry of Women, Children and Poverty Alleviation, Bamboo Association of Fiji

#### IMPLEMENTING ENTITIES

PIDF, Ministry of Forestry of Fiji

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

July 2021- July 2023

#### LINK

<https://www.pidf.int/bamboo/>



industry, particularly for their properties that make them ideal for use in cyclone-resistant buildings.

The PIDF, in collaboration with partners, such as the International Bamboo and Rattan Organization (INBAR), is supporting Fiji's efforts to establish a Bamboo centre, with the goal of methodically building an industry out of an underutilized resource. This centre will become the country's epicentre for all things bamboo. The Ministry of Forestry has finalized the site selection for the bamboo centre, and the necessary legal documentation is nearing completion for approval.

The relevant Government Ministries, Bamboo Association of Fiji, PIDF, Fiji National University, and international resource personnel make up the Fiji national technical working group, which was formed in 2021 to develop a short to medium term plan for the industry. Seedlings and inventory, strength and treatment, affordable housing, small business, and the Bamboo Centre are all addressed in the plan.

The PIDF serves as a regional hub to eventually link such centres in other Pacific Island Countries through a dedicated knowledge portal. It will also endeavour to link these to other centres around the world through the INBAR network. The preparatory work has been made possible through a MoU established between INBAR and PIDF, and subsequently the Government of Fiji joining INBAR in September 2020. The Bamboo Centre will be guided by the Ministry of Forestry and in accordance with the needs of the industry as expressed by the Bamboo Association of Fiji.

PIDF's partnership with the Pacific Agribusiness Research Development Initiative saw the publishing of a [Bamboo Agribusiness Compendium](#) in 2021. This is now housed at the PIDF knowledge hub, together with PIDF's other portals, including the [Pacific Green Business Centre \(PGBC\)](#).

The opportunities are limitless. This Centre will be the hub of an industry that could provide Fiji with significant economic benefits, provide employment for many its youth, and reduce imports of products made of materials that do not necessarily fit the green transformation that Pacific Island countries have chosen to pursue and that the PIDF has been tasked to support.

An essential element is the integration of women in the running of the Centre. Working with the Fiji Ministry of Women, Children and Poverty Alleviation, the Centre would facilitate training of women in cultivation, preservation, craft making, management and administration of the Bamboo Centre.

Through the PIDF membership, the Centre will support other PIDF member countries in the development of their own bamboo industries, either through the establishment of their own bamboo centres or through provision of training and other services, as per the individual countries' requirements.



With the initial support of the Government of Fiji, the PIDF and INBAR, through a joint project, work on establishing the Centre is well underway. It is expected to eventually function independently. To do so, the Centre will develop its own financing plan in the first six months of operation taking into account the potential for generating funds from its course offerings, sales from its nurseries and workshops, services that can be offered to government agencies and the private sector and project proposals to development partners.

Through the Centre, Bamboo entrepreneurs will be supported through a variety of opportunities in the tourism industry, including building resort outfits and selling souvenirs. This also includes training in fencing, blinds and other kitchen products; and in bathroom and other home, office and commercial products – all of which could be produced locally at a competitive price. They will be trained in bamboo furniture which would also benefit the furniture industry, both for the rustic, beach and resort market, as well as for the modern and office furniture market, thanks to the use of bamboo composites. Bamboo composites could also provide material for flooring and interiors in both domestic and international markets.

---

#### CONTACT INFORMATION

**Viliame Kasanawaqa**  
Director Island Resilience, PDIF  
viliame.kasanawaqa@pidf.int





# Poverty Alleviation through Tilapia Industry Value Chain Development in Tanzania



Contributing to sustainable aquaculture development and poverty alleviation through technical consultations and capacity-building programmes among Tanzanian smallholders and technicians

## CHALLENGE

Aquaculture plays a key role in providing employment, increasing incomes and ending poverty in African countries. The United Republic of Tanzania is rather rich in inland fishery resources, especially in Lake Victoria, Lake Tanganyika and Lake Nyasa region, and aquaculture has begun to be exploited gradually in the last few decades. Aquaculture in Tanzania has a vast yet untapped potential. The industry is dominated by freshwater fish farming in which small-scale farmers practice both extensive and semi-intensive fish farming. Aquaculture has been identified as the key industry for nutrition intake, food security and social progress from the governments.

Yet, though a large number of rivers, lakes, reservoirs, dams and streams, as well as climatic conditions, are available in Tanzania, the industry has been developing at a quite slow pace, with low production, high mortality and limited quantities, mainly due to some major constraints, e.g. low level of technology and competition from other sectors; an unreliable seed supply; inadequate aquaculture extension services and poor infrastructures; insufficient quality feeds supply; lack of fund for aquaculture and other projects; and subsistence activities apart from a few notable examples.

## TOWARDS A SOLUTION

Focusing on the above challenges, the Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences (FFRC, CAFS), supported by Global South-South Development Center Project and in partnership with Ministry of Livestock and Fisheries of the United Republic of Tanzania, carried out technical extension services, capacity-building training and a consultation and academic workshop in the aquaculture sector. The Tilapia species has been the focus of aquaculture development in Tanzania. Every year, tilapia production accounts for more than 80 percent of the total output of aquatic products in the country, making a positive contribution to the alleviation of poverty and hunger in Tanzania.

### PROJECT NAME

Poverty Alleviation through Tilapia Industry Value Chain Development in Tanzania

### NOMINATED BY

China International Center for Economic and Technical Exchanges (CICETE)

### COUNTRIES/REGIONS/TERRITORIES

China, the United Republic of Tanzania

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.2, 1.5, 2.1, 2.A, 14.2, 14.7, 17.6, 17.7, 17.9, 17.16

### SUPPORTED BY

Global South-South Development Center Project

### IMPLEMENTING ENTITIES

Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences (FFRC) and Fisheries Education and Training Agency, Ministry of Livestock and Fisheries (MLF) of Tanzania

### PROJECT STATUS

Completed

### PROJECT PERIOD

August 2020 – July 2022

### LINK

<https://www.ffrc.cn/info/1066/9842.htm> (In Chinese)

<https://www.ffrc.cn/info/1066/9627.htm> (In Chinese)

<https://www.ffrc.cn/info/1066/9582.htm> (In Chinese)



This can help increase local smallholders' income, supply animal protein, promote fishery industry development and create more job opportunities, which are closely in line with Sustainable Development Goal (SDG) 1 (No Poverty), SDG 2 (Zero Hunger) and SDG 8 (Decent Work and Economic Growth). It can also reduce natural fishery resources capture, which contributes to the achievement of SDG 14 (Life Below Water). Through the active participation and joint efforts of various fishery institutions, the authorities and local smallholders, it contributes to achieving SDG 17 (Partnerships for the Goals).

This project was implemented from August 2020 to July 2022. Due to the COVID-19, it was impossible for experts to carry out on-site technical guidance, demonstration, and popularization in Tanzania. The FFRC mission team decided to adopt an innovative cooperation model. To that end, the team successively carried out online survey on aquaculture in Tanzania, established the China-Tanzania fisheries cooperation partnership, compiled tilapia-related technical manuals, trained technical personnel and recruit students for master's degree for Tanzania thereby achieving the expected results.

Throughout the project, the FFRC team focused on five aspects:

- ▶ Increasing the understanding of the real needs of Tanzania in aquaculture development.
- ▶ Improving knowledge of local fish farmers and technicians on scientific tilapia farming, through the remote technical consultations and well-targeted and need-based training sessions, scientific methods and techniques which have been shared with farmers and other beneficiaries.
- ▶ Increasing the confidence of the local managerial authorities to strengthen support for aquaculture.
- ▶ Facilitating Chinese fishery institutions and enterprises to cooperate with local fishery institutions for the improvement of fishery facilities and the development of the feed industry.
- ▶ Sharing with participants more funding channels for developing the tilapia industry.

Through the successful implementation of the project, the FFRC mission contributed in the following ways:

**Understanding the technical needs for tilapia industry development in Tanzania.** The expert group of FFRC talked with Tanzanian fishery practitioners and managers of China-invested aquaculture enterprises in Tanzania under the coordination of officials from the Tanzanian Ministry of Livestock and Fisheries. The experts also had technical consultations and exchanges with experts from the Fisheries and Aquaculture Division of the Food and Agriculture Organization of the United Nations (FAO), Zhongzhi Tilapia Farming Base in Tanzania, the Fisheries Education and Training Agency and the Tanzanian Embassy in China. They also communicated with local fishery enterprises in terms of the design, water quality and farming facilities of tilapia farms, fully exchanged views with technicians and farmers on tilapia farming, and consulted with officials from FAO and Tanzanian institutions on many local issues.

**Improving the techniques and skills of tilapia production through training, education and consultancy.** Two fishery officers were recruited to have a two-year master study in fishery development in FFRC from 2021-2023. FFRC also invited 25 fishery technical and management officials from Tanzania to participate in the online training, covering several key areas, including selective breeding, seed production, feed development, inspection and quarantine, aquatic product quality and fishery development.

Moreover, the expert group organized a technical training seminar regarding tilapia in African countries, and invited 52 technicians, scholars and management officials from 13 African countries to exchange ideas with them. In addition, online technical consultancy on farm design and high-yield technology of tilapia for Zhongzhi Tilapia Farming Base in Tanzania was provided by the FFRC team.

**Promoting cooperation through communication and proposals.**

During the project, the experts of FFRC had in-depth exchanges with the Tanzanian Embassy in China, the Tanzanian Ministry of Livestock and Fisheries, the Zhongzhi Tilapia Farming Base in Tanzania and with other Tanzanian institutions and enterprises, including Dr. Rashid Tamatama, Permanent Secretary (vice-ministerial level) of the Tanzanian Ministry of Livestock and Fisheries. In this way, the experts obtained first-hand information on the technical needs of Tanzania's aquaculture development in real time, and analysed Tanzania's aquaculture development in terms of advantages, disadvantages, opportunities and challenges. On this basis, the experts prepared a proposal for cooperation. During the training, FFRC also organized a webinar on aquaculture economic and trade cooperation, which showed the technology and products of enterprises to each other and laid a strong foundation for future cooperation.

This project not only solved a lot of local problems and difficulties, but also taught the local farmers and technicians how to conduct tilapia farming scientifically, gradually promoting the local tilapia industry via self-reliance. This serves as a positive example for other developing countries, especially in Africa. It ultimately stimulates the fishery and aquaculture industry thus helping achieve poverty alleviation in Africa.

---

## CONTACT INFORMATION

### Dr. Jing Xiaojun

Director of the International Cooperation Division  
Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences  
jingxiaojun@ffrc.cn

# Closing the Loop: Scaling up Innovation to Tackle Marine Plastic Pollution in Southeast Asian Cities



## Seizing the Urban Opportunity to Clean Up our Ocean

### CHALLENGE

Plastic waste in urban waterways endangers human health, marine ecosystems and wildlife, as well as local livelihoods. Plastic pollution is a transboundary issue requiring a response and cooperative action plans on a regional level. The COVID-19 pandemic further exacerbated the plastic waste problem by dramatically changing patterns of plastic use and management in cities. There was a significant increase in the use of single-use plastics, both due to hygiene concerns and a shift to take away/home delivery services. There was also a dramatic increase in the use of Personal Protective Equipment (PPE), particularly outside of the home, in environments where access to waste recycling infrastructure is more limited. The management of plastic waste also changed due to the pandemic's adverse effects on municipal waste management capacities, impacting livelihoods for the significant number of informal workers in the sector. To combat the issue, ESCAP provided technical cooperation support towards the comprehensive measurement, monitoring and management of plastic pollution in four Asian cities and countries.

### TOWARDS A SOLUTION

The Closing the Loop project, implemented by **UN-ESCAP; the ASEAN Secretariat and the Institute for Global Environmental Strategies, supported by the Government of Japan**, was built on the demand and evidence generated in pilot cities of Pune, India, and Bangkok, Thailand, from the 2018-2019 ESCAP Phase I project, entitled "Closing the Loop: Unlocking the informal economy to recover plastic waste and reduce marine pollution as part of an inclusive circular economy approach".

The project was implemented on an on-demand basis in four ASEAN countries, namely Indonesia, Malaysia, Thailand and Viet Nam with the expected outcome that "four cities in ASEAN develop policies and corresponding investment strategies to address plastic waste pollution and leakages into the marine environment". It was designed with the objective to "reduce the

### PROJECT NAME

Closing the Loop: Scaling up Innovation to Tackle Marine Plastic Pollution in Southeast Asian Cities

### NOMINATED BY

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

### COUNTRIES/REGIONS/TERRITORIES

Indonesia, Japan, Malaysia, Thailand, Viet Nam

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

11.6, 12.5, 14.1

### SUPPORTED BY

Government of Japan

### IMPLEMENTING ENTITIES

UN-ESCAP; Association of Southeast Asian Nations (ASEAN) Secretariat; Institute for Global Environmental Strategies; International Solid Waste Association; Japan Space Systems

### PROJECT STATUS

Completed

### PROJECT PERIOD

April 2020 – December 2021

### LINK

<https://www.unescap.org/projects/ctl>



environmental impact of ASEAN cities by addressing plastic waste pollution and leakages into the marine environment”.

In line with this objective, the project and its partners developed tools using the latest technology to assist governments and organizations in measuring and tracking plastic waste in their respective communities. In doing so, the project used artificial intelligence, satellite imaging, drones and waste flow modelling to pinpoint the “source to sea” movement of how plastic leaks into the marine environment from cities.

The project organized city-to-city peer learning events along key milestones in the development of their action planning process which served to identify “joint solutions to common problems” transmitting good practices and lessons learned in areas, such as addressing data gaps on the informal waste economy, strengthening municipal solid waste management systems and engaging households for effective segregation of waste.

Due to the effects of the COVID-19 pandemic, many capacity-building activities planned shifted to virtual formats. The project launched a self-paced, free eLearning programme, *Cities and Marine Plastic Pollution, Building a Circular Economy*, which has engaged over 450 trainees across the project cities and beyond. The seven-module course shows how to measure, monitor and manage urban plastic pollution leveraging the common knowledge from the collaboration of the four participating cities.

For sustainability, the project established a unique South-South regional platform to promote regional collaboration on cities and marine plastic waste mitigation, chaired by ESCAP and the ASEAN Secretariat, with a wide range of complementary agencies and institutions to take forward research and technical cooperation on cities and marine plastic pollution within the Southeast Asian region beyond the project lifecycle in support of the implementation of the ASEAN Regional Action Plan on Marine Litter.

ASEAN countries, being among the highest contributors to ocean plastics at the time of project design, has led to the development of regional and national-level plans and frameworks. However, while waste management is under the purview of city governments, such plans and strategies were absent at the city-level. Furthermore, in the four target cities of Surabaya (Indonesia), Kuala Lumpur (Malaysia), Nakhon Si Thammarat (Thailand) and Da Nang (Viet Nam), earlier efforts to manage plastic waste were made under overall solid waste management initiatives, resulting in limited evidence and focus on rising levels of plastic waste, specifically.

The project made substantial progress in providing target cities and key stakeholders with data, knowledge and skills to monitor, analyse, report on and manage plastic waste using innovative technologies. Baseline assessments using a “plastic pollution calculator” in partnership with the International Solid Waste Association for all four cities quantified the plastic waste leaking into the urban and marine environment.



This information has resulted in the development of a unique action plan for each of the four target cities. Moreover, under the Closing the Loop project, for the first time a digital tool was developed and deployed in a short time to monitor the plastic waste flow using innovative technologies.

Under the supervision of ESCAP, the project capitalized on the capacities of several international, national and local experts and partner institutions to implement and achieve project outputs. The demonstrated political will in the development and approval of the action plans and the capacity of local experts developed by the project are factors that support the sustainability of the project outputs. In line with the landmark 2022 UNEA Resolution 5/14 aimed at ending plastic waste pollution, ESCAP is currently identifying additional financial resources to continue investments for improvements in technical know-how, refining digital tools and implementing city waste management policies for a subsequent phase of the project.

#### CONTACT INFORMATION

**Omar Siddique**  
Economic Affairs Officer, UNESCAP  
Omar.siddique@un.org



# South-South Collaboration to Strengthen Statistics for Ocean-related SDGs



## Developing statistical guidance for ocean accounting through South-South collaboration

### CHALLENGE

Countries in the Asia-Pacific region benefit tremendously from the oceans. In 2018, Asia was home to 85 percent of the global population engaged in fisheries and aquaculture.<sup>1</sup> Among the Sustainable Development Goals, data availability on Goal 14 remains limited. With the three measurable targets, the Asia-Pacific region has made little progress in tackling marine pollution (Target 14.1) and in conservation of coastal areas (Target 14.5) and it is regressing on marine resources for small island developing States (SIDS) and Least Developed Countries (LDC) (Target 14.7).<sup>2</sup>

Ocean data and statistics are fragmented and fit-for-purpose statistical standards are insufficient, hampering the development of cohesive sustainable ocean development policies. Of the international frameworks that exist, none of them have been applied at the level of detail that would support monitoring and measurement of ocean-related targets in Goal 14 and inter-related goals.

### TOWARDS A SOLUTION

ESCAP seeks to bridge the gaps in producing and disseminating harmonized data and statistics for monitoring and reporting progress related to sustainable ocean development. The strategy for doing so was to develop common statistical guidance through South-South collaboration, with the Global Ocean Accounts Partnership (GOAP) established as the platform for experience-sharing and the generation of common knowledge products. The statistical guidance developed, the *Technical Guidance on Ocean Accounting*,<sup>3</sup> supports countries in selecting, prioritizing, and standardizing

#### PROJECT NAME

South-South Collaboration to Strengthen Statistics for Ocean-related SDGs

#### NOMINATED BY

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

#### COUNTRIES/REGIONS/TERRITORIES

All countries in Asia and the Pacific

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 9.4, 13.2, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.c, 14.c.15.5, 15.9, 17.8, 17.9

#### SUPPORTED BY

ESCAP, University of New South Wales (Australia), Australian Department of Agriculture, Water and the Environment, UN Joint SDG Fund, UN Development Account

#### IMPLEMENTING ENTITIES

ESCAP and the Global Ocean Accounts Partnership (GOAP)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2018 – 2024

#### LINK

<https://stat-confluence.escap.un.org/x/woDL>  
<https://www.oceanaccounts.org/>

1 Food and Agriculture Organization of the United Nations (2020). *The State of World Fisheries and Aquaculture 2020*. Sustainability in action. Rome. <https://doi.org/10.4060/ca9229en>

2 ESCAP (2022). Asia and the Pacific. SDG Progress Report. ST/ESCAP/2996

3 <https://www.oceanaccounts.org/technical-guidance-on-ocean-accounting-2/>





data of national, regional and global importance, so the data can be integrated to provide comprehensive information for decision-making. The technical guidance builds on existing statistical frameworks, including the System of Environmental Economic Accounting (SEEA) and the System of National Accounts (SNA), and adds elements of ocean governance and of sustainable use of the ocean.

The guidance was developed from experiences and expertise gained through initial experimentation and national pilots in the Global South, with five pilots conducted by China, Malaysia, Samoa, Thailand and Viet Nam in 2019. Lessons and results of the five pilots formed the basis for the technical guidance, built in-country capacity on ocean accounting and generated policy-relevant data: China developed harmonized ecosystem maps and carbon stock assessments of Beihai Bay, one of China's important marine ecological sites; Malaysia examined food security risk along the Straits of Malacca under climate variability and changes in ecosystems; and the sustainable tourism focus of Samoa, Thailand and Viet Nam enhanced the understanding of linkages between tourism income, natural resource use, land-based pollution and ecosystem impacts. Since then, the technical guidance has been further improved through enhanced South-South collaboration and additional pilots both in Asia and the Pacific and Africa.

Pilot projects adopted the following methodology for implementation:

1) a national pilot team conducted a rapid assessment to outline a pilot structure using ESCAP's diagnostic tool; 2) a national pilot team carried out a scoping assessment, with guidance from ESCAP, to review existing ocean-related policy priority, stakeholders, institutional mechanisms, existing data and gaps and opportunities, and to suggest options for the pilot; 3) a first national workshop was held by countries, where ESCAP provided ocean accounts training and key national stakeholders agreed on the topic; 4) a national pilot team implemented ocean accounting; and 5) a second national workshop was held by countries to review initial pilot results. The diagnostic tool utilized in the first step was designed to engage and guide structured dialogue among stakeholders, whereas the two workshops embedded in the pilot process ensured stakeholders were involved and consulted throughout the project.

The first version of the ESCAP diagnostic tool was tested through the initial pilot studies, and was further transformed into the Ocean Accounts Diagnostic Tool<sup>4</sup> for use in future pilots. The methodology for implementation has since been replicated by other GOAP members initiating ocean accounting projects. The 2019 pilot findings were presented at the First Global Dialogue on Ocean Accounting<sup>5</sup> where more than 100 technical experts and decision-makers from around the world shared ocean accounting experiences and reviewed the emerging technical guidance. The meeting was the first time GOAP convened, and since then, GOAP membership has expanded considerably.

The partnership serves as a coordination and communication platform for a global ocean accounting community of practice, where members exchange knowledge and share lessons learned from applying the ocean accounting framework.

4 <https://www.oceanaccounts.org/ocean-accounts-diagnostic-tool/>

5 <https://bit.ly/3JUhsBH>

6 <https://www.unescap.org/events/2021/fourth-asia-pacific-day-ocean-4>

7 <https://seea.un.org/events/experimental-ocean-accounts-seea-ocean>

The shared practices, in turn, are used to improve the technical guidance. GOAP provides technical and policy support for pilot implementation and organizes annual Global Dialogues on Ocean Accounting to exchange knowledge and discuss progress made. GOAP members continuously share experiences in the GOAP regional communities of practice for Africa and the Asia-Pacific region, and contribute to several regional and global events such as the Asia-Pacific Days for the Ocean.<sup>6</sup> The Technical Guidance developed through South-South collaboration was recognized by the UN Statistical Commission, and now forms the substantive basis for ocean accounting standards development within the UN Committee of Experts on Environmental-Economic Accounting.<sup>7</sup> The countries involved continue to extend their pilots. For example, Samoa focuses on links between land-based pollution and waste and the ocean. Currently, the country is preparing a study on plastic pollution and mangrove ecosystems. In Thailand, ocean accounts, Ocean Health Index and marine spatial planning have been integrated in a new pilot study in Phang Nga Bay. SEEA and ocean accounting were also incorporated in Thailand's Tourism Satellite Account-SEEA study, and methodologies from the initial pilot are being replicated in other tourism clusters. Viet Nam's original pilot on the ecosystem, pollution and tourism is being extended to an economic valuation of coastal and marine ecosystem services in Quang Ninh to support ocean economy planning. Countries that want to develop ocean accounts are encouraged to adhere to the Technical Guidance, while following the methodology for implementation. The methodology for implementation provides a road map and leads to the creation of a network and coordination among national, regional and international partners. In addition to the technical challenges encountered, there were logistical and coordination challenges which the pilots sought to overcome. These lessons and experiences are included in the guidance shared through the GOAP community of practice.

Most recently and inspired by the other pilot experiences, Palau initiated an ocean accounting pilot in 2021 with the initial scope of accounting for the extension and condition of coral and mangrove ecosystems. Ocean accounts, developed through this initiative, are meant to primarily inform policies for sustainable ocean development, and related sustainable development targets. Emphasis on capacity-building activities is paramount to build technical expertise and to support countries' long-term ability to produce ocean accounts. Most recently, GOAP has received funding to continue and to scale up its technical assistance to countries wishing to initiate or continue their ocean accounting activities.

---

## CONTACT INFORMATION

### Rikke Munk Hansen

Chief, Economic and Environment Statistics Section, ESCAP  
[hansenrm@un.org](mailto:hansenrm@un.org)

# Challenges and Opportunities to Scale Up Payment for Ecosystem Services (PES)



## Building capacities through South-South and triangular cooperation for the implementation and strengthening of PES mechanisms in Costa Rica and Peru

### CHALLENGE

The agriculture, forestry, fishing and tourism sectors have a major impact on our ecosystems. The unprecedented pressure on natural resources is negatively influencing the capacity of fragile biomes to continue to provide critical environmental services, such as carbon sequestration, soil regeneration and pollination. In Peru, 90 percent of the population living in the highlands rely on the use and conservation of natural resources available in their watersheds for livelihood. However, more than 10,000 hectares of their habitat are severely degraded, endangering these communities as they are not able to benefit from the ecosystem services these areas can provide.

Costa Rica faces similar challenges, and over the years it has developed a robust Payment for Ecosystem Services (PES) programme, paying up to US\$30 million each year to vulnerable stakeholders that support the preservation of their local ecosystems. South-South cooperation is a powerful tool to build capacities and improve the implementation of PES initiatives, contributing to the achievement of several SDGs and national policies targeting biodiversity and climate change.

### TOWARDS A SOLUTION

Over the years Peru has established legal, institutional and operational mechanisms for the assessment of public spending on ecosystem services making it possible to generate vital environmental and economic statistics. The project, entitled “Conservation and Sustainable Use of High Andean Ecosystems of Peru through Payment for Environmental Services” (MERESE), funded by the International Fund for Agricultural Development (IFAD) and the Global Environment Facility (GEF), invested US\$1.6 million to support community groups to restore and preserve nearly 15,000 hectares of native forest, grasslands and high Andean wetland habitats. Participating communal groups have strengthened their capacities to design and implement restoration and conservation programmes and to increase their incomes.



### PROJECT NAME

Challenges and Opportunities to Scale Up Payment for Ecosystem Services (PES)

### NOMINATED BY

International Fund for Agricultural Development (IFAD)

### COUNTRIES/REGIONS/TERRITORIES

Costa Rica, Peru

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

11.5, 11.a, 13.1, 13.2, 15.1, 15.3, 15.4, 15.9, 15.a

### SUPPORTED BY

IFAD, Global Environment Facility (GEF)

### IMPLEMENTING ENTITIES

Ministry of Environment of Peru (MINAM), Fund for the Promotion of Protected Natural Areas of Peru (PROFONANPE)

### PROJECT STATUS

Completed

### PROJECT PERIOD

January 2016 – April 2022

### LINK

<https://bit.ly/3pn9p6N>  
<https://bit.ly/3PIZSrr>

In Costa Rica, a country with more than 30 years of consolidated PES governance, programmes are now being updated according to the needs and specific requirements of beneficiaries. PES mechanisms have incorporated a political and social element, not only contributing with financial resources but also valorizing widely recognized landscapes and ecosystem services, such as watershed and biodiversity protection, scenic beauty and greenhouse gases mitigation. For instance, the valorization of such landscapes helped to establish the Sustainable Biodiversity Fund, a successful initiative that is implementing innovative financing tools, such as the Green Debit Card. For each transaction made with the Card, 2 percent of the interbank commission is transferred to the Fund and invested in initiatives targeting fragile ecosystems and their communities.

Costa Rica has been able to achieve important objectives related to the reduction in deforestation rates, recovery of forest coverage and degraded lands (SDGs 13 and 15), thus contributing to national and global goals and becoming a reference for other countries in the region. These achievements caught the attention of Peru and stimulated the beginning of an institutional dialog between the two countries, facilitated by IFAD. This dialogue has resulted in a series of technical exchanges on how to implement and improve mechanisms for payment for ecosystem services.

In total, six virtual workshops, involving 86 experts from Peru and Costa Rica, were organized during the last half of 2020, allowing participants to exchange their experiences and best practices on PES initiatives. The discussions were structured around key topics, such as legal and regulatory frameworks, financing instruments, bio-businesses and the monitoring and evaluation of PES initiatives. The main outcome of these exchanges was a road map outlining strategies for the improvement of PES programmes, and suggestions on how to strengthen integration and the design of joint initiatives between the two countries.

Early in 2021 a high-level event was organized with the participation of representatives from Costa Rica and Peru to discuss the main outcomes of the workshops with a wider audience and to further explore potential areas for collaboration. The event was an important step for the continued high positioning of PES on the agenda of both countries, and to consolidate it as an important tool to contribute to the achievement of several SDGs.

The exchanges between Costa Rica and Peru on PES have helped both countries to increase their capacities for assessing and expanding programmes and initiatives that contribute directly to SDGs 11, 13; and 15 and its targets 15.a, 15.1, 15.3, 15.4 and 15.9. Despite having been organized in a context of significant uncertainty due to the COVID-19 pandemic, and in a virtual format, the exchanges assisted the participating institutions to highlight key aspects of the sustainability and permanence of PES initiatives, underpinning the need to seek long-term commitment from stakeholders, explore innovative funding sources and ensure suitable monitoring and accountability systems.



## CONTACT INFORMATION

**Liliana Miro Quesada**  
Country Programme Officer, IFAD  
[l.miroquesada@ifad.org](mailto:l.miroquesada@ifad.org)



# Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia



Innovative governance tool to protect and manage forests, and secure the interests of stakeholders, owners, managers and the public

## CHALLENGE

Most of the countries in the Caucasus and Central Asia region are 'low forest cover countries,' and struggle with the degradation of their limited natural resources due to deforestation, illegal logging and extensive grazing. The countries do not regularly monitor the status of forests and often lack a comprehensive approach to linking forests to sustainable development. The availability and access to relevant information is the key condition for the development of forest governance and management and of related legislation, tools and systems. Criteria and indicators (C&I) for sustainable forest management (SFM) are central tools applied in advanced forest management systems for collecting, managing and using data. In 2015 there were no active systems for C&I for SFM in countries of the Caucasus and Central Asia, due to the lack of capacities and knowledge on the topic, therefore national capacities in that regard needed to be strengthened.

## TOWARDS A SOLUTION

To improve this situation and to strengthen the capacities of national governments and stakeholders in Armenia, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan, UNECE, jointly with the FAO Forestry and Timber Section, implemented the UNDA 10th Tranche project, entitled "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia". The project aimed at strengthening the national capacity of beneficiary countries to develop national accountability system for sustainable forest management, primarily through the development of national criteria and indicators (C&I) for sustainable forest management (SFM).

The project was designed as a mutually reinforcing combination of sequenced activities: national capacity-building workshops, regional workshops, advisory missions, policy briefs, assessments of the situation, and recommendations to improve national policies. Detailed knowledge and methodology for the implementation of the project was provided through "Guidelines for the Development of a Criteria and Indicator Set for Sustainable

### PROJECT NAME

Criteria and Indicators for Sustainable Forest Management in the Caucasus and Central Asia

### NOMINATED BY

United Nations Economic Commission for Europe (UNECE)

### COUNTRIES/REGIONS/TERRITORIES

Armenia, Georgia, Kazakhstan, Kyrgyzstan, Uzbekistan

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

15.1, 15.2, 17.9

### SUPPORTED BY

Food and Agriculture Organization of the United Nations (FAO), United Nations Development Account (UNDA)

### IMPLEMENTING ENTITIES

UNECE, FAO

### PROJECT STATUS

Completed

### PROJECT PERIOD

June 2016 – December 2021

### LINK

<https://bit.ly/3dyLTBk>



Forest Management,” developed explicitly for the project. The Guidelines provide specific concepts, definitions, tools and reference materials to guide the development process of national C&I sets for SFM.

In the implementation of the project, UNECE strongly promoted the participatory, inclusive approach. Workshops were open to a range of national stakeholders and other forest-related ministries and institutions to ensure cooperation among them, to establish synergies within the national ministerial architecture and to secure future support in the implementation of the developed tools. The importance of stakeholders’ participation in the development and implementation of C&I is reflected in the Guidelines, which contain the toolbox of participatory methods to assist the development process of national C&I and their use. The activities were designed to help countries in gradual learning, in developing their systems, in consulting with stakeholders that did not participate in the project to facilitate mutual learning. Many similarities among the countries of the region can be identified; they also share many challenges, including scarcity of relevant knowledge and experience thus benefiting from the work and experience of other countries in the project.

It was a key factor not only for developing national solutions but also for creating conditions for their future cooperation. It also had amplifying effects, sharing information among non-project countries from the region and outside interested in this topic, at the project’s regional meetings (with extended participation) or at intergovernmental meetings. During the project’s implementation in 2016-2020, the five project countries developed their national sets of C&I for SFM and tailored methodologies for data collection for all indicators within these sets. Further, policymakers received additional information (policy briefs) on the use and application of C&I in: (i) Sustainable Forest Management; (ii) National Forest Inventory; (iii) Monitoring, Assessment and Reporting; (iv) Information Systems; and (v) forest-related communication.

C&I for SFM are an innovative, modern, flexible tool developed for defining the scope and relevance of the information that was needed for the implementation of SFM at the national level to support evidence-based policymaking. Though they can be perceived as a tool for monitoring the status and trends in the forest sector, their role is far more important, as they can be used for designing quantifiable objectives, helping in communication with stakeholders, and eventually monitoring progress towards sustainable development goals. Foremost, their innovativeness lies in their potential to integrate several types of activities, managerial levels and thematic areas into a modern forest policy-making tool. Furthermore, they are supposed to strengthen forestry in connecting with other sectors.

A national set of C&I for SFM is intended to be used by national authorities to sustainably manage and monitor forests in countries on a daily basis. They are intended to serve as the long-time framework, guiding national forest policymaking. Through this, they support the long-term sustainability of forest management practice, and rational and coherent implementation of approaches and use of methods and tools in that regard.

The project contributed to improving the development of policy-supporting tools in beneficiary countries, and to increase awareness of the options for further development in this sphere. Five policy briefs



developed within the project display the path for the use of criteria and indicators as policy tools for SFM and decision-making (monitoring, assessment and reporting), as well as forest-related communication. They also describe the use of C&I for SFM for the development of the National Forest Inventory: a basic tool for forest information collection and information systems: a useful tool for better forest policy and management.

The results achieved through the project strengthened national capacities both in achieving SDG15- Life on Land, and other Goals, including SDG7 – Affordable and Clean Energy, SDG13 – Responsible Consumption and Production, and SDG12 - Climate Action, and also equipped countries with the tool for coordinating work towards their implementation.

C&I for SFM is the tool that provides a common framework, approach and structure that can be adjusted to the national economic, social, environmental or even political conditions. Due to their flexible nature, they can be developed in any country and applied both at the national, regional and local levels. This makes them an extremely useful tool for a thorough implementation of national and international forest policies. Experience gained and tools developed during the project provide a package of knowledge that can guide other countries (or other interested parties) interested in developing their C&I. Although the package was developed by the forestry sector, it provides knowledge that can be used by other sectors due to its universal approach, openness to different topics and sectors and its multistakeholder environment. Experience from project implementation shows a genuine interest among stakeholders already at the developing stage of the process. This proved the value of C&I and their integrative potential. In a way, they can be characterized as a common language, translating hermetic, complicated technical matters of forestry, reserved for highly specialized experts, to a broader audience at various levels and areas of life who have an interest in forests. By building national sets, the project provided a good starting point for the full utilization of this potential, however, a lot depends on how these tools will be integrated into the national political system, in particular how they will be recognized when they become part of legislation.

#### CONTACT INFORMATION

**Roman Michalak**  
Economic Affairs Officer  
Joint UNECE/FAO Forestry and Timber Section  
[roman.michalak@un.org](mailto:roman.michalak@un.org)



# Trees in Cities Initiative



## Building a peer-learning community of UNECE and global cities implementing urban forestry for the SDGs

### CHALLENGE

Two-thirds of humanity will live in cities by 2050 – achieving national sustainable development objectives and the SDGs depends on healthy and resilient cities. Responsible for around 75 percent of global CO<sub>2</sub> emissions, cities are also at the forefront of fighting climate change while being particularly vulnerable to its impacts.

Heat extremes, which are increasing under climate change, drive heat-related deaths and reduce worker productivity, while increasing required expenditures on air conditioning, which in turn drives increased carbon emissions. Extreme weather is also increasing the risk and severity of urban flooding and landslides, threatening lives, livelihoods and property. Many residents, often disproportionately those in marginal communities, do not have adequate access to green space, despite its scientifically proven benefits for physical and mental health.

Yet, while cities urgently need to build resilience and deliver mandates across the Sustainable Development Goals (SDGs), they face many legal, finance and capacity challenges, including limited support from national governments.

### TOWARDS A SOLUTION

The Trees in Cities Challenge was launched by UNECE in September 2019 at the United Nations Climate Action Summit and aims to make cities greener, healthier and more resilient by expanding sustainable urban forestry.

Sustainable urban forestry is an integrative and cost-effective nature-based solution to these challenges and can help develop greener, healthier and more resilient cities. Trees and forests in urban and peri-urban areas provide vital benefits for health and well-being, sustainable development, climate adaptation and mitigation, biodiversity and disaster risk reduction. These benefits contribute to many SDGs and other local, national and global ones.

#### PROJECT NAME

Trees in Cities Initiative

#### NOMINATED BY

United Nations Economic Commission for Europe (UNECE)

#### COUNTRIES/REGIONS/TERRITORIES

55 cities in Albania, Austria, Brazil, Bulgaria, Canada, Cyprus, Denmark, France, Georgia, Germany, Ireland, Israel, Italy, Lithuania, Mexico, Moldova, Montenegro, Portugal, Russia, Slovakia, South Africa, Spain, Sweden, Switzerland, Turkmenistan, United Kingdom

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 3.4, 6.6, 7.3, 8.5, 8.9, 11.7, 13.1, 13.2, 15.2

#### SUPPORTED BY

Government of Switzerland

#### IMPLEMENTING ENTITIES

UNECE

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

September 2019 – December 2024

#### LINK

<https://treesincities.unece.org/>



It contributes to achieving SDG15.2 (sustainably manage of all types of forests, halt deforestation, restore degraded forests, increase afforestation and reforestation), and SDG11.7 (universal access to safe, inclusive, and accessible, green and public spaces). The many benefits of sustainable urban forestry also make strong contributions to most SDGs. Examples include:

- ▶ Creating and enhancing habitats and contributing to land restoration (SDG 15)
- ▶ Creating green jobs and providing ecosystem services (SDG 8)
- ▶ Contributing to food security through urban food forests (SDG 2)
- ▶ Improving air quality; providing space for healthy lifestyles and mental health (SDG3)
- ▶ Cooling the air up to 8°C, reducing health risks of extreme heat (SDG 3)
- ▶ Reducing the risk of flooding and mudslides (SDG 6, 11)
- ▶ Reducing the need for building heating and cooling (SDG 7, 8, 13)
- ▶ Increasing safe, inclusive and accessible green space (SDG 11)
- ▶ Increasing resilience to climate change impacts (SDG13)

To achieve these benefits and accelerate the use of sustainable urban forestry to achieve the SDGs and build resilient cities, the Trees in Cities Challenge asks mayors to commit to tree planting pledges, including sustainable urban forestry targets and practices. This approach helps to build political will to expand and strengthen the use of sustainable urban forestry as a nature-based solution. To date, over 50 cities around the world have committed to planting over 12 million trees, of which over 8 million have already been planted.

Yet while there is an urgent need to expand the urban forest cover in urban areas, afforestation and tree planting interventions should be adequately designed and include provisions for sustainable, long-term management. This ensures that the benefits provided by the urban forest are optimized over time.

The initiative has been welcomed by cities and countries, which have expressed interest in maximizing opportunities for exchange or experiences and lessons learned. As a result, participating cities from the Global South and North can now join the Informal Network of Experts on Sustainable Urban Forestry, formed by UNECE in October 2021 building on the success of initial peer exchange events, as a participatory peer learning community where cities exchange best practices and support to overcome the myriad challenges they face as local governments.

This supports the long-term sustainable management of urban forests and trees by participating cities, so that trees are planted in the right place, for the right reasons and grow to maturity so that they can deliver their many co-benefits. The Network also facilitates collaboration on issues of common interest or concern, including ongoing work on benchmarking. The network also includes representatives of national governments, civil society and the private sector, facilitating exchanges across sectors and levels of government, as well as among cities from the Global North and South. Furthermore, discussions during meetings

of the Network of Experts have helped inform the drafting of a policy brief on Sustainable Urban Forestry.

Sustainable urban forestry has received limited attention from national ministries and institutions in many countries. By engaging first at the city level to promote sustainable urban forestry, the Trees in Cities Challenge strengthens the capacity of cities to contribute to efforts to achieve national development objectives and the SDGs. At the UNECE level, it has helped to build awareness among policymakers and other key stakeholders at the national and regional level. In particular, the UNECE intergovernmental mechanism on forest and the forest industry included urban forestry in its integrated programme of work, and a regional action plan is currently under development. The integration of the initiative in the intergovernmental context will support its integration in national and regional policy, and thereby not only sustain outcomes of the initiative, but also accelerate and scale up the impact in the future.

A key lesson of the initiative is that the exchange of experiences among cities is particularly valuable. Municipal governments typically have broad mandates with limited technical depth in any given area. Peer networks provide support in the planning, planting and management of urban forests to enhance their contribution to the SDGs. This helps build capacity for effective on-the-ground implementation of sustainable urban forestry. This can be critical because, unlike sectoral ministries, cities have integrated mandates for sustainable development, and so all the co-benefits of urban forestry across the SDGs are relevant to city governments. This can be therefore be an effective approach to localize the SDGs.

The innovative model of the Trees in Cities Challenge initiative – building political will among mayors and supporting implementation through peer networks – can be replicated as an approach to localize the SDGs. The initiative also demonstrates that strong subnational engagement, particularly when complemented by diverse stakeholder networks, can also be an innovative approach to build momentum for – and gather lessons learned and input for – national and regional policy action to sustain and accelerate the development outcomes and enhance regional cooperation in the long term.

---

## CONTACT INFORMATION

**Liliana Annovazzi-Jakab**  
Chief, UNECE/FAO Forestry and Timber Section  
liliana.annovazzi-jakab@un.org

# United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD)



## Strengthening climate and forest capacity through knowledge sharing

### CHALLENGE

Forests and woodlands are important storehouses of greenhouse gases, such as carbon dioxide. According to the United Nations Environment Programme (UNEP), apart from being home for most of the biodiversity on the planet, forests and woodlands also soak up 30 percent of carbon dioxide emissions from industry and fossil fuels. However, the world loses around 10 million hectares of forest every single year.<sup>1</sup>

With the world aiming to limit global warming to 1.5 degrees, the goals outlined in the Paris Agreement cannot be met without halting and reversing deforestation and forest degradation. In addition to being carbon sinks, forests, as the largest and most mature nature-based solution, are also key to addressing the interrelated biodiversity and health crises and support global efforts for economic recovery.

### TOWARDS A SOLUTION

Since its inception in 2008, the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD) is the UN knowledge and advisory platform on forest solutions to the climate crisis. It promotes the protection of tropical forests as a guiding principle, with the informed and meaningful involvement of all stakeholders, including indigenous peoples, local communities and women. The UN-REDD Programme aims to slow down deforestation, while establishing firm social and environmental safeguards and contributing to the sustainable development of countries with tropical forests.

The programme makes sure not to harm local communities while trying to protect their forests, understanding that the communities living in and around the forests need it for several services and goods (such as water,

<sup>1</sup> <https://wedocs.unep.org/bitstream/handle/20.500.11822/35851/DF.pdf>

### PROJECT NAME

United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD)

### NOMINATED BY

United Nations Environment Programme (UNEP)

### COUNTRIES/REGIONS/TERRITORIES

Argentina, Bangladesh, Benin, Bhutan, Plurinational State of Bolivia, Burkina Faso, Cambodia, Cameroon, Central African Republic, Chad, Chile, Colombia, Costa Rica, Republic of the Congo, Côte d'Ivoire, Democratic Republic of the Congo, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Ethiopia, Fiji, Gabon, Ghana, Guatemala, Guinea, Guinea Bissau, Guyana, Honduras, India, Indonesia, Jamaica, Kenya, Lao PDR, Liberia, Madagascar, Malawi, Malaysia, Mexico, Mongolia, Morocco, Myanmar, Nepal, Nigeria, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Samoa, Solomon Islands, South Sudan, Sri Lanka, Sudan, Suriname, Thailand, Togo, Tunisia, Uganda, United Republic of Tanzania, Vanuatu, Viet Nam, Zambia, Zimbabwe

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

13.b.1, 15.2, 15.b

### SUPPORTED BY

Government of Norway, Government of Denmark, Government of Japan, Government of Luxembourg, Government of Spain and Government of Switzerland, European Union

### IMPLEMENTING ENTITIES

UNEP, United Nations Development Programme (UNDP), Food and Agriculture Organization of the United Nations (FAO)

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

2008 – 2025

### LINK

<https://www.un-redd.org>



medicines, shade, fruits and firewood). It places a lot of effort on sensitization of the communities so that they see the benefits for themselves in the long run when they all protect the forests now.

The UN-REDD Programme enables low-income countries to share their knowledge with other such countries (peer-to-peer learning) and to scale up all this knowledge from local experiences to global lessons learned and best practices.

Recognizing the importance of preserving forests in the fight against climate change, a comprehensive technical process known as Reducing Emissions from Deforestation and Forest Degradation (REDD+) was developed under the United Nations Framework Convention on Climate Change (UNFCCC). It aims to halt greenhouse gas emissions from deforestation and forest degradation in developing countries.

It builds on the convening capacity and technical expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) to support country-led efforts to implement REDD+.

With the support of Norway and other donors, its approaches ensure the environmental integrity of carbon emissions reductions while supporting non-carbon benefits – from safeguarding biodiversity to supporting local livelihoods and promoting the informed and meaningful involvement (FPIC) of all stakeholders, including of indigenous peoples and local communities.

UN-REDD has been playing a transformative role in supporting 65 partner countries (70 percent of all tropical forests) across Africa, Asia and the Pacific, and Latin America and the Caribbean. In addition to providing technical assistance to respond to country needs, it supports its partner countries by systematizing and aggregating the collection of know-how and converting and elevating local knowledge into lessons learned, best practices and success stories with global relevance, targeted to various audiences. In this way, the Programme also boosts the individual and collective impact of local knowledge and ensures South-South learning and the cross-fertilization of ideas and approaches across countries on how to scale up REDD+ implementation to accelerate climate action.

Examples of these South-South and triangular cooperation knowledge-sharing events in 2021 included a virtual regional knowledge exchange where UN-REDD partner countries from Latin America shared lessons learned and good practices from the first pilot phase of Green Climate Fund (GCF) result based payments. In addition, UN-REDD organized a South-South exchange between Costa Rica, Ecuador and Suriname on indigenous rights in forest affairs.

UN-REDD also compiled and assessed lessons and approaches for the digital participation of indigenous peoples in policy and institutional processes in Colombia, a pilot initiative to scope best practices

for inclusive digital participation of indigenous peoples and rural communities. The knowledge gathered was further disseminated when contributing to the fifth session of the UNFCCC Local Communities and Indigenous Peoples Platform, in collaboration with the Asia Indigenous Peoples Pact.

Moreover, a total of 10 knowledge briefs were produced summarizing the Programme's knowledge and good practices on landscape approach and planning, forest tenure, indigenous peoples' rights, financing and the private sector, forest monitoring systems and MRV, linking REDD+, the Paris Agreement, NDCs and the SDGs, REDD+ funding mechanisms, safeguards and gender. These expert briefs bring together 10+ years of UN-REDD expertise and best practice for supporting partner countries to realize forest solutions to the climate emergency by avoiding carbon emissions and fostering carbon sequestration.

As of today, 25 UN-REDD partner countries have adopted REDD+ policies at ministerial/cabinet level, resulting in substantial decreases in deforestation and forest carbon emissions. To be more precise, UN-REDD countries have submitted more than 700 million tCO<sub>2</sub> of forest emissions reductions to the UNFCCC, equal to taking more than 150 million cars off the road for a year. Amongst these countries are Chile, Colombia, and Côte d'Ivoire. Also, more than US\$1 billion has been channelled and mobilized since inception, including US\$350 million for REDD+ results-based payments. And 38 UN-REDD countries have established transparent forest monitoring systems.

The knowledge generation and dissemination on forest-positive agriculture and halting deforestation served countries to advance their sustainable development agendas, not only with respect to SDG 13 (Climate Action) and SDG 15 (Life on Land), but also across the spectrum of the SDGs.

Currently, UN-REDD is continuing to provide support to countries for accessing the funding provided by the Lowering Emissions by Accelerating Forest Finance (LEAF), whilst ensuring that countries are integrating participatory and socially inclusive REDD+ processes to protect their forests and achieve their climate goals.

---

## CONTACT INFORMATION

**Ingrid Dierckxsens,**  
Communications and Knowledge Management Officer, UN-REDD Programme, UNEP  
[Ingrid.dierckxsens@un.org](mailto:Ingrid.dierckxsens@un.org)

# Desertification Control and Key Factor Regulation in Central and Western Asia



## Building ecological barriers in Kazakhstan and Uzbekistan

### CHALLENGE

Central Asia-West Asia is located in the arid zone of Asia and the region has arid and windy climate and a desert landscape. Because of the large areas of sand dunes, wind erosion is serious and sand movements are active. In the process of desert oil and gas exploration and urbanization, the local ecosystem became more fragile. Local communities are threatened by serious hazards like sand dunes, the invasion of quicksand and strong winds, which seriously affect the sustainable development of local economies and societies.

China, as a close neighbour of Central Asian countries, has a similar desert landscape in Xinjiang, and Chinese scientists have built sound partnerships in Central Asia to jointly address common issues of desertification.

### TOWARDS A SOLUTION

This project “Desertification Control and Key Factor Regulation in Central Asia-West Asia” funded by the Chinese Academy of Sciences was initiated to address sustainable development challenges and ecosystem degradation issues of the Pan Third Pole region. It aims at transferring key restoration technologies, establishing experimental demonstrations, providing technical support for such demonstrations, and finally serving for the global goal of land degradation neutrality in 2030 (SDG 15.3).

The team established a few ecological green belt demonstrations in difficult sites in Kazakhstan. In cooperation with Saken Seifullin Kazakh Agrotechnical University, the Kazakhstan Scientific Research Institute of Forestry and the Kazakh Research Institute of Soil science and Agricultural Chemistry, the project team from the Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG-CAS) addresses the technical challenges in establishing ecological green belt in Nursultan, capital of Kazakhstan, such as strong wind, saline land and waterlogging in low-lying land during spring.



### PROJECT NAME

Desertification Control and Key Factor Regulation in Central and Western Asia

### NOMINATED BY

United Nations Environment Programme-International Ecosystem Management Partnership (UNEP-IEMP)

### COUNTRIES/REGIONS/TERRITORIES

China, Kazakhstan, Uzbekistan

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 3.9, 13.1, 15.3

### SUPPORTED BY

Chinese Academy of Sciences

### IMPLEMENTING ENTITIES

Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG, CAS)

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

March 2018 – March 2023



The project team screened cold-tolerant, drought-tolerant and saline-alkali-tolerant plants to carry out adaptiveness evaluation and established a plant nursing base. The XIEG-CAS team integrated afforestation techniques for difficult sites such as arid sloping land, gravel soil, waterlogged low-lying land, and severe salinized areas. XIEG-CAS built an ecological green belt experimental demonstration in 23 hectares, formed the technical guidelines for ecological green belt establishment in the capital circle of Kazakhstan, and trained more than 500 people. Such modes have been applied to another area of more than 20 hectares. It provides a demonstration model for the establishment of ecological protection system in similar ecological environments.

In Uzbekistan, XIEG-CAS jointly established a research team in partnership with the Uzbekistan Aral Sea International Innovation Centre and the Uzbekistan Institute of Botany to build a demonstration bases for water-saving irrigation, breeding of salt-tolerant plants and formed the “Aral Sea Lake Basin Ecological Environment Comprehensive Management Plan”.

The project implemented the following specific interventions in Kazakhstan and Uzbekistan by referring to Chinese research outcomes and addressing local challenges.

**Demonstration of restoration in dry Aral Sea Lake beds.** For the purpose of restoring vegetation, the research team collected and screened plant resources, conducted species` salt tolerance evaluation, breeding, and irrigation technology research. The collection and utilization of rainfall and snow water reduced both cost and water shortage. The application of water-saving drip irrigation improved water-use efficiency and regulated soil salt. Specific soil conditioners (fertilizers) were used to promote plant germination and rhizosphere environment, and increase the survival rate of plantation. Through such research, a 6.67ha demonstration with salt tolerance plantation was established in Muynak, Uzbekistan, together with another 66.67 ha demonstration in Xinjiang, China.

**Bio saline Agriculture demonstration in the Aral Sea surrounding area.** Aiming at comprehensive utilization of saline-alkali land and halophyte resources, the research team integrated a saline-alkali land utilization system with “drip irrigation + biological salt discharge + rapid soil fertility recovery” technics. It can alleviate the water shortage while improve saline-alkali land use, and brought outstanding economic and social benefits. The research team piloted high-yield plantation demonstrations of salt-tolerant forage crops and forage halophytes in the Nukus Aral Sea Center, and processed them as forage for animal. This allows the preliminary bio saline agriculture system function, with integrating salt-tolerant forage planting and processing, as well as husbandry in saline-alkali land. With the previous patented technology, the project team also got related enterprise guideline approved for halophyte resources planting and processing, which enables more effective upscaling. The promotion and application of water-saving irrigation also contributes to the implementation of ecosystem restoration in the



Aral Sea area. A 2-ha water-saving demonstration base has been established in Nukus, Uzbekistan, and another demonstration in Xinjiang, China is over 100 ha.

With such in-depth cooperation, the XIEG-CAS had signed an MoU with the Saken Seifullin Kazakh Agrotechnical University, the Kazakh Research Institute of Soil Science and Agricultural Chemistry, the Kazakhstan Scientific Research Institute of Forestry, the Uzbekistan Aral Sea International Innovation Centre and the Uzbekistan Institute of Botany respectively, and jointly established the Kazakhstan Nursultan Ecological Barrier Research Centre and the Uzbekistan and China Joint Laboratory for Plant and Soil Analysis. Through such cooperation, XIEG-CAS recruited 24 Master and Ph.D. candidates from Central Asia and West Asia and organized a few disaster reduction technology training courses with more than 600 people trained.

#### CONTACT INFORMATION

**Dr. Wang Yongdong**  
Associate Professor, XIEG-CAS  
wangyd@ms.xjb.ac.cn

# Piloting Desertification Control in Countries of the Great Green Wall in Africa



## Linking the Great Green Walls in the world's two largest deserts through South-South cooperation

### CHALLENGE

The Sahel region is seriously affected by land degradation, especially desertification. Under the leadership of the African Union, the “Great Green Wall (GGW) of Africa” was launched to combat land degradation and poverty, and has achieved some initial results in the past 10 years. The adjusted GGW objectives are to restore 100 million hectares of degraded land, sequester 250 million tons of carbon in the soil and create 10 million green jobs in rural areas by 2030. However, there are still large gaps in governance, monitoring and reporting, funding and technical issues to overcome to achieve these goals, as shown by the United Nations Convention to Combat Desertification review report. Some of these issues include: 1) lack of proper and managed knowledge/information-sharing and lack of coordination mechanisms at the national and regional levels; 2) a low survival rate in tree plantation; and 3) the motivation of farmers and sense of ownership in communities depend on revenues.

### TOWARDS A SOLUTION

To address the technical gaps identified above concerning requisite GGW restoration actions, this project builds restoration technology demos in Mauritania (host of GGW regional hub) and Ethiopia (African Union host country), as a reference point for all GGW countries. These demos refer to China's successful 436 km long 'Green Wall' built from 1991 to 2006 that holds back numerous sand dunes within the second largest sand desert in the world, the Taklimakan Desert. This Taklimakan Green Wall's development was based on long-term research and tested to be cost-effective by the team from the Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG, CAS).

The project team from XIEG, CAS developed in the GGW regions various modes of sand-fixing through applied research and screening cost-effective

### PROJECT NAME

Piloting Desertification Control in Countries of the Great Green Wall in Africa

### NOMINATED BY

United Nations Environment Programme - International Ecosystem Management Partnership (UNEP-IEMP)

### COUNTRIES/REGIONS/TERRITORIES

China, Ethiopia, Mauritania, Nigeria

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.4, 3.9, 13.1, 15.3, 17.7, 17.9

### SUPPORTED BY

Joint programme of UNEP, Ministry of Science and Technology of China and CAS

### IMPLEMENTING ENTITIES

Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG, CAS), UNEP-IEMP

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

July 2019 – June 2023





sand-fixing materials. Some key technologies were identified and demonstrated, such as mixed mechanical-biological measures, ecological restoration and degraded grassland management. Such cooperation provides tested desertification control and livelihood options for GGW. All of these measures contributed to SDGs 15.3, 2.4, 3.9, 13.1, 17.7 and 17.9.

The project team implemented tasks in Mauritania through the Nouakchott-based West Africa Office of the China-Africa Joint Research Centre under the Chinese Academy of Sciences, and it worked closely with the Mauritania Ministry of Environment and Sustainable Development (MEDD) and the Mauritania African Great Green Wall National Agency. The project in Mauritania aims to improve the Nouakchott existing urban protection system to combat desertification. Some grid sand-fixing demos (1.5ha) were built with integrated measures like rapid sand fixation with new materials in fine grid, resilient native species selection, drip irrigation and plantation at raining season. Field technical training was provided to 50 local trainees to allow effective implementation and follow-up maintenance.

Through the long-term partnership with Oromia Pastoral area Development Commission, Ethiopia (OPADC), the project team jointly established these following two demonstration sites and with land and personnel support provided by the Ethiopian side.

- ▶ **Afforestation with fish scale pit and water-retaining material (2 ha).** To address erosion, high intensity and unevenly distributed precipitation in Ethiopia's hilly low-altitude desert, a water-harvesting afforestation plan was implemented by expanding waterlogging afforestation, increasing rainwater collection with water-retaining material, improving tree survivalship and the growth rate. It turned seasonal flood into irrigation for expanded new plantation in low-altitude areas. These practices were further scaled up for wider use by the local community on 3,795 ha. of land in 13 pastoral districts of the Borana zone.
- ▶ **Degraded grassland restoration in 200ha:** in addressing declining animal husbandry and local livelihoods as grave consequences of grassland degradation in Ethiopia, a comprehensive grassland restoration technology in low altitude areas was developed. This includes planting grass while clearing encroached bush species, fencing hillsides for grazing rotation, combination of grazing and animal husbandry. These practices have been upscaled in other low altitude areas, with 2,646 kg of forage seeds spread on 330.8 ha. of bare or degraded rangelands participated in by 34 pastoral households. The average forage yield from these areas was 2.9 t/ha, which has doubled. This intervention ensured year-round forage supply for over 100 cattle. Furthermore, such interventions were undertaken over 52,841 ha of land in 13 pastoral districts. The current total annual forage yield of these intervened areas (52,841 ha) is about 137,387 ton which ensured a year-round forage availability for more than 127,210 cattle (at a daily intake rate of 3 kg per head per day) benefiting over 43,000 people directly and indirectly in the area.

With such cooperation, XIEG, CAS signed Memorandums of Understanding with the Pan African Agency of the Great Green Wall, MEDD of Mauritania and Oromia Pastoral area Development Commission, Ethiopia, which provided institutional partnerships for joint applied research, knowledge-sharing, technology transfer and capacity- building. To scale up this project to other countries, international technical training courses were organized by XIEG, CAS. Six international students from African countries were recruited with scholarships and educated in China. Some Chinese enterprises dealing with prevention and control of desertification were invited to this project sites and supplied their cost-effective technology. Joint research to assess the current GGW progress and technology, sustainable livelihood options and local policies is in progress to allow better scaling up.

Moreover, during the Eighth Ministerial Conference of the Forum on China-Africa Cooperation (FOCAC) in Nov 2021 the Dakar Declaration clearly listed "support the development of the Great Green Wall" as one of joint actions. In the Declaration on China-Africa Cooperation on Combating Climate Change, it also stated that China will support Africa in implementing the Great Green Wall Initiative and will make good use of technologies including the China high-resolution Earth Observation System.

Some of key innovations or values added of this project are as follows: 1) science and long-term experiments based interventions referring to Chinese success in tests undertaken in a similar context; 2) long term partnership and buy-in of pilot countries since 2011, with significant support from the GGW regional office and national governments to allow inclusive participation and sustainability; 3) integrated ecosystem management approaches for multiple SDGs, including short- and long-term livelihood options for local community incentives; 4) UNEP, through UNEP-IEMP, provided cross-nation facilitation and upscaling opportunities; 5) continuous funding from the Chinese Government and new FOCAC political support for GGW bring incentives and sustainability for such cooperation; and 6) capability-building for different stakeholders, including scientists and practitioners, to allow effective hand-on practices and transfer of knowledge and technology.

---

## CONTACT INFORMATION

### Na Zhou

Assistant Professor, XIEG-CAS  
zndesert@ms.xjb.ac.cn

### Guoqin Wang

Programme Manager, UNEP-IEMP  
guoqin.wang@unep-iemp.org

# Strengthening Capacities for the Identification of Victims of the Viet Nam War

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



## Joint initiative by Argentina and Viet Nam to identify the bodies of over half a million unidentified soldiers

### CHALLENGE

The project, supported by the Argentine Fund for International Cooperation (FO.AR) and implemented by the Argentine Forensic Anthropology Team (EAAF), was conducted under the framework of the Vietnamese Prime Minister's Decision N°150, establishing several tasks that involved several government agencies in Viet Nam for the purpose of identifying the bodies of over half a million soldiers that died during the Vietnam war and remain unidentified.

The main challenge of the project was to contribute to the effective implementation of the National Master Plan to Identify Unnamed Remains through capacity-building, training and technical support in recovering, analysing and sampling victims' remains.

### TOWARDS A SOLUTION

To address the above challenge, the Argentine Fund for International Cooperation (FO.AR) supported "*Capacity-building for the identification of victims of the Viet Nam War*" project which aimed at the exhumation and identification of the victims of the Vietnam War by strengthening the capacities of Vietnamese counterparts in recognition of their victims. The initiative contributes to the Sustainable Development Goal 16 by promoting the development of peaceful and inclusive societies and facilitating access to justice and of better understanding the process of identifying war victims as an instance of closure and historical reparation.

Through the project, specialists from the Forensic Military Medicine Institute (IMMF) in Vietnam were trained by the Argentine Forensic Anthropology Team (EAAF) in the handling of samples, the preparation of DNA frequency charts for laboratory genetic analysis, and regional groups (North-Centre-South)

#### PROJECT NAME

Strengthening Capacities for the Identification of Victims of the Viet Nam War

#### NOMINATED BY

General Directorate of International Cooperation, Argentina

#### COUNTRIES/REGIONS/TERRITORIES

Argentina, Viet Nam

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

16.1, 17

#### SUPPORTED BY

Argentine Fund for International Cooperation (FO.AR)

#### IMPLEMENTING ENTITIES

Argentine Forensic Anthropology Team (EAAF) – Ministry of Labour, Invalids and Social Affairs of the Socialist Republic of Viet Nam – Bureau of National Devotees

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2012 – 2019



were trained in exhumation, selection and sampling techniques. This project was developed in line with the Vietnamese National Action Plan which was aimed at identifying 700 representative cases in the Ha Noi and Ho Chi Minh cemeteries.

Among the main elements of joint work, the training of Vietnamese professionals for the exhumation of remains stands out; their identification through anthropology, dentistry and forensic medicine; and the genetic analysis of samples in laboratories.

Additionally, action protocols were implemented for sample collection and the Argentine Forensic Anthropology Team (EAAF) developed a *Practical Guide for the Recovery and Analysis of Bone Remains of the Victims of the War in Viet Nam*, which served as a framework for the joint work between the operational and scientific levels. It is also important to highlight that the EAAF itself processed more than 40 samples in Argentina, managing to positively identify five victims of the war.

As a result of the successful joint work carried out on this project until December 2018, Viet Nam requested the project's continuation and the further strengthening of its cooperation with Argentina on this matter. In that regard, in February 2019 a new *Action Plan for the Identification of War Victims* was signed with the Ministry of Labour and Invalid Persons of Viet Nam. Currently, within the framework of the Action Plan, work is being done with EAAF on the development and adaptation of training plans and protocols aimed at strengthening Vietnamese laboratories and their human resources in the identification process, with emphasis on genetic issues and database development.

Finally, this initiative aimed at strengthening capacities in forensic anthropology and identification of remains in post-conflict scenarios presents promising prospects for replication, being adaptable to different contexts, as evidenced by the multiple experiences of cooperation with countries such as Malaysia, Thailand and Timor-Leste.

---

## CONTACT INFORMATION

### **Victoria Armayor**

Diplomatic officer, General Directorate of International Cooperation – Ministry of Foreign Affairs, International Trade and Worship, Argentina  
vjy@mrecic.gov.ar

# Excellence in Public Service Delivery in Azerbaijan – the case of ASAN Service

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



## Retooling governance mechanisms to improve public service delivery by putting people first



### CHALLENGE

Azerbaijan faced challenges in delivering public services due to a lack of accessibility, efficiency, and accountability among entities. Unnecessary bureaucracy, lack of access to services within one single building, undue costs, a lengthy process of document submission, the absence of a unified body responsible of standardization, coordination and digitalization of public services were the main problems besetting the public sector. The establishment of a modern management mechanism in the field of public service delivery was therefore crucial for subsequent actions aimed at reforming the system. Since the adoption of the Sustainable Development Goals (SDGs), setting up effective and transparent institutions has been one of the major targets of the international community. The project aimed to achieve SDG 16 by building a strong institution to serve for the benefit of the community.

### TOWARDS A SOLUTION

Since 2012, the ASAN Service initiative is working to streamline citizens' access to public services; maintain ethical principles and foster professional skills of civil servants; provide high standards of public services; increase public confidence in state institutions; achieve complete transparency in public service delivery; and maximize the efficient delivery of digital services. "ASAN service" proved itself to be a new concept representing the best national and international practices of public service delivery. It unified 320 services delivered by 11 state and 26 private entities in one place. It simplified procedures for receiving public services via new standards and innovations. In order to ensure accessibility of services and equal opportunities for the public, Mobile ASAN service provided services in 44 destinations to 213,593 individuals in 2021. It established an efficient work style through digitalization of services and a convenient work schedule. ASAN service ensured a "zero corruption zone" as it excludes "hand-to-hand" payments and increases transparency.

### PROJECT NAME

Excellence in Public Service Delivery in Azerbaijan – the case of ASAN Service

### NOMINATED BY

State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan (SAPSSI)

### COUNTRIES/REGIONS/TERRITORIES

Azerbaijan, Indonesia, Montenegro, Morocco, Uganda, Uzbekistan, among others.

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

16.5, 16.6, 17.6, 17.9

### SUPPORTED BY

Government of Azerbaijan

### IMPLEMENTING ENTITIES

ASAN Service – a state agency for public services to citizens of Azerbaijan – and 11 state and 26 private entities

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

July 2012 – Ongoing

### LINK

[www.asan.gov.az](http://www.asan.gov.az)





The process was participatory in the sense that it involved several relevant state entities, local outsourcing companies specializing in different areas (public-private partnerships), local executive authorities, committees and civil society, all of which contributed to the design and implementation of the initiative.

The provision of transparent and efficient services leaving no-one behind is a key accomplishment, an important goal realized, for the Government of Azerbaijan. Transparency and accountability have been fully attained in all “ASAN” centres. Thanks to these achievements, “ASAN Service” received the United Nations Public Service Award in 2015 in the category of “Improving the Delivery of Public Services”. This special award was presented to ASAN for ensuring excellence in public service delivery through applying digital governance.

ASAN is one of most advanced models of public service delivery. It unifies in one building state and private entities that directly offer their services. Hence, a conflict of interests and duplication of functions between the state agency and servicing entities are avoided. “ASAN Service” has been successful in eliminating corruption at all levels of public service delivery to contribute to the overall economic well-being of the country thereby increasing public trust towards government.

Since its establishment, more than 53 million applications were processed in ASAN Service Centres and the satisfaction rate of the citizens is 99.5 percent, the ultimate proof of sustainability. The citizen centric nature of the initiative ensures to be used over the long term – as citizens can obtain all requisite documents starting from a birth certificate to a death certificate.

The ‘ASAN Service’ model’s high replicability can be seen in its availability in 23 cities/areas of Azerbaijan, seven of which are in Baku. Due to its potential, the State Agency for Public Service and Social Innovations, under the President of the Republic of Azerbaijan (SAPSSI), has been determined to export the model to other countries. Indonesia, Montenegro, Morocco, Uganda, Uzbekistan are developing their public service systems based on Azerbaijan’s ASAN model.

Moreover, most of the delegates of those countries have participated in the trainings held by SAPSSI experts. The latter conducted multiple field trips to other public service entities abroad to share their expertise and know-how on the ASAN Service system. During the above-mentioned trips, needs assessment reports were prepared and presented to the entities concerned.

Moreover, the “ASAN International Association of public service delivery entities” was founded by some countries (Afghanistan, Azerbaijan, Indonesia, Montenegro, Morocco, Türkiye, Uganda and the United Arab Emirates) that cooperate in the appropriate fields and share innovative approaches. The purpose of the ASAN Association has been to organize institutional networks of professionals (practitioners) and experts (academicians) to discuss ways and means to tackle actual



problems and contemporary challenges for efficient management of public services and their delivery, and to set up strategies and frameworks of implementation.

The main takeaway was that transparency was highly instrumental to the functioning of the initiative, as was the application of social innovations. The latter helped to demonstrate the quality difference and to elicit public approval. Another no less important lesson is that ASAN’s public-centric approach is essential for public awareness of the activities of various state entities. The bottom line – it promotes effective citizenship.

#### CONTACT INFORMATION

##### **Nazrin Aliyeva**

Chief Specialist of the International Relations Department, State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan  
n.c.agayeva@asan.gov.az, nzrnghyv@gmail.com

# myGov One-Stop Solution Portal

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



## Aggregating all government e-services on one platform

### CHALLENGE

Over the last few decades, governments have been offering many different services through digital platforms. However, public service delivery, especially when it comes to e-services, often suffers from the negative ramifications of decentralization. As in many other developing countries, different e-governance services in Bangladesh are autonomous and separate, each requiring a different user login and separate application processing. Coupled with the discrepancies in digital literacy among the population and civil servants, decentralization makes it hard for both the users and the government to keep track of various applications on different platforms. It also creates issues related to accountability and transparency.

### TOWARDS A SOLUTION

The Government of Bangladesh has been pursuing an Integrated Service Delivery Platform (ISDP) to create a citizen-centric digital platform through which all necessary services can be delivered to the public. In short, this ISDP, which offers special access modes regardless of device, time or place, is known as 'myGov'. It has been built as a centralized platform that provides digital services from numerous government organizations on a single platform. The platform uses technology in the most cost-effective way to ensure it contributes to:

- ▶ Substantially reducing corruption and bribery in all their forms
- ▶ Developing effective, accountable and transparent institutions at all levels
- ▶ Ensuring responsive, inclusive, participatory and representative decision-making at all levels
- ▶ Ensuring public access to information and protect fundamental freedoms



#### PROJECT NAME

myGov One-Stop Solution Portal

#### NOMINATED BY

Aspire to Innovate (a2i) Programme

#### COUNTRIES/REGIONS/TERRITORIES

Bangladesh

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

9.1, 9.c, 16.5, 16.6, 16.7, 16.8, 16.A

#### SUPPORTED BY

UNDP Bangladesh and Government of People's Republic of Bangladesh

#### IMPLEMENTING ENTITIES

Aspire to Innovate (a2i) Programme and all the Ministries/ Departments and Offices of the Government of Bangladesh

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

June 2018 – Ongoing

#### LINK

<https://www.mygov.bd/>



The 'myGov' digital innovation follows seven steps for the rapid digitalization of government services. In step 1, the organization whose services will be digitized is selected by a2i implementation team. Then an introductory meeting is held in the presence of senior officials of the Ministries to give a comprehensive idea about myGov platform. At this stage, necessary information is collected from service-providing government officials about the services and resource persons from concerned ministries are selected to conduct the digitization activities successfully.

In step 2, technical personnel of a2i with the help of ministry resource persons analyse public services one by one using myGov service analysis tools. Here the services that qualify to be included in the myGov platform are selected. This level determines which process engine (myGov own process engine, e-filing process engine or 3rd party system integration) will be used to digitize services.

In step 3, services are digitized one by one. An application form is created here, and the corresponding process engine is attached to the application form as per the design prescribed in step two. Services that have been digitized in step 3 are rechecked in step 4. Errors are corrected at this step.

In step 5, digitized services are officially launched through an inauguration ceremony where Ministers and high officials of the concern ministries are present. In this step, a2i and the concerned Ministry organize several trainings to enhance the skills of government officials providing services to ensure their efficient delivery. Various traditional and social media are used to inform the service recipients on how to get the desired services. One should mention that a service recipient can apply for the service himself/herself on the MyGov platform and also with the help of myGov agents and 333 call centre agents.

In step 6, post-development intensive care provides smooth service delivery to ensure user satisfaction and further development. In this step, an IT support management (ITSM) firm has been hired to ensure maximum effectiveness in the management of the system.

There is scope for continuous development of the system through ongoing reviewing of the user feedback. Thus step 7 ensures the sustainability of existing digital services where the respective organizations play a crucial role in using clients' feedback and other myGov tools.

To date, over 10 million individuals have visited the myGov site. Over 3 million have registered on the platform to obtain government services. Over 2 million applications have been received and 22,74,072 have been processed on the myGov platform. The assumption is that almost 50 to 60 million people will receive government services through the myGov platform every year once the digitization of services of all ministries is completed by 2023.



The myGov platform has successfully simplified and unified government services, boosted the digital transformation, ensured continuous improvement of services, increased government transparency and accountability, ensured a cultural shift in public service management and increased public trust in government through different myGov tools (Service Tracker, Dashboard, Reports, Client's feedback, Poll, Survey, Grievance Redress System, UDC/333 agents etc.) which ultimately reduce time, cost and visits of service recipients. In conclusion one premise is certain – the platform will be sustainable in the medium- and long-term.

Since myGov adds simplicity to provide citizen centric public service, the global interest for this is noteworthy. As part of knowledge and experience sharing facilitated under South South Cooperation, the myGov platform was replicated in Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), Republic of Philippines; in collaboration with Ministry of Interior and Local Government (MILG) and with support from UNDP Philippines as Digital Bangsamoro. The Digital Bangsamoro was launched in World Congress on Information Technology (WCIT) in 2021.

#### CONTACT INFORMATION

**Mohammad Salahuddin**  
National Consultant (Deputy Secretary), a2i  
mohammad.salahuddin@a2i.gov.bd  
+880 1712582644

**Asad-Uz-Zaman**  
Strategy and Innovation Specialist, a2i  
asad.zaman@a2i.gov.bd  
+880 1712092922

# Triangular Cooperation for e-Government Capacity Building Between Cameroon, Nigeria and the Republic of Korea

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



## Boosting e-government capacity in the field of information and communication technology

### CHALLENGE

According to the United Nations E-government Development Index 2020, Cameroon ranked 144th in the e-government development ranking among 190 United Nations Member States. The COVID-19 pandemic led to a widespread digital transformation. At this critical juncture, Cameroon has established a National Development Strategy 2020-2030 to modernize its public services. According to this strategy, it intends to pursue digitalization by fostering innovation and establishing an appropriate infrastructure in the ICT field. The Cameroonian Government intends to implement e-government reform to carry out this plan.

Despite its intentions, e-government reforms have been delayed. The main reason is the different understanding for the need of e-government reform within the country. There is insufficient understanding of e-government reform needs even within the government. The lack of digital infrastructure and appropriate learning materials for e-government reform also hinders the quality training for responsible government officials who lead the comprehensive digitalization process at the national level.

### TOWARDS A SOLUTION

To address this challenge, KOICA implemented a triangular cooperation project with Cameroon, entitled "Project for Enhancing Awareness and Building E-Government Capacity in Cameroon". This project offers a capacity-building and awareness-raising programme for Cameroon's government officials, with the aim of laying the groundwork for shifting toward national digital government. In the alignment of its overall goal, the project is composed of two activities: developing an online learning platform with quality learning contents and a concrete instruction on e-government. With these two elements, the project aims to instruct 1,000 government officials per year.

#### PROJECT NAME

Triangular Cooperation for e-Government Capacity Building Between Cameroon, Nigeria and the Republic of Korea

#### NOMINATED BY

Korea International Cooperation Agency (KOICA)

#### COUNTRIES/REGIONS/TERRITORIES

Cameroon, Nigeria, Republic of Korea

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

16.6, 17.6

#### SUPPORTED BY

KOICA

#### IMPLEMENTING ENTITIES

KOICA/Nigeria e-Government Training Centre(eGTC)

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

November 2021

#### LINK

<https://bit.ly/3Qub5rg>  
<https://bit.ly/3dAnMC3>





This Triangular Cooperation is comprised of KOICA as facilitating partner, the Nigeria e-Government Training Centre (eGTC) and the relevant e-government ministry as pivotal partners, and nine government officials from the e-government-related ministry in Cameroon as the beneficiary partner. The main activities were the invitation training in Nigeria for raising awareness and capacity-building in e-government and drawing up of an Action Plan which will be a reference point for KOICA's bilateral project in Cameroon.

KOICA had implemented a similar bilateral project in Nigeria, entitled "Project Capacity-Building of e-Government for Nigeria", which shares similar activities with the bilateral project in Cameroon. Through this project, the Nigeria e-Government Training Centre (eGTC) was established to deliver continuous instruction for government officials, and a masterplan was set for the e-Government policy-wise. Knowledge, experiences and lessons learned from their Nigerian counterparts were shared with Cameroon.

KOICA, as facilitating partner, especially its overseas office in Nigeria and Cameroon, communicated closely with the related actors within the respective countries to provide a solid foundation, financial support for triangular cooperation and detailed consultations on overall triangular cooperation. Nigeria was a pivotal partner providing lectures, workshops and field trips during the training to beneficiary partners, according to tangible results from the KOICA's bilateral project completed in 2019. Cameroon, as a beneficiary partner of this triangular cooperation, selected government officials for the training course.

The triangular cooperation project gave Cameroon the opportunity to observe how Nigeria, its neighbour, operates an African e-government programme with the establishment of an e-government training centre and benchmarks to measure the spread of the e-government agenda across the government. It directly contributes to SDG 16 (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels) and SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development).

On the Cameroon side, nine officials from the President's Office, including the Deputy Minister and the Director of the Ministry of Public Service and Administrative Reforms, participated in the triangular cooperation. From Nigeria, the Ministry of Communication and Digital Economy, which leads Nigeria's e-government agenda and institutions affiliated with the e-government committee, provided the contents for the training.

This training within the triangular cooperation consisted of learning about the curriculum and instructor training methods of the Nigeria E-Government Training Centre (eGTC), the Nigerian e-government governance system, the masterplan implementation status of the Nigerian e-government and best practices for e-government services.

During the training in Nigeria, participants visited the e-Government Training Centre (eGTC), which is one of the major outcomes of KOICA's similar bilateral project. The participants were provided with the opportunity to learn directly about the eGTC's operation plans, about measures for instructor training, education, a training strategy and curriculum development. The workshops and discussions were also held to provide an opportunity to design ways to increase awareness about e-government in Cameroon.

Based on this exchange, an Action Plan containing strategies and steps for Cameroon's e-government reform was drawn up by the participants with KOICA's close consultation and advice. These were given to the senior officials in the Cameroonian Government. The Action Plan contains an analysis of problems, the gap between goals and reality, and strategies and institutional frameworks to realize the e-government reform. In addition, the Action Plan is used for the Project for Enhancing Awareness and Building-Capacity on E-Government in Cameroon (2022-2026/US\$8 mn) to be implemented through KOICA, ensuring continuity and becoming the driving force for e-government reform.

---

## CONTACT INFORMATION

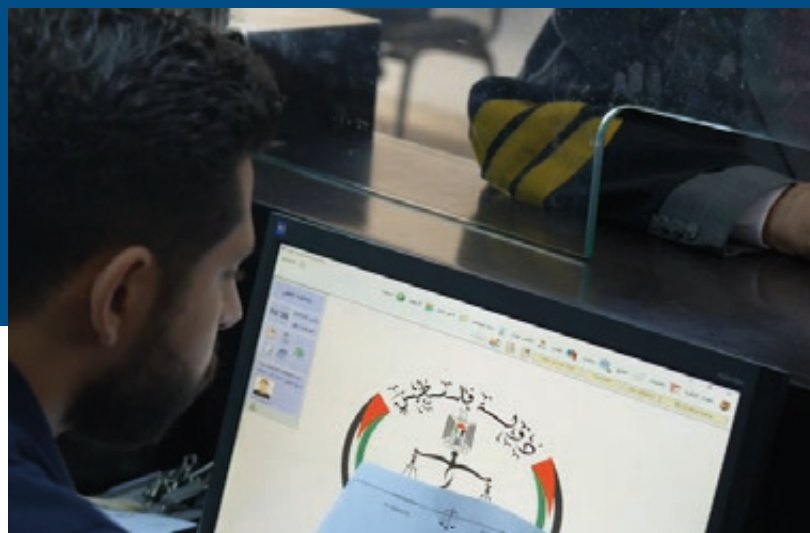
### Seolri Park

Partnership officer, KOICA  
shellypark@koica.go.kr



# Access to Justice through e-Services and Dematerialized Case Management

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



## Scaling up connectivity and unlocking the digital potential of judicial institutions to enhance access to justice for all

### CHALLENGE

While the legal fragmentation of the occupied Palestinian territory has severely constrained the potential of rule of law institutions to deliver services to citizens, it has also incentivized nascent justice institutions<sup>1</sup> to proactively seek digital solutions to divert Palestinian citizens away from well-established informal justice networks that often fail to offer even basic justice guarantees, particularly for women and children. This is a challenge that is not unique to the State of Palestine: estimates show that in fragile contexts 90 percent of disputes are resolved outside formal justice mechanisms.<sup>2</sup> However, the Palestinian digitalization experience offers a solid alternative through ground-breaking solutions that can sustainably address obstacles in accessing justice and have a high potential for replication across the Middle East and North Africa (MENA) region.

### TOWARDS A SOLUTION

Digitalization has underpinned the development of justice institutions from the onset of the creation of the Palestinian Authority with the specific goal of providing Palestinian citizens with efficient, accessible and interconnected services. To deliver on this front, the High Judicial Council, from the time of its establishment in the early 2000s, partnered with the United States Agency for International Development to mainstream digital tools in judicial work. After the completion of the prototyping phase in 2006, the High Judicial Council joined forces with UNDP to further develop a comprehensive court management system and enhance Mizan-based connectivity among the various justice institutions and beyond.

1 Palestinian justice institutions were established following the establishment of the Palestinian Authority in 1994, as envisaged under the Oslo Accords (I and III)

2 International Development Law Organization (2019), *Policy and Issue Brief. Navigating complex pathways to justice: engagement with customary and informal justice systems*

### PROJECT NAME

Access to Justice through e-Services and Dematerialized Case Management

### NOMINATED BY

United Nations Development Programme/Programme of Assistance to the Palestinian People (UNDP/PAPP)

### COUNTRIES/REGIONS/TERRITORIES

Djibouti, Morocco, State of Palestine

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.8, 16.2, 16.3, 16.5, 16.6, 16A

### SUPPORTED BY

Government of the Netherlands, Sweden – Swedish International Development Cooperation Agency (SIDA), Spain – Spanish Agency for International Development Cooperation (AECID) and the European Union (EU)

### IMPLEMENTING ENTITIES

High Judicial Council, Attorney General's Office, Supreme Judge Department, Ministry of Justice, Ministry of Social Development, civil society organizations

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

July 2019 – June 2023

### LINK

<https://www.youtube.com/watch?v=w6OtXa4a4Xg>



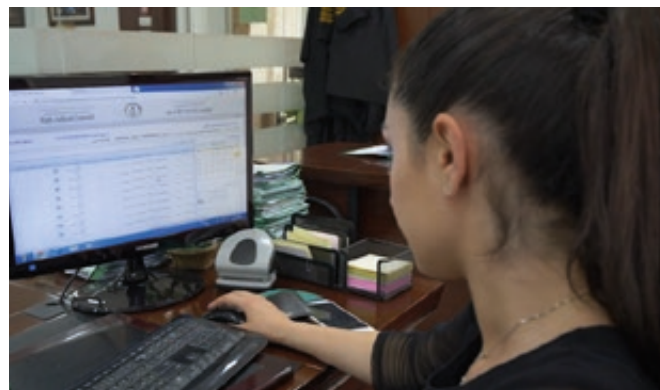
To do so, UNDP developed a successful methodology that rests on four elements: national ownership, progressive implementation, wide stakeholder participation and complementarity of action. In this case, national ownership was secured through focusing the support provided by UNDP on local software development. While this tends to increase initial costs, it ensures sustainability in the long run as it eliminates ever rising and unpredictable licensing expenditures.

The gradual investments made by UNDP to equalize the capacity of various justice institutions also helped to develop an institutional culture that systematically factors in IT needs in budgetary exercises. The strategic digitalization of justice processes also fostered a progressive implementation approach underpinned by wide stakeholder participation that culminated in the establishment of the e-Justice committee.<sup>2</sup> This allowed for the introduction of incremental policy changes and helped increase reliance on Mizan applications, thereby stimulating sector-driven demand.

This methodology was key to expanding the Mizan model beyond Palestinian courts and helped to position the country as a leader and provider of knowledge on the case/court management front, hence also demonstrating the high potential and demand for South-South and Triangular Cooperation. In view of this, the High Judicial Council organized a regional conference with 16 MENA countries<sup>3</sup> in 2019 that kickstarted cooperation in an area where technology transfer is crucial to fast-track the development of context-sensitive e-Justice platforms. Building on renewed impetus for digitalization during the COVID-19 crisis, Djibouti and the State of Palestine are concluding a memorandum of understanding (MoU) to transfer the Mizan technology. Similarly, an MoU between the Kingdom of Morocco and the State of Palestine is tabled for signature and envisages the formation of a joint committee in the field of e-Justice.

On this front, the Mizan system has proved a critical vehicle, particularly as it promotes more equal access to justice (SDG 16.3). Applications – such as the filing of enforcement motions online – are critical in reducing transactional costs, including when Palestinians continue to face considerable movement restrictions. Another example includes Mizan's unified warrant system that helps deliver warrants to citizens during routine traffic stops. Mizan also substantially reduced corruption and bribery (SDG 16.5) as files are completely digitized, and the system schedules hearings and assigns judges based on predetermined criteria.

Moreover, justice institutions can now automatically produce reports against policy targets, thereby fostering access to public information (SDG 16.A) and a strategic use of accountability frameworks for more effective, accountable and transparent institutions (SDG 16.6).



Mizan's connectivity with the Al-Muqtafi database is also contributing to enhancing equal access to legal information (SDG 16.A) with justice decisions being directly linked with over 50,000 pieces of legislation, jurisprudence and legal doctrine. Access to justice for women (SDG 16.3) also improved, including through technology-based legal empowerment (SDG 5.8).

A related achievement is that thousands of women no longer need to ensure liaison with banking institutions to receive alimony as Mizan digitally transfers orders to the relevant parties. Mizan also deals with social inquiry reports filed by Child Protection Counsellors appearing in juvenile case files, thereby allowing for the adoption of more measures that are protective of children (SDG 16.2). This builds on expertise aggregated over time under the Joint UNDP, UN Women and UNICEF *Sawasya* Programme.

Such results are key to sustaining joint and complementary support between technical and development partners and underpin the work of the *Sawasya* Programme and UNDP's Chief Digital Office to convert Mizan into a digital public good that will be adaptable to and sustainable for other contexts.

## CONTACT INFORMATION

### Christopher Decker

Joint Programme Manager, Joint UNDP - UN Women - UNICEF *Sawasya* Programme, UNDP  
chris.decker@undp.org  
+972 (54) 7179047

2 The e-Justice committee is comprised of the Ministry of Justice, the High Judicial Council, the Attorney General's Office, the Supreme Judge Department, the Palestinian Judicial Institute, Constitutional Court, Legislative Advisory Bureau, Palestinian Bar Association, Palestinian Anti-Corruption Commission, Judicial Police, the military judiciary and the Palestinian Maintenance Fund.

3 Algeria, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Somalia, Tunisia, Türkiye, Yemen – and the State of Palestine. See the conference report here: [https://drive.google.com/file/d/1JubD2P\\_q8Po2IQJF996ke\\_FUIF3VAIwg/view](https://drive.google.com/file/d/1JubD2P_q8Po2IQJF996ke_FUIF3VAIwg/view).



## Community of practice- and knowledge-exchange that fosters regional and multisectoral efforts in information management for public security

### CHALLENGE

For decades, public security challenges have hindered the sustainable development of Latin American and Caribbean countries. Seventeen of the 20 countries with the highest homicide rates globally are in Latin American countries. From 2010 to 2020, more than 170,000 people were victims of homicide in Central America and the Dominican Republic. In addition, governments in the region have institutional shortfalls in information management, which hinder the design of evidence-based policies for public security. The institutions have poor disaggregation of information, disjointed data and little collaboration between institutions working on public security information, which limits multidimensional analysis of violence. In addition, there is a large gap in understanding and addressing such security using digital tools.

### TOWARDS A SOLUTION

DatAction is an online community of practice that promotes a space to share knowledge, experiences and good practices for improving management on citizen security information, implemented by the UNDP InFosegura <sup>1</sup> project. The project aims to create collaboration and synergies between institutions to strengthen their capabilities and implement solutions to their common problems with funding support from the United States Agency for International Development (USAID).

Government institutions, civil society and academia from all countries involved participate by sharing experiences and strategies to develop and improve data production, multidimensional analysis, use of information in public policy, strategic communication, tools for the attention of victims and others. DatAction contributes to SDG 16 (Peace, Justice, and Strong

<sup>1</sup> Infosegura builds capacities by providing technical and strategic support for states in the design of evidence-based public policies for public security with a human right- and gender-based approach. It works all along the chain of information management.



#### PROJECT NAME

DatAction

#### NOMINATED BY

United Nations Development Programme (UNDP)

#### COUNTRIES/REGIONS/TERRITORIES

Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

4.a, 5.2, 5.a, 10.7, 11.6, 16.1.1, 16.1.3, 16.1.4, 16.2.1, 16.2.2, 16.2.3, 16.3.1, 16.3.3, 16.4.1, 16.6.2, 16.7.2, 16.10.2, 17.6, 17.17

#### SUPPORTED BY

United States Agency for International Development (USAID)

#### IMPLEMENTING ENTITIES

Central American and Dominican Republic UNDP Country Offices (Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

May 2020 – May 2024

#### LINK

<https://www.youtube.com/watch?v=2WXCgkORI4Y>



Institutions), through the strengthening of institutional capacities to address public security, and to SDG 4 (Quality Education), by improving data collection and production to build policies that reduce violence and promote an inclusive and safe school environment.

Institutions in charge of information management in the participating countries, such as national police, judicial agencies, public ministries and prosecutors' offices, forensic medicine, observatories, inter-institutional coordination groups and centres for analysis of security and coexistence share their experiences through DatAction webinars thereby helping other countries and institutions to overcome shared challenges and to promote innovation and collaboration.

UNDP-Infosegura, through UNDP Country Offices, works with countries to facilitate exchanges and to ensure a strategic view of the collaboration linking it with the public policy contribution. Some examples of how DatAction has been beneficial for institutions and countries are as follows:

- ▶ Costa Rica presented information management regarding road traffic accidents by the Costa Rican Inter-institutional Technical Commission for Statistics on Coexistence and Citizen Security (COMESCO). El Salvador expressed an interest in the good practice and agreed for a collaboration plan. To date, seven sessions between COMESCO and the Road Traffic Victim Assistance Fund (FONAT) have taken place to support an **Observational Study of the Behaviour of Motorcycle Riders in San Salvador**.
- ▶ El Salvador presented a **violence against woman and girl survey (VAWG)** collecting information of different types of VAWG. Honduras was interested in developing the first VAWG survey and agreed to collaborate with the Directorate General for Statistics and Census of El Salvador. El Salvador provided technical assistance to Honduras with methodologies and instruments.
- ▶ The violence index of multidimensional VAWG developed in Honduras was presented by the Woman's National Institute. This tool assists in running an analysis of the evolution of VAWG from a multidimensional approach, and targets have been set to move towards the reduction of VAWG. This tool contributes to the creation of regulatory frameworks, an institutional architecture, resource management and human capital. This raised interest and now Guatemala with the Ministry of Governance is adapting the VAWG index.
- ▶ The Belize Crime Observatory presented the **Integrated Information Management Platform** as an innovative and multidimensional platform to promote a more structured framework for interagency collaboration for data-sharing, analysis, reporting and capacity-building. This served as a steppingstone to develop the Integrated System of Information for the Prevention of Violence (SIPREVI) in Guatemala.

When an institution makes a demand on a good practice broadcast at DatAction, UNDP-Infosegura takes actions to promote collaboration among institutions. First, there is a planning meeting to lay the foundation for the requirement. Then, a road map is drawn up, specifying the

type of collaboration and steps to be taken. Lastly, the Project monitors the road map and agreements.

The exchanges promoted through DatAction contributed to national policies and laws, strengthening the countries' institutional architecture on public security information management. DatAction has two seasons per year, each with webinars and exchanges. Topics are chosen based on the regional and national citizen security analysis undertaken through UNDP Country Offices through analysis, surveys, tools and other mediums. In this way, DatAction helps to present the common or different challenges faced by countries and contributes to better identifying the applicability of the tools and the possibility of exchanging experiences, strategies, or policies.

Considerations to adapt or replicate DatAction include the following conditions:

- ▶ Existing interinstitutional collaboration with the government, academia and civil society.
- ▶ Systemic and innovative knowledge products that can be shared and discussed.
- ▶ Understanding the common challenges and differences of each country to present and foster solutions that are good practices.
- ▶ Resources for knowledge products, communication.
- ▶ Evaluate agreements frequently.

A lesson learnt is that the exchange of knowledge or experiences among developing countries requires continuous inter-institutional coordination as does the implementation of innovative solutions that are of interest to the public and that respond to a problem that needs solving.

---

## CONTACT INFORMATION

### Juan Pablo Gordillo

Regional Deputy Coordinator, Infosegura, UNDP Regional Bureau of Latin America and the Caribbean  
juan.gordillo@undp.org

# Bwalo Lathu Platform to Support the Parliament of Malawi

16 PEACE, JUSTICE  
AND STRONG INSTITUTIONS



17 PARTNERSHIPS  
FOR THE GOALS



## Digital transformation for enhanced representation, legislation and oversight by the parliament of Malawi

### CHALLENGE

With the COVID-19-related restrictions on physical meetings, social distancing and movements, it became clear that it would be difficult for the Parliament of Malawi (PoM) to deliver its legislative, representative and oversight mandates. This adverse situation was exacerbated by the fact that the 193-member house uses analog systems and archaic technologies in document management, publication of records and plenary management thereby rendering business processes paper-based and inefficient.

This directly affected how PoM interacted with its constituencies as official records of parliamentary deliberations took too long to produce and were not easily accessible. Additionally, due to the inefficient plenary management system, parliamentary sessions were often extended for several weeks, which meant additional public resources were spent that could have been channeled towards developmental activities that benefited the population. As Malawi is a low-income country, it is the responsibility of public institutions to have systems that promote austerity measures in utilizing public resources.

### TOWARDS A SOLUTION

To address these challenges, UNDP–Malawi provided technical assistance to assess the ICT capacity of the Parliament of Malawi to determine strategic recommendations to digitize business processes, which included the scoping of like-minded Parliaments in the region that are using digital tools.

The digitalization process of the Parliament of Malawi through South-South cooperation with the Zambia National Assembly aimed to introduce digital tools for legislative information management, plenary management, document sharing and e-voting. Furthermore, the solution aims to bring efficiency and accuracy in recording proceedings in Parliament through a digitalized Hansard production system with digital storage and sharing. The new tools are designed to be deployed and utilized in the context of virtual

#### PROJECT NAME

Bwalo Lathu Platform to Support the Parliament of Malawi

#### NOMINATED BY

United Nations Development Programme (UNDP)

#### COUNTRIES/REGIONS/TERRITORIES

Malawi, Zambia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

16.6, 17.6, 17.6, 17.7

#### SUPPORTED BY

UNDP

#### IMPLEMENTING ENTITIES

Parliament of Malawi, National Assembly of Zambia

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

October 2021 – December 2022

#### LINK

<https://bit.ly/3AupNjD>



or hybrid meetings which is a direct response to doing business in the COVID-19 era.

The eChamber App and digital Hansard lay a foundation for an e-Parliament system that will be paperless and transparent in conducting business by making records of deliberations and proceedings easily accessible to the public. These solutions are contributing directly to SDGs 16.6, 17.6 and 17.7.

UNDP played an integrator role by connecting the Parliament of Malawi and the National Assembly of Zambia to collaborate on a legislative management information system “eChamber App” and a Hansard recording and transcription system for plenary and committee record production and publication. UNDP facilitated an ICT assessment, which led to the formulation of a comprehensive Parliament of Malawi Digital Transformation Strategy (2022-2026). The strategy placed ICT as an enabler for a digital, open, accessible, efficient and greener Parliament.

This formed a basis of engagement with the Inter-Parliamentary Union (IPU), and the National Assembly of Zambia, which developed an in-house open source eChamber App and deployed a digital Hansard system. The engagement was carried out through virtual meetings in November 2021, followed by an in-country visit by the Zambia ICT team in February 2022, and the Malawi ICT team visit to Zambia in April 2022.

This led to a road map for collaboration, software customization, training and skills transfer. The process has been fully participatory by all parties involved thus both virtual and physical engagement has been undertaken by the Parliament of Malawi, the National Assembly of Zambia, and UNDP Malawi. There are plans to formulate a memorandum of understanding to ensure a formalized approach to collaboration and knowledge-sharing.

The digital solutions are innovative as they bring in new ways of conducting business at the Parliament of Malawi and ensure that the digital transformation strategy is at the core of business operations and information-sharing. The solutions have made the Parliament of Malawi modernize and move towards a paperless authority and act as a precursor of e-Parliament. This will be a model within the region. For instance, the Parliament of Malawi can produce records of plenary meetings within 24 hrs., as opposed to the analog system, which took five days. Similarly, the eChamber app allows online document sharing, attendance registration and voting by the 193 Members of Parliament.

The proposed solutions are inherently sustainable since the backend technology and software architecture for the legislative management information system (eChamber) is built on an open-source platform and developed in-house by the National Assembly of Zambia. The software development skills were transferred to the Malawi ICT team who can customize and make further changes to the software and fix any issues in the long term. Similarly, with the Digital Hansard system, the Zambia team has been using a similar system since 2015, hence it was easy for training to be done in unison.

The digital solutions that are being utilized by the National Assembly of Zambia are replicable and easily adaptable in the context of Malawi. The setup of both legislative houses is similar, and the solution requirements are not heavily reliant on vendor-lock and high-end expensive technologies which could pose a challenge for scale-up. For these reasons, and the in-house technical expertise that exists in Zambia and Malawi, adaptation and system customization have been easy. The systems were replicated easily in Malawi with both physical and virtual assistance and capacity- building of Malawi teams in ICT, audiovisual and equipment.

The key lesson from South-South cooperation is linked to the suitability of the deployed solutions. It became apparent that there is a need to have Champions within each section of the Parliament of Malawi that will drive utilization of the systems, motivate staff and cascade skills transfer within the institution. To make this a reality, managers from each section were deployed to placement programmes in Zambia, which gave them an opportunity to have hands-on experience to be able to subsequently train others and resolve any emerging issues.

---

## CONTACT INFORMATION

### Busekese Kilembe

Programme Analyst, Democratic Consolidation, UNDP Malawi  
busekese.kilembe@undp.org  
+ 265 993181404

# The Western Balkans Small Arms and Light Weapons Control Road Map

16 PEACE, JUSTICE  
AND STRONG INSTITUTIONS



A regional approach for a sustainable solution to the illegal possession, misuse and trafficking of small arms and light weapons and their ammunitions

## CHALLENGE

The accumulation of small arms and light weapons (SALW) and their ammunition in the Western Balkans region, their storage conditions, illicit possession and policy implementation gaps, coupled with fragile political systems, continue to limit the effectiveness of SALW control efforts. Weak SALW control capacities directly and adversely affect the security and development of the region and perpetuate several types of violence, including gender-based violence.

## TOWARDS A SOLUTION

The *Road Map for a Sustainable Solution to the Illegal Possession, Misuse and Trafficking of SALW and their Ammunition in the Western Balkans by 2024* envisages the Western Balkans as a safer region and an exporter of security where comprehensive and sustainable mechanisms, fully harmonized with the European Union (EU) and other international standards, are in place to identify, prevent, prosecute and control the illegal possession, misuse and trafficking of firearms, ammunition and explosives.

Developed jointly by the Western Balkans Governments with technical support of UNDP SEESAC, under the auspices of France and Germany, and in consultation with the EU and other relevant actors, it is the most comprehensive arms control exercise in the region. Monitoring and coordination of the Road Map's implementation, supported by the EU, is entrusted to UNDP SEESAC.

The road map is based on the regional cooperation principles, and it draws upon UNDP SEESAC's signature solutions to arms control, rooted in almost two decades of work on all aspects of arms control, completed together with the governments in the region and in partnership with the EU.

## PROJECT NAME

The Western Balkans Small Arms and Light Weapons Control Road Map

## NOMINATED BY

United Nations Development Programme Southeastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (UNDP SEESAC)

## COUNTRIES/REGIONS/TERRITORIES

Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, and Kosovo. The entire road map concept has been replicated by Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. The Western Balkans Road Map's system of Key Performance Indicators for tracking progress was replicated by the European Union

## SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.2, 16.4

## SUPPORTED BY

The Southeastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC), European Union, Germany, France, Regional Cooperation Council (RCC)

## IMPLEMENTING ENTITIES

SEESAC

## PROJECT STATUS

Ongoing

## PROJECT PERIOD

January 2019 – December 2024

## LINK

<https://www.seesac.org/SALW-Control-Roadmap>





When developing the road map, the authorities from Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia defined 7 specific goals each pertaining to a key aspect of SALW Control, which they all aim to reach. In addition, they adopted a set of 14 Key Performance Indicators (KPIs), developed to ensure precise monitoring and evaluation of progress achieved under the road map.

This approach, driven by jurisdictions themselves and corresponding to their actual needs, has proven essential for recognizing the value and empowering key actors implementing changes, for ingraining a sense of local ownership and, consequently, for the sustainability of actions. By advancing the road map's goals, jurisdictions are working directly towards SDG 16, particularly SDG 16.4. The road map also places particular importance on the advancement of gender equality and SDG 5. The document was based on a gender analysis of SALW/firearms control in the region and reinforces its key recommendations. Furthermore, people have equally contributed to its development.

The participating jurisdictions report on the progress of the road map implementation through the submission of detailed narrative and KPI reports, reflecting on each of the predefined 7 goals and 14 KPIs, and hold local and regional meetings biannually with key implementing partners and donors. High-level Ministerial Meetings are held annually by the [EU](#), [Germany](#), or [France](#).

These meetings provide the opportunity to review progress made in the implementation of the road map's goals, to identify the remaining gaps, to present the data collected on the KPIs and to coordinate support provided by the implementing partners and donors.

Regional Roadmap Coordination meetings are also a platform for a vibrant exchange of practical lessons-learned and relevant information among jurisdictions implementing similar activities. The exchange of ideas and experiences contributes to a coordinated approach among all stakeholders, but also to the regional standardization of efforts and approaches to SALW Control.

The value of the model was recognized globally: in the [UN Secretary General's report to the Security Council on SALW](#), in the [Outcome document of the 7th Biennial Meeting of States on the Programme of Action](#), by the [UN Coordinating Action on Small Arms \(CASA\)](#), by Germany's Federal Foreign Minister [H.E. Heiko Maas](#) and by the EU's Commissioner of Home Affairs [H.E. Ylva Johansson](#).

The regional approach to tackling arms control encapsulated by the Western Balkans Road Map has already been replicated in its entirety by the countries of the Caribbean, with SEESAC's advisory support. The Road Map for Implementing the Caribbean Priority Actions on the Illicit Proliferation of Firearms and Ammunition across the Caribbean in a Sustainable Manner by 2030 (the Caribbean Firearms Roadmap) was formally adopted in January 2021 by the 15 participating Caribbean Community (CARICOM) states and the Dominican Republic.



The main drafters and implementing partners for the Caribbean Firearms Road Map are the United Nations Regional Centre for Peace, Disarmament and Development in Latin America and the Caribbean and the Caribbean Community Implementation Agency for Crime and Security while the key donors include Germany, the United States of America, Canada and the United Kingdom.

The EU Commission integrated the Western Balkans SALW Control Road Map in the EU Action Plan on Firearms Trafficking. Additionally, recognizing the quality of the comprehensive monitoring system developed under the Road Map, the EU Commission introduced the Road Map's KPIs into the EU Action Plan as a way of initiating detailed data collection and monitoring of progress within the EU.

For the model to be replicated, political will is needed on the ground, ready to be executed through functioning teams of practitioners invested in the implementation of SALW strategies. A strong facilitator is needed to coordinate the process at the regional level, provide relevant technical and advisory support to the governments, monitor progress and coordinate the actions of the stakeholders. Strong donor support is also needed and implementors can provide relevant support to the authorities.

## CONTACT INFORMATION

**Bojana Balon**  
Head, UNDP SEESAC  
[Bojana.balon@undp.org](mailto:Bojana.balon@undp.org)

# Enhancing Peace, Security and Stability in Africa

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



## Improving capacities to prevent, manage and resolve conflicts, combat transnational threats and challenges to peace and security in Africa

### CHALLENGE

A 2018 World Bank and United Nations report stated that due to the absence of concrete action, more than half of the people living in poverty in 2030 will be from countries affected by violent conflict. This could certainly apply to Africa. The continent has witnessed an unforeseen relapse into conflict in some countries and unanticipated tensions in others. Moreover, six of the ten countries that now account for more than 75 percent of the world's refugee population are in Africa. Armed conflict has become more protracted, complex and deadly, with civilians enduring most of the suffering. State fragility, a proliferation of non-state armed actors, and unconventional threats, such as climate disasters and disease epidemics, are among several challenges impeding and reversing human and economic development in the Arab and African regions.

### TOWARDS A SOLUTION

In light of these challenges, and based on a comprehensive analysis of the evolving threat environment in Africa and the critical capacity gaps to prevent conflict and sustain peace, the international community is shifting its attention towards conflict prevention, focusing on addressing the root drivers of conflict, and creating the conditions for positive peace, earlier than warning signs are observed. UNDP and its partners provide resolute support to the Cairo International Centre for Conflict Resolution, Peacekeeping and Peacebuilding (CCCPA), an African centre of excellence for training and capacity-building to enhance African capacities to prevent, manage and resolve conflicts, and to combat transnational threats and challenges to African peace and security.

#### PROJECT NAME

Enhancing Peace, Security and Stability in Africa

#### NOMINATED BY

United Nations Development Programme (UNDP)

#### COUNTRIES/REGIONS/TERRITORIES

Burkina Faso, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Egypt, Ethiopia, Gabon, Kenya, Mali, Mozambique, Nigeria, Rwanda, Somalia, South Sudan, Zambia and other countries in the region

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.5, 8.7, 16.2, 16.B, 17.9

#### SUPPORTED BY

Governments of Japan, Sweden and Switzerland, UNDP-Egypt

#### IMPLEMENTING ENTITIES

Cairo International Centre for Conflict Resolution, Peacekeeping and Peacebuilding (CCCPA)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

2014 – 2022

#### LINK

<https://www.cccpa-eg.org>

<https://open.undp.org/projects/00080290>



CCCPA aims to develop innovative approaches and critical capacities in four key areas linked to Enhancing African capacities in:

- ▶ Communities' resilience to radicalization and extremism, leading to terrorism
- ▶ Peacekeeping
- ▶ Conflict prevention and resolution
- ▶ Combating transnational threats and organized crime

CCCPA contributes to advancing the Sustainable Development Goals (SDGs) in Africa by facilitating international partnerships (SDG 17) necessary for the implementation of the proposed activities, contributing to promotion of peaceful, just and inclusive societies (SDG 16) in Africa through training workshops taking place where 46 participants from African countries were trained on peace-making, peacebuilding and sustaining peace, and 51 were trained on combating human trafficking and smuggling of migrants.

For example, the training programme "Preventing Radicalization and Extremism Leading to Terrorism" (PRELT) is the first of its kind in Africa. It seeks to empower local religious and community leaders and influencers to contribute to improving "community" resilience to radicalization and extremism leading to terrorism. The course provides trainees with the knowledge and skills to construct and deliver inclusive peace narratives, including those based on Sharia and Islamic teachings. In the words of a high-ranking Somali official, CCCPA trainings have "changed the thinking capacity of the Mogadishu Municipal staff on security and radicalization ideologies. They have shared the knowledge and experiences they have learned with the communities at large in Mogadishu City, as well as with the Municipal staff. The training outcome has made a real difference in our understanding of radicalization and extremism."

Moreover, by streamlining gender in all the project's activities and advancing the implementation of the women, peace, and security agenda, it supports women's empowerment efforts (SDG 5) since 2014, where CCCPA, in cooperation with the Crisis Management Centre of Finland, the League of Arab States and the Arab Women Organization – delivered 18 foundational courses and 4 training of trainers courses. These courses serve as a contribution to mainstreaming gender across the continuum of peace interventions (conflict prevention and resolution, peace-making and peacebuilding), while establishing a group of experts and practitioners with enhanced knowledge and skills on the effective implementation of the Women, Peace and Security agenda.

CCCPA conducted number of workshops/conferences, training activities and publications throughout 2014–2022. In 2014, and in partnership with the United Nations Peacebuilding Support Office (UNPBSO), CCCPA organized the regional workshop, entitled "Regional Aspects of Peacebuilding: Identifying Gaps, Challenges and Opportunities". The workshop's outcome report was distributed as an official United Nations Security Council and General Assembly document.



Considering strengthening the cooperation between Egypt and South Sudan, the director general of CCCPA went to South Sudan on a field mission where they tackled ways to support peacebuilding efforts and cooperation to address the challenges facing South Sudan through the development of a comprehensive approach that enhances the humanitarian-development-peace nexus – an approach underpinned by the Aswan Forum for Sustainable Peace and Development. There was also positive feedback received from CCCPA alumni from South Sudan evaluating the impact of the trainings and workshops received.

Impact and sustainability are shown in the positive changes that were achieved as a result of the project, such as in the following examples: 1) Enhanced African capacities in areas of peace-making, peacekeeping, crisis management and combating human trafficking; and 2) Improved resilience of targeted local African communities in PRELT.

CCCPA adopts an inclusive and participatory approach to project design, implementation and evaluation, one that involves beneficiaries and stakeholders. Of particular significance is the latter's contribution to the needs assessment phase, through extensive consultations and through identifying new and emerging needs in the field during implementation.

Furthermore, CCCPA adopts a sustainable approach. It will continue its efforts to diversify its sources of funding to ensure the financial sustainability of all its activities – either through the Egyptian Government or international partners. CCCPA's approach to training is one of building African long-standing capacities, as explained in its theory of change. This both ensures sustainability of results and provides opportunities for scaling up.

## CONTACT INFORMATION

### Reem ElSawy

Programme Analyst, Inclusive Growth and Innovation, UNDP Egypt  
reem.elsawy@undp.org





## Capacity-building to improve the impact of development cooperation projects through proper planning, management and evaluation

### CHALLENGE

Governments and agencies involved in international development cooperation programmes are eager to achieve better results and improve the effectiveness of cooperation projects. In that regard, it is important to develop appropriate methodologies for the formulation, monitoring and evaluation of projects, articulated with national and international strategies in the framework of the 2030 Agenda and the Sustainable Development Goals (SDGs).

For upper middle-income countries, such as Argentina, which carry out cooperation in different modalities (South-South, North-South, Triangular Cooperation), this issue has specific characteristics, posing challenges in new fields without many precedents, such as planning, monitoring and evaluation of South-South cooperation projects, or the design of cooperative evaluation schemes in multi-stakeholder initiatives, such as in triangular cooperation.

### TOWARDS A SOLUTION

The General Directorate for International Cooperation (DGCIN) of the Argentine Foreign Ministry, with the collaboration of the Japan International Cooperation Agency (JICA), began a bilateral project entitled "International Cooperation Project Management (PCM)", between 2003 and 2008 in which professionals were trained in the PCM Methodology (Project Cycle Management). The aim of this initiative was to expand the training offer for professionals linked to the management of international cooperation projects using the PCM methodology to facilitate the process of planning, execution, monitoring and evaluation of development projects. The initiative focused its scheme on a Project Design Matrix – PDM (Project Design Matrix) that showed the logical relationships among its components.

#### PROJECT NAME

International Cooperation Project Management (PCM)

#### NOMINATED BY

General Directorate of International Cooperation - Ministry of Foreign Affairs, International Trade and Worship, Argentina

#### COUNTRIES/REGIONS/TERRITORIES

Angola, Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Chile, Dominican Republic, Ecuador, El Salvador, Granada, Guatemala, Haiti, Honduras, Jamaica, Japan, Mexico, Mozambique, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, Saint Vincent and the Grenadines, Timor-Leste, Uruguay, Venezuela

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

17.16

#### SUPPORTED BY

DGCIN, Japan International Cooperation Agency (JICA)

#### IMPLEMENTING ENTITIES

General Directorate of International Cooperation of Argentina

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

September 2012 – 2025





In 2000, DGCIN developed activities to broaden and improve the planning of international technical cooperation projects. This is how, within the framework of the bilateral relationship with Japan, it was decided to develop a technical cooperation project with JICA, which was signed in 2005 and lasted three and a half years. Its objective was to disseminate the PCM methodology, as it is used by Japanese institutions dedicated to development cooperation, to help raise the capacities of human resources and the quality of development projects of Argentine institutions requesting international technical cooperation. For this, IC Net Limited – a growing multidisciplinary international development firm from Japan – shared its knowledge and experience with Argentine officials and technicians.

As a result of this project, specialists were trained at the Argentine Foreign Ministry, the Ministry of Education, the University of San Martín and the National University of La Plata, so that Argentina would have sufficient human resources to be able to continue applying this methodology and also to spread these methodological tools that allow the proper formulation, monitoring, and evaluation of development projects.

At the regional level, training sessions were coordinated with the Ibero-American Programme for Strengthening South-South Cooperation of the Ibero-American General Secretariat (SEGIB) for the delivery of courses with representatives of the member countries of the Programme. Likewise, within the scope of the Argentina-Japan Joint Association Programme (PPJA), Training Courses for Third Countries were developed for officials from Latin America, the English-speaking Caribbean, Africa (Portuguese-speaking) and Southeast Asia (Timor-Leste).

At the international level and within the framework of South-South Cooperation, through the Argentine Fund for International Cooperation (FO.AR), numerous training workshops have been held in countries such as Brazil, Cuba, Dominican Republic, Ecuador, El Salvador, Mexico, Paraguay, Peru, as well as in Angola and Timor-Leste.

Although the bilateral project with Japan ended in 2008, since then, the sustainability of the initiative has been consolidated, both in work at the national, regional, and international levels, with the training of Argentine officials. In fact, in 2021 the triangular cooperation agreement with Japan was renewed, so the objective is to continue this training with third countries.

Among the lessons learned, the improvement of the criteria for the selection of the participants stands out, so that when they return to their countries, they can implement the knowledge and tools acquired, as well as the importance of maintaining regular contact with the trained professionals and with the national institutions that present and endorse the candidates.

Thanks to this initiative, it was possible to contribute to the development of capacities of countries in Latin America, the Caribbean and Africa to improve the impact of development cooperation projects. The initiative allowed the PCM Methodology to be successfully adapted to the characteristics of South-South cooperation.

---

## CONTACT INFORMATION

### **Victoria Armayor**

Diplomatic officer, General Directorate of International Cooperation - Ministry of Foreign Affairs, International Trade and Worship, Argentina  
vjj@mrecic.gov.ar



# Reverse Linkage Project for Strengthening Artificial Insemination in Livestock

17 PARTNERSHIPS FOR THE GOALS



## Cooperation between IsDB and the Governments of Indonesia and Kyrgyzstan to promote exchanges towards sustainable economic development

### CHALLENGE

In Kyrgyzstan 40 percent of the workforce is employed in the agricultural sector. However, the potential has not been optimized as this sector only accounted for 20 percent of GDP, with more than half sourced from livestock. Some of the causes are outdated technology and lack of skilled staff in livestock breeding and production, including through artificial insemination, and the need for funding.

### TOWARDS A SOLUTION

Indonesia has been a significant partner for countries from the Global South by contributing through the framework of South-South and Triangular Cooperation (SSTC). Through SSTC, Indonesia aims to support the common welfare of the population there. This is in line with Indonesia's National Medium-Term Development Plan (RPJMN) 2020-2024, which is to increase Indonesia's role in SSTC. One of the best examples of Indonesia SSTC is a Reverse Linkage project, the Development of Artificial Insemination for Livestock for Kyrgyzstan, 2015-2017. The cooperation is implemented as part of the implementation of the Reverse Linkage programme, in collaboration with the Islamic Development Bank (IsDB).

Development cooperation on artificial insemination for livestock aims to support livestock productivity in Kyrgyzstan. Its objective is to upgrade the capacity of human resources in Kyrgyzstan to further boost the production of livestock through artificial insemination, while giving the opportunity to Indonesia to promote its expertise and products. The objectives are relevant to the achievement of SDG 17, whereas SSTC is enhanced through the exchange of knowledge on Science, Technology and Innovation (STI). It also contributes to the achievement of SDG 8 on higher levels of economic productivity through technological upgrading in labour-intensive sectors.

#### PROJECT NAME

Reverse Linkage Project for Strengthening Artificial Insemination in Livestock

#### NOMINATED BY

Ministry of National Development Planning/National Development Planning Agency (Bappenas) Indonesia

#### COUNTRIES/REGIONS/TERRITORIES

Indonesia, Kyrgyzstan

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

8.2

#### SUPPORTED BY

Islamic Development Bank (IsDB)

#### IMPLEMENTING ENTITIES

Singosari National Artificial Insemination Center (SNAIC), Ministry of Agriculture Indonesia; Kyrgyz Scientific Research Institute of Livestock and Pastures (KSRIIP), Ministry of Agriculture and Melioration of Kyrgyzstan

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

2015 – 2017

#### LINK

<https://www.youtube.com/watch?v=2huSFSz7RxA>

<https://www.youtube.com/watch?v=PFbtMbk8sZY>



To achieve the above-mentioned goals, the project implementation focused on several key approaches:

- ▶ The cooperation framework uses a robust multi-stakeholder partnership approach by involving various stakeholders – Bappenas, Ministry of Agriculture, the Kyrgyz Scientific Research Institute of Livestock and Pastures (KSRILP), IsDB and the Singosari National Artificial Insemination Centre (SNAIC), among others, as the implementing agency. Bappenas fully supported SNAIC since the diagnostic mission in 2013 and the validation mission in 2014; it also provided support in the formulation of the memorandum of understanding (MoU) signed by Minister of Agriculture of the Republic of Indonesia, the Minister of Agriculture and Melioration of the Kyrgyz Republic and Vice President of the IsDB in 2015; and in the monitoring process until 2017 to ensure the project was integrated in the planning and budgeting process.
- ▶ The cooperation framework combined several activities through a series of training workshops and the dispatch of experts in some areas. This involved: 1) Strengthening the institutional management of artificial insemination; 2) Upgrading the value chain of artificial insemination production; 3) Increasing productivity of livestock; and 4) Improving the distribution system/networks of frozen semen. This approach aimed to enhance various approaches in problem solving and in addressing challenges. BBIB has trained at least 86 participants for various artificial insemination trainings and dispatched six experts for three stages to Kyrgyzstan.
- ▶ The implementation of the cooperation was based on the strategic alignment principle to support Kyrgyzstan's existing efforts to improve their livestock productivity. This principle was to make sure the cooperation was implemented based on Kyrgyzstan's needs and demands.
- ▶ The cooperation used a peer-to-peer approach formulated through a peer-to-peer consultation process. Through this Reverse Linkage framework, each partner also contributes to the cooperation both in kind and in cash. This participatory process strengthens the sense of ownership of the project.

All parties have benefited from this cooperation. Kyrgyzstan benefited by improving its human resources knowledge and skills in support of its efforts to establish a strong distribution network of frozen semen products to farmers and to improve the quality of local breeds. For Indonesia, cooperation presented the opportunity to promote its expertise on agriculture, notably regarding artificial insemination. It also provided benefits by creating further potential economic cooperation.

As a follow-up to cooperation, Indonesia exported 12,500 doses of frozen semen to Kyrgyzstan. This is an example of engagement by state-owned enterprises or the private sector through involvement with SNAIC in terms of resource mobilization, technology, capacity-building, institutional coherence and multi-stakeholder partnerships. This is in line with the SDGs' "inclusiveness" principle and the modality to ensure sustainability in cooperation.



Referring to the success story of Indonesia-Kyrgyzstan cooperation, the activities were replicated at the request of the Suriname Government in 2020-2023. In 2021, the Government of Nigeria also requested such cooperation. Furthermore, future collaboration can be scaled up to include workshops, training, technical assistance, equipment assistance, expert dispatch, scholarships and research collaboration, as well as encouraging non-state actors in regard to sustainable business-to-business relations.

To better conduct scaled-up projects or future replication some lessons learnt were identified are as follows:

- ▶ Identification of the beneficiary country should consider the implementing agency's existing facilities and resources and its ability for upgrades and local government support for the project's sustainability.
- ▶ The impact should generate multiple opportunities in various sectors, such as economic, political, social and cultural for both parties.
- ▶ The project should strengthen private sector involvement for future business-to-business cooperation.

#### CONTACT INFORMATION

##### Priyanto Rohmattullah

Deputy Director for Global Development Cooperation, Ministry of National Development Planning/Bappenas, Indonesia  
priyanto@bappenas.go.id



# The Aswan Forum for Sustainable Peace and Development



## Championing African solutions to African challenges through strengthening the links between policy and practice for the peace-development nexus

### CHALLENGE

By 2030, one in every five people in the world will live in Africa. Its potential in resources, urbanization, industrialization and economic diversification is unmatched. However, this great potential is under threat as a result of persistent and emerging challenges to peace, security and development, including conflict, terrorism, and forced displacement. First, a renewed focus on conflict prevention is required because it saves lives. Secondly, novel approaches must be found to deal with conflict and crises to meet sustainable development objectives and to sustain peace. Operationalizing the existing African Union's (AU) normative frameworks and policies, and bringing conflict prevention and sustainable peace and development to the fore of the AU's work contribute to tackling such pressing challenges.

### TOWARDS A SOLUTION

Working towards the Sustainable Development Goals (SDGs) 5, 8, 16 and 17, the Aswan Forum, spearheaded by the Government of Egypt, aims to raise awareness of the imperative to integrate the prevention agenda into national development policies and efforts. In this way, it will advance "national ownership" across the continuum of peace interventions, expand the conversation on state-building and bring national actors and stakeholders to the negotiating table so as to uphold peace.

The Aswan Forum advocated for a reform process that promotes a paradigm shift from addressing conflict to preventing conflict in a manner that coalesces governments, leaders and high-level officials from national governments to advance an African conversation on novel approaches, programmes, financial instruments and partnerships to promote sustainable development, to alleviate poverty and to promote peace and stability across the continent, including through South-South and Triangular cooperation.

#### PROJECT NAME

The Aswan Forum for Sustainable Peace and Development

#### NOMINATED BY

United Nations Development Programme (UNDP) Egypt

#### COUNTRIES/REGIONS/TERRITORIES

Chad, Comoros, Egypt, Gabon, Niger, Nigeria, Senegal and Togo

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

5.5, 8.3, 8.7, 16.8, 17.9

#### SUPPORTED BY

Government of Japan, Sweden, United Kingdom, African Development Bank, International Organization for Migration, EFG Hermes Holding S.A.E, UNDP-Egypt

#### IMPLEMENTING ENTITIES

Cairo International Centre for Conflict Resolution, Peacekeeping and Peacebuilding (CCCCPA)

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

August 2019 – December 2023

#### LINK

<https://bit.ly/3c0FD4T>





The Forum, held in December annually, presents concrete and action-oriented recommendations to African heads of states and governments, leaders from national governments, regional and international organizations and financial institutions, the private sector and civil society.

The process has enabled key stakeholders to create and develop institutional mechanisms; to develop normative, legal and policy frameworks; and to devise tools to prevent and manage conflicts; to rebuild post-conflict societies; to respond to forced displacement and terrorism; and to advance women's empowerment. Internationally, the Forum aims to promote partnerships and to inform context-specific and the complex needs of operationalizing conflict prevention. The innovation framework of the Aswan Forum is its ownership by Africa combined with the support of international and regional partners.

As the Aswan Forum Secretariat, the Cairo International Centre for Conflict Resolution, Peacekeeping and Peacebuilding (CCCPA) leverages its unique position in the international/regional sphere to secure additional resources/expertise necessary for the implementation of activities in Africa, and utilizes opportunities for collaboration with other leading training and research institutions in Africa, through its membership of the Executive Committee of the African Peace Support Trainers Association (APSTA), utilizing best practices and lessons learned from the Global South.

CCCPA, in cooperation with the Egyptian Ministry of Foreign Affairs, UNDP and partners conducted two virtual preparatory expert workshops, entitled "Terrorism in the Shadow of the Pandemic, Climate-related Security and Development Risks assessment in Africa" and "Leaving No One Behind: Mainstreaming Migration in National Development Policies in the Sahel and Sahara Region". These workshops preceding the Aswan Forum brought together more than 300 experts from national governments, regional and international organizations, civil society and think tanks to take stock of current opportunities and challenges to peace, security and development in Africa, and to develop context-specific and action-oriented recommendations to advance the implementation of the "sustainable development" and "sustaining peace" agendas in Africa.

The outcome of these workshops was the Aswan Forum report which represents the collation of non-attributable opinions and recommendations shared by official and expert participants. The report was issued before the Forum and was intended as a forward-looking, action-oriented and thought-provoking conversation starter.

African Governments and their partners have been encouraged to advance the implementation of the AU Operational Guidance Notes on Disarmament, Demobilization and Reintegration (DDR) and the AU Transitional Justice Policy. One example is the "Virtual Foundational Training on DDR with Special Emphasis on Asymmetrical Contexts", which brought together 32 participants from 13 African countries. This



included government officials from Burkina Faso and Nigeria, representatives from the national DDR Commission in South Sudan, the AU and regional organizations, including the Lake Chad Basin Commission, the Multinational Joint Task Force, the Southern African Development Community, the Neem foundation and different United Nations missions in Africa.

Women and youth empowerment are mainstreamed in the AU Commission Post-Conflict Reconstruction and Development (AUC-PCRD's) planning and programme design and implementation processes where a virtual dialogue on "Women's Leadership in Conflict Prevention and Sustaining Peace: Challenges and Opportunities in a New Normal" took place in November 2020.

Accordingly, African Governments and the AU have been invited to actively contribute to shaping a reinvigorated multilateralism at the international level and to address new emerging risks to sustainable peace and security. Moving forward, crisis preparedness must be integrated into national policies and systems. In line with the notion of national ownership, African Governments must invest in building resilient and viable institutions at the national and local levels while ensuring the promotion of inclusive governance through a whole-of-government approach.

As part of the fourth comprehensive review of the United Nations peacebuilding architecture, the 2020 report of the United Nations Secretary-General Peacebuilding and sustaining peace recognized the Aswan Forum as an example of "Member States and regional organizations... promoting conflict prevention and advancing integrated approaches".

## CONTACT INFORMATION

**Reem ElSawy**  
Programme Analyst, Inclusive Growth and Innovation, UNDP Egypt  
reem.elsawy@undp.org





## Building resilient communities through crowdfunding

### CHALLENGE

Despite over US\$1 trillion of public and private investment in the SDGs, the widening poverty and inequality worldwide requires a bold increase in development financing. The gap for financing SDGs has increased from US\$2.5 trillion to US\$4.2 trillion since 2020 due to emergency spending on COVID-19 in developing countries. Shifting donor priorities, lack of capacity, legal barriers, conflicts, or major economic hardships and challenges have impacted financial resilience and access to financial opportunities, particularly in the post COVID-19 situation.

Innovative and alternative financing mechanisms, such as crowdfunding, can address the investment gap that is required to achieve the SDGs.

### TOWARDS A SOLUTION

The UNDP Crowdfunding Academy (CFA) is a programme, a platform and a community that provides visibility, funding and supports capacity-building and knowledge-sharing among countries. It is an intensive eight-week online course, whose main goal is to promote crowdfunding as an alternative and an innovative finance mechanism among UNDP Country Offices, governments, civil society organizations (CSOs) and other partners to bridge the SDG financing gap. The academy targets all 17 SDGs by working with the participants on a range of campaign topics – from girls' education and ocean protection to alleviating poverty and access to clean water.

The first Crowdfunding Academy (CFA) was launched in Istanbul in 2015 by the UNDP Alternative Finance Lab (AltFinLab) at the UNDP Istanbul Regional Hub (IRH) and UNDP BERA Innovative Digital Partnerships Team, and since then has been replicated in and by countries from the Global South, like Bangladesh, Cabo Verde, Costa Rica, Ecuador, Fiji, Indonesia, Kazakhstan, Lebanon, Morocco, Panama, the Philippines, Somalia, the State of Palestine, Thailand, Tunis, Uruguay and Uzbekistan, with new academies



### PROJECT NAME

UNDP Crowdfunding Academy

### NOMINATED BY

United Nations Development Programme (UNDP)

### COUNTRIES/REGIONS/TERRITORIES

Global South: Bangladesh, Barbados, Cabo Verde, Colombia, Costa Rica, Djibouti, Ecuador, Egypt, Fiji, Indonesia, Kazakhstan, Kyrgyzstan, Lebanon, Madagascar, Maldives, Mexico, Morocco, Panama, the Philippines, Somalia, the State of Palestine, Tajikistan, Thailand, Tunis, Türkiye, Uruguay, Uzbekistan and Yemen, with new academies being established or campaigns launched in Burkina Faso, Iraq, Jordan, Libya, Niger, Pakistan, Senegal (and all other 57 IsDB member States) and China, India and Sri Lanka Albania, Bosnia and Herzegovina, Croatia, Kosovo, Moldova, the Republic of North Macedonia, Montenegro, Serbia

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

17.1, 17.3, 17.16

### SUPPORTED BY

UNDP

### IMPLEMENTING ENTITIES

UNDP (BERA Innovative Digital Partnerships Team and IRH Innovation Team- Alternative Finance Lab, Islamic Development Bank (IsDB), Islamic Solidarity Fund for Development (ISFD)

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

2015 – 2023

### LINK

<https://www.undp.org/impact-giving>  
<https://www.sparkblue.org/crowdfundingcop>  
<https://www.undp.org/impact-giving>  
<https://bit.ly/3JYdqRy>



and campaigns coming to India, Sri Lanka, and all IsDB Members States (57 countries). So far 30 CFAs have been conducted.

The CFA is also a platform that enables countries to directly collaborate and exchange expertise, and implement top-down and bottom-up strategies for establishing crowdfunding ecosystems in their countries.

The online programme is hosted on two knowledge-sharing platforms – [Sparkblue](#) (UNDP) and [Kaya](#) (as part of the NGO Empowerment Programme portal at the Humanitarian Leadership Academy) – which makes it easy to replicate and adapt around the world thereby ensuring its sustainability.

Among UNDP's responsibilities are implementation and scaling up of the Crowdfunding Academies, creating crowdfunding ecosystems in countries, expanding local, national and global crowdfunding communities, conducting peer-to-peer learning workshops and codifying emerging best practices.

- ▶ In partnership with the Islamic Development Bank, UNDP set up an IsDB - ISFD [NGO Empowerment Program for Poverty Reduction Program](#) (Tadamon), which involves government and local partners undertaking either replication (knowledge-sharing) or implementation (capacity-building and campaign development) of academies in [the entire 57 member countries of IsDB](#). For example, crowdfunding NGO from Lebanon that went through the CFA training programme is now under implementation at the academy in Tunisia. So far 6 Crowdfunding Academies have been fully completed, 120 CSOs trained and more than 40 CSOs have launched their campaigns.
- ▶ For the recovery of the Punta del Diablo Public Park supported by UNDP Uruguay, an area affected by fires in 2021, [Plantatón Uruguay](#) successfully raised funds that allowed 1,111 native trees to be planted and cared for. This was inspired by other campaigns led by [Uzbekistan](#) to restore life to the Aral Sea and [Costa Rica's Huella de Futuro](#) campaign, which planted 200,000 trees in the North Zone.
- ▶ As part of UNDP CFA community of practice from Thailand to Ecuador and the Philippines to Costa Rica crowdfunding campaigns were launched aimed at making a real difference both for nature and for livelihoods and in ensuring a crisis response.

To date over 200 teams have been supported or participated in the course and launched over 100 campaigns. Overall, due to crowdfunding efforts, UNDP, CSOs and other partners mobilized about US\$8 million through crowdfunding campaigns to address national level challenges for successful implementation of the SDGs.



The academy has been replicated and currently has several pillars. The aim is to:

- ▶ Support CSOs as part of Tadamon or the NGO Empowerment Programme which targets 57 OIC member States (six editions, with approximately 150 teams).
- ▶ Support social impact innovators, as part of BOOST, a social impact acceleration programme in Europe and Central Asia (2 editions, with 18 teams).

#### CONTACT INFORMATION

##### **Marina Petrovic**

Alternative Finance and Technology Expert (Digital Development), UNDP IRH Innovation Team  
marina.petrovic@undp.org

##### **Ekin Celikyay**

Crowdfunding and Alternative Finance Analyst, UNDP IRH Innovation Team  
ekin.celikyay@undp.org



# Innovative Solutions in Response to the COVID-19 Crisis in Albania and North Macedonia



## Serbia's Official Development Assistance Call for Proposals – Innovative solutions to counter COVID-19 crisis in Albania and North Macedonia

### CHALLENGE

The COVID-19 pandemic has caused huge socio-economic setbacks in the Western Balkans region, having a wide and far-reaching impact on health and economic well-being. Some of these challenges include disruption in supply chains affecting access to essential goods, including food and medical supplies; and reduced demand for key services, which has impacted operations of small and medium-sized enterprises (SMEs), especially in transport, tourism and manufacturing, resulting in a general economic meltdown. A joint response across the countries from multiple stakeholders was needed to sustain socio-economic activities and resilience in the region.

### TOWARDS A SOLUTION

In response to the above challenges UNDP Serbia launched Serbia's Official Development Assistance (ODA) Challenge Call for innovative solutions to address the emerging development issues resulting from the global COVID-19 crisis in North Macedonia and Albania, as partnering countries under the Open Balkans regional cooperation initiative. The initiative aimed to support the transfer of Serbian knowledge, expertise and implementation of innovative solutions in those two countries and to create a compendium of home-grown solutions consistent with partner countries' local context and practices, which they could learn from and replicate to reduce the socio-economic impact of the pandemic. The goal is to support the public and private companies and the academic and research institutions from Serbia to transfer those innovative solutions.

The Challenge Call focused on the following areas:

- ▶ **New digital services** – to address the inequalities and needs in different sectors, innovative inclusive and sustainable digital solutions in the services sector are sought.
- ▶ **Low touch economies** (contactless economic activities) – to stimulate economic growth, solutions are sought that introduce new ways of production/consumption and promote contactless economic activities, remote delivery services and tele-working opportunities.
- ▶ **Health and well-being** – to support individuals and communities' health and well-being, innovative solutions are sought that promote the connection of individuals and health, physical and psychosocial welfare and other holistic ways to improve the well-being of the population, to protect service providers and caregivers from COVID-19 and to minimize the risk of transmission.

The call was launched in May 2021 which generated 21 submissions – 15 from North Macedonia, 4 from Albania, 1 application relevant for both North Macedonia and Albania and 1 application without reference to the countries.

#### PROJECT NAME

Innovative Solutions in Response to the COVID-19 Crisis in Albania and North Macedonia

#### NOMINATED BY

United Nations Development Programme (UNDP) Serbia

#### COUNTRIES/REGIONS/TERRITORIES

Albania, North Macedonia, Serbia

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

3.8, 3b, 3d, 8.2, 8.3, 17.6, 17.7, 17.8, 17.9

#### SUPPORTED BY

Government of Serbia

#### IMPLEMENTING ENTITIES

UNDP Serbia

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

May 2021 – May 2022

#### LINK

<https://bit.ly/3QEAYhG>





The amount of funding available for this Challenge Call was US\$200,000. Agreements have been signed with the six awardees – 4 in North Macedonia, 2 in Albania, with the requested funding in the amount of US\$194,039.17. The total value of the awarded initiatives (requested funding + co-funding from the applicants) amounted to US\$328,474.17.

The list of the awarded companies is given below:

- ▶ Neomedica d.o.o. <https://neomedica.rs/>
- ▶ Svezdrav Rešenja d.o.o. <https://svezdrav.rs/>
- ▶ Institute for the Application of Nuclear Energy – INEP, Belgrade. <https://inep.ac.rs/>
- ▶ Just Smart d.o.o. Belgrade. <https://www.shtreber.com/>
- ▶ Digital Worx d.o.o., Belgrade. <https://digital-worx.rs/>
- ▶ EON PLUS d.o.o., Belgrade. <https://www.eon-plus.com/about-us>

### Decision on award

The overall ranking was done based on the evaluation of all received applications according to the number of points received, and the threshold was defined by considering the available funds and the amount of applications received. The final decision for making the awards was made according to the ranking list. Only applicants with an evaluation score above the defined threshold could be nominated for an award. The decision for an award was guided by the principles of impartiality, transparency and the rational use of funds. Following the award decision, the selected applicants signed the Innovation Challenge Agreement (hereafter Agreement).

The Agreement contained the final Project Plan and Project Budget that was not necessarily the same as the one the applicant submitted, resulting from negotiations with the applicant. Before signing the Agreement, UNDP and successful applicants agreed on specific activities, outputs, project milestone schedules and indicators. Before signing the Agreement, the applicant had to send all the required documentation. Awarding is done under the Agreement's general provisions, and the payments for funding are to be completed based on UNDP regulations and rules.

Selection: Panel members reviewed and evaluated the proposed projects, based on the evaluation criteria as follows:

- ▶ Innovative solution (introducing a new idea, approach, product, or service to a target group) with consideration of risks (10%)
- ▶ Development impact and project quality, including intervention logic (20%)
- ▶ Experience of management and development team (10%)
- ▶ Potential for scale-up and replication (10%)
- ▶ Long-term sustainability (financial, environmental, social) (10%)
- ▶ Value for money and cost-effectiveness (30%)
- ▶ Availability of co-funding (10%)

Only applications that scored above 70% were considered for awarding the Project.

Upon completion of the award procedure, the selected companies started with implementing the initiatives. The role of the UNDP Serbia, as implementing partner in the process, was to ensure high-level standards in the implementation of this award, according to the UNDP rules and procedures, and to provide innovative solutions in its broadest sense: 1) a new approach, product, idea, or service not yet tested anywhere; or 2) one new to the beneficiary country; or 3) on not yet applied to the sector in question in the beneficiary country; or 4) a service or business model being introduced to a target group as yet untried.

Furthermore, UNDP CO Serbia oversaw monitoring of the entire implementation process whose purpose was: (i) to assess the progress in the successful project implementation in terms of the envisaged activities and project goal achievements; and (ii) to ensure financial expenditures conformed to the Project budget for the given period. Monitoring ensured that key information was regularly collected and tracked to allow progress measurement against set objectives. The awardee had to deliver a short, mid-term, narrative report, and a detailed final narrative report, including all key requisite information for tracking progress against the targets.

Three out of six awarded initiatives were related to the new digital services:

- ▶ **Development of a digital learning tool** that would be free and accessible to all students in North Macedonia, irrespective of their location or social status (through gadgets or laptops), by offering a digitized version of education.
- ▶ **Development of a new industrial workflow management system (named TAKT)** which would help industrial small and medium enterprises in North



Macedonia to control and manage their activities more efficiently, to align them with the company's capacities and ensure proper availability of resources, thus increasing the company's competitive advantage and gross margin.

- ▶ **Creating digital solutions for conducting Environmental and Social Impact Assessment (ESIA) – ENVIGO** that will ensure benefits and contribute to local people, communities and societies.

The remaining three initiatives dealt with health and well-being:

- ▶ **Rapid antigen test for the detection of SARS-CoV-2 virus** to provide a test for the qualitative detection of SARS-CoV-2 antigen in saliva/sputum specimens in patients in the acute (early) phase of SARS-CoV-2 infection, and also in asymptomatic patients. This would reduce the incidence of COVID-19 among preschool and schoolchildren in Albania
- ▶ **Innovative palette of ELISA COVID-19 serology assays**, with the newly introduced algorithm that should contribute to a more accurate interpretation of results of antibody testing in COVID-19 and to a better understanding of humoral immune response, with the accent on medical professionals and patients
- ▶ **Newly developed device** for providing remote monitoring of ECG and other biomedical signals and telehealth. The idea was to solve the post-pandemic health-care system overload caused by the corona virus in North Macedonia, by doubling the speed of processing patients, reducing the need for physical contact between the patient and doctor, and to prepare the health-care system for dealing with new pandemic situations.

The awardees, in addition to the financial and technical support provided by UNDP, could also benefit from the UNDP's network of contacts in the region and from institutional support from partnering countries. This was aimed at reaching planned results and objectives to the maximum possible extent.

All awarded solutions have proven to be sustainable in practice, innovative and replicable/scalable, which has generated additional attention from the national authorities and private sector in partnering countries and created the foundation for further enhancement of cooperation among private companies from Albania, North Macedonia and Serbia. For example, Serbian companies have used this opportunity to agree on extending business cooperation with North Macedonian and Albanian partner companies, both on the call for proposals and on other business endeavours. Thus, new and long-term partnerships have been established for the benefit of all stakeholders concerned. Therefore, the Government of Serbia supports the continuation of this initiative in the form of a new call that would cover the relevant thematic areas and involve the relevant partner countries necessary to achieve the SDGs, both in the region and globally.

### CONTACT INFORMATION

**Goran Simunovic**

Portfolio Manager – Integrated Solutions, UNDP  
goran.simunovic@undp.org



# Adaptation of 3PA to Urban and Displacement Settings



## Using South-South and Triangular Cooperation in World Food Programme Three-Pronged Approach capacity strengthening through cross-learning initiatives

### CHALLENGE

The World Food Programme's (WFP) Three Pronged-Approach (3PA) has become instrumental in the design, planning and implementation of programmes in integrated resilience-building, safety nets, public works programmes, emergency preparedness and response. WFP has been equipping universities to take full ownership and to apply 3PA to support strengthening the capacities of governments and partners. Universities can be good implementors of the 3PA given the rigorous consultation process and technical detail of the information collected and analysed through the 3PA. With the success of the roll-out and applying 3PA tools through universities, there has been an impetus in some countries to adopt a similar approach – namely eSwatini and Mozambique in Southern Africa (Regional Bureau Johannesburg (RBJ)) and Kenya and Ethiopia in East and Central Africa (Regional Bureau Nairobi (RBN)). However, due to the wide diversity in geography, economy and political context – it often appears challenging to build the capacity of target stakeholders on 3PA and it is also time- and resource-demanding.

### TOWARDS A SOLUTION

To address these challenges, RBJ, with support from the Livelihoods, Asset Creation and Resilience Unit (PRO-RL) in the Programme – Humanitarian and Development Division in WFP Headquarters (HQ), leveraged South-South and Triangular Cooperation (SSTC) to enable cross-learning visits where one single roll-out engaged multiple country stakeholders and economized the use of time and resources, while having a more significant impact within and across regions.

WFP facilitated a cross-learning initiative among participating countries – eSwatini, Mozambique and Zimbabwe – that included training and in-field missions for exchanges on Seasonal Livelihood Programming (SLP). In the long run, this initiative will be scaled up to support more countries

#### PROJECT NAME

Adaptation of 3PA to Urban and Displacement Settings

#### NOMINATED BY

World Food Programme (WFP)

#### COUNTRIES/REGIONS/TERRITORIES

eSwatini, Ethiopia, Kenya, Mozambique and Zimbabwe

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

2.3, 2.4, 2.6, 2.8, 17.6

#### SUPPORTED BY

WFP South-South and Triangular Cooperation

#### IMPLEMENTING ENTITIES

WFP Regional Bureau Johannesburg

#### PROJECT STATUS

Completed

#### PROJECT PERIOD

October 2021 – December 2021



implementing the SLP. It will continue to enable networks among countries and universities to promote knowledge-sharing between practitioners and academia, and will provide a good example of how to set up and run sustainable partnerships. This initiative directly contributes to achieving target 17.6 of SDG 17 which aims to enhance South-South and triangular regional and international cooperation on and access to science, technology and innovation and to enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms.

In particular, this project enabled cross-learning and exchange visits which were designed and articulated in such a way that in three months all target universities and government staff in the four countries concerned would be well trained on the rural and urban Seasonal Livelihood Programme.

In close collaboration with countries and universities, WFP RBJ and PRO-RL jointly designed these exchange visits to promote cross-learning on the implementation of 3PA in the SLP and supported the host countries in the preparation and roll-out of rural and urban SLPs. The approach was divided into three phases. In phase 1 (26 Sep - 04 Oct 21), the National University of Science and Technology (NUST) in Bulawayo, with support from the WFP Country Office in Zimbabwe, organized and rolled out a rural SLP in Uzumba Maramba Pfungwe district with the participation of delegates from eSwatini and Kenya.

In phase 2, an SLP Lead Trainer from NUST deployed to eSwatini (11 Oct – 05 Nov 21) to facilitate one urban SLP in Mbabane West, and one rural SLP in Nhlambeni District with the participation of delegates from Mozambique. Finally, under the leadership of NUST, the WFP Zimbabwe Country Office organized a rural SLP in Hwedza District (08-11 Nov 21) with the participation of delegates from Ethiopia and Kenya.

Through this small-scale initiative, RBJ and PRO-R were able to effect a much greater impact than anticipated and achieved the following outcomes:

- ▶ Skills to replicate SLPs in four new countries were developed, first by exposing trainees to the SLP through the study tours, and then by having trainees replicate the learning (with mentoring) on their return. This was demonstrated through the SLP's undertaken, the reports produced and the evaluation of trainees during their implementation of SLPs.
- ▶ SLP capacities in the two Eastern and Southern African regions expanded through nine new facilitators from four universities (and one WFP CO) to further support WFP RB, CO and government SLP requests.
- ▶ Universities from five countries established relationships with each other and have initiated a network of support and experience-sharing.
- ▶ Government exchanges on SLP were facilitated between three countries among eSwatini, Mozambique and Zimbabwe on the use of SLP for their own policy, strategy and programmatic developments, thereby facilitating the introduction of SLP to government.

The unique part of this cross-learning approach is the engagement of government and leadership of the university, where the WFP only plays a facilitator's role.

To ensure the sustainability of this initiative, WFP adopted an approach to transfer the 3PA to full university ownership for the country. This

builds on the experience of RBJ with countries like Madagascar, Malawi, Mozambique, the United Republic of Tanzania and Zimbabwe to establish longer-term strategic partnerships and signing of MoUs with universities. After this the South-South project PRO-RL and RBJ were working with the WFP Country Office in eSwatini to facilitate a long-term partnership with the University of eSwatini.

In addition, RBJ supported a successful partnership with the Deputy Prime Minister's Office and Ministry of Thinkundlas (eSwatini) and the Tanzania Social Assistance Fund (TASAF) – the largest public works programme in Tanzania in terms of government capacity strengthening through 3PA.

The same approach can be replicable in French-speaking (Democratic Republic of the Congo, Republic of the Congo, and Madagascar) and Portuguese-speaking (Angola, Mozambique) countries in the region. This will both build the capacity of the universities and national government staff and contribute to knowledge management in French and Portuguese.

Some of the key lessons learned through this cross-learning initiative enabled by SSTC are outlined below:

- ▶ Strengthening networks is critical as it provides more scope for inter-university collaborations even outside the SLP processes to ensure a greater impact on food security and nutrition.
- ▶ A preliminary session introducing the SLP and its principles can be conducted with universities learning the SLP for the first time before attending a Training of Trainers session. This is key for the preparation for the SSTC exchanges.
- ▶ Some lessons learnt on the SLP process itself include the following:
  - ▶ Participation of community representatives breeds ownership, educates them on resource endowments and other critical capacities which will likely translate into sustainable development initiatives in the target district.
  - ▶ The use of relevant examples during facilitation enhanced understanding and steered debates during SLP consultations. And seasonality brings to the fore the salient preparedness, protection and investment interventions.
  - ▶ There was an excellent mix and participation from socio-economic groups and technical partners, and the active participation of women was encouraging.
  - ▶ The SLP process provides for a catalytic potential to support monitoring and evaluation of pro-poor policies and practices.
  - ▶ Visiting teams appreciated the hands-on training and indicated that they felt empowered and better prepared to roll out similar SLP exercises in their respective countries.

## CONTACT INFORMATION

### Preacherd Donga

Programme Policy Officer, WFP  
preacherd.donga@wfp.org

### Katherine Gaylord

South-South and Triangular Cooperation Consultant, WFP  
Katherine.Gaylord@wfp.org





# COMSATS Joint Centre for Industrial Biotechnology

17 PARTNERSHIPS FOR THE GOALS



## Promoting meaningful South-South and Triangular Cooperation in Industrial Biotechnology

### CHALLENGE

Poverty, food insecurity, inadequate health care, climate change and other issues have hampered the ability of countries in the Global South to achieve sustainable socio-economic growth. These challenges cannot be addressed without conscious efforts on education, science, technology, indigenous research and development and innovation in various areas of science and technology, particularly in industrial biotechnology.

Industrial biotechnology, characterized by clean and efficient processes, starting from renewable raw materials that are plentiful in the Global South, could provide an important solution to solve sustainability problems and create a green mode of economic growth. Developing countries must pool their human, financial and technological resources to forge concerted international cooperation in these areas, to tackle the key challenges hampering the sustainable development and to create a greener, healthier, more prosperous and inclusive world.

### TOWARDS A SOLUTION

In order to promote meaningful cooperation among developing countries, particularly COMSATS' member States, in industrial biotechnology, the COMSATS Joint Center for Industrial Biotechnology (CCIB) was established on 14 April 2021, at the Tianjin Institute of Industrial Biotechnology (TIB), CAS, under the framework of the National Center of Technology Innovation for Synthetic Biology (NC SynBio) of China.

CCIB aims to address the challenges of poverty, hunger and food insecurity, diseases, energy crisis and environmental problems in an effective manner by facilitating collaborative research and development activities, academic exchanges, personnel training, science and technology consulting services and technology transfer among the COMSATS member States with substantial support from the NC SynBio, to contribute towards the



### PROJECT NAME

COMSATS Joint Centre for Industrial Biotechnology

### NOMINATED BY

Commission on Science and Technology for Sustainable Development in the South (COMSATS)

### COUNTRIES/REGIONS/TERRITORIES

Bangladesh, China, Colombia, Democratic People's Republic of Korea, Egypt, Ghana, the Gambia, Iran, Jamaica, Jordan, Kazakhstan, Morocco, Nigeria, Pakistan, the Philippines, Senegal, Somalia, Sri Lanka, State of Palestine, Sudan, Tunisia, Türkiye, Uganda, Yemen, Zimbabwe

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

1.a, 2.1, 2.4, 2.a, 3.3, 3.9, 3.b, 3.c, 7.2, 7.a, 9.2, 9.3, 9.5, 9.b, 12.2, 12.4, 12.5, 12.9, 17.6, 17.7, 17.9, 17.16

### SUPPORTED BY

Tianjin Institute of Industrial Biotechnology (TIB), Chinese Academy of Sciences (CAS), China; COMSATS; Chinese Ministry of Science and Technology; and Tianjin Local Government, China

### IMPLEMENTING ENTITIES

COMSATS; TIB, China

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

2021– 2025

### LINK

<http://comsats.org/?p=7106>  
[http://english.tib.cas.cn/ns/es/202104/t20210416\\_267264.html](http://english.tib.cas.cn/ns/es/202104/t20210416_267264.html)





following Sustainable Development Goals (SDGs): 1. No Poverty; 2. Zero Hunger; 3. Good Health and Well-being; 7. Affordable and Clean Energy; 9. Industry, Innovation and Infrastructure; 12. Responsible consumption and production; and 17 Partnerships for the Goals.

CCIB is an open and shared platform, ensuring the participation of relevant scientists, experts and policymakers in concerted activities addressing the common demands in the South. The participatory process is guided by CCIB management structure, including a Secretary Office, a Consultative Committee (CC), a Technical Advisory Committee (TAC) and question-driven Joint R&D Groups (JRDGs), all of which have representatives from various developing countries, and sustainability is guaranteed by the NC SynBio.

As one of the joint centres to promote South-South and Triangular Cooperation, the NC SynBio provides CCIB with unique technology innovation infrastructure, including: 1. sharing NC's state-of-the-art core facilities; 2. sharing NC's financial resources from the Chinese national and local government and NC-associated or non-associated social capitals; 3. sharing NC's innovation network for technology development (academic network) and technology transfer (industrial network); and 4. sharing intellectual properties generated from the joint activities. The participants bring their unique questions, get involved in the concerted R&D activities organized by NC, get their outcomes industrialized globally with the help of NC and get trained and profit from the process.

Under the robust support of NC SynBio, 14 young visiting scholars were funded; five high-level joint R&D projects were initiated, which involved over 10 research teams from the member countries; 4. Science Citation Index papers were/are to be published while 2 patents have been applied. Several technologies including biofertilizer and biopesticides, microbial production of plant natural products, anaerobic treatment of organic wastes and enzymatic textile processing are being demonstrated in the member States to address sustainable development problems encountered in agriculture, medicine, energy and the environment.

CCIB significantly contributes towards capacity-building in developing countries. To date, two workshops have been organized on biomedicine and bio-agriculture respectively. During these events, 11 well-known scholars from member countries were invited to introduce the latest progress in related areas, while about 150 participants from nearly 20 countries participated, enhancing mutual understanding and laying a robust foundation for future cooperation. Moreover, CCIB organized a ten-day training course in December 2021, in which 78 researchers (trainees) from 17 developing countries received high-level training in diverse frontier technologies in synthetic biology and biotechnology. CCIB plans to continue organizing such workshops and training regularly in the future.

CCIB recommended five organizations, including ICCBS-Pakistan, NRC-Egypt, KazNU-Kazakhstan, IROST-Iran and NAS-Belarus to join the Biomanufacturing Industry (Talent) Alliance, a networking platform



to facilitate cross-border Industry-University-Research cooperation in the biomanufacturing industry and talent exchanges.

CCIB is also active as a think tank to provide consultation service for the development of biotechnology and bio-industry in the developing countries. CCIB is carrying out surveys on the status of industrial biotechnology and bioindustry in member countries with the coordination/support of the COMSATS Secretariat to serve for demand-driven S&T cooperation and transformation of applied technology.

With these innovative mechanisms and strong support of the NC SynBio, the CCIB can catalyse solid collaboration in the South. This model can easily be replicated in other areas.

## CONTACT INFORMATION

### Prof. Dr. Jibin Sun

Director, CCIB / Deputy Director General, TIB  
sunjibin@tib.cas.cn

### Qianqian Chai

Coordinator, CCIB / International Cooperation Officer, TIB  
chai\_qq@tib.cas.cn

### Farhan Ansari

Senior Assistant Director (Programmes), COMSATS Headquarters  
farhan@comsats.org



## Fostering triangular partnerships for innovative initiatives with positive impact on the 2030 Agenda for Sustainable Development

### CHALLENGE

Triangular cooperation (TC), viewed as a transformative development cooperation modality, is drawing wide international attention. Important international processes and documents – such as the 2030 Agenda for Sustainable Development, the Global Partnership for Effective Development Co-operation (GPEDC), and, more recently, the BAPA+40 – all point to the importance of the modality and its contributions to achieving the Sustainable Development Goals (SDGs). However, evidence about TC's impact and effectiveness is still limited. This is due to the lack of available systematic empirically verified findings as to whether the TC modality is contributing to medium- or long-term development gains.

### TOWARDS A SOLUTION

To address this challenge, the ADELANTE 2 Window intends to demonstrate the potential of Triangular Cooperation to contribute effectively to the achievement of the 2030 Agenda in Latin America and the Caribbean, and the European Union. It promotes the role of multi-stakeholder and multi-level Triangular Cooperation partnerships for the execution of Triangular Cooperation Initiatives, based on the exchange and triangulation of knowledge.

**ADELANTE 2** is an international development cooperation programme of the European Commission, managed by the Directorate-General for International (DG INTPA), that aims to contribute to fulfilling the 2030 Agenda for Sustainable Development, along with more inclusive and sustainable development, through the promotion and use of Triangular Cooperation between Europe and Latin America and the Caribbean, harnessing the full potential of the international partnerships inherent to this modality.

#### PROJECT NAME

ADELANTE 2

#### NOMINATED BY

European Commission / Directorate-General for International Partnerships (DG INTPA) / South America and Regional Operations 1

#### COUNTRIES/REGIONS/TERRITORIES

Antigua and Barbuda, Argentina Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, European Union (EU) Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela.

#### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

10.2, 10.3, 17.6, 17.9

#### SUPPORTED BY

European Commission / Directorate-General for International Partnerships (DG INTPA)

#### IMPLEMENTING ENTITIES

European Commission / Directorate-General for International Partnerships (DG INTPA). 83 European, Latin American and Caribbean entities in 2021 edition

#### PROJECT STATUS

Ongoing

#### PROJECT PERIOD

January 2021– December 2024

#### LINK

<https://www.adelante2.eu/en>



**The ADELANTE Triangular Cooperation Window EU – Latin America and the Caribbean (ADELANTE Window)** is a funding mechanism and instrument, within the framework of ADELANTE 2, which aims to mobilize and channel EU resources towards partnerships between Europe and Latin America and the Caribbean that correspond to the Triangular Cooperation modality.

ADELANTE 2 and the ADELANTE Window understand Triangular Cooperation in the following manner: “Triangular Cooperation is a horizontal and partnership-centred modality, in which the complementary knowledge and experience of the different partners and their resources are harnessed to jointly create solutions that respond to development challenges”. The programme builds on the experience of the four years of phase 1 and is also part of the growing discussions on Triangular Cooperation at the international level, aligned with its own good practices and those of other partners.

The ADELANTE Window receives a budget allocation from the EU with an overall indicative amount of EUR5 mn with an expected duration of four years, coordinated through announcements or ‘annual Windows’ from 2021 to 2024, organized into a demand driven approach.

In May 2021, the first annual Window was launched. **The ADELANTE Window 2021 was open to all EU-LAC countries**, (from national cooperation agencies and public entities, at national and subnational level, to private, social and research entities, as well as multilateral, international and regional organizations and international financial institutions, among others) covering all SDGs.

To qualify entities must assume one of the following partnership roles:

- ▶ **Beneficiary:** from a LAC country, seeks support to meet a development challenge and makes their knowledge and experience available.
- ▶ **First provider:** from a LAC country, has experience in addressing the same development challenge in a similar context as the beneficiary, shares knowledge and experience with the beneficiary and partners.
- ▶ **Second provider:** from an EU country, contributes to strengthening the partnership and provides support through its knowledge, experience and financial resources.

**The ADELANTE Window 2021 resulted in the financing of 15 Triangular Cooperation initiatives** that were implemented from August 2021 to April 2022. These Initiatives involved 83 entities from 17 EU and LAC countries, which comprised 15 partnerships that implemented, with the support of the ADELANTE Team, 94 “knowledge triangulation activities”, such as workshops, seminars, congresses, consultancies, study visits, internships, studies and courses. Over 1,770 participants directly benefited from these activities.

Of the 15 ADELANTE Window 2021 Initiatives, eight contribute to SDG 8, addressing 9 of its 10 targets. The other seven initiatives contribute to SDGs 7, 9, 11 and 12. All of them contribute to SDG 10 and SDG 17. In this regard, the demand on the ADELANTE Window 2021 is especially oriented towards objectives under the theme of ‘Prosperity’.

The Triangular Cooperation Initiatives that were selected are harnessing the knowledge and expertise of the partnership’s member entities, to generate new knowledge that can be applied to respond effectively to a development challenge. This new knowledge is collected and systematized through models that facilitate its practical application. This logic results in the capacity-building of the entities and of the partnership itself, in addition to fostering the creation of specialized networks with a broader scope.

The ADELANTE Window has a team of professionals that support the Initiatives. It is through this team that the EU’s participation in the partnership is made effective. The ADELANTE Team is tasked with contributing decisively to the quality of each of the Initiatives throughout their management cycle, with their participation and contribution being essential in the final formulation phase and throughout implementation.

The team also conducts the logistical coordination and direct contracting of logistics services, professional services associated with the activities. These are carried out in full coordination with the partnership members (those selected for funding) and according to the objectives, the intervention methodology and the action plan of the Initiative. Once the implementation of the initiatives is completed – undertaken with **superior quality in its Triangular Cooperation approach, involving the capacity-building of the staff in the entities and in the partnership itself and impacting positively on sustainable development** – the contributions towards the 2030 Agenda for Sustainable Development will be highlighted, along with the lessons learnt.

---

## CONTACT INFORMATION

### Carla Vidussi

ADELANTE 2 focal point, European Commission / Directorate-General for International Partnerships (DG INTPA) / South America and Regional Operations 1  
Carla.VIDUSSI@ec.europa.eu



# Global Partnership Initiative on Effective Triangular Cooperation

17 PARTNERSHIPS FOR THE GOALS



A platform for the exchange of experiences, challenges and tools to work more effectively in triangular cooperation

## CHALLENGE

Triangular cooperation supports the goals, objectives and implementation of the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. In the past, triangular cooperation only involved three development actors: a traditional provider, an emerging economy and a beneficiary partner. In the current development landscape, the modality is expanding its scope to include **multi-stakeholder** relationships among governments, international organizations, civil society and the private sector. It provides comparative advantages by complementing North-South and South-South cooperation. Nevertheless, recent studies show there is still a lack of systematic and comparable data, analysis and debate about their experiences. Triangular cooperation is still considered a niche modality, not integrated into programme management systems, hence it is often underutilized and underreported.

## TOWARDS A SOLUTION

The Global Partnership Initiative (GPI) on Effective Triangular Cooperation was created in 2016 by the Governments of Mexico and Canada to bring together development stakeholders to promote and to ensure that triangular cooperation projects and initiatives were effective, country-led and involved inclusive partnerships for sustainable development. It contributed to the implementation of the SDGs, specifically SDG 17 (Partnerships for the Goals), supporting stakeholders to join forces and work together toward the global implementation of the 2030 Agenda.

Since its creation, more than 60 members joined the initiative. Currently, the GPI core group members include the AUDA-NEPAD, the Governments of Canada and Chile, PIFCSS, the IsDB, the Governments of Japan, Mexico and Norway, the OECD and UNOSSC.

### PROJECT NAME

Global Partnership Initiative on Effective Triangular Cooperation

### NOMINATED BY

Global Partnership Initiative on Effective Triangular Cooperation (GPI)

### COUNTRIES/REGIONS/TERRITORIES

Global

### SUSTAINABLE DEVELOPMENT GOALS TARGET(S)

17.6

### SUPPORTED BY

Governments of Canada, Chile, Japan, Mexico and Norway, the African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD), the Ibero-American Programme for the Strengthening of South-South Cooperation (PIFCSS), the Islamic Development Bank (IsDB), the Organisation for Economic Co-operation and Development (OECD), the United Nations Office for South-South Cooperation (UNOSSC)

### IMPLEMENTING ENTITIES

Governments of Canada, Chile, Japan, Mexico and Norway, AUDA-NEPAD, PIFCSS, IsDB, OECD, UNOSSC and more than 50 other members

### PROJECT STATUS

Ongoing

### PROJECT PERIOD

November 2016 – Ongoing

### LINK

<https://triangular-cooperation.org/>





Its members include governments, international organizations, civil society organisations, private sector representatives, among others. The GPI members engage and contribute financially and with in-kind contributions through three workstreams: advocacy, operational and analytical. They engage in substantial discussion of the drafts prepared by the workstreams, both remotely and in face-to-face meetings. It is a member-driven initiative and became a relevant global platform for partners to meet and exchange.

The initiative has two main objectives:

- ▶ At the policy level: to mainstream triangular cooperation in development cooperation systems globally and to promote the Voluntary Guidelines for Effective Triangular Cooperation for governments, international organizations, civil society and the private sector to agree to and use in their triangular cooperation programming.
- ▶ At the operational level: to compile and, on-demand, develop better tools to ensure effectiveness in the implementation of triangular cooperation.

At the policy level, examples of its initiatives include the co-creation and advocacy of nine voluntary guidelines for effective triangular cooperation.<sup>1</sup> These guidelines represent a shared commitment to effectiveness, advanced in 2019 in close consultation with numerous GPI members. Additionally, the GPI collect and analyse cases and identify different models of triangular cooperation to extract lessons. In 2021 the analytical workstream dedicated its efforts to analysing triangular cooperation in the context of COVID-19.

Nine members (the BRICS Policy Center, the Food and Agriculture Organization of the United Nations (FAO), International Trade Centre, the Governments of Japan, Korea, Mexico, Norway, and the State of Palestine and the OECD) jointly co-created and published the brief “Leveraging triangular partnerships to respond to COVID-19 and build back better from the pandemic”<sup>2</sup> In 2022 the group is focusing on a series of short case studies to share evidence on how GPI members use triangular cooperation to implement the 2030 Agenda and the BAPA+40 outcome document.

At the operational level, the GPI regularly organizes a Marketplace, a matchmaking initiative for triangular partnerships. In September 2021, the Marketplace meeting focused on digital transformation, with more than 50 participants from all regions of the world sharing their experiences, identifying challenges and looking for solutions through triangular partnerships. Several follow-up meetings happened after the main event and possibilities of concrete partnerships identified.

An example of partnership emerging from this matchmaking exercise is a project between the Islamic Development Bank, the Palestinian International Cooperation Agency (PICA) and the Chilean International Cooperation Agency for Development for strengthening PICA's institutional capacities delivering South-South and Triangular Cooperation. The BAPA +40 in Buenos Aires (March 2019) was a milestone event for triangular cooperation and the GPI. For the first time, the GPI is mentioned in an official United Nations document – the BAPA +40 Outcome Document. This provides fertile ground for the GPI to grow and strengthen its function as a global “one-stop-shop” for triangular cooperation, implementing its ambitious Action Plan<sup>3</sup> and maintaining its global relevance and visibility.

Since its establishment in 2016, the GPI has evolved from a small initiative spearheaded by a few committed countries and organizations to a truly global initiative and platform, receiving strong support and political backing at the highest level. The GPI raises awareness at the regional and global level on the value-added of triangular cooperation, creates space for knowledge-sharing among its members and the broader development cooperation community and promotes new partnerships to implement the sustainable development agenda.

---

## CONTACT INFORMATION

### Geovana Zoccal

Focal Point, GPI

GPI@triangular-cooperation.org

1 <https://bit.ly/3pJoVKB>

2 <https://bit.ly/3CuhKgS>

3 <https://bit.ly/3KoHcq8>



# Annex: list of SDGs and targets





## End poverty in all its forms everywhere

### Targets

- 1.1** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- 1.2** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 1.3** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
- 1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- 1.a** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions
- 1.b** Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions



## End hunger, achieve food security and improved nutrition and promote sustainable agriculture

### Targets

- 2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- 2.2** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- 2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- 2.5** By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
- 2.a** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 2.b** Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
- 2.c** Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility



## Ensure healthy lives and promote well-being for all at all ages

### Targets

- 3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
- 3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
- 3.3** By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4** By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 3.5** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- 3.6** By 2020, halve the number of global deaths and injuries from road traffic accidents
- 3.7** By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
- 3.b** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 3.c** Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
- 3.d** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks



## Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

### Targets

- 4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b** By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.c** By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States





## Achieve gender equality and empower all women and girls

### Targets

- 5.1** End all forms of discrimination against all women and girls everywhere
- 5.2** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- 5.3** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
- 5.4** Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
- 5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
- 5.6** Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
- 5.a** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- 5.b** Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
- 5.c** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels



## Ensure availability and sustainable management of water and sanitation for all

### Targets

- 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- 6.5** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 6.a** By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- 6.b** Support and strengthen the participation of local communities in improving water and sanitation management



## Ensure access to affordable, reliable, sustainable and modern energy for all

### Targets

- 7.1** By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2** By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3** By 2030, double the global rate of improvement in energy efficiency
- 7.a** By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- 7.b** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support



## Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

### Targets

- 8.1** Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent gross domestic product growth per annum in the least developed countries
- 8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 8.4** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
- 8.5** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
- 8.6** By 2020, substantially reduce the proportion of youth not in employment, education or training
- 8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
- 8.8** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
- 8.9** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
- 8.10** Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 8.a** Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries
- 8.b** By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization



## Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

### Targets

- 9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.2** Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3** Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
- 9.4** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 9.5** Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
- 9.a** Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
- 9.b** Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
- 9.c** Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020



## Reduce inequality within and among countries

### Targets

- 10.1** By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average
- 10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- 10.3** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
- 10.4** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
- 10.5** Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
- 10.6** Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions
- 10.7** Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
- 10.a** Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
- 10.b** Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes
- 10.c** By 2030, reduce to less than 3 percent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 percent



## Make cities and human settlements inclusive, safe, resilient and sustainable

### Targets

- 11.1** By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- 11.3** By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.4** Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- 11.5** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
- 11.6** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- 11.7** By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
- 11.a** Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- 11.b** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
- 11.c** Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials



## Ensure sustainable consumption and production patterns

### Targets

- 12.1** Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- 12.2** By 2030, achieve the sustainable management and efficient use of natural resources
- 12.3** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- 12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- 12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7** Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- 12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- 12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- 12.b** Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
- 12.c** Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities





## Take urgent action to combat climate change and its impacts\*

### Targets

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2** Integrate climate change measures into national policies, strategies and planning
- 13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- 13.a** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- 13.b** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

\* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.



## Conserve and sustainably use the oceans, seas and marine resources for sustainable development

### Targets

- 14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- 14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- 14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 14.4** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- 14.5** By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
- 14.6** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
- 14.7** By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- 14.a** Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
- 14.b** Provide access for small-scale artisanal fishers to marine resources and markets
- 14.c** Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want



## Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

### Targets

- 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
- 15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- 15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
- 15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
- 15.6** Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
- 15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
- 15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
- 15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
- 15.a** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
- 15.b** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
- 15.c** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities



## Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

### Targets

- 16.1** Significantly reduce all forms of violence and related death rates everywhere
- 16.2** End abuse, exploitation, trafficking and all forms of violence against and torture of children
- 16.3** Promote the rule of law at the national and international levels and ensure equal access to justice for all
- 16.4** By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
- 16.5** Substantially reduce corruption and bribery in all their forms
- 16.6** Develop effective, accountable and transparent institutions at all levels
- 16.7** Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.8** Broaden and strengthen the participation of developing countries in the institutions of global governance
- 16.9** By 2030, provide legal identity for all, including birth registration
- 16.10** Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- 16.a** Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
- 16.b** Promote and enforce non-discriminatory laws and policies for sustainable development



## Strengthen the means of implementation and revitalize the global partnership for sustainable development

### Targets

#### Finance

- 17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
- 17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 percent of ODA/GNI to developing countries and 0.15 to 0.20 percent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 percent of ODA/GNI to least developed countries
- 17.3 Mobilize additional financial resources for developing countries from multiple sources
- 17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress
- 17.5 Adopt and implement investment promotion regimes for least developed countries

#### Technology

- 17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- 17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

#### Capacity-Building

- 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation

### Trade

- 17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda
- 17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
- 17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

### Systemic issues

#### *Policy and Institutional coherence*

- 17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence
- 17.14 Enhance policy coherence for sustainable development
- 17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development

#### *Multi-stakeholder partnerships*

- 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
- 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

#### *Data, monitoring and accountability*

- 17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- 17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries













United Nations  
Office for South-South Cooperation