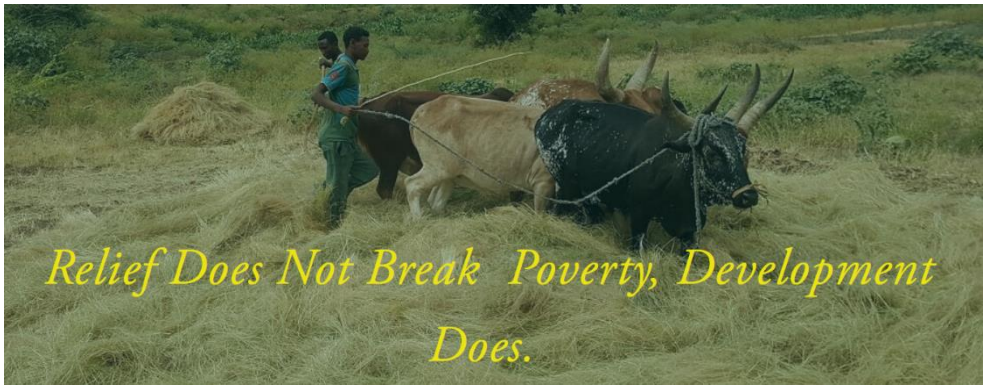
February 14, 2024

PROJECT CHARTER

Farmer-Led and Sustainable Irrigation Project in Raya, Tigray.



Our vision is to be an integral part of the Raya people in their effort to overcome the entrenched poverty in their region.

Abraham Beyene
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Raya Development Association in Canada

PROJECT CHARTER

1. General Project Information	
Project Name:	**Farmer-Led and Sustainable Irrigation Project in Raya, Tigray**
Executive Sponsors:	**Raya Development Association in Canada**
Department Sponsor:	**N/A**
Impact of project:	Drought Resistant Agricultural Economy

2. Project Team

	Name	Department	Telephone	E-mail
Project Manager:	Berhanu Tesfay Gebru	na	+251-91-263-4117	berhannuaait@gmail.com
Team Members:	Yassien Kassie Mehamed	na	+251-91-416-9827	yassienkassie225@gmail.com
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3. Stakeholders

Raya Development Assocuation in Canada.
Raya International Development Organization
Raya Development Asociation in Canada
Farmers participating in the project.
Southern Tigray Zone Government Administration
Raya Azebo, Raya Chercher, and Raya Alamata Wereda Adminstrations
University of Mekelle Department of Agriculture

4. Project Scope Statement

Project Purpose / Business Justification

Raya is the preferable region to initiate agricultural pilot projects such as this one because of its favorable climate, and fertile soil type. In addition to its fertile soil type, this region also possesses a huge groundwater reservoir in the Raya valley area which is nestled between the Korem and Chercher mountains.

Lack of financing, inadequate farming techniques, poor land management, inappropriate water governance, and vicious cycles of recurring droughts compounded by chronic shortage of skilled workers, have become the main impediments to farmers in this region to take advantage of the favorable conditions and break through the poverty threshold under which they have been living for decades.

By focusing on agricultural projects which bring-about root-cause solutions, we believe that we can be an integral part of the farmers in Raya in their effort to stop the recurring food shortages and help them pave their way to not only become self-reliant in food security, but also create sustainable agricultural economic growth and become exporters of agricultural goods.

In Raya, agriculture has been the main source of livelihood since the founding of this region, as such, this project focuses on sustainable agricultural development solutions which incorporates the use of renewable energy, introduction of modern agricultural techniques, conservation farming, drip-irrigation, tree planting and recovering lost indigenous plants through restoration and reforestation programs.

This project will use a mix of groundwater resources and rainfall catchment reservoirs, complemented by modernized farming techniques which is designed to conserve water and produce more yield.

This project will also create job opportunities and knowledge development opportunities for the youth who otherwise are subjected to migrations looking for better life elsewhere.

Objectives

For decades, NGOs and other charitable organizations as well as various government and international institutions have been providing aid to this region. They have distributed food aid, built schools, provided health facilities, supplied medicine, and have attempted to introduce sustainable farming techniques. However, the community tends to revert into extreme poverty when the helping hands are no longer there.

Supported by grass-root organizations, this project will incorporate extensive training programs to ensure that the farming techniques used in this project are retained by the farmers and adapted by the rest of the community with the objective of paving the path for continues and sustainable agricultural improvements in the region long after the pilot project is completed.

This project will involve the establishment of modern farming pilot program in cooperation with a group of selected farmers in the Raya region, who are unable to finance such undertakings on their own. This pilot project will use conservation farming methods suitable for semi-arid environments using a mix of groundwater and water collected from rainfalls in such a way that the ground retains maximum moisture with less water to prevent depletion of the groundwater and protect the environment.

This area is frequently exposed to droughts and unseasonal rainfalls, this project will help alleviate the regions dependency on seasonal rainfalls by building inexpensive rainwater catchment systems (reservoirs) to maintain year-round farming while minimizing the use of ground water sources.

The pilot project will be farmer-led. Farmers will prepare and till the land, manage the irrigation systems, and harvest their yields. In this process, the project team will demonstrate conservation-based farming techniques which will help produce sustainable higher yields with minimum impact on the environment.

The training will include, among other things, estimating the amount of water required per crop type during different irrigation seasons, selecting market-oriented crops suitable for the environment, adapting efficient cropping pattern, selecting suitable area for ground water recharging, and determining maximum water extraction from water wells but avoiding adverse impacts of over-irrigation and groundwater depletion.

In addition to the outlined training ideas, the project team will also develop and recommend water management by-laws and guidelines, design hydraulic equipment including pumps and other accessories as well as farm infrastructures layouts.

Deliverables

- Project site identified and participating farmers selected.
- A project management plan prepared.
- Irrigations system using drip irrigation layout completed
- Rainwater catchment reservoirs near the farms prepared
- Trees planted along the reservoir
- Trees planted around the farms.
- Purchased and installed water pumps to harvest water from pre-existing boreholes, ponds, or rivers nearby.
- Purchased or manufactured water tanks and installed at higher elevation near the farms for water storage.
- Provided training on conservation farming methods.

Scope

In Scope:

- Purchasing and laying out irrigation systems that uses drip irrigation
- Creating rainwater catchment systems
- Planting trees alongside the reservoir to prevent evaporation.
- Planting trees near and around the farms to help the soil retain moisture and prevent erosion.
- Purchasing and installing water pumps to harvest water from pre-existing boreholes, ponds, and rivers nearby.
- Purchasing or manufacturing water tanks for water reservoirs.
- Provide training on conservation farming methods.

Out of scope:

- Drilling boreholes
- Purchasing modem farm-equipment such as tractors.
- Funding or subsidizing individuals or entities other than the selected participants.

Project Milestones	Date
Project Initiated	29-02-2024
Site selection completed	31-03-2024
Participants selected	31-03-2024
Project planning document completed	30-04-2024
Project execution completed	30-09-2024
Lessons learn and project documents archived	15-10-2024

Risk	Risk Rating (Hi, Med, Lo)
Material shortage or unavailabe	Med
Reginal stability	Hi

Constraints

Unpaved roads

High Inflation rate

Government bureacracy

Lack of skilled workers

External Dependencies

Government Prmits and Autorization

Workers Safety/Reginal security

Funding avaialbility/donor dependency

5. Communication Strategy
Emails, Zoom, Teams, Google Meets, and other modern communication platforms.

6. Sign-off			
	Name	**Signature**	**Date (MM/DD/YYYY)**
Executive Sponsor	Abraham Beyene		15/02/2024
Department Sponsor	N/A		
Project Manager	Berhanu Tesfay		15/02/2024

7. Notes