# Concept Note

## Building climate resilience of food insecure smallholder farmers in Southern Malawi

Malawi | Sahara and Sahel Observatory

18 November 2019

GREEN CLIMATE FUND

# Simplified Approval Process
# Concept Note

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| Project/Programme title: | Building climate resilience of food insecure smallholder farmers in Southern Malawi |
| Country(ies): | Malawi |
| National Designated Authority(ies) (NDA): | Environmental Affairs Department |
| Executing Entities: | Environmental Affairs Department (EAD); Ministry of Agriculture, Irrigation and Water Development (MoA); Department of Forestry (DoF); Development Aid from People to People (DAPP) Malawi and a Consortium of CSO partners |
| Accredited Entity(ies) (AE): | Sahara and Sahel Observatory |
| Date of first submission/ version number: | *7/18/2019 V.1* |
| Date of current submission/ version number | *11/18/2019 V.2* |

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*Eligibility for SAP is determined by the review of the concept note and the ESS screening.*

| A. Project / Programme Information (max. 1 page) | | | | | |
|---|---|---|---|---|---|
| **A.1. Project or programme** | ☒ Project<br>☐ Programme | **A.2. Public or private sector** | ☒ Public sector<br>☐ Private sector | **A.3 RFP** | Not applicable |
| **A.4. Indicate the result areas for the project/programme** | Mitigation: Reduced emissions from:<br>☐ Energy access and power generation: 0%<br>☐ Low emission transport: 0%<br>☐ Buildings, cities and industries and appliances: 0%<br>☒ Forestry and land use: 25%<br><br>Adaptation: Increased resilience of:<br>☒ Most vulnerable people and communities: 25%<br>☒ Health and well-being, and food and water security: 25%<br>☐ Infrastructure and built environment: 0%<br>☒ Ecosystem and ecosystem services: 25% | | | | |
| **A.5. Impact potential** | A.5.1. Estimated mitigation impact (tCO2eq over project lifespan) | 814,008 tCO2eq | | | |
| | A.5.2. Estimated adaptation impact (number of direct beneficiaries) | 60,000 direct beneficiaries | | | |
| | A.5.3. Estimated adaptation impact (number of indirect beneficiaries) | 120,000 indirect beneficiaries | | | |
| | A.5.4. Estimated adaptation impact (% of total population) | 1% of the country's total population | | | |
| **A.6. Financing information** | | | | | |
| **A.6.1. Indicative GCF funding requested (max 10M)** | Amount: 9,530,000 Currency: USD Financial Instrument: Grants | | | | |
| **A.6.2. Indicative co-financing** | Amount: 470,000 Currency: USD Financial Instrument: Other (Instrument Description: In Kind)<br>Institution: DEVELOPMENT AID FROM PEOPLE TO PEOPLE (DAPP) MALAWI | | | | |
| **A.6.3. Indicative total project cost (GCF + co-finance)** | Amount: 10,000,000 Currency: USD | | | | |
| **A.6. Estimated duration of project/ programme:** | disbursement period: 60<br>repayment period, if applicable: | **A.7.2. Estimated project/ Programme lifespan** | 240 | | |
| **A.8. Is funding from the Project Preparation Facility needed?** | ☐ Yes<br>☒ No | **A.9. Is the Environmental and Social Safeguards Category C or I-3?** | ☒ Yes<br>☐ No | | |
| **A.10. Provide rationale for the ESS categorization (100 words)** | The project is categorized as C. It will implement activities with smallholder farmers, which are context-specific and based on socio-economic conditions and nature-based solutions in the landscape at the zone of intervention. The project will include activities on small-scale farming plots, restoration of forest areas, establishment of rainwater harvesting | | | | |

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| | technologies, adopting agroforestry systems, livelihood diversification and capacity building activities. All expected project activities are participatory and gender-responsive. Environmental and social screening considered health and safety, adverse impacts on beneficiaries and environment, protected sites and other potential negative impacts. No specific risks and impacts were identified that would require an extensive Environmental Impact Assessment. | | |
| **A.11. Has the CN been shared with the NDA?** | ☒ Yes<br>☐ No | **A.12. Confidentiality** | ☐ Confidential<br>☒ Not confidential |
| **A.13. Project/Programme rationale, objectives and approach of programme/project (max 100 words)** | The project addresses the adaptation needs of vulnerable smallholder farmers and their communities in the Southern Region of Malawi, who have limited resilience and adaptive capacities towards climate-related shocks. The addressed communities and their livelihoods are threatened by the climate impacts of rising temperatures, water shortages and extreme weather events of droughts, dry spells and floods. These vulnerabilities will be addressed by an intervention that is based on strengthening ecosystem health, sustainable water management and climate-resilient agriculture development.<br>A consortium of national civil society organizations will collaborate with Ministries of Natural Resources, Energy and Mining; and Agriculture, Irrigation and Water Development to execute the activities. An expert group from the included departments and organizations will implement measures to manage environmental and social risks. | | |

## B. Project / Programme details

### B.1. Context and Baseline (500 words)

Malawi is a landlocked, low-income country with a rapidly expanding population of approximately 18 million. Malawi ranks 173th out of 188 countries on the Human Development Index, with approximately 50% of people living under the national poverty line and 72.2% living with under 1.25$ a day. 40% of Malawians lack the purchasing power to satisfy their daily needs indicating that most rural jobs are neither productive nor gainful. Six million smallholder farmers contribute more than 70% to agricultural Malawi's GDP. Malawi's economic performance is therefore dependent on the performance of smallholder farmers, who are dependent on rain-fed agriculture[1]. The resilience of the agro-ecosystem in Malawi is hindered by soil and land degradation as well as nutrient loss leading to low productivity. Land and other natural resources are threatened by the high demand. The deforestation rate is estimated to be between 1 to 2.8 percent and an estimated 2.5 million hectares of forest resources were lost between 1972 and 1992, which was over 40% of Malawi's forest resources. An additional 17% was lost between 1990 and 2010. Forests are being cleared for fuel wood and charcoal production, for agriculture and infrastructure development, including housing, primarily driven by population growth. Deforestation is contributing to land degradation and reduced water retention capacity in the catchment areas. Future projections for further increases in deforestation and land degradation are startling. With the population increases expected, if more is not done towards agriculture intensification then an estimated 740,000 hectares of forest and woodland (representing 37% of the 2010 forested area) will need to be cleared to provide farmland to meet the expected food requirements, which will further place pressure on biomass availability in central and southern regions of the country[2].

The proposed project aims to **build climate resilience of smallholder farmers and forest**

**ecosystems in three climate vulnerable Districts in Southern Malawi: Balaka, Machinga and Neno Districts**. In these Districts, most smallholders focus on maize cultivation with limited crop diversification. The irrigated land area is minimal due to unavailability of sustainable water sources, and agriculture production is vulnerable to rainfall variation. Low productivity leads to persistent high levels of poverty and malnutrition and is exacerbated by lack of enabling frameworks and sustainable financing, limited advisory services and limited youth participation. Agricultural productivity is adversely affected by the poor quality of inputs, declining soil fertility and sub-optimal practices[3].

Malawi is particularly vulnerable to climate change variability and extreme weather events. There are large temporal and spatial rainfall variations during the rainy season, which generally runs from October to May in most parts of the country, with trends being observed of late onset and early cessation. The remainder of the year, there is generally no rainfall at all. High rainfall intensity and large rainfall variations, such as flush floods occur. However, although some records exist, there is generally a lack of information and data about this. [4] **Recent climate trends** show an average temperature increase 0.21 degrees per decade [5]. Other observed changes in climate most notably include a shift in the rainfall season, with late onset and early cessation, as well as increases in the length of the dry season and reductions in the length of the growing season. Over the last four decades, Malawi has experienced several climatic variations that have resulted in the occurrence of extreme weather events, ranging from droughts (7 recorded) to floods (18 recorded) and flash floods (4 recorded)[6]. Evidence suggests that the frequency and magnitude of these hazards will increase in the future and will be exacerbated by climate change.

Climate change **projections for Malawi** indicate mean temperature increases of between 1.5 and 2°C by 2050 in optimistic scenarios (RCP4.5) and between 2 and 2.5°C in more pessimistic scenarios (RCP8.5), with longer and more intense heatwaves. Projections for the end of the century range between +2.5 (RCP4.5) and 4.5°C (RCP8.5). Annual rainfall is expected to decrease and rainfall variability is expected to increase, with an anticipated increase in the intensity of rains during the rainy season and drier periods during the dry season. The Southern Region of Malawi, including Neno, Maching and Balaka Districts, is forecasted to be exposed more severely to temperature increases, evapotranspiration, decreases in rainfall and an increased occurence of droughts, as compared to the other regions of the country[7]. These trends are expected to have severe impacts on the agriculture sector, e.g. losses in agricultural GDP are estimated to range from 1.1 to 21.5% for return periods of 5 and 25 years[8].

The **root causes of the vulnerability** of Southern Malawi's economy and local populations to climate change is due to a number of compounding factors: unique and highly degraded ecosystems; the socio-economic and demographic situation; limited capacity to finance adaptation measures; overdependence on rain-fed agriculture; heavy reliance on natural resources; limited knowledge on climate change at community level to inform adaptation practices; sub-optimal agricultural productivity and practices, and limited diversification within household economy both on and off-farm[9] [10]. An initial needs' assessment in the targeted Districts identified a set of **main constraints and barriers to climate change adaptation and climate-resilient development** and these findings are confirmed by recent studies and vulnerability assessments made, which identify the Southern Region to score highest on vulnerability and lowest on adaptive capacity in the country 11 [11]. The key contraints and barriers include: (i) limited agriculture production and post-production capacities: despite availability of improved technologies, productivity has no significantly increased over the last 4 decades, while post-harvest losses are estimated at 40%, further threatened by climate change; (ii) limited diversification of production and income: the majority of smallholders rely on single subsistence or cash crops, in the area mostly maize and tobacco, increasing vulnerability towards shocks, including climate-related ones; (iii) lack of access to climate information related to to agriculture and and advisory services, and

(iv) poor access to markets: agriculture development, put at risk due to climate change impacts, in which the country has stagnated, including limited improvements along the agriculture production chains; (v) land degradation, exacerbated by climatic events and unsustainable practices; (vi) a lack of assets, including wealth and income; (vii) exposure to worsening climatic conditions, such as droughts and floods (as described above) - including the most recent cyclone Idai causing severe flooding in Southern Malawi; (viii) deforestation and forest degradation as a result of population growth, poor agricultural and other coping practices; (ix) feminization of poverty and inequalities between women and men in agricultural support access; and (x) limited irrigation and water storage infrastructure (92% of Malawi's population relies directly on rain-fed sources of water.

The proposed project was **conceived based on national climate change programmes and strategies**. It is aligned with contributions outlined in Malawi's INDC, most specifically with the adaptation contributions : the current project will promote the adoption of improved practices and will facilitate increased access to water for irrigation, directly contributing to adaptation measures defined in tha agriculture (3.1) and water (3.2) sectors. The emphasis on integrating resilient ecosystems, contributes to adaptation measures targeted under Forestry (3.6).

As defined in the National Climate Change Management Policy (NCCMP), the project will contribute to reduced climate change vulnerability through improved social, economic and ecological resilience, increased awareness and enhanced capacity to implement climate change related interventions, respectively corresponding to Outcomes 1, 3 and 5 of the NCCMP.

Additionally, the project will contribute to three key priority investment areas of the National Climate Change Investment Plan namely (adaptation (investment area 5.2), mitigation (investment area 5.3) and and capacity development in climate change (investment area 5.5.).. The project is aligned with priority area 1 (Agriculture, water development and climate change management) in the Malawi Growth and Development Strategy (MGDS) III, which defines “Agriculture and Climate Change Management” as its key priority for catalyzing socio-economic development. Just as the current project, it aims to reduce the vulnerability of communities and ecosystems through improved and environment-friendly practices to improve production and productivity. In this sense, the project is also aligned with with the National Agriculture Policy and its 8 priority areasof sustainable agricultural production and sustainable Irrigation development; mechanisation of agriculture; agricultural market development, agro processing and value addition; food and nutrition security; agricultural risk management; empowerment of youth, women and vulnerable groups in agriculture; Iinstitutional development, coordination and capacity strengthening he project contributes to achieving the National Forest Landscape Restoration Strategy, specifically to its priority areas in Agriculture Technologies, Community Forests and Woodlots, and Forest Management. In addition, the project was informed by observations and findings made in the NAP stocktaking report and by suggestions of EAD which will secure that results and lessons learned by the project will feed into the development and implementation results of the NAP.

The proposed interventions will build **synergies** with previously implemented and current climate change and agriculture projects, among others, with the Shire River Basin Management Programme (WB-GEF), Climate Proofing Local Development Gains (UNDP), Enhancing Early Warning Systems in Malawi (UNDP-GCF), Climate Adaptation for Sustainable Water Supply (AfDB).

*[1] UNDP, Human Development Report Malawi, 2017;*
*[2] GoM, Forest Landscape Restoration Opportunities Assessment for Malawi, 2017;*
*[3] FAO, Review of Food and Agriculture Policies, 2014;*
*[4] Graphical illustrations on seasonal events and climate change trends were attached to the*

*Concept Note in Annex 4.*

*[5] Cosmo Ngogondo, Lena Tallaksen, and Chong Xu, 'Growing season length and rainfall extremes analysis in Malawi', October 2014;*

*[6] Université Catholique de Louvain, EM-DAT, The OFDA/CRED - International Disaster Database http://www.emdat.be, 2016;*

*[7] GoM, Second National Communication (SNC) of the Republic of Malawi, October 2011;*

*[8] Pauw, K., J. Thurlow, M. Bachu and D. E. Van Seventer, 'The Economic Costs of Extreme Weather Events: A Hydro-Meteorological CGE Analysis for Malawi', 2018;*

*[9] LUANAR, Existing Research and Knowledge on Impacts of Climate Variability and Change on Agriculture and Communities in Malawi, 2014;*

*[10] USAID, Malawi Climate Change Vulnerability Assessment, 2013;*

*[11] Malcomb, Weaver and Krakowa, Vulnerability Modeling for Sub-Saharan Africa: An operationalized approach in Malawi, 2014*

**B.2. Project / Programme description (1000 words)**

The project will build the climate resilience and adaptive capacities of 10,000 smallholder farmers (75% women *[2]*) and their respective households (approximately 60,000 people, 50% women) towards current and projected climate change, forest ecosystems and variability, and will be implemented in 3 Southern Districts of Malawi: Neno, Machinga and Balaka.

**Specific objectives** are (1) To reinforce and protect forest ecosystem health through regeneration of natural forests, forest management and reduced anthropogenic pressure; (2) To increase access to sustainable water sources for irrigation and consumption throughout the dry season by the promotion of rainwater harvesting technologies and systems; (3) To increase and diversify agricultural production, productivity and income by adoption of climate-resilient techniques and value chain development;

These objectives will be achieved through the implementation of three combined and interlinked key components:

1. **Strengthening climate resilience of forest ecosystems**, with the corresponding Outcome 1: Reinforced ecosystems and improved management contributing to carbon sequestration, achieved by following outputs and activities: Output1.1: Natural and assisted forest regeneration is promoted: (A1.1) strengthening of 200 Village Natural Resource Management Committees (VNRMCs); (A1.2) Promotion of farmer-managed natural regeneration (FMNR) on 10% of farmland; and (A1.3) Establishment of Village Forest Areas (VFAs); Output 1.2: Forest restoration and agroforestry are promoted: (A1.4) Capacity Building of communities' on nurseries establishment and management; (A1.5) Provide inputs for Community Nurseries establishment; (A1.6) targeted afforestation in priority areas; (A1.7) establishment of 200 agroforestry demonstration plots; Output 1.3: Human pressure on natural forests is reduced: (A1.8) introduction of (native) fast-growing tree crops for firewood and fodder; (A1.9) promotion of low-cost improved cooking stoves; (A1.10) sensitization campaigns on importance of forest resources and management**;** and (A.11) promotion of community forestry bylaws.
2. **Enhancing smallholder farmers' resilience towards climate change**, structured as follows: Outcome 2.1 Enhanced resilience capacity of smallholder farmers towards prolonged drought spells [3], achieved by Output 2.1.1 Rainwater harvesting infrastructure for agriculture is established: (A2.1) Site-specific assessment for identification of most viable rainwater harvesting technologies; (A2.2) Construction and rehabilitation of rainwater storage tanks; (A2.3) Establishment of farm ponds, swales and other in situ rainwater systems; (A2.4) Capacity building of extension workers and communities in O&M of rainwater harvesting technologies; Output 2.1.2 Farmers are connected to rainwater

harvesting infrastructure: (A2.5) Sensitization and trainings on micro-scale irrigation; and (A2.6) Provision of inputs to communities for small-scale irrigation systems; Output 2.1.3 Climate-resilient agriculture is promoted and adopted: (A2.7) Establishment and organization of 200 farmer-based organizations (FBOs); (A2.8) Capacity building of 150 extension workers on CA and AFS; (A2.9) Establishment of model plots for showcasing climate-resilient agriculture practices; (A.2.10) Provision of inputs to FBOs for adopting new practices; (A2.11) Trainings and on-farm assistance of farmers on CA and AFS; and Output 2.1.4 Livelihood and income generation activities are diversified: (A2.12) Formation, strengthening and coaching of Cooperatives; (A2.13) Promotion of value chains, including with provision of processing technologies and establishment of PPPs and a focus on tree-crops; (A2.14) Establishment of storage facilities; and (A2.15) Promotion of community-based revolving funds. To achieve improved food security and nutrition, and increased household income, the project will focus on the production of nutrition-rich and climate-resilient crops such as horticulture, maize and companion crops, millet, specific tree crops such as Moringa and Tangerine, and short-cycle livestock.

3. **Capacity Building, communication and knowledge sharing**, with the corresponding Outcome 3.1: Capacities are built and knowledge shared: Output 3.1.1 Climate information is disseminated to stakeholders; (A3.1) Establishing links with M-Climes project; (A3.2) Strengthening of climate information dissemination networks at district-level stakeholders (small farms); Output 3.1.2 Knowledge and lessons learned are disseminated: (A3.3) Development of communication plan; (A3.4) Dissemination of information on lessons learned and project results; (A3.5) Awareness raising at school level, churches and communities on climate change and adaptation options; Output 3.1.3 Rainwater harvesting for domestic use is promoted: (A3.6) Establishment of low-cost rooftop rainwater harvesting systems in public places and communication on safe water use.

The combination of these components and their respective outputs responds to **an integrated and holistic approach** which encourages a genuine and sustainable transformation from coping to adaptation strategies in targeted communities. In this light, activities under the 3 components reinforce each other, leading to a sustainable shift away from detrimental practices to economic benefit among the target communities. The project also delivers on **crosscutting elements** such as co-benefits in environmental protection, education, health & nutrition, and gender.

The project is guided by a methodological approach that is based on the following **key principles**: *(a) Indigenous knowledge vs. science vs. best practices*: the project fosters existing knowledge and matches it with available climate change science and best available practices in the country; (b) *Building capacities of stakeholders*: the consortium was consciously selected with a secondary aim to build capacity of civil society and other actors in climate change interventions; (c) *Value chain development and public-private partnerships*: the project emphasizes the inclusion of smallholders and producer organizations in the value chain, and capitalizes on existing, pending and potential PPP's, harmonizing needs and demands of smallholder farmers with those of the private sector; (d) *Gender reponsiveness*: The project targets specificially women smallholder farmers to improve their capacities and wellbeing, while all program elements will be designed with an inclusive approach to embrace vulnerable population groups such as women, youth and people living with disabilities, including at community, at beneficiary, at institutional, and at project management level, with the aim to improve women's position in society, considered a key factor in building resilience.

The project builds on successful models of public-private partnerships that have been established in Malawi. These projects link smallholder farmers with national companies, who in their turn link the products to the national and international markets. Farmers provide production capacity, while local companies provide processing capacity and technical capacity to comply with standards and certifications that are internationally applicable, creating a win-win situation. The involvement of public institutions and NGOs that support farmers and the strengthening of cooperatives secures that the

value chains are equitable and the rights of the vulnerable farmers are taken into account. Products are selected based on (1) the demand on national and international markets, (2) farmers' preferences, and (3) climate change factors that influence or will influence production, with no partical order of importance.

The project hinges furthermore on the **participation and execution of activities by beneficiary farmers and communities**. This will be achieved through the structures of the Farmers' Clubs Model (FCM), an agricultural extension method that has been implemented in over 330 projects across Sub-Saharan Africa, Asia and Latin America. With support of the international donor community and national governments, the model has reached approximately 220,000 farmers to day, successfully increasing their production and income. In Malawi, the FCM has thus far reached 69.000 farmers, and is **ready to be scaled up and to be replicated**. The FCM is based on setting up local structures and promoting peer-learning as a method to transfer and maintain knowledge on farming practices and other practices at the local level. In combination with the **comparative advantages** of each of the implementing organizations, the model has the **potential for transformation** of communities towards a climate-resilient pathway.

The role of the OSS as the accredited entity of the project is to bear full responsibility for the overall management of the project, including the financial, monitoring, and reporting responsibility. Through its project support unit, it will guide the execution of all activities of the project, which will be carried out by the executing entities. DAPP Malawi, together with the NDA, will lead the execution of the project on the ground in the Southern Region, in cooperation with other consortium members, which are the Civil Society Network on Climate Change (CISONECC), the Rainwater Harvesting Association of Malawi (RHAM), Leadership for Environment and Development (LEAD), the Malawi Environmental Endowment Trust (MEET), The Coordination Unit on the Rehabilitation of the Environment (CURE) and the Forest Research Institute Malawi (FRIM). Together with the consortium members, the government partners (EAD, MoA, DoF) will be key members in the project steering committee which will overview the overall implementation of the project. The EAD, as the NDA, will monitor the project implementation and provide technical guidance, both in terms of environmental issues as in the compliance with GCF policies and standards, and will secure policy guidance to the project. MoAIWD and their District Level counterparts will be key participants in the agriculture-related activities, while their extension workers will participate as key staff in implementation. The DoF, together with FRIM (a DoF department), will provide technical guidance on the forest regeneration activities and the training of communities in forest management.

Financial risks are characterized by inflation and foreign exchange rates and expected price differentials and those applied in the agricultural market. Operational key risks include: social conflicts, abrupt changes in climatic and ecological parameters, and lack of commitment of local authorities. Management and mitigation measures consist in making useful arrangements on pricing strategies, having solid contingency plans in place to deal with potential extreme weather events and social conflicts, and early engagement with local authorities.

*[1] A more visual overview of linkages between Components, Outcomes, Outputs and Activities is attached in a Logical Framework table in Annex 3*

*[2] Female-headed HHs will be prioritized over male-headed HHs. The proportion of female-headed HHs in Malawi is 30,6% (World Bank, 2015), while women account for 75% of agricultural production (FAO, 2016).*

*[3] Water governance is organized through Catchment Management Committees and Water User Associations (National Water Policy, 2005). A person has the right to harvest rainwater on his own land or on communal land and to use it for domestic purposes. (Malawi Water Resources Act, 2013)*

**B.3. Expected project results aligned with the GCF investment criteria (500 words)**

**Impact Potential:** The project will have direct socio-environmental impacts by integrating climate-resilient agriculture with forest management systems, as well as by livelihood strategies adapted to produce in vulnerable and degraded lands, which climate change puts at risk for further degradation. Supporting smallholders to adapt is essential given the role they play for current and future food security. Community-based and farmer-based activities are of core importance to transition towards ecologically sustainable landscapes, and towards a greener economy in Southern Malawi. Improved ecosystem health and increased resilience deliver clear adaptation benefits for the beneficiary communities. Through re- and afforestation (3.000 ha) and forest managemenent (6.000 ha) it delivers clear long-term adaptation impacts in Balaka, Machinga and Neno Districts, where the future potential of ecosystem services and nature-based solutions will be reinforced. Directly, the adaptation impact is the increased resilience and adaptive capacity of 60,000 people, household members of the 10,000 targeted farmers (75% women). Female-headed HHs will be prioritized over male-headed HHs . It is further estimated that the project will provide an approximate 120,000 people (community members) with adaptation benefits.

Although the project targets adaptation, there are clear mitigation benefits in building the resilience of forest ecosystems and in the shifting of agriculture and coping practices. An initial estimation of reduction in emissions is 814,008 tCO2eq over 20 years, yet in order to quantify the exact mitigation impact of carbon sequestration and avoided deforestation, further estimations will need to be made during full proposal development [1].

**Paradigm Shift Potential:** A paradigm shift in addressing adaptation needs among smallholder farmers in Southern Malawi lies in a holistic approach that combines agricultural development, water management and strengthening of ecosystems within organized communities. The approach that used focuses on restructuring and strengthening relevant systems and structures. This includes capacity building and strengthening of relations between key stakeholders of both public and private sector. The public-sector responsibility chain in agriculture, forestry and water management will be strengthened from national to community level, and essential links and cooperation between the sectors will be reinforced through the proposed intervention. Social capital in terms of cooperation, mutual support and peer-learning structures are shifting the momentum towards a common approach for adaptation and for changing the human-ecosystem relationship. This will include adding commercial value to forest and natural resources for community benefits. It is furthermore estimated that the adoption of ecosystem-friendly practices, combined with the introduction of alternative solutions and with increased awareness will have an incrementally positive impact on ecosystems' resilience. In turn, ecosystem resilience will contribute to reducing vulnerability of farms and communities towards impacts of climate-related shocks, e.g. it will reduce soil erosion and provide ecosystem services that are currently under pressure, which will have a positive impact on household economy. Increased income and food security resulting from the project will lift poverty-driven pressure on land and forest ecosystems. Although limited national and regional markets will remain an economic pressure.

The consortium of executing partners for the project is established to further develop a long-term platform between national civil society actors and government bodies and aims to be a network of pioneer-innovators in climate change adaptation. The process that the proposed project will guide the consortium through will build long-term capacities to access climate finance and build familiarity with the GCF processes, in its turn creating another piece of the foundation for long term adaptation planning and action.

**Sustainable Development:** The project delivers multiple sustainable development co-benefits.

Environmentally, it promotes positive externalities including improved soil quality and enhanced biodiversity, while forest ecosystem health and natural capital is a key resilience catalyst targeted by the project. Water access and availability for 6.000 households is expected to have added environmental, health and nutrition benefits. In addition, the project will bring socio-economic co-benefits. 10.000 farmers will increase production by 100%, improving food security. 6.000 households will increase their income with 50%, through diversifying sources of income by creating new income-generating opportunities and market linkages. Alltogether the project will contribute to the achievement of multiple of the SDGs as well as to the MGDS III. Directly, the project will contribute to SDGs 13, 15, 1 and 2. Indirectly, it will contribute to SDGs 3, 5 and 12. It will be secured that the project's results will feed into national SDG tracker instruments.

**Gender:** A key outcome aimed for is an improved socio-economic position of women in society. 75% of the participating farmers are women. The project utilizes an inclusive and human rights based approach, applying affirmative action in favour of women, youth and other vulnerable population groups in any area where local practices tend to exclude them from decision-making bodies and socio-economic opportunities. As such, the project prioritizes activities undertaken by women and youth for which they have recognized expertise and from which they can derive an income. Moreover, the action ensures women's access to factors of production, to their participation in the management of new and existing organizational structures as well as access to training and capacity building throughout the project cycle.

**Needs of Recipients:** By design, the proposed project targets the most vulnerable populations of the country, smallholder farmers in rural areas, for whom at this moment in its development curve, the country does not have the necessary resources to support sufficiently, neither in development or in adaptation to climate risks and variability. The initial needs assessment identified the key constraints and vulnerabilities, as mentioned in the sections above.

The intervention area, Southern Malawi, is identified as the most climate vulnerable part of the country, in which climate change risks and variability will have the most severe impact on local populations, if nothing is done (higher rates of temperature increases, evapotranspiration, decreases in rainfall and an increased occurence of droughts as compared to other Regions).

**Country ownership:** The project was designed in alignment with national policies, programmes and priorities, including the climate change programmes such as the NDC, the NAPA, National Charcoal strategy, National Resilience strategy, NAIP, NAP, NCCIP, National Forest Landscape Restoration Strategy (NFLRS), Malawi national Land policy and the NCCMP. National stakeholders of the relevant institutional structures were key participants in the design of the project, securing the project to be informed on policies and programmes in the pipeline. The adaptation benefits of the project are in line with the country's development priorities, such as stated in the MGDS III. The outcomes are in line with the relevant sectorial programmes and policies, such as the different policies and programmes mentioned above. Additionally, relevant government departments, as well as communities and their respective committees are included in the implementation arrangements for the project.

**Efficiency and effectiveness:** The project builds on existing national capacities, resources and experiences in Malawi, both at governmental and civil society level, making the project considerably cost-effective and efficient. Synergies with existing initiatives contribute further to that, as does the approach, community- and group-based, generating high adaptation impacts with relatively limited resources. Furthermore the stakeholder consultations resulted in a methodology based on best practices in the country. The economic benefits gained by the beneficiaries will loop back into Malawi's economic development, ideally generating continuous and sustainable growth.

The project model, which is easily scalable and/or replicable, and its results will allow for further

leveraging public and private finance into similar climate change adaptation interventions, as both social and economic benefits at various levels will be significant.

*[1] FAO's EX-ACT tool will be used for determining the Mitigation Impact during proposal development and project implementation*

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

### C.1. Financing by components

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

| Component | Output | Indicative cost (USD) | GCF financing | | Co-financing | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount (USD) | Financial Instrument | Type | Amount (USD) | Financial Instrument | Name of Institutions |
| Component 1: Strengthening climate resilience of forest ecosystems | | 1,100,000 | 1,060,000 | Grant | | 40,000 | Other | |
| Component 2: Enhancing smallholder farmers' resilience towards climate change | | 8,000,000 | 7,670,000 | Grant | | 330,000 | Other | |
| Component 3: Capacity Building, communication and knowledge sharing | | 450,000 | 350,000 | Grant | | 100,000 | Other | |
| Project Management fees | | 450,000 | 450,000 | Grant | | 0 | Other | |
| **Indicative total cost (USD)** | | 10,000,000 | 9,530,000 | | 470,000 | | | |

*For private sector proposal, provide an overview (diagram) of the proposed financing structure.*

### C.2. Justification of GCF Funding Request (300 words)

GCF contribution is deemed critical for the proposed project because of (i) the urgency of increasing vulnerabilities towards climate change impacts of rural communities in Southern Malawi, and (ii) the limited economic capacity of the country's public and private sectors.

Malawi ranks 155th on the ND-Gain Index ranking, while on the respective rankings on vulnerability and readiness, Malawi ranks in the bottom 15%[1]. Changes in the CPIA scores 2008-2016 indicate a negative trend in terms of institutional capacities and are below the average of non-fragile SSA countries. By design, the proposed project targets the most vulnerable populations of the country, smallholder farmers, for whom at this moment in its development curve, the country does not have the necessary resources to support sufficiently, neither in development as in adaptation.

As noted above, about 56% of the rural population of Malawi lives in poverty. Impacts of climate change are already affecting the rural population, and most notably smallholder farmers relying on rain-fed agriculture. Projected increased occurrence of droughts and rainfall variability further place these population groups under pressure. The proposed project is focused on reaching out to those vulnerable populations in a Least Developed Country (LDC), in line with the GCF mandate. Although a number of interventions have been and are being implemented to deal with the climate-related hazards and threats, the adaptation needs overreach the current scope of interventions, while Malawi's constrained public economy does not allow for sufficient investment to reach all vulnerable population groups.

Malawi's low HDI ranking and its low position on the other relevant poverty-assessment rankings indicate the limited economic strength of both public and private sector in the country. The NDC for Malawi furthermore affirms the need for external funding as condition for succesfully implementing the adaptation contributions. GCF resources will, by means of this project, contribute to addressing that need. Both public sector insitutions and the private sector manifest a lack of capacity in terms of climate change rationale and in terms of transitioning towards low-carbon emission development. This, in its turn, also results in a lack of funding streaming towards adaptation initiatives. The proposed GCF investment will contribute to efforts that aim to overcome those capacity gaps.

[1] Notre Dame Global Adaptation Initiative, ND-Gain Country Index, 2017

**C.3. Exit Strategy and Sustainability (300 words)**

The proposed project was designed with the intention to build the foundations for scaling up the interventions from community-level to district and potentially national level, and for replication in other areas of the country with similar agro-ecological and climate conditions and vulnerabilities, and similar socio-economic conditions and needs. Through the central role of the EAD (NDA), the Malawi Technical Committee on Climate Change and Civil Society Networks, the results achieved by the project will feed into the design of future projects and will set the stage for replication and scaling up, further reinforced through the capacities built at various levels and in multiple relevant sectors.

Stakeholder involvement, long-term sustainability of the project and exit considerations are principles that guide the project design. The project has strong governmental and civil society endorsement and support, in the sense that the proposed project was designed through consultations and involvement of public and private sector, national NGOs and civil society to promote ownership of the project and the effectiveness of its results. The organizations in the consortium have long-standing working relationships with the rural communities that are addressed, securing endorsement of the project and its results by the beneficiaries.

Relevant government departments as well as local communities will be leading on the implementation of project activities. This highlights a major strength of the proposed investments, namely that they will be country- and community-driven and owned. This builds sustainability and social development related to climate-resilient agriculture, natural resource management, ecosystem resilience and water management. The involvement of subnational institutions and local institutions such as Village Development Committees, Village Natural Resources Management Committees and organizations such as District Councils, agriculture extension officers, private sector and civil society will ensure continued support to the beneficiary smallholders beyond the project.

Building on these foundations, the project ensures that the investments as well as the results are sustained beyond the project duration.

Specifically, key sustainability activities included in the project design, which are contributing to sustainability include:

- Capacity building of relevant public sector structures - including agriculture extension,

environmental and forestry services - at national, regional and district level;

- Strengthening the cooperation and relation between the addressed sectors and their respective departments, among stakeholders of both public and private institutions and organizations;
- Establishing and strengthening of community-based organizations, including those for forestry, National Resource Management (NRM) and rainwater management, with a particular focus on strengthening their capacity to manage and maintain infrastructure, mainstream adopted technologies and practices, and manage and implement community plans;
- Putting in place and strengthening agriculture cooperatives, including building their capacities to be able, competitive and respected players in the agriculture markets;
- Establishment of long-term Public-Private Partnerships between targeted farmers in their newly developed structures, and actors from the private sector;
- Knowledge management and dissemination, in particular within and across the targeted sectors, but also at an overarching level in terms of the management and implementation of adaptation projects, and on accessing and managing climate finance;
- At environmental level, sustainability is informed by the minimal risks of the interventions and by strengthened capacities of NRM systems and committees;

These sustainability measures will be integrated in the M&E framework of the project (as described in section C.5), and the project will be included in Malawi's GCF portfolio, managed and monitored by the EAD throughout and beyond the duration of the proposed project. Additionally, District level authorities, including Director of Planning and development (DPD), District Agriculture Development Officers (DADO), District Environmental Officers (DEO), will monitor the project's implementation and results closely. At local community level, the project will work with exiting local institutions including area and village development committees; area and village civil protection committees. Training and capacity building aspects of the project will build local capacity to manage the project period of 5 years.

**C.4 Stakeholders engagement in the project or programme (300 words)**

The project design phase was informed by extensive stakeholder consultations with public institutions, NGOs and civil society, which started in March 2018. The Environmental Affairs Department (NDA) was included from the starting phase of the consultations. Other public institutions consulted were, among others, the Ministry of Natural Resources, the Energy Department, the Forestry Department, the Ministry of Agriculture and Irrigation Development and the Ministry of Rural Development. District Councils of the targeted districts were also consulted. Furthermore, consultations took place with civil society organizations with long-term experience with climate change related activities in Malawi such as CISONECC, LEAD, CURE, MEET and RHAM, as well as with private sector entities in the agriculture sector. The project was presented to and approved by Malawi's National Technical Committee on Climate Change (NTCCC) to assure suitability alignment to national climate change strategies and synergies.

At country-level, DAPP will act as the lead EE, in straight collaboration with executing partners MoA, DoF and the consortium of CSOs. During the development of the full funding proposal, which will be led by DAPP, the NDA will be consulted extensively and will play a key role throughout all stages, as will the NTCCC, and OSS. A stakeholder committee for the present project will be composed with representatives from all executing partners and relevant public institutions and civil society, which will be involved in the process of full proposal development, and will provide inputs during different stages.

Further consultations will take place with the District Authorities, with farmers' unions representing the targeted communities, and with the targeted communities. Pre-agreements will be made with private sector partners in the agriculture sector to assure the market viability of the crops targeted. The

National Technical Committee on Climate Change, just like the NDA, will be an important backstopping organism in the development of the funding proposal.

In order to secure synergies with existing initiatives, and to prevent duplication of interventions, consultations will take place with other entities that are implementing climate, forestry and agriculture projects in the targeted districts. This process will be guided by national and district authorities who oversee the different projects. The organizations consulted will include, besides relevant government bodies, UN organizations, bilateral partners and Multilateral Development Banks (MDBs).

The stakeholder committee formed during the full proposal development will form the foundation for a Project Steering Committee (PSC), which will be established to oversee and coordinate the implementation of the project. The PSC will be co-chaired by DAPP as the EE and by the EAD, who jointly will agree on annual work plans and budgets, and input into reporting processes. The PSC will furthermore include representatives from the NDA, the DoF and the CSO partners. AE OSS will have an observer role to the PSC.

## 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

Please indicate your answers to the questions below and provide an explanation on the response selected. In cases when the TBD response has been selected please explain briefly why you are not able to determine now and when in the project cycle the question will be addressed.

If the criteria is not applicable to the project you may write N/A in the justification box.

| Exclusion criteria | YES | NO |
|---|---|---|
| Will the activities involve associated facilities and require further due diligence of such associated facilities? | ☐ | ☒ |
| The proposed project will not involve any associated facilities that would require further due diligence. The project will only implement activities in targeted areas and will not involve any activities that are outside the work plan. | | |
| Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to affected states? | ☐ | ☒ |
| The project does not have any significant environmental or social trans-boundary risks and impacts. The project has a positive impact in the areas of water resources and will support balancing ecosystems. The project will promote good use of natural resources for agriculture production and proper management of agriculture waste. | | |
| Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women and children? | ☐ | ☒ |
| The project will secure good working conditions for the employees, including women, and will strictly comply with the national legislation and international standards related to employment. Additionally, as a cross-cutting element, the project will place specific emphasis on the prevention of infectious diseases for its targeted beneficiaries, as well as for staff. | | |
| 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? | ☐ | ☒ |
| The project will not produce any hazardous waste such as resulting from the use pesticides, herbicides or chemical fertilizers. The agriculture techniques mainstreamed are nature-based and the use of chemicals will be avoided. Ecological fertilizers will be promoted and production of those will be organized (compost, moringa-based fertilizer, biochar where possible, etc.). It is further estimated that the on-farm (bio)diversity promoted through those practices will reduce the need for synthetic pesticides. Technologies to be introduced, such as for rainwater harvesting, will be low-cost and affordable, suited for a rural environment, and will not generate any hazardous waste. No additional studies will be required | | |
| 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? | ☐ | ☒ |
| The project will not include any major construction or rehabilitation of critical infrastructure that would require further technical assessments or safety studies. To address water shortages as an adaptation intervention, the project will concentrate on low cost, environmentally friendly water | | |

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| harvesting techniques which will mainly be at household and communal level. The tanks and irrigation systems are micro-scale and it is deemed that there would be very little impact on the environment, if any. On the contrary, some interventions may have positive effects in the sense that through the interventions soil erosion may be avoided - which is a significant issue in Malawi, and impacts the water retention capacity of the soil (The photos are presented on the ESS answer sheet). | | |
| Will the activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities? | ☐ | ☒ |
| The project will be implemented in the communities on and around individual farmers' land and fields, and may involve some communal lands available for this purpose, with consent of the village development committees. The beneficiaries will live and improve their own land hence there will be absolutely no need for resettlement. There are no major infrastructure works involved that would require anyone to resettle. | | |
| Will the activities be located in or in the vicinity of protected areas and areas of ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites? | ☐ | ☒ |
| The communities in the targeted districts are not located in or adjacent to protected areas, nor in areas identified as critical habitats or key biodiversity areas. The targeted communities and districts are highly degraded. The proposed project will work with the communities to restore the lost environment while building resilience to climate change impacts. | | |
| Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans? | ☐ | ☒ |
| The intervention will not involve activities that may affect indigenous people. Interventions are local, small in scale and will require no further due diligence. As a key principle, participation of communities and individuals will be voluntary and with informed consent. | | |
| 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? | ☐ | ☒ |
| The locations targeted by the project do not include any sites considered to be critical cultural heritage. The project interventions will be located in agriculture lands and potential forest areas which need regeneration. | | |

## Part B: Specific environmental and social risks and impacts

| Assessment and Management of Environmental and Social Risks and Impacts | YES | NO | TBD |
|---|---|---|---|
| Has the E&S risk category of the project been provided in the concept note? | ☒ | ☐ | |
| Has the rationale for the categorization of the project been provided in the relevant sections of the concept note? | ☒ | ☐ | |
| Are there any additional environmental, health and safety requirements under the national laws and regulations and relevant international treaties and agreements? | ☐ | ☒ | ☐ |
| No, there are no further requirements from the country. The Malawi Technical Committee on | | | |

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| Climate Change has endorsed and recommended the proposed project to be submitted to the GCF, without further requirements. | | | |
| Are the identification of risks and impacts based on recent or up-to-date information? | ☒ | ☐ | ☐ |
| Yes, the identification of risks, carried out in December 2018, is based on recent information. No significant changes have happened since that identification. | | | |
| **Labour and Working Conditions** | YES | NO | TBD |
| Will the activities potentially 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? | ☐ | ☒ | ☐ |
| The project will not impact the health and safety of the employees negatively. As in all projects, the national legislation on workers' rights will be complied with strictly. The project will furthermore emphasize equal employment opportunities for women and other vulnerable groups. | | | |
| Will the activities pose occupational health and safety risks to workers including supply chain workers? | ☐ | ☒ | ☐ |
| The project will avoid all occupational health and safety risks to workers and will respect the national legislation on workers' health and safety. | | | |
| **Resource Efficiency and Pollution Prevention** | **YES** | **NO** | **TBD** |
| Will the activities generate (1) emissions to air; (2) discharges to water; (3) activity-related greenhouse gas (GHG) emissions, (4) noise and vibration; and (5) wastes? | ☐ | ☒ | ☐ |
| The project will not generate any significant emissions. Agriculture, water and forest protection practices introduced by the project will all contribute to reducing emissions, and their implementation will not generate significant emissions. Any activity-related emissions will be insignificant (e.g. from transportation, small-scale infrastructure and technologies, etc.) | | | |
| Will the activities utilize significant amount of natural resources including water and energy? | ☒ | ☐ | ☐ |
| The project will use water to reach the adaptation impacts as set out for, addressing increasing frequency of droughts in the area. However, the water used will be harvested and stored rainwater, and there will not be any negative impacts on rivers and/or aquifers. Energy used during the project will be for the purpose of project operation and management, and will be minimized. No large-scale energy investments will be made. | | | |
| Will there be a need to develop detailed measures to reduce pollution and promote sustainable use of resources? | ☐ | ☒ | ☐ |
| As activities are farmer-based and community-based, and impacts regarding pollution, emissions or natural resources will be positive, it is deemed no further detailed measures will need to be developed. | | | |
| **Community Health, Safety, and Security** | **YES** | **NO** | **TBD** |
| Will the activities potentially generate risks and impacts to the health and safety of the affected communities? | ☐ | ☒ | ☐ |
| The activities will not generate risks and impact to the health and safety of the affected communities, as the project does not foresee the use of technologies and methodologies that may potentially generate risks to the beneficiary communities. | | | |
| 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? | | | |
| The project will build resilience to any negative effect from climate change impacts. Yet, the risk of major natural disasters does exist, which may affect communities and the implementation of activities. However, Malawi has existing emergency preparedness and response plans, and the current project will not interfere with these plans. | | | |
| Will there be risks posed by the security arrangements and potential conflicts at the project site to the workers and affected community? | ☐ | ☒ | ☐ |
| The project will mobilise the communities and their leaders to be part of the design and implementation of the activities. Village Development Committees will be at the centre of the action. The targeted communities are not located in or near any conflict zones. | | | |
| **Land Acquisition and Involuntary Resettlement** | **YES** | **NO** | **TBD** |
| Will the activities likely involve land acquisition and/or physical or economic displacement? | ☐ | ☒ | ☐ |
| The project will avoid activities that will cause loss of land, assets, source of revenue and means of existence. The re- and afforestation of 3,000 ha and forest management of 6,000 ha areas are not contiguous but are spread out over communities, forest areas, and farms in the intervention area in the 3 Districts. Interventions will take place on individual farmland and newly established Village Forest Areas (VFAs), which are managed by Village Natural Resource Management Committees (VNRMCs) together with the Department of Forestry (DOF). The project will focus on key stakeholder participation, in particular from vulnerable groups and poor and marginalized communities, in the conception and implementation of the project. | | | |
| **Biodiversity Conservation and Sustainable Management of Living Natural Resources** | **YES** | **NO** | **TBD** |
| Will the activities potentially introduce invasive alien species of flora and fauna affecting the biodiversity of the area? | ☐ | ☒ | ☐ |
| The project plans to encourage natural forest regeneration, and cultivation of local crops, and will not introduce any alien species to the target areas. The common tree species to be introduced are: Senna siamea, Senna spectabilis, Gliricidia sepium. These species are indigenous to Malawi and would not cause any environmental hazards. They are known as fertilizer trees because they fix nitrogen in the soil. They are also fast growing providing the much-needed fuel wood to communities. | | | |
| Will the activities have potential impacts on or be dependent on ecosystem services including production of living natural resources (eg.agriculture, animal husbandry, fisheries, forestry)? | ☐ | ☒ | ☐ |
| The project activities will not have negative impacts on the ecosystem services. Any impacts that would arise from the introduction of agriculture techniques and forest regeneration practices, are deemed to have positive effects. | | | |
| **Indigenous Peoples** | **YES** | **NO** | **TBD** |
| Will the activities potentially have any indirect impacts on indigenous peoples, ethnic minorities, or vulnerable and marginalized groups? | ☐ | ☒ | ☐ |
| The mitigation and adaptation activities will not have a direct impact on indigenous people. | | | |
| **Cultural Heritage** | **YES** | **NO** | **TBD** |
| Will the activities restrict access to the cultural heritage sites and properties? | ☐ | ☒ | ☐ |
| The actions does not involve activities nearby cultural heritages, and will not hinder access to any | | | |

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|---|---|---|---|
| other sites and properties. | | | |
| Will there be a need to prepare a chance-find procedure in case of the discovery of cultural heritage assets? | ☐ | ☒ | ☐ |
| The project will not interfere with the cultural heritage in its activities. | | | |
| **Stakeholder engagement and grievance redress** | **Yes** | **NO** | **TBD** |
| Will the activities include a continuing stakeholder engagement procress and a grievance redress mechanism and integrated into the management/implementation plans? | ☒ | ☐ | ☐ |
| District and national climate change feedback forums have been planned in the prosed project. In addition, the project executing entities will be participating the national technical working groups on climate change. Grievance redress mechanisms will be integrated into the implementation plans. | | | |

## Part C: Sign Off

**Sign-off:** *Specify the name and designation 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.*

Mrs. Khaoula Jaoui, khaoula.jaoui@oss.org.tn Climate Finance and Environment Expert OSS' Social and Environmental Committee Officer