

Linking Climate Markets to Maize Farmers in Karnataka



Project Description

This project involves supporting Maize Farmers in Belgaum Karnataka who are employed through Farmer Producer Organisations to gradually transition from chemical agricultural practices to a more sustainable form of agriculture and crop production. The project will regulate water use, soil use, fertilizer use etc. and ensure maximum benefits in terms of crop production and yield.

The above activities also mean that this project can access carbon finance. This finance will be used by the FPOs in order to efficiently and smoothly raise working capital for the continuation of the project.

The aim of the project is to halve the interest rate from current levels.

This subsidy will be financed by a unique model combining the benefits of Carbon Finance as well as other green instruments such as Climate Bonds.



Key Features

- Pilot Agricultural program accessing blended finance from Green Bonds, Micro-finance and Carbon Finance.
- Carbon credits to be generated by FPOs through their member farmers by reducing chemical inputs in their PoP, improving soil carbon on their fields through increased carbon sequestration on the land.
- A structured Incentive Plan will be put in place for the farmers and communities to be actively involved in the project and encourage them during the transition & help support their costs.
- There will be a guaranteed NO YIELD reduction from current levels for the farmers and INCREASED yield will be the aim of the project through sustainable agriculture techniques.
- Pilot to be done with **10,000 maize farmers** in Belgaum
- Each FPO covers around 3-4 villages



Project Implementation



Location
Country - India
State - Karnataka
District - Belgaum

Key Activity:

Transitioning these farmers from chemical agricultural practices to sustainable agriculture.

Linking farmers in Karnataka to climate markets.

Beneficiaries:

Maize Farmers in Karnataka

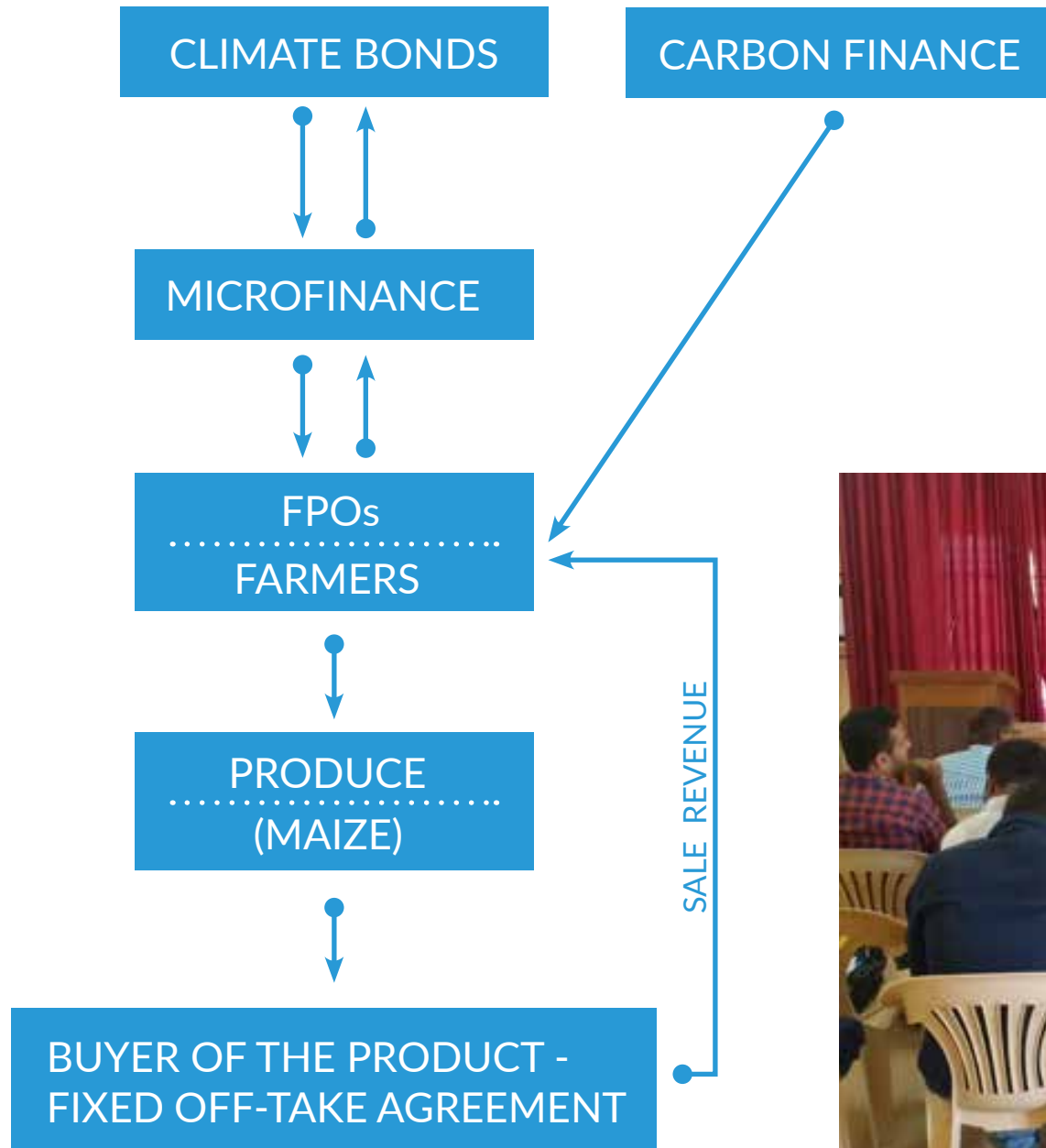
10,000 farmers
(produce maize)

9 farmer groups
Each FPO has 1100 farmers

Duration of the Project:

10 Years

Program Cycle



Project Features

This data pertains to only Kharif season (main crop) since majority farmers practice rainfed agriculture. In Gokak, Hukkeri, Savadatti - in around 5 FPOs, maize is planted in Rabi season too, so that would contribute at least 60% additional quantity of maize available.

Number of FPOs:

9

Names of FPOs:

Parasgad FPO, Mahantha FPO, Panchalingeshwar FPO, Lakshmi Venkateshwara FPO, Revayya, Swamy FPO, Halsiddeshwar FPO, Basaveshwar FPO, Raitha Spoorthy FPO, Vivekananda Horticulture FPO

Number of Taluks: 5

Savadatti, Ramdurga, Hukkeri, Bailahonngal, Gokak

Total target Maize cultivation area:

10,000 ha

Total cultivation area under Maize in hectares (pilot):

2954 ha

Major varieties:

Ganaga Kaveri, Decalb, Kargil, Kaveri, Raider M, Allrounder, NK, CP, HiECH, Rajkumar, Biostade, Prince, Decalb, DKC, Prince, Biostade, JK



Project Features

Average yield per acre (1 Quintal = 100 Kg)	20.44 Quintals
Total estimated produce in Quintals from 9 FPOs	1,74,200 Quintals
Average estimated produce in Quintals per FPO	19,356 Quintals
Average sale price/MT of Maize	INR 14,722 (245 \$)
Total estimated farmer expense/MT	INR 58,000 (967 \$)
Average estimated farmer expense/ MT	INR 6,444.44 (107 \$)



Average cost of production/MT data is based on inputs from farmers directly.

Anticipated Activities

- Zero Tillage
- Organic fertilisers (Farm Yard Manure, Vermicompost, Greenmanuring)
- Biofertilisers and Microbial Cultures (Sanjivak, Jivamrut, Amritpani, Panchgavya)
- Bio-pesticides (Trichoderma/ Pseudomonas)
- Botanical Pesticides (Neem)
- Mulching
- Inter cropping
- Crop rotation
- Biological Control of Weeds
- Integrated Pesticide Management (IPM)
- Integrated Nutrient Management (INM)
- Integrated Farming Systems (IFS)
- Drip Irrigation / Micro Irrigation



Organic fertilisers



Mulching



Inter cropping



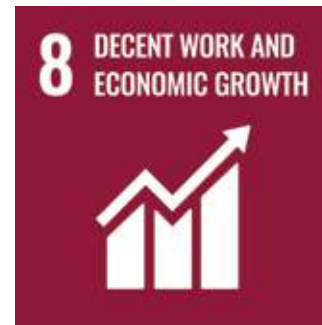
Botanical Pesticides (Neem)

Community involvement and benefits

- Reduced interest rate for farmers (Loan to farmers aimed to be at subsidised rates) even possibly a lower amount to be borrowed due to the unique financial model combining the benefits of both Carbon Finance and Climate Bonds.
- Increased source of income and new employment opportunities - via monitoring, maintenance etc.
- Reduced gender inequalities - Involvement of both men and women
- Capacity building and knowledge sharing
- Awareness and education on carbon markets
- Low income farmers to access low cost micro-finance



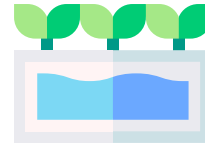
SDGs addressed by the project



The Benefits



Improved soil health



Improved water quality and management



Reduced chemical fertilizer and pesticide use



Healthier crops which leads to less produce waste



Training and capacity building of farmers on sustainable agriculture techniques by IFHD



Crop yields - Crops are maintained and not negatively affected



Farmer Groups - Creation of community organisation through formation of farmer groups



Local Employment - Recruitment of project staff and monitors



Self-help groups with a significant number of women are created; so as to encourage collaborative decision-making and working



VNV ADVISORY

VNV Advisory Services has been at the forefront of working with climate change and livelihoods. Our decade-long experience has seen us develop low-carbon projects that support these communities in getting their basic needs while adapting to and mitigating the harsh impacts of climate change. We work in areas of clean cooking, social forestry, sustainable agriculture, rural energy access and many other related community based technologies. With support from over 40 NGOs and implementation partners, our work encompasses over 4 million rural households and 50,000 hectares of forest areas under management across the South Asian (India, Bangladesh, Nepal, Laos, Myanmar and Sri Lanka) region. We have also been able to engage with businesses to address issues of Social Responsibility, Environmental Sustainability and Carbon Neutrality.





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