RWANDA

NGIRYI RICE COOPERATIVE INVESTS IN CLIMATE-CLEVER SOLUTIONS

Climate-clever cooperatives are cooperatives that are resilient to the impacts of climate change, minimise their negative impacts and increase their productivity in a sustainable way.

Our climate is changing and no other sector is impacted more than agriculture. Additionally, our rapidly growing global population demands food production to double by 2050 (FAO), while at the same time become substantially more sustainable and efficient. Cooperatives and farmers hold the keys.

Being the renowned specialist on cooperative development, Agriterra has a unique position to scale-up sustainable implementation of climate-smart approaches.

By including climate aspects in our approach and promoting climate-clever agricultural practices, we can support **over 1 million farmers** today to **sustainably increase their productivity**.

To achieve this, Agriterra:
- offers services to create climate awareness;
- assesses cooperative's and farmer's climate cleverness;
- links cooperatives to climate-clever solutions, experts and donor programmes.

This case study describes the outcomes of our cooperative climate-clever check, that covers all key areas of climate clever agricultural practices.
We have identified the climate issues that cause most problems and whether the cooperative and farmers have been able to implement effective climate-clever solutions. Based on the identified areas for improvement, we have linked the cooperative to the right experts to implement effective solutions.

795 members
(503 males, 292 females)
Year of establishment: 1992
Commodities: rice
Facilities: 7 drying facilities and 1 storehouse

3 main sources of income:
- Selling members' rice production for a service fee of 5 RWF per each kilogram sold through the cooperative
- Selling inputs (fertilisers and chemicals) to members and non-members
- A building which is constructed in a business centre generating a monthly rental income

MISSION AND VISION

- Grouping farmers together for the promotion of rice production in located area
- Easy dissemination of good agricultural practices to the farmers
- Improving the livelihood of the farmers
- Facilitating the farmers' access to the best market with reasonable pricing
- Increasing the yield production of rice by taking care of the production and reducing post-harvest losses
- Supporting easy input access for members

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THE OUTCOMES OF THE CLIMATE-CLEVER CHECK




WASTE / ENERGY CLEVERNESS

Before
Ngiryi cooperative was making briquettes from the rice residues and organic fertilisers. During the action plan establishment, the cooperative planned to increase the compost made and eradicate completely the culture of crop residue burning which was practised by some farmers.

After assessment
Agriterra encouraged them to make more organic fertilizers that will result in using more organic than inorganic.

Currently
So far, they have made 12 compost piles, of around 1.5 tonnes each, and this organic fertiliser is to be used for the coming season.

WATER CLEVERNESS

Before
There was no effective practice nor technology of water harvesting and usage at the cooperative and its members. The rainwater run-off was the cause of erosion during the wet seasons. The water that came from the hillside and other buildings ran directly to the marshland and flooded the crops, because the drainage available was too poor to accommodate all the water coming from the hillside.

After assessment
Together with the cooperative, Agriterra has elaborated the action plan in which water collection was among the activities planned. Together they advocated in the sector level for demonstrating the impact of poor water management and the losses of cooperative yield production as a result thereof. The sector level agreed to support the cooperatives in obtaining holding tanks to collect water and to mobilise and organise community work (Umuganda) to increase the water drainage canals.

Currently
The cooperative bought 2 water tanks for water harvesting and these have already been installed in the cooperative's hangar. Each tank has a 5,000-liter capacity. The total cost was 1,500,000 RWF for both tanks, but the cooperative paid 750,000 RWF (750 Euro) thanks to government subsidy.

KNOWLEDGE CLEVERNESS

Before
Only 7 members were receiving the weather information via SMS. Cooperative members claimed that they didn't receive updated meteorological information.

After assessment
After Agriterra consulted with the Rwanda meteorological agency, the latter agreed to increase the number of lead farmers receiving meteorological information.

Currently
Now 22 farmer members receive the weather information via SMS.

SOIL CONSERVATION CLEVERNESS

Before
The marshland where the cooperative has been cultivating rice used to face erosion problems and flooding due to hillside run-off and the expected rice production was reduced very much.

After assessment
Together with the cooperative, Agriterra has elaborated the action plan in which soil conservation was also part of the planned activities. The waterways in the marshland were not big enough to accommodate the quantity of water coming from the hillside. The cooperative and the local administration at sector level have started to expand the water-ways and make them proper, just to prepare for the rain season which is at its starting time.

Currently
The government's plan is to terrace the hills around the marshland and to make dams. These two activities are to be implemented next year and all costs will be covered by the government.

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