Project/Programme Title: Overcoming chronic and acute food insecurity for 540,000 households living in western Kenya through a systems approach to Cassava Value Chain up-grading

Country(ies): Kenya

National Designated Authority(ies) (NDA): National Treasury

Executing Entities: NETFUND, Ministries of: Agriculture; Industrialization, trade and cooperatives, African Center for Technology Studies

Accredited Entity(ies) (AE): NEMA

Date of first submission/version number: [YYYY-MM-DD] [V.0]

Date of current submission/version number: [YYYY-MM-DD] [V.0]
## A. Project / Programme Information (max. 1 page)

<table>
<thead>
<tr>
<th>A.1. Project or programme</th>
<th>☒ Project</th>
<th>☐ Programme</th>
<th>A.2. Public or private sector</th>
<th>☒ Public sector</th>
<th>☐ Private sector</th>
</tr>
</thead>
</table>

### A.3. Indicate the result areas for the project/programme

#### Mitigation:
- ☐ Energy access and power generation
- ☐ Low emission transport
- ☐ Buildings, cities and industries and appliances
- ☐ Forestry and land use

#### Adaptation:
- ☒ Most vulnerable people and communities
- ☒ Health and well-being, and food and water security
- ☐ Infrastructure and built environment
- ☐ Ecosystem and ecosystem services

### A.4. Estimated mitigation impact (tCO2eq over lifespan)

### A.5. Estimated adaptation impact (number of direct beneficiaries and % of population)

Over 5 million

### A.6. Indicative total project cost (GCF + co-finance)

Amount: USD _________

### A.7. Indicative GCF funding requested (max 10M)

Amount: USD _________

### A.8. Mark the type of financial instrument requested for the GCF funding

- ☒ Grant
- ☐ Loan
- ☐ Guarantee
- Other: specify___________________

### A.9. Estimated duration of project/programme:

- a) disbursement period: 5 years
- b) repayment period, if applicable:

### A.10. Estimated project/Programme lifespan

5 years

### A.11. Is funding from the Project Preparation Facility needed?

- Yes ☒ No ☐

### A.12. Confirm overall ESS category is minimum to no risk

- ☒ C or I-3

### A.13. Provide rational for the ESS categorization (100 words)

### A.14. Has the CN been shared with the NDA?

- Yes ☒ No ☐

### A.15. Confidentiality

- ☒ Not confidential

### A.16. Project/Programme rationale, objectives and approach of programme/project (max 100 words)

Brief summary of the problem statement and climate rationale, objective and selected implementation approach, including the executing entity(ies) and other implementing partners, including who will be implementing the measures to manage the environmental and social risks.

The proposed intervention aims at building climate resilience for the most vulnerable communities by transforming cassava value chain into a commercially viable enterprise. The interventions seek to address constraints along the value chain by strengthening the mutually beneficial linkages between value chain actors and removing structural and policy barriers. The proposed interventions adopt a systems approach which recognizes the different dimensions of the cassava value chain which are embedded and interconnected with other social-economic and cultural attributes and the natural resource base within which value chain actors operate. The project will create sustainable businesses for actors across the value chain.

### B. Project / Programme details (max. 3 pages)

#### B.1. Context and Baseline (max. 1 page)

### Footnotes:

1. Refer to the SAP ESS Guidelines
2. Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy ([Decision B.12/35](#)) and the Review of the Initial Proposal Approval Process ([Decision B.17/18](#)).
Describe as relevant the climate vulnerabilities and impacts, GHG emissions profile, and mitigation and adaptation needs that the prospective intervention is envisaged to address.

In Kenya, changes in the climatic system have increased the severity and frequency of droughts and floods. In the last 20 years the country has experienced two major droughts that lasted between two to three years. The first drought occurred between 1999 and 2001, at the time, this was the worst drought that the country had experienced in 37 years and more than 4 million Kenyans were in need of food aid. This drought which affected approximately 23 million Kenyans was characterized by total crop failures and livestock deaths triggering severe food shortages in the country and more so in the Arid and Semi-Arid lands (ASALS). Between these two major droughts, several other droughts occurred, some of which were declared by the government as natural disasters. These droughts occurred between: 1999-2000, 2005-06, 2008-09 and 2016-17.

These dry spells characterized by increased drought severity and frequency are likely to continue and worsen as the planet continues to warm. There is therefore a need to promote drought resistant crops to be part of the country’s staple crops. Cassava is one such crop that holds a great promise in improving the food security situation in the country. Cassava is well adapted to soils with low fertility, marginally lower pH, drought, heat stress (Howeler et al. 2002). It is also a low maintenance crop compared with other cereals, making it an ideal crop for improving food security and livelihoods for resource poor farmers (Burns et al. 2010).

Please indicate how the project fits in with the country’s national priorities, action plans and programs and its full ownership of the concept.

Cognizant of the challenges posed by climate change the Kenyan government has instituted several responses including; the National Climate Change Response Strategy (NCCRS 2010), National Climate Change Action Plan (NCCAP 2013) and National Adaptation Plan (NAP). The priority actions highlighted in the NDCs that are also relevant to this proposal are: Enhance the adaptive capacity of the population; Strengthen the adaptive capacity of the most vulnerable groups and communities through social safety nets and insurance schemes; Mainstream climate change adaptation into county integrated development plans and implement the Ending Drought Emergencies Strategy.

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed. Where relevant, please describe the key characteristics and dynamics of the sector or market.

Despite the potential posed by cassava in improving the country’s food security and climate adaptive capacity, cassava’s product development is highly unexploited in Kenya. Its production is characterized by low use of inputs, use of rudimentary technology, large post-harvest losses, minimal processing, and unreliable supply, inconsistency in quality of products, low producer prices, costly marketing structure and low utilization in the industrial sector.

Previous interventions in the cassava value chain focused mainly on the production side with minimal focus on creating and enabling environment or building a sustainable market. For instance, one such project implemented by Farm Africa (a UK non-governmental organisation), focused on introduction of disease resistant varieties of cassava and training farmers on how to grow the introduced varieties. Another such project, implemented by Self Help Africa (A USA based non-governmental organisation) aimed at training lead farmers to disseminate trainings on cassava production to 28,000 smallholders in producer groups. The training focus on good agricultural practices and climate smart agriculture, farming as a business, quality standards, and value-addition. Although, these projects focus on assisting local farmers play a dominant role in the cassava value chain, the gains they made during the project period are not sustainable as some of the critical components of the value chain are mostly ignored. And the interventions focus on component of the cassava value chain and not the entire value chain and how to development it to sustain itself.

B.2. Project / Programme description (max. 1 page)

Describe the expected set of components and activities to address the above barriers identified that will lead to the expected outcomes.

**Component 1: To increase the production and productivity for cassava**

Specific Objectives are to:
1) Improve access to quality inputs for cassava production
2) Increase the adoption of sustainable land management practices in cassava production
3) Enhance access to agricultural information and extension services on cassava production
4) Promote adoption of appropriate technologies for on farm cassava pre-processing

**Component 2: To facilitate market development for cassava**

Specific Objectives are to:
1) Improve the linkages and coordination between cassava value chain actors
2) Promote capacity development for the production of cassava products (Adoption of appropriate postharvest, processing, and storage technologies)
3) Create awareness on cassava products, usage and safety (Development of local market)
4) Support the development and adoption of appropriate preservation, processing and storage technologies for
cassava

5) Promotion of export market for cassava and cassava based products

**Component 3: Establish enabling environment for development of cassava industry**

Specific Objectives are to:

1) Review, update and finalize the national policy on cassava industry
2) Develop standards and quality assurance guidelines for cassava products
3) Develop an incentives programme for cassava SMEs within the cassava value chain
4) Establish a cassava promotion fund (For support innovations, start-up, De-risking of SMEs, early financing)

Please explain why this project or programme is ready for scaling up and has the potential for transformation. Has it been piloted in the country or region? Are the proposed interventions well documented for their costs and benefits?

Cassava holds a great promise in improving the food security situation in the country. Cassava is well adapted to soils with low fertility, marginally lower pH, drought, heat stress. It is also a low maintenance crop compared with other cereals, making it an ideal crop for improving food security and livelihoods for resource poor farmers. The world over, cassava is ranked fifth after wheat, maize, rice and Irish potato, as the most important food crop. Cassava does well and can be grown profitably within a rainfall range of 500-1500 mm per year. The crop has low labour requirements and produces higher amounts of calories per hectare than most tropical food crops. Among the non-cereal crops in Kenya, cassava comes second to Irish potato as an important source of food. In addition, promotion of cassava as a food crop and also as a raw material for industries would play a major part in enhancing climate adaptability and resilience for many communities, especially those living in arid and semi-arid lands.

This project aims at up-grading this value chain by focusing on the entire chain and the major actors and identifying their needs and what can be done to accelerate their participation and impact on the value chain. With this approach, cassava will serve as a reserve staple food crop, that can substitute the more climate sensitive staple crops like Maize, wheat and rice. In several sub-Saharan countries the promotion of cassava as a staple crop has worked really well by employing some of the interventions proposed here. One such country is Nigeria, where cassava production from small holder farmers increased by about 20% between 2004-2006. This increase in production was as a result of government and development partners’ interventions. Some of the interventions that lead to this increased productivity included nationwide focus on; the development of new disease-resistant cassava varieties, distribution of high-yielding varieties of cassava that are also resistant to cassava mosaic disease (CMD), on-farm training on appropriate agronomic technologies and management practices, policy intervention for flour blending at 10% for all baking flours, commercialisation of cassava and political goodwill where a Presidential initiative on cassava development was established. This initiative focused on the development of production, processing, and marketing of the processed products.

Describe in what way the Accredited Entity(ies) is well placed to undertake the planned activities and what the implementation arrangements with the executing entity(ies) and implementing partners will be.

Please provide a brief overview of the key financial and operational risks and any mitigation measures identified.

**B.3. Expected project results aligned with the GCF investment criteria (max. 1 page)**

Please describe and provide an estimate of the expected impacts aligned with the GCF investment criteria: impact potential, paradigm shift, sustainable development, needs of recipients, country ownership, and efficiency and effectiveness.

**C. Indicative financing / Cost information (max. 2 pages)**

C.1. Financing by components (max ½ page)

Please provide an estimate of the total cost per component and disaggregate by source of financing.

<table>
<thead>
<tr>
<th>Component</th>
<th>Indicative cost (USD)</th>
<th>GCF financing</th>
<th>Co-financing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Amount (USD)</td>
<td>Financial Instrument</td>
</tr>
<tr>
<td>Indicative total cost (USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For private sector proposal, provide an overview (diagram) of the proposed financing structure.
C.2. Justification of GCF involvement (max 1/2 page)

Explain why the Project/Programme requires GCF funding, i.e. explaining why this is not financed by the public and/or private sector(s) of the country.

To jumpstart the sector, it will be necessary to offer Cost-support (e.g. in form of financial instruments such as credit, guarantee, insurance etc.) to value chain actors for upgrading of the value chain. Such funds will be established to encourage investment from the private sector and also support farmers who will be main growers of the cassava.

A major component of implementation of this project will also focus on developing and advocating for policy and legislation on for blending of cassava in other flours, import substitution and mandatory use of locally produced cassava. This should build on the traditional indigenous practices and technologies by different communities in Kenya in the utilization of cassava particularly in blending with other traditional foods.

To enable SME food processors, participate in the value chains, incubators such as KIRD will be capacity built to offer incubation, training, product development, laboratory testing and common manufacturing facilities; while Kenya Bureau of standards will expedite the development of standards for the new products to facilitate market access.

C.3. Sustainability and replicability of the project (exit strategy) (max. 1/2 page)

Please explain how the project/programme sustainability will be ensured in the long run and how this will be monitored, after the project/programme is implemented with support from the GCF and other sources.

The implementation approach for this project will focus on developing profitable business ventures within the cassava value chain, led driven by private sector actors. We envisage that before the private sector can play a vital role in the value chain, there will be a need to demonstrate the profitability of some of the ventures and also de-risk the various components of the value chain. At these initial stages, the project will establish Private-Public Partnerships across the entire cassava value chain, where the role of the public sector will be to build investment confidence in the value chain. For instance, in the production of diseases free planting materials, we envisage the use of large public farms—for instance those held by Kenya Prisons, Agricultural Development Cooperation, National Youth Service among others. These large scale farms will act as nucleus farms for clean seed multiplication and production. The partnership between this public institution and the project team will be guided contractual farming model whereby the project will enter into pre-production agreements with the institutions. Kenya Plant health inspectorate Service (KEPHIS) will be engaged for certification of the seed growers while the Ministry of Agriculture Livestock & Fisheries (MoAL&F) will train and supervise informal seed growers.

For non-grant instruments, explain how the capital invested will be repaid and over what duration of time.

C.4 Stakeholders engagement in the project or programme (max ½ page)

Please describe how engagement among the NDA, AE, EE and/or other relevant stakeholders in the country has taken place so far and what further engagement will be undertaken as the concept is developed into a funding proposal.

C.5 Monitoring and Evaluation and reporting plans (max ¼ page)

Please explain how the M&E will be conducted as part of the project or programme (routine and concurrent monitoring, interim and final evaluations, and annual reports)

D. Annexes

- ESS screening check list (Annex 1)
- Map indicating the location of the project/programme (as applicable)
- Evaluation Report of previous project (as applicable)
Annex 1: Environmental and Social Screening Checklist

Part A: Risk Factors

The questions describe the "risk factors" of activities that would require additional assessments and information. Any "Yes" response to the questions will render the proposal not eligible for the Simplified Approval Process Pilot Scheme. Proposals with any of the risk factors may be considered under the regular project approvals process instead.

<table>
<thead>
<tr>
<th>Exclusion criteria</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the activities involve associated facilities and require further due diligence of such associated facilities?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to downstream riparian states?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women, child labour?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities potentially generate hazardous waste and pollutants including pesticides and contaminate lands that would require further studies on management, minimization and control and compliance to the country and applicable international environmental quality standards?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities involve the construction, maintenance, and rehabilitation of critical infrastructure (like dams, water impoundments, coastal and river bank infrastructure) that would require further technical assessment and safety studies?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the proposed activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities be located in protected areas and areas of ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Part B: Specific environmental and social risks and impacts

<table>
<thead>
<tr>
<th>Assessment and Management of Environmental and Social Risks and Impacts</th>
<th>YES</th>
<th>NO</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the AE provided the E&amp;S risk category of the project in the concept note?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Has the AE provided the rationale for the categorization of the project in the relevant sections of the concept note or funding proposal?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are there any additional requirements for the country?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are the identification of risks and impacts based on recent or up-to-date information?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labour and Working Conditions</th>
<th>YES</th>
<th>NO</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the proposed activities expected to have impacts on the working conditions, particularly the terms of employment, worker’s organization, non-discrimination, equal opportunity, child labour, and forced labour of direct, contracted and third-party workers?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Area</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Will the proposed activities pose occupational health and safety risks to workers including supply chain workers?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Resource Efficiency and Pollution Prevention</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Are the activities expected to generate (1) emissions to air; (2) discharges to water; (3) activity-related greenhouse gas (GHG) emission; and (5) waste?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Are the activities expected to utilize natural resources including water and energy?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will there be a need to develop detailed measures to reduce pollution and promote sustainable use of resources?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Community Health, Safety, and Security</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Will the activities potentially generate risks and impacts to the health and safety of the affected communities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will there be a need for an emergency preparedness and response plan that also outlines how the affected communities will be assisted in times of emergency?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will there be risks posed by the security arrangements and potential conflicts at the project site to the workers and affected community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Land Acquisition and Involuntary Resettlement</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Will the activities likely involve voluntary transactions under willing buyer-willing-seller conditions and have these been properly communicated and consulted?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Biodiversity Conservation and Sustainable Management of Living Natural Resources</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Are the activities likely introduce invasive alien species of flora and fauna affecting the biodiversity of the area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will the activities have potential impacts on or be dependent on ecosystem services including production of living natural resources?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Indigenous Peoples</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Are the activities likely to have indirect impacts on indigenous peoples?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will continuing stakeholder engagement processes and a grievance redress mechanism be integrated into the management / implementation plans?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cultural Heritage</td>
<td>YES</td>
<td>NO</td>
<td>TBD</td>
</tr>
<tr>
<td>Will the activity allow continuous access to the cultural heritage sites and properties?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Will there be a need to prepare a procedure in case of the discovery of cultural heritage assets?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Sign-off: Specify the name of the person responsible for the environmental and social screening and any other approvals as may be required in the accredited entity’s own management system.