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EMERGENCY SUPPORT TO THE REHABILITATION OF THE AGRICULTURAL PRODUCTION FOR FARMERS AFFECTED BY FLOODS IN KIREHE DISTRICT

January 2023

SDGs:



Country:

Rwanda

Project Code:

TCP/RWA/3705

FAO Contribution:

USD 300 000

Duration:

7 October 2019 –31 December 2021

Contact Info:

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Implementing Partners

Ministry of Agriculture and Animal Resources (MINAGRI) and Kirehe District.

Beneficiaries

Flood-affected agricultural communities in Kirehe District.

Country Programming Framework (CPF) Outputs

Outcome 1: Coping mechanisms to improve food security, nutrition and resilience are adopted by vulnerable groups in targeted districts.

Output 1.2: Coping mechanisms targeting improved livelihood resilience of low income and vulnerable groups (including people living with HIV/AIDS, men, women and youth, widows and orphans) identified and capacity of vulnerable groups for their adoption strengthened.

Strategic Objective 5: Increase the resilience of livelihoods to disasters.



BACKGROUND

Kirehe District has been severely impacted by a number of climate hazards, including a protracted drought and recent strong rainfall, which have increased the risk of unprecedented run-offs that, in turn, could result in flooding and landslides. The destruction of homes, top soil erosion and crop submergence are among the disastrous consequences in marshlands, where more than 50 ha of rice crops have already been destroyed. Kigarama, Kigina, Nyamugari, Mahama, Nyarubuye and Mpanga were six of the 12 sectors in Kirehe that were particularly affected.

Between January and March 2019, 17 people were killed, 1 613 houses razed and 1 381 kitchens and toilets destroyed. At least 3 954 ha of crops were damaged, with 90 household animals decimated.

Livelihoods are becoming a challenge in such areas, particularly since the majority of the population relies on casual agricultural labour and subsistence farming.

In this context, MINAGRI requested the assistance of FAO in providing emergency support to rehabilitate and expand the agricultural production capacities of affected farmers. Given that markets in the areas in question remain operational, the use of cash as a modality of humanitarian assistance can be employed to rehabilitate irrigation infrastructure while enhancing communities' capacity.

The project aimed to reduce the negative impact of recent adverse climatic events, such as floods and mudslides. This was to be complemented by promoting the timely resumption of agricultural production through the rehabilitation of irrigation infrastructures destroyed by sediment deposition in the lowlands, in order to restore production for the following agricultural seasons, as well as by providing agricultural inputs, such as seeds, fertilizer and tools, to affected farmers for the 2020A season, and by building infrastructure.

IMPACT

The livelihoods of flood-affected agricultural communities were restored and enhanced, thus increasing the communities' resilience to future shocks.

By providing the means for agricultural communities to recover their livelihoods and boost their capacities to cope with future climate shocks, this project is consistent with Sustainable Development Goal (SDG) 2, which aims to eliminate hunger by 2030, and SDG 13, which seeks to prevent climate change and its impact.

ACHIEVEMENT OF RESULTS

The project focused on the rehabilitation and operationalization of irrigation infrastructure, as well as the distribution of agricultural inputs and equipment to vulnerable and affected farm households. All inputs were leveraged to restart crop production, grow trees, rehabilitate the land and increase agricultural resilience in an equitable manner, with a view to both agriculture production and food security in the area recovering to pre-flood levels. The project was carried out in close coordination with MINAGRI and Kirehe District officials.

In Kirehe, a project inception workshop was convened, and the decision made to employ members of the local population as casual labour in public works as a form of economic recovery for the community affected by floods that occurred during the agricultural season 2020 A (September 2019 to December 2019). The project was crucial in rehabilitating land in Mpanga Sector, which was devastated by heavy rains in 2019. Thanks to this support, the local community in Mpanga village is expected to produce more agricultural outputs in the marshland, which now forms a protection against erosion.



During the 2021 B season (March 2021 to June 2021), a total of 65 ha of progressive terraces were rehabilitated and planted with trees, thanks to the participation in public works of 467 people, including skilled and unskilled individuals, from 412 households. These participants were given 400 hoes, 150 photos and 270 pegs to complete this. In addition, a 500 metre-long and 2 metre-wide water canal was built and reinforced.

Farmers are now expected to be able to produce for several agricultural seasons without being affected by floods.

Kirehe District technicians participated in the project's implementation, in close coordination and consultation with MINAGRI. The ministry's permanent secretary, who oversees project progress on a monthly basis, designated a focal point to ensure the sustainability of the project's accomplishments, while also carrying out work surveillance of agricultural areas funded by the Buffed foundation.

IMPLEMENTATION OF WORK PLAN AND BUDGET

The completion of activities was delayed owing to COVID-19-related restrictions on movement. The identification of casual labour employed in the rehabilitation of progressive terraces and the construction of the water canal was particularly slowed, as all operations were halted from March 2020 to September 2020 due to a lockdown. Because of these delays, a no-cost extension of the project was approved in order to assure the completion of all activities.

As a result of the extension, the project encompassed an extra agricultural season, necessitating the distribution of additional agricultural inputs, such as pigs and seeds (including potato vines), to beneficiaries whose terraces had been rehabilitated, in order to assist them in preparing organic manure and increasing soil fertility.

All project activities were successfully completed within the estimated budget.

FOLLOW-UP FOR GOVERNMENT ATTENTION

The local government, in particular Kirehe district officers, has committed to following up the maintenance of the rehabilitated progressive terraces and water canal and of the planted trees. This would ensure that erosion would not once more destroy farmers' crops and land. Continuous monitoring of agricultural infrastructure and community sensitization, coupled with preparedness, will support the population in adapting to any climate-related event that might occur in the Mpanga area.

SUSTAINABILITY

1. Capacity development

The following training activities were carried out by the agronomist and district officers: (i) mobilization and sensitization of district authorities and vulnerable communities, (ii) sensitization of the community to protect the catchment and preparedness and response to future shocks and (iii) training for farmer facilitators on basic crop production information.

2. Environmental sustainability

The implementation of a range of agroforestry technology (planting, maintenance, role in soil protection) was encouraged in order to meet the zone's food security challenges. The project helped the local community to build its resilience to the consequences of climate change and will have a positive long-term influence on the country's natural ecosystem, notably agroforestry resources. The project contribution, if maintained sustainably, has the potential to bring a number of advantages, including erosion protection, rural employment and development.



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Resilience of agriculture-based livelihoods in flood-affected communities enhanced		
Outcome	Agriculture-based livelihoods of flood-affected farmers in Kirehe District restored and improved		
	Indicator	Number of beneficiaries with restored livelihoods.	
	Baseline	0	
	End Target	3 000 beneficiaries (1 000 households).	
	Comments and follow-up action to be taken	<ul style="list-style-type: none"> – 412 households (467 people) have been involved in the progressive terraces rehabilitation. – 501 households (501 people) have been employed in the construction of the water canal. 	
Output 1	Cropland rehabilitated and irrigation infrastructure restored and protected		
	Indicators	Target	Achieved
	Area of affected cropland rehabilitated and irrigated.	250 ha	Partially
Baseline	0		
Comments	A total of 65 ha of progressive terraces have been rehabilitated and protected by agroforestry trees (in particular <i>Grevillea sp.</i> and <i>Calliandra sp.</i>).		
Activity 1.1	Conduct a project inception needs assessment/review, in a gender sensitive manner, to identify, validate the profiling of sites and beneficiaries		
	Achieved	Yes	
	Comments	After heavy rains in March-May 2019, which affected the sectors of Kigarama, Kigina, Nyamugali, Mahama, Nyarubuye and Mpanga, a needs assessment was conducted in October 2019 and results were validated during a workshop in December 2019. The assessment identified the actual needs of agricultural communities and allowed for the selection and prioritization of damaged infrastructure for rehabilitation. The decision was taken to rehabilitate 58.4 ha that were damaged in Rurambi 2, Kabuye village in Mpanga cell in Mpanga sector.	
Activity 1.2	Mobilize and sensitize the stakeholders and beneficiaries for the rehabilitation of the damaged irrigation infrastructures		
	Achieved	Yes	
	Comments	A community outreach meeting was held on site in Mpanga village by the mayor of Kirehe district. During this meeting, the population identified the households directly affected by floods in the village. Each household nominated at least two people (head of the family and spouse or children) who benefited from the support (cash-for-work on the rehabilitation of terrace, construction of water canal, distribution of seeds, etc.).	
Activity 1.3	Repair and protect the irrigation infrastructures selected for interventions.		
	Achieved	Yes	
	Comments	<ul style="list-style-type: none"> – A 500-metre long water canal has been rehabilitated and improved. – A total of 4.1 km of progressive terraces has been rehabilitated through public works. – Farmers who engaged in these public works on a daily basis were paid FRW 1 200 for unskilled labour, FRW 2 000 for supervisory work, and FRW 3 500 for secretarial work, which consisted of recording data and compiling weekly and monthly reports. Each day, the agronomist and masonry supervisor were paid FRW 7 500. – The agricultural engineer collaborated with the district environmental engineer to engage the population in the protection of rehabilitated lands and marshlands. 	

Output 2	Crop production is improved through the provision of inputs		
	Indicators	Target	Achieved
	Production per hectare in the rehabilitated area.	58.4 ha	Yes
Baseline	0		
Comments	A total of 65 ha has been rehabilitated.		
Activity 2.1	Identify the inputs to be distributed to the vulnerable households		
	Achieved	Yes	
	Comments	A total of 3 333 cuttings of <i>Pennisetum purpureum</i> (elephant grass), 1 000 trees of <i>Calliandra sp.</i> , and 1 000 trees of <i>Grevillea sp.</i> have been planted on 4.1 km of progressive terraces.	
Activity 2.2	Activity 2.2: Procure and distribute the identified agricultural inputs		
	Achieved	Yes	
	Comments	<ul style="list-style-type: none"> – Ten kilos each of cabbage seed, onion seed and sweet pepper and five kilos of carrot seed were distributed. – 88 ha located in 5 sectors as follows: Mpanga (30 ha), Kigarama (10 ha), Kigina (15 ha), Nyamugali (8 ha) and Mahama (25 ha). 	
Activity 2.3	Raise farmers' awareness in using quality seeds, certified seed of improved varieties		
	Achieved	Yes	
	Comments	Farmer awareness was raised during the selection of the beneficiaries and distribution of seeds, in particular in terms of horticultural crop protection against pests and diseases.	
Output 3	Enhanced capacities of farmers, farmer facilitators and technician farmers on coordination for increased agriculture production, and in preparedness and response to future shocks		
	Indicator	Target	Achieved
	Number of affected households and facilitators trained on the operation and maintenance of irrigation infrastructures and best agronomic practices.	50 facilitators and 3 000 farmers (1 000 households).	Partially
Baseline	0		
Comments	The project employed three district officers (an agronomist, an environment engineer and an infrastructure engineer), who in turn capacitated 16 facilitators to supervise the rehabilitation activities.		
Activity 3.1	Select the farmer facilitators and other farmers to be trained.		
	Achieved	Yes	
	Comments	During the distribution of agricultural materials, 16 groups were formed. Within each of these, members selected a supervisor (skilled labourer) to lead the group.	
Activity 3.2	Conduct training to benefit of farmers in the affected communities.		
	Achieved	Yes	
	Comments	Two awareness campaigns were conducted with the community in Mpanga sector. The main objective was to alert the population on future climate change-related events (other floods or droughts) that might occur in the region – and how quickly they could adapt. The second objective was to sensitize them on the maintenance of terraces and the water canal.	
Activity 3.3	End-of-project performance assessment, lessons learnt and recommendations.		
	Achieved	Yes	
	Comments	An end-of-project field mission was conducted and assets handed over to Kirehe district to ensure monitoring by local authorities.	

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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