



SUPPORT LIVELIHOOD RESTORATION TO THE DISASTER **AFFECTED COMMUNITIES IN KAGERA REGION OF TANZANIA**

November 2019

SDGs:













Countries: United Republic of Tanzania

Project Codes: TCP/URT/3606

FAO Contribution USD 299 000

Duration: 22 February 2017 – 30 June 2019

Contact Info: FAO Representation in United Republic of Tanzania

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Implementing Partner

Ministry of Agriculture, Livestock and Fisheries (MALF).

Beneficiaries

Small-scale farmers, fisher folk, pastoralists, foresters, and urban poor, particularly women and youth, in five districts of Kagera Region.

Country Programming Framework (CPF) Outputs

CPF 2014-2016 - Priority C - Output C1.2 — National, district, and local level capacity for predicting and effectively responding to food and nutrition security/emergencies strengthened.

CPF (2017 - 2020) - particularly in the following priority areas:

- Priority area B: Increasing agricultural production, productivity for food and nutrition security;
- Priority area D: Strengthening resilience to natural and man-made threats and crises, such as climate change impacts, and unsustainable management of natural resources.



BACKGROUND

Kagera Region of the United Republic of Tanzania is predominantly rural, completely landlocked and remote from the coast and capital, and largely dependent on agriculture. Agricultural production engages about 75 percent of the regional population in the production of food and cash crops. The region has been affected by prolonged drought, and the effects of the severe earthquake that took place in September 2016 has compounded the risk of food shortages and seed scarcity. It is among the regions in the country with the highest rates of malnutrition among women and children below five years of age, with a reported stunting level of over 50 percent. The overall objective of the project was to provide technical support to smallholder producers (farmers, livestock keepers and fisher folk) affected by the earthquake and drought disaster, to improve food security, nutrition and the quality of life of communities in five districts of Kagera Region.

IMPACT

The project directly improved food and nutrition security and generated income for 4 774 households in the targeted districts of Kagera Region. In addition, communities in over 40 villages and streets benefited from the provision of seeds, planting materials and improved livestock breeds resilient to the effects of climate change, and ultimately improved food production in their households. In view of this, the project contributed significantly to achieving Sustainable Development Goal (SDG) 1 (no poverty), SDG 2 (zero hunger) and SDG 13 (climate action).

ACHIEVEMENT OF RESULTS

As a result of the project interventions, smallholder farmers in the targeted districts of Kagera Region are now sustainably producing adequate and surplus nutritious foods (crops, livestock and fish) for their households and communities. In addition, the beneficiary farmers are selling surplus crop produce, meat, eggs, fish, planting materials and seeds within and outside the project area. The quantities of food produced during the project are shown in Table 1 below.

<u>Table 1</u>: Agricultural food production between July 2017 and June 2019

	Unit	Quantity Target A		Actual			
Item	Quantity	Quantity	Ha/#	Tonne	Ha/#	Tonne	%
Crops							
Cassava*	Cuttings	448 316	44.83	1 120.75	44	1 100	98
Sweet potatoes	Vines	553 063	17.02	255.30	17	250	98
Beans	Kg	1 000	12.50	18.75	12.50	18.50	100
Maize	Kg	200	8	28	8	28.00	100
Paddy	Kg	120	2.40	6	2.40	6.00	100
Banana	Suckers	4 000	2	50	2	0	0
Livestock							
Chickens	Bird	3 033	3 033		3 033		100
Goats**	Each	60	60		120		200
Pigs**	Each	30	30		60		200
Rabbits**	Each	40	40		80		200
Fingerlings	Each						
Equipment/Infrastructure							
Cassava graters	Set	2	2		2		
Drip irrigation system	Set	1	1		1		

^{*}Fresh matter/**Original quantity doubled

Crop productivity (tonne/ha) increased significantly by the end of the project, as a result of the adoption of Good Agricultural Practices (GAPs) and the appropriate use of improved agricultural inputs, such as seeds and planting materials, fertilizers, pesticides and fungicides. The change in agricultural productivity in the project area is shown in Table 2.

<u>Table 2</u>: Percentage change in agricultural productivity

Crop	Baseline	Actual	% increase
Cassava	8	25	212.5
Sweet potatoes	4.5	15	233.3
Beans	0.9	1.5	66
Maize	1.6	3.5	118.7
Paddy	2	2.5	25
Banana	12.8	-	-



The organizational and technical capacities of 4 774 households, represented by 4 774 farmers in 128 farmer groups, were significantly strengthened through training sessions in different GAPs on crops, livestock and fish farming. Of the total farmers trained, 2 788 were women, including female-headed households and people living with human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS); while youth comprised two-thirds of the beneficiaries. In addition, training manuals on the principles of the production of cassava, sweet potato, banana, bean, tomato and poultry were developed, and are currently being used as reference materials by farmers and extension workers. The training sessions are outlined in the table below.

<u>Table 3</u>: Training sessions conducted between July 2017 and June 2019

Training type		Actual			
		Male	Female	Total	%
Capacity-building training of regional disaster committee on disaster preparedness and response	29	23	6	29	100
Capacity-building training of district disaster committees on disaster preparedness and response	272	120	29	149	55
Training of Trainers (TOT) for regional and district experts on GAPs by Tanzania Agricultural Research Institute (TARI)-Maruku	27	19	8	27	100
TOT for district experts on GAPs by TOT trainers	15	9	6	15	100
Training of Extension Workers on GAPs by district experts	65	47	15	62	95
Training of farmer facilitators on GAPs by district experts	130	72	58	130	100
Training of project farmers on GAPs by extension workers and district experts	4 477	1 986	2 788	4 774	100



The project supported the distribution of different improved root and tuber planting materials, pulse, cereal, horticultural seeds, banana suckers, and livestock; as well as appropriate pesticides and fungicides (see table below).

<u>Table 4</u>: Agricultural inputs, livestock and fingerlings distributed in the project area between July 2017 and June 2019

Item	Unit	Quantity
Crops		
Cassava	Cuttings	448 316
Sweet potatoes	Vines	553 063
Beans	Kg	1 000
Maize	Kg	200
Paddy	Kg	120
Banana	Suckers	4 000
Horticultural seeds	Grams	17 980
Fertilizers (NPK, UREA)	50 kg bags	60
Pesticides	Litres	54
Fungicides	Litres	68
Foliar fertilizer/booster	Litres	110
Livestock		
Chickens	Bird	3 033
Goats	Each	60
Pigs	Each	30
Rabbits	Each	40
Fingerlings	Fingerlings	3 300

A nutrition campaign was conducted in all project districts through local radio, printed materials, public events, and food demonstrations to communities. The campaign messages promoted proper child and maternal nutrition, the consumption of vegetable and biofortified crops for micronutrients, and the establishment of kitchen gardens for dietary diversifications. For effective campaign results, the project supported beneficiaries, especially women's groups, with seeds for a variety of horticultural crops, to establish kitchen gardens. In addition, poultry, rabbits and dairy goats were distributed to improve household dietary diversifications. The communities in the project area were aware of and gradually adopting the campaign messages.

The project strengthened the performance capacities of the regional and eight district and municipal disaster committees on preparedness and response to impacts of hazards and disasters, through specific capacity-building activities. As a result, all disaster committees are knowledgeable on disaster concepts, committee roles and responsibilities, and the Tanzania Disaster Management Act No. 15 of 2015. In addition, training was provided for Bukoba municipal and district councils and the regional disaster committees on developing, reviewing and updating the Hazard, Vulnerability and. Capacity Assessment (HVCA) reports and Disaster Reduction and Response (DRR) plans. The members of these committees have improved their performance capacities in reviewing and updating the plans and reports, as a result.

IMPLEMENTATION OF WORK PLAN

Most of the activities were implemented on time. However, the project implemented a five-month no-cost extension to complete some of the activities, such as the procurement of agriculture processing machines and farmers' capacity building. The majority of the activities was implemented within the planned budget. A slight budget revision was done to enable smooth capacity-building training to district disaster committees.

The implementation of project activities, particularly the use of agrochemicals, was closely supervised by extension workers and district experts to reduce environmental risks. No environmental and social risks occurred during the project.

FOLLOW-UP FOR GOVERNMENT ATTENTION

It is recommended that: i) the regional and district authorities mainstream the project activities in their agricultural development plans, in order to contribute to the Agricultural Sector Development Programme II; ii) extension workers be attached to farmer groups for sustainability; iii) municipal and district councils where the project was implemented incorporate agricultural capacity-building activities in their plans; and that they support project groups through the National Agricultural Input Subsidy Programme; iv) nutrition messages be mainstreamed in extension services; and v) the Government actively seek donor funding to provide similar training to village and ward disaster committees in Kagera Region.



SUSTAINABILITY

1. Capacity development

Some project activities, such as banana and cassava production and dairy and fish farming, were incorporated in the district and TARI-Maruku development plans for future support.

The project created partnerships with local government authorities, Mennonite Economic Development Associates (MEDA), agricultural input suppliers, and TARI-Maruku. Discussions were held with local government authorities/districts on how to mainstream and manage project activities after project closure.

2. Gender equality

Needs and priorities of women and men were met by the project, particularly in aspects/qualities such as high yielding, early maturity, tolerance to drought and pests, and crop and livestock diversifications for improving household food and nutrition security and income. In addition, kitchen gardens were established, at the request of the women beneficiaries.

Both women and men benefited equally from participation and decision-making in the established farmer groups. Most of the leadership positions, especially treasurers, were held by women. Agricultural inputs, training sessions and extension services were equally distributed to both men and women. In addition, crop produce and incomes accrued from sales were discussed before being distributed among household members.

3. Environmental sustainability

Environmental protection was considered during the implementation of the project.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The beneficiaries identified and implemented project priorities with guidance from extension and district experts. The approval of farmer groups proposed for support was done in a transparent manner, through voting in public meetings. In addition, for transparency, the district and village leaders sensitized all communities in all the project area on the opportunities provided by the project. Marginalized individuals, such as single-headed households, people with disabilities, and those living with HIV/AIDS, were deliberately identified and supported by the project.

The project established farmer groups operating enterprises on horticultural crop production, improved cassava cuttings, sweet potato vines and biofortified beans. Other groups are managing poultry, fish ponds, dairy goats, piggery and rabbits, to create employment.

The project supported the training of smallholder farmers on GAPs, including safety procedures on the use of agrochemicals and agricultural equipment, especially motorized cassava processing machines.

5. Technological sustainability

The introduced GAPs were appropriate and readily adopted by the beneficiaries. There was limited or no cost for some of the promoted technologies. The project's contribution to the development of local knowledge and capacity can be summarized as follows: i) 95.5 percent of planned households (farmers) in 128 groups received knowledge and skills on GAPs; ii) 100 percent of extension workers in the project area strengthened performance capacity through refresher training on GAPs; iii) 100 percent of disaster committees strengthened and improved their capacity on disaster preparedness and response; and iv) 80 percent of communities in the project area are receiving good quality seeds and planting materials from plots established by farmer groups.

Farmers' improved technical capacities will enable them to keep on producing food with minimum technical assistance. Similarly, the multiplication of planting materials and seeds, fingerlings and improved livestock breeds are expected to continue with minimal technical assistance from agricultural experts.

6. Economic sustainability

The project beneficiaries, district and regional authorities supported project activities in cash and in kind. About USD 9 500 were mobilized (excluding in-kind contributions) to support crop and livestock production and fish farming.

All the products and services developed by the project were affordable to beneficiaries and stakeholders. This can be substantiated by the high level of the adoption of technologies, which was basically guided by priorities established by the beneficiaries themselves.





DOCUMENTS AND OUTREACH PRODUCTS

Training manuals on crop and livestock production

- ☐ Principals of tomato production (*Kanuni bora za kilimo cha nyanya*). TARI-Maruku. Bukoba, United Republic of Tanzania, 30 June 2019. 38 pp.
- ☐ Beans production (*Kilimo bora cha maharage*).

 TARI-Maruku. Bukoba, United Republic of Tanzania,
 30 June 2019. 27 pp.
- ☐ Cassava production (*Kilimo bora cha muhogo*).

 TARI-Maruku. Bukoba, United Republic of Tanzania,
 30 June 2019. 34 pp.
- ☐ Sweet potato production (*Kilimo bora cha viazi vitamu*). TARI-Maruku. Bukoba, United Republic of Tanzania, 30 June 2019. 33 pp.
- ☐ Guidelines on poultry production for smallholder farmers (*Mwongozo wa Ufugaji wa Kuku kwa Wafugaji Wadogo*). TARI-Maruku. Bukoba, United Republic of Tanzania, 30 June 2019. 30 pp.
- ☐ Banana production (*Uzalishaji wa migomba*). TARI-Maruku. Bukoba, United Republic of Tanzania, 30 June 2019. 34 pp.
- ☐ Multiplication of cassava planting materials (*Uzalishaji* wa Vipando vya Muhogo). TARI-Maruku. Bukoba, United Republic of Tanzania. 30 June 2019. 23 pp.

Outreach material

- Nutrition leaflet on food groups.
- ☐ Nutrition messages (through local radio).



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Improved food security, nutrition and quality of life in five districts of Kagera Region						
	Smallholder producers engaged in sustainable production of food to meet household needs and surplus for the market						
	Indicators	Kagera Region agricultural sector plan contributes to food and incomes of local people.					
	Baseline	1. 0 2. (Tonne/ha) cassava 8, sweet potatoes 4.5, beans 0.9, maize 1.6, paddy 2.0, banana 12.8.					
	End Target	 5 000 households. 20% increase in select value chains. 					
Outcome	Comments and follow-up action to be taken	Smallholder farmers are sustainably producing adequate and surplus nutritious foods (crops, livestock and fish) for their households and communities, the surplus foods are sold both within and outside the project area. Crop productivity (tonne/ha) increased significantly by the end of the project. This increase is linked to the adoption of Good Agricultural Practices (GAPs) and the appropriate use or application of improved agricultural inputs, such as seeds and planting materials, fertilizers, pesticides and fungicides. It is advised that the regional and district authorities mainstream the project activities in their agricultural development plans, in order to contribute to the Agricultural Sector Development Programme II.					
			der producers for increased production, post-ha	rvest			
Output 1	handling and nutrition Indicators		Target	Achieved			
Output I	Organizational and practical capacity of number of households strengthened		Organizational and practical capacity of 5 000 households strengthened	Yes			
Baseline	0						
Comments	The organizational and technical capacities of 4 774 households (95.5% of the target), represented by 4 774 farmers in 128 farmer groups, were strengthened through training sessions in different agricultural practices on crop, livestock and fish farming. The groups were well organized, with leadership comprised of chairpersons, secretaries and treasurers, and were well guided by mutually formulated simple rules. The training on GAPs provided farmers with technical agricultural skills on food production. It is recommended that extension workers be attached to farmer groups for sustainability.						
		ing for smallholder producers	- Company of the comp				
	Achieved	Yes					
Activity 1.1	Comments	The project supported training on GAPs for 4 774 households, represented by 4 774 farmers in 128 groups. Of the total farmers trained 2 788 (58.40%) were women, including female-headed households and people living with HIV/AIDS; while youths comprised two-thirds of the beneficiaries. Extension workers and district experts facilitated farmers' training sessions with technical backstopping provided by experts from TARI-Maruku. In addition, TARI-Maruku conducted refresher training courses on GAPs to 65 and 15 extension workers and district experts respectively. Training manuals on the principles of the production of cassava, sweet potato, banana, bean, tomato and poultry were developed by TARI-Maruku, and are currently being used as reference materials by farmers and extension workers. The training sessions focused on the following:					

	Input support					
	Achieved	Yes				
Activity 1.2	Comments	The project supported the distribution of different improved root and tuber planting materials, pulse, cereal and horticultural seeds and banana suckers. In addition, farmers were supported with appropriate pesticides and fungicides and trained in their safe use. The horticultural seeds distributed comprised seeds for tomato, cabbage, hot pepper, onion, eggplant, spinach, carrot and ammaranthus. It is advised that the municipal and district councils where the project was implemented support project groups through the National Agricultural Input Subsidy Programme.				
	Nutrition cam		a to a great product of			
	Achieved	Yes				
Activity 1.3	Comments	A nutrition campaign was conducted in all project districts through local FM radio, printed materials, public events, and food demonstrations to communities. The campaign messages promoted proper child and maternal nutrition, the consumption of vegetable and biofortified crops (sweet potatoes and beans) for micronutrients, and the establishment of kitchen gardens for dietary diversifications. For effective campaign results, the project supported beneficiaries, especially women's groups, with seeds for a variety of horticultural crops, to establish kitchen gardens. Similarly, the project distributed poultry, rabbits and dairy goats to improve household dietary diversifications. The communities in the project area were aware of and gradually adopting the campaign messages. It is recommended that nutrition messages be mainstreamed in extension services.				
	Stronger capacities of Regional and District authorities for Disaster Risk Reduction					
	Indicators		Target	Achieved		
Output 2	 Strengthening capacity of the regional and district disaster committees in Kagera Region. Developing Disaster Reduction and Response (DRR) plans and Hazard, Vulnerability and. Capacity Assessment (HVCA) reports in number of district councils and municipal councils. 		 Strengthening capacity of the regional and eight district disaster committees in Kagera Region. Developing Disaster Reduction and Response (DRR) plans and Hazard and Vulnerability Capacity Assessment (HVCA) reports in one district council and one municipal council. 	Yes		
Baseline	0		and one mainsipal counts.			
Comments	The project strengthened the performance capacities of the regional and eight district and municipal disaster committees on preparedness and response to impacts of hazards and disasters. As a result, all disaster committees are knowledgeable on disaster concepts, committee roles and responsibilities, and Tanzania Disaster Management Act No. 15 of 2015. In addition, the project trained Bukoba municipal and district councils and the regional disaster committees on how to develop, review and update both the HVCA reports and DRR plans. The members of these committees have improved their performance capacity in reviewing and updating the plans and reports.					
		nce building actions				
Activity 2.1	Achieved Yes FAO, in collaboration with the Prime Ministers' Office, conducted capacity-building training on disaster preparedness and response for the regional and all eight (100%) district and municipal disaster committees, with 240 (20.4% women) members in Bukoba municipal council and Bukoba, Missenyi, Karagwe, Kyerwa, Ngara, Biharamulo and Muleba district councils. Other resilience-building actions carried out in the project area were the training of smallholder farmers on GAPs, and the distribution of and training in the use of climate-resilient agricultural inputs. It is recommended that the Government actively seek donor funding to provide similar training to village and ward disaster committees in Kagera Region.					