

NS-206 - Sustainable Fertilizers Production and Use

Rwanda

NAMA Seeking Support for Preparation

A Overview

A.1 Party

Rwanda

A.2 Title of Mitigation Action

Sustainable Fertilizers Production and Use

A.3 Description of mitigation action

This Nationally Appropriate Mitigation Action (NAMA) for the agriculture sector in Rwanda focuses on the development and implementation of sustainable fertilizer production and use accomplished across several subsector component programs including: (a) creation of up to 600 community cattle agribusiness cooperatives for organic composting of fertilizers for reductions of animal enteric GHG emissions and use of other field residues for composting, in lieu of burning, (b) improved production for producing finely granulated natural lime found in abundance in Musanze, Karongi and Rusizi districts of Rwanda, and (c) improved and sustainable agricultural fertilizer applications, soil erosion measures, and improved agronomic management of soils capacity development programs implemented through Rwanda's agricultural extension service and farmer schools in rural areas.

The key mitigation actions include the collection and production of livestock manure for organic Fertilizer, improved efficiency in lime production & application, elimination and reduction of vertical lime burning, and improved agronomic management of soils, fertilizers, and crop yields.

Emission Reductions:

The initial emission reduction estimations foresee a total mitigation potential of approx. 880,000 tCO₂e for the period 2016 to 2030.

Sustainable Development Benefits:

This NAMA supports the Republic of Rwanda's earnest and active policies and efforts in terms of poverty reduction, private sector economic growth, green growth and climate resilience strategies, and improving the quality of life of all citizens including improved child nutrition. Specific sustainable co-benefits of the NAMA include:

- Improving livelihoods through increased income generation activities;
- Improving agricultural productivity through the increased use of manure as fertilizer, and domestically produced lime;
- Improving soil quality and reducing erosion through the planting of grasses and trees;

- Improving nutrition through greater access to cattle based products (dairy and meat);
- Increase in private sector small enterprises.

Private Sector Participation:

The basis of the implementation and operation of community cattle cooperatives is the establishment of the cooperatives as independent private sector small enterprises. Included within the NAMA is the integration and strengthening of, the lime production subsector, which is already private sector based. As well, existing agribusiness is private sector based in Rwanda and this is expected to be strengthened under the NAMAs capacity building activities. It is envisioned that communities would provide the land needed for the community cattle cooperatives and in-kind labour for implementation, where operation will be under the small enterprise business model.

A.4 Sector

<input type="checkbox"/> Energy supply	<input type="checkbox"/> Transport and its
<input type="checkbox"/> Residential and Commercial buildings	<input type="checkbox"/> Infrastructure
<input checked="" type="checkbox"/> Agriculture	<input type="checkbox"/> Industry
<input type="checkbox"/> Waste management	<input type="checkbox"/> Forestry

Other

A.5 Technology

<input type="checkbox"/> Bioenergy	<input type="checkbox"/> Cleaner fuels
<input type="checkbox"/> Energy Efficiency	<input type="checkbox"/> Geothermal Energy
<input type="checkbox"/> Hydropower	<input type="checkbox"/> Solar Energy
<input type="checkbox"/> Wind Energy	<input type="checkbox"/> Ocean Energy
<input type="checkbox"/> Carbon Capture and Storage	<input type="checkbox"/> Low till / No till
<input type="checkbox"/> Land fill gas collection	

Other

A.6 Type of action

<input type="checkbox"/> National/ Sectoral goal	<input checked="" type="checkbox"/> Project: Investment in machinery
<input type="checkbox"/> Strategy	<input checked="" type="checkbox"/> Project: Investment in infrastructure
<input checked="" type="checkbox"/> National/Sectoral policy or program	<input checked="" type="checkbox"/> Project : other

Other

A.7 Greenhouse gases covered by the action

<input checked="" type="checkbox"/> CO2	<input checked="" type="checkbox"/> CH4
<input checked="" type="checkbox"/> N2O	<input type="checkbox"/> HFCs
<input type="checkbox"/> PFCs	<input type="checkbox"/> SF6

Other

B National Implementing Entity

B.1.0 Name

Rwanda Ministry of Agriculture and Animal Resources (MINAGRI) - Rwanda Agriculture Board (RAB)

B.1.1 Contact Person 1

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B.1.13 Comments

C Expected timeframe for the preparation of the mitigation action

C.1

Number of months for completion

18

D Currency

D.1 Used Currency

AED

Conversion to USD: 1

E Cost

E.1.1 Estimated full cost of preparation

400000

E.1.2 Comments on full cost of preparation

The full costs of preparation covers comprehensive feasibility studies (including technical, financial and institutional feasibility assessment) for the 3 key sub-measures within the NAMA, a sector survey, the preparation of the full NAMA Design Document and institutional level capacity development support.

Note that the Climate Change Focal Point (Rwanda Environmental Management Authority) and the National Implementing Entities will provide in-kind programme management, institutional coordination, and procurement services during the preparation phase of the NAMA. This in-kind contribution is not included in the estimated full cost of preparation.

F Support required to prepare the mitigation action

F.1.1 Amount of Financial support

310000

F.1.2 Type of required Financial support

- Grant
- Loan (sovereign)
- Loan (Private)
- Concessional loan
- Other
- Guarantee
- Equity
- Carbon finance

F.1.3 Comments on Financial support

Preparation of NAMA Design Document
This consists of the activities and cost of full NAMA design and it's documentation, including the institutional framework, implementation planning, baseline determination and emission mitigation calculations, financial structuring, support required, and MRV system design and management. (USD 122,000)

Full Feasibility Studies:

The three full feasibility studies will focus on: (1) technical, financial and institutional feasibility assessment for up-scaled community dairy/livestock cooperatives (building on an existing programme), (2) study for low emissions lime production will also include a comprehensive survey of the sector for lime production, (3) study for best indigenous methods and gap analysis for manure and fertilizer management and practices. (USD 188,000)

F.2.1 Amount of Technical support

F.2.2 Comments on Technical support

F.3.1 Amount of capacity building support

90000

F.3.2 Type of required capacity building support

<input checked="" type="checkbox"/>	Individual level
<input type="checkbox"/>	Institutional level
<input type="checkbox"/>	Systemic level
<input type="checkbox"/>	Other <input type="text"/>

F.3.3 Comments on Capacity Building support

Workshop for institutional capacity building for climate finance and financial structuring in priority sectors of NAMAs seeking support for implementation. Focus is on meeting general international requirements, and specific requirements of selected support facilities. (USD 45,000)

Workshop for institutional capacity building for MRV systems and their structuring in priority sectors of NAMAs seeking support for implementation. Focus is on the institutional framework for MRV and the tracking of mitigation actions, finance and sustainable benefits in a performance based methodology. (USD 45,000)

F.4 Financial support required

F.5 Technological support required

F.6 Capacity support required

G Relevant National Policies strategies, plans and programmes and/or other mitigation action

G.1 Relevant National Policies

The planned NAMA is in line with all relevant national and sectoral policies, which are as follows:

A) Key policy linkage to the national Green Growth and Climate Resilience strategy with a focus on low carbon development to 2020 and a vision for 2050. The key linking programmes are:

- Programme 1: Sustainable Intensification of Agriculture; Action 1: Mainstreaming of Agroecology (key indicator = % of farms up-taking agroecology technologies); Action 3: Fertiliser Enriched Compost (key indicator = % of farms applying fertiliser rich compost)

B) Rwanda's updated Vision 2020

C) In addition the NAMA is in line and considers the sectoral policies Economic Development and Poverty Reduction Strategy II (EDPRS II) and the MINAGRI's Strategic Plan for the Transformation of Agriculture in Rwanda Phase III (PSTA III).

G.2 Link to other NAMAs

H Attachments

H Attachments

Title Description

H.1 Attachment description

H.2 File

Browse...

I Support received

- I.1 Outside the Registry
- I.2 Within the Registry

Support provided	SupportType	Amount	Comment	Date
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