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South-South and Triangular Cooperation **Innovative Good Practices**

June 2025

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Foreword

South-South and Triangular Cooperation (SSTC) is a dynamic and transformative force in the global development landscape. It refers to the collaboration and exchange of resources, knowledge, and expertise among countries of the Global South to address common challenges, promote inclusive growth, and advance sustainable development.

Since 2015, the United Nations World Food Programme (WFP) has been facilitating SSTC in countries of the Global South through the mobilization of financial, technical, and in-kind resources to deliver tangible, high-impact change to communities.

WFP's SSTC Unit has been collecting, documenting, and sharing innovative solutions, best practices, technologies, and know-how available across the Global South. These efforts support host governments in building new partnerships, addressing shared development challenges, strengthening national systems and programmes, and ultimately advancing food security and nutrition for all.

In the context of this publication, we define good practice as a successfully implemented WFP-facilitated SSTC initiative between two or more developing countries that demonstrates a certain level of effectiveness and has proved to reliably lead to the desired results based on experience and research. A good practice can be a stand-alone single activity as well as a long-term project and can be recommended as a model to be scaled-up and replicated in different and/or similar contexts.

A SSTC good practice is considered innovative if it includes a novel or adapted approach that contributes to improved results and demonstrates added value or unique application within a specific context.




This publication provides an overview of SSTC innovative good practices implemented in 2024 across countries of the Global South. The good practices presented span thematic areas such as Smallholder Farmers' Support, Disaster Risk Reduction, Climate Change Resilience, Food Systems, Social Protection, School Meals, among others.

It also includes a highlight on innovative expertise in Namibia, Democratic Republic of the Congo and India, showcasing approaches and solutions that can be shared with and adapted by other countries of the Global South.

WFP continues to showcase and leverage SSTC innovative good practices to contribute to the achievement of Sustainable Development Goals 2 (Zero Hunger) and 17 (Partnerships for the Goals) — in line with its mandate of “saving lives and changing lives”.

BOLIVIA

Advancing Rural E-Commerce in Bolivia Through Collaboration with China

 BOLIVIA	Advancing Rural E-Commerce in Bolivia Through Collaboration with China.
 OBJECTIVE	To enhance the productive capacity and market access, of indigenous Guaraní handicraft workers in the communities of the Guaraní indigenous territory, by providing lessons learned from rural e-commerce in China and exploring marketing opportunities in physical and virtual markets.
 THEMATIC AREA	Value Chain Development for Smallholder Farmers; Disaster Risk Reduction and Climate Change Resilience.
 PARTNERS ENGAGED	Administration and Management Institute (AMI) of the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA), WFP Centre of Excellence of the People's Republic of China, Manq'a Sostenible, The Bolivian Space Agency (ABE).

BACKGROUND AND CHALLENGE

The Guarani are the third-largest Indigenous nation among the 36 recognized within the Plurinational State of Bolivia.

Closely linked to their natural environment, they rely on traditional livelihoods such as fishing, rain-fed agriculture, honey collection, livestock rearing, and artisanal production—particularly the weaving of Karandai (palm leaves), an activity primarily led by women.

Communities in the Guarani Indigenous Territory of Itika Guasú face increasing climate-related vulnerabilities, including prolonged droughts, intense rainfall, floods, and landslides, which severely impact livelihoods.

Environmental degradation from mining and hydrocarbon extraction further exacerbates these challenges.

Amid reduced employment opportunities and the decline of agricultural and fishing activities, traditional crafts have become an important income-generating activity.

WFP has recognized the economic and empowering potential of these crafts for Guarani women, as well as their role in enhancing household food security—particularly in the context of compounding shocks such as the COVID-19 pandemic.

SOLUTION

Since 2023, the Bolivian Space Agency under the Ministry of Public Works, Services and Housing has worked with WFP, Manq'a Sostenible and the Ministry of Agriculture and Rural Affairs (MARA) of the People's Republic of China to strengthen the

economic resilience of Guarani women artisans by facilitating their access to fair and inclusive markets—both traditional and digital—at national and international levels.

This objective is in line with the constitution of Bolivia, several legal frameworks and institutional mechanisms (e.g., Committee for the Protection of Vulnerable Indigenous Peoples 2023). The project aims to enhance production quality, management capacities, and digital literacy, thereby contributing to income generation and improved food and nutrition security.

The knowledge exchange component with China focuses on rural cooperative development, e-commerce, and digital innovation.

The initiative aims to bolster the productivity and market connectivity of Guarani artisans, particularly in response to the compounded challenges of climate change, environmental degradation, and the socioeconomic impacts of COVID-19.

Key areas of intervention include:

- Improving digital connectivity to enable access to virtual marketplaces;
- Establishing a product brand identity to enhance market visibility;
- Building management and marketing skills through tailored training;

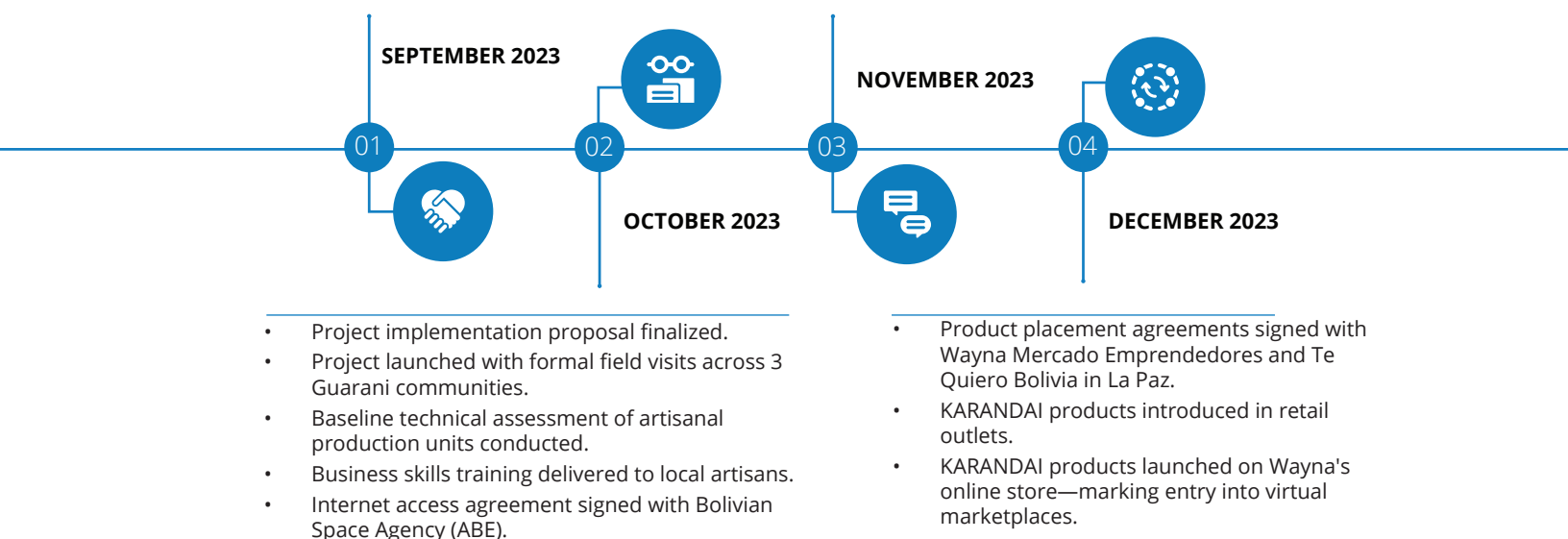
- Upgrading packaging and labeling to increase product appeal and competitiveness;
- Expanding access to diverse sales channels, including e-commerce platforms and non-traditional markets.



KEY MILESTONES

- Initial engagement with community leaders and handicraft workers, supported by National Deputy Darlen Isabel Velasco Torrez.
- Project mobilization initiated through implementing partner Manq'a Sostenible.

- Satellite Internet activated in all 3 communities.
- Training on product design and cost management.
- Digital marketing & e-commerce workshops conducted.
- Launch of KARANDAI brand—co-designed with women artisans based on market insights.
- Knowledge exchange webinar led by Chinese expert, highlighting rural e-commerce success stories.



KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- 1. Implementation of Community Wi-Fi Service:**
The remote location of the communities from urban centers results in a lack of access to mobile phone coverage and, consequently, mobile internet services. This limitation negatively impacts connectivity and access to essential services for daily life and the sale of handicrafts.
- 2. Training and Technical Assistance Programme:** The Training and Technical Assistance Programme aimed to equip Guarani handicraft workers with essential skills in production cost management and product marketing strategies.
- 3. Market Access Assessment and Strategic Advisory:** An assessment was conducted to identify pathways for connecting handicraft products to local and national markets—both physical and virtual. Recommendations were provided to align production with market demand and improve the commercial visibility of artisans' work.
- 4. Training programme on product development and production cost management:** Artisan associations received targeted support in product development and pricing, supported by tools such as catalogues, costing models, and strategic planning resources to enhance competitiveness.
- 5. Product Branding:** A distinct visual identity was developed under the brand KARANDAI to represent palm-based handicrafts. The brand was strategically positioned to increase recognition and competitiveness in the La Paz artisan market.
- 6. Professional Multimedia Production:** High-quality promotional content—including photographs and short videos—was produced to support the marketing of artisan products. These materials are now being used across social media and digital platforms to expand consumer reach.
- 7. Digital Marketing Capacity Building:** Artisans were trained in essential digital marketing skills to strengthen their online presence and better engage with potential customers via e-commerce and social platforms.
- 8. Brand Launch and Market Integration:** KARANDAI was officially launched and introduced into retail outlets and virtual marketplaces in La Paz, establishing a foundation for continued growth and visibility in national markets.
- 9. E-Commerce Knowledge Exchange:** A specialized webinar was conducted in collaboration with an expert from China, focused on e-commerce development and rural market integration. The session shared relevant experiences from the Chinese agricultural e-commerce sector, offering valuable lessons for local adaptation.
- 10. Management of Sales Channels:** Efforts were undertaken to facilitate access to both physical and digital markets. Artisans were supported in navigating commercial spaces in La Paz and in setting up an operational virtual marketplace.

KEY LESSONS LEARNED

As a key lesson learned, the SSTC project showcases that innovative approaches involving technology can effectively support indigenous peoples by enhancing productivity and market access, along with their financial and social resilience.

NEXT STEPS

The project has the potential to strengthen efforts to close the digital divide and promote digital literacy among artisanal workers via knowledge sharing of best practices and lessons learned.

The project also aims to amplify the visibility of local artisans' products by utilizing campaigns and promotions on social media. The KARANDAI brand which produces palm-made handicrafts, is just one example of increasing market access for local artisans.

ACTIVITY	MILESTONES	AMOUNT (USD) APPROX.	TIMELINE
In a next stage, the goal is to share the experience with other rural communities, preferably indigenous, in the country affected by climate change, prioritizing the Amazon region.	Videos developed and field visits made to communities	5,000	June – July 2025
Monitor the programme with the support and guidance of national and international universities, identifying opportunities for improvement and scaling up.	Monitoring reports	5,000	July – August 2025
Continue training Guarani workers in the use of e-commerce to expand their national and international markets virtually.	Training videos and reports of training contacts made	5,000	July – August 2025



MOZAMBIQUE

Sharing Brazil's Expertise for the Beyond Cotton Project in Mozambique

 MOZAMBIQUE	Sharing Brazil's Expertise for the Beyond Cotton Project in Mozambique.
 OBJECTIVE	Support small cotton producers in marketing by-products and associated food crops, aiming to contribute to increased income and to their food and nutrition security.
 THEMATIC AREA	Food Systems.
 PARTNERS ENGAGED	WFP Mozambique, Centre of Excellence Against Hunger in Brazil (WFP Brazil CoE), Brazilian Cotton Institute (IBA), Brazilian Cooperation Agency (ABC), Mozambique Institute of Cotton and Oilseeds (IAOM), Polytechnic Institute of Manica (ISPM), Federal University of Lavras (UFLA); District Service for Economic Activities (SDAE).

BACKGROUND AND CHALLENGE

Acute food insecurity has been on the rise in recent years in Mozambique, as conflict and recurring displacement, compounded by climate and economic shocks, have disrupted communities' agricultural activities, livelihoods, and purchasing power.

To mitigate food insecurity, since 2020 the Government of Mozambique has led the "Beyond Cotton" project in Mozambique which is part of the regional initiative "Alternative markets for cotton by-products and intercropped food crops in Africa."

The project's objective is to support smallholder cotton producers and public institutions in improving access to markets for cotton by-products (such as oil and cake) and associated food crops.

The project promotes local food systems and contributes to the resilience of farming families by enhancing food and nutrition security and generating income.

In central Mozambique, intercropping is not widely practiced by smallholder farmers. This technique—combining cotton with food crops such as maize,

sorghum, and beans—diversifies production, improves diet quality, and generates income.

In some communities, cotton farming is relatively new and is still being integrated into existing agricultural systems, highlighting the need for technical support and market access for both cotton by-products and associated food crops.

In Mozambique, the project was implemented, leveraging SSTC with Brazil and supported by the Mozambique Institute of Cotton and Oilseeds (IAOM), the District Service for Economic Activities (SDAE), and the Polytechnic Institute of Manica (ISPM).

On the Brazilian side, coordination was carried out by the Brazilian Cooperation Agency (ABC), in partnership with the Federal University of Lavras (UFLA), the WFP Centre of Excellence against Hunger in Brazil (WFP Brazil CoE) and WFP Mozambique. Financial support was provided by the Brazilian Cotton Institute (IBA).

The project carried out more than 250 capacity-building activities and actions to improve smallholder production systems in the Manica Province and the Tete Province.

These efforts focused on enhancing diversified farming systems to promote food and nutrition security among farming families and increase income through the sale of surplus produce.

However, the project identified several challenges. Beneficiaries faced difficulties in individually marketing cotton and intercropped food products,

as middlemen purchased the products and resold them to institutional markets at higher prices.

This highlighted the importance of formalizing farmers' organizations to strengthen local economies. Additionally, extreme droughts caused by the El Niño phenomenon disrupted planting and harvesting cycles in the project areas.

As climate change intensifies, such events are expected to become more frequent and severe, posing increasing threats to the food and nutrition security of vulnerable farming communities.

SOLUTION

As part of the Beyond Cotton Project in Mozambique, technical missions were carried out by teams from UFLA, WFP Mozambique and agricultural experts from ISPM. During these missions, 247 farmers, including 108 women, were trained in improved planting techniques and pest control in the field.

Following these activities, family farmers participated in a series of trainings focused on forming associations and cooperatives—formal structures essential for enabling communities to compete in institutional markets. In addition, access to microcredit became more attainable for the farmers.

Trainings were conducted on forming boards of directors and fiscal councils, as well as on organizing general assemblies, bringing greater legal structure to the sale of field-harvested products. These sessions were facilitated by teams from UFLA, ISPM, and WFP Mozambique.

They played a key role in making the farmers' market access more competitive and in supporting the development of savings, credit, and emergency funds, which help ensure the sustainability of communities and provide financial support in times of crisis.



In relation to climate-related challenges, mitigating the impacts of drought proved to be a major difficulty, as the project areas are arid and access to water for cultivation is extremely limited.

As an alternative to cope with climate shocks, practical activities in livestock and horticulture were implemented to support both income generation and household food consumption.

Regarding livestock, hay production training was conducted in two stages: theoretical and practical. The theoretical component covered the importance of hay as animal feed during pasture shortages, types of forage, and basic sanitary care for animals.

The practical part included pasture selection, preparation of artisanal hay production boxes, and hay processing and storage.

These activities were adapted to the specific conditions of each community and expanded to include poultry, sheep, goats, and pigs, which serve

as important sources of income and subsistence during periods of food insecurity caused by drought.

For horticulture, farmers cultivated vegetables in areas near rivers to take advantage of natural irrigation. The implementation of “productive backyards” (spaces near farmers’ homes for growing fresh foods) helped increase income through the sale of produce while also improving food and nutrition security.

The horticultural production areas ranged from 150 to 250 square meters in river-flooded lands and from 150 to 450 square meters in lowland areas, where crops such as okra, lettuce, kale, onions, and tomatoes were cultivated.

Altogether, more than 400 kg of okra, 179 kg of lettuce, 204 kg of kale, 174 kg of tomatoes, and 79 kg of onions were harvested, contributing both to food security and income generation from surplus production.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- Packaging innovation for sharing with other countries of the Global South.
- Horizontal exchanges of knowledge between institutions in different countries.
- Constant fieldwork with the support of local technicians.
- Conduct consultative meetings and consolidate feedback from beneficiaries.
- Empowering local communities.

ACTIVITY	MILESTONES	AMOUNT (USD) APPROX.	TIMELINE
Trainings on Association	Strengthen local governance and the organizational capacities of beneficiaries, promoting greater autonomy, joint marketing, and access to public policies.	USD 10,000	May - June 2025
Installation of Climate-Resilient Productive Home Gardens	Diversify food production, promoting nutritional security and income generation, with species adapted to the local climate and water conservation techniques.	USD 25,000	May - June 2025
Hay Production for Animal Feed During Drought Periods	Create strategic food reserves for livestock during droughts, strengthening the resilience of farming families.	USD 0.00	May - June 2025
TOTAL		USD 35,000.00	

KEY MILESTONES

DECEMBER 2018

A seminar held in Maputo on December 12–13, 2018, aimed to validate data on Mozambique's cotton sector for the "Beyond Cotton" project. It focused on mapping the cotton value chain, including by-products, intercropped crops, key actors, and challenges related to food and nutrition security.

Representatives from various institutions expressed support, and technical sessions identified key stakeholders and expected outcomes.

MARCH 2019

The project diagnosis was launched, outlining key insights into Mozambique's cotton sector, covering food and nutrition security, production trends, intercropped crops, and the socioeconomic and nutritional status of cotton producers. It also highlighted priority areas for intervention.

JANUARY 2020

The project document was fully developed and collaboratively written by all participating institutions.

APRIL–MAY 2020

The project was signed by WFP Mozambique, the National Government, the Centre of Excellence, ABC, and UFLA.

Activities were postponed due to the COVID-19 pandemic.

NOVEMBER–DECEMBER 2020

A comprehensive field mission was carried out across all target areas, resulting in several key findings. Locations for establishing the Results Demonstration Fields (RDFs) were identified, along with the most suitable food crops for each region.

Coordination efforts were made with provincial and local authorities to provide project updates, and associations with potential to form cooperatives—particularly those involving active participation of women—were also identified.

Focal points within the SDAEs were designated to support project activities, and planning began for agricultural and food security interventions.

MARCH–DECEMBER 2021

Online courses were submitted to the UFLA platform, "Virtual Campus", to support agricultural training remotely. The course, taught by a specialist professor in agriculture, covers four key modules: the soil system and the importance of soil analysis; soil correction for fertility; fertilization management; and sustainable cotton cultivation systems. Important guidance and warnings are also provided throughout the course.

Due to the outbreaks of COVID-19, H3N2, and seasonal flu, many in-country missions could not be carried out during the year.

JANUARY–DECEMBER 2022

UFLA promoted virtual trainings on soil and pest management, awarding certificates to participating agricultural technicians. ISPM technicians conducted in-person trainings on topics such as food crop mapping, rainfall patterns, the agricultural calendar, periods of food availability, good agricultural practices, and seedbed preparation.

Results Demonstration Fields (RDFs), or school fields for intercropped planting, were installed.

A study was developed in the project regions to identify and map public and private institutions involved in institutional procurement.

Regular meetings of the Project Monitoring Committee (PMC) were held.

JANUARY 2023

UFLA and WFP conducted a technical mission covering pest and disease management, soil fertility, and the evaluation of cultivation areas, including RDFs and their replicas.

Feedback meetings were held to present the project's diagnosis to farmers and technicians involved in each RDF.

MAY 2023

A nutrition-focused technical mission was carried out in two districts, organized by WFP, the Centre of Excellence (CoE), and university specialists. Activities included cooking workshops to develop new recipes using food harvested by smallholder farmers, as well as a Food and Nutrition Education initiative aimed at understanding generational eating habits, festive eating practices, and everyday dietary patterns.

The Project Monitoring Committee (PMC) held an in-person meeting in Maputo, the capital city.

JUNE 2023

Smallholder farmers received post-harvest training aimed at preventing food losses.

The legalization of five producer associations was completed, followed by capacity-building to enhance their organizational strength and operational effectiveness.

DECEMBER 2023

Specialists conducted an agricultural field mission to train technicians and producers, providing both theoretical and practical sessions on rural extension methods, cotton by-product processing, collective organization (cooperatives/associations), and production strategies for arid climates affected by El Niño.

JANUARY–MARCH 2024

The project's action plan was impacted by severe climatic crises, including droughts in the project's productive areas, caused by the El Niño phenomenon.

MAY–JUNE 2024

WFP Mozambique have developed hay for animal feed and established productive backyards for vegetable cultivation to ensure food security and income for farmers.

Training on savings and loans was offered for cooperatives. Formalization of New associations were formalized.

Steps were taken to improve the commercialization of cotton.

JULY–DECEMBER 2024

Field activities were suspended due to National elections.

2025

A script for the documentary was developed, along with a brochure highlighting the main results. A concluding event for the launch of the documentary and brochure was planned for the second half of the year.

KEY LESSONS LEARNED

Based on the field interventions, the country's current context, and the impacts of climate change, several lessons learned were identified to help mitigate challenges in future agricultural seasons.

The absence or limited number of associations and/or cooperatives remains a significant barrier preventing family farmers from systematically selling their produce in institutional markets and, consequently, from increasing local community income.

Without formal organizations, farmers are often forced to sell to middlemen who purchase products at lower prices than those offered on the market.

Therefore, it is crucial that national institutions promote the formalization of associations and

cooperatives, offering access to credit, training opportunities and fiscal incentives for sustainable practices adopted in the field.

Additionally, climate shocks have a direct and critical impact on planting, harvesting, and the overall well-being of the beneficiaries. To prevent more severe future damage, it is necessary for climate monitoring teams, in coordination with local institutions, to provide financial, food, water, and in some cases, housing support to smallholder farmers.

Moreover, investing in sustainable agricultural practices and in the adaptation of technologies suitable for arid climates is essential to support production in extreme environments.

NEXT STEPS

In 2025, the initiative looks to amplify the impact of the system through:

- Launch of brochure with main results;
- Release of a documentary about the project;
- Dissemination of results to new supporters;
- Fundraising to continue new knowledge exchanges in SSTC to promote food security during phase II of the project, which aims to: i) Enhance climate-smart agriculture capacities and practices among smallholder farmers;
- ii) Ensure access to water systems for nutritious crop production; iii) Promote healthy food consumption over rural communities; iv) Support cotton by-product processing and income diversification; v) Reduce post-harvest losses through sustainable food processing techniques; vi) Facilitate market access and digital inclusion for smallholder farmers; vii) Strengthen financial inclusion through savings, microinsurance, and access to financial services.

TESTIMONIAL







"I work with my wife and son here. I'm very happy with Beyond Cotton. Before the project, I didn't expect to pick up these many bags of cotton here. But I did! I'm very grateful. Next year, with the money I've acquired, I want to buy an ox to pick more cotton. Some of my colleagues already have money for consumption, to buy oil and soap. Today I have 28,150 meticaís (around 440 USD) and the association has earned a total of 58,925 meticaís (around 923 USD). But in addition to the cotton resource, there are peanuts, mapira, nhemba beans, corn."

Mr. Jose Dicissone, president of the Chibverano Association of Calangache 3, on the financial return that the Beyond Cotton Project has made possible for him and the association, after the collective sale of cotton to the government institution responsible for purchasing the product.

DOMINICAN REPUBLIC

Mozambique and Dominican Republic Leverage SSTC for Shock Responsive Social Protection and Anticipatory Action

 DOMINICAN REPUBLIC	Mozambique and Dominican Republic Leverage SSTC for Shock Responsive Social Protection and Anticipatory Action.
 OBJECTIVE	Exchange experiences and share best practices to drive impactful improvements and direct knowledge transfer in adaptive social protection and Anticipatory Action.
 THEMATIC AREA	Social Protection and Anticipatory Action.
 PARTNERS ENGAGED	The National Institute for Disaster Management of Mozambique, Division for the Development of Arid and Semi-Arid Zones of Mozambique, Superate, Social Subsidy Administrator of Dominican Republic (ADESS), Unified Beneficiary System of Dominican Republic (SIUBEN).

BACKGROUND AND CHALLENGE

Mozambique is one of the most disaster-prone countries and the third in Africa with the highest exposure to climate-related events. With a population of 32.1 million and a Human Development Index (HDI) of 0.456 (ranked 181 out of 188), the country faces a cycle of vulnerability due to recurring disasters, underscoring the need for effective risk management.

The country has developed a strong legal and institutional framework for emergency response, highlighting the importance of Adaptive Social Protection (ASP). Significant progress has been made in financing slow-onset emergencies, following the Disaster Risk Reduction Master Plan (PDRRD 2017-2030) and the Disaster Risk Reduction and Management Law (Law No. 10/2020).

The National Institute for Disaster Management (INGD), through the Division for the Development of Arid and Semi-Arid Zones (DARIDAS), has implemented the Drought Early Warning System (SAP-Seca) to strengthen Forecast-Based Financing (FbP).

However, challenges remain in planning, budgeting, and contingent financing.

The Dominican Republic also faces high climate risk, ranking among the 15 most affected countries by disasters between 1997 and 2017, impacting over 2.2 million people. Its food systems and livelihoods are constantly threatened by hurricanes, earthquakes, droughts, and economic fluctuations, while institutional and coordination gaps pose challenges for disaster risk reduction and food security.

In recent years, the country has strengthened its social protection system through an ASP approach, integrating disaster risk management to enhance the resilience of the most vulnerable populations.

This strategy includes prevention, preparedness, and response actions to ensure a more coordinated and effective reaction to climate change and other systemic crises.

SOLUTION

Recognizing shared vulnerability to climate-related shocks, in November 2023, the Governments of Mozambique and the Dominican Republic participated in a WFP facilitated a South-South exchange to strengthen the responsiveness of national social protection systems.

The Mozambican delegation, composed of representatives from the Ministry of Gender, Child and Social Action (MGCAS), the National Institute of Social Action (INAS-IP), and the National Institute of Disaster Management (INGD), visited Santo Domingo for a five-day learning exchange. The visit was hosted by Dominican institutions including Supérate, SIUBEN, and ADESS, with support from WFP Country Offices and financial backing from the People's Republic of China and the EU's ECHO.

The exchange was rooted in the Dominican Republic's notable advancements in Adaptive Social Protection and Anticipatory Action, including the implementation of tools such as the Basic Emergency Form (FIBE) and the Climate Shock Vulnerability Index (IVACC) to improve targeting. These innovations were of relevance to

Mozambique, where institutions seek to improve the targeting, interoperability, and proactive capacity of their emergency response systems.

The Mozambican delegation also shared their pioneering work on drought-focused anticipatory actions through the SAP-Seca early warning system, demonstrating their unique experience in applying Forecast-Based Financing (FbF) in the African context.

Through technical deep-dives, site visits, and policy dialogues, the exchange enabled both countries to identify actionable insights for strengthening their own systems.

The Dominican side gained exposure to operational lessons from Mozambique's anticipatory cash transfer models, while Mozambique drew inspiration from the Dominican Republic's highly interoperable social registry, digital payment infrastructure, and data-driven beneficiary targeting strategies. The dialogue was not unidirectional but rather a mutual learning experience that embodies the core spirit of SSTC - knowledge sharing between equals.

KEY MILESTONES

Initial dialogue between WFP Country Offices in Mozambique and Dominican Republic, supported by the WFP CoE in China and Regional Bureau in Panama.

JUNE 2023

01



02



AUGUST 2023

Scoping call held between WFP HQ, RBP, and both COs to identify shared priorities in shock-responsive social protection and anticipatory action.

Exchanged concept note and agenda finalized, with participation confirmed by both governments.

SEPTEMBER 2023

03



04



NOVEMBER 2023

Five-day in-person exchange hosted in Santo Domingo: technical visits to Supérate, SIUBEN, ADESS; dialogue on IVACC, FIBE, and cash readiness mechanisms.

Exchange outcomes documented and shared; Mozambique expresses intent to adapt IVACC and FIBE models to national context.

DECEMBER 2023

05



06



Q1 2024

WFP supports Mozambique in drafting an internal roadmap to pilot adaptations based on the Dominican Republic models.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- Support the Dominican Republic in exploring the implementation of Anticipatory Action (AA) in drought management.
- Facilitate further study for Mozambican authorities on the use of targeting tools such as FIBE and IVACC.

KEY LESSONS LEARNED

Some key lessons learned include:

- **Importance of inter-institutional coordination:** The experience showed that effective collaboration between different institutions, both at the governmental level and in disaster management and social protection organizations, is essential for a timely and effective response to emergencies. Mozambique recognized the need to strengthen these partnerships.
- **System interoperability:** Interoperability between social protection systems and disaster risk management is key to ensuring a quick and well-coordinated response.

The visit highlighted the importance of having systems that can effectively exchange data between institutions.

- **Mutual learning through the exchange of experiences:** Both countries shared successful practices in the implementation of anticipatory action and social protection programmes, enriching both delegations by allowing them to learn from each other's successes and challenges. This reinforces the SSTC principle that any country can be both a provider of knowledge and learn at the same time.

NEXT STEPS

As some next steps the two countries will aim to establish a continuous exchange platform to share best practices and advancements, particularly in Shock-Responsive Social Protection (SRSP) within the framework of AA.

Building on the success of the first phase, the two countries agreed on a roadmap for continued collaboration. Mozambique committed to exploring the adaptation of IVACC and FIBE for its own use, and both sides are exploring further exchanges.

WFP, alongside national institutions, is facilitating follow-up actions including joint workplans, system integration discussions, and a knowledge-sharing platform.


The next step will involve a reciprocal visit by Dominican authorities to Mozambique, creating further opportunities to co-develop and localize solutions in shock-responsive social protection and AA.



SSTC Innovate Good Practices

BRAZIL, REPUBLIC OF CONGO

Enhancing Family Farmers' Access to Local Markets in the Republic of Congo Through South-South Cooperation - 'Seeds for Tomorrow'

 BRAZIL, REPUBLIC OF CONGO	Enhancing Family Farmers' Access to Local Markets in the Republic of Congo Through South-South Cooperation - 'Seeds for Tomorrow'.
 OBJECTIVE	Enhance food security in the Republic of Congo by linking school meals to local smallholder farming.
 THEMATIC AREA	School Meals; Smallholder Farmers Support; Food Security; Nutrition.
 PARTNERS ENGAGED	India, Brazil and South Africa Facility for Poverty and Hunger Alleviation (IBSA Fund), United Nations Office for South-South Cooperation (UNOSSC), Brazilian Cooperation Agency of the Ministry of Foreign Affairs of Brazil (ABC/MRE), National Fund for Education Development of the Ministry of Education of Brazil (FNDE/MEC) and Ministry of Agrarian Development (MDA), Ministry of Agriculture, Livestock and Fisheries of the Republic of Congo (MAEP), Ministry of Primary and Secondary Education and Literacy of the Republic of Congo (MEPPSA), WFP Country Office in the Republic of Congo, Centre of Excellence against Hunger in Brazil (WFP Brazil CoE).

BACKGROUND AND CHALLENGE

In the Republic of Congo, food insecurity affects 33.3% of families, with a high prevalence in rural areas, while 19.6% of children under five suffer from chronic malnutrition.

As domestic food production only covers 30% of needs, the country relies heavily on food imports from abroad. Most food processing is artisanal, and food storage and processing practices are generally inadequate, resulting in the loss of products and nutrients.

Major challenges remain in connecting farmers in remote areas to markets and addressing inequalities in women's access to land.

Farmers' associations and the broader agricultural sector in the Republic of Congo have significant potential to support Home-Grown School Feeding (HGSF) programmes.

These associations, composed primarily of small producers such as family farms, cooperatives, and individual farmers, form the backbone of Congolese agriculture, despite using traditional and labor-intensive methods.

Key strengths include consolidated farming communities that enhance production efficiency through collective action, the presence of functioning food and agricultural markets that ensure stable supply chains and the resilient staple production of cassava.

The main difficulties in institutional capacity, at the political and technical levels, include support for smallholder farmers (e.g. access to credit and natural resources), insufficient technical assistance services, poor rural infrastructure, insufficient agricultural modernization, inadequate food storage/ processing practices and equipment

and limited capacity of farmers' associations/ cooperatives and gender inequalities further constrain agricultural productivity.

Addressing these challenges through diversification of agricultural production, investment in

infrastructure and training, and empowerment of women and indigenous people is essential to enhance the sector's contribution to school feeding programmes and overall food security.

SOLUTION

Launched in June 2023, the 'Seeds for Tomorrow' project aims to improve food security and nutritional status of smallholder farmers, their families, and schoolchildren in the Republic of Congo.

The project has two main components:

- 1. Institutional capacity strengthening** for policy makers and technical officials of the Ministry of Agriculture, Livestock and Fisheries and of the Ministry of Pre-school, Primary, Secondary Education and Literacy, at central and local levels, through a "training of trainers" approach and on-the-job coaching; and
- 2. Capacity strengthening at the grassroots level** for family farmer associations/cooperatives in targeted districts, through delivery of equipment, tailored training, and in-field demonstrations by Ministry of Agriculture, Livestock and Fisheries staff. In addition, it seeks to strengthen livelihoods of smallholder farmers through access to school feeding markets.

To achieve these objectives, the project is currently supporting capacity strengthening in 10 schools and 10 smallholders associations of local producers in multiple departments throughout the Republic of Congo.

The Government of the Republic of Congo, the Government of Brazil, and the United Nations Office for South-South Cooperation (UNOSSC) support the project which is facilitated by the WFP Brazil CoE and WFP Republic of Congo, with funding from the IBSA (India, Brazil and South Africa) Fund for Poverty and Hunger Alleviation.

In February, 2025, the Republic of Congo confirmed national commitment to the Global School Meals Coalition, reinforcing its dedication to ensuring school meals for children.



KEY MILESTONES

DECEMBER 2023

Steering Committee meeting and validation of workplan for 2024.

FEBRUARY 2024

Scoping mission and liaison with local authorities and school and farmers' representatives.

MARCH 2024

Study visit to Brazil in Rio de Janeiro to learn from Brazilian expertise.

MAY 2024

Visit to 10 schools and 10 smallholders' farmers pre-identified for the implementation of school feeding programmes.

AUGUST 2024

First of three workshops to exchange best practices and lessons learned between the Governments of Brazil and Republic of Congo.

OCTOBER 2024

WFP and MEPPSA signed a Memorandum of Understanding handing over the 25 schools from WFP to MEPPSA marking the commitment to transition from a WFP-led to a country-led school feeding programme from 2025 to 2030.

NOVEMBER 2024

Multiple workshops held with schools and farmers to prepare and plan the implementation of locally sourced school meals programmes.

DECEMBER 2024

A Congolese delegation composed of two representatives of the Ministry of Pre-school, Primary, Secondary Education and Literacy MEPPSA shared the country's vision for school feeding as well as the results achieved at the 2024 Global Child Nutrition Forum in Japan.

JANUARY 2025

School feeding pilot started in 10 schools.

JANUARY 2025

The Government of the Republic of Congo officially confirmed its national commitment to the Global School Meals Coalition.

KEY LESSONS LEARNED

Some lessons learned include:

- **Strong governance structures are essential for coordination and sustainability and high-level oversight reinforces political commitment and strategic alignment:** The dual governance framework— the Steering Committee for high-level oversight—ensured cross-sectoral collaboration, alignment between Brazil, the Republic of Congo and the Technical Committee and integration of the initiative within national food security and nutrition policies. Frequent engagement supports adaptive management and responsiveness.
- **Government buy-in is critical for long-term sustainability and scale-up:** The project successfully secured government ownership, particularly from the Ministry of Agriculture, Livestock, and Fisheries (MAEP) and the Ministry of Pre-school, Primary, Secondary Education, and Literacy (MEPPSA), ensuring that national authorities played a leading role in decision-making and implementation.
- **Clearly defining roles and responsibilities strengthens implementation and accountability:** Establishing clear mandates from the beginning ensured effective stakeholder engagement, smooth execution, and institutionalization of technical solutions and policy innovations.
- **Contextualizing best practices from SSTC enhances impact:** Combining policy dialogue, training, study visits, and farmer-to-farmer exchanges facilitated the adaptation of relevant lessons from Brazil and other developing countries to the Republic of Congo.

NEXT STEPS

The results of the SSTC exchanges in 2025 will inform the following:

- The revision of the school feeding policy and development of the implementation strategy;
- The design of the 2026-2030 transition plan to pave the way for a longer-term partnership between Brazil and the Republic of Congo for the locally sourced school feeding programme;
- The development of a school feeding partnership and funding mobilization strategy aligned with the 2026-2030 transition plan;
- The development of set of recommendations based on the lessons learned from the pilot in the 10 schools and 10 farmers' cooperatives;
- The development of a series of agriculture practice workshops to enhance the capacity of government staff and farmers organizations.

TESTIMONIALS



"We drafted a school feeding policy, requesting the Government to lead the implementation of the school feeding programme. This challenge led us, along with WFP, to visit Brazil. In this process, we count on the support of our partners, Brazil and WFP. Currently, in the Republic of Congo, school feeding is not yet a consolidated programme, but an initiative supported by WFP and endorsed by the Government. It is important to move forward to implement an effective programme. In the next phase, we will work in collaboration with WFP to explore possible additional actions, including issues of child nutrition."

Mr. Aimé Blaise Nitoumbi, Director General of Development and Partnerships at the Ministry of Planning, Statistics and Regional Integration.



"We are nearby, so it is ideal for us to deliver our products to the school. Otherwise, we would have to go back and forth with the goods, looking for a market to sell our products, and there is no transportation. When products are delivered to the school, payment is received promptly, ensuring part of the cooperative members' income."

Madame Victorine Bisseyou, member of the Matsoukou cooperative, Bouenza.







"We are also parents, so we are already confident in the quality of the products our children will benefit from. When they eat, there is no difference between what they eat at school and what they eat at home. Therefore, there is no need to adapt the flavors for the children. The advantage for us, the cooperative, is that it is a secure market that lasts nine months, so we already have a permanent client."

Kounga-Biby, Secretary-General of the Exa-Gama Agricultural Cooperative, Bouenza.

LESOTHO, MADAGASCAR, MOZAMBIQUE, ZIMBABWE, MALAWI

Fostering Community Resilience in Southern Africa by Strengthening Urban Preparedness Systems

 LESOTHO, MADAGASCAR, MOZAMBIQUE, ZIMBABWE, MALAWI	Fostering Community Resilience in Southern Africa by Strengthening Urban Preparedness Systems.
 OBJECTIVE	Better prepare for an upcoming urban emergency, thus reducing the number of affected people by disaster and respond to an ongoing urban emergency, thus improving the assistance provided to affected populations.
 THEMATIC AREA	Emergency Preparedness and Response.
 PARTNERS ENGAGED	Southern African Development Community (SADC) Secretariat, Chartered Institute of Management Accountants (CIMA), World Vision, Northwest University of South Africa, Disaster Management Authorities in Mozambique (INGD), Lesotho (DMA), Madagascar (BNGRC), Zimbabwe (DCP), National Vulnerability Assessment Committees (NVACs) in Mozambique (SETSAN), Lesotho (LVAC), Madagascar (MVAC). Municipalities of Antananarivo in Madagascar (CUA), Municipality of Beira in Mozambique, Urban Council of Leribe in Lesotho, and Municipality of Gweru in Zimbabwe.

BACKGROUND AND CHALLENGE

The rapid expansion of unplanned cities in Southern Africa has reshaped the landscape of humanitarian response. Traditionally focused on rural areas, the attention is now shifting as urban needs are confronted with multi-layered crises, extreme weather events, conflicts, and the complex dynamics of urban governance.

Currently, 59 million people are food insecure due to climate-induced challenges, including prolonged El Niño dry spells, flash floods, and the La Niña phenomena during the 2024–2025 rainy season.

These compounding crises are further exacerbated by urban vulnerabilities such as poverty, unemployment, and inequality, against a backdrop of rapid urbanization expected to reach 70% by 2050.

Addressing these challenges requires strong urban preparedness mechanisms and coordinated regional action.

While disasters have become increasingly urban, there are key gaps in integrating vulnerability data to create risk-informed policies and preparedness planning in the region.

One of the key questions the project set out to answer was how we enhance urban vulnerability assessment frameworks and embed them within national policy: the rationale behind this investigation is the understanding that knowing the nuances of urban vulnerability would ultimately strengthen governance and decision making and optimize disaster response, by ensuring the most marginalised communities within the most vulnerable locations are reached in a dignified manner.

SOLUTION

In response to the increasing complexity of urban crises and the evolving nature of vulnerability in Southern Africa, WFP and the Southern African Development Community (SADC) established a strategic partnership in 2021 to enhance national and regional urban preparedness systems.

This initiative, leveraging SSTC, brings together Disaster Management Authorities (DMAs), National Vulnerability Assessment Committees (NVACs), and regional institutions to build sustainable, evidence-based systems for addressing urban vulnerability and enhancing emergency logistics.

In four pilot countries—Madagascar, Mozambique, Zimbabwe, and Lesotho—WFP and partners are supporting the integration of innovative technologies such as Unmanned Aerial Vehicles (UAVs) and Machine Learning, alongside the Essential Needs Analysis (ENA) framework, into national Vulnerability Assessment and Analysis (VAA) systems.

This approach equips governments with robust socio-economic, demographic, and geospatial tools to identify, map, and monitor vulnerable populations in urban areas. These data-driven methods are enabling DMAs to develop city-specific risk profiles, conduct simulation exercises, and

design evaluation plans rooted in real-time needs and capacities.

Beyond national implementation, these tools and approaches have been showcased in regional and international platforms to promote peer learning and facilitate the adaptation of best practices across countries. The goal is to enable governments to manage urban crises more effectively through structured, forward-looking approaches grounded in harmonized data.

A second focus area of the initiative—developed in close partnership with the SADC Secretariat—leverages existing regional platforms to facilitate collaboration among Member States in the areas of urban vulnerability assessments and logistical prepositioning.

Through this component, countries work together to share best practices, build regional interlinkages, and co-develop standardized tools and protocols to manage emergencies across borders.

These joint efforts are laying the groundwork for a more cohesive, coordinated, and resilient regional response architecture that reflects the growing urbanization of risk and complexity of modern emergencies.



KEY STEPS FOR IMPLEMENTING THE INITIATIVE

In 2021, WFP and SADC formalized their collaboration to strengthen urban resilience in the region. Working jointly with DMAs and NVACs, the initiative focused on two primary workstreams:

- 1) Strengthening urban vulnerability analysis,
- 2) Enhancing regional logistics preparedness.

A. Advancing Urban Vulnerability Analysis RVAA Integration:

The Regional Vulnerability Assessment and Analysis (RVAA) Programme, a key policy and planning tool in SADC, was selected as the entry point for mainstreaming urban analysis. A multidimensional urban vulnerability and Emergency Needs Assessments (ENA) approach was introduced into the RVAA methodology.

The 2023 RVAA Report featured a dedicated section on urban vulnerability for the first time, presenting findings from the four pilot countries on socio-economic risks and the cost of essential needs in urban settings. These insights were presented at RVAA forums, encouraging other Member States to explore the integration of urban methodologies.

In 2025, WFP, CIMA, and the Governments of Lesotho and Mozambique co-facilitated a technical session at the Regional Vulnerability Assessment Programme Annual Organizational (AOM) Meeting on enhancing the urban vulnerability framework, with a focus on geospatial layering and data integration.

The initiative has since attracted interest from other

Member States, including Small Island Developing States (SIDS), who are now exploring collaboration to strengthen their own urban VAA systems.

B. Strengthening Regional Logistics Linkages and Capacity

In 2024, WFP and Malawi's Department of Disaster Management Affairs hosted a regional peer exchange with SADC's Humanitarian Operations Centre (SHOC) and government partners from Madagascar, Malawi, Zambia, and Zimbabwe:

- Establishing a regional prepositioning strategy.
- Adopting a regional policy framework for emergency logistics and cross-border movement of humanitarian cargo.
- Creating standardized trigger mechanisms and advocating for sustainable funding pathways.

In partnership with the Centre for African Disaster Studies at Northwest University, WFP and regional actors conducted a comprehensive logistics capacity assessment, including:

- Mapping of current prepositioning infrastructure and capabilities.
- Development of a regional logistics strategy and activation protocols.
- Design of common alerting mechanisms to enable coordinated cross-border response.

These steps aim to enhance cross-border coordination, support knowledge exchange, and improve operational readiness for transboundary shocks.

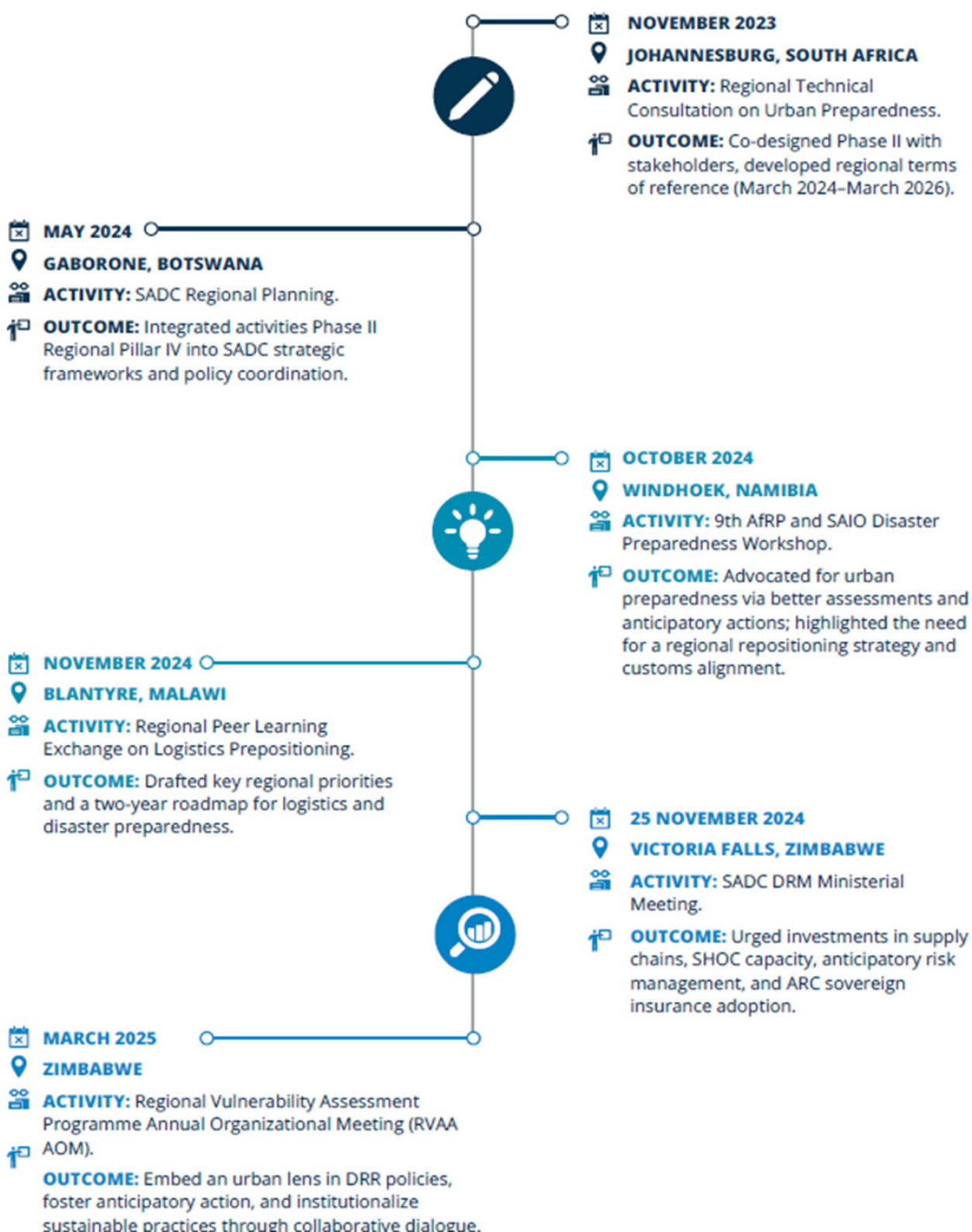
TESTIMONIAL



"Through our collaborative efforts with WFP and other humanitarian actors under a regional initiative for urban preparedness in Southern Africa that tackling these challenges requires joint action by aligning our resources and knowledge, we can reduce urban vulnerabilities and enhance resilience to climate change and extreme weather events... Urban preparedness, in short, is not just about responding to crisis, but about fostering partnerships and resilience as such."

From the opening remarks of Marco Varrenti, ECHO Lesotho Representative, National Dialogue for Disaster Preparedness, January 2025, Maseru, Lesotho.

TIMELINE OF REGIONAL ENGAGEMENTS:



KEY LESSONS LEARNED

Challenges

- **Political Timeline and Competing Agendas:** Key activities such as the National Dialogue experienced delays due to shifting political schedules.
- **Political Instability:** Political transitions disrupted planned project activities and limited stakeholder engagement in certain countries.
- **Lack of Disaster Risk Management (DRM) Structures:** Cities face increased vulnerability due to absent disaster management systems
- **Coordination Bottlenecks:** Complex bureaucratic procedures slowed decision-making and impeded cohesive and timely emergency responses.

Lessons Learned

- **Incorporate a Participatory and Inclusive Approach:** Effective multi-stakeholder coordination – including national and local

governments, private sector, academia, and other partners, is essential for building ownership and relevance.

- **Programme with Flexibility and Foresight:** Political shifts are often unpredictable; adaptive planning and structured handover mechanisms are key to maintaining project continuity.
- **Investing in Local Analytical Capacity:** Strengthening technical skills of national and local government counterparts is critical to ensure timely data collection, analysis, and reporting.
- **Establish Urban DRM Structures:** The absence of localized disaster management systems at the city level—characterized by the lack of urban-specific units within national Disaster Management Authorities and the absence of dedicated DRM offices within municipalities—limits the development of effective, vulnerability-based preparedness protocols in urban contexts.

NEXT STEPS

In 2025, the project will focus on integrating the key findings into national systems and regional frameworks for urban preparedness and response, including those of SADC.

To further support peer learning, a high-level SSTC policy dialogue is planned in 2025, bringing together government representatives from Lesotho, Mozambique, Madagascar, and Zimbabwe. Each country will showcase its comparative strengths—from Lesotho's work on setting context-appropriate transfer values to Mozambique's advancements in urban mapping using UAVs.

A series of engagements planned for 2025 both at national and regional level will aim to:



- **Integrate Urban VAAs:** Embed urban vulnerability assessments into national frameworks to enhance risk-informed governance.
- **Enhance Local Response Capacity:** Focus on capacity-building initiatives to improve localized urban humanitarian efforts.

- **Establish Urban Risk Units:** Create dedicated units within DMAs to drive Urban Resilience Action Plans.
- **Develop Financial Mechanisms:** Create funding models to support urban resilience initiatives sustainably.
- **Strengthen Forecasting Systems:** Establish multi-hazard forecasting to better prepare for logistical demands in disaster scenarios.



PHILIPPINES, INDONESIA

Philippines and Indonesia Leverage SSTC for Mobile Kitchen Solutions

 PHILIPPINES	Philippines and Indonesia leverage SSTC for mobile kitchen solutions.
 OBJECTIVE	The objective of the SSTC exchange is to strengthen the Philippine Government's emergency preparedness and response capacities by learning from Indonesia's mobile food kitchen model—focusing on its technical design, operational deployment, and integration within national disaster response frameworks.
 THEMATIC AREA	Emergency Preparedness and Response.
 PARTNERS ENGAGED	National Disaster Risk Reduction and Management Council (NDRRMC), Department of Social Welfare and Development (Disaster Response Management Group (DRMG)), Indonesian Ministry of Social Affairs (MoSA), Badan Nasional Penanggulangan Bencana (BNPB), Provincial Social Affairs Office in Bandung, West Java; Ministry of Social Affairs (TAGANA), ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre), WFP Philippines Country Office, WFP Indonesia Country Office.

BACKGROUND AND CHALLENGE

Natural disasters are a major driver of food insecurity, disrupting access to nutritious food and prolonging recovery for vulnerable communities.

In the Philippines—one of the most disaster-prone countries globally—frequent typhoons, floods, earthquakes, and droughts place millions at risk each year.

Ranked as the most disaster-exposed country by the World Risk Index 2022, the Philippines faces an average of 20 tropical cyclones annually, along with recurrent droughts linked to El Niño and nearly 900 earthquakes.

In emergencies, displaced families often seek shelter in evacuation centers, where immediate access to food and water is critical. While local governments are working to establish community kitchens, rapid deployment of food assistance and logistical assets remains essential to bridging urgent gaps and safeguarding food security in crisis settings.

SOLUTION

In 2023, the Government of the Philippines, through the Department of Social Welfare and Development (DSWD), partnered with WFP to strengthen national emergency preparedness and response capacities.

As part of a multi-year strategy developed

under the guidance of the National Disaster Risk Reduction and Management Council (NDRRMC), WFP worked closely with national agencies to identify critical gaps in disaster response, particularly around timely food assistance for displaced populations.

Following a formal request from DSWD in March 2023, WFP collaborated with government counterparts to co-design a mobile food kitchen—a scalable solution to support rapid meal preparation in evacuation centers and hard-to-reach areas during emergencies.

Drawing on global best practices, the design was inspired by WFP’s “Kitchen-in-a-Box” model and the Philippine Red Cross’ “Hot Meals on Wheels” programme.

To further inform the design and operational planning, WFP brought in experts from its headquarters to facilitate knowledge exchange with

Indonesia’s National Disaster Management Agency (BNPB) in late 2023. Building on this engagement, a SSTC mission between the Philippines and Indonesia was conducted in April 2024, enabling DSWD and NDRRMC officials to gain first-hand insights into the deployment and management of mobile kitchen units in disaster settings.

This initiative reflects the Government’s proactive leadership in strengthening food security during emergencies and highlights WFP’s role as a trusted technical partner in advancing national response systems.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- **Conduct Regional Learning Exchange:** Facilitate exposure visits to countries with operational mobile kitchen models—such as Indonesia—to gain practical insights into deployment strategies, food safety protocols, and kitchen operations.
- **Engage with National and Sub-National Actors:** Consult with government institutions like the Ministry of Social Affairs and local disaster response offices to inform technical design, training frameworks, and integration into national emergency systems.
- **Review Policy and Coordination Structures:** Meet with disaster management agencies to understand the enabling policy environment and how mobile food kitchens can align with broader emergency preparedness and response frameworks.
- **Leverage Regional Mechanisms:** Engage with the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) to understand regional disaster coordination mechanisms, early warning systems, and opportunities for cross-border support through ASEAN structures.
- **Incorporate Learnings into National Design:** Apply insights from the exchange to refine the design of the mobile food kitchen model in the Philippines and inform the development of related policies, Standard Operating Procedures (SOPs), and training curricula.



KEY LESSONS LEARNED

- **Peer-to-Peer Learning Strengthens National Systems:** The exchange provided a valuable platform for government officials from the Philippines and Indonesia to share experiences and explore emerging strategies in emergency preparedness and response (EPR), including early warning systems, resource prepositioning, and technological innovations.
- **Practical Exposure Informs Operational Planning:** Firsthand demonstrations of Indonesia's mobile kitchen operations offered critical insights into real-time deployment, logistics, and functionality, supporting more informed planning for the Philippine context.
- **Importance of Multi-Level Coordination:** The delegation gained a deeper understanding of how Indonesia coordinates over 500 mobile kitchen units across national and sub-national levels, including the role of trained community volunteers in sustaining operations.
- **Focus on Food Safety and Nutrition Standards:** Onsite learning emphasized the essential role of food quality, safety, and nutrition in emergency feeding solutions—critical components for effective and accountable response.
- **Understanding Regional EPR Architecture:** Engagement with the ASEAN AHA Centre provided strategic insight into regional coordination mechanisms, reinforcing the Philippines' role in cross-border collaboration and access to broader humanitarian support systems.

NEXT STEPS





Outlined below are the next key actions and initiatives, as mutually agreed upon, to sustain our partnership:

- **Operationalization and Scale-Up:** WFP has handed over one prototype mobile kitchen to the Government, while DSWD has procured an additional 15 units using national resources—marking a strong commitment to institutionalizing the solution.
- **Policy, Procedures, and Capacity Development:** WFP will support DSWD in developing an organizational policy and standard operating procedures for mobile kitchen operations, alongside co-developing a training curriculum with the DRMG to build capacity at the sub-national level.
- **Sustained Learning and Coordination:** In collaboration with NDRRMC, DSWD will map existing kitchen solutions to inform training needs. WFP will continue providing technical assistance and facilitate an online SSTC activity to strengthen cross-country learning and long-term partnership.



PHILIPPINES

The Philippines Participates in a Learning Exchange Visit to the UN Humanitarian Response Depot Leveraging SSTC with Malaysia

 PHILIPPINES	The Philippines Participates in a Learning Exchange Visit to the UN Humanitarian Response Depot Leveraging SSTC with Malaysia.
 OBJECTIVE	To strengthen the Philippines' national emergency preparedness and response by advancing logistics system digitalization, institutionalizing training, expanding field-level exercises, and fostering regional and humanitarian partnerships for more coordinated and effective disaster response.
 THEMATIC AREA	Emergency Preparedness and Response.
 PARTNERS ENGAGED	National Disaster Risk Reduction and Management Council (NDRRMC) - Office of the Civil Defense (OCD), Department of Foreign Affairs (DFA), and Department of Social Welfare and Development (DSWD), Ministry of Social Services and Development (MSSD) and Ministry of Interior and Local Government (MILG) of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), National Disaster Management Agency (NADMA), Mercy Malaysia, Australia's Department of Foreign Affairs and Trade (DFAT).

BACKGROUND AND CHALLENGE

The Philippines, one of the most disaster-prone countries globally, continues to face frequent climate-related shocks that challenge the efficiency of national and local disaster response systems—particularly in humanitarian supply chain management.

Despite progress in preparedness, operational bottlenecks persist due to limited technical capacity, coordination gaps, and outdated logistics systems, especially at the sub-national level.

SOLUTION

In response to persistent challenges in humanitarian logistics and disaster response systems, the Government of the Philippines, with support from WFP, is strengthening national emergency preparedness through the Preparedness and Response Excellence in the Philippines (PREP) initiative.

Recognizing the importance of a responsive and efficient supply chain, government agencies have prioritized strengthening logistics capacity and digitalizing systems to improve the visibility and effectiveness of relief operations.

These efforts present a strategic opportunity for WFP to collaborate with national counterparts in co-developing scalable, sustainable solutions that reinforce the country's emergency response architecture.

This multi-year, multi-donor effort aims to enhance the resilience and responsiveness of the country's disaster logistics infrastructure.

Under the leadership of the National Disaster Risk Reduction and Management Council (NDRRMC) and key implementing agencies, including the

Department of Social Welfare and Development (DSWD) and the Office of Civil Defense (OCD), the Philippines Government is working to close critical supply chain gaps. With support from Australia's Department of Foreign Affairs and Trade (DFAT), PREP is advancing the digital transformation of asset management systems, promoting policy and institutional reforms, and strengthening operational hubs with a climate-resilient lens.

A cornerstone of this collaboration is the enhancement of the Humanitarian Supply Chain Management Training Course, designed to build technical capacity at both national and sub-national levels and improve inter-agency coordination in logistics operations.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

The learning visit was a four-day activity that aimed to provide Philippine delegates with in-depth understanding of the management of humanitarian hubs and training facilities.

This initiative also served as a platform for the delegates to gain more insights into warehouse design and establishment, information systems, mobilization and deployment, among others.

To complement these efforts with global expertise, WFP organized a technical learning visit to the United Nations Humanitarian Response Depot (UNHRD) in Subang, Malaysia.

This exposure laid the groundwork for a SSTC exchange between the Philippines and Malaysia in June 2024, focused on warehouse management, asset tracking, and training innovation—further reinforcing the Philippines' commitment to professionalizing and modernizing its humanitarian logistics system.

The SSTC learning exchange translated into real-time impact during the 2024 typhoon season.

Senior officials from DSWD and OCD applied lessons on strategic logistics and coordination, playing key roles in emergency meetings with the President. Their joint leadership reflected improved inter-agency collaboration and decision-making, directly influenced by the South-South learning experience.



KEY MILESTONES

FEBRUARY 2024

Initial concept developed for a regional learning exchange under the Preparedness and Response Excellence in the Philippines (PREP) initiative.

MARCH 2024

Coordination meetings held between WFP Philippines and UN Humanitarian Response Depot (UNHRD) Malaysia to discuss potential collaboration and visit structure.

APRIL 2024

Internal planning and alignment meetings conducted with key Philippine Government partners, including the Department of Social Welfare and Development (DSWD), the Office of Civil Defense (OCD), the Department of Foreign Affairs (DFA), and the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM).

MAY 2024

Finalization of the learning visit agenda and participant list; logistical and administrative arrangements initiated in coordination with UNHRD and WFP Malaysia.

JUNE 2024

Learning Exchange Visit conducted in Malaysia, featuring sessions with UNHRD, National Disaster Management Agency (NADMA), and other key institutions; official launch of SSTC between the Philippines and Malaysia.

Post-visit debrief conducted with participating agencies to capture key takeaways, identify next steps, and align follow-through actions.

JUNE 2024 ONWARDS

Follow-up activities initiated, including review of training course enhancements and continued collaboration with the Philippine Government.

NEXT STEPS

- Advance digitalization of relief inventory systems and review joint priorities to strengthen logistics and supply chain capacity.
- Finalize and institutionalize the Humanitarian Supply Chain Management Training Course, including development of training materials.
- Prepare for the 2026 Field Logistics Exercise

KEY LESSONS LEARNED

Following the learning visit, WFP conducted an online evaluation to gather participant feedback on both the content and logistical arrangements.

The majority of participants rated the visit positively, citing the relevance of the sessions, quality of facilitation, and value of cross-country learning.

Key recommendations included extending the visit duration to allow for deeper engagement, increasing interactive and hands-on learning opportunities, and incorporating additional site visits to logistics facilities.

Participants also highlighted the importance of peer exchange and suggested dedicated sessions for sharing national experiences and best practices in humanitarian logistics.

"The learning visit gives a great opportunity for all to learn and see how it can be applied in our respective organizations. It also gives opportunity for networking."

"[The highlight of the activity is] the establishment of UNHRD in Malaysia. This only shows that collective efforts and commitment between various agencies is essential in achieving long term goals."

"[The highlight of the activity is] sharing and acquiring of relevant experiences and lessons learned from these experiences."




(FLEX) to test coordination and response mechanisms.

- Conduct capacity mapping and formalize future collaboration through updated agreements.
- Explore opportunities for regional partnerships and expand the presence of humanitarian actors to enhance response capabilities.

HIGHLIGHT ON INNOVATIVE EXPERTISE

NAMIBIA

Permaculture Food Circle: Utilizing Grey Water in Resource-Limited Environments

 NAMIBIA	Permaculture Food Circle: Utilizing grey water in resource-limited environments.
 OBJECTIVE	To improve food security and livelihoods in Namibia's informal settlements by promoting sustainable urban agriculture through household gardens, local food production, and skills training in Permaculture.
 THEMATIC AREA	Environmental Sustainability and Climate Resilience; Food Security and Nutrition.
 PARTNERS ENGAGED	Ministry of Agriculture, Water & Land Reform, Ministry of Urban and Rural Development, Kambashu Institute, World Future Council (WFC), GIZ Namibia (Deutsche Gesellschaft für Internationale Zusammenarbeit), Namibia Permaculture Network Nutrition and Food Security Alliance of Namibia, Namibia Nature Foundation, University of Namibia, the Regional Centre of Excellence against hunger and malnutrition in Côte d'Ivoire (CERFAM).

BACKGROUND AND CHALLENGE

Namibia, home to approximately 3 million people, faces mounting socio-economic challenges, particularly in urban centres like Windhoek, where nearly one-third of the population lives in informal settlements.

These areas often lack access to clean water, sanitation, and electricity, contributing to ongoing public health risks. As of September 2024, 1.26 million people—41% of the population—were experiencing acute food insecurity, driven by persistent drought, economic shocks, and the impacts of El Niño, which have significantly reduced agricultural productivity and employment.

SOLUTION

In response to food insecurity, water scarcity, and environmental vulnerability in Windhoek's informal settlements, the Kambashu Institute has introduced the Permaculture Food Circle—a low-cost, climate-

The rapid growth of informal settlements has further strained the capacity of local authorities to deliver basic services, with limited financial resources and unclear land tenure compounding the issue.

In this context, urban agriculture presents a promising solution. By supporting local food production and building community capacity, particularly among women and youth, such initiatives can strengthen food security, promote sustainable livelihoods, and improve resilience in underserved urban areas.

smart solution rooted in circular urban agriculture.

This household-level model reuses grey water (lightly used household wastewater, typically from sinks, laundry, or bathing) and applies permaculture

principles (design guidelines that mimic natural ecosystems) to boost food production, improve nutrition, and strengthen livelihoods, particularly for women and youth.

Each food circle optimizes productivity in small spaces, providing six linear meters of growing area in a compact two-meter diameter. This has led to a marked improvement in household diets, with families gaining regular access to nutrient-rich vegetables such as spinach, onions, and herbs.

The approach also encourages sustainable practices, including composting, water harvesting, and waste recycling.

Participatory training delivered by the Kambashu Institute equips residents with technical skills, while empowering local trainers to become microentrepreneurs and community leaders.

Supported by the Namibian Permaculture Network, World Future Council, GIZ Namibia, and academic

institutions, the initiative demonstrates strong potential for scale and replication, aligning national strategies for food security, climate resilience, and inclusive urban development.

Officially, the Government of Namibia, through its ministries responsible for agriculture, urban development, and environmental affairs, has provided decisive political and strategic support to foster the development of local innovations such as the Permaculture Food Circle.

Its commitment to sustainable food systems and community-driven solutions has been essential in creating an environment where such initiatives can thrive.

GIZ Namibia, in partnership with the Namibian government, has played a key role by providing technical assistance, supporting training programmes, and promoting knowledge exchange between communities and policymakers.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- **Community Engagement and Capacity Strengthening:** Raise awareness on food security and sustainable practices, while equipping residents—particularly women and youth—with hands-on training in climate-smart agriculture, composting, and grey water use.
- **Economic Empowerment and Environmental Sustainability:** Promote microenterprise development in vegetable production and composting, while integrating environmentally sustainable practices such as waste recycling and grey water irrigation to build climate resilience.
- **Implementation of Household Food Circles:** Support the establishment of small-scale, water-efficient gardens using permaculture principles to enhance nutrition, optimize space, and increase household-level food production.
- **Partnerships, Research, and Scale-Up:** Collaborate with NGOs, academic institutions, and development partners to monitor impact, share knowledge, and integrate urban agriculture into local planning—laying the groundwork for

“I had the privilege of visiting all the nominated food circles, and I must say, I was thoroughly impressed by what I saw. These communities, with limited resources, have been able to cultivate kale, spinach, onions, and even trees throughout the winter months. It’s not about the resources they start with, but about how they utilize what they have. The creativity and resourcefulness of these individuals truly exemplify the potential of permaculture to enhance food security and environmental sustainability. These gardens are living proof that innovation and perseverance can make a significant impact, even in resource-constrained settings.”

Temapo Johannes Negongo, Horticulture Teacher, and Board Member of the Namibian Organic Association.

2016 – 2018

Initial Awareness and Planning Phase

- Recognition of the growing food insecurity, water scarcity, and environmental degradation in Windhoek's informal settlements.
- Community leaders, local NGOs, and early adopters began exploring sustainable agriculture techniques.
- Introduction of permaculture concepts and grey water reuse by environmental advocates and educators in urban areas.

2019 – 2020

Establishment of Pilot Projects

- Urban Permaculture Programmes at an urban farm in Windhoek's informal settlements.
- Launch of initial capacity-building programmes focusing on composting, permaculture design, and water-efficient techniques.
- Early collaboration with the Namibia Permaculture Network and local grassroots groups.

2021

Scaling Partnerships and Institutional Support

- Founding of the Kambashu Institute.
- Strategic partnerships formed with World Future Council (WFC), and GIZ Namibia.
- Integration of climate resilience and grey water reuse into the urban farming curriculum.

2022

Formalization and Expansion of the Initiative

- Full-scale implementation of the Permaculture Food Circle model in multiple settlements.
- Establishment of grey water-fed gardens and compost systems at household level.
- Launch of women- and youth-led microenterprises focused on vegetable production, compost sales, and garden services.

2023

Research, Advocacy, and Visibility

- The initiative gained regional recognition as a model for urban climate resilience and circular economy practices.
- Documentation of the initiative by CERFAM.

2024

Institutionalization and Policy Integration

- Expansion of gardens to new informal settlements.
- Training-of-trainers programmes launched to ensure local ownership and sustainability.

2025 AND ONWARD

New Goals and Replication

- Expand reach to more informal settlements of Windhoek.
- Emphasize ongoing research to refine techniques.
- Design and prototyping of further permaculture-based solutions such as dry toilets, waste management systems.

KEY LESSONS LEARNED

The Permaculture Food Circle initiative in Namibia demonstrates how community-led, climate-smart agriculture can address urban food insecurity in low-resource environments. Key lessons include:

- **Locally Led and Inclusive Design:** Active engagement of communities—particularly women and youth—in co-design ensures relevance, ownership, and sustainability. Participatory methods also foster social cohesion and collective responsibility.
- **Adaptable, Scalable Solutions:** The use of compact, household-level food circles demonstrates how small-scale, low-cost interventions can significantly improve nutrition,

enhance resilience, and be scaled across similar urban contexts.

- **Capacity Building and Economic Empowerment:** Hands-on training in sustainable agriculture and water-efficient practices has empowered residents to improve food security and establish microenterprises, supporting longer-term self-reliance.
- **Context-Specific Innovation and Regional Learning:** Continuous prototyping and adaptation to local conditions, combined with strategic knowledge sharing, have positioned the initiative as a replicable model for other urban, resource-limited settings.

NEXT STEPS

The initiative has proven its value in enhancing food security, promoting environmental stewardship, and strengthening community resilience in Windhoek's informal settlements. Looking ahead, key priorities include:

- Scaling to additional settlements in Namibia and exploring replication across Southern Africa.
- Continued investment in capacity building, technology, and systems to support sustainability.

- Integration into national frameworks for sustainable agriculture, water management, and climate resilience.
- Strengthening partnerships with government, development actors, and the private sector to expand reach and institutional support.

This initiative presents a compelling example of how locally led innovation can drive transformative change in urban resilience.

TESTIMONIAL



"I've created my little food forest right around my house, where I care for each plant as if it were family. I greet them every morning and evening, even talk to them! Right now, we always have something fresh from the garden—spinach and carrots, beans, and soon fruits like strawberries, lemons, and grapes. The Permaculture Food Circle approach has transformed the way I think about food production and sustainability. It's not just about growing food, but about creating a relationship with nature. My garden is my livelihood, and I feel empowered to feed my family with what I cultivate right outside my door."

Lucia Haitembu (53), Winner of the Food Circle Prize in Gold, Goreangab (August 2024).

DEMOCRATIC REPUBLIC OF THE CONGO

Feeding the Future – Empowering Women and Building Resilient Communities Through School Meals

 DEMOCRATIC REPUBLIC OF THE CONGO (DRC)	Feeding the Future – Empowering women and building resilient communities through school meals.
 OBJECTIVE	To enhance community resilience and women's empowerment through an integrated Home-Grown School Feeding approach, linking local food production, school meals, and sustainable livelihoods in informal and rural settings.
 THEMATIC AREA	Home-Grown School Feeding; Climate-Resilient Agriculture; Nutrition and Livelihoods.
 PARTNERS ENGAGED	Ministries of Agriculture and Education of DRC, RENAHER, Bolingo Women Group, Community-Based Organizations, Farmers' Organizations in DRC, Education and Agriculture Ministries and Cooperative Partners of Benin, WFP.

BACKGROUND AND CHALLENGE

The Democratic Republic of the Congo (DRC) faces widespread food insecurity, particularly in rural and peri-urban areas like Nsele, Kinshasa. Many schools lack the resources to provide regular, nutritious meals, contributing to school dropouts—especially among girls—and weakening education outcomes.

Women, who are central to household and community food systems, face limited access to training, markets, and financial opportunities. At the same time, smallholder farmers struggle with low productivity and limited resilience to climate shocks.

Local food systems remain disconnected from school feeding programmes, missing opportunities to support livelihoods, improve nutrition, and strengthen community resilience.

A more integrated, inclusive approach is needed—linking school meals to local agriculture, empowering women, and building sustainable food systems.

SOLUTION

In response to national priorities on education, nutrition, and women's empowerment, the Government of DRC, with support from WFP, launched a locally anchored model that links school feeding to sustainable agriculture and community resilience in 2023.

Under the leadership of the Ministries of Agriculture and Education, and in coordination with women's associations and local authorities, the initiative delivers daily ready-to-eat cassava-based meals—enriched Chikwangue—to 375 students at Ignye

Primary School in Kinshasa's Nsele district.

This integrated approach builds on government efforts to operationalize home-grown school feeding (HGSF) as a lever for rural development and food systems transformation.

Women's groups, like the Bolingo Women Group, are engaged as service providers, while farmers receive government-supported training on agroecology, irrigation, and value chain development.

School gardens and community fields produce key crops such as cassava, palm oil, and vegetables, supported by the installation of RRT service kits—government-linked infrastructure providing water, solar power, and space for agro-processing and entrepreneurship.

The Bolingo group, completed an intensive training programme designed to enhance their knowledge and skills in agriculture and agri-food production. The comprehensive curriculum covered a diverse array of topics, including advanced cassava cultivation techniques, and the Smallholder Horticulture Empowerment and Promotion (SHEP) approach, intended to optimize small-scale horticultural outputs.

Recognizing the importance of holistic empowerment, the training also incorporated modules on financial management and essential hygiene practices. Complementing these foundational skills, the programme facilitated the implementation of income-generating activities predicated on the utilization of the RRT Kit, aiming to bolster the community's overall economic resilience.

In April 2024, a delegation of government officials from the DRC participated in a South-South learning exchange in Benin, organized in collaboration with WFP.

This exchange, hosted by the Government of Benin, centered on the strategies employed by national institutions to support women's cooperatives in the production and supply of food to local schools, with a particular focus on Benin's model for fostering income-generating activities (IGAs) within these groups.

Through carefully curated site visits and constructive policy dialogues, the DRC delegation gained firsthand exposure to concrete mechanisms for institutionalizing local procurement practices, formalizing women-led enterprises, and aligning school feeding programmes with national agricultural strategies.



Inspired by the insights gleaned from the Benin experience, the DRC is actively integrating these learnings into its own national framework. With dedicated support from the Ministries of Agriculture and Education, new policies are being formulated to promote cassava-based school feeding initiatives and to expand crop diversification, can also introduce vitamin A-rich, orange-fleshed sweet potatoes.

The exchange mission to Benin, facilitated by WFP through SSTC and conducted in partnership with the Ministries of Education and Agriculture, provided the DRC with invaluable lessons for optimizing its national policies related to food security and nutrition.

Specifically, the DRC gained valuable insights from Benin's models for developing community-based school canteen programmes and structuring IGAs for women's and men's groups, focusing on processing local agricultural products. This proactive approach demonstrates a firm commitment to leveraging regional best practices to sustainably improve food and nutritional security within Congolese schools, prioritizing local and sustainable approaches.

In January 2025, the Inye School, located near the Bolingo community field, established a communal school canteen with the support of WFP. This initiative guarantees the daily provision of approximately 373 nutritious meals, facilitated by a collaborative sourcing model that actively engages parents of the students.

This approach not only ensures a consistent

supply of nourishing food for the children but also stimulates the local economy through the direct purchase of agricultural products from local farmers, thereby guaranteeing access to fresh, high-quality ingredients.

The Bolingo community contributes to the project's sustainability by providing catering services, while the students' parents maintain a dedicated school garden and cultivate a community field to produce fresh produce destined for the school meals.

Surplus production resulting from these endeavors is commercialized, with all generated revenue being fully reinvested in the canteen's operations and the school itself.

Complementing these sustainable activities, regular awareness campaigns focusing on child protection, hygiene, and sanitation are conducted, aiming to strengthen the competencies of all actors and stakeholders involved in promoting the well-being and academic success of the students.

This initiative serves as a compelling model of how government-led, community-driven innovation—amplified through SSTC—can effectively transform food systems, empower women, and build resilient futures for children by fostering sustainable food production and enhancing access to nutritious meals within educational settings.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- Introduced ready-to-eat cassava meals for 375 children daily in Kinshasa's Nsele commune.
- Supported women-led catering groups to supply nutritious meals to schools.
- Trained smallholder farmers and community members in diversified agriculture and agroecology (e.g., promotion of school gardens, community fields (market gardening, cassava, palm oil, corn) and poultry and goat breeding; fish farming and income generating activities).
- Established sustainable linkages between schools, community farms, and solar-powered processing hubs.
- Conducted a South-South learning mission to Benin to adapt best practices.
- Created a coordination platform among government stakeholders to align with national school feeding policy development.

KEY LESSONS LEARNED

- Government leadership and inter-ministerial coordination are essential to scaling and sustaining school feeding initiatives.
- Women's empowerment is most impactful when linked to income-generating activities embedded in local food systems.
- Community farms serve as a foundation for building sustainable supply chains and fostering ownership.
- Fortifying local staples like cassava improves both nutrition and economic value.
- South-South learning exchanges catalyze innovation, peer learning, and policy adaptation.





NEXT STEPS

- Scale up the model to reach 1,000 schoolchildren and integrate it into the national school feeding programme.
- Train additional women's groups in cassava processing, fortification, and entrepreneurship.
- Expand crop diversification, including vitamin A-rich, orange-fleshed sweet potatoes.
- Conduct coordination meetings to secure government budget allocation for 2024–2025.
- Document results and engage in further SSTC exchanges to replicate the model across similar contexts.



INDIA

Solar for Resilience: Leveraging Solar Based Technologies for Building Resilient Capacities and Livelihoods of Smallholder Farmers in India

 INDIA	Solar for Resilience: Leveraging solar based technologies for building resilient capacities and livelihoods of smallholder farmers in India.
 OBJECTIVE	To scale the use of affordable solar-based food processing technologies for building resilience and livelihoods of women and smallholder farmers.
 THEMATIC AREA	Resilience Building; Climate Change Adaptation.
 PARTNERS ENGAGED	Ministry of Agriculture and Farmers Welfare (MoAFW), Directorate of Horticulture, Department of Agriculture and Farmers' Empowerment, Local Farmer Organizations, local smallholder farmers and micro-entrepreneurs, WFP India.

BACKGROUND AND CHALLENGE

India's agriculture sector faces multifaceted challenges that undermine food security and farmer livelihoods. Fragmented landholdings, unreliable electricity supply, and significant post-harvest losses—particularly for perishable commodities—contribute to reduced incomes and heightened vulnerability among smallholder farmers. These challenges are further aggravated by the impacts of climate change.

A critical gap lies in the lack of adequate storage infrastructure and limited food processing capacity, especially in rural and remote areas. As a result, a substantial portion of perishable produce is lost post-harvest, reducing the income potential for farmers and exacerbating food insecurity.

Moreover, agriculture is a major contributor to global greenhouse gas (GHG) emissions.

Post-harvest losses, especially when quality deterioration occurs at the farm level, lead to avoidable food waste and additional emissions, intensifying environmental stress.

To address these challenges, the Government of Odisha jointly with WFP launched the Solar for Resilience (S4R) project in Odisha. The initiative aims to develop a scalable and sustainable model for reducing post-harvest losses by introducing solar-powered dehydration technology for highly perishable horticultural produce.

By integrating solar technology into post-harvest management, S4R demonstrates an innovative approach to building food systems that are more resilient, inclusive, and climate-smart—with strong potential for scale-up across other vulnerable regions.

SOLUTION

The S4R initiative was launched in early 2023 by the Government of Odisha, WFP, and private and academic partners to promote affordable solar-

powered food processing technologies that build resilience and empower women.

The initiative provides farmers with the tools, training, and financing needed to become micro-entrepreneurs in food processing—converting perishable produce into marketable, shelf-stable goods using solar dryers. This not only reduces food loss but also generates sustainable income, improving food security and community resilience.

Through training in processing, branding, digital literacy, and entrepreneurship, women are supported to move up the value chain.

The model links farmers with markets via Farmer's Organizations and leverages local banks for micro-financing without collateral. By operating in off-grid and low-income areas, S4R reduces dependency on fossil fuels and opens pathways for replication in similar contexts across the Global South.

The initiative builds on WFP's technical expertise and India's strong institutional frameworks. It includes community-led food processing units, training in post-harvest handling, and nutrition-sensitive crop planning.

Since 2023, the project has successfully reduced 351 metric tons of post-harvest losses and generated USD 10,700 through the value addition activities. Additionally, it contributed to environmental sustainability by reducing 144 metric tons of CO2 emissions.

While this initiative has been piloted in India, there is potential to share knowledge with other countries of the Global South.

KEY STEPS FOR IMPLEMENTING THE INITIATIVE

- Conducted feasibility assessments for project expansion.
- Undertook Horticulture Assessment in selected districts for streamlining procurement process.
- Established partnerships with women's groups and local governments to co-design the model.
- Supported the setup of decentralized food processing units led by women's self-help groups.

KEY LESSONS LEARNED

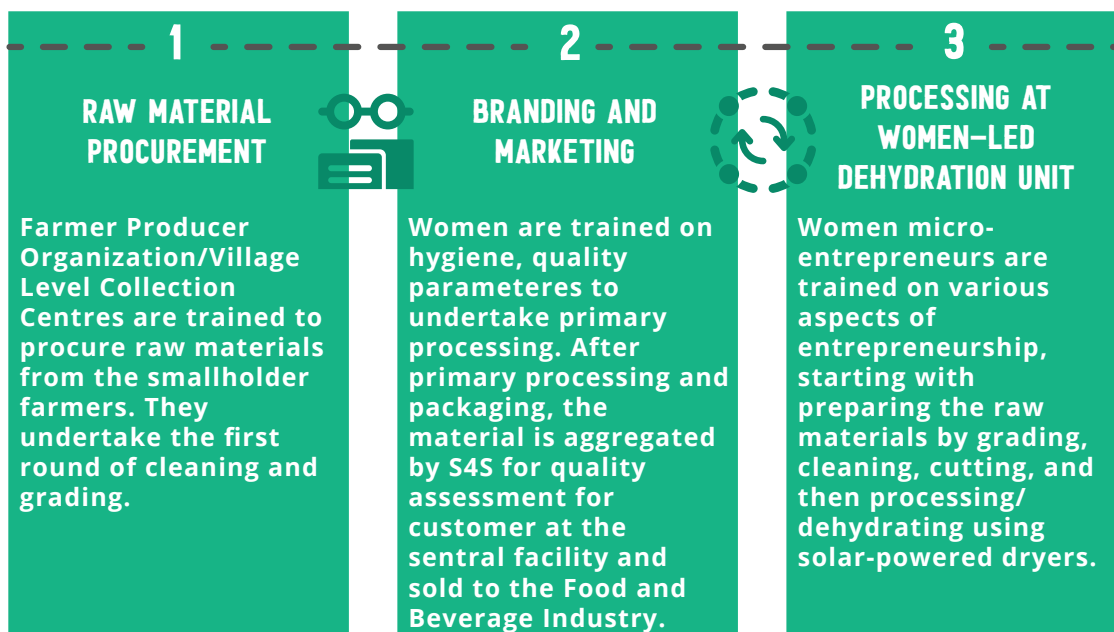
- Strong institutional backing and convergence across ministries is key to scaling local food solutions.
- Empowering women as entrepreneurs in food systems enhances sustainability, nutrition, and livelihoods.
- Climate-smart crops and decentralized processing are essential for resilience in vulnerable communities.



"I have been working on this project for the past year, where we process locally grown cabbage and pumpkins. We start by cutting the vegetables using cutter machines, then use a drying fan and solar dryers to remove moisture and dry the cut pieces. The entire process takes about three days. Once dried, we pack and store the products ready for distribution. My family has been supportive since the beginning of this project. Thankfully, the issues of irregular raw materials have been resolved, and we now have a steady supply. As an educated woman struggling to find work, this project has given me an important job at my doorstep. I earn around 8000 INR (~ 92 USD) every month, which allows us to have more nutritious food as a family. Working with other women creates a bond as we learn together. We all have dreams and things we want to do with this success."

Jasmin Muni

S4R IMPLEMENTATION PROCESS



NEXT STEPS

- Expand the model to additional districts with government co-financing.
- Enhance market linkages for women's groups through procurement schemes.
- Develop toolkits and training materials for national scale-up.
- Leverage SSTC to share lessons learned from this initiative with new partners including countries in Asia and Africa.



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