Meeting of the Board
21 – 24 October 2024
Songdo, Incheon, Republic of Korea
Provisional agenda item 10

GCF/B.40/02/Add.08

30 September 2024

Consideration of funding proposals – Addendum VIII

Funding proposal package for FP246

Summary

This addendum contains the following seven parts:

a) A funding proposal titled "Climate Resilient Agriculture in Somalia (Ugbaad)";
b) No-objection letter issued by the national designated authority(ies) or focal point(s);
c) Environmental and social report(s) disclosure
d) Secretariat's assessment;
e) Independent Technical Advisory Panel's assessment;
f) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
g) Gender documentation.

Table of Content

Funding Proposal

Project/Programme title:	Climate Resilient Agriculture in Somalia (Ugbaad)
Country(ies):	Somalia
Accredited Entity:	FAO
Date of first submission:	2024/05/12
Date of current submission	2024/08/08
Version number	V.06

GREEN CLIMATE FUND

Contents

Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the GCF Information Disclosure Policy, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that maUy not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

"FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]"

A. PROJECT/PROGRAMME SUMMARY

A.1. Project or programme	Project	**A.2. Public or private sector**	Public
A.3. Request for Proposals (RFP)	Not applicable		

A.4. Result area(s)

*Check the applicable GCF result area(s) that the overall proposed project/programme targets below. For each checked result area(s), indicate the estimated percentage of **GCF and Co-financers' contribution** devoted to it. The total of the percentages when summed should be 100% for GCF and Co-financers' contribution respectively.*

	GCF contribution	Co-financers' contribution[1]
Mitigation total	Enter number %	Enter number %
☐ Energy generation and access	Enter number %	Enter number %
☐ Low-emission transport	Enter number %	Enter number %
☐ Buildings, cities, industries and appliances	Enter number %	Enter number %
☐ Forestry and land use	Enter number %	Enter number %
Adaptation total	Enter number %	Enter number %
☒ Most vulnerable people and communities	30 %	30 %
☒ Health and well-being, and food and water security	40 %	40 %
☒ Infrastructure and built environment	10 %	30 %
☒ Ecosystems and ecosystem services	20 %	0 %

A.5. Expected mitigation outcome *(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)*	*N/A*	**A.6. Expected adaptation outcome** *(Core indicator 2: direct and indirect beneficiaries reached)*	*Direct:* ***1,152,142 (50% women)***	*Indirect:* ***972,689 (50% women)***
			6.2% of total population	*5.2% of total population*
A.7. Total financing (GCF + co-finance[2])	94,901,497 USD	**A.9. Project size**	Medium (Up to USD 250 million)	
A.8. Total GCF funding requested	79,707,268 USD			

[1] Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.
[2] Refer to the Policy of Co-financing of the GCF.

A.10. Financial instrument(s) requested for the GCF funding	☒ Grant ☐ Loan Enter number ☐ Guarantee Enter number ☐ Equity Enter number ☐ Results-based payment Enter number		
A.11. Implementation period	*7 years*	**A.12. Total lifespan**	*20 years*
A.13. Expected date of AE internal approval	*5/1/2024*	**A.14. ESS category**	B
A.15. Has this FP been submitted as a CN before?	Yes ☒ No ☐	**A.16. Has Readiness or PPF support been used to prepare this FP?**	Yes ☐ No ☒
A.17. Is this FP included in the entity work programme?	Yes ☒ No ☐	**A.18. Is this FP included in the country programme?**	Yes ☒ No ☐
A.19. Complementarity and coherence	Yes ☒ No ☐		
A.20. Executing Entity information	The project will be executed by FAO and the Government of Somalia acting through (i) the Ministry of Environment and Climate Change (MoECC) and (ii) the Ministry of Agriculture and Irrigation (MoAI) in a co-execution modality. More details are provided in Section B.4 and in the Annex 2.		

A.21. Executive summary (max. 750 words, approximately 1.5 pages)

Somalia is one of the most fragile countries in the world from various points of view, including security, inequality, displacement, conflicts over natural resources, and economic development, which are exacerbated due to climate change. Many households are food-insecure and 49% of the population is undernourished. The latest integrated Food Security Phase (IPC) classification notes that 1.7 million children below the age of 5 face acute malnutrition[3]. The domestic production only meets 22% of per capita cereal needs on average and the country is dependent on food imports and food aid[4]. The agricultural sector in Somalia accounts for approximately 75% of gross domestic product (GDP)[5], with 65% of population relying on the livestock subsector, mainly nomadic pastoralism and agro-pastoralism that depends on natural pastures on the country's vast rangelands. Agricultural productivity is very low due to high dependency on rain-fed agriculture for major crops including maize and sorghum under its arid and semi-arid climate where the average annual rainfall is about 200 mm in most parts of the country. The northern coastline receives significantly less annual rainfall (only up to 50 mm) whilst the south receives approximately 400 mm (Somalia NAPA, 2013).

[3] IPC info dated April 2024
[4] International Monetary Fund (IMF), Somalia: Selected Issues (2022)
[5] SOMALIA: Rebuilding Resilient and Sustainable Agriculture, International Bank for Reconstruction and Development/The World Bank and FAO (2018)

There have been significant changes in the climate and extreme climatic events in Somalia since the baseline period (1981–2010) and climate change is increasing the likelihood of compounding and cascading impacts for communities and ecosystems. Climate scenarios project that both mean maximum and minimum temperatures are expected to rise in the near, mid, and far futures under different scenarios (RCP 2.6 and RCP 8.5). Coastal areas may see increased precipitation, particularly under RCP 8.5, while inland regions might experience decreases. The frequency of heavy rainfall events is projected to increase across the country. The frequency and intensity of droughts have been rising and are expected to continue increasing, with projections indicating shifts in affected areas during different seasons. Floods during the Gu season are also expected to increase in certain regions, posing risks to populations due to lack of preparedness.

Depleted technical capacity in government institutions due to years of conflict, low investment in agriculture, and inadequate access to climate information among last-mile users are significant barriers that must be lifted for local communities to be able to leverage climate resilient livelihoods. The project proposes a multi-faceted approach to address these barriers. It restores productive landscapes so they can sustain resilient livelihoods, promoting sustainable agricultural practices and increasing access to water, enhancing access to climate-resilient inputs (seeds, feed, fodder), improving market access for smallholders, and strengthening institutional frameworks and coordination for sustainable landscape management and climate-resilient agriculture.

The project is premised on the following theory of change: If local communities' capacity is strengthened to implement sustainable landscape management and climate resilient agriculture and an institutional enabling environment is improved, then the resilience of local communities and ecosystems to climate change will be enhanced, because livelihoods will be derived from sustainably managed landscapes and adapted climate resilient agriculture and supported by adequate enabling environment.

The project aims to achieve three outcomes that work together to create a context in which, on the one hand, communities participate in the restoration of the productive landscape, and, on the other hand, they are supported by a stronger government extension services, governance and climate information systems. The three outcomes support the transition from unsustainable, unproductive and maladapted production systems with low productivity to more resilient productive agricultural practices. Pastoral systems have declined because of rangeland degradation and the project will support transition from pastoralism to agro-pastoralism. The project builds on best practices and lessons learned from recent projects and programs and are closely coordinated with other efforts to rebuild the country following years of conflict.

The project will benefit a total of 2,124,831 people (1,152,142 direct beneficiaries and 972,689 indirect beneficiaries). The project will directly contribute to the following targeted results in alignment with the GCF's Updated Strategic Plan (USP-2); T1 (by supporting the Country's adaptation and mitigation goals), T4 Food (85,932 beneficiaries adopting climate-resilient agricultural practices) and T5 Ecosystems (41,800 hectares to be conserved, restored and sustainably managed) through T9 locally-led adaptation approach. The Project will also support dissemination of climate information to communities, directly contributing to T3 CIEWS. The Project also aligns with T10 (by supporting resilient market chains).

Outcome 1 - Restored landscapes are resilient and sustainably managed.

Activities under this Outcome are designed to restore productive landscapes and facilitate ecological resilience, supporting ecosystem adaptation to climate change so that they can provide crucial ecosystem services and sustain the agricultural livelihoods of local communities. This requires both the creation and strengthening of local planning systems and the deployment of urgent landscape restoration interventions. Given the importance of water as a limiting factor in development in Somalia, the project has opted to adopt the sub-watershed as a planning unit.

Outcome 2 Local livelihoods are resilient to climate change.

Activities under this outcome are designed to ensure that local communities derive increased and improved climate resilient livelihoods from agriculture. The project targets existing key value chains (maize, sesame, sorghum) which are climate vulnerable staple crops, as well as livestock production. In these value chains, the project also supports the transition from extensive to intensive cropping and from pastoralism to agro-pastoralism. Given that a significant limitation is posed by water scarcity in Somalia, the project also focuses on securing resilient water supply for agricultural production through combinations of Ecosystem-based Adaptation (EbA) (outcome 1), green and grey infrastructure solutions at both landscape and farm level.

Outcome 3 An improved institutional enabling environment for sustainable landscape management and climate resilient agriculture is in place at State and Federal Levels

Activities under Outcome 3 form part of the project's sustainability and upscaling strategy. The aim is to create conditions and an enabling environment for the achievement, replication and broader adoption of project results. Given the fragile conditions of the Government of Somalia, strengthening of capacity is required to ensure that Federal Member States can implement new norms for sustainable landscape management and climate resilient agriculture.

The activities support the institutional capacity of the Government of Somalia at various levels. Output 3.1 considers legal frameworks, implementation monitoring modalities and coordination (the normative elements of institutional capacity), while output 3.2 strengthens the informational capacity of the Government of Somalia, in particular its capacity to generate and disseminate useful, relevant and timely climate information to last mile users.

The project will be executed by FAO and the Government of Somalia acting through (i) the Ministry of Environment and Climate Change (MoECC) and (ii) the Ministry of Agriculture and Irrigation (MoAI) in a co-execution modality to deliver the project activities.

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

B1.1 Climate context

Development problem of Somalia: High vulnerability and food insecurity

1. Somalia is the most fragile countries in the world[6] from various points of view, including security, inequality, displacement, conflicts over natural resources and economic development, which will be exacerbated due to climate change. Somalia has already experienced impacts of climate change on people's livelihoods due to limited adaptive capacity and preparedness. Somalia, ranked 172 out of 182 countries by the ND-GAIN Country Index[7], is one of the most climate vulnerable countries in the world and one of the least ready to face the climate crisis.

2. 6.6 million people or 39% of the total population currently have high levels of acute food insecurity according to the 2024 Global Report on Food Crises. Of them, 2.5 million are Internally Displaced Persons (IDP). This figure is the highest in GRFC history and includes roughly 1.9 million in Emergency (IPC Phase 4), although the population in Catastrophe (IPC Phase 5) declined since 2022. The latest Integrated Food Security Phase Classification (IPC) notes that 1.7 million children below the age of 5 face acute malnutrition[8]. Domestic production meets only 22% of average per capita cereal needs and the country is dependent on food imports and food aid[9].

3. The agricultural sector in Somalia accounts for approximately 75% of gross domestic product (GDP)[10], with 65% of the population relying on the livestock subsector, mainly nomadic pastoralism and agro-pastoralism that depends on natural pastures on the country's vast rangelands. The rural population consists largely of nomadic pastoralists and agro- pastoralists and population density follows the distribution of natural resources: over two thirds reside in the southern regions while the rest are in the northern and the central regions respectively. The agricultural productivity is very low due to high dependency on rain-fed agriculture for major crops including maize and sorghum under its arid and semi-arid climate where the average annual rainfall is about 200 mm in most parts of the country. The northern coastline receives significantly less annual rainfall (only up to 50 mm) whilst the south receives approximately 400 mm (Somalia NAPA, 2013).

4. Environmental degradation in Somalia is both a cause and consequence of extreme weather events, impairing the environment's capacity to meet societal and ecological needs. Approximately 27.5% of the land area in Somalia is considered degraded11, which is higher than the regional average. Due to the civil war, changes in governance and changes in land use patterns have changed considerably. These changes have contributed to the present state of land degradation and include expansion of cultivation agriculture into the rangelands without suitable land management activities, non-regulated charcoal production for local consumption and for export, uncontrolled grazing of livestock, and individual land ownership for urban and agricultural development. In addition, lack of good land management and lack of conservation measures have accelerated environmental degradation in some areas (SWALIM, LADA, 2009).

5. Degradation of vegetation and native species negatively impacts the social and economic resilience to climate shocks and livelihoods of displaced and host communities. In place of healthy biodiversity, *Prosopis spp*. (Prosopis) and other invasive species, i.e. Siam weed (*Chromolaena odorata*) and Parthenium weed (*Parthenium hysterophorus*) are colonizing rangelands and forest areas and are one of the problems causing decreased availability of natural pastures, biodiversity loss and habitat alteration. These invasive species compete with crops including in riverine areas by invading arable land and thereby reducing the area available for cropping use and decreasing water availability for people, crops and animals, well as disrupting other ecosystem processes.

6. Insufficient water management is one of the biggest challenges for communities to stabilize agricultural productivity and adapt to increased frequency and intensity of drought and flood events. As a result of the prolonged civil war and the weakness of communities' organization, most of the infrastructure for flood control and irrigation that was developed prior to the civil war is not currently functioning adequately[12].

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[6] Fragile States Index of Somalia is 111.9 out of 120, ranked 1st out of 179 countries in 2023.
[7] The ND-GAIN Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.
[8] IPC info dated April 2024
[9] International Monetary Fund (IMF), Somalia: Selected Issues (2022)
[10] SOMALIA: Rebuilding Resilient and Sustainable Agriculture, International Bank for Reconstruction and Development/The World Bank and FAO (2018)
[11] The Federal Republic of Somalia, Land Degradation Neutrality Target Setting Process in Somalia; Country Report (2020)
[12] SOMALIA: Rebuilding Resilient and Sustainable Agriculture, International Bank for Reconstruction and Development/The World Bank and FAO (2018)

7. Nearly 70% of Somalis live on less than USD 1.90 per day, the sixth-highest poverty rate in the region. Almost 90% of Somali households are deprived in at least one dimension: monetary, electricity, education, or water and sanitation, with nearly 70% of households suffering two or more dimensions[13]. Poverty hampers adaptation action to cope with extreme weather events and compounded by social inequalities. Environmental shocks are identified as a key contributor to poverty, alongside other significant factors. Among the top four drivers of poverty, natural hazards stand out prominently. Additionally, shifting migration trends, escalating inequality and political instability all play crucial roles in escalating poverty rates in Somalia. These factors collectively exacerbate vulnerabilities, particularly for marginalized communities by disrupting livelihoods, displacing populations, and straining already limited resources. These compounded vulnerabilities exacerbate systemic risks of food security in Somalia as illustrated below.

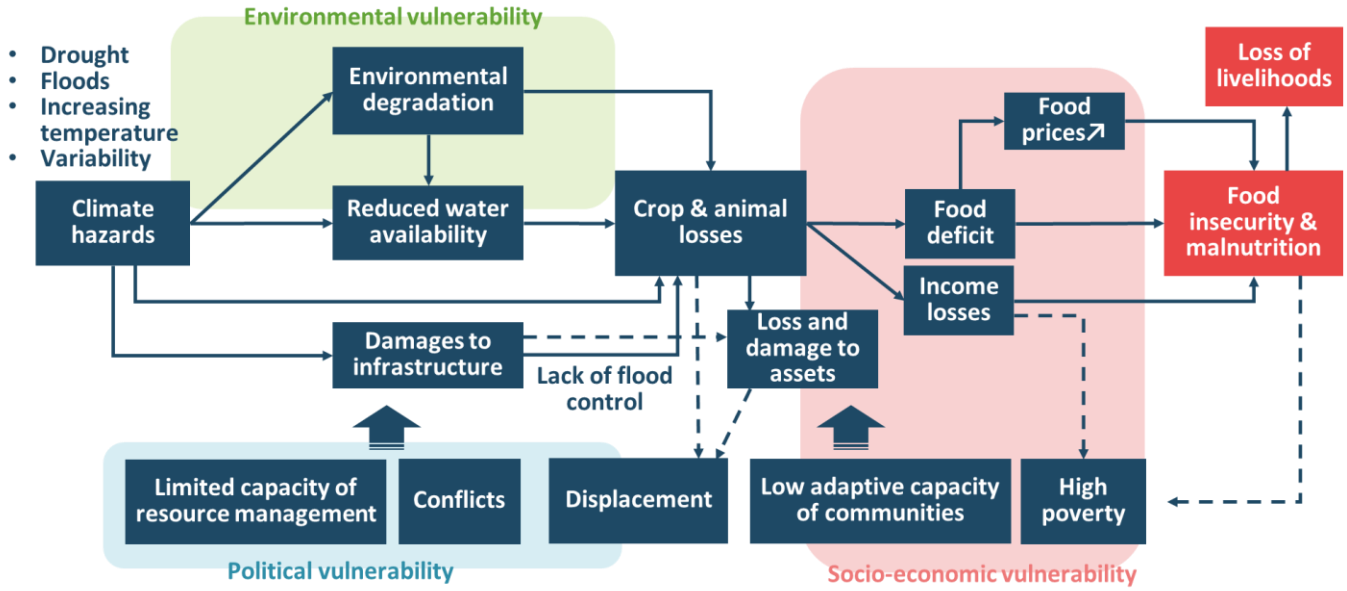

Figure B.1.1. Compound & cascading impacts for communities & ecosystems

Climate-Development Nexus: Climate Drivers and Climate Change Impacts

8. There have been significant changes in the climate and extreme climatic events in Somalia during the baseline period (1981–2010) and climate change is increasing the likelihood of compounding and cascading impacts for communities and ecosystems. Maximum temperatures have shown significant yearly increase at the rate of 0.005 to 0.055°C/year, equivalent to 0.15-1.65°C. The total annual rainfall trends vary across the country14. Middle and Lower Juba, Lower Shebelle, and Bay regions, which receive higher annual precipitation, have experienced a 25% reduction with increased interannual variability. Changes in the frequency of days with heavy rainfall conditions (≥20mm/day) is spatially variable; a significant increase is observed in the Bari, Lower Juba, and Gedo regions. There is a significant increase in days with maximum temperature above 35ºC in most of the country, at the rate of 0.25-2 days a year. An increase in the number of very hot days (40°C) is significant in coastal areas of Somaliland, Lower Juba, Gedo, Bakool, and Bari regions. Somalia has experienced a general increase in the number of tropical nights (days when minimum temperatures are above 20°C). This increase is significant in Gedo, Bakool, and Bay, Nugaal and Bari regions (an increase between 0.2 and 1.2days/year)[15, 16] .

9. These climatic changes are projected to continue. Both mean maximum and minimum temperatures are projected to increase under both RCP 2.6 and RCP 8.5 in the near (2010–2039), mid (2040–2069) and far (2070–2099) futures (between <1ºC and 1.5ºC). The highest mean annual maximum temperature increase compared to the baseline period is reached in the far future (2070–2099) in RCP 8.5 (4ºC). The number of days with maximum temperatures

[13] PROGRESS TOWARDS THE 2030 AGENDA IN SOMALIA: A Companion to the United Nations Common Country Analysis 2020. UNDP Somalia CCA Companion 2020.pdf (un.org)
[14] Funk, C., Michaelsen, J., & Marshall, M. T. (2012). Mapping recent decadal climate variations in precipitation and temperature across eastern Africa. Remote sensing of drought: innovative monitoring approaches, 331(7), 331-355.
[15] FAO. 2024. Climate and Agriculture Risk Visualization and Assessment (CAVA). Available online at: https://risk-team.github.io/CAVAanalytics/articles/CAVA.html
[16] Ogallo et al. 2018. 'Climate Change Projections and the Associated Potential Impacts for Somalia'. American Journal of Climate Change 07 (January): 153–70. https://doi.org/10.4236/ajcc.2018.72011

above 35°C is projected to increase up to 200 days per year compared to the baseline in the far future (2070–2099) under RCP 8.5, particularly along the Ethiopian border areas. Under RCP 2.6, coastal areas are expected to experience small diurnal variations compared to the historical period. While the increase in precipitation is projected along the coastline of the country with the coastlines of Mudug, Middle and Lower Shebelle regions projected to receive up to 300 mm under RCP 8.5 by the end of the century, an annual precipitation decrease is projected in the inland areas under RCP 2.6. There will be an increase (1 to 4 days) in the frequency of heavy rainfall events compared to the baseline period across the country. While there is a projected decrease in the frequency of dry days (days with daily precipitation below 1 mm) along the coastline by between 6 and 15 days, the inland areas are projected to have an increase in the number of dry days (between 5 and 15 days) in both RCP 2.6 and 8.5 across all futures [17,18.]

10. The frequency of agricultural drought events has been increasing and is projected to further increase. The drought frequency (determined by the percentage of cropland and number of people affected) has increased over the years. The frequency during the *Gu* season (March-June) has increased since the mid-2000s, while in the *Deyr* season (October to December) this shift happened around 2009. Under climate change, the area of cropland affected by agricultural drought during the September-December season is projected to remain relatively similar under both RCP 2.6 and RCP 8.5. During the March-May season, the area of cropland affected by drought is projected to decrease in middle and lower Shebelle but increase in Mudug, Lower Juba and Togdheer. The high intermodal variability points to high uncertainty in the projections[19].

11. Floods during the *Gu* season are projected to generally increase in Lower Juba, Mudug, Middle and lower Shebelle under both RCP 2.6 and RCP 8.5[20]. These floods bring destruction, causing significant casualties, displacement, and property damage due to the region's increasing population and lack of effective preparedness.

12. Somalia's agriculture and livelihoods suffer from frequent droughts and floods (Ekolu et al. 2022). These two hazards cause severe impacts and risks. Somalia has experienced at least one major climate extreme event per decade between 1960 and 2011 (NAPA, 2013). Somalia has experienced some level of drought conditions and flooding every year since 2000 (UNCCD 2020, EMDAT). Floods are the most frequent events experienced in Somalia. Seventy-one percent of disasters between 2000 and 2023 were caused by floods, while drought constituted 18% and storms constituted the remaining 11%. Most of the flooding is due to overflow of the Shebelle and Juba rivers because of heavy rainfall in their catchments in the Ethiopian highlands. Following the El Niño-associated widespread floods in 2023, there was an upsurge of reported open breakages along the Juba and Shabelle rivers.

13. The economic cost of droughts and floods in Somalia is high. For example, the 2010–2011 drought, which triggered a famine, resulted in the loss of 258,000 human lives. The 2016-17 drought resulted in losses and damages estimated at USD 2.23 billion and USD 1.02 billion respectively[21]. Loss associated with four main staple crops (maize, sorghum, sesame, cowpeas) were USD 71.2 million[22] and approximately 4 million animals died causing USD 875 million in income lost for pastoralists and agro-pastoralists. Over 2.2 million people were internally displaced with 1 million individuals transitioning away from their traditional pastoral lifestyle and 6.2 million people faced food insecurity. Flooding in July 2020 resulted in the displacement of nearly 342,000 people, inundating 294 villages and destroying up to 20,000 ha of crops, mainly along the Juba and Shebelle River valleys[23]. The recent flood event during *Deyr* (October-December) 2023 season, at least 1.5 million ha of farmland was swamped causing 20% loss of the harvest in south-central Somalia. As a result, 1.5 million children are projected to face acute malnutrition between August 2023 and July 2024. Stored food was either inundated or washed away leading to food losses and contamination. There was massive destruction of irrigation infrastructure and death of livestock by drowning.

14. Crop yields, which are already low, are likely to further decline under climate change. Under climate change, maize yields under rainfed conditions are projected to decline by 20–40% with the greatest decline in Lower Juba, middle Shebelle and lower Shebelle regions by 2050 under RCP 8.5[24]. Projected sorghum yields under rainfed conditions

[17] Niang I, Ruppel OC, Abdrabo MA, Essel A, Lennard C, Padgham J, Urquhart P (2014) Africa. In: Climate change 2014: impacts, adaptation, and vulnerability. Part B: regional aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Barros VR, Field CB, Dokken DJ, Mastrandrea MD, Mach KJ, Bilir TE, Chatterjee M, Ebi KL, Estrada YO, Genova RC, Girma B, Kissel ES, Levy AN, MacCracken S, Mastrandrea PR, White LL (eds.)]. Cambridge University Press, Cambridge, pp. 1199–1265

[18] Bichet, A., Diedhiou, A., Hingray, B., Evin, G., Touré, N. D. E., Browne, K. N. A., & Kouadio, K. (2020). Assessing uncertainties in the regional projections of precipitation in CORDEX-AFRICA. Climatic Change, 162, 583-601.

[19] Funk, C., Fink, A. H., Harrison, L., Segele, Z., Endris, H. S., Galu, G., ... & Nicholson, S. (2023). Frequent but predictable droughts in East Africa driven by a Walker circulation intensification. Earth's Future, 11(11), e2022EF003454.

[20] There is however high uncertainty in these projections due to the high intermodel variability (see Annex 2)

[21] https://documents1.worldbank.org/curated/en/339531516991002333/pdf/122990-Revised-PUBLIC-Somalia-Executive-Brief-180111-Digital.pdf

[22] UNDP, Somalia Drought Impact and Needs Assessment (2018)

[23] UNOCHA, "Humanitarian Needs Overview Somalia," January 2021.

[24] IFAD, Climate Adaptation in Rural Development (CARD) Assessment Tool, Version v2.0rc3 - February 2021, FAO (2024) Climate impact potential assessment (Annex 2)

under RCP 2.6 are uncertain in all the project sites except the middle and Lower Shebelle regions that show a decline of up to 10% near, mid and far future. Under RCP 8.5, the yield of Sorghum in middle Shebelle and lower Shebelle regions are projected to decline by 5%, 15% and 20% in the near, mid, and far future respectively. Maize and Sorghum are staple cereals and play a major role in human food security in Somalia. Stover from the two crops used as fodder for the animals. The stalks are either baled into hay or fed fresh to animals.

15. The average annual Temperature Humidity Index (THI), which is an indicator of heat stress on livestock, is already in the severe to emergency levels and is expected to further increase due to the increasing temperature. Heat stress has a direct impact on the productivity of livestock and leads to higher mortality among young and birthing livestock. Changes in pests, vectors, and pathogens' abundance and distribution will affect livestock health and pose a challenge to the export market due to increase in Transboundary Animal Diseases (TADs) and quarantine diseases such as Rift Valley Fever. Increase in temperatures will affect the quality and shelf life of milk, affecting their availability and safety. (Details in the CIPA.)

16. Climate change will cause increased pressure on the already scarce feed and water resources, which could amplify conflicts over natural resources among communities. Drought affects the quantity, quality and availability of feed and water resources available for livestock, affecting communities in multiple ways. During droughts, the productivity of herds drops due to high mortality, decrease in production of milk and loss of animal body conditions, which leads to distress sales. The reduction of productivity and distress sales lead to the deterioration of terms of trade by increasing prices of grain and milk and reducing livestock prices. Poor herd productivity and deterioration in terms of trade in turn affect livelihoods by eroding community's productive assets, reducing their income, food security, health status and increasing their debts and liabilities[25].

17. The Somali society is clan-oriented and competition among clans underpins natural resource management between farmers and pastoralists[26]. Mobility is one of the coping strategies employed by pastoralists during times of feed and water scarcity. However, these movements give rise to competition between clans leading to conflicts. It also allows for interaction between livestock, which ultimately leads to transmission of livestock diseases and deaths. Livelihood losses usually lead to pastoral dropouts who in turn move to urban areas in search of other livelihood options27.

Capacity to anticipate and respond to climate change.

18. The adaptive capacity of the Somalia population is very low and the current coping strategies in response to extreme weather events rely on short-term solutions such as selling of assets[28]. The limited adaptive capacity is due to a combination of structural and individual factors. Structural factors include low literacy rate, limited access to information, markets, and services. In large part these drive individual factors, including low adoption of climate technology, limited awareness and knowledge of climate resilient agriculture, low access to climate information and advisories[29], and other livelihoods practices such as land use methods, especially among women and other vulnerable groups. The literacy rate of the general population is 50% (lower rate for women than men)[30], which limits access to information. There is also limited access to extension services and appropriate technologies to address climate change negative impacts (such as drought-tolerant varieties and water-saving technologies).

19. Climate resilient landscape management is not well planned and implemented to address environmental degradation, loss of indigenous species and increase of invasive species which negatively affect the social, economic and ecological resilience to climate shocks and livelihoods of communities. Approximately 23% forest cover loss occurred between 2000 and 2019[31]. Biological degradation is the highest type of land degradation (38%) followed by soil erosion by water (34%)[32]. Changed soil quality from erosion also facilitates the appearance of invasive species. The Shebelle and Juba basins, vital areas for productivity, face heightened degradation risks due to deforestation, overgrazing, and poor agricultural methods such as improper irrigation, monoculture, and excessive tillage. These drivers are encouraged by the prevailing communal land tenure practices, poor governance, and civil war (Omuto et al. 2014). Population growth as well as vulnerability also intensifies resource pressure, and consumption, exacerbating deforestation rates due to charcoal and wood fuel demands, considering forests and trees are the main source of fuel for household cooking.

[25] Otte et al. 2023. Impact of the 2016/17 drought on Somali livestock keepers. FAO Statistics Working Paper Series, No. 23-37. Rome, FAO
[26] Beyene, Fekadu (2017). Natural Resource Conflict Analysis Among Pastoralists in Southern Ethiopia. Journal of Peacebuilding & Development, 12(1), 19–33. doi:10.1080/15423166.2017.1284605
[27] Andre Le Sage; Nisar Majid (2002). The Livelihoods Gap: Responding to the Economic Dynamics of Vulnerability in Somalia. , 26(1), 10–27. doi:10.1111/1467-7717.00188
[28] UNDP, Somalia Drought Impact and Needs Assessment (2018)
[29] World Bank. 2022. Somalia Economic Update, Seventh Edition: Investing in Social Protection to Boost Resilience for Economic Growth
[30] World Bank Group, 2019, Somali Poverty and Vulnerability Assessment
[31] Musei, Sylus & Nyaga, Justine & Zeila, Abdi. (2021). Remote Sensing Based Quantification of Forest Cover Change in Somalia for the Period 2000 to 2019. 10.5772/intechopen.99365.
[32] The Federal Republic of Somalia, Land Degradation Neutrality Target Setting Process in Somalia; Country Report (2020)

20. Conflict exacerbates existing vulnerabilities within communities and introduces new obstacles that impede their ability to manage and rebound from crises. As violent non-state actors like Al-Shabaab complicate Somalia's governance landscape, challenging state authority and controlling significant territories, the political crisis in Somalia has resulted in displacement and livelihood disruptions, causing financial loss, food insecurity, and restricted access to vital services. Internally displaced persons (IDP) add to local pressures on natural resources, and often face increased inequalities in access to services. Additionally, critical infrastructure is often destroyed or/and poorly maintained, further limiting access to essential resources. This prolonged conflict has undermined governance and the rule of law, fostering insecurity, human rights violations, and reduced access to resources. Somalia is identified as one of the countries in Africa with a high concentration of hotspots of security vulnerability associated with climate change.[33]

21. Limited financial capacity is a barrier to the implementation of adaptation and mitigation activities. Economic shocks associated COVID-19 pandemic, the desert locust invasion in 2020-22 and inflation of food and key input prices[34] have further eroded the adaptive capacity of populations. Communities have inadequate access to finance and credit, limiting their ability to invest in medium-scale water infrastructure or land and soil management infrastructure. Village Savings and Loans Associations (VSLA) approach[35] exists in the country, but members have limited financial capacity and groups are subject to external shocks such as conflicts, extreme climate events and increasing food prices.

22. Limited access to timely and accurate climate information further hinders Somalia's ability to anticipate and prepare for floods and droughts, hampering early warning and response efforts. The observation network coverage is below the recommended WMO requirements. There is limited data collection from other indicators relevant in determining drought situation such as pasture/vegetation, livestock body condition, yields produced, and other ecological and climatic related indicators. The FAO Somalia Water and Land Information Management (SWALIM) project has installed and monitors 26 Automated Weather Stations (AWS), 110 manual rainfall stations, 5 synoptic stations and 7 ground water stations[36]. SWALIM has developed a digital platform, Diginin, sending early warning messages. But, still it needs to be further developed. Efforts are in place to strengthen and expand existing systems, however early warning mechanisms that reach last-mile communities are still weak: most people do not receive climate information and agro-climate advice is not widely disseminated. Low rates of literacy also prevent many farmers from understanding what action to take during early warnings or on the basis of forecasts.

23. In the last decade, Somalia has made strides in the establishment of political, social, environmental, and economic systems to tackle climate change; however, there are limited concrete operational arrangements and coordination between anticipated resilience action planning and humanitarian actions. Somalia has enacted critical natural resource management and climate change relevant policies such as the Nationally Determined Contribution (NDC), NDC implementation plan and Somalia National Adaptation Programme of Action (NAPA). Refer to Annex 2 for more details.

24. The current investment at country level focuses more on humanitarian actions. USD 5.4 billion has been spent on life-saving emergency responses since the 2011 famine. However, it is estimated that building resilience in Somalia would save an average of USD 53 million per year in humanitarian assistance, while investing in early response and resilience measures yields average benefits of USD 2.8 for every USD 1 invested[37]. Recent FAO reports have demonstrated that disaster risk management practices represent a cost-efficient investment that yield resilience dividends. For example, farm-level DRR good practices perform on average 2.2 times better than usual practices under hazard conditions. Furthermore, every USD 1 invested in anticipatory action can yield up to USD 7 in benefits and avoided agricultural losses.[38]

B1.2 Targeted areas

25. The targeted areas of the project were pre-identified based on the climate risk analysis[39], which considered climate hazard, exposure, vulnerability and adaptive capacity, and the agro-ecological zones in Somalia (details in Annex 2). The project will target six regions in Somalia which include the top three high climate risk regions; (i) Southwest: Lower Shebelle region (ii) Hirshabelle: Middle Shebelle region (iii) Jubaland: Lower Juba region, and other three

[33] Busby, J.W., Cook, K.H., Vizy, E.K. et al. Identifying hot spots of security vulnerability associated with climate change in Africa. Climatic Change 124, 717–731 (2014). https://doi.org/10.1007/s10584-014-1142-z
[34] FSIN and Global Network Against Food Crises. 2022. 2022 Global Report on Food Crises
[35] VSLA approach creates self-managed and self-capitalised savings groups that use members' savings to lend to each other.
[36] Dashboard: Somalia Climate TimeSeries Data (faoswalim.org)
[37] USAID Economics of Resilience to Drought: Somalia Analysis; Somalia_Economics_of_Resilience_Final_Jan_4_2018_BRANDED.pdf (usaid.gov)
[38] FAO 2023, *The Impact of Disasters on Agriculture and Food Security 2023. Avoiding and reducing losses through investment in resilience*, Rome.
[39] The climate risk analysis has been done by using FAO Climate Risk Toolbox – CRTB.

regions where the agro-pastoral system prevails; (iv) Puntland: Nugal region, (v) Somaliland: Todgheer region, and (vi) Galmudug: Mudug region.

Table B.1.2: Key characteristics and climate hazards and challenges in targeted areas

Region	Key characteristics	Climate hazards and challenges[40]
Lower Shebelle	• Total population: 1.3 million[41]. **9 % of population in crisis, emergency or catastrophe** • Agropastoral zone, irrigated crops (maize, sesame)	• Droughts, Flooding and climate variability • Increase in evapotranspiration demand. • Animal and crop pests and diseases • Environmental degradation
Middle Shebelle	• Total population: 0.86 million. **29% of population in crisis, emergency or catastrophe** • Agropastoral zone, irrigated crops (maize, sesame)	• Flooding and drought. • Erratic rainfall and dry spells. • Increase in evapotranspiration demand. • Livestock and crop pests and diseases • Market disruptions
Lower Juba	• Total population: 0.98 million. **13% of population in crisis, emergency or catastrophe** • Agropastoral zone, irrigated crops (maize, sesame)	• Drought • Flooding in coastal areas. • Climate variability • Livestock and crop pests and diseases • Market disruptions
Nugaal	• Total population: 0.53 million. **47 % of population in crisis, emergency or catastrophe** • Pastoral zone and potential Agropastoral areas	• Drought • Flooding (coastal areas) • Water shortages • Significant environmental destruction • Livestock diseases • Conflict
Togdheer	• Total population: 0.73 million. **32 % of population in crisis, emergency or catastrophe** • Agropastoral zone, rainfed crops (+ flood irrigation from highlands)	• Drought • Lack of pastures and water • Environmental degradation • Animal diseases • Conflict
Mudug	• Total population: 1.2 million. **47% of population in crisis, emergency or catastrophe** • Pastoral and Agropastoral areas (cow peas), some irrigation with underground waters	• Drought • Low erratic rainfall and dry spells • Tropical storms and Flooding (coastal areas) • Livestock diseases • Environmental degradation • Market disruptions

26. These regions were selected in close consultation with the government considering the government's priority areas that have been newly liberated from terrorist groups in Hirshabelle, Galmudug, Jubaland and South-West states where no major investment project has been implemented and there are huge needs of rural communities to cope with climate change. A conflict-sensitive programming approach will be mainstreamed during the implementation of the project.

27. There has been a concerted push towards greater inclusivity and dialogue in Somalia. Inter-regional relations have seen positive developments, with Federal Member States (FMS) and the Federal Government of Somalia (FGS) developing alliances and partnerships to address common challenges. Security enhancements, including successful counterterrorism efforts and (relatively) improved governance structures, have contributed to a more stable environment. Economic growth and development initiatives have helped alleviate disparities between regions, showing a sense of shared prosperity. This project, with a common goal to address ongoing and future climate challenges, will support this positive movement towards resilience and peace building.

B.1.3 Related projects and interventions

28. This project is closely linked and builds on several development projects and programs supported by various partners:

29. The TRANSFORM project is funded by USAID to the tune of 25 million USD (2024–2027). Its focus is to restore and rehabilitate major irrigation infrastructure, and in particular, the Sabuun barrage and its dependent primary irrigation canals, which are located in Jowhar District and serves 1.5 million people in Afgoye, Merka, and Balcad (Hirshabelle). Through th TRANSFORM project, FAO will provide15.19 million USD in cofinancing to this project.

[40] Somalia Livelihood profiles; fsnau.org/downloads/Somalia-Livelihood-Profiles-30-June-2016.pdf
[41] UNFPA, 2021

30. Other projects include:

Project / Program title and linkages with project design
The SWALIM program provides high quality water and land information, crucial to relief, rehabilitation, and development initiatives in Somalia, to support sustainable water and land resources development and management. It is particularly linked to Outcome 1 and Outcome 3.
The EU funded projects "Climate Adaptation for resilient livelihoods" and "Climate-resilient livelihoods to Boost Food production and Nutrition outcomes (CLIMB)" aim to improve food production and contribute to the resilience of food systems in Somalia. Linkages exist with activities under Outcome 2.
The World Bank Funded project entitled "Water for agro-pastoral productivity and resilience "which was approved in 2019 is implemented in Galmudug, Puntland, South-West State, and Somaliland. Its objective is to develop water and agriculture services among agro-pastoralists. The convergence of approaches will be fostered during implementation. This project is linked to Outcome 2.
The groundwater for resilience project is a regional project funded by the World Bank (WB) including Kenya, Somalia, Ethiopia, and an Intergovernmental entity (IGAD). The project costs amount to 455 USD Millions. The development objective of the project is to increase the sustainable access and management of groundwater in the Horn of Africa's borderlands. The project focuses on groundwater supply and infrastructure and operates in some of this project's targeted regions, with linkages with outcomes 1 and 2.
Adaptive Agriculture and Rangeland Rehabilitation Project (A2R2) (2024–2028) which is financed to 40 million USD through IFAD and GEF-7. The objective of the project is to enhance the climate resilience of poor rural households in Somalia through sustainable natural resources management on multiple levels: improved water resources and rangelands management; eco-agriculture and climate-proof livelihoods; forest/habitat rehabilitation; improved governance and information systems for land degradation and biodiversity. This project would serve as parallel financing with linkages with outcomes 1 and 2.

Linkages to other GCF projects:

31. The African Development Bank (AfDB) is developing a GCF multi-country projects titled "Program to Build Resilience and Food Security in the Horn of Africa" with Somalia as one of the participating countries. The AfDB project, which is under development, will operate in transboundary areas between Somalia and Ethiopia. There will be no geographical duplication between this project and AfDB's project and this project will ensure synergies with AfDB's project through close coordination and further discussion with AfDB.

32. For further detail on these ongoing projects and programs, please refer to Annex 2, FS, Chapter 4. Lessons learned from these projects and, in particular from FAO's programming over the years in Somalia, have informed this project design. One key element of value added from this project is its integrated bottom-up approach that combines targeted capacity building at community level with supportive interventions at landscape levels, while supporting the renewal of State-executed governance of natural resources. If many of the interventions of the past have supported some of the approaches and technologies included in this project, they have done it from a solely socio-economic perspective; few have placed climate resilience at the heart of their interventions. Furthermore, while many projects attempt to address the potential for, or recovery from, conflict, this project postulates that climate vulnerability is a potential driver of conflict, and must be addressed as such.

B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)

33. This project addresses the impacts of climate change on vulnerable people in 6 regions of Somalia who depend on agriculture and natural resources for their livelihoods. The project objective is to reduce the climate vulnerability of Somali populations. The key climate hazards that are addressed in this project are the increased temperatures, increased frequency and intensity of drought and floods. The project is premised on the following theory of change:

34. IF local communities' capacity is strengthened to implement sustainable landscape management and climate resilient agriculture and an institutional enabling environment is improved, THEN the resilience of local communities and ecosystems to climate change will be enhanced, BECAUSE livelihoods will be derived from sustainably managed landscapes and adapted climate resilient agriculture and supported by adequate enabling environment..

35. To achieve its objective, however, the project must remove a series of interconnected barriers:

36. **Barrier 1: Lack of planning capacity and weak local governance have prevented the implementation of climate resilient natural resources management at the landscape level**.

37. Although there is knowledge of the links between environmental degradation, climate vulnerability and poverty, efforts have not yet been made to create democratic decentralized management systems that fully consider the role played by healthy landscapes in local development. Prolonged periods of civil conflict have severely disrupted governance structures and the rule of law. The lack of stable and effective institutions has made it difficult to implement comprehensive land use policies and plans. The focus thus far has been on restoring basic governance and security institutions.

38. Effective governance is also hindered by unclear land tenure rights and land ownership, frequent disputes, and the absence of a widely recognized and enforced legal system for land registration. There is also due to the weakness of the state, a lack of enforcement of land use and environmental regulations.

39. Due to the clan-based social structure in Somalia, land use planning must consider local dynamics and conflicts. Effective engagement with communities is necessary to ensure that land use plans are acceptable and beneficial to local stakeholders, but such engagement is often limited by lack of trust in authorities and insufficient mechanisms for public participation. A patriarchal culture prevails in Somalia, and women are often excluded from political decision-making at national and community levels. At the community level, in rural areas, most decisions are made by clan-based committees that are entirely composed of men, excluding women.[34]

40. Despite these challenges, there are ongoing efforts to improve land use planning in Somalia. International organizations and governmental bodies are working to build local capacities, develop better governance structures, and implement projects aimed at sustainable land management and environmental conservation. However, significant efforts are still needed to create a robust framework for land use planning that can support Somalia's resilient development and environmental sustainability. As State structures are recovering, developing integrated landscape-level natural resource management approaches will be crucial, both as a way of promoting climate-resilient sustainable development and as a way of preventing further conflict.

41. **Barrier 2: Local communities do not yet have the technical or institutional capacity to fully participate in the management and allocation of natural resources, particularly water and land, which are in scarce supply already.** Locally, there is limited localized knowledge and data on the impacts of landscape degradation on development. Poverty, conflict and food insecurity have led local communities towards short-term, maladapted, unsustainable and inefficient practices that further exacerbate this degradation. Land management practices are predominantly guided by communal ownership and clan-based governance systems, which are integral to the pastoral and agro-pastoral ways of life. These practices, deeply rooted in the customary law known as "xeer", enable collective use of land for grazing, farming, and settlement, supporting the mobility essential for pastoral communities. For example, clans share access to crucial resources such as water points and grazing areas, which are managed through verbal agreements and respected within the community. This system facilitates the nomadic lifestyle, allowing pastoralists to traverse large areas in search of pasture and water following seasonal patterns, which is vital in the arid and semi-arid regions of Somalia.

42. However, these traditional practices are increasingly maladapted to current and future climate conditions. Degraded and climate vulnerable landscapes fail to provide the basic ecological services—whether productive or protective, and this is even further exacerbated by the destruction—after years of conflict—of main infrastructure assets, especially water infrastructure. Furthermore, educational attainment among women is very low. Overall, 75% of women aged 15–49 have not attended any formal schooling. This makes them more likely to be excluded from traditional top-down literacy-based extension services, that tend to be oriented towards men due to land ownership and decision-making structures in families and communities.

43. In response to these challenges, there is a gradual push to integrate traditional management practices with more modern, climate informed, land use planning. However, the transition towards sustainable approaches to environmental stewardship that aligns with both traditional and modern management cultures requires long-term efforts and capacity at local level, as well as gradual culture changes to ensure women, who play an oft-disregarded role in agriculture, can also become agents of change.

44. **Barrier 3: There has, to date, been insufficient dissemination of technology on climate resilient agriculture and livestock production**. Local communities do not have access to practices and technologies that could make their livelihoods more resilient, and do not have access to climate information services. While it is known that a transition from pastoralism to agro-pastoralism would be more resilient and would provide increased avenues for development, there has yet been any significant effort to assist local population in effecting this transition. Most poor households continue to rely on subsistence agriculture and pastoralism. The use of rainfed agriculture with minimal mechanization and reliance on natural rainfall limits crop yields. Access to modern irrigation systems is scarce. This lack of reliable water sources for irrigation directly affects the productivity and sustainability of agricultural practices. Additionally, the limited access to agricultural processing facilities and effective post-harvest storage solutions exacerbates the loss of produce due to spoilage and pests. Market access is also hindered by poor infrastructure and transportation, reducing the ability of farmers to sell their crops at fair prices and further invest in improving their agricultural practices.

45. Similarly, pastoralist households face significant challenges due to unsustainable grazing practices and limited access to water for their livestock. Overgrazing is common, driven by the need to maximize short-term returns from limited land resources, which contributes to land degradation and reduces the land's long-term viability for supporting livestock. The scarcity of water points further exacerbates these challenges, as pastoralists have to travel long

distances to access water, putting additional stress on both the animals and the pastoralists. Moreover, there is a lack of facilities for processing livestock products, such as milk, which limits the economic benefits pastoralists can derive from their herds. The absence of proper storage facilities for meat and dairy products leads to significant losses and reduced profitability. The difficulties in accessing markets, compounded by the lack of preservation technologies, mean that pastoralists often cannot capitalize fully on their livestock's economic potential, perpetuating a cycle of poverty and unsustainable resource use.

46. Limited access to technologies is also particularly exacerbated among women, whose access to agriculture extension services is limited due to time and mobility constraints as a result of unpaid care work responsibilities and social norms. Women often don't participate in technical and vocational training as they tend to be organized far away from their village. Low levels of education and literacy among women are also a constraint on their participation.

47. **Barrier 4: local communities and producers have very limited access to finance and markets**, perpetuating the trend in which rural poor bear the brunt of the risk in transitioning towards climate resilient practices. Rural Finance Institutions themselves lack the capacity to develop or deploy finance in ways that would support climate resilient livelihoods and value chains, which prevents the emergence of an agri-food private sector that could act as an engine for socio-economic development locally. Formal financial institutions are scarce in rural areas, and where available, they often require collateral, formal documentation, and proof of stable income—conditions that many rural households cannot meet. According to a report by the FAO[42], these requirements, coupled with the inherent risks of agriculture in a region plagued by environmental and socio-political instability, severely restrict access to traditional banking services. Consequently, many in these communities turn to informal sources of credit, which can carry prohibitively high interest rates, exacerbating the cycle of poverty and limiting investment in sustainable agricultural practices. Furthermore, women's entrepreneurship is constrained by low levels of literacy and access to support services and networks, limited mobility and free time, as well as limited access to and control over land and other assets that might support access to finance. Women also have limited access to financial literacy, vocational, and business skills training. As a result, their main source of capital to start their businesses is remittance. Most women entrepreneurs are engaged in petty trading ventures as a survivalist-oriented business activity.

48. However, there are signs of progress with the introduction of mobile banking and microfinance initiatives aimed at increasing financial inclusion. Organizations like IFAD have been active in promoting mobile money solutions, which have seen a rise in popularity among rural populations. Mobile connectivity in Somalia has been increasing. The growth in mobile internet users suggests a potential to improve agricultural practices and market access for rural communities by providing real-time information on weather, market prices, and innovative farming techniques. This connectivity can play a crucial role in enhancing food security in rural areas, but it has not yet been leveraged for the transmission of climate information or market information.

49. Additionally, village savings and loan associations (VSLAs) have been established, offering a community-based approach to savings and lending that provides members with more accessible and flexible financial options. These initiatives represent critical steps towards broader financial inclusion, offering hope for economic improvement and increased resilience against the challenges facing rural Somalia. However, most of the small agri-food businesses are micro-enterprises that operate with little capital in the informal market. Adding to this, remoteness and isolation prevent the addition of value to most commodities, and the degradation of rural markets and roads prevents the circulation of goods that would enable local communities to cope during climate extremes.

50. **Barrier 5: The government's support to natural resources planning and climate adaptation is limited by its weak technical capacity, and by the bias towards crisis responses of recent years**. Somalia struggles with a shortage of trained professionals in urban planning and environmental management, as well as a lack of reliable data on land characteristics, usage, and ownership. Climate and environmental information services are not yet available in all States. The observational network for weather and climate data is underdeveloped, with insufficient coverage of automated weather stations and manual rainfall gauges. There are significant gaps in historical and real-time climate data, which hinder accurate forecasting and modelling. As with many government services, there is a shortage of trained meteorologists and technicians, which limits the ability to analyze and disseminate climate data effectively. Dissemination of climate information to rural and remote communities is challenging, affecting the timely delivery of weather forecasts and advisories.

51. Records of land ownership and usage are incomplete and often outdated, making it difficult to enforce land use policies and resolve disputes. In addition, the legal frameworks governing land registration and property rights are weak and not uniformly enforced across different regions. There is a significant lack of local expertise in geographic information systems (GIS) and land surveying, which are essential for modern land management practices. There has been some progress in establishing flood and drought early warning systems through projects like the FAO-

[42] https://www.fao.org/policy-support/policy-themes/access-to-finance/en/

SWALIM (Somalia Water and Land Information Management). These systems help monitor hydrological data but need further expansion and enhancement to cover more areas and provide more precise forecasts.

52. **Barrier 6: Lack of Climate Information Services impede climate resilient agriculture.** Access to climate information services among last mile users is severely limited, posing significant challenges for managing the impacts of climate variability and change. Despite the critical need for accurate climate forecasts, early warning systems, and agricultural extension services to mitigate these impacts, the infrastructure and systems to provide such services are underdeveloped. First, there is a lack of necessary hydro-agro-climate infrastructure and material capacity to gather, analyze and disseminate climate information effectively. This includes insufficient weather stations, inadequate technology for data collection and analysis, and poor telecommunications infrastructure that hampers the flow of information. Years of civil conflict and instability have devastated Somalia's institutional capacities. The absence of a strong, centralized government for long periods has made it difficult to implement coordinated, nationwide programs including those for climate monitoring and information dissemination. Even where data is available, the dissemination tools are often not sophisticated enough to reach all segments of the population, particularly in rural or remote areas. Many regions lack access to the internet and other digital communication technologies that could facilitate the wider distribution of climate information. Financial resources for climate services have been limited. Investments in climate information systems are often de-prioritized in favour of immediate humanitarian needs arising from ongoing conflicts and recurring natural disasters.

53. In addition, there are barriers to women's access to information. Ninety-three percent of women in Somalia do not access any form of media at least once a week. Media access is especially low among the poorest category of women, due to low literacy rates and limited mobility, however opportunities are arising thanks to mobile connectivity: 67% of rural women and 59% of women living in nomadic communities own a mobile phone.

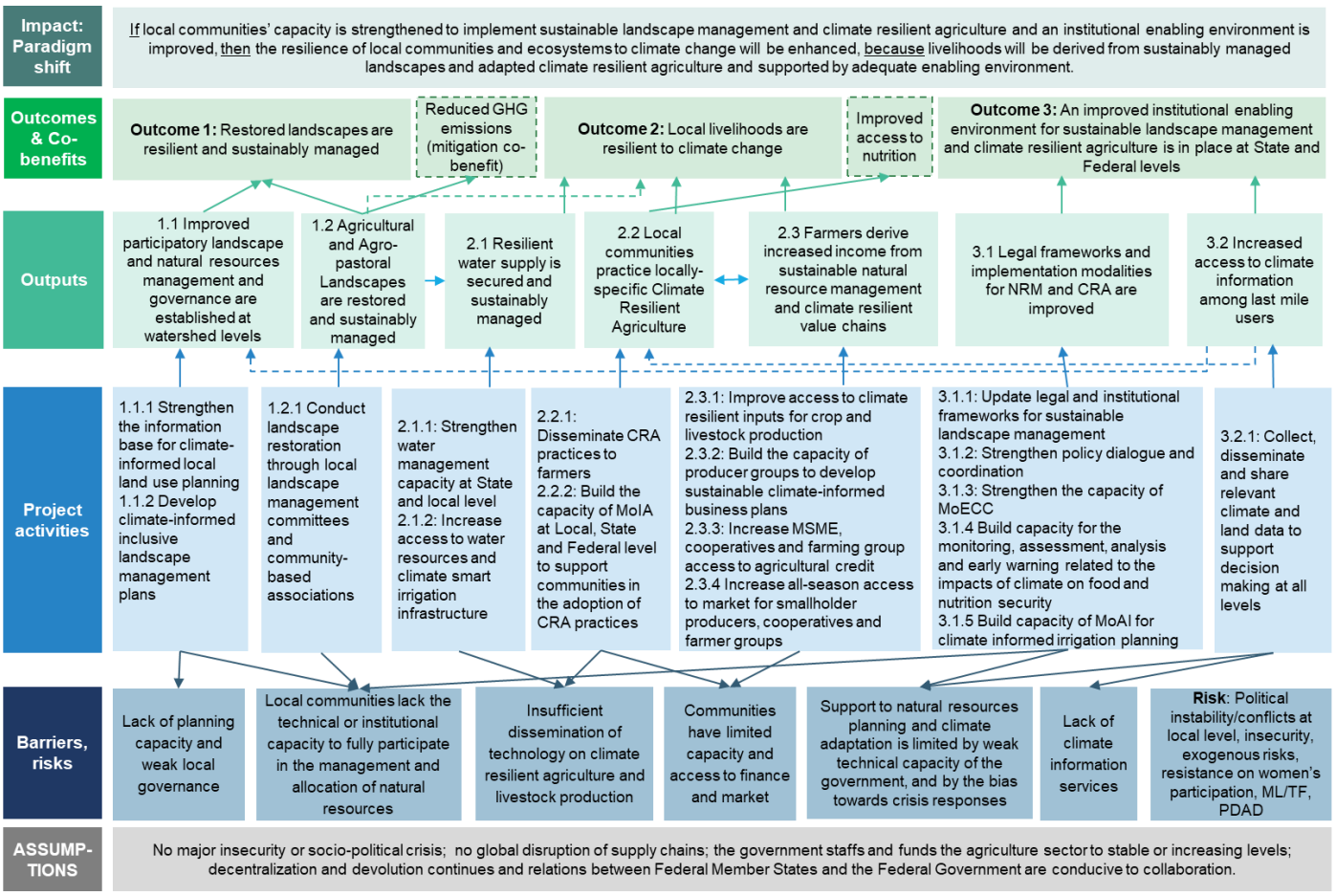

Figure B.2.1: Theory of Change

Proposed Climate Solutions

54. The proposed project addresses these climate challenges by working directly with crop and livestock producers to improve agricultural production and to ensure the resilience of livelihoods. The project adopts an integrated approach that seeks to restore the ecological resilience and productivity of degraded landscapes, so that they can support stabilized and increased yields, leading to improved adaptive capacity of the most vulnerable people. Through the

combined application of Ecosystem-based Adaptation to land degradation, erosion and flood risk, the project can also reduce water scarcity, and limit the impacts of increased aridity on livelihoods.

55. Northern regions of Somalia are under green water scarcity (GWS), that is when the amount and or distribution of rainfall is not enough to meet crop water demand. FAO analysis (see Annex 2, FS, Chapter 2) indicates optimum irrigation, reduction in crop-water demand and water conservation techniques can improve yields in such area.

56. The overall yield increase from the project interventions (see Table B.2.1 below and Annex 2, FS) can be significant, ranging broadly from 20-50% depending on the specific context and effectiveness of the implementation[43,44] (see Annex 2, FS for details). These interventions not only enhance yields but also contribute to long-term sustainability, resilience to climate change, and improved livelihoods for farming communities. Considering all these elements together, the estimated average percentage increase in annual income per household (HH) after proposed interventions are implemented ranges from 20-77% (under RCP 2.6) to18-66% (under RCP 8.5), depending on the indicative model (see Annex 3). Assuming that the increase in income is at least partially spent by HHs on food, these results should translate into increased food security for project beneficiaries.

Table B.2.1 Key proposed climate solutions

<table>
<tr><th rowspan="2">Drivers/ barriers</th><th colspan="4">Key proposed climate solutions/ technologies</th></tr>
<tr><th colspan="3">Agriculture & livestock</th><th>Ecosystem</th></tr>
<tr><td>Increasing temperatures</td><td>Promotion of Climate Resilient Agriculture (CRA) (output 2.2): Heat-/drought-tolerant varieties, timing of planting, agroforestry, crop cover, shade netting, IPM, improved post-harvest storage, improved stock breeds, Provision of shade (natural shading material from trees, as well as animal shelters), watering, etc.</td><td rowspan="4">Rehabilitation of irrigation infrastructure, small-scale water storage reservoirs/ ponds, improved water management (output 2.1)</td><td rowspan="4">Deployment of Early warning/ climate information services, Agriculture advisory services (output 3.2)</td><td rowspan="4">Land restoration, anti-erosive measures, soil conservation, soil moisture conservation, Prosopis removal (output 1.2)</td></tr>
<tr><td>Increased precipitation variability</td><td>Promotion of CRA (output 2.2): Timing of planting, agroforestry, crop cover, crop rotation, Integrated Pest management (IPM), shift from pastoral to agro-pastoral system, water harvesting and conservation, etc.</td></tr>
<tr><td>Increase in frequency and intensity of droughts</td><td>Promotion of CRA (output 2.2): Heat-/drought-tolerant varieties, shift to drought-tolerant crops, timing of planting, agroforestry, crop cover, shift from pastoral to agro-pastoral system, etc.</td></tr>
<tr><td>Increase in frequency and intensity of floods</td><td>Promotion of CRA (output 2.2): timing of planting, climate-proof storage/ processing facilities, etc.</td></tr>
<tr><td>Lack of planning capacity and weak local governance</td><td>Improved legal frameworks and implementation modalities (output 3.1)</td><td>Climate-informed irrigation planning (output 3.1)</td><td>Improved legal frameworks and implementation modalities, improved technical capacity of ministries (output 3.1)</td><td></td></tr>
<tr><td>Limited technical or institutional capacity of local communities</td><td rowspan="2">Deployment of FFS/APFS, training for lead farmers (output 2.2)
Improved access to climate resilient input (output 2.3)</td><td>Enhancement of WUAC (output 2.1)</td><td>Radio programme (output 3.2)</td><td>Climate-resilient landscape management planning, establishment of LMCs (output 1.1)</td></tr>
<tr><td>Insufficient dissemination of technology</td><td colspan="3">Deployment of Early warning/ climate information services, Agriculture advisory services (output 3.2)</td></tr>
</table>

[43] Enfors, E., Barron, J., Makurira, H., Rockström, J., & Tumbo, S. (2011). Yield and soil system changes from conservation tillage in dryland farming: A case study from North Eastern Tanzania. *Agricultural Water Management*, *98*(11), 1687-1695.
44 Mwangi J, N., W. Catherine, M., Shem, K., John, N., & Fergus, S. (2020). Rainfall variability, soil heterogeneity, and role of trees in influencing maize productivity—the case from an on-station agroforestry experiment in semi-arid Kenya. Forests, Trees and Livelihoods, 29(1), 34-52.

Limited access to finance and markets	Capacity building for VSLAs, development of 4Ps, improved financial services, improved access to market (output 2.3)		
Limited government support to natural resources planning and climate adaptation	Capacity building for government staff on CRA (output 2.2)	Climate-informed irrigation planning (output 3.1)	Capacity building for government staff, improvement of local natural resources management systems, increase in data collection, sharing and analysis (output 3.1)
Lack of climate information services	Early warning/ climate information services, Agriculture advisory services, increased data flows to government and last mile users (output 3.2)		

57. In this Project, all outputs act together to leverage multiplied adaptation benefits for local vulnerable communities. Activities under outcome 1 are designed to restore and increase the natural productivity of ecosystems to ensure that they recover their resilience in the face of existing and projected climate change. Restoring landscapes to a point of resilience and balance (ecosystem-based adaptation) requires multiple elements: reducing the exposure of land and vegetation to extremes such as high heat, strong winds, severe rainfall events and other erosion inducing factors; restoring natural soil productivity by increasing land cover and nutrient cycling; and improving soil moisture retention and aquifer recharge. The mark of a resilient ecosystem will be the restoration land productivity dynamics, and the slowing or cessation of land degradation trends. To support this process and create conditions for upscaling and sustainability, the project will set up participatory climate-informed and science-driven land use planning and management mechanisms that bring together land users, communities and governments towards an optimal use of ecosystems for resilience (activities 1.1.1 and 1.1.2). Under Output 1.2, the project will implement community selected priority ecosystem-based adaptation measures (activity 1.2.1).

58. Under outcome 2, the project ensures that local communities derive increased and qualitatively improved climate resilient livelihoods from agriculture, despite prevailing and forthcoming climate conditions. The project targets maize, sesame, and sorghum, which are climate vulnerable staple crops, as well as livestock production. In these value chains, the project supports the transition from extensive to intensive cropping and from pastoralism to agro-pastoralism as key adaptation strategies. Given that a significant limitation is posed by water scarcity in Somalia, the project also focuses on securing resilient water supply for agricultural production through combinations of ecosystem-based adaptation and infrastructure-based solutions at both landscape and farm level (activity 2.1.2), supported by improved participatory water management mechanisms (activity 2.1.1). The project disseminates improved, climate resilient agricultural practices directly to farmers through Farmer Field Schools (FFS) or Agropastoral Field Schools (APFS) (activity 2.2.1) and by building the government's capacity to deliver climate-informed extension support (activity 2.2.2). In addition, activities under output 2.3 are intended to take farming out of the loop of low-productivity, subsistence orientation and into a market-oriented, value-added paradigm. This requires providing farmer associations and private sector with increased technical, material and financial capacity to scale agri-businesses, first by securing and revitalizing the input supply chains (activity 2.3.1), then by improving business capacity of MSME (activities 2.3.2 and 2.3.3.), and finally by ensuring markets are open and reachable (activity 2.3.4).

59. Finally, Outcome 3 fosters an enabling environment for the replication and broader adoption of project results. Given the fragile state of the Government in Somalia, strengthening of capacity is required to ensure that Federal Member States can implement new norms for climate resilient agriculture. Output 3.1 considers legal frameworks (activity 3.1.1), coordination among sectors and levels of government (activity 3.1.2), monitoring modalities (activities 3.1.3 and 3.1.4), and planning capacity (activity 3.1.5). Output 3.2 strengthens the informational capacity of the Government of Somalia, in particular its capacity to generate and disseminate useful, relevant and timely climate information and early warning to last mile users (activity 3.2.1).

Scope and Targeting

60. The project will work in 11 districts located in 6 regions, that represent different agro-ecosystems and are exposed to different types of climate impacts. The sites were selected based on a climate risk and vulnerability assessment, combined with an analysis of conflict sensitivity.

61. The ultimate beneficiaries of this project are vulnerable women, children and men living in the targeted districts. Fifty percent of beneficiaries at local level, particularly through the FFS/APFS will be women. The first type of beneficiaries are local community members and households, characterized by the following:

    - Very limited access to water and sanitation
    - Limited access to energy from non-lignous sources
    - Extreme prevalence of food insecurity and malnutrition
    - Large household size (6.2 people on average)
    - Majority aged under 18.

- Low level of access to productive assets

62. The second type of beneficiaries include cooperatives (particularly seed growers), community-based associations (for example water user association committees), micro and small agricultural enterprises (particularly processors, transformers). The third group of beneficiaries include government staff at Federal, State and district levels who will receive training and capacity building from the project.

63. The project will reach farmers through their groups and associations, including for example FFS or APFS, cooperatives, producer associations, savings groups, and small agro-businesses. In addition, the project also reaches government officials at the district, State and Federal levels, and will work with the Ministry of Environment and Climate change (MoECC) and the Ministry of Agriculture and Irrigation (MoAI) and to build their capacity to provide agricultural extension support through their decentralized offices.

64. The project, through the Gender Action Plan, will seek to ensure the fullest possible participation of women as decision-makers and agents of change, recognizing the limitations and barriers they currently face in accessing land, productive assets, education, information and finance. Particular care will be taken to safeguard women against any risk of violence or harassment that could be exacerbated by their increased access to assets and influence. Mechanisms will be in place to analyse, prevent and address any form or risk of SEAH/GBV during the project.

65. For more information on project sites and beneficiaries, please refer to Annex 2, chapter 5.4. Eligibility criteria for participation in each activity are provided in Annex 2, chapter 8.5.

B.2 (b). Outcome mapping to GCF results areas and co-benefit categorization.

Outcome number	GCF Mitigation Results Area (MRA 1–4)				GCF Adaptation Results Area (ARA 1–4)			
	MRA 1 Energy generation and access	**MRA 2** Low-emission transport	**MRA 3** Building, cities, industries, appliances	**MRA 4** Forestry and land use	**ARA 1** Most vulnerable people and communities	**ARA 2** Health, well-being, food and water security	**ARA 3** Infrastructure and built environment	**ARA 4** Ecosystems and ecosystem services
Outcome 1	☐	☐	☐	☐	☒	☒	☐	☒
Outcome 2	☐	☐	☐	☐	☒	☒	☒	☐
Outcome 3	☐	☐	☐	☐	☒	☐	☐	☐

Co-benefit number	Co-benefit					
	Environmental	**Social**	**Economic**	**Gender**	**Adaptation**	**Mitigation**
Co-benefit 1: Reduced GHG emission from AFOLU	☐	☐	☐	☐	☐	☒
Co-benefit 2: Increased nutrition security	☐	☒	☐	☐	☐	☐

B.3. Project/program description (max. 2500 words, approximately 5 pages)

66. The project is structured along three main outcomes. The three outcomes work together to create a context in which, on the one hand, communities participate in the restoration of the productive landscape, and, on the other hand, they are supported by a stronger government extension, governance and climate information systems. The three outcomes support the transition from unsustainable, unproductive, and maladapted production systems to more resilient productive agricultural systems. The activities of the project build on best practices and lessons learned from recent projects and programs and are closely coordinated with other efforts to rebuild the country following years of conflict.

67. For each activity, site and beneficiary eligibility criteria are specified in Annex 2, FS, sections 8.4 and 8.5. The specific use of GCF proceeds and cofinancing is specified in Annex 2, FS, section 6 as well as in Annex 4.

Outcome 1—Restored landscapes are resilient and sustainably managed.

68. Activities under this Outcome are designed to restore the productive landscapes to a state of resilience—where land productivity can once again be depended upon to support the livelihoods of local communities. This requires both the creation and strengthening of local planning systems and the deployment of urgent landscape restoration interventions. Given the importance of water as a limiting factor in development in Somalia, the project has opted to adopt the sub-watershed as a planning unit.

Output 1.1 Improved participatory landscape and natural resources management and governance are established at watershed and village levels.

69. This output supports the deployment of improved and more adapted governance approaches that are based on scientific data, participatory and democratic processes, and climate risk analysis. Currently, local planning is based on administrative jurisdictions and does not integrate any form of climate risk. However, land use practices are not circumscribed by administrative jurisdiction, and communal lands tend to fall outside the scope of traditional systems. Customary law systems have been disrupted by the war, displacement, and are further complicated by the degradation of natural resources. The project will therefore support the following activity:

Activity 1.1.1 *Strengthen the information base for climate-informed local land use planning.*

70. Most of the available data on the health of watersheds is insufficient or inadequate to support climate-informed land use planning. The last study of land cover or areas affected by land degradation is dated (2009) and was conducted at a resolution of 500 m[45]. Furthermore, there are gaps in data where areas were inaccessible during recent years. A country-level baseline study at a lower scale is necessary to be able to determine the area's most at risk, and to determine priority interventions both during the project and after. To conduct this study (sub-activity 1.1.1.1), the project will mobilize the expertise of the data networks that have been developed for the SWALIM project, and mix satellite data with ground-truthing observation to characterize the following key parameters:

    - Land Cover
    - Soil Types,
    - Level of Land Degradation

71. The study will relate the land parameters to climate parameters such as mean annual rainfall, temperature, and types of soil erosion to provide a comprehensive baseline. This study will also serve as a basis for measuring progress in the restoration of landscapes (output 1.2) in project sites. In addition, the project will also provide a detailed assessment of the invasion of Prosopis through the combination of remote sensing, GIS, and local ground truthing (sub-activity 1.1.1.2). This will also serve as a basis for direct intervention under output 1.2 for the removal and management of Prosopis from rangelands and agricultural land. Both sub-activities will be delivered by FAO in close collaboration with the MoECC, who will also be capacitated to continue these exercises in the future (Outcome 3). Data will be housed in MoECC SWALIM servers and placed at the free access of all relevant stakeholders.

Activity 1.1.2 *Develop climate-informed inclusive landscape management plans (LMPs).*

72. Based on the data provided above the project will strengthen the capacity of local actors to conduct participatory landscape management planning. First, a participatory cartography exercise and conflict-informed Free Prior Informed Consent procedure will be deployed in all project sites in the targeted sub-watersheds (sub-activity 1.1.2.1) to ensure that all relevant groups, in particular vulnerable people are included and aware of their rights to participate under the project. The process for conducting the FPIC will follow the FAO FPIC guidelines and the project's Indigenous Peoples Planning Framework (IPPF, see Annex 6: ESMF) and will be led by the project team[46] along with relevant government departments. A stakeholder identification mission will help identify stakeholder groups and project beneficiaries, including potential Indigenous Peoples and vulnerable or excluded minorities. Explanations of the project, its activities, potential benefits and risks will be provided in local language and participatory mapping will also take place. Each group will be invited to express their needs and priorities related to participation in the project, in a manner that is also conflict sensitive. Iterative discussions will take place from the start of the project to make sure all participants and their concerns are identified early on.

73. The project will bring together stakeholders from all groups (women, men, youth, agricultural producers, livestock producers, etc.) to conduct a climate-oriented participatory assessment of water and land resources and any associated conflicts (sub-activity 1.1.2.2), as well as a description (or clarification) of land use rights. This will be needed to gradually build momentum for the creation of locally owned representation-based landscape management committees, to ensure that all interests are represented and understood before engaging in a landscape management plan.

[45] FAO-SWALIM, Land Degradation Assessment and a Monitoring Framework in Somalia, LD-14, 2009.

[46] International & national safeguards specialists, International Gender, Social Inclusion and IP Specialist, National Conflict and Risk Management Specialist, and National Indigenous People and Land Tenure expert, National FPIC consultant

74. The Landscape Management Planning process will bring together actors' representative of various groups from across the sub-watershed. Each group or subgroup will nominate a representative, for a total of 30 representatives in each Landscape Management Committee (LMC), 50% of which will be women (in positions of influence, wherever possible). The project will facilitate the nomination process in its first year. Members of the LMC will receive training on climate change and climate-informed landscape management, ecosystem-based adaptation, environmental and social safeguards, and on committee governance, rules, and by-laws (sub-activity 1.1.2.3). Each LMC will then undertake the participatory development and validation of climate informed LMPs in their area (sub-activity 1.1.2.4). Landscape Management Plans aligned to sub-watersheds (31 in total) will be established for a period of 6 years and will include the following elements:

    - Assessment of land and water resources and their degradation using data collected in activity 1.1.1, presented in a user-friendly format.
    - Maps of current land use and land users, and an overview of land use rights
    - Land use plans and allocations by use (e.g. strategic green infrastructure for water catchment, conservation, rangeland, cropland)
    - Selection and characterization of priority landscape restoration and EbA activities to be delivered over the period.
    - Monitoring and evaluation plan
    - Budget for activities and the maintenance/operations of landscape management

75. The activities under output 1.1 are delivered through FAO as EE. By the end of the second year of the project, it is expected that 31 LMPs will be validated with a list of priority interventions approved by each committee.

Output 1.2 Agricultural and Agropastoral Landscapes are restored and sustainably managed.

76. Activities under output 1.2 pick up the priority nature-based landscape restoration interventions that will be contained in the LMPs and combine these with the preliminary assessments of land degradation conducted during the feasibility study, to implement a series of concrete measures designed to restore the productivity of agricultural landscapes in 12 districts. In total, the project will support the rehabilitation of 41,800 ha of degraded land. Restoration activities will be conducted by local non-governmental organizations, civil society organizations and private sector firms following a set of established terms of reference and technical specifications for each type of work. Each service provider will be trained and capacitated for the development and supervision of environmental and social management plans on all areas under restoration, wherever applicable according to the project's ESMF (refer to Annex 6).

Activity 1.2.1 *Conduct landscape restoration through local landscape management committees and community-based associations*

77. The project supports two types of ecosystem-based restoration activities according to the specific locations: one which is designed to enhance the water-related ecosystem functions (run-off control, erosion control, soil moisture control and aquifer recharge) and the second which is designed to restore land productivity (restoration of land cover, soil organic matter, erosion control, and control of invasive species). The options for landscape restoration include targeted reforestation, construction of Berkads, water pans and semicircular bunds, rock catchments and the control of Prosopis. The project will procure required material and provide training to LMC members on the functions and anticipated benefits of selected techniques (sub-activity 1.2.1.1), in order to facilitate supervision. Details on each restoration option can be found in Annex 2, Chapter 6.2.

Table B.3.1 Landscape based ecosystem-based adaptation

Restoration option	Climate problem/ landscape degradation issue
Half-Moon structures	Aridity, high temperatures, run-off, land degradation
Contour bunds	Aridity, high temperatures, run-off, land degradation
Sand dams or Subsurface dams	Aridity, high temperatures, run-off, land degradation
Berkad	Aridity, high temperatures, run-off and evaporation, land degradation
Riverbank rehabilitation	Run-off, soil erosion, flooding
Hafirs/ Water Pans	Aridity, run-off, land degradation
Management/ Control of Prosopis	Land degradation, soil erosion, loss of arable land.
Reforestation	Land degradation, reduction in soil organic matter. Low productivity.

78. The project will also rehabilitate eroded riverbanks in targeted areas in the South-West and Hirchabelle regions (sub-activity 1.2.1.2). All activities take place on communal land or public land and are designed to provide resilient ecosystem services to the communities whose livelihoods depend on them. The restoration activities are complemented by the on-farm land and water management activities that will be implemented under Outcome 2. For technical information on these technologies, please refer to Annex 2, Chapter 6.

79. Landscape management committees (LMCs) will receive trainings on monitoring on land restoration activities (sub-activity 1.2.1.3) and, with the support of FAO and the MoECC at FMS level will also undertake regular supervision and monitoring on these land restoration activities (sub-activity 1.2.1.4). Sites will be equipped with hydro-climate monitoring equipment and the project will facilitate data collection from various sources to monitor results on a series of indicators that inform Land Productivity, directly linked with sub-activity 1.1.1.1 and sub-activity 3.2.1.1. Each LMC will develop an annual progress report on its restoration activities and disseminate the results to their constituents through awareness workshops. The hydro-climate equipment will be managed by MoAI during the project execution according to current SWALIM arrangements. In the long-term SWALIM functions will be gradually transferred over to the government.

Outcome 2 Local livelihoods are resilient to climate change.

80. Activities under this outcome are designed to ensure that local communities derive increased and improved climate resilient livelihoods from agriculture. The project targets existing value chains (maize, sesame, sorghum) which are climate vulnerable staple crops, as well as livestock production (used for meat, dairy). In these value chains, the project also supports the transition from extensive to intensive cropping and facilitates the transition from pastoralism to agro-pastoralism. Given that a significant limitation is posed by water scarcity in Somalia, the project also focuses on securing resilient water supply for agricultural production through combinations of Ecosystem-based adaptation (outcome 1), green and grey infrastructure solutions at both landscape and farm level.

Output 2.1 Resilient water supply is secured and sustainably managed.

81. Similarly to the activities under Output 1, participatory governance of water resources will be established as a principle to enable local communities to collect, manage and distribute water in a manner that is sustainable and climate sensitive. The project works with the government to establish data systems and governance mechanisms to enable State and district governments to support local water management; and with local communities to help them access improved and resilient water supply.

Activity 2.1.1 *Strengthen water management capacity at State and local level.*

82. In the perspective of decentralizing and democratizing natural resources management, the project will support the establishment and capacity of water user association committees (WUAC) that will oversee the rehabilitation, operation and maintenance of water infrastructure and resources in all the sub-watersheds (sub-activities 2.1.1.1). In all project sites, WUAC will be placed under the overall umbrella of landscape management committees to ensure consistency of approach and coordination. The roles and responsibilities of WUAC will be to oversee irrigation water management, mobilization, allocation, and maintenance. Each WUAC Board will be formed of approximately 50 people (target 50% women) with adequate representation from all vulnerable groups and water users. Committees will receive leadership, governance, and management training, as well as training on climate-informed operations and management of water in their territory (sub-activity 2.1.1.2). Each committee will also be endowed with the material means for conducting supervision and monitoring of water infrastructure.

83. To support the long-term sustainability of water management activities, and to ensure long-term operationalization of water infrastructure, the project will partner with UN Capital Development Fund (UNCDF) support work with the WUAC to develop fee-based systems in 1 district for the various types of infrastructure. The objective being to ensure infrastructure is maintained using communities' contributions. This will require working with WUAC and their constituents to establish the fees, assess their feasibility, and pilot their application during the project's execution phase (sub-activity 2.1.1.3). Fees will be established in a participatory manner, based on social acceptability and on contractual arrangements between the WUAC and the communities that are using the water infrastructure. The fees mechanism might be upscaled in other districts under other financing.

84. At State level, to support the devolution of water management, the project will support the delivery of a water accounting and audit survey which will provide data on existing water availability, withdrawals, and irrigation potential under various climate scenarios (sub-activity 2.1.1.4). The activity will also include training for MoAI staff at State and Federal levels on water accounting and water monitoring (quantity and quality) (sub-activity 2.1.1.5). Data collected during the water accounting exercise will be combined with data obtained under output 1.1 on land use, as well as new crop monitoring data emerging from project sites and other districts under production. It will be housed by FAO in an open data system made available to MoAI, MoECC and all State actors for improved knowledge and

monitoring (sub-activity 2.1.1.6). After midterm of the project, the MoAI will take over the data system, and continue its operationalization. This data and data system also be combined with the information collected on landscape restoration (activity 3.1.3) and food/nutrition security (activity 3.1.4). The resulting systems will be coordinated and open access sets of information at high resolution that will enable all State and non-state actors (LMCs, WUACs) to manage land and water through a climate lens, with the view to ensuring long-term sustainability of livelihoods.

Activity 2.1.2 *Increase access to water resources and climate-smart irrigation infrastructure*

85. In order to secure resilient livelihoods for vulnerable communities, access to water for irrigation needs to be upgraded and stabilized, particularly in the light of impending climate change, as highlighted in B1.2. All the targeted regions have a dearth of water mobilization and conservation infrastructure, and those in place have either been destroyed during the conflict, or degraded due to erosion and lack of maintenance. Water demand is due to increase, and if any efforts to stabilize population and ensure their continued food security are to succeed, water availability must be ensured. Therefore, building on data arising from the water accounting audits undertaken in the first year of the project, as well as the data from the soil and water baseline study under output 1, the project will upgrade and rehabilitate significant water infrastructure. In Jowhar, the project will (through cofinancing), rehabilitate and restore the Sabuun Barrage and the primary canal that provides water to 4 districts (Jowhar, Afgoye, Merka and Balcad), serving 1.5 million people and irrigating an estimated 50,000 ha of land (sub-activity 2.1.2.1, co-financed and executed by FAO). The project will upgrade, rehabilitate, and operationalize 16 irrigation canals will (main canals approximately 10km long, each with 20km of secondary canals and 40km of tertiary canals) (sub-activity 2.1.2.2.).

86. All rehabilitated infrastructures along with supplied irrigation equipment (drip irrigation and solar pumping systems) will be managed and operated by WUAC established in activity 2.1.1 according to agreed water uses and with a focus on equitable access and conflict prevention. In each site, the project will work with WUAC to also deploy water-saving technologies to farmers and producers, including drip irrigation kits and solar operated pumping systems (sub-activity 2.1.2.3). This will increase water use efficiency in all cropping systems and will be supported by training at local level for all users.

87. Details of the infrastructure to be rehabilitated can be found in Annex 2, chapter 6.2.

Output 2.2 Local communities practice locally specific Climate Resilient Agriculture

88. Activities under this output are designed to transfer climate resilient agriculture (CRA) technologies, approaches, and inputs to producing households in the project sites, and to reinforce the support provided by local extension services to the adoption of climate resilient agricultural practices.

Activity 2.2.1 *Disseminate CRA practices to farmers.*

89. This will be primarily done through the Farmer Field School (FFS) and Agropastoral Field School (APFS) model, which has been successfully used globally by FAO to rapidly disseminate better food production practices. The "menu" of agricultural practices will be tailored to the local conditions, projected climate change, existing production systems and value chains, and priorities of the local community. Selection of specific technologies and practices will also be aligned with the LMP developed under Output 1.1, and the project will support linkages between LMC and FFS in the region. For example, FFS members may be invited to participate in LMC meetings, some may also be sitting as representatives in the LMC, or LMC members may visit FFS for information exchange. A list of technologies, approaches and practices that will be promoted through this project is provided in the Annex 2, Chapter 6.2. A summary of the proposed technologies and their adaptation benefit is included in Table.

Table B.3.2 List of climate adaptation technologies and their benefits

Technology	Adaptation benefit	Climate Hazards, Drivers of vulnerability and Impacts addressed
Biogas	Production of biogas helps reduce pressure on land and reduces deforestation for energy.	Land degradation, Deforestation
cover crops	Maintenance of soil fertility, reduction of erosion due to rainfall and wind. Increased yields and access to food.	Soil erosion (wind and rainfall), soil compaction, drought, flood, erratic rainfall patterns
Crop rotation	Increased soil fertility, increased access to food and nutrition	Land degradation, flood, erratic rainfall patterns, Reduced yields
Drip irrigation (Solar)	Increased access to water, increased production, and productivity for key crops. Improved water use efficiency.	Increased temperature, drought and extended dry periods, increased crop water demand,

Solar pumping	Continuous and increased access to irrigation water. Reduced use of fossil fuel energy for water pumping.	Increased temperature, drought and extended dry periods, increased crop water demand,
Fodder production	Increased livestock production and productivity, intensification, reduced rangeland degradation, reduced land degradation	Rangeland degradation, reduced animal productivity, animal losses
Improved breeds	Increased livestock productivity and resilience	Rangeland degradation, reduced animal productivity, animal losses
Improved cookstoves	Reduced deforestation and land degradation, reduced labour burden for women and girls, improved indoor air quality.	Land degradation, Deforestation
Intercropping	Increased land productivity, diversification, improved soil fertility and soil moisture	Increased temperature, drought and extended dry periods, increased crop water demand and evapotranspiration, reduced yields, and crop failures
mechanization of land preparation	Increased land under production, removal of invasive species (Prosopis), reduced labour burden,	Soil erosion (wind and rainfall), soil compaction, drought, flood, erratic rainfall patterns
Micro basins, water reservoirs and earth ponds	Improved water retention, increased access to irrigation at farm and household level (house gardens) leading to increased production, productivity and diversification.	Increased temperature, drought and extended dry periods, reduced yields, soil erosion (wind and rainfall), rapid run-off and flood during severe rainfall.
Minimum tillage	Reduced land degradation, reduced risk of erosion, increased soil fertility,	Soil erosion (wind and rainfall), soil compaction
Mulching	Reduced land degradation, reduced risk of erosion, increased soil fertility, improved productivity	Reduced soil fertility, reduced yield, increased crop water demand
Use of nitrogen-fixing plants	increased soil fertility, improved productivity	Reduced soil fertility, reduced yields, crop losses and crop failure
Proper use organic fertilizer	increased soil fertility, improved productivity	Reduced soil fertility, reduced yields, crop losses and crop failure
Use of resilient seed and breeds	Increased productivity of crop and livestock under various climate conditions, reduced losses	Reduced yields, crop losses due to drought or flood, and crop failure and animal death
Rainwater harvesting	Improved water retention, increased access to irrigation at farm and household level (house gardens) leading to increased production, productivity and diversification.	Increased temperature, drought and extended dry periods, increased crop water demand and evapotranspiration, reduced yields and crop failures
Rangeland rehabilitation	Increased rangeland productivity, reduced risk of erosion and flood, increased livestock production.	Reduced land productivity, land degradation and desertification
Rationing	Increased production in the second season	Reduced soil fertility, reduced yield,
Rehabilitation and construction of grain, input and post-harvest storage	Reduced post-harvest losses, improved prices, improved access to quality food, increased access to inputs and resilient seeds and feed.	Harvest losses due to extreme heat or rainfall
Fallowing	Improved soil fertility, reduction of land degradation and risk of erosion	Reduced soil fertility, reduced yield, severe rainfall and rapid run-off
Contour farming	Improved production on sloped land, reduced risk of erosion, improved soil moisture and water conservation.	Reduced soil fertility, reduced yield, severe rainfall and rapid run-off, flooding
Greenhouses, net shading and protected cropping	Reduced crop losses from extreme heat, improved productivity, reduced pests, improved water use efficiency	Increased temperatures, heat extremes, drought, increased crop water demand
Home gardening	Increased production and diversification, improved access to nutritious food, increased income	Crop losses or animal losses due to extreme events, reduced yields from high temperatures, droughts, floods
Agroforestry	Trees in farms for nutrition and income, and sylvopastoral systems for fodder	Heatwaves and other extreme events

90. The project will organize 420 FFS and APFS in total, grouping 30 people each (men and women). At the beginning of the project, FAO with MoAI will develop a curriculum that will include detailed technical packets on all the proposed technologies and practices (sub-activity 2.2.1.1). Trainers and facilitators (approx. 3 people per FFS) including lead farmers, some of whom may be selected from among existing extension offices in project districts, will receive extensive training over 6 weeks on the practices and technologies, and the requirements of facilitating FFS in Somalia (sub-activity 2.2.1.2).

91. Each FFS will receive material and technical support in addition to regular training and exchange visits, over the course of two years (sub-activities 2.2.1.3). The Government of Somalia, through MoAI and its network of extension services, along with FAO, will provide technical and logistical backstopping, supervision and monitoring of the FFS throughout the project (sub-activity 2.2.1.4).

Activity 2.2.2 *Build the capacity of MoAI at Local, State and Federal level to support communities in the adoption of CRA practices.*

92. In parallel, the project will strengthen the technical capacity of MoAI at local, State and Federal level to support producers and rural households. The capacity of staff has been depleted during the years of conflict, and the low level of investment into extension, agricultural research and agricultural information services, has undermined the capacity of the government to serve rural communities. The project will therefore develop and deliver a full public service retraining program related to climate resilient agriculture (sub-activity 2.2.2.1), which will be developed based on the findings of a detailed decentralized needs assessment. This program will be delivered to existing staff during the project and will also be deployed to all new MoAI recruits at federal and State levels, through NGOs and with the collaboration of academic institutions, particularly universities. It is expected that the program will be adopted by MoAI as part of its regular training mandate. Short-term training for technical staff and extension staff who are immediately involved in project implementation will also be developed and deployed in all project districts. The focus of these trainings will be the technologies listed in Table 1. The purpose of these trainings is to ensure that capacity exists at local level to support the FFS and the continued scaling and dissemination of the climate-resilient agricultural practices promoted by the project (sub-activity 2.2.2.2).

Output 2.3 Farmers derive increased income from sustainable natural resource management and climate resilient value chains.

93. Under output 2.3, activities are targeted towards the development of value chains that are more resilient. While outputs 2.1 and 2.2 were targeted at ensuring livelihoods and production were conducted according to the principles of climate resilience, output 2.3 activities are aimed at actors beyond producing households. The purpose of these activities is to ensure that supply chains, particularly input supply chains, are sustainable and sufficiently organized and structured to ensure continuity and gradual upscaling of project outputs and activities.

Activity 2.3.1 *Improve access to climate resilient inputs for crop and livestock production.*

94. This activity is aimed at strengthening and reorganizing the seed distribution system, in line with MoAI priorities and with the needs of local producers. There is an urgent need to secure a stable supply of resilient seed material, to ensure that appropriate climate resilient varieties are being used and multiplied locally in all the value chains. This includes trees, fodder and crop varieties. As a first element, the project will support a comprehensive seed market dynamics analysis, which will include a mapping of input sources at country and State level, an analysis of demand/supply and projections aligned to climate scenarios, and an analysis of prices and storage capacities. This study will be used as a basis for policy reform in the area of seed subsidies by the MoAI (sub-activity 2.3.1.1).

95. The MoAI will also receive extensive technical support and training on the quality assurance, certification and implementation of seed certification norms and standards (sub-activity 2.3.1.2). Based on this training, the MoAI (through the Somali Agricultural Regulatory and Inspection Services (SARIS) will conduct seed certification according to improved seed testing protocols, including through the establishment of improved test and trial sites and laboratory testing facilities (sub-activity 2.3.1.3).

96. The project will aim to strengthen the seed supply system in multiple ways: first, by acquiring appropriate, internationally certified foundation seed material through the CGIAR and the private seed companies and distributing or selling it to local farmers' associations and cooperatives who will act as seed multipliers (sub-activity 2.3.1.4). These seed multipliers will receive training and material support to conduct seed multiplication with a view to becoming autonomous seed providers by the end of the project. During the project, the project will acquire seed from these multipliers for distribution and sell to project beneficiaries under the FFS and APFS models (sub-activity 2.3.1.5). By the end of the project, pricing for the seeds will be established together with the cooperatives and

considering issues of equity and the ability to pay of the producers. The project will also contribute to streamline the seed supply system among the International Partners, for Somalia to be able to build a Seed Value Chains.

97. A similar model will be followed for the production of fodder, where the project will purchase foundation seeds and create 8 fodder processing facilities in support of agro-pastoral communities in the main livestock producing districts. Training in fodder conservation and fodder cropping and material support will be provided to cooperatives (sub-activity 2.3.1.6).

98. For tree production, which will be required for the establishment of agroforestry in the project sites, the project will also work with cooperatives and farmer associations to establish nurseries. The project will establish 30 nurseries which will be run and operated as small businesses by their members (sub-activity 2.3.1.7). To ensure that waste is reduced and that prices are controlled, the project will build climate resilient input storage facilities that will be collectively managed (sub-activity 2.3.1.8). Seed growing and multiplying cooperatives, fodder producing facilities and nurseries will become small private sector agri-businesses, thereby contributing to the generation of additional income for agricultural households and the revitalization of the input supply chain locally.

99. For further detail on the seed system and its associated production methods and facilities, please refer to Annex 2, chapter 6.2.

Activity 2.3.2 *Build the capacity of producer groups to develop sustainable climate-informed business plans.*

100. In order to further strengthen the value chains, the producer groups, cooperatives and associations will also be strengthened in terms of their business and finance capacity, to ensure the growth and stability of the sub-sector as a key element of ensuring resilient livelihoods can be pursued throughout the region. The project will support 410 groups among small businesses, seed grower cooperatives for the 3 major target value chains (Maize, Sorghum, Sesame), nurseries, producers and associations and will provide them with training on value addition, processing, packaging and marketing (sub-activity 2.3.2.1). The groups will also receive assistance in the development of climate informed business plans for selected processing and value addition activities (sub-activity 2.3.2.2). Where necessary, the project may provide initial material investments, such as small processing machinery and equipment, to support the growth of the agri-food private sector for the 3 main Value Chains (Sesame, Maize and Sorghum). The project will also support the construction and rehabilitation of climate resilient food storage facilities (including solar powered cooling and climate control) at district level (sub-activity 2.3.2.3). This will facilitate access to market, price control, and importantly, reduce wastes and losses for value-added commodities.

Activity 2.3.3 *Increase MSME, cooperatives and farming group access to agricultural finance*

101. The groups above and the FFS and APFS convened under output 2.2 will also receive support in accessing agricultural credit and rural finance, also as a way to strengthen the sustainability of value chains, and to ensure long-term financial autonomy and self-replication of the production systems. In this activity the project will work both on the demand and supply of rural finance. First, a subset of the FFS and APFS groups will be supported in establishing Village Savings and Loans Associations (VSLA). VSLA will be supported through formal registration, governance, financial literacy and bookkeeping, and loan making (sub-activity 2.3.3.1). The purpose of VSLA will be to support the financial activities of the group or its individual members according to specific lending criteria, including climate resilience requirements. As part of sub-activity 2.3.3.1, the project will also use the Gender Action Learning System (GALS) approach to address the power relationships and facilitate behavioral changes in households. These groups, cooperatives and small businesses (including seed multipliers, fodder producers and nurseries) will also be supported in accessing microfinance institutions that will also be capacitated to support climate resilience investments (sub-activity 2.3.3.2).

102. One promising model, which has been tested in Somalia and provides unique advantages in terms of consolidating value chains is the Producer- Public-Private-Partnership model (4Ps). The model creates a system resembling contract farming and secures income for vulnerable producer households whose production is guaranteed to be purchased at a fair price, under certain production conditions, by large buyers and bulkers. The project will develop 4Ps between farmer cooperatives, microfinance institutions, Somali Bankers Association and lead wholesalers, for example the Sesame exporters platform (sub-activity 2.3.3.3).

103. Working on the supply side of the rural finance continuum, the project will also provide technical support to financial institutions themselves (MFI, bankers associations) to develop innovative financial products that are responsive to the needs of the sesame, sorghum and maize value chains in a context of climate change and climate variability (sub-activity 2.3.3.4). These could include concessional loans, subsidies, equity, insurance, lines of credit or other forms of accessible finance for small producers and small groups.

104. Additional details on key stakeholders, existing institutions and potential partners are found in Annex 2, Chapter 6.2.

Activity 2.3.4 *Increase all-season access to market for smallholder producers, cooperatives and farmer groups.*

105. Finally, the project will invest in rehabilitating key rural infrastructure that has been degraded either due to conflict or natural causes in order to ensure that producers can access markets to both acquire inputs and sell products. Functioning markets, regardless of climate conditions, particularly in times of flooding or other climate extremes, offer important coping strategies on multiple levels. From an economic perspective, access to markets allows the creation of value and breaks the cycle of subsistence farming; from a social perspective, particularly in a fragile context functioning and accessible markets create poles where households can access social services and safety nets, as well as social networks. Input supply chains cannot function without accessible markets. Therefore, the project will rehabilitate rural roads and upgrade them to withstand harsher climate conditions, including heat and severe rainfall (sub-activity 2.3.4.1). Similarly, given the importance of livestock in the local economy and culture, the project will also rehabilitate cattle corridors and create intermediary markets at district level or regrouping points at village level for small ruminants, to promote local exchanges (sub-activity 2.3.4.2). Additional details on roads and markets can be found in Annex 2, Chapter 6.2.

Outcome 3 An improved institutional enabling environment for sustainable landscape management and climate resilient agriculture is in place at State and Federal Levels

106. Activities under Outcome 3 form part of the project's sustainability and upscaling strategy. The aim is to create conditions and an enabling environment for the replication and broader adoption of project results. Given the fragile conditions of the Government of Somalia, strengthening of capacity is required to ensure that Federal Member States can implement new norms for sustainable landscape management and climate resilient agriculture. The activities support the institutional capacity of the Government of Somalia at various levels. Output 3.1 considers legal frameworks and modalities for monitoring their implementation (the normative elements of institutional capacity), while output 3.2 strengthens the informational capacity of the Government of Somalia, in particular its capacity to generate and disseminate useful, relevant and timely climate information to last mile users.

Output 3.1 Legal frameworks and implementation modalities for NRM and CRA are improved.

Activity 3.1.1 *Update legal and institutional frameworks for sustainable landscape management*

107. This activity recognizes that significant changes need to be affected to the national legislative and policy apparatus to support the transition towards climate-resilient development pathways. This includes, in particular, the institutionalization of approaches such as landscape management as integrated adaptation strategies and as innovative governance frameworks that can build communities across traditional lines. The project will therefore work with MoECC to develop new pathways for monitoring he implementation of landscape management approaches that cut across sectoral lines. This will be done on the basis of a needs assessment study, which will also include considerations related to the decentralization of landscape management approaches at State level, and the potential complexities of enforcing Landscape Management Plans across administrative boundaries (sub-activity 3.1.1.1).

108. Following this study, the project will bring Federal Member states and districts together, learning from the experience of the landscape management committees established under outcome 1, to develop new regulations, by-laws and other instruments to consolidate landscape management and upscale it to the rest of the country. (Sub-activity 3.1.1.2.) The experience of landscape management committees will also be useful in the design of an LSMP manual, tailored to the specific Somali context, covering all the elements of the landscape approach on the basis of lessons learned nationally and internationally (sub-activity 3.1.1.3).

109. The project will also work with MoECC to develop a strategy and action plan on the management of Prosopis, as an invasive species that severely restricts agricultural development potential. The Strategy and action plan will also build on project experience with the removal, management and re-use of Prosopis that was deployed under outcome 1, and on the results reported by landscape management committees in terms of benefits of such approaches (sub-activity 3.1.1.4). Finally, the project will also assist with the development of a set of new standards for construction, buildings and infrastructure that will enshrine the principle of resilience and will formalize adaptation in any reconstruction and future construction efforts throughout the country, drawing on the climate studies and assessments conducted in the project (sub-activity 3.1.1.5). Standards on climate proofing infrastructure will be defined as water management infrastructure but also transport infrastructure as it is poorly designed and does not resist extreme weather events such as floods.

Activity 3.1.2 *Strengthen policy dialogue and coordination between sectoral ministries at State levels.*

110. Furthermore, the project will work at national and State level to increase intersectoral coordination between various ministries and vertical coordination from the local to the federal level. The landscape management approach provides an opportunity to break down stove-piped sectoral management of natural resources to generate multiplied adaptation benefits for vulnerable communities. The project therefore will assess the existing coordination

mechanisms at federal, state, and local level, and make recommendations on improvements that can facilitate the adoption of more integrated approaches over natural resource management and climate resilient agriculture (sub-activity 3.1.2.1). A proposal will be made on the design of an improved coordination framework (sub-activity 3.1.2.2). To build knowledge and regional networks, the project will also integrate regional and international knowledge and policy best practices into national policy making. These improved coordination frameworks will be formalized and operationalized in the project States (sub-activity 3.1.2.3) towards the end of the project.

Activity 3.1.3 *Strengthen the capacity of MoECC to manage, monitor and govern natural resources and implement Ecosystem-based Adaptation*

111. To support effective decentralization and to create an enabling environment in which landscape management is facilitated by government frameworks and support, the project will build the capacity of the MoECC to understand, plan and monitor EbA solutions to climate change. Training will be provided to district, State and Federal level MoECC officials on climate change and Ecosystem-based adaptation solutions (sub-activity 3.1.3.1), especially focusing on staff that will be acting as support to landscape management committees established under output 1.1. Staff will also be supported in learning how to facilitate participatory monitoring of landscape restoration measures (sub-activity 3.1.3.2). This will be particularly important to ensure that all local stakeholders are aware and can measure the immediate benefits of landscape restoration, whether environmental, economic and social. This will serve to facilitate broader upscaling and replication later on. To this end, the MoECC at FMS level will be supported in rehabilitating local monitoring and observation infrastructure, which will include offices and weather stations, as well as field-testing facilities to support continued research into the applicability of Ecosystem-based Adaptation (sub-activity 3.1.3.3). The project will also support the development of the implementation plan for the National Environmental Management and Protection Act (sub-activity 3.1.3.4) and the operationalization of the Environmental and Social Impact Assessment regulations (sub-activity 3.1.3.5).

Activity 3.1.4 *Build capacity for the monitoring, assessment, analysis and early warning related to the impacts of climate on food and nutrition security.*

112. Similarly, the MoAI, local universities and NGOs will also receive support to conduct monitoring, assessment and early warning of food security at decentralized levels (sub-activity 3.1.4.1). This will include provision of training and materials for the collection of data, assessment, analysis of the linkages between food production/availability and climate conditions, in order to develop more reliable food security warnings at district level. Each district will then conduct, through a collaborative Food Security working group, seasonal assessments and analysis of the impacts of climate on food and nutrition security (sub-activity 3.1.4.2). This will be linked to the existing IPC working group and federal food security early warning systems currently in place. Each State will disseminate two annual briefings through local media, print and radio (sub-activity 3.1.4.3).

113. The project will also provide interactive training sessions on climate change adaptation and the effects of climate change on the environment to media professionals and the institutions in charge of Early Warning and Disaster Risk Reduction (sub-activity 3.1.4.4). The training sessions aim at enhancing stakeholders' understanding and awareness of climate change impacts but also at establishing permanent links between media professionals and the institutions to involve media professionals in the creation of Early Warning systems in the country.

Activity 3.1.5 *Build capacity of MoAI for climate informed water management infrastructure planning.*

114. The project will support technical assistance to the ministry of agriculture and irrigation to develop climate informed water management infrastructure master plans targeting regions surrounded by Shabelle River and Juba river. The process will be participatory and will include the development of a multi-stakeholder task force, as well as local consultations to develop irrigation master plans that will guide future investments. The MoAI will first create an Irrigation plan task force (sub-activity 3.1.5.1) which will coordinate and conduct consultations with water and land users (sub-activity 3.1.5.2). Based on the assessment and consultations with water and land users, the project will support the development of a climate-informed irrigation master plans (sub-activity 3.1.5.3). The objective of having a master plan is to identify the large-scale infrastructure needed for irrigation water supply and flood protection in order to prepare other initiatives and prioritize future investment.

Output 3.2 Increased Access to Climate Information Among Last Mile Users

115. Currently, last mile users, producing households and extension services do not have sufficient access to climate information services. Forecasts are not yet being shared from national to State or local level, and their reliability is inadequate. Seasonal forecasts are currently available, but only distributed to government services. Early warnings for climate extremes are not being disseminated, leading to missed opportunities for early adaptive action at local levels. If producer households do not have access to adequate agro-meteorological advice, the transition to climate-resilient livelihoods will be incomplete and unsustainable.

Activity 3.2.1 *Collect, disseminate and share relevant climate and land data to support decision making at all levels.*

116. The project will work with the MoECC and the climate information service providers at Federal and State levels to redesign and deploy an open-access GIS-based climate information platform, on which users will be able to access forecasts at 3 and 10-day intervals. Seasonal forecasts will be improved, and the early warnings and regular forecasts will also be linked to agronomic advice (sub-activity 3.2.1.1). All information will be made publicly available free of charge on an online climate information platform associated with the current SWALIM system. State level meteorological and agro-meteorological staff will also receive training and capacity building for the deployment and use of the climate information.

117. To ensure that last mile users receive information and can act on it in a timely and appropriate manner, the project will partner with local radio, mobile phone service providers and the existing Digniin platform, to deliver digital early warning and decision support tools for agricultural producers (sub-activity 3.2.1.2). The activity will build on the rapid growth in mobile phone connectivity and disseminate information to crop and livestock producers either directly or through the relay of group leaders (FFS, associations, savings groups, cooperatives). Information will be free of charge, however, towards the end of the project, the MoECC will establish the modalities for continued operation of the system, including exploring cost-sharing mechanisms, cost recovery and pricing options for long-term affordability and sustainability, on the basis of documented lessons learned and benefits from this project (sub-activity 3.2.1.3).

118. In addition, to further strengthen the capacity of the MoECC to undertake climate informed landscape management and planning, the project will work with the MoECC to establish 2 SWALIM information management centre (IMC) at decentralized level. The IMCs will be established and will serve as centres for data collection, analysis, management and sharing on all aspects related to natural resources. The centres will be tasked with producing land use maps, monitoring land degradation and water availability, collecting all data sources from studies developed in this project (under outcome 1) and distributing information that can serve to deploy climate-informed land use planning, landscape restoration and water management (sub-activity 3.2.1.4). The 2 IMCs will be staffed by MoECC staff and operated by MoECC and MoAI, as part of the institutionalization of SWALIM, and thereby integrated into the government apparatus. The IMC will provide coordination and M&E function with support from the project (sub-activity 3.2.1.5). The IMC will be modelled on the existing SWALIM IMCs that has successfully been established in Somalia to date.

119. Finally, the project will support the development of radio programs, awareness and distance learning targeting the population (sub-activity 3.2.1.6). Although there is an ongoing transition in the Somali media landscape as online media is growing in importance, the Somali's population still relies on radio and the information that people hear on the radio or read/see online is quickly spread throughout the community. The awareness raising radio programs will be developed and disseminated through local radio stations reaching the communities at the district and community level.

B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

Accredited Entity

120. FAO will serve as the Accredited Entity (AE) for this project. As such, FAO will be responsible for the overall management of the project, including (i) all aspects of project appraisal; (ii) administrative, financial and technical oversight and supervision throughout project implementation; (iii) ensuring funds are effectively managed to deliver results and achieve objectives; (iv) ensuring the quality of project monitoring, as well as the timeliness and quality of reporting to the GCF; and (v) project closure and evaluation. FAO will ensure these responsibilities in accordance with the detailed provisions outlined in the Accreditation Master Agreement (AMA) between FAO and GCF.

121. FAO's role as AE will be attributed to the relevant offices and divisions in FAO Headquarters located in Rome, Italy (HQ), Regional Office for Africa located in Accra, Ghana, Sub-Regional Office for East Africa located in Addis Abeba, Ethiopia, the Country Representation Office for Somalia (FAO-Somalia).

122. In order to fulfil the AE functions, FAO will set up a dedicated Project Task Force (PTF) in line with FAO project cycle guidelines. The PTF will be composed by the Budget Holder (BH), the Lead Technical Officer (LTO), Funding Liaison Officer (FLO), HQ Technical Officer and other technical officers, as appropriate.

123. The PTF will remain independent from the Executing Entity functions also performed by FAO (see Project execution section below). In line with the GCF policy on fees adopted through GCF Board Decision B.19/09, the above-mentioned segregation of responsibilities within FAO will ensure that the Organization can independently and effectively perform the AE functions listed in the GCF *General principles and indicative list of eligible costs covered under GCF fees and project management costs*.

Project co-financing

124. FAO will provide in-cash (grant) co-financing through the USAID-funded TRANSFORM project to be executed by FAO, for a total amount of 15.19 million USD. The executing entity of co-financing is responsible for reporting of co-financing activities and their disbursement amount to the AE in accordance with the detailed provisions outlined in the GCF policies as well as AMA, Funded Activity Agreement (FAA) between FAO and GCF and the co-financing agreement signed between the co-financier and FAO in its capacity of AE. FAO will be responsible for executing and managing their co-financing under the coordination of the Central Project Implementation Unit (CPIU — see below) and through the Project Steering Committee—PSC (see Project execution section below).

Executing Entities

125. The project will be executed by FAO and the Government of Somalia acting through (i) the Ministry of Environment and Climate Change (MoECC) (ii) the Ministry of Agriculture and Irrigation (MoAI in a co-execution modality to deliver the project activities funded by GCF proceeds (see below for details).

126. FAO will act as EE and will ensure strong country-driven execution of project activities and will be in charge of the execution of selected activities funded by GCF proceeds based on its comparative advantages. This will allow Somalia to benefit from the technical and operations experience of a specialized development assistance agency from the United Nations (UN), while providing opportunities for the government to increase their capacity through technical assistance and development and implementation of activities under the three components. FAO will also execute the activities co-financed by FAO.

127. **Flow of funds and legal arrangements**. In line with the project implementation arrangements outlined above, GCF proceeds received by FAO in its capacity as Accredited Entity will flow to the Executing Entities, namely FAO-Somalia, MoAI, and MoECC for the implementation of project activities (figure 3). A summary of EE activities also illustrating the flow of funds is presented in table 5 below. More details are presented in the feasibility study (Annex 2 of the FP). The provisions regarding MoAI and MoECC responsibilities as EEs, together with all financial details, will be included in the Project Agreement, which will also serve as subsidiary agreement, signed by the Government of Somalia.

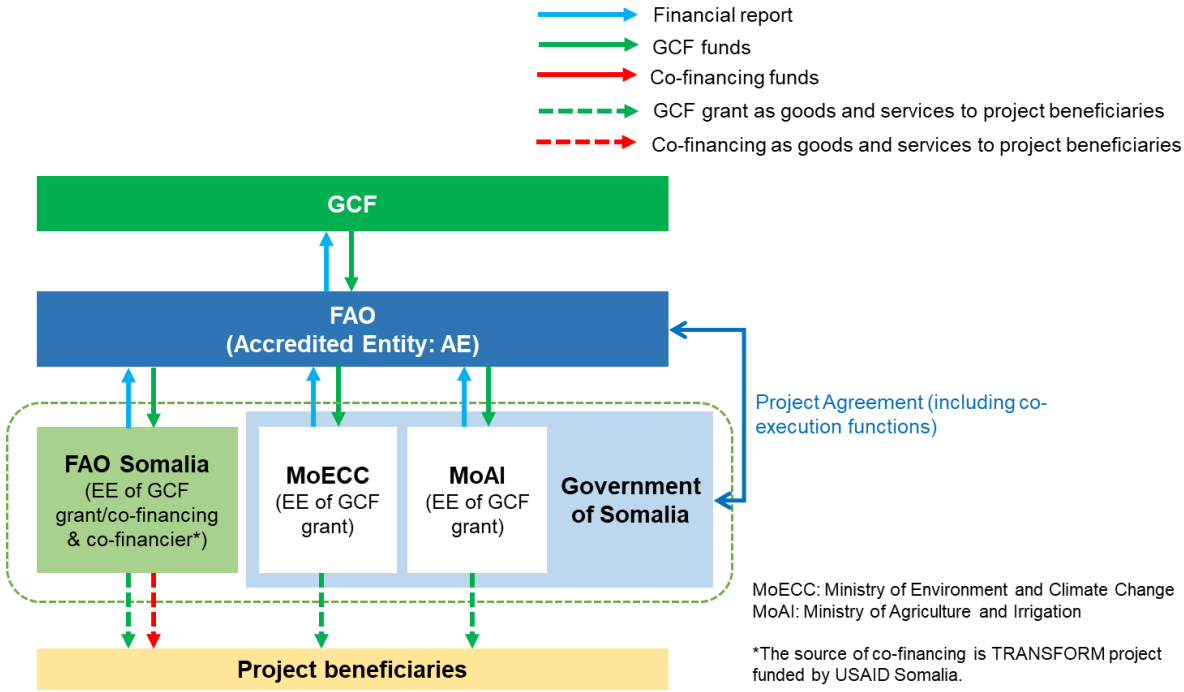

Figure B.4.1: Flow of funds

Table B.4.1: Project activities per EE

Activity	Sub-activity	Executing Entity (EE)			Funding source
		FAO	GoS-MoECC	GoS-MoAI	
1.1.1	1.1.1.1	x			GCF
	1.1.1.2	x			GCF
1.1.2	1.1.2.1	x			GCF
	1.1.2.2	x			GCF

	1.1.2.3	x			GCF
	1.1.2.4	x			GCF
1.2.1	1.2.1.1	x			GCF
	1.2.1.2	x			GCF
	1.2.1.3	x			GCF
	1.2.1.4		x		GCF
2.1.1	2.1.1.1	x			GCF
	2.1.1.2	x			GCF
	2.1.1.3	x			GCF
	2.1.1.4	x			GCF
	2.1.1.5	x			GCF
	2.1.1.6	x			GCF
2.1.2	2.1.2.1	x			FAO
	2.1.2.2	x			GCF
	2.1.2.3	x			GCF
2.2.1	2.2.1.1	x			GCF
	2.2.1.2	x			GCF
	2.2.1.3	x			GCF
	2.2.1.4			x	GCF
2.2.2	2.2.2.1	x			GCF
	2.2.2.2	x			GCF
2.3.1	2.3.1.1			x	GCF
	2.3.1.2	x			GCF
	2.3.1.3			x	GCF
	2.3.1.4			x	GCF
	2.3.1.5			x	GCF
	2.3.1.6	x			GCF
	2.3.1.7	x			GCF
	2.3.1.8	x			GCF
2.3.2	2.3.2.1	x			GCF
	2.3.2.2	x			GCF
	2.3.2.3	x			GCF
2.3.3	2.3.3.1	x			GCF
	2.3.3.2	x			GCF
	2.3.3.3	x			GCF
	2.3.3.4	x			GCF
2.3.4	2.3.4.1	x			GCF
	2.3.4.2	x			GCF
3.1.1	3.1.1.1	x			GCF
	3.1.1.2		x		GCF
	3.1.1.3	x			GCF
	3.1.1.4		x		GCF
	3.1.1.5		x		GCF
3.1.2	3.1.2.1		x		GCF
	3.1.2.2		x		GCF
	3.1.2.3		x		GCF
3.1.3	3.1.3.1		x		GCF
	3.1.3.2		x		GCF
	3.1.3.3		x		GCF
	3.1.3.4		x		GCF
	3.1.3.5		x		GCF
3.1.4	3.1.4.1	x			GCF
	3.1.4.2	x			GCF
	3.1.4.3	x			GCF
	3.1.4.4	x			GCF
3.1.5	3.1.5.1			x	GCF
	3.1.5.2			x	GCF
	3.1.5.3			x	GCF

3.2.1	3.2.1.1	x			GCF
	3.2.1.2		x		GCF
	3.2.1.3		x		GCF
	3.2.1.4		x		GCF
	3.2.1.5	x			GCF
	3.2.1.6		x		GCF

128. The project will establish a **Central Project Implementation Unit (CPIU)** that will be functional for the entire duration and be responsible for day-to-day implementation of the project, with support FAO offices in each FMS. The main functions of the CPIU, following the guidance of the PSC and project technical committee (PTC), will be to ensure overall efficient management, coordination, implementation, and monitoring of the project through the effective implementation of the annual work plans and budgets (AWPBs). The CPIU will be led and managed by a project-recruited a Technical Advisor and National Technical Coordinator (NTC), who will be appointed by FAO and will be responsible for overall project management and coordination with project stakeholders. The CPIU will also include the following core personnel (part time); Administration and Finance Officer, Compliance Officer, Operations Officer, Procurement Officer, Project Implementation Specialist, HR specialist National Specialists in the area of admin, HR, finance, procurement and operation, National Field Support Assistants, international and national technical specialists for outcomes 1–3, international and national Environmental and Social Safeguard Specialists, international gender, social inclusion and Indigenous Peoples specialist, national gender specialist, national conflict and risk management specialist, national Indigenous Peoples and Land Tenure expert (refer to Annex 2 Chapter 8 and also Annex 6, IPPF).

129. The project's Monitoring, Evaluation and Learning plan will be supported by a MEL Unit, who will be supervised by the CPIU. The head of Monitoring and Evaluation, with support from other project staff, international and national consultants and experts, will be responsible for overseeing all activities related to information collection related to the project indicators (e.g. household surveys) and for managing the project's learning, communications and knowledge sharing strategy.

130. The CPIU will coordinate closely the field officers posted at the 6 FAO Somalia field offices located in all target states, who will supervise the day-to-day project operations in each district, liaising with the Focal Points (appointed by the respective EE) in each district. National M&E specialists, National Finance Specialists, and National Field Support Assistants will be located in the FAO Somalia field offices to closely support the operations in the field.

Other Project Partners

131. During implementation, in addition to the above EE, the project will engage relevant government counterparts from MoAI (e.g. Seed Bank and laboratories), MoECC (e.g. department of climate information services). It will also engage knowledge centres (e.g. CGIAR, agricultural research organizations), universities and training centres (for example University of Somalia, Nile University of Science and Technology), local non-profit and community-based organizations, finance service providers and the private sector, financial institutions, mobile phone operators. In addition, several partners will be engaged in the project either to ensure complementarity with their activities and/or delivery of goods works and services. In particular organizations and partners working with the other related projects and cofinancing partners, including IFAD, USAID, World Bank and other donors with projects in the area. It will also work with NGOs having a proven track record of implementing activities in the countries or in the region. The partners will be selected during project implementation in accordance with relevant FAO Manual Sections.

Project Governance

132. A **Project Steering Committee (PSC)** will be established to provide strategic guidance for the project. The PSC will be chaired by the MoECC, and co-chaired by FAO-Somalia. The CPIU will serve as Rapporteur to the PSC. The PSC will include representatives of other key government departments and agencies, private sector, and civil society organizations. These partners will include MoA, Ministry of Livestock, Rangelands and Forestry, Ministry of Water and Energy. State MoAI and MoECC representatives will also be invited to the PSC meetings.

133. The role of the PSC will be to: (i) provide overall guidance and direction to the project, ensuring it remains within any specified constraints; (ii) address project issues as raised by the national project implementation coordinator; (iii) monitor project risks and the effectiveness of mitigation measures, and provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks; (iv) review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans; (v) review and agree with annual work plan and provide necessary strategic guidance for its implementation; (vi) appraise the annual project implementation report, including the quality

assessment rating report; (vii) make recommendations for subsequent work plans to build on achievements and address any shortcomings; and (viii) provide ad hoc direction and advice for exceptional situations when the project coordinator's tolerances are exceeded.

134. The PSC will be expected to meet formally at least once every 12 months. Formal meetings will be scheduled and arranged by the National Project Implementation Coordinator in consultation with, and at the request of PSC members (with tentative dates for the following meeting being agreed under Any Other Business). Extraordinary meetings of the PSC can be requested by any of its members.

135. The PSC will be supported by a **Central Project Technical Committee (CPTC)** and **Regional Project Technical Committees (RPTCs)**, which will review and, where needed, advise on the technical delivery of the project at FGS and FMS level respectively. The CPTC will be co-chaired by the Ministry of Agriculture and Irrigation and Ministry of Environment and Climate Change. Other members of the CPTC will include the Ministry of Livestock, Rangelands and Forestry and the Ministry of Water and Energy, FAO, and relevant CSOs and NGOs. The CPTC will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project. A RPTC will be set up in each of the target Federal Member State to monitor project implementation. It will be chaired by the State Ministry of Environment and Climate Change and includes line Ministries, CSOs and private sector and international partners. Technical committees will meet quarterly and on an ad hoc basis.

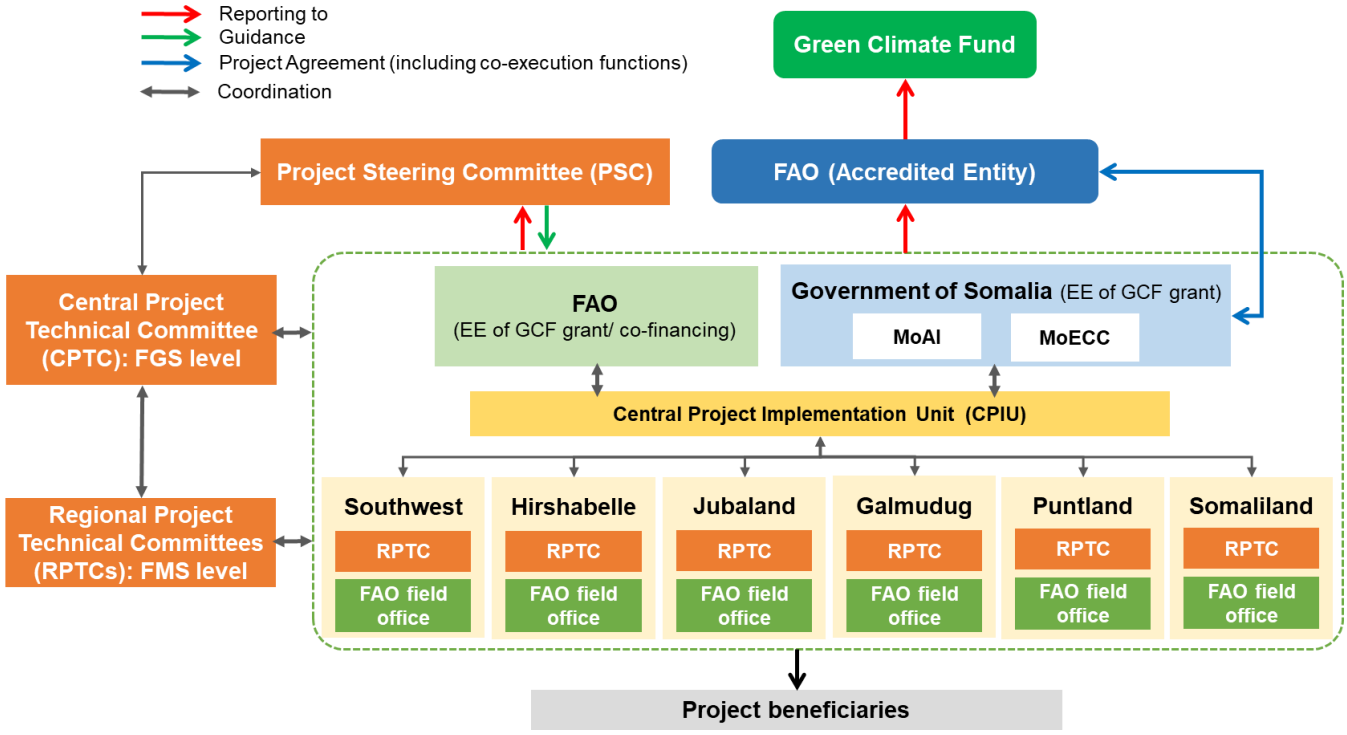

Figure B.4.2 Implementation arrangements

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

136. Somalia, one of the world's most fragile states and LDCs, stands at a critical juncture where the convergence of several challenges demands urgent attention. The nation grapples with a myriad of issues, and the agriculture sector is at the heart of socio-economic recovery. Somalia's agricultural sector remains particularly vulnerable, with local populations facing extreme vulnerability to climate variability and climate change, in a context where scarcity is already stark. Currently, four million people in Somalia (21 percent of the population) are facing Crisis or Emergency food insecurity, according to the latest Integrated Phase Classification (IPC). An estimated 1.7 million children below the age of 5 face acute malnutrition in 2024, including 430,000 who are likely to be severely malnourished[47].

137. Somalia is very much exposed to Climate extreme events as demonstrated in section B.1. The country is therefore in need to access to Climate Finance Instruments, providing resources to address Climate Change and at

[47] IPC

the same time contributing to build the resilience of ecosystems and communities. Large-scale investments programs, such as the ones funded by the GCF, are also relevant in the context of Somalia, where emergency response and humanitarian aid prevail. Most of the interventions have thus far focused on governance, peace-building, and disarmament, with urgent food aid and food security interventions taking the forefront. If recovery is to be sustainable, and local communities can gradually move on from survival and subsistence, development has to be conducted in climate-informed manners. The country has just ended the HIPC transition program and has finally gotten rid of massive debt. With a GDP of 10 billion in 2022[48], it cannot be expected to take on new loans. Although public expenditures are rising (1 billion USD in 2024, a 4 percent increase from 2023), over two thirds of resources originate from external aid[49].

138. Somalia's ability to invest in crucial sectors such as water and agriculture remains limited. With limited fiscal space, public investment in agriculture remains dismally low, hindering the development of resilient farming practices and infrastructure. Grant financing presents a viable avenue to inject much-needed capital into the agricultural sector, enabling the implementation of sustainable initiatives aimed at mitigating climate risks and improving productivity. The project also creates the conditions for the emergence and strengthening of an agri-food private sector, one in which communities, with adequate support, can begin to create their own economic opportunities. Currently, the absence of accessible finance mechanisms further exacerbates the plight of farmers, and the risks involved in transitioning to climate-resilient development pathways, stifling innovation, and inhibiting adaptation to climate change.

139. The government has expressed clear commitment to actively participate in international climate governance mechanisms, particularly UNFCCC processes, recently revising its NDC submission in 2023 (the first NDC was submitted in 2016) and submitting its first National Communication in 2019 and the first Biennial Update Report in 2021. Somalia is one of the LDCs without a submitted National Adaptation Plan (NAP), however a draft document has been in process. Somalia's NDC 2021 estimated the cost of implementing the adaptation actions of the NDC target at USD 55 billion for 2021–2030, meaning USD 5.5 billion per year. For agriculture and food security area, USD 10 billion is estimated as investment required for 2021–2030. As stated in Somalia's NDC, Somalia, as an LDC in a fragile context, requires external financial support through multilateral and bilateral donors for successful implementation of the NDC. These initiatives demonstrate a strong commitment on the country level to work with partners to promote a paradigm shift from fragility to resilience, contributing to long-term development and stability in the country.

140. The proposed GCF grant is appropriate to address the urgent needs of the country to cope with climate change. Decades of conflict have taken a toll on Somalia's agricultural sector, exacerbating the vulnerability of local populations to the impacts of climate change. Environmental degradation further compounds these challenges, undermining agricultural productivity and exacerbating food insecurity. The degradation of natural and built infrastructure that support climate coping mechanisms, must be reverted in order to continue to support local development. These investments, however, lie beyond the means of the Somalia government for the moment. In light of these challenges, the imperative for GCF grant financing to bolster climate-resilient agriculture emerges as a crucial solution to sustain livelihoods, enhance food security, and foster socio-economic stability and resilience.

141. Co-financing with other initiatives has been identified, including the USAID-funded project (USD 15.19 million) to be implemented by FAO. Co-financing from the Government of Somalia will ensure country ownership, complementarity with other initiatives and sustainability.

B.6. Exit strategy (max. 500 words, approximately 1 page)

142. The project's exit strategy is ingrained in all the project interventions. All activities are designed to be sustainable in the long term, and plans are integrated to ensure that the Somali government can maintain and upscale the key strategies promoted in this project. A significant aspect of the project's exit strategy is included in Outcomes 1 and 3.

143. First, the project creates a basis of information and knowledge that will be integrated into future policy making; for example, the baseline study of land cover and land degradation will be integrated into the information systems created under Output 1.1, 2.1, and 3.2 and can be leveraged to prioritize interventions by the government or other donors. Capacity built for monitoring landscapes, climate conditions, crop production and food security will also feed into long-term agricultural policy-making and operations at both State and Federal levels. The project also includes

[48] https://www.imf.org/en/News/Articles/2023/12/13/pr23438-imf-and-world-bank-announce-us-4-5-billion-in-debt-relief-for-somalia#:~:text=Following%20HIPC%20Completion%20Point%2C%20Somalia's,poverty%2C%20and%20promote%20job%20creation.

[49] https://somalipublicagenda.org/review-of-the-federal-government-of-somalias-first-billion-dollar-budget-for-2024/#:~:text=The%20federal%20government%20of%20Somalia's%20budget%20for%202024%20was%20approved,last%20year's%20%24977%20million%20budget.

measures to strengthen the capacity of the government in terms of monitoring the adherence to rules and regulations related to natural resources use and management.

144. Second, at the local level, the creation of landscape management committees and strengthening of water user committees, which are expected to outlast the project duration, will create a lasting foundation for community-based management of natural resources, nested within the context of decentralization. These committees will create lasting capacity among their members (who are expected to change regularly) to understand and manage natural resources in a climate informed manner. These institutional structures are expected to outlast the project duration and to serve as a basis for further institutionalization of the watershed-based landscape management approach.

145. Third, all infrastructure and landscape restoration activities are designed with an exit strategy in mind. The development and institution of fee-based systems for water management, the promotion of standards for the construction of climate proof infrastructure, the formalization of water user committees as key management bodies create conditions under which future land and water management can be continued by the beneficiaries themselves. In particular, all community groups (FFS, WUAC, LMC) will receive training and capacity building for the continued operations and maintenance of all infrastructure and natural assets. The creation of a fee-based system for water management plays a key part in the exit strategy, as it creates a lasting basis for financing of water services. Although there remains a high level of dependency on external resources for investment in water infrastructure, the government of Somalia is committed to invest in the operation and maintenance of all works. The project works with the MoAI to develop an irrigation master plan, which will include recommendations on water financing. A detailed O&M plan is available in Annex 16.

146. Care has been taken not to create systems or institutions that create undue financial burden on the beneficiaries or on the Government. For example, under Outcome 3, work to develop early warning systems, agrometeorological information dissemination and other e-extension, is conducted with a view to ensuring the autonomy and financial viability of the system, and continued affordability for end users. Pricing will be limited to a minimum to ensure continued service, and modalities for the establishment of user fees for e-extension will also be explored.

147. Another element of the project's exit and sustainability strategy is the strong emphasis on building the capacity of government actors in delivering support to local producing households. While it is understood that significant support is needed due to the dire situation experienced in the country, it is also agreed that all systems and services will be owned and continued by the government in the long-term. This includes information management centres, early warning systems, all databases and, of course, any infrastructure upgraded by the project. The project develops training programs that will fill both immediate capacity gaps and long-term gaps, to ensure the climate risk management aspects are mainstreamed in all aspects of the MoECC and MoAI's work.

C. FINANCING INFORMATION

C.1. Total financing

(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)	Total amount	Currency
	79,707,268	USD ($)

GCF financial instrument	Amount	Tenor	Grace period	Pricing
(i) Senior loans	Enter amount	Enter years	Enter years	Enter %
(ii) Subordinated loans	Enter amount	Enter years	Enter years	Enter %
(iii) Equity	Enter amount			Enter % equity return
(iv) Guarantees	Enter amount	Enter years		
(v) Reimbursable grants	Enter amount			
(vi) Grants	79,707,268			
(vii) Results-based payments	Enter amount			

(b) Co-financing information	Total amount	Currency
	15,194,229	USD ($)

Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
FAO	Grant	15,194,229	USD ($)	Enter years Enter years	Enter%	Options
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options

(c) Total financing (c) = (a)+(b)	Amount	Currency
	94,901,497	USD ($)

(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)	
	The project also identified parallel co-financing opportunities, namely WB-funded project implemented by the Government of Somalia, IFAD-GEF Adaptive Agriculture and Rangeland Rehabilitation Project (A2R2) (2024-2028), IFAD-Adaptation Fund (AF) project ''Green and Resilient Ecosystems for Somali Livelihoods (Hal-abuur)'' (under formulation).

C.2. Financing by component

Component	Output	Indicative cost USD ($)	GCF financing		Co-financing		
			Amount USD ($)	Financial Instrument	Amount USD ($)	Financial Instrument	Name of Institutions
Component 1	Output 1.1	4,307,984	4,307,984	Grants	Enter amount	Choose an item.	Click here to enter text.
	Output 1.2	30,127,943	30,127,943	Grants	Enter amount	Choose an item.	Click here to enter text.

Component 2	Output 2.1	24,172,925	9,311,909	Grants	14,861,016	Grants	FAO
	Output 2.2	8,181,815	8,181,815	Grants	Enter amount	Choose an item.	Click here to enter text.
	Output 2.3	9,544,024	9,544,024	Grants			
Component 3	Output 3.1	3,317,004	3,317,004	Grants	Enter amount	Choose an item.	Click here to enter text.
	Output 3.2	2,755,379	2,755,379	Grants	Enter amount	Choose an item.	Click here to enter text.
Monitoring & Evaluation	M&E	4,360,155	4,360,155	Grants	Enter amount	Choose an item.	Click here to enter text.
Project Management Cost	PMC	5,812,700	5,479,487	Grants	333,213	Grants	FAO
Contingency		2,321,571	2,321,571	Grants			
Indicative total cost (USD)		94,901,497	79,707,268			15,194,229	

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities?	Yes ☒ No ☐
C.3.2. Does GCF funding finance technology development/transfer?	Yes ☒ No ☐

148. A total of 108,180 people will directly benefit from capacity building activities with the amount of USD 19.7 million. Activities where the main aspect is capacity building are as follows:

- 1.1.1 Strengthen the information base for climate-informed local land use planning
- 1.1.2 Develop climate-informed inclusive landscape management plans
- 2.1.1 Strengthen water management capacity at State and local level
- 2.2.1 Disseminate CRA practices to farmers
- 2.2.2 Build the capacity of GoS-MoAI at Local, State and Federal level to support communities in the adoption of CRA practices
- 2.3.1 Improve access to climate resilient inputs for crop and livestock production
- 2.3.2 Build the capacity of producer groups to develop sustainable climate-informed business plans
- 2.3.3 Increase MSME, cooperatives and farming group access to agricultural finance
- 3.1.1 Update legal and institutional frameworks for sustainable landscape management
- 3.1.2 Strengthen policy dialogue and coordination between sectoral ministries at State levels
- 3.1.3 Strengthen the capacity of MoECC to manage, monitor and govern natural resources and implement EbA solutions
- 3.1.4 Build capacity for the monitoring, assessment, analysis and early warning related to the impacts of climate on food and nutrition security
- 3.1.5 Improve capacity of MoAI for climate-informed irrigation planning

149. A total of 1,152,142 people will directly benefit from the following activities related to technology transfer with the amount of USD 41.8 million.

- 1.2.1 Conduct landscape restoration through local landscape management committees and community-based associations
- 2.1.2 Increase access to water resources and climate-smart irrigation infrastructure
- 2.2.1 Disseminate CRA practices to farmers
- 2.3.1 Improve access to climate resilient inputs for crop and livestock production
- 2.3.2 Build the capacity of producer groups to develop sustainable climate-informed business plans
- 2.3.4 Increase all-season access to market for smallholder producers, cooperatives and farmer groups
- 3.2.1 Collect, disseminate and share relevant climate and land data to support decision making, early warning and early action at all levels

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's Initial Investment Framework.

D.1. Impact potential (max. 500 words, approximately 1 page)

150. The project reaches 1,152,142 people (Direct beneficiaries) and benefits are expected to accrue to an additional 972,689 indirect beneficiaries[50]. Direct beneficiaries represent 6% of Somalia's total population, with 50% female. Benefits in terms of food security, and livelihoods will be felt by poor rural households, specifically children (in Somalia 45% of the population is less than 15 years old).

151. Estimations of beneficiaries were made as follows: For output 1.1, since direct beneficiaries would be participants in LMC (960 people who are community members), they are included among other outputs. Indirect beneficiaries are the entire population of the district who will benefit from improved planning of natural resources.

152. For output 1.2, direct beneficiaries represent all people served by areas under ecosystem-based adaptation, calculated according to the average size of ha per person (1 ha/person). Indirect beneficiaries are also the entire district population who benefit from improved ecosystem services.

153. For output 2.1, the direct beneficiaries are the people served by areas under improved water management, mobilization and conservation at both landscape and farm levels (899,300 people). Indirect beneficiaries are also the entire population of the districts who will benefit from improved ecosystem services related to water. Direct beneficiaries of output 2.2 are FFS facilitators, lead farmers and participants in FFS and APFS and their households (85,932 people). Direct beneficiaries of output 2.3 are cooperative members, producer group members who benefit from technical assistance on market-oriented agriculture.

154. Under Output 3.2, the direct beneficiaries are people in each district who can access climate information, estimated as a factor of the rate of access to mobile phones (44.7%). In both cases, the indirect beneficiaries represent the total district population.

155. To avoid double counting, since the figure for output 3.2 also includes the others (as a sub-set), we have retained that figure as total number of beneficiaries and added the proportion of the population of Jowhar district who benefit from output 2.1 but are not counted under output 3.2 The total indirect beneficiaries will be the entire district population (less direct beneficiaries). In all cases, we have assumed that women make up 50% of beneficiaries, except in the case of activities that involve training government staff, where the proportion of women is lower due to inequalities in employment (30%).

156. Adaptation benefits include increased yields of maize, sorghum, and sesame from the application of climate resilient agricultural practices and increased access to water (through better mastery of productive assets, both natural and man-made). The overall yield increase from the project interventions (see Table B.2.1 below and Annex 2, FS) can be significant, ranging broadly from 20-50% depending on the specific context and effectiveness of the implementation[51,52] (see Annex 2, FS for details). Considering all these elements together, the estimated average percentage increase in annual income per household (HH) after proposed interventions are implemented ranges from 20-77% (under RCP 2.6) to18-66% (under RCP 8.5), depending on the indicative model (see Annex 3). Assuming that the increase in income is at least partially spent by HHs on food, these results should translate into increased food security for project beneficiaries.

157. The project will also improve efficiency of livestock production through the introduction of agro-pastoralism and fodder production, leading to better yields and food diversification among pastoralist communities. Access to food and input storage will also help reduce losses and wastes, which will improve land-use efficiency as well as mitigate climate risks locally. This will lead to more stable livelihoods, increased income from agriculture (both on farm and off farm), and improved food security and nutrition for beneficiary households. Improved access to early warning and agronomic advice will also help increase yields and stabilize production despite variability and extremes. Gradually the project will also consolidate value chains, including input supply chains, and strengthen the private sector's participation in the agriculture sector.

158. Government staff and employees will also benefit from the project, including improved knowledge and material capacity to deliver more reliable extension services and EbA solutions. The improvement of data flows will support

[50] Refer to Annex 23 for the methodology to calculate the number of beneficiaries.
[51] Enfors, E., Barron, J., Makurira, H., Rockström, J., & Tumbo, S. (2011). Yield and soil system changes from conservation tillage in dryland farming: A case study from North Eastern Tanzania. *Agricultural Water Management*, *98*(11), 1687-1695.
[52] Mwangi J, N., W. Catherine, M., Shem, K., John, N., & Fergus, S. (2020). Rainfall variability, soil heterogeneity, and role of trees in influencing maize productivity—the case from an on-station agroforestry experiment in semi-arid Kenya. Forests, Trees and Livelihoods, 29(1), 34-52.

more informed policy-making at State and federal levels, enabling them to deliver better climate extension services to last mile users. Additional details on adaptation benefits and the methods of calculations are indicated in Annex 23.

159. In terms of emissions reductions, the project will also generate a mitigation co-benefit of 1,678,938 tCO2-eq (see Appendix 5 of Annex 2: EX-ACT calculation sheet) through on-farm and off-farm interventions that include: reforestation, agroforestry, better land management and preparation techniques, a stronger control of irrigation, and the introduction of solar energy, including in food storage and water pumping.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

160. Pastoral systems are the backbone of the agricultural sector is Somalia but went through successive shocks and crisis in the last decades due to Rangeland degradation and increasing livestock as compared to the available carrying capacity. The project will promote the transformation of pastoral systems into agro-pastoral systems in target project district and alternative livelihoods.

161. This project will shift the paradigm of the agricultural sector in Somalia from a current scenario of ongoing land degradation and crop and livestock losses and failure because of floods and droughts, to one where yields are sufficient to ensure food security regardless of climate conditions. The project creates the conditions for a major leap in agricultural production, through infrastructure, rural finance, and value addition, so that households can exit the survival and subsistence mode and enter a market-oriented economy that provides opportunities for diversification and builds social safety nets.

162. This project will enable producers to overcome barriers to market access by providing them with technical skills, irrigation technologies, climate information, and by creating linkages among producers, private sector, and State actors, as well as to potential finance providers. A major change instituted in this project lies in the creation of mechanisms for collaborative, democratic management of natural assets, infrastructure, agricultural land, and agro-pastoral production systems through local organizations such as landscape management committees and Water user associations.

163. The paradigm shift in this project lies in the integrated approach that targets not only producers, but also those whose mandate it is to support them (extension services, climate information service providers, and financial institutions). The project will enable the existing extension-related organizations at local, state, and federal level to build their capacities and ensure producers have access to extension services sustainably. At the same time, the project will enable to strengthen coordination mechanisms at federal and state level among national and international partners willing to adopt an integrated and coordinated approach to address droughts and floods on short and longer terms and to build the capacity of Government organizations in mainstreaming climate resilient agriculture and landscape approach in Government's policies and strategies.

164. The interventions in the project are all conceived to be replicable in all areas but will be adapted at each of the local context. At local level, the process set up for selecting and implementing natural landscape restoration and infrastructure rehabilitation, can be applied in all regions, provided political stability is in place. The project also builds national level systems and capacity to generate information and that that can be used by all States and state structures at federal and decentralized levels. The information management centre and data collection exercises that are implemented under the various outcomes will also serve to the development of a next generation of climate information services. Similarly, once in place, the systems for dissemination of early warning and climate information through mobile phones, radio, and media, can also be upscaled rapidly.

165. At the local level, the physical intervention and technologies promoted by this project for agricultural production are all based on best practice and can be adapted or upscaled to other regions. For example, the project will develop technologies for maize and sorghum production that can be disseminated to other regions either through extension services or through farmer networks themselves. In this regard the perception and communication of benefits will be key in ensuring farmers opt in to the resilient practices. Access to rural finance and the consolidation of input markets will also serve as elements of this upscaling strategy, since they will facilitate the broader adoption of project-promoted practices by other groups.

166. Knowledge sharing and learning are essential components of this project's strategy. First the project will generate data and knowledge on natural capital, agricultural production, and climate conditions, that will be used to inform policy and planning at local and government level. Second, the project will disseminate knowledge and best practice on climate resilient production technologies, as well as value addition and transformation of agricultural commodities. The mechanisms for transmission of information to end users include traditional extension services, FFS and APFS, community groups, awareness raising and use of mobile phones and media.

167. The project not only shares knowledge but also ensures that those who receive the knowledge are well equipped to interpret it and act upon it. This is why the project works closely with local communities and

organizations to ensure the adequate downscaling of information that has, to date, been concentrated to central government authorities.

168. The project also creates mechanisms for knowledge sharing among government partners. This includes promoting cross-sectoral coordination between ministries, cross-sectoral planning frameworks and the mainstreaming of climate risks into development and territorial planning at all levels.

169. Outcomes 1 and 3 activities lead to the creation of a stronger enabling environment in which the adoption of climate-smart agricultural practices is facilitated by efficient government services. Policies that include climate risks, or that are based on better understanding of climate-environment changes, such as landscape management strategies, will emerge as a new paradigm for the intersectoral management of territory. In addition, the project will advance capacity for the participatory monitoring of these new frameworks, particularly by strengthening the technical means for monitoring the state of land degradation, but also by creating homegrown, locally owned, monitoring mechanisms. It is expected that the landscape management committees, water user committees and other groups of beneficiaries will begin playing a more important role in the management of resources in the future.

D.3. Sustainable development (max. 500 words, approximately 1 page)

170. The environmental benefits of this project are as follows:

- Improved water management through irrigation and regulation and erosion control through soil and land management techniques. This will be achieved through Ecosystem-based adaptation (green infrastructure) such as contour bunds, half-moons, rock dikes and catchments, for example. As a result, water availability for irrigation will also increase, and erosion from rainfall will be limited.
- Ecological benefits will also arise from the implementation of landscape management plans through regeneration of the natural land cover using local resilient species, through reforestation, rangeland rehabilitation and through the integration of trees in production systems (agroforestry and agro-sylvo-pastoralism) and ecosystem-based solutions, such as reduced erosion and flooding risk, increased land cover, soil fertility and soil moisture, which will also contribute to increasing natural land productivity and reducing emissions from the land use sector. The total area covered by such measures is 41,800 ha. Indirectly, land cover is also expected to improve thanks to the introduction of anti-erosion and run-off control structures listed above, since improved soil moisture is likely to help vegetation growth.
- Improvement of biodiversity through Prosopis removal and control. Removal of Prosopis will also be supported by reforestation using indigenous species as mentioned above to avoid the return of the invasive species, which grows on degraded land and riverine areas. Alternative uses for Prosopis will also be promoted, including for example as hardwood, charcoal briquettes, or animal feed, which may bring added economic value.
- On farm, the project will also lead to improvements in soil fertility and land productivity through the use of integrated soil fertility management, better alluvium management through relevant infrastructure for flood management and integration of livestock and cropping.

171. The economic benefits the project will generate include: (i) income generation that will overtime allow investments in small ruminants, acquisition of lands, housing and asset accumulation, not to mention provide added coping mechanisms in times of extremes (ii) additional income from value addition, food and input storage in constructed warehouses (iii) access to credit that will help producers diversify and intensify their production systems (iv) links of the producers to microfinance institutions, to enable them to build their resilience to shocks and ensure that their investments are sustainable.

172. Main social benefits the project will generate will include: (i) employment opportunities on farm particularly in irrigated areas and in processing/storage units, involvement in tree nursery and seed multiplication and control of invasive species (ii) promotion of youth, women and minorities engagement along the value chains, particularly in value addition and processing (iii) increase equity and representation in local governance system for men and women; (iv) better management and prevention of local conflicts over natural resource management and strengthening of social cohesiveness, (v) built/strengthened linkages between agro-pastoralists and pastoralists in areas where the competition for grass and animal feeding is severe.

173. Because of the objective to facilitate the transition from pastoral to agro-pastoral systems and the capacity built in conflict management, the project will also contribute to mitigate conflicts over natural resource management at local level.

174. Added information on sustainable development benefits can be found in Annex 2, FS.

D.4. Needs of recipient (max. 500 words, approximately 1 page)

175. Vulnerability to climate change in Somalia is underpinned by various combined factors such as extreme poverty and conflict, demographic pressure over natural resources, the effects of climate change but also structural constraints such as disruption of traditional land rights and rangeland management systems that are no longer adapted. Somalia confronts a host of pressing challenges, including inadequate public investment in agriculture, underdeveloped value chains, and a fragile – and informal - private sector. These hurdles, coupled with prolonged conflict and environmental degradation, heighten the vulnerability of the nation's agricultural sector. In this context, targeted financing, and reinvestment to promote climate-resilient agriculture emerge as a necessity for bolstering food security, fostering resilience, and catalysing sustainable progress.

176. Somalia's agricultural landscape suffers from meagre public investment and underdeveloped value chains for crucial staple crops, impeding the adoption of resilient farming practices and the establishment of robust infrastructure. The dearth of financial backing undermines endeavours to enhance productivity and adapt to climate fluctuations, exacerbating food insecurity and poverty. Grant financing presents a strategic avenue to inject essential capital, fortify value chains, expand market access, and facilitate the uptake of climate-smart agricultural technologies, thereby fortifying the resilience of Somalia's agricultural sector.

177. Decades of conflict have exacted a heavy toll on Somalia's agricultural and natural resources sectors, exacerbating the vulnerability of local communities to the uncertainties and risks of climate change. Severe environmental degradation exacerbates these challenges, eroding agricultural productivity and intensifying food insecurity. GCF financing can help address the root causes of conflict, rehabilitating degraded ecosystems, and nurturing resilience among conflict-affected communities, laying a robust foundation for sustainable agricultural development and recovery.

178. The beneficiaries' needs include the urgent need to improve the water infrastructure (including the design and construction), to better manage water resources and avoid negative impacts of recurrent floods. Given the prevalence of land degradation, all areas require the improved management of natural resources to regenerate the land cover and reduce local conflicts over natural resources in a context of drought. Beneficiaries also need to access climate-smart agriculture techniques including drought tolerant varieties, improved cropping techniques or integrated soil fertility management and integrated crop and livestock systems.

179. The Government capacity is limited in terms of financial resources but also in terms of institutional capacities and knowledge. Most interventions in the last 3 decades have been humanitarian responses and few small scale investment programs have been created. Somalia is building its institutions at federal and federal state level. The very small Somali government budget still relies on heavily on international aid: the Overseas Development Aid to GDP ratio in 2020 was 43%, whereas the remittances to GDP ratio was 31% in 2020 (Ministry of Planning, 2021). Having just recently transitioned out of HIPC initiative, the government of Somalia is unable to contract large-scale loans to support development in the primary sector.

D.5. Country ownership (max. 500 words, approximately 1 page)

180. The proposed project is aligned with current Government policies and programs to foster adaptive capacity and climate-resilient development, as noted in the country's most recent NDC which emphasizes the need to focus on "climate smart agriculture, livestock and Land use" including, among others: i) Provision of climate resilient water resources and infrastructure for agro-pastoral productivity and resilience in the rangelands of Somalia, ii) up-scale development of new irrigation schemes and modernizing existing schemes, iii) Development of soil maps for Somalia, iv) Establishing and restocking national grain reserves to enhance food security v) Establishing national plant and livestock breeding systems that can, in the long-term, possess technical capacity to develop fast maturing cultivars and climate smart livestock, vi) Promote the cultivation of legumes and other crops that offer multiple benefits, such as soil fertility enhancement and dietary improvement)[53].

181. The project is aligned with the Somalia National Adaptation Programme of Action (NAPA) to Climate Change which includes 3 program areas: (i) Sustainable Land Management (ii) Water Resources Management and (iii) Disaster Management.

182. The proposal is also in line with national priorities as set out in the National Development Plan 2020–2024, in particular the economic (3) and Social Pillars (4) with respect to Agriculture, Food Security, Social and Human Development. The proposal also aligns with National Water Resource Strategy (NWRS 2021–2025) to: 1 – Develop a functional water sector governance framework; 2 - Operationalize Integrated Water Resources Management and

[53] The Federal Republic of Somalia updated nationally determined contribution (NDC), 2024 (draft)

in particular sub-strategies 10 and 11 to plan and respond to climate change and its impacts on water resources, and 3 - Improve the provision of priority water services, including water security for agriculture[54].

183. The project is also in alignment with the **Green Somalia** campaign, led by President Hassan Sheikh since August 2022, that aims to plant 10 million trees nationwide. These trees will bolster biodiversity, enhance climate resilience, and defend against droughts to transform arid landscapes into thriving oases, mitigating desertification and climate challenges for a sustainable future.

184. The NDA for GCF Somalia is the Minister of Environment and Climate Change. This project was developed in close collaboration with the NDA, who has endorsed this project for priority submission.

D.6. Efficiency and effectiveness (max`. 500 words, approximately 1 page)

185. The Project's expected impact. With an estimated total budget of USD 94.90 million, the project's GCF grant is estimated at USD 79.71 million. The project is expected to deliver direct benefits to an estimated 1.15 million direct beneficiaries, mainly agro-pastoralists and marginalized pastoralists, and indirectly to 972.69 thousand people in Somalia. These estimated direct and indirect beneficiaries represent approximately 6.5% and 5.5%, respectively, of Somalia's total population, which reached 17.60 million in 2022 (World Bank, 2022 est.). The cost per beneficiary for GCF grant is USD 69.18 (per direct beneficiary) and USD 37.51 (per all beneficiaries combined), and for total funding, USD 82.36 and USD 44.66 respectively.

186. Concessionality justification. The proposed concessional financing level for the Project is justifiable based on the ongoing need for highly concessional financing in the country. This grant financial support will help Somalia address its development needs and contribute to achieving more sustainable economic growth. Various factors, including budgetary, macroeconomic, and internal government organization aspects, contribute to this need for grant financing:

187. The project will establish the necessary intergovernmental and inter-agency cooperation mechanisms, linkages, and learning between the central and regional-level governing bodies. These activities will foster the implementation of the following actions: (i). Improving emergency monitoring schemes (ii) modernizing and customizing early disaster-warning systems (iii). Facilitating the provision and availability of public information to agro-pastoralists and pastoralists, (iv) Improving access to markets (e.g. via rehabilitation of rural accessibility). Knowing that these activities largely remain in the public good domain, per definition, they do not attract private sector investment, especially in countries like Somalia where the potential risk of conflict remains strong.

188. The project will provide the necessary financial resources that could not have been obtained otherwise due to the lack of the necessary internal resources. Quoting the IMF's press release on Somalia's budget and fiscal space from March 2024: "The approved 2024 budget targets a modest overall fiscal deficit of 0.3 percent of GDP, which is appropriate to accommodate priority expenditure that is supportive of growth, security, and development while limiting other discretionary spending. External budget support from multilateral and bilateral partners remains crucial to support the authorities' policy efforts." [1]

189. The project will cater to agro-pastoralists and marginalized pastoralists in a highly climate-vulnerable and poverty-stricken country to help them adapt to the onset of various weather and climate shocks: prolonged droughts, flash floods, heatwaves, etc., which negatively affect their agriculture production and animal herding, hence food security, and livelihood. The impoverished agro-pastoralists and marginalized pastoralists are characterized by a low level of available resources that could help them adapt their customary agricultural production and animal herding to climate change-related weather patterns. They tend to have insufficient knowledge about potential ways of adapting their agricultural production to climate change and low access to credit due to the unavailability of lending institutions (caused by farmers' remote location or non-sedimentary livelihood, for example), no credit score, or absence of collateral. The Project will ensure the provision to Somalia's agro-pastoralists and marginalized pastoralists of goods that, in the long run, will contribute to the public good: (i). Improved, climate-resilient farming practices (ii). Climate-smart soil and land management (iii). Efficient water collection, management, and water-saving techniques (iv). Management of encroaching plant invasive species.

190. Economic and financial analysis modelling. The indicative ex-ante EFA was pursued separately in financial and economic terms from two perspectives: (1) the perspective of direct beneficiaries, and (2) the perspective of the entire project with an embedded accounting of the budgetary implementation framework of 7 years. These two modelling perspectives (1) and (2) were additionally appraised using two different climate scenario assumptions:

[54] Additionally, FAO is providing TA to coordinate a National Flooding Task Force and develop a road map to work across the humanitarian and development nexus under the direction of the Deputy Special Representative of the Secretary-General (DSRSG) and the Government of Somalia. The work of the Task Force focuses on emergency humanitarian response, developmental programming with longer term objectives, national coordination and help in obtaining the goals of the Federal Government and the United Nations in Somalia.

RCP 2.6 and RCP 8.5 to show how the results might change under differing climate hardships. The financial and economic EFA results were calculated over 20 years, using a conservative level of discount rate of 15%. The incremental aggregate Financial Net Present Values (FNPVs) of appraised indicative iCRAPs (6 indicative models) under RCP 2.6 assumption range from USD 6.25 million to USD 21.40 million. The incremental financial FNPV from the perspective of the entire Project was estimated at USD 33.44 million. The incremental aggregate FNPVs of appraised indicative iCRAPs (6 indicative models) under RCP 8.5 assumption range from USD 5.85 million to USD 14.76 million. The incremental financial FNPV from the perspective of the entire project was estimated at USD 12.99 million. The incremental aggregate Economic Net Present Values (ENPVs) of appraised six indicative iCRAPs under RCP 2.6 assumption range from USD 10.75 million to USD 30.40 million. The incremental ENPV from the perspective of the entire Project was estimated at USD 74.94 million. The incremental aggregate ENPVs of appraised seven indicative iCRAPs under RCP 8.5 assumption range from USD 10.35 to USD 28.43. The incremental ENPV from the perspective of the entire Project was estimated at USD 55.47 million. Therefore, the obtained EFA results suggest that the expected benefits will outweigh the costs, and the proposed project should be implemented in its proposed form.

191. Application of the best practices. The project aims to make the most impact by supporting the introduction of integrated solutions and best practices that have already been tested in similar contexts and proven successful. Furthermore, the project will be implemented using a participatory and integrated approach in project target districts. For instance, the project plans to leverage the FAO's Farm Field Schools (FFS) to improve agricultural practices and sustainable land management techniques and to address invasive species infestation. Additionally, the project aims to rehabilitate and strengthen climate-proof water infrastructure and promote alternative livelihoods through value chain development. One of the project's main objectives is to ensure that innovative approaches and capacities built up interconnect the various elements to generate virtuous cycles of implementation, testing, and feedback. This will help to scale up and sustain efforts and generate financial and economic returns for intended beneficiaries and the entire economy.

LOGICAL FRAMEWORK

E.1. Project/Programme Focus

☐ Reduced emissions (mitigation)
☒ Increased resilience (adaptation)

E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

Assessment Dimension	Current state (baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
Scale	There is currently limited evidence of significant investment in climate-resilient development pathways at the local level in Somalia.	Low	Demonstrated benefits of adopting climate resilient agriculture and landscape management practices create momentum for a larger-scale adoption and upscaling.	The project reaches 6 regions and disseminates agricultural practices and landscape management practices that will lead to significant food security and economic benefits at local level (outcome 2 and outcome 3). These are expected to be taken up by local government, federal member states and local (communities as part of an upscaling and replication strategy). The project will establish the necessary drivers to foster scaling-up, including: - innovations: the Project will introduce and scale-up EbA solutions in highly vulnerable districts and watersheds to restore degraded ecosystems, increase climate resilience of agriculture, make water available, and enhance livelihoods. - Leadership: by supporting the adoption of the climate resilient agriculture (CRA) and EbA approach with a wide variety of stakeholders, including local leaders, extension services, financial institutions, government staff and policy makers, enabling its replication at all levels. - Incentives and accountability: the prospects of stabilized livelihoods and higher yields are a key incentive for the long-term adoption of proposed climate-resilient technologies at farm and community levels. *Activities that directly contribute to scaling up include:* - *1.1.1 the national baseline study which will help prioritize future intervention sites;*

				- *1.1.2 the Landscape Management Plans which will help scale up at landscape level* - *2.1.1 which provides data on water accounting at State level to support future interventions and the creation of open data systems* - *2.2.1 which trains 1260 facilitators/lead farmers as local community extension champions* - *2.2.2 the development of MoAI capacity for climate-informed extension which can be replicated at scale through the States and beyond* - *All activities under output 3.1, which create the institutional and legal framework for scaling and replication* - *And all activities under 3.2 which strengthen data systems and availability*
Replicability	Currently there are a few examples of replicable technologies and practices, which have been tested and piloted. However, these have not been implemented at scale.	Low	The project scales up tested approaches and technologies to reach 10 districts in 6 regions of the country, representing a cross-section of agro-climate zones and land use zones. The participation of federal member states makes the replication at State level realistically achievable. A replication at national level is also plausible under certain conditions (particularly the availability of finance and national stability).	Activities under outcome 2 are all replicable at the scale of the entire country. Activities under Outcome 1 (the landscape management approach) are replicable but must be adapted to the realities of each district and locality. Activities under Outcome 3 are intended to support nationwide processes and can easily be replicated at national level, particularly in terms of early warning systems. Replicability will be guaranteed by (i) the relevance, efficiency and effectiveness of promoted techniques to build vulnerable smallholder's and ecosystem's resilience; (ii) the integration of EbA in local planning and extension programs through FFS – guaranteeing strong ownership and establishing the blueprint for future replication; and (iii) support to financial mechanisms both at local and national level to facilitate the pursued financing of promoted interventions. *Activities that directly contribute to replication include* - *1.1.1 the national baseline study which will help prioritize future intervention sites;* - *1.1.2 the Landscape Management Plans which will help scale up at landscape level* - *2.1.1 which provides data on water accounting at State level to support future interventions and the creation of open data systems*

				- *2.2.2 the development of MoAI capacity for climate-informed extension which can be replicated at scale through the States and beyond* - *All activities under output 3.1, which create the institutional and legal framework for scaling and replication* - *Activities that help local farmers pool savings to support replication of project-supported activities, and the development of innovative financial products.* - *all activities under 3.2 which strengthen data systems and availability* - *The monitoring and evaluation activities, that provide lessons learned in support of future replication in Somalia and beyond.*
Sustainability	Sustainability of previous interventions has been impacted by the level of instability and conflict in the country.	Low	As a recovering country, the creation of lasting institutions and processes depends on the participation of all stakeholders. Conflict-prevention and peace-building measures are integrated into the proposed interventions, with a view to strengthening the capacity of the Federal government and member state governments to enforce laws and provide valuable services to local populations.	Approaches and strategies that will be used to ensure the sustainability and scaling up of the impacts of the project are : (i) participatory design and implementation of landscape management plans, including operations and maintenance based on local self-governance (ii) knowledge management and sharing with stakeholders (iii) promotion of the adoption of financial instruments at local level that will ensure producers can access to credit and insurance schemes either to make the value chains developed sustainable or to ensure producers' activities resume after the occurrence of extreme events (iv) improvement of coordination mechanisms at local level, (v) capacity building for communities and government staff including for the replication and upscaling of project outputs; vi) creation of a lasting data collection system to support decision making and climate informed decentralized governance.

E.3. GCF Outcome level: Reduced emissions and increased resilience (IRMF core indicators 1-4, quantitative indicators)

GCF Result Area	IRMF		Baseline	Target	Assumptions / Note

	Indicator	Means of Verification (MoV)		Midterm	Final[55]	
ARA1 Most vulnerable people and communities	Core 2: Direct and indirect beneficiaries reached	Yearly progress reports and final evaluation Progress reports from interventions and the constant monitoring	0	576,071 direct beneficiaries (288,036 women) 486,344 indirect beneficiaries (243,172 women)	1,152,142 direct beneficiaries (576,071 women) 972,689 indirect beneficiaries (486,344 women)	Note: This represents the total number of beneficiaries including those who will have resilient livelihood options by receiving training and capacity building on the implementation of CRA and by benefiting from improved access to water for CRA, those who will have access to improved climate information services and awareness-raising activities, and those served by improved landscape management. Calculations: This is the global number of beneficiaries (please refer to Annex 23 and 23a for details). Assumptions: No major conflict occurs, no major change in presence of displaced persons. Cell phone connectivity is stable or increasing;

[55] The final target means the target at the end of project/programme implementation period. However, for core indicator 1 (GHG emission reduction), please also provide the target value at the end of the total lifespan period which is defined as the maximum number of years over which the impacts of the investment are expected to be effective.

ARA2 Health, well-being, food and water security	Core 2: Direct and indirect beneficiaries reached	Yearly progress reports and final evaluation Progress reports from interventions and the constant monitoring	0	576,071 direct beneficiaries (288,036 women) 486,344 indirect beneficiaries (243,172 women)	1,152,142 direct beneficiaries (576,071 women) 972,689 indirect beneficiaries (486,344 women)	Note: This represents the total number of beneficiaries including those who will have resilient livelihood options by receiving training and capacity building on the implementation of CRA and by benefiting from improved access to water for CRA, those who will have access to improved climate information services and awareness-raising activities, and those served by improved landscape management. Indirect beneficiaries represent the remainder of the total district population. Calculations: This is the global number of beneficiaries (please refer to Annex 23 and 23a for details). Assumptions: No major conflict occurs, no major change in presence of displaced persons. Cell phone connectivity is stable or increasing;

ARA1 Most vulnerable people and communities	Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options	Yearly progress reports and final evaluation Survey of project beneficiaries	0	314,806 direct beneficiaries (157,403 women)	629,612 direct beneficiaries (314,806 women)	Beneficiaries estimated are included in Core 2. This represents the total number of beneficiaries who will adopt improved and or new climate resilient livelihoods options as a result of training and capacity building on CRA, landscape management, improved access to water, and agriculture related climate information services. Calculations: More specifically, this refers to beneficiaries from activities 1.2.1.1, 2.1.2.2, 2.2.1 and 2.3.1, to avoid double counting. It is a subset of Core 2. Please refer to Annex 23 for details. Assumptions: No major conflict occurs, no major change in presence of displaced persons.
ARA2 Health, well-being, food and water security	Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security	Yearly progress reports and final evaluation Survey of project beneficiaries	0	449,650 direct beneficiaries (224,825 women) benefitting from improved access to water	899,300 (449,650) direct beneficiaries benefitting from improved access to water	Beneficiaries estimated are included in Core 2. Calculations: This includes beneficiaries under water-related activities in activity 1.2.1 and 2.1.2. Please refer to Annex 23.

						Assumptions: No major conflict occurs, no major change in presence of displaced persons.
ARA1 Most vulnerable people and communities	Supplementary 2.4: Beneficiaries (female/male) covered by new or improved early warning systems	Yearly progress reports and final evaluation	0	474,900 direct beneficiaries (237,450 women)	949,799 direct beneficiaries (474,900 women)	This includes all individuals (male and female) that are covered by improved early warning systems for climate change related risks and hazards. Calculations: Beneficiaries estimated the same as core 2. This is the global number of beneficiaries (please refer to Annex 23 for details). Assumptions: No major conflict occurs, no major change in presence of displaced persons. Mobile phone connectivity is stable or increasing;
ARA3 Intrastructure and built environment	Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions	Yearly progress reports and final evaluation	0	One barrage and main canal rehabilitated; 5km of secondary and tertiary irrigation canals rehabilitated; 30 km of rural	One barrage and main canal rehabilitated; 15km of secondary and tertiary irrigation canals rehabilitated; 70 km of rural	This is calculated as a factor of cost, bearing in mind that the existing infrastructure is up to 90% destroyed due to years of conflict.

				road rehabilitated: with an estimated value of USD 12 million	road rehabilitated: with an estimated value of USD 23.9 million	Please refer to Annex 23a (Data tab) for detailed calculations.
ARA4 Ecosystems and ecosystem services	Core 4: Hectares of natural resources brought under improved low-emission and/or climate-resilient management practice	SWALIM, earthmap, beneficiary surveys Landscape Committee Reports, physical observation	0	25,625 ha under direct intervention	51,250 ha under direct intervention	This is calculated using the number of FFS participants at rate of 1 person per hectare (at a 75% adoption rate), adding the total area under improved landscape management under activity 1.2.1. Assumptions: No major conflict occurs, no major change in presence of displaced persons. Adoption of project technologies for improved natural resources management proceeds as planned (an adoption rate rate of 75% is retained).

E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)

Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage

Core Indicator 6: Degree to which GCF investments contribute to technology deployment, dissemination, development or transfer and innovation	Very few projects and programs have been designed with the purpose of disseminating climate change related technologies, practices, or knowledge. Most of the past years programming has been focused on conflict prevention or management and security and governance. There is a highly limited regulatory framework, staff, technical capacity, and financing available to promote climate-resilient development pathways and technologies.	low	- *Improved and enabling regulatory environment.* - *Availability of data to inform agricultural management, NRM governance, EW, and climate risk management.* - *local communities operate on the basis of updated knowledge and best adaptation practices through FFS*	*The project strengthens capacity at local and government level to identify and implement climate resilient pathways in the agriculture sector. Under output 1.2 the project develops and transfers best available technologies for landscape management and ecosystem-based adaptation. Under outputs 2.1, 2.2 and 2.3, the project transfers water management and climate resilient agriculture technology and strengthens the enabling environment for their adoption through output 3.1.* *In addition, the project supports the deployment of gender sensitive and gender targeted technologies, approaches, knowledge and practices to support a transformative change in the conditions of women.*	Multiple sub-national areas within a country
Core Indicator 5: Degree to which GCF investments contribute	The institutional and regulatory frameworks for sustainable land	low	- *Improved and enabling regulatory environment.*	*The project works to improve the regulatory framework governing*	Multiple sub-national areas within a country

to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner	management, land use planning, water management and irrigation control are only established at national level and remain theoretical. Decentralization is only beginning, and federal member states lack the technical and material capacity to plan, monitor and enforce. Local communities are not yet fully involved in the management of natural resources, and there is a lack of data that can inform the development of improved policy frameworks at any level.		- *Availability of data to inform agricultural management, NRM governance, EW, and climate risk management. Existence of local, democratic and science driven institutions and processes for the allocation and management of land and water*	*agriculture and natural resources management through outputs 1.1 (local level) and 3.1 (state and federal levels). It will increase data availability to inform improved governance at a decentralized level. In addition, the project will create processes for locally driven landscape management processes (while preventing conflict).*	

E.5. Project/programme specific indicators (project outcomes and outputs)

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
Outcome 1: Restored landscapes are resilient and sustainably managed	Change in land productivity dynamics (LPD) and normalized difference vegetation index (NDVI), disaggregated by Site	SWALIM, earthmap	TBD (A baseline assessment is foreseen in year 1). Initial data from earthmap shows LPD for the period 2016-	5% increase in LPD and 15% increase in NDVI	15% increase in LPD and 30% increase in NDVI	Data for land productivity and average ND Vegetation indices from earthmap and validated by SWALIM studies at baseline, mid-point and end point (activity 1.1.1).

			2022 and NDVI for the period 2017-2019. Please refer to Annex 2, section 6.1 for figures.			
Output 1.1 Improved participatory landscape and natural resources management and governance are established at watershed and village levels	ha of land under climate informed planning mechanisms	SWALIM, earthmap	0	4,419,129	8,838,259	*Areas are calculated on basis of sub-catchment map from SWALIM. Represents total area by sub-catchment under the governance of landscape management committees*
Output 1.2 Agricultural and Agropastoral Landscapes are restored and under sustainable management	ha of land under restoration, disaggregated by type of intervention	Landscape Committee Reports, physical observation (SWALIM)	0	20,950	41,800	*Based on initial prioritization of works. Ha represents all area covered by landscape rehabilitation activities*
Outcome 2: Local livelihoods are resilient to climate change	# of people adopting improved and/or new climate resilient livelihoods options disaggregated by gender/site	Beneficiaries records, Beneficiary surveys (baseline, mid-term, and final), mid-term and final evaluations surveys and technical evaluations	0	314,805 (157,403 women)	629,612 (314,806 women)	This represents the total number of beneficiaries who will have resilient livelihood options by receiving training and capacity building on the implementation of CRA, through improved landscape management and improved access to water. These individuals will also benefit from improved climate information services.
Output 2.1 Resilient water supply is secured	# of ha covered by resilient water supply	Physical observation	0	16,400	32,800	This figure is based on the initial prioritization of

and sustainably managed						works. Please refer to Annex 23a for details.
Output 2.2 Locally-specific Climate Resilient Agriculture practices are adopted	# of people trained in locally specific CRA practices	Beneficiaries records, Beneficiary surveys (inception, mid-point and end point),	0	61,800 participants 30,900 women	85,932 participants (42,966 women)	This represents FFS participants, assuming 420 FFS and APFS groups of 30 people each (50% women globally)..
	Number of field extension officers and lead farmers capacitated as FFS facilitators	Project annual progress reports Training records,	0	630	1,260	The project trains 3 facilitators for each FFS or APFS.
Output 2.3 Additional income for farmers is derived from climate resilient value chains	# of people deriving increased income (at least 15%) from value added in the climate resilient value chains	Sales registries, training reports, beneficiary surveys (baseline, mid-term, and final),	0	7,440 (3720 women)	14,880 (7,440 women)	This represents the number of people, cooperative members and producer groups who are specifically targeted under output 2.3. Please refer to Annex 23.
Outcome 3: An improved institutional enabling environment for sustainable landscape management and climate resilient agriculture is in place at State and Federal Levels	# of institutional frameworks and coordination mechanisms updated on the basis of climate risk information	Policy documents	0	1 national level strategy/frame work	2 national level strategies/ frameworks, 1 master plan and 6 state level frameworks updated	
Output 3.1 Legal frameworks and implementation modalities for NRM and CRA are improved	# of legal frameworks and implementation monitoring modalities improved	Policy documents	0	1 national level strategy/frame work	2 national level strategies/frameworks, 1 master plan and 6 state level	

					frameworks updated	
	# of government staff trained	Project annual progress reports Training records,	0	970	1940	
Output 3.2 Increased access to climate information among last mile users	# and type of new or improved climate information products and services produced and distributed	SWALIM records and data, Beneficiary surveys (baseline, mid-term, and final),	2 all-hazard seasonal bulletins annually	At least 2 hazard specific seasonal forecasts, and 30 10-day bulletins per year	3 hazard-specific seasonal forecasts, flood and drought EW and 30 10-day bulletins per year	Note that flood and drought early warnings would only be emitted if and when triggered according to the selected methodology.
	# of people accessing improved climate information services	Platform data, Beneficiary surveys (baseline, mid-term, and final),	0	474,900 (237,450 women)	949,799 (474,900 women)	
Project/programme co-benefit indicators						
Co-benefit 1: Reduced GHG emissions from AFOLU sector	*GHG emissions reduction*	EX-ACT	0	777,748 tons of Co2eq reduced	1,549, 496 tons of CO2eq reduced.	41,800 ha under improved landscape management and 85,932 ha under improved CRA practices (incl. 80,000 ha under improved irrigation) restoration and improved CRA practices. Please refer to Annex 2 – EXACT.
Co-benefit 2: Improved access to nutrition	*# of people with improved access to nutrition.*	Beneficiary surveys (baseline, mid-term, and final)	0	42,966 (50% women)	85,932 (50% women)	People trained under FFS (Activity 2.2.1). Nutrition will be mainstreamed in FFS to improve people's access to nutrition.
E.6. Project/programme activities and deliverables						

Activities	Description	Sub-activities	Deliverables
Activity 1.1.1 Strengthen the information base for climate-informed local land use planning	The purpose of the activity is to update the basis of knowledge on land degradation in the country as a way to inform future planning. The study will relate the land parameters to climate parameters such as mean annual rainfall, temperature, and types of soil erosion and will provide land use information including data on the invasion of Prosopis for prioritization.	Sub-activity 1.1.1.1 Develop a baseline study of land status Sub-activity 1.1.1.2 Map the invasion of Prosopis	One baseline study covering land cover, soil types and areas affected by different types of land degradation 1 Map of Prosopis invasion per district
Activity 1.1.2 Develop climate-informed inclusive landscape management plans	The project will work with local Landscape Management Committees (LMC) to develop LMPs that include recommended options for watershed restoration and landscape restoration, conflict prevention measures, gender-disaggregated activities and related cartography.	Sub-activity 1.1.2.1 Conduct targeting, cartography and conflict-informed FPIC Sub-activity 1.1.2.2 Assess water and land-related conflict risks Sub-activity 1.1.2.3 Build capacity of Community Landscape Management Committees Sub-activity 1.1.2.4 Develop climate informed Landscape Management Plans	A FPIC process for the project is completed A detailed conflict sensitivity assessment 930 people in 31 LMCs trained and capacitated for the management of landscape 31 LMP including landscape restoration options + annual monitoring reports
Activity 1.2.1 Conduct landscape restoration through local landscape management committees and community-based associations	Implement Landscape Management Plans land restoration techniques through training and material support, including replanting and off-farm reforestation, Prosopis removal and control, riverbank rehabilitation, anti-erosive measures, soil conservation and soil moisture conservation measures, small scale water storage reservoirs , ponds, water and soil	Sub-activity 1.2.1.1 Implement ecosystem-based adaptation priorities Sub-activity 1.2.1.2 Rehabilitate eroded riverbanks Sub-activity 1.2.1.3 Provide training on landscape restoration monitoring Sub-activity 1.2.1.4 Support monitoring and data collection on EbA	31 LMPs under implementation 90km of eroded riverbanks rehabilitated One annual landscape restoration report in each State

	moisture conservation infrastructure such as semicircular bunds, soil bunds, rock catchments, check dams, sub-surface dams and sand dams, Balley, Hafirs and berkad.		
Activity 2.1.1 Strengthen water management capacity at State and local level	The project will support the registration and operationalization of water user association committees (WUAC) and provide training on financial management and bookkeeping, management and bylaws, water management modalities and support for the establishment of fees. In parallel, the project will also work with the government to assess water resources (water accounting and auditing) and develop an open-source data system that will relate water data with crop monitoring.	Sub-activity 2.1.1.1 Operationalize water user association committees (WUAC) Sub-activity 2.1.1.2 Build governance, operational and management capacity of WUAC Sub-activity 2.1.1.3 Develop and apply fee-based systems at WUAC level Sub-activity 2.1.1.4 Conduct a water accounting and auditing study at State level Sub-activity 2.1.1.5 Conduct training on water accounting Sub-activity 2.1.1.6 Create open data systems for water accounting and crop monitoring	31 WUAC operationalized. 1550 people trained 1 operational fee-based system per WUAC (31 in total) 1 water accounting and auditing study at State level (6 in total) 500 Water Ministry Staff (M/F) trained on Water accounting at State level + 1 training at Federal Level 1 open data system for crop and water monitoring
Activity 2.1.2 Increase access to water resources and climate-smart irrigation infrastructure	This activity includes tangible investments in the rehabilitation and re-operationalization of critical water infrastructure in the targeted regions. This includes restoration of the Sabuun barrage and supply canal in Jowhar (under cofinancing) which allows for the irrigation of 50,000 ha, as well as the rehabilitation and upgrade of secondary and tertiary canals in the other districts	Sub-activity 2.1.2.1 Restore Sabuun Barrage and Supply canal in Jowhar Sub-activity 2.1.2.2 Upgrade secondary and tertiary canals to resilience standards Sub-activity 2.1.2.3 Deploy water-saving technologies	One barrage + reservoir, outlet regulator and canal rehabilitated providing water to irrigate 50,000 ha 16 irrigation schemes rehabilitated and upgraded to resilience standards 31 WUAC equipped with drip irrigation kits and night batteries
Activity 2.2.1 Disseminate CRA practices to farmers	Deployment of FFS and APFS focusing on Application of CRA	Sub-activity 2.2.1.1 Curriculum Development for FFS and APFS	1 curriculum and materials developed for each technology promoted

	methodologies including: nutrition; climate resilient crops and varieties, different agricultural practices (agroforestry, crop rotation, intercropping, use of micro-catchments, establishment of cover crops, mulching, minimum tillage, soil fertility management; bunds and ridges, micro-catchments, contour farming, fallowing, use of cover crops, tree planting; improved climate resilient fodder crops and varieties, exposure to tested technologies and practices such as inter-cropping, relay cropping, promotion of tillering grass fodder e.g. sorghum, fodder processing and storage; contour farming, use of mulching and cover crops; safe/targeted use of inorganic fertilizers to prevent chemical imbalances, use of legumes for nitrogen fixing and adoption of plant species with high organic matter production (carbon fixing plants); greenhouses and drip irrigation systems especially in cultivation of fruits and vegetables, rain water harvesting for kitchen gardens, mulching and micro-catchments.; rotating rice with legumes, intercropping cowpea with maize or sorghum, rotating maize or sorghum with legumes, transplanting sorghum after flood recession etc.	Sub-activity 2.2.1.2 Train FFS/APFS Trainers and Facilitators Sub-activity 2.2.1.3 Deploy FFS/APFS on climate resilient agriculture Sub-activity 2.2.1.4 Conduct regular FFS technical and operational backstopping and monitoring	1260 facilitators/lead farmers trained 12,600 people trained in CRA Annual FFS monitoring reports; 9 Farmer advisory centres operational

Activity 2.2.2 Build the capacity of GoS-MoAI at Local, State and Federal level to support communities in the adoption of CRA practices	The project will deliver a comprehensive retraining program for MoAI staff related to climate-smart agriculture on the basis of a targeted training needs assessment at State and Federal Level. This program will be made available to all new recruits following the project. In addition, the project will deliver short-term training on climate resilient technologies and practices such as crop diversification, adoption of climate-smart crops and varieties, crop rotation, intercropping, agroforestry, soil fertility management, crop cover establishment, economic use of water resources and integrated pest management (short term training in the field)	Sub-activity 2.2.2.1 Develop and deliver a public service retraining program for GoS-MoAI staff Sub-activity 2.2.2.2 Short-term training of GoS-MoAI technical and extension staff	One public service retraining program developed. 100 Staff trained each year at State or Federal levels 420 GoS-MoAI Staff trained in CRA technologies
Activity 2.3.1 Improve access to climate resilient inputs for crop and livestock production	The project will operationalize 30 seed growing cooperatives, 30 nurseries, and 30 feed/fodder cooperatives to supply local farmers and agro-pastoralists with stable and adequate input supply. This includes support to the government's seed certification system and also partnering with private sector seed providers and multipliers to strengthen the supply chain.	Sub-activity 2.3.1.1 Conduct a seed market dynamics analysis Sub-activity 2.3.1.2 Deliver training to on resilient seed characterization and certification. Sub-activity 2.3.1.3 Conduct seed certification Sub-activity 2.3.1.4 Acquire seed material and engage private sector to produce foundation seeds Sub-activity 2.3.1.5 Deliver material assistance and training for seed multiplication Sub-activity 2.3.1.6 Deliver material assistance and training for fodder production	1 Seed Market Dynamics Report including pricing and subsidy recommendations 20 seed varieties certified, and technical documents published 500 tons of resilient crop breeder seeds; 2.4 metric tons of 12 fodder crop varieties 1800 farmers become resilient seed producers 8 fodder processing facilities in 4 districts 30 nurseries operational 10 seed storage facilities operational

		Sub-activity 2.3.1.7 Deliver material assistance and training for tree seedling production Sub-activity 2.3.1.8 Construct climate resilient seed/feed storage facilities	
Activity 2.3.2 Build the capacity of producer groups to develop sustainable climate-informed business plans	In this activity the project works with private sector, cooperatives, producer groups to build capacity for value addition and food transformation. This will create a pull effect on the market, encouraging production and ensuring access to markets and finance for any increased production.	Sub-activity 2.3.2.1 Build capacity for value addition, processing, packaging, marketing. Sub-activity 2.3.2.2 Provide technical assistance on climate informed business planning Sub-activity 2.3.2.3 Build, repair, retrofit or upgrade climate-resilient food storage facilities	8200 people trained in value addition, processing, packaging, marketing and financial management 410 business plans developed and submitted to financial institutions 20 food storage facilities upgraded
Activity 2.3.3 Increase MSME, cooperatives and farming group access to agricultural finance	The project also strengthens the capacity of the private sector, savings groups, producer groups and cooperatives to access finance in order to reinvest into climate resilient agriculture. This activity works on the demand and supply side of rural finance, building capacity of the financial institutions to develop and deploy financial products. The project will also strengthen the capacity of local producers and processers to access finance through business planning.	Sub-activity 2.3.3.1 Operationalize Village Savings and Loans Associations (VSLA) Sub-activity 2.3.3.2 Support access for cooperatives to credits Sub-activity 2.3.3.3 Develop 4Ps between farmer cooperatives, Government, Private sector and finance institutions Sub-activity 2.3.3.4 Assist financial institutions to develop innovative financial products	210 savings groups established 175 savings groups, cooperatives and SME incl. Seed grower cooperatives, accessing microfinance 2 MOU/contracts and loan agreements signed 2 new/improved financial products developed (with gender consideration)
Activity 2.3.4 Increase all-season access to market for smallholder producers, cooperatives and farmer groups	The project will support the rehabilitation of market infrastructures, including rural roads, cattle corridors to ensure that access is un-interrupted even during climate extremes. Furthermore, the project also creates new market poles to promote local	Sub-activity 2.3.4.1 Rehabilitate and upgrade rural roads, cattle corridors. Sub-activity 2.3.4.2 Construct intermediary markets at district level.	150 km of rural roads 10 intermediary markets built

	exchanges and increase economic activity among local users.		
Activity 3.1.1 Update legal and institutional frameworks for sustainable landscape management	Under this activity the project strengthens the institutional and regulatory capacity of the government of Somalia by assisting in the development of norms, regulations related to landscape management. This will enable the Ministries to adequately implement and monitor landscape and natural resources management practices at district and State level.	Sub-activity 3.1.1.1 Develop Landscape management monitoring modalities. Sub-activity 3.1.1.2 Strengthen capacity for landscape management monitoring through State regulations. Sub-activity 3.1.1.3 Develop Landscape Restoration and management (LRM) manual Sub-activity 3.1.1.4 Develop a national strategy and action plan for Prosopis management and control Sub-activity 3.1.1.5 Develop climate-proof agricultural infrastructure standards	1 Landscape management implementation monitoring modality report 6 new regulations or by-laws 1 LRM Manual and guidance 1 National Strategy and Action Plan for Prosopis control and management 1 set of climate resilient infrastructure standards
Activity 3.1.2 Strengthen policy dialogue and coordination between sectoral ministries at State levels	This activity brings all major stakeholders involved in landscape management and natural resources management together to improve inter-sectoral coordination. The project builds on existing practices in other area and focuses on areas where coordination is lagging, with a focus on South-West, Somaliland and Puntland. The project will create intersectoral platforms and support their training and operationalization. Linkages to regional and international platforms will also be promoted to ensure learning.	Sub-activity 3.1.2.1 Assess existing coordination mechanisms Sub-activity 3.1.2.2 Design an improved coordination framework Sub-activity 3.1.2.3 Operationalize coordination mechanisms	1 landscape coordination mechanism assessment report for each state 1 new intersectoral coordination platform operational 6 coordination mechanisms meeting biannually

Activity 3.1.3 Strengthen the capacity of MoECC to manage, monitor and govern natural resources and implement Ecosystem-based Adaptation	The MoECC will receive training and on the job support for the planning, management and monitoring of landscape management and EbA solutions. This will also include support on conducting participatory monitoring to inform communication on adaptation benefits. The government will receive both technical assistance and material assistance to conduct decentralized operations at State level.	Sub-activity 3.1.3.1 Training on Ecosystem-based Adaptation for MoECC Sub-activity 3.1.3.2 Participatory monitoring of landscape restoration and Ecosystem-based Adaptation Sub-activity 3.1.3.3 Rehabilitate State-level infrastructure for observation, monitoring and management Sub-activity 3.1.3.4 Develop the implementation plan for the National Environmental Management and Protection Act Sub-activity 3.1.1.5 Support MoECC to operationalize ESIA regulations	200 people trained in MoECC 2 reports on evolution of restoration in targeted landscapes Five State MoECC offices are rehabilitated 1 implementation plan for the National Environmental Management and Protection Act ESIA regulations operationalized
Activity 3.1.4 Build capacity for the monitoring, assessment, analysis and early warning related to the impacts of climate on food and nutrition security	The MoAI, local universities and NGOs will also receive support to conduct monitoring, assessment and early warning of food security at decentralized levels. This will include provision of training and materials for the collection of data, assessment, analysis of the linkages between food production/availability and climate conditions, in order to develop more reliable food security warnings at district level. Each district will then conduct, through a collaborative Food Security working group, seasonal assessments and analysis of the impacts of climate on food and nutrition security.	Sub-activity 3.1.4.1 Training on the assessment of the impact of climate and other risk factors on food security, nutrition and livelihood outcomes Sub-activity 3.1.4.2 Conduct seasonal assessments and analyses of the impact of climate and other risk factors on food & nutrition security Sub-activity 3.1.4.3 Produce and disseminate information products on the impact of climate on food security and nutrition Sub-activity 3.1.4.4 Train media professionals on climate change adaptation	One training at national level and one training at FMS Level in 10 districts One seasonal report in each State Two annual briefing in each State Three trainings for media professionals and the institutions
Activity 3.1.5 Build capacity of MoAI for climate informed irrigation planning	The project will support technical assistance to the ministry of agriculture and irrigation to develop	Sub-activity 3.1.5.1 Create an Irrigation plan task force	Irrigation task force meeting Local consultation meetings

	climate informed irrigation master plans targeting regions surrounded by Shebelle river and Juba river. The process will be participatory and will include the development of a multi-stakeholder task force, as well as local consultations to develop irrigation master plans that will guide future investments.	Sub-activity 3.1.5.2 Conduct consultations with water and land users Sub-activity 3.1.5.3 Develop an irrigation master plan	One irrigation master plan
Activity 3.2.1 Collect, disseminate and share relevant climate and land data to support decision making, early warning and early action at all levels.	The purpose of this activity is to ensure that climate, land and agriculture data reaches last mile users in ways that are relevant to them. The project will redesign the early warning systems through an open access platform that will distribute more granular forecasts and early warnings at various times-scales. The project will promote the use of digital information dissemination systems, particularly applications and mobile phone-based tools that can reach more people. In addition, the project will design and operationalize a new decentralized SWALIM information management systems, that will be operated by the Government.	Sub-activity 3.2.1.1 Redesign and deploy an open-access GIS-based climate information platform Sub-activity 3.2.1.2 Develop and deploy digital EWS and decision-making tools for farmers and livestock producers Sub-activity 3.2.1.3 Develop a sustainability strategy for digital EWS Sub-activity 3.2.1.4 Design and operationalize SWALIM information management centers Sub-activity 3.2.1.5 Provide support to the IMC on coordination and M&E Sub-activity 3.2.1.6 Develop awareness raising radio programmes.	One open access GIS-based climate information platform 1 free digital EWS operational One sustainability strategy for digital EWS Two fully operational SWALIM IMCs Radio programmes disseminated

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

192. In its role as Accredited Entity (AE), FAO will oversee project implementation according to the Accreditation Master Agreement (AMA) signed between FAO and GCF and will bear overall responsibility for ensuring that reporting is provided to the GCF in a timely manner and in accordance with the required standards. The M&E team will prepare draft performance reports, which will in turn be sent to the PSC/PTC. As per the GCF Monitoring and Accountability Framework, FAO will provide the GCF with: Inception Report, Annual Performance Reports, independent Midterm Evaluation report, Project Closure Report, and an independent Final Evaluation report. FAO will also provide semi-annual and annual Financial Reports throughout project implementation. The monitoring team will also share its findings with the CPIU so that they may discuss implementation issues as they arise.

193. Project monitoring will be conducted by the M&E team composed of international and National M&E specialists, information. Management and knowledge specialists. FAO will ensure the existence of a well-designed, operational, and effective impact monitoring and measurement dashboard based on project indicators. Project oversight will be carried out by the Project Technical and Steering Committees (PTC and PSC), the Central Project Implementation Unit (CPIU) and relevant Technical Units in FAO Somalia and at HQ. The project will be implemented based on the annual workplan and budget (AWPB) which will be adjusted as envisaged by the CPIU, subject to the Budget Holder (BH) approval (FAO AE). Project components will be monitored separately as well as in relation to the achievement of higher-level project results and overall GCF goals. Monitoring data will be stored, compiled, and displayed in a dedicated module of the Monitoring Information System (MIS) to be developed by the CPIU. The MIS will serve to track on the project implementation, including the outputs, outcomes, and targets in the results framework. It will also track implementation of the project's Gender Action Plan and Environmental and Social Management Plans.

194. In compliance with the requirements in FAO's Accreditation Master Agreement with the GCF, FAO - Office of Evaluation (the Accredited Entity independent evaluation office) will conduct an independent evaluation of the project that meets GCF policy and Funded Activity Agreement obligations. To this end, the evaluation will include multiple components aligned with GCF requirements, such as assessing implementation and impacts. The evaluation budget includes all evaluation costs, including design, inception mission, data collection (baseline and follow-ups through surveys, interviews, focus groups, etc.), data analysis, report writing, and quality assurance. The Accredited Entity will communicate the results of this evaluation through an interim and a final independent evaluation report.

195. Please refer to Annex 11 for more detail on the M&E plan.

F. RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

Selected Risk Factor 1 Political instability: high rotation of government officers, potential changes in the development priorities of the Government of Somalia, and political landscape between FGS and FMS

Category	Probability	Impact
Technical and operational	Medium	Medium

Description

Low enforcement of development priorities, strategies and international commitments preventing from fully engaging in integrated landscape management and climate resilient agriculture. Turnover and changes in decision makers and institutional arrangements beyond the control of the project lead to a volatile environment that hampers the long-term success of the work. Since the political landscape between FGS and FMS has experienced notable improvements, thanks to collaborative efforts and strengthened cooperation, the political risk between the FGS and the FMS exists but rated as medium/low, except between Somaliland and FGS due to claim for independence. The overall inherent risk is assessed as high, but the following mitigation measures would lower the risk to medium.

Mitigation Measure(s)

Project priorities are well aligned with the international commitment of the Government of Somalia and with the most recent national strategies (such as NDC, NDC implementation plan). The project's implementation arrangements have foreseen that the highest level of project governance – the Project Steering Committee (PSC) – will include multi-sectorial high-level representatives (at least at Permanent Secretary level) and will debate together with the NDA about any changes in government policy and any changes in the project governance that might have an impact on the project, its activities, and its implementation modalities. Previously marked with tensions over authority and resource allocation, there has been a concerted push towards greater inclusivity and dialogue. Inter-regional relations have seen positive developments, with FMS and the FGS developing alliances and partnerships to address common challenges. Security enhancements, including successful counterterrorism efforts and (relatively) improved governance structures, have contributed to a more stable environment. Economic growth and development initiatives have helped alleviate disparities between regions, showing a sense of shared prosperity. Based on FAO's past experience, this project will support the enhancement of coordination under output 3.1 and strengthen the capacity of actors both at FGS and FMS level. The FAO Representation in Somalia, which has been operating in Somalia since 1980, will remain in constant dialogue with the Government counterparts to anticipate potential changes in policies and strategic directions and to propose the necessary measures. To mitigate the risks due to high rotation of government officers, FAO Somalia is in the process of establishing a joint workplan with the MoECC (NDA). The project delivers training programs that will be made available to any new incoming staff, guaranteeing the inclusion of climate related knowledge in public service training and retraining. The FAO Representation is based in Mogadishu with 5 field offices located in target Federal Members States, and one support office based in Nairobi to ensure business continuity. AE will inform the GCF in case of any major changes in the government policies and strategic directions that may have adverse impacts to the project. In addition, the project will support strengthening legal framework and modalities for implementation monitoring for landscape management and climate resilient agriculture (output 3.1). FAO Somalia is an integral part of the United Nations Country Team and works closely with all United Nations agencies and the UN mission in Somalia (UNSOM); major changes impacting the work of the United Nations in Somalia are jointly responded under the leadership of the Deputy Special Representative of the Secretary-General, Resident and Humanitarian Coordinator for Somalia (DSRSG/RC/HC).

Selected Risk Factor 2 Insecurity that can hamper access to project target areas

Category	Probability	Impact
Technical and operational	High	Medium

Description

The security situation remains complex and unpredictable in Somalia with Al-Shabaab (AS), linked to Al-Qaeda being the primary perpetrator of attacks against the government and security forces in Southern Central Somalia, which could hamper access to project target areas. Islamic State in Somalia (ISIL), linked to Daech presents a lesser concern and its presence in Somalia primarily consists of small cells or factions operating independently or in collaboration with local militant groups. These cells are often concentrated in specific areas, particularly in the northeastern part of the country. Both AS and ISIL are listed as sanctioned entities by the United Nations. It is anticipated that the ongoing Government/ATMIS (African Union Transition Mission in Somalia) offensive will displace most of these insurgent groups from their current locations, potentially affecting humanitarian access positively in areas where the operation succeeds, but negatively in areas where these groups relocate.

There are other paramilitary groups and regional armed militias/forces particularly in the Galmudug and Mudug regions, and in the Jubaland region, and also clan armed factions in the disputed territories of Sool and Sanaag between Somaliland and Puntland. These paramilitary groups and regional armed militias/forces operate in various regions throughout Somalia, with each exerting influence and control over specific territories. When Al-Shabab, ISIL or these paramilitary groups and regional armed

militias/forces clashes, it results in accessibility issues and forced displacement of the communities/beneficiaries assisted, impacting therefore in the timely delivery of the programs.

Mitigation Measure(s)

FAO Somalia is monitoring on a regular basis the security situation at all levels (FGS, FMS and local level). The security situation and feasibility of implementation have been also considered during the prioritization of the project target regions and districts. The target districts have been selected to mitigate the security related risks during the project implementation. Al-Shabaab is active in swaths of central and southern Somalia including Lower Shabelle, Middle Shabelle, and Lower Juba while there is no or limited Al-Shabaab presence in Nugaal, Togdheer and Mudug where the accessibility is higher from a security point of view. FAO has been supporting those six regions with a strong field presence (FAO Somalia has the main office in Mogadishu and five field offices) in close collaboration and coordination with the Government of Somalia and relevant ministries at FMS level. The project will also work with the ministries at FMS level as well as local NGOs which have a strong presence and better access to local communities in the target regions through Letters of Agreement (LoA) for activities which require strong engagement with communities in the fields such as landscape management planning & implementation, rehabilitation of irrigation scheme as well as FFS. Conflict-sensitive programming approach has been used and will be mainstreamed during the implementation of the proposed project.

The risks mitigation measures involve different approaches and tools, and interventions are designed based on the last 30 years of experience in Somalia and decided based on strategic interventions and operational modalities implemented and challenged in the past and contained in sectoral strategies. FAO adapted the design and modality of implementation of activities to mitigate risk or reduce its likelihood; as example a) Mobile Money transfer for a safer and inclusive modality, b) level of assistance adapted to the degree of accessibility, c) distribution of inputs via a network of verified and vetted local agro-dealers and suppliers, d) modality of registration and verification of beneficiaries via digital tools (kobo, voice prints, GPS photos, etc.), e) inclusion of contingency budget in case of security emergency, etc.

Selected Risk Factor 3 Local resource-based tension or conflict

Category	Probability	Impact
Technical and operational	Medium	Medium

Description

The Somali society is clan-oriented and competition among clans underpins natural resource management. There has been also tension around access to scarce natural resources between pastoral, agro pastoral, farmer, and displaced groups. The inherent risk is assessed as high, but the residual risk is assessed as medium with the following mitigation measures.

Mitigation Measure(s)

The project will avoid areas where there are large-scale conflicts which cannot be addressed or responded to by the project's mitigation measures. The project will build the capacity of communities in conflict management over natural resource management (output 1.1). A conflict-sensitive and peace-responsive programming approach has been used and will be mainstreamed during the implementation of the proposed project. In particular, FAO has a structured participatory process designed to identify and integrate conflict sensitive strategies to minimize risk of any negative or harmful impacts due to interventions – as well as to maximize, where possible, any positive contributions to strengthening conditions for sustainable peace. The project will conduct a conflict sensitivity assessment as part of FAO's "Conflict Sensitivity Programme Clinic"[56] under output 1.1 to better deconstruct local dynamics, including conflict and peace drivers over natural resources among local groups. This will support the project in taking mitigative and resolution measures and will bolster the adaptive capacity for this intervention to reduce any harm. The conflict sensitivity analysis will also consider intra-household conflict potential, to ensure that the project does not create conditions for gender-based violence, or SEAH. The project's principle is based on community/locally led adaptation approach to encourage dialogue and engagement with local communities while building their capacity. All local governance mechanisms to be established by the project have the added purpose and benefit of creating avenues for dialogue among local groups, and to develop trust-based systems for natural resources management. Other vulnerable groups mentioned under this Risk Mitigation section, such as women and youth, will also be engaged as part of this conflict mitigation and peace building discovery process.

For the risk of exclusion, including Protection from Sexual Exploitation and Abuse (PSEA) matters, FAO's approach to Accountability to Affected Population (AAP) provides a framework for addressing and integrating issues in its programmes such as gender equality, protection, the inclusion of the aged and people living with HIV, AIDS, disability, including marginalized and at-risk social groups, and the prevention of sexual exploitation and abuse by FAO and partner staff. FAO has zero tolerance for Sexual Exploitation, Abuse and Harassment (SEAH), harassment and abuse of authority and considers such acts, when substantiated, to be serious misconduct that will result in summary dismissal or termination of contract. FAO engages local communities in the aid assistance process through awareness-raising sessions, radio campaigns, bulk SMS information, beneficiary orientation meetings, and community feedback mechanisms to foster ownership, accountability, and trust. Local community representatives (elders, council members, district authorities, etc.) are registered by FAO and consulted for feedback and mediation. FAO established clear

[56] See Appendix 13 of Annex 6: ESMF for the summary of FAO's conflict sensitivity programming approach.

reporting channels and response mechanisms for beneficiaries and community members to report any suspicions or concerns regarding targeting, fairness, safety, aid diversion, etc. ensuring timely investigation and appropriate action by relevant authorities. FAO favors the direct contact with beneficiaries via the Call Centre and FAO's toll-free hotline, however other mechanisms are available to communities via elders, implementing partners, district authorities, TalktoLoop, and anonymous emails.

Selected Risk Factor 4 Exogenous risks

Category	Probability	Impact
Other	Medium	Medium

Description

Exogenous risks include: (i) climate risks: more extreme weather events negatively impacting all landscape restoration efforts; (ii) COVID-19 and other sanitary crisis such as Cholera and respiratory infection disturb implementation. These risks would translate into operational disruptions and discontinuation of activities' implementation, and would threaten the project's investments, livelihoods, and producers' resilience (if climate related). The inherent risk is assessed as high, but the following mitigation measures would lower the risk to medium.

Mitigation Measure(s)

The project seeks to restore and enhance the services provided by ecosystem that support sustainable and resilient livelihoods. The project will support investments in sustainable landscape management including restoration and climate-resilient agricultural practices. During the formulation of community-based landscape management plan under output 1.1, areas that are high risk (such as inundation zones) will be identified and the landscape management plan may also identify areas where physical interventions, e.g. terraces or bunds are required to reduce erosion / water flows. The budget includes contingency that would be used (upon prior consultation with and agreement from the GCF Secretariat) in case of unexpected costs or situations that may emerge during project implementation, such as sudden increases in material prices, unanticipated delays, or urgent repairs.
Risks mitigation strategies against the sanitary crisis will include (i) adjusting stakeholders' engagement plans, adopt higher flexibility and adaptive management and use remote communication whenever possible, (ii) maintaining social distancing, (iii) reviewing and adjusting implementation and stakeholder engagement arrangements to compensate staff shortages, and (iv) favour local sourcing for environment and contextual adaptability. These actions will lower the impact of risk to medium.

Selected Risk Factor 5 Resistance on Women's Participation and Empowerment

Category	Probability	Impact
Other	Medium	Medium

Description

The project may encounter passive or active resistance to women's participation as well as when working to strengthen women's empowerment in the communities. The inherent risk is assessed as high, but the following mitigation measures would lower the risk to medium.

Mitigation Measure(s)

The project targeting mechanisms including direct, community-based, and self-targeting mechanisms will promote women's participation including vulnerable groups such as female-head of household, female youth and girls, and persons living with HIV/AIDS. The project will rely on participative community approach and on gender-transformative approach that promote the participation of all community and household members including women, men, female and male youth. Religious, traditional and community leaders and other key figures will be trained to strengthen their capacity to play active roles in social mobilization on Gender Equality and Women's Empowerment (GEWE). The use of these approaches will allow to openly discuss gender-sensitive topics such as (i) gender and sex; (ii) advantages and disadvantages of gender-specific roles and tasks; (iii) gender-based violence (GBV) and SEAH, including masculinities and patriarchy; (iv) origin/history and merits/demerits of social inclusion Free Prior and Informed Consent (FPIC) process; (v) examples, motives and results of gender discrimination and social exclusion; and (vi) gender and social inclusion in community development and welfare, including food and nutrition security. All along the project lifecycle, the project will refer to the GAP developed during the design process to monitor the progress made on GEWE and take necessary corrective actions as appropriate.
The safety of women in FAO's activities is of paramount. FAO Somalia developed modalities for delivering assistance that are safer and prevent exposing beneficiaries to harmful events including SEA, despite delivering assistance in hard-to-reach most insecure areas. FAO has zero tolerance for SEA, harassment and abuse of authority and considers such acts, when substantiated, to be serious misconduct that will result in summary dismissal or termination of contract. FAO Somalia approach to preventing and responding to SEA involves i) safe programming, ii) ensuring safety and accessibility for all, iii) people proximity, iv) capacity strengthening, v) information sharing, vi) victim protection, and vii) trust and confidentiality.

Selected Risk Factor 6 Money laundering and countering the financing of terrorism (ML/TF)

Category	Probability	Impact
ML/FT	Low	Low

Description

Risks of money laundering and countering the financing of terrorism. The inherent risk is assessed as high, but the following mitigation measures would lower the risk to low.

Mitigation Measure(s)

FAO includes in the project agreement signed between FAO and the Government of Somalia clauses related to AML/CFT, as follows:

a) The Government shall comply and shall require all persons and entities engaged in its activities under the Project to comply, with all internal anti-money laundering, counter-terrorism financing laws, rules, and regulations.
b) The Government confirms it has obtained sufficient undertakings from all persons and entities involved in its activities under the Project that they shall not engage in any prohibited practices; the Government undertakes and confirm that it shall comply with the substantive objectives of the GCF's Policy on Prohibited Practices.
c) Consistent with numerous United Nations Security Council resolutions adopted under Chapter VII of the UN Charter, the Government and FAO are firmly committed to the international fight against terrorism and against the financing of terrorism. It is the policy of the Government and FAO to seek to ensure that none of their funds are used, directly or indirectly, to provide support to individuals or entities: i) associated with terrorism, as included in the list maintained by the Security Council Committee established pursuant to its Resolutions 1267 (1999) and 1989 (2011); or ii) that are the subject of sanctions or other enforcement measures promulgated by the United Nations Security Council. This provision must be included in all agreements that may be concluded with third parties for the implementation of activities under the Project.

FAO confirms that the project will be implemented in full compliance with the UN Security Council Resolution 2714 (2023) related to Somalia and that, based on the currently applicable 1844 Sanctions List, no exemptions are needed from the UN Security Council Committee established pursuant to the above-mentioned Resolution. Would new UN Security Council sanctions apply to Somalia, FAO will, as per current procedures, assess their impact on project operations and inform accordingly GCF.

As part of the FAO clearance process to prevent risk of funds being diverted to listed entities, including AS or ISIL, FAO conducts due diligence processes to all implementing partners, contractors, and third- parties before entering into agreements. Verification of the implementing partners is conducted where their board composition and members' background with the Somalia United Nations Risk Management Unit (RMU) is checked to ensure that they are not affiliated to terrorist groups. The RMU database allows the UN to cross check names against listed individuals or organizations on Security Council sanctions lists, and other donors' sanctions lists. All FAO Somalia registered suppliers/contractors are invited (through special advertisements and directly) to register with the UN Suppliers' management system, UNGM (United Nations Global Market Place), where they are thoroughly scrutinized by UN and FAO and, if approved, may be registered. Contracted entities, including NGOs, are required to sign a declaration of non-affiliation (including any partner staff) with illegal entities, including Al-Shabaab. FAO Somalia invitations to bid contain a clause as a commitment to act in compliance with the provisions of the UN Security Council resolutions.

FAO encourages its suppliers, IPs, and other third parties, including beneficiaries, to report any cases of fraud and corruption through its Complaints, Compliance and Feedback Mechanism (CoCO platform). The CoCO platform offers various confidential channels of communication that allow FAO to monitor, react to and provide feedback to stakeholders on such cases.

During project implementation FAO, as AE, will ensure close monitoring and supervision through its offices in the regional office and HQ to ensure that the activities are implemented in full compliance with the signed project agreement. Please also refer to Annex 20.

Selected Risk Factor 7 Post Distribution Aid Diversion

Category	Probability	Impact
Prohibited practices	Medium	Medium

Description

Somalia is plagued by a systemic Post-Distribution-Aid Diversion (PDAD), primarily identified in IDP camps, but also spread across other activities and locations, including rural areas. The risk of PDAD in Somalia is primarily at the stage of the targeting and selection of the beneficiaries where they are required (mainly by local community representatives) to pay registration fee at time of receiving assistance, and if they refuse, they are not registered or frightened not to be registered in future interventions. Local community representatives may act on behalf of other individuals or entities such as district authorities or local militia commander, in collusion or not with local staff of the implementing partner. The inherent risk is assessed as high, but the following mitigation measures would lower the risk to medium.

Mitigation Measure(s)

FAO Somalia's approach on risk of PDAD involves implementing rigorous monitoring and evaluation protocols, establishing robust accountability mechanisms, conducting thorough risk assessments, utilizing advanced technology for tracking and tracing aid distribution, implementing transparent reporting systems, and fostering strong partnerships with local communities and authorities. By utilizing a combination of actions and tools, systematically embedded in activities, it effectively reduces the risk of PDAD.

More specifically to prevent PDAD FAO Somalia is putting strong efforts in preventing it via strengthening its operating framework and SOPs for i) Risk Assessment and Mitigation, ii) Community communication and sensitization, iii) Transparent Beneficiary Targeting and Selection, iv) Safe and secure Distribution Modalities, v) Flexible Programing, vi) Community Engagement, vii) Monitoring and Oversight, viii) CFM, Reporting and Response Mechanisms, ix) Coordination and Collaboration, x) Third parties/Implementing Partners and Contractors (due diligence and oversight), xi) Government involvement, xii) Capacity Building, xiii) Digital Solutions, and xiv) Data Protection and data sharing agreements.

In addition, FAO Somalia has recently introduced new PDAD mitigation measures which involves a new Layering Targeting Approach, and provision in the Mobile Money Operators contracts with post distribution transactions monitoring services to flag PDAD. FAO Somalia has also broadened its two-way communication with communities and beneficiaries specifically on PDAD via i) Bulk Voice SMS informing of entitlement and hotline number to 100% beneficiaries, ii) Bulk SMS surveys reaching 100% of HHs, with 40% response rate expectation, and iii) Radio Public Services Announcements.

FAO Somalia ensures also systematic involvement of the Government in PDAD matters when recovery is not feasible.

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

196. During project formulation, an environmental and social management framework was developed – see the Environmental and Social Management Framework (ESMF) in Annex 6. An initial risk assessment was carried out against FAO's Framework for Environmental and Social Management (FESM). All project activities considered gender, social, and environmental aspects, and identified priority design elements to proactively address these. A stakeholder engagement process was carried out to identify and engage with all stakeholders of the project, from national to local authorities, relevant technical institutions, to NGOs and CSOs, among others, as outlined in Annex 7. As per the FESM, the project was screened to establish its overall environmental and social risk categorization. The ESMF (Annex 6) identifies the project as Category B (Moderate Risk), based on the fact the project contains activities with potentially limited adverse environmental and/or social risks and impacts that individually or cumulatively, are generally site-specific, largely reversible, and readily addressed through mitigation measures.

197. Overall, the project is expected to bring about major positive impacts, thanks to the socially inclusive participatory processes it creates, with a strong focus on women, youth and vulnerable groups; and the major environmental co-benefits resulting from Ecosystem Based adaptation (enhanced biodiversity, soil and water conservation, land restoration, etc.), which will be promoted at farm and landscape level. Even with these expected positive impacts, the project has been classified as Moderate Risk with outcomes of the application of FAO's safeguards standard (see screening Table G.1.1 below).

Table G.1.1 summarizes the outcomes of the application of FAO's screening checklist

Safeguard Policy	Triggered	Safeguard Instruments & Mitigation Measures
ESS1: Biodiversity conservation, and sustainable management of natural resources	Yes	▪ ESMF/ESMP ▪ List of non-eligible activities (Appendix 1 of Annex 6: ESMF) ▪ Biodiversity Management Planning Framework (Appendix 7)/ Biodiversity Management Plan The project aims at sustainable intensification. No land conversion will take place (expansion of agriculture frontier, clearing of native forest or similar activities, increases in areas under cultivation within protected areas (PA). The project will work mainly with local/native breeds and species sourced from local or national markets where available. All genetic material for plants and animal (seedling/planting material, species, breeds) should be free from pests and diseases.
ESS2: Resource efficiency and pollution prevention and management	Yes	▪ ESMF/ESMP ▪ Pest Management Plan (see Appendix 3 of Annex 6: ESMF for the guidance) ▪ Waste Management Plan (see Appendix 10 of Annex 6: ESMF) ▪ Construction management plan (Appendix 12 of Annex 6: ESMF) (rehabilitation/renovation) Solid or water waste, which will be generated during the infrastructure construction works period and not the whole project timespan, will be managed by Waste Management Plan and Construction Management Plan. The rehabilitation activities will be designed in a way to ensure minimum permanent soil damage of the productive soil. Practices and technologies promoted by the project aims at improving efficiency in the use of natural resources (water, land, soil, energy) through inclusive and participatory approach of women, man, youth, elders, PLWD and indigenous people. The project promotes the use of local or native breeds and species (for livestock, poultry and planting/seedling material), IPM to reduce use and dependency of agrochemicals (Refer to Appendix 3 of ESMF) and integrates sustainable soil and water management. Implementing agro-ecological approach at landscape level will ensure the sustainable management of natural resources, avoiding pollution and degradation of the environment, protecting human and animal health, properly manage water, soil and biodiversity. Additionally there will be no pesticide procurement under the project, and highly hazardous pesticides (HHP) will not be used in the project areas.
ESS3: Climate change and disaster risk reduction	Yes	▪ Non-Eligible activities (Appendix 1 of Annex 6: ESMF) The Project already incorporates findings from the climate risk assessment and will address risks related to climate change and disaster by enhancing adaptive capacity of communities, rehabilitating ecosystems and irrigation infrastructure and improving access to climate information services In order to avoid dependencies on the external resources in the post project situation, the project will internalize the capacities including sustainability planning that enable the beneficiaries to sustain and manage the project investment self-reliantly.
ESS4: Decent work	Yes	▪ ESMF/ESMP

		▪ Labour Management Plan (Appendix 8 of Annex 6: ESMF) ▪ Occupational Health and Safety Plan (Appendix 9 of Annex 6: ESMF) ▪ Construction management plan (rehabilitation/renovation) The project promotes compliance with national and international employment and labor regulations and guidelines. All employment relationships will be based on the principle of equal opportunity and fair treatment and will not discriminate, particularly as women, youth and minorities are targeted. Training and sensitization campaigns will be carried for farmers/FOs on Occupational, Health, and Safety (OHS) child labour and appropriate work for youth. The project supports knowledge generation and will generate youth/women opportunities in selected value chains and support rural youth/women/PLWD access to information and productive resources. The project will ensure that children under aged are not employed, adequate and verifiable mechanisms for age verification in recruitment procedures will be set. Project will conduct sensitization training on safe, decent rural employment and age-appropriate work, given that youth often assist with the farming work. The project will carry out rehabilitation/renovation activities including restoring Sabuun Barrage and Supply canal in Jowhar, upgrade secondary and tertiary canals to resilience standards and deploy water-saving technologies. The project will also support the rehabilitation of market infrastructures, including rural roads, cattle corridors to ensure that access is un-interrupted even during climate extreme. This will be done through FAO procurement of contractors, nevertheless the beneficiaries will be involved in the overall decision making process regarding planning, execution, monitoring and subsequent O&M.
ESS5: Community health, safety, and security	Yes	▪ ESMF/ESMP ▪ Zero tolerance of SEAH ▪ Labour Management Plan (Appendix 8 of Annex 6: ESMF) ▪ Occupational Health and Safety Plan (Appendix 9 of Annex 6: ESMF) The project adopts a Zero tolerance of SEAH and GBV, all project stakeholders will participate on sensitization campaigns and training on SEAH & GBV. Additional risks for the community are related to exposure of waterborne diseases, vector-borne diseases, zoonotic diseases, food-borne diseases from construction and agro-facilities. The project activities will follow recommendation established by industry-specific best management practices for management of risks related to community health and safety. Design, construction, and operation will follow national legal requirements and good international practice, ensure inclusive engagement to avoid increasing inequalities.
ESS6: Gender equality and prevention of gender-based violence	Yes	▪ ESMF/ ESMP will include measures to facilitate social inclusion and enhance gender equality, and safeguard against SEAH. ▪ Gender Action Plan (GAP: Annex 8 of FP) ▪ Zero tolerance of SEAH Project design and implementation incorporates gender equality and prevention of gender-based violence as an integrated element, a Gender Analysis and Action Plan, with specific gender-targeted activities and indicators was developed (Annex 8). The project's GRM will be accessible for all project-related complaints, including SEAH-specific complaints. The GRM will be survivor-centered and gender responsive, and will have specific procedures for SEAH, including confidential reporting and safe and ethical documenting.
ESS7: Land tenure, displacement, and resettlement	Yes	▪ ESIA/ESMF ▪ Project will employ Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests and incorporate land tenure assessment as part of the landscape/watershed strategies. The project activities will not lead to involuntary resettlement or displacement of people or communities; resources from the project will not be used for land acquisition. No set aside land or additional conservation areas will be established as part of the project. Reforestation/rehabilitation areas will take place mainly on public or community land (executed by region administrations) or interventions on private land (executed by communities with funding from the project) and will focus on areas where such interventions can facilitate or leverage improved productivity through ecosystem services. Proposed activities will mostly imply the involvement of districts on a purely voluntary and demand-driven basis.
ESS8: Indigenous Peoples	Yes	▪ ESMF and Indigenous Peoples Planning Framework (IPPF), and subsequent ESMP and Indigenous Peoples Plan (IPP), refer to Annex 6. ▪ FPIC will be carried out before any project activity is implemented, and it will consider the active participation of indigenous people living in the project area, as well as those indigenous people (nomadic pastors and hunter gatherers that depend on the resources of the project area of influence). The project activities will not lead to involuntary resettlement or displacement of people or communities; resources from the project will not be used for land acquisition or resources.

		Some of the project activities could affect IPs and their livelihood (e.g., loss of access to grazing land, interference with pastoralist livelihood), if these groups are excluded from planning and decision-making processes (e.g. indigenous groups are represented in project main committees). Any involuntary restrictions on land use and access to natural resources is subject to traditional ownership or under customary use and will be addressed by ensuring IPs rights are respected and that they are involved in the development, implementation, and monitoring of the project and in the decision- making processes. The project will use a participatory approach to design the Landscape Management Plan making sure to include all social categories. Furthermore, the same categories will be targeted for Value Chain Development and Agriculture and Livestock support
ESS9: Cultural heritage	No	▪ Non-Eligible activities (Appendix 1 of Annex 6: ESMF) The project will not invest in areas identified as cultural heritage sites. These include shrines, village squares, etc. The region specific ESMPs (regional ESMPs for all six project regions will be developed at the project inception level) will ensure that the scoping and screening exercises caption these kinds of issues.

198. The ESMF establishes a framework that guides the screening and categorization, level of impact assessment, required institutional arrangements, and processes to be followed during project implementation. The project's ESMF has entailed careful planning and includes a range of management controls to ensure that post-appraisal social and environmental due diligence takes place in a timely manner. It describes the required institutional mechanisms to allow the executing entities to implement sub-activities in a manner consistent with the requirements of FAO's ESMG, and Somali regulations.

199. **Institutional arrangements:** Overall compliance with the project's ESMF will be ensured by the Environmental and Social Safeguards within the CPIU, who will work closely together with the Gender and Social Inclusion Specialist (who will oversee the GAP).

200. **In addition, there will be zero tolerance of sexual exploitation, abuse, and harassment (SEAH),** and the project's ESMF and consequent ESMPs will mainstream SEAH risk mitigation, in accordance with the FAO FESM. The project will support gender sensitization and trainings for project staff and beneficiaries on gender equality and social inclusion and SEAH and will elaborate a code of conduct for the implementation of the project. Specific procedures to minimize SEAH risk will be developed for the project GRM, to ensure the mechanism is survivor-centered and gender-responsive (including confidential reporting), and to facilitate linkages to related services and redress for anyone affected by SEAH.

201. **Grievance and Redress Mechanism (GRM):** The GRM is an integral project management element that intends to seek feedback from beneficiaries and resolve complaints on project activities and performance. The mechanism is based on FAO requirements and most importantly, it is based on existing, community-specific grievance redress mechanisms preferred by the local beneficiaries. FAO and EEs will inform communities about the GRM through culturally appropriate mechanisms, ensuring information on mechanisms at all three levels is communicated (i.e. project-based, and FAO-level redress mechanisms and GCF's Independent Redress Mechanism). The CPIU and FAO Somalia will be responsible for managing the grievance and redress mechanism. The GRM has a strong link with FAO Somalia's competent officers to ensure the right application of GRM principles. Project-related SEAH and gender-based violence (GBV) grievances will be managed through the existing FAO GRM system, which will also be strengthened to include a procedure for handling SEAH that is inclusive, survivor-centered and gender-responsive, complemented by GBV referral pathways (see Annex 6: ESMF).

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

202. Somalia has integrated gender equality objectives into the country's constitution and national development plans. However, the progress in the implementation of the commitments is very slow. Women's participation in the formal labor force is constrained because of unpaid care work responsibilities that women shoulder and the restrictions on their mobility as a result of social norms. In the agriculture sector, women are actively engaged in crop and livestock production, however, they have limited access to agricultural inputs and advisory services and limited control over income. Conflict and displacement have heightened the risk of SEAH and GBV against women and girls. Women's right to land is challenged by customary laws that discriminate against them. Somalia has one of the highest levels of gender inequality globally. The impacts of climate change exacerbate existing gender inequalities.

203. The project's Gender Action Plan aims at reducing inequalities and removing the above-identified barriers; mainstreaming gender equality and prevention of SEAH and GBV as an integrated element. The implementation of the Gender Action Plan will be led by an international Gender, Social Inclusion and IP Specialist (part time) and a national Gender Specialist (full time) in collaboration with the National Project Coordinator, international Technical Advisor as well as relevant technical experts.

204. Under outcome 1, the project aims to establish participatory landscape and natural resources management and governance systems. Due to social norms that restrict women's mobility and representation in the public sphere, women can be excluded from the consultation process and management committees. The project will organize community dialogues targeting clan and traditional leaders to sensitize them on the importance of including women in landscape management committees and in consultations as well as prevention of SEAH/GBV related issues.

205. Under outcome 2, the project aims to develop the resilience of local livelihoods by improving the management of water supply systems, building capacities on climate-resilient agriculture practices, and supporting farmers to develop climate-resilient value chains. Traditional norms can restrict the participation of women in WUACs. Women's ability to benefit from the trainings on climate resilient agriculture practices may be limited due to time and mobility restrictions and a culture of extension agents not considering women as clients. A gender-blind value chain development intervention can limit women's ability to benefit from the value chain development activities.

206. The gender action plan will address these barriers in the following ways. The project will set a quota to increase the representation of women in WUACs and train women committee members on scheme management and basic maintenance. The project will set a quota for the recruitment of women lead farmers who will receive TOT and facilitators training on climate-resilient agriculture practices. A gender assessment of the rural advisory services will be conducted to identify barriers and good practices to improve women's access to advisory services in the country and develop a gender strategy for the agriculture extension department. Capacity-building training on how to develop and deliver gender-sensitive advisory services will be cascaded down targeting agriculture extension staff at various levels.

207. A gender-sensitive seed value chain analysis will be conducted to inform the development of a subsidy system. Women's groups will be supported to engage in seed multiplication business. In addition, value chains where women are overrepresented and have a growth potential will be identified to provide support to women entrepreneurs.

208. The project will engage financial institutions to influence the development of financial products that are suitable for women agripreneurs. Selected women agripreneurs will be supported to develop business plans using FAO's Rural Investment Tool. B2B meetings will be organized between women business owners and financial institutions to help them present their business plans and identify funding opportunities.

209. To address GBV/SEAH and gender inequality in the country, the project will use the Gender Action Learning System (GALS) approach as part of support to VSLAs under sub-activity 2.3.3.1. GALS approach is a community-led empowerment methodology using specific participatory processes and diagram tools that aims to give women as well as men more control over their lives as the basis for individual, household, community and organizational development.

210. Outcome 3 of the project includes increasing farmers access to climate information through digital early warning and decision-making tools. Although a significant proportion of women in the project sites have mobile phones most women don't access the internet or use mobile to access information on agriculture. The project will conduct a gender assessment on how men and women farmers access information on agriculture and the barriers to use digital services, including good practices and approaches that facilitate access and use of digital information for agriculture decision-making by men and women farmers. The assessment will inform the development of the early warning system and other digital agriculture advisory services.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

211. Financial management and control and procurement processes will be implemented as per FAO rules and regulations, which were certified as acceptable to the GCF in the FAO accreditation process. FAO has an Administrative Manual organized across various Chapters covering Finance, Human Resources, Travel and Procurement. The FAO Intranet provides access to this Manual and to other procedures, information and guidance via the "FAO Handbook".

212. FAO has deployed an Oracle based ERP system the Global Resources Management System" (GRMS) to its world-wide offices, which provides all FAO employees, in all locations globally, with travel, human resource, procurement and finance functionalities. Using GRMS improves the flow of financial information, supports financial monitoring and reporting, increases transparency and visibility, and strengthens internal control. FAO maintains a chart of accounts which is used by the whole organization and that allows for a separation of income and expenditure by donor and project and supports and provides a standardized coding structure that enables data to be recorded, classified and summarized to facilitate internal management and external reporting requirements. Procurement and Letters of Agreement Services are managed by a dedicated FAO unit, which provides policy and operational support to ensure that the Organization procures goods, works and services based on "Best Value for Money" principles as embodied in the Manual Section 502 and for Letters of Agreement under Manual Section 507.

213. As mentioned in Section C.4. FAO as the Accredited Entity of the GCF will have overall responsibility for quality assurance and oversight of co-executing entities and shall assume fiduciary responsibility in accordance with FAO standards and procedures. In addition to this, FAO will be responsible for the financial execution of GCF funds according to FAO rules and regulations mainly contained and detailed in the FAO Handbook (including those referred to financial monitoring, audit and procurement).

214. During implementation, FAO will provide oversight and quality assurance in accordance with its policies and procedures. This may include monitoring missions, spot checks and participation at project governance meetings. The project will be audited internally and externally following FAO's Financial Regulations.

G.4. Disclosure of funding proposal

☐ No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

☒ With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

H. ANNEXES

H.1. Mandatory annexes

☒	Annex 1	NDA no-objection letter(s) **(template provided)**
☒	Annex 2	Feasibility study - and a market study, if applicable
☒	Annex 3	Economic and/or financial analyses in spreadsheet format
☒	Annex 4	Detailed budget plan **(template provided)**
☒	Annex 5	Implementation timetable including key project/programme milestones **(template provided)**
☒	Annex 6	E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3): **(ESS disclosure form provided)** ☐ Environmental and Social Impact Assessment (ESIA) or ☐ Environmental and Social Management Plan (ESMP) or ☐ Environmental and Social Management System (ESMS) ☐ Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People's Plan, Land Acquisition Plan, etc.)
☒	Annex 7	Summary of consultations and stakeholder engagement plan
☒	Annex 8	Gender assessment and project/programme-level action plan **(template provided)**
☒	Annex 9	Legal due diligence (regulation, taxation and insurance)
☒	Annex 10	Procurement plan **(template provided)**
☒	Annex 11	Monitoring and evaluation plan **(template provided)**
☒	Annex 12	AE fee request **(template provided)**
☒	Annex 13	Co-financing commitment letter, if applicable **(template provided)**
☒	Annex 14	Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

☒	Annex 15	Evidence of internal approval **(template provided)**
☒	Annex 16	Map(s) indicating the location of proposed interventions
☐	Annex 17	Multi-country project/programme information **(template provided)**
☐	Annex 18	Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
☐	Annex 19	Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
☒	Annex 20	First level AML/CFT (KYC) assessment
☐	Annex 21	Operations manual (Operations and maintenance)
☐	Annex 22	Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)[57]
☒	Annex 23	Methodology for calculating the number of beneficiaries

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*

[57] Annex 22 is mandatory for mitigation and cross-cutting projects.

No-objection letter issued by the national designated authority(ies) or focal point(s)

JAMHUURIYADDA FEDERAALKA SOOMAALIYA
Wasaaradda Deegaanka
& Isbeddelka Cimilada
Xafiiska Wasiirka

جمهورية الصومال الفيدرالية
وزارة البيئة والتغير المناخي
مكتب الوزير

FEDERAL REPUBLIC OF Somalia
MINISTRY OF ENVIRONMENT & CLIMATE CHANGE
Office of the Minister

Ref: MOECC/0134/2024 **Date: 12-05-2024**

To: The Green Climate Fund ("GCF")

Re: Funding proposal for the GCF by Food and Agriculture Organization of the United Nations (FAO) regarding Climate Resilient Agriculture in Somalia

Dear Madam, Sir,

We refer to the project titled *Climate Resilient Agriculture in Somalia* in Somalia as included in the funding proposal submitted by Food and Agriculture Organization of the United Nations (FAO) to us on **April 28, 2024.**
The undersigned is the duly authorized representative of H.E. Khadija Mohamed Almakhzoumi, the National Designated (NDA) of Somalia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of Somalia has no-objection to the project as included in the funding proposal;
(b) The project as included in the funding proposal is in conformity with the national priorities, strategies and plans of Somalia;
(c) In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Amb. Khadija Almakhzoumi
Minister, Ministry of Environment and Climate Change
Federal Republic of Somalia.

Address: Wadajir District, Airport Road, Mogadishu - Somalia
Website: moecc.gov.so | **Email:** minister@moecc.gov.so

Environmental and social safeguards report form pursuant to para. 17 of the IDP

Basic project or programme information	
Project or programme title	Climate Resilient Agriculture in Somalia (Ugbaad)
Existence of subproject(s) to be identified after GCF Board approval	Yes
Sector (public or private)	Public
Accredited entity	Food and Agriculture Organization of the United Nations (FAO)
Environmental and social safeguards (ESS) category	Category B
Location – specific location(s) of project or target country or location(s) of programme	Lower Juba, Lower Shebelle, Middle Shebelle, Mudug, Nugaal, Togdheer regions of Federal Republic of Somalia
Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	Thursday, September 19, 2024
Language(s) of disclosure	English and Somali
Explanation on language	Somali is the national language of Somalia, which is a language understandable to affected peoples/stakeholders.
Link to disclosure	English: https://openknowledge.fao.org/handle/20.500.14283/CD2301EN Somali: https://openknowledge.fao.org/handle/20.500.14283/CD2301SO
Other link(s)	FAO disclosure portal (English and Somali): https://www.fao.org/environmental-social-safeguards/disclosure/en FAO Representation in Somalia website (English and Somali): https://www.fao.org/somalia/resources/publications/en/
Remarks	An ESIA consistent with the requirements for a Category B project is contained in the "Annex 6: Environmental and Social Management Framework (ESMF)".
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Thursday, September 19, 2024
Language(s) of disclosure	English and Somali
Explanation on language	Somali is the national language of Somalia, which is a language understandable to affected peoples/stakeholders.
Link to disclosure	English:

	https://openknowledge.fao.org/handle/20.500.14283/CD2301EN Somali: https://openknowledge.fao.org/handle/20.500.14283/CD2301SO
Other link(s)	FAO disclosure portal (English and Somali): https://www.fao.org/environmental-social-safeguards/disclosure/en FAO Representation in Somalia website (English and Somali): https://www.fao.org/somalia/resources/publications/en/
Remarks	An ESMP consistent with the requirements for a Category B project is contained in the "Annex 6: Environmental and Social Management Framework (ESMF)".
Environmental and Social Management System (ESMS) (if applicable)	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), Indigenous Peoples Planning Framework (IPPF) (if applicable)	
Description of report/disclosure on accredited entity's website	Thursday, September 19, 2024
Language(s) of disclosure	English and Somali
Explanation on language	Somali is the national language of Somalia, which is a language understandable to affected peoples/stakeholders.
Link to disclosure	English: https://openknowledge.fao.org/handle/20.500.14283/CD2301EN Somali: https://openknowledge.fao.org/handle/20.500.14283/CD2301SO
Other link(s)	FAO disclosure portal (English and Somali): https://www.fao.org/environmental-social-safeguards/disclosure/en FAO Representation in Somalia website (English and Somali): https://www.fao.org/somalia/resources/publications/en/
Remarks	An IPP Framework consistent with the requirements for a Category B project is contained in the "Annex 6: Environmental and Social Management Framework (ESMF)".
Disclosure in locations convenient to affected peoples (stakeholders)	
Date	Friday, September 20, 2024
Place	The hard copies will be made available in English and Somali in the following places;

FAO Representation in Somalia:

1. National Office:
   FAO Representation in Somalia
   Aden Abdulle International Airport (AAIA)
   Mogadishu, Banadir Region, Somalia
2. Nairobi Support Office
   Ngecha Road Offices, Off Lower Kabete Road,
   P.O Box 30470 – 00100, Nairobi, Kenya

FAO field offices at the Federal Member States (FMS):

1. Somaliland: FAO office at Hargeisa, H27R+3H8, 17 May School Rd, Hargeisa, Somaliland
2. Puntland: FAO office at UN common complex, Garowe, Puntland
3. Juba-land: FAO office at Juba-land, IOM-Premises, UNSOS-MR-Kismayo
4. South-West state of Somalia: FAO office, UNICEF Premises, off Baidoa airport, Baidoa
5. Galmudug State of Somalia: FAO office, UNHCR common compound, North Galkayo (Mudug region of Puntland State)
6. Hirshabelle: FAO office, UN common compound, Airport Area, Beletweyne city, Hirshabelle State of Somalia.

National Level Government:

1. Ministry of Environment and Climate Change, Wadajir District, Airport Road, Mogadishu, Somalia
2. Ministry of Agriculture and Irrigation: KM4 Street, Hodan, Mogadishu, Somalia. Offices

Government Representatives at Federal Member State (FMS) level:

1. **Somaliland:**

- Ministry of Environment and Climate Change, Hargeisa, Somaliland: 14, Ali Bin Abi Talib Road, Durya, 26-June, Hargeisa, 90602
  Ministry of Agriculture Development, Hargeisa, Somaliland: 10, Lane 216, Abu Baker Al Siddiq Road, Durya, 26-June, Hargeisa, 90602

2. **Puntland:**

- Ministry of Agriculture and Irrigation: Ministerial Road, Garowe-Puntland, Somalia
- Ministry of Environment and Climate Change: Ministerial Road, Garowe-Puntland, Somalia

3. **Juba-land:**

- Ministry of Environment and Climate Change, Juba-land State of Somalia: Ministerial complex ground floor, Opp K2
  Ministry of Agriculture and Irrigation Jubaland State of Somalia: Ministerial complex ground floor, Opposite to K2 | 252-Somalia

	4. Galmudug: - Ministry of Environment Climate Change and Rural Development, at Government offices, G9JJ+J9C, Dhuusamareeb Galmudug State of Somalia - Ministry Agriculture, Plant and Forestry , Galmudug State of Somalia. Government offices, G9JJ+J9C, Dhuusamareeb, Galmudug State of Somalia **5. South-West:** - Ministry of Environment & Climate Change Southwest State of Somalia: Ministries Area, Adada Village, Baidoa. - Ministry of Agriculture and Fisheries, Southwest State: Ministries Area, Adada Village, Baidoa. **6. Hirshabelle:** - Ministry of Environment and Climate Change, Ministerial compound at Jowhar, Hirshabelle State of Somalia - Ministry of Agriculture and Irrigation, Ministerial compound at Jowhar
Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity's Board meeting	N/A
Date of GCF's Board meeting	Monday, October 21, 2024

Note: This form was prepared by the accredited entity stated above.

Secretariat's assessment of FP246

Proposal name:	Climate Resilient Agriculture in Somalia (Ugbaad)
Accredited entity:	Food and Agriculture Organization of the United Nations
Country:	Somalia
Project/programme size:	Medium

I. Overall assessment of the Secretariat

1. The funding proposal is presented to the Board for consideration with the following remarks:

Strengths	Points of caution
Strong paradigm shift in transitioning from emergency humanitarian interventions to long-term/developmental ones. Technically sound and with a good exit strategy, it will enhance the capacity of subsistence farmers to adapt to climate impacts by addressing financial, knowledge and enabling environment barriers – most importantly water, agricultural inputs and market access.	The project has a heightened risk profile owing fundamentally to external risk factors outside of the project's control. The Food and Agriculture Organization of the United Nations has embedded multiple risk mitigation strategies at various levels, from site selection to adaptive management measures and contingency budget provisions.
The project targets an extremely vulnerable, post-conflict African State, affected by a multi-year drought that collapsed food systems. Helping the agriculture sector to adapt to new climate patterns has an extremely high impact potential on the lives and livelihoods of the population of Somalia.	
The Food and Agriculture Organization of the United Nations is an optimal partner as accredited entity in terms of presence in the field and continued operations through conflict periods in Somalia, building expertise on the ground, which may prove critical in scenarios of operational disruptions. The proposed project benefits from demonstrated buy-in from the government and alignment with national priorities, with foreseen participation of various layers of national, provincial and district stakeholders receiving vital capacity-building.	

2. The Board may wish to consider approving this funding proposal in accordance with the term sheet agreed between the Secretariat and the accredited entity (AE) and, if considered appropriate, subject to the conditions set out in annex II to document GCF/B.40/02.

II. Summary of the Secretariat's assessment

2.1 Project background

3. Somalia is one of the most fragile countries in the world from various points of view, including security, inequality, displacement, conflicts over natural resources and economic development, which are exacerbated by climate change. Many households are food-insecure and 49 per cent of the population is undernourished. The latest Integrated Food Security Phase Classification notes that 1.7 million children below the age of five face acute malnutrition. The domestic production meets only 22 per cent of per capita cereal needs on average and the country is dependent on food imports and food aid. The agriculture sector in Somalia accounts for approximately 75 per cent of gross domestic product, with 65 per cent of the population relying on the livestock subsector, mainly nomadic pastoralism and agropastoralism, which depend on natural pastures on the country's vast rangelands. Agricultural productivity is very low owing to high dependency on rain-fed agriculture for major crops, including maize and sorghum, in an arid and semi-arid climate.

4. There have been significant changes in the climate and extreme climatic events in Somalia since the baseline period (1981–2016) and climate change is increasing the likelihood of compounding and cascading impacts for communities and ecosystems. At the same time, depleted technical capacity in government institutions due to years of conflict, low investment in agriculture and inadequate access to climate information among last mile users are significant barriers that must be lifted for local communities to be able to leverage climate-resilient livelihoods.

5. The project proposes a multi-faceted approach to address these barriers. It restores productive landscapes so that they can sustain resilient livelihoods, promoting sustainable agricultural practices and increasing access to water, enhancing access to climate-resilient inputs (seeds, feed, fodder), improving market access for smallholders and strengthening institutional frameworks and coordination for sustainable landscape management and climate-resilient agriculture. The project aims to achieve three outcomes (see section 2.2 below) that work together to create a context in which, on the one hand, communities participate in the restoration of the productive landscape and, on the other hand, they are supported by stronger government extension services, governance and climate information systems. The three outcomes support the transition from unsustainable, unproductive and maladapted production systems with low productivity to more resilient productive agricultural practices. Pastoral systems have declined because of rangeland degradation and the project will support the transition from pastoralism to agropastoralism. The project builds on best practices and lessons learned from recent projects and programmes and is closely coordinated with other efforts to rebuild the country following years of conflict.

6. The project will benefit a total of 2,124,831 people (1,152,142 direct beneficiaries and 972,689 indirect beneficiaries). The project will directly contribute to the following targeted results in alignment with the updated Strategic Plan for the GCF 2024–2027: 1 (by supporting the country's adaptation and mitigation goals); 4 (Food) – 85,932 beneficiaries adopting climate-resilient agricultural practices; and 5 (Ecosystems) – 41,800 hectares to be conserved, restored and sustainably managed through a locally led adaptation approach in line with targeted result 9. The project will also support dissemination of climate information to

communities, directly contributing to targeted result 3 (Climate information and early warning systems).

7. The project will be executed by the Food and Agriculture Organization of the United Nations (FAO) and the Government of Somalia acting through the Ministry of Environment and Climate Change (MoECC) and the Ministry of Agriculture and Irrigation (MoAI) in a co-execution modality to deliver the project activities.

8. The AE requests a grant of USD 79.71 million, which will be complemented by a USD 15.19 million grant from FAO.

2.2 Component-by-component analysis

Component 1: Restored landscapes are resilient and sustainably managed (total cost: USD 34,435,926; 100 per cent from GCF)

9. Activities under this component are designed to restore productive landscapes and facilitate ecological resilience, supporting ecosystem-based adaptation to climate change so that they can provide crucial ecosystem services and sustain the agricultural livelihoods of local communities. This requires both the creation and the strengthening of local planning systems and the deployment of urgent landscape restoration interventions. Given the prominence of water scarcity as a limiting factor in development in Somalia, the project has opted to adopt the sub-watershed as a planning unit. Component 1 is structured in three main outputs: 1.1: Improved participatory landscape and natural resources management and governance are established at watershed and village levels; 1.2: Agricultural and agropastoral landscapes are restored and sustainably managed; and 1.3: Capacities of local governments to plan, budget, implement and monitor for effective locally led adaptation are enhanced.

Component 2: Local livelihoods are resilient to climate change (total cost: USD 41,898,764; GCF cost: USD 27,037,748 (63 per cent); co-finance: USD 14,861,016)

10. Activities under this component are designed to ensure that local communities derive increased and improved climate-resilient livelihoods from agriculture. The project targets existing key value chains (maize, sesame, sorghum), which are climate-vulnerable staple crops, as well as livestock production. In these value chains, the project also supports the transition from extensive to intensive cropping and from pastoralism to agropastoralism. Given that a significant limitation is posed by water scarcity in Somalia, the project also focuses on securing a resilient water supply for agricultural production through a combination of ecosystem-based adaptation (component 1) and green and grey infrastructure solutions at both landscape and farm level. Component 2 comprises three interconnected outputs: 2.1: Resilient water supply that is secured and sustainably managed; 2.2: Local communities enabled to practice locally specific climate-resilient agriculture; and 2.3: Farmers are supported in deriving increased income from sustainable natural resource management and climate-resilient value chains.

Component 3: An improved institutional enabling environment for sustainable landscape management and climate-resilient agriculture is in place at the state and federal level (total cost: USD 6,072,382; 100 per cent from GCF):

11. This component forms part of the project's sustainability and upscaling strategy. The aim is to create conditions and an enabling environment for the achievement, replication and broader adoption of project results. Given the fragile conditions of the Government of Somalia, strengthening of capacity is required to ensure that federal member states can implement new norms for sustainable landscape management and climate-resilient agriculture. The activities support the institutional capacity of the Government of Somalia at various levels. Output 3.1 considers legal frameworks, enforcement modalities and coordination (the normative elements of institutional capacity), while output 3.2 strengthens the informational capacity of the

Government of Somalia, in particular its capacity to generate and disseminate useful, relevant and timely climate information to last mile users.

Project management costs (total cost: USD 5,812,700; GCF cost: USD 5,479,487) and other costs

12. This cost will support the management, coordination and implementation of the project activities, in compliance with the contractual obligations that are included or referred to in the legal agreements entered into with the AE. At 7.4 per cent of the grant portion of requested funding from GCF, the GCF portion of the project management cost exceeds the 5 per cent threshold established in the GCF policy on fees. Accordingly, FAO has provided a strong justification based on the needs for security requirements, financial transaction costs in the absence of SWIFT connectivity, higher costs for staff, etc.

13. The budget also includes a USD 2.32 million contingency, which the Secretariat views as important for dealing with implementation risks, as well as a USD 4.36 million monitoring and evaluation budget.

III. Assessment of performance against investment criteria

14. The Secretariat considers the proposal to be strongly aligned with GCF investment criteria, particularly in terms of impact and paradigm shift potential, as well as needs of the recipient.

3.1 Impact potential *Scale: High*

15. The project shows strong impact potential, reaching an estimated 1,152,142 direct beneficiaries, 6 per cent of the population of Somalia, mostly in the form of improved water management and conservation, access to climate information and training. These outcomes are critical at the farm level to improve food security and livelihoods in Somalia, particularly for poor rural households.

16. In particular, training through farmer and agropastoral field schools is ambitious in its scale, with 420 field schools benefiting up to 85,932 people (including household members) as facilitators, lead farmers or regular participants, helping to build up farmer and herder technical knowledge on resilient agriculture.

17. Climate-resilient agricultural practices and increased access to water are expected to result in yield increases of 20–50 per cent for target crops, including maize, sorghum and sesame, raising household incomes by 18–66 per cent and contributing to food security in the area, providing a keenly needed benefit to over 2.1 million people (direct and indirect beneficiaries).

3.2 Paradigm shift *Scale: Medium to high*

18. Under the current agropastoral system, Somalia has undergone successive shocks as a result of land degradation and overgrazing, compounded by increasingly frequent floods and droughts, leading to the failure of the rangeland ecosystems upon which households depend.

19. The project aims to change this paradigm towards a system where yields are sufficient to ensure food security under climate change scenarios. The approach proposed combines infrastructure investment, rural finance and value addition, so that households can exit the survival and subsistence mode and enter a market-oriented economy that provides opportunities for diversification and builds social safety nets. This would be enabled by an integrated approach targeting the capacity-building of both producers and support systems

(extension services, climate information service providers and financial institutions) at the local, state and federal level.

20. In the project, FAO focuses first on areas with greater stability, where interventions will be tailored to local conditions, but the project is designed with a view to scaling up to other regions as conditions allow. This will be possible through the build-up of support services and the replication of processes to select and implement restoration interventions, with the help of a robust knowledge-sharing and learning system.

3.3 Sustainable development potential *Scale: High*

21. The project, as a result of its ecosystem regeneration using indigenous species, Prosopis removal and landscape management on a total of 41,800 hectares, will have significant environmental co-benefits. These include improvements in biodiversity, reduced erosion and flooding risk, and increased land cover, soil fertility and soil moisture, which will also contribute to increasing natural land productivity. It will further lead to reductions in greenhouse gas emissions from the land-use sector, which have been estimated at 1.68 million tonnes of carbon dioxide equivalent, as described in appendix 5 to annex 2 (EX-ACT calculation sheet).

22. Similarly, social and economic benefits are highly relevant in the low development context of the rural areas of Somalia. These include income generation from enhanced land productivity and value addition, leading to gradual asset accumulation for rural households, enabling coping strategies to deal with extreme events, and improved access to credit – which, combined, can help to unlock a cycle of further investment in production systems. The project will support job creation, promote the engagement of youth, women and minorities in value chains and decision-making, strengthen social cohesiveness and contribute to the prevention of conflict over natural resources.

3.4 Needs of the recipient *Scale: High*

23. The project targets one of the most climate-vulnerable countries globally. Somalia has the highest Notre Dame Global Adaptation Initiative vulnerability score and is currently affected by a multi-year drought that has brought very high levels of food insecurity and exacerbated rural poverty, two of the key focuses of the project.

24. Somalia is affected by a long conflict that has led to severe underinvestment in rural development and agricultural value chains, most relevantly on water infrastructure, as well as an undeveloped private sector, both of which are underlying factors in the food crisis in Somalia. The proposal recognizes them and tackles them through a robust and integrated set of activities.

25. The resources of the Government of Somalia are also severely limited, relying largely on international aid and without access to credit at scale for the primary sector, making GCF grant support a necessity.

3.5 Country ownership *Scale: High*

26. The proposal shows strong alignment with current government policies and programmes to foster adaptive capacity and climate-resilient development, including the nationally determined contribution, national adaptation programme of action, the National Development Plan and Water Resource Strategy. Among others, it tackles several of the priority actions contained under one of the nationally determined contribution's focus areas, "Climate smart agriculture, Livestock and Land use": (i) Provision of climate-resilient water resources

and infrastructure for agropastoral productivity and resilience in the rangelands of Somalia; (ii) Upscaling development of new irrigation schemes and modernizing existing schemes; (iii) Development of soil maps for Somalia; (iv) Establishing and restocking national grain reserves to enhance food security; (v) Establishing national plant and livestock breeding systems that can, in the long-term, possess technical capacity to develop fast maturing cultivars and climate-smart livestock; and (vi) Promoting the cultivation of legumes and other crops that offer multiple benefits, such as soil fertility enhancement and dietary improvement.

27. The proposal is also aligned with a key campaign led by the President of Somalia to plant 10 million trees nationwide, providing important high-level support in a challenging socioeconomic context.

3.6 Efficiency and effectiveness *Scale: Medium to high*

28. The overall assessment of this project's efficiency and effectiveness is medium to high. The AE developed a high-quality and robust economic and financial analysis with clear and thoroughly referenced data and assumptions. The economic and financial analysis evaluates the economic and financial viability of six different agricultural packages, titled "integrated climate-resilient agriculture packages", in each of the project intervention zones. It includes both without-the-project and with-the-project scenarios under different climate scenarios (Representative Concentration Pathway 2.6 and 8.5).

29. Financial viability in the long run is demonstrated through the profitability indicators for the six integrated climate-resilient agriculture packages with and without the project. In all six models, the project scenarios generate returns above the financial discount rate of 15 per cent, with an overall financial internal rate of return of 24 per cent and net present value of USD 34 million. The results remain robust to the sensitivity analysis conducted on the decrease in inflows and benefits, indicating the project's continued viability with positive net results. It is important to note that the without-the-project scenario is also financially viable, and farmers may opt to continue with business as usual without adopting any adaptation measures. GCF additionality lies in the adaptation benefits, where farmers will adopt resilient agricultural inputs, leading to more sustainable and long-lasting impacts from a climate impact perspective.

30. The proposal requests the highest level of concessionality, seeking full grants from GCF to make the project viable. The financial adequacy and appropriateness of this concessionality are justified by the macroeconomic context and fiscal capacity of Somalia, as well as the fiscal profile of project beneficiaries. Smallholder farmers in Somalia predominantly rely on cash transactions and have limited access to finance in the agriculture sector, with less than 10 per cent holding a formal bank account. Historically, climate finance in Somalia has mostly been in the form of grants rather than debt instruments. Therefore, the justification for full concessionality is both adequate and reasonable.

31. The project's adaptation cost is USD 69 per direct beneficiary and USD 38 per total beneficiary. These costs are at the lower end of the GCF portfolio for climate-resilient agriculture in Africa. The co-financing ratio is 1:0.19. The proposal details the application of best practices in the project, specifically leveraging the expertise of the AE and experience in delivering agricultural practices and sustainable land management techniques through farm field schools. However, the potential for catalysing and leveraging private and public sector investments is not demonstrated with quantitative estimates, and the degree of financial innovation is also not shown.

IV. Assessment of consistency with GCF safeguards and policies

4.1 Environmental and social safeguards

32. **Project overview.** The project is structured around three main components that aim to enhance the resilience of agropastoral systems through sustainable landscape management and improved irrigation water supply, promote climate-resilient livelihoods in agriculture and livestock production, and enable environments conducive to sustainable landscape management and climate-resilient agriculture. The project's environmental and social co-benefits include reduced greenhouse gas emissions from the agriculture, forestry and other land use sector and improved access to nutrition.

33. **Environmental and social (E&S) risk category and safeguard instrument.** The project has been screened using the FAO Project Environmental and Social Screening Checklist, giving a classification of moderate risk, which is equivalent to category B of the GCF E&S risk-categorization system. This categorization indicates that the project will have activities with potential limited adverse environmental and/or social risks and impacts that, individually or cumulatively, will be few, generally site-specific, largely reversible and readily addressed through mitigation measures. The project will have multiple site-specific activities/subprojects to be implemented in several regions. These activities/subprojects will be based on master plans called landscape management plans (LSMPs), which are still to be developed with the project stakeholders during implementation. For these reasons, an environmental and social management framework (ESMF) is deemed the appropriate pre-approval instrument for the project. More focused and detailed assessments and management plans will be conducted and prepared during implementation.

34. **Compliance with GCF's environmental and social safeguards (ESS) standards.** The paragraphs below describe how the project will comply with the standards.

35. **ESS 1: assessment and management of E&S risks and impacts.** The ESMF includes a project description, baseline E&S conditions, a legal and institutional framework, details of stakeholder engagement, an Indigenous peoples planning framework, and details of expected impacts, mitigation measures, procedures and implementation arrangements. The ESMF also identifies the expected E&S risks and impacts of the project activities and provides generic mitigation measures. Further, the ESMF contains various frameworks, templates and outlines of management plans that may be required or applied to individual project activities. The project will further conduct an E&S impact assessment on the proposed activities in the regions/districts that will inform the development of LSMPs and project E&S management plans. Project subactivities will undergo a screening, assessment, review and clearance process before their execution.

36. **ESS 2: labour and working conditions.** The ESMF provides a brief background on the current policies and legislation on labour and working conditions in Somalia, including international treaties to which Somalia is a signatory. The ESMF identifies the following risks and potential negative impacts relating to labour and working conditions: (i) risks of child and forced labour; (ii) occupational health and safety risks for workers deployed at construction sites; and (iii) poor working conditions. The ESMF provides measures to mitigate the risks, such as the preparation of a labour management plan and an occupational health and safety plan. Where needed – for example, when the number of workers to be engaged is significant or when the nature of the work is hazardous – subactivities/subprojects will be required to prepare and implement an occupational health and safety plan. A construction E&S management plan has also been prepared that identifies and addresses some occupational health and safety issues.

37. **ESS 3: resource efficiency and pollution prevention.** The project will have temporary impacts on air and water quality in the form of dust, noise and sedimentation, which are expected from the activities/subprojects that will involve construction work. Solid and domestic waste from construction camps may also cause local pollution if not disposed of properly. Other pollution impacts may occur from activities that involve support to the agricultural and

livestock value chain, including soil erosion, air quality impacts due to emissions from processing facilities, water quality deterioration due to solid and liquid waste from processing and farm facilities, and contamination from fertilizers and pesticides in crop production. Irrigation water with high total dissolved solids may lead to salinization of soils. These potential impacts are addressed in the ESMF. For activities involving construction, a construction management plan and site waste management plan may be required. The ESMF provides guidance on developing these plans. Value chain investments with significant solid and liquid waste will also be required to prepare and implement a waste management plan. Water use efficiency would be part of any activities that use water under this project. The ESMF also identifies design and management measures that can be adopted in specific activities/subprojects to reduce water consumption.

38. **ESS 4: community health, safety and security (CHSS).** The anticipated CHSS risks for this project include (i) construction site and route safety hazards; (ii) increases in criminality – including sexual exploitation, sexual abuse and sexual harassment (SEAH) and gender-based violence (GBV) – due to a possible influx of workers into local communities; (iii) spread of communicable diseases brought in by non-resident workers; (iv) potential increased incidence of vector-borne diseases due to changes in the landscape; (v) exposure to hazardous substances, including pesticides, from value chain activities; (vi) food safety issues relating to value chain activities that involve production and distribution of food products; and (vii) potential exacerbation of conflict due to perceived unfairness or exclusion or restriction of certain groups from accessing water, pasture and land required for certain other uses, resulting from the implementation of LSMPs, the project's security arrangements, and/or cultural differences between migrant worker population (for projects with a significant labour influx). The ESMF identifies construction-related safety hazards to the community, SEAH and GBV, waterborne and vector-borne/zoonotic diseases, food-borne diseases, and potential exacerbation of the conflict situation, which could result from upsetting community dynamics due to, among other factors, influx from neighbouring district and locations.

39. To address CHSS risks related to construction and value chain operation, the project will follow recommendations established in industry-specific best practices for management of risks related to community health and safety. Design, construction, and operation will follow national legal requirements and good international practice, and will ensure inclusive engagement to avoid increasing inequalities. The risk of pesticide poisoning will be minimized by not allowing project funds to be used to procure pesticides. Moreover, highly hazardous pesticides will not be used in the project areas. The project will promote integrated pest management to reduce the use of and dependency on agrochemicals, and will employ sustainable soil and water management. Regarding potential exacerbation of the conflict situation, the ESMF provides a concise conflict sensitivity assessment of the country focusing on the targeted regions and proposes to address the risk by (a) applying the FAO Programme Clinic[1] approach to the project; (b) strengthening institutional capacities; (c) reviving traditional governance practices; and (d) developing sustainable land and water management frameworks.

40. **ESS 5: land acquisition and involuntary resettlement.** The project will use the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and incorporate land tenure assessment as part of the landscape/watershed strategies. With these measures, project activities will not lead to involuntary resettlement or displacement of people or communities, and resources from the project will not be used for land acquisition. Moreover, there will be no set-aside land or additional conservation areas to be established as part of the project. Reforestation/rehabilitation areas will be located mainly on public or community land

[1] The Programme Clinic: Designing conflict-sensitive interventions - Approaches to working in fragile and conflict-affected contexts. Facilitation guide |Policy Support and Governance| Food and Agriculture Organization of the United Nations (fao.org)).

(executed by regional administrations) or interventions on private land (executed by communities with funding from the project). The proposed activities mostly imply the involvement of districts on a purely voluntary and demand-driven basis. As added safeguards against involuntary resettlement, the following are listed as non-eligible for funding under the project: (i) activities that involve relocation and/or demolition of any permanent house or business; (ii) activities that use the project as an incentive and/or a tool to support and/or implement involuntary resettlement of local people and village consolidation; (iii) activities that involve land acquisition; and (iv) activities that involve the establishment of new settlements or the expansion of existing settlements.

41. **ESS 6: biodiversity conservation and sustainable management of living natural resources.** The ESMF provides a brief background on the ecological profile of the target project areas and identifies potential impacts and risks of project activities to biodiversity. The project will not involve land conversion or expansion of agriculture frontiers, clearing of native forest or similar activities, or increases in areas under cultivation within protected areas. Additionally, the project will use mainly local/native breeds and species sourced from local or national markets where available, and all genetic material for plants and animal (seedlings/planting materials, species and breeds) will be free from pests and diseases. Furthermore, the non-eligibility list specifies that the following activities will not be funded: (i) activities of any kind within natural habitats and existing or proposed protected areas; (ii) introduction of invasive species (non-native species will only be introduced if they are deemed to be essential, are climate-resilient and are known for their non-invasive properties); and (iii) significant conversion or degradation of natural habitats, or activities where the conservation and/or environmental gains do not clearly outweigh any potential losses. A biodiversity management planning framework (BMPF) has been prepared that provides detailed descriptions of the country's biodiversity and natural habitat profile, including a list of protected areas and an assessment of the impacts of project activities on biodiversity and their management measures. The BMPF assesses the project as having a generally beneficial impact on biodiversity, particularly component 1. The potential negative impacts on biodiversity may come mainly from component 2 due to its possible effects on infrastructure and livelihood and value chain development. Infrastructure may cause habitat fragmentation and loss of high-value ecosystems, while the pursuit of livelihoods and value-chain development may ignore agricultural biodiversity in favour of higher productivity and income generation. To address these impacts, the BMPF seeks to integrate biodiversity conservation objectives into the formulation and implementation of LSMPs by requiring, among other measures, (i) biodiversity baseline assessments to inform the LSMPs; (ii) biodiversity impact assessment of water and the market infrastructure; and (iii) capacity-building of relevant stakeholders (e.g. landscape management committees, water authorities, water users, the MoAI, producer groups, and micro, small and medium-sized enterprises) on biodiversity conservation, habitat restoration and ecosystem functions.

42. **GCF Indigenous Peoples Policy and ESS standard 7 (Indigenous Peoples).** An Indigenous Peoples planning framework is provided as part of the funding proposal package, acknowledging the diverse population of the nation, as well as the complex relationships between the different communities. The Indigenous Peoples planning framework will ensure social inclusion and safeguarding of rights for all marginalized and excluded communities. A stakeholder identification mission will identify stakeholder groups and project beneficiaries, including Indigenous Peoples and any vulnerable or excluded minorities. Explanations of the project, its activities, potential benefits and risks will be provided in the local language and participatory mapping will also take place. Each group will be invited to express its needs and priorities related to participation in the project, in a manner that is conflict sensitive. Iterative discussions will take place from the start of the project to make sure all participants and their concerns are identified early on. A free, prior and informed consent (FPIC) procedure will be carried out and capacity-building will be informed by local consultations. The AE highlights that

the FPIC procedure will consider the active participation of Indigenous Peoples living in the project area, as well as those Indigenous Peoples (nomadic pastoralists and hunter-gatherers) that depend on the resources of the project area of influence. The AE recognizes the valuable role of traditional knowledge in the project. An Indigenous Peoples and land tenure specialist, as well as an FPIC consultant are foreseen as part of the resources of the project. In line with its roles and functions, the Indigenous Peoples Advisory Group is available to provide advice to the AE and executing entities (EEs).

43. **ESS 8: cultural heritage.** The project's potential impacts on physical cultural heritage sites will be avoided, as the project will not invest in areas identified as cultural heritage sites, such as shrines, village squares or known archaeological sites. Region-specific E&S management plans, developed at the project's inception, will ensure that activities are screened against this requirement.

44. **Sexual exploitation, abuse and harassment**. The GCF revised Environmental and Social Policy adopted by decision B.BM-2021/18 requires safeguarding from SEAH in GCF-financed activities. The AE has identified potential risks related to SEAH and also noted that conflicts and displacement in the project implementation area increase the likelihood of sexual and GBV, especially against women and girls. The AE highlights safeguards that include a strict zero-tolerance policy towards SEAH. Additionally, a grievance redress mechanism (GRM) accessible to all project-related complaints, including SEAH, will be established. This survivor-centred and gender-responsive GRM will incorporate specific procedures such as confidential reporting and ethical documentation.

45. In the case of SEAH incidents, the AE outlines the procedure for addressing grievances. The GRM will have referral pathways for GBV and special considerations for processing, handling and responding to complaints, prioritizing the rights, needs and wishes of survivors. The AE provides information on accessing the GRM, including specific guidelines for the project-level GRM, the AE GRM and the GCF Independent Redress Mechanism. These guidelines will be widely shared with stakeholders. Training and awareness-raising sessions will be conducted to ensure that all personnel involved in the grievance process understand the importance of a survivor-centred and gender-responsive approach.

46. To monitor and report progress in SEAH responses, the AE will conduct annual gender reviews. These reviews will assess progress in mainstreaming gender in the project and share lessons learned. They will also be used to revise training on SEAH safeguarding. The AE emphasizes that all stakeholders involved in project implementation are responsible for documenting and reporting grievances received as part of safeguard performance monitoring. The GRM framework includes a provision to compile and share best practices, enhancing project performance. All SEAH-related activities are outlined in the gender action plan and are budgeted for. Overall, the SEAH safeguarding measures presented by the AE are in alignment with GCF SEAH provisions.

4.2 Gender policy

47. The AE has provided a gender assessment and action plan and therefore complies with the GCF Gender Policy.

48. Despite the development of the federal- and state-level national gender policies and other efforts, progress on implementation and resource allocation towards gender equity efforts has been lagging. Women, especially those in rural areas, are most affected by climate change owing to their reliance on natural resources for their livelihoods. They are at the front line confronting the challenges of climate change but are also poorly equipped and under-resourced to respond to the challenges, having limited access to economic resources, land ownership and decision-making processes. They are disproportionately affected by gender-based

discrimination, climate change impacts and high poverty rates; they also bear increased responsibilities as heads of households and are excluded from decision-making spaces and leadership roles. Additionally, they have limited access to education, healthcare, training opportunities and climate-resilient resources, as well as significant barriers to market access and infrastructure. GBV, unpaid care work and a lack of representation in consultation meetings and management committees further exacerbate their marginalization.

49. To address these challenges, the project will implement a range of activities aimed at empowering women and promoting gender equality. Key initiatives include increasing women's access to water resources and climate-smart irrigation infrastructure, setting quotas for their representation in committees and providing gender-sensitive training in agriculture and leadership. The project will also focus on economic empowerment through financial literacy, vocational training and entrepreneurship support. Additionally, it will address GBV and discrimination through awareness-raising campaigns and support services, promote women's participation in agriculture and decision-making processes and enhance their access to healthcare, education and essential resources. Advocacy for policy changes to address gender inequalities and protect women's rights will also be a central component of the project.

50. The gender action plan defines activities, indicators and targets for women's participation and benefits with corresponding timelines, budget and gender expertise.

4.3 Risks

51. The proposed project exhibits high risks of political instability, insecurity impacting access, and local resource-based conflict, making it essential to enhance political engagement, provide flexible implementation, implement robust conflict resolution, and strengthen local monitoring and decentralized risk-reporting. The AE proposes several mitigation measures and the Secretariat suggests considering developing multiple contingency plans for various risk scenarios before or during the implementation stage.

4.3.1. Overall programme assessment (medium risk)

52. The project operates in a high-risk environment characterized by a high turnover of government officers and potential shifts in development priorities, which complicates long-term planning and execution. Political improvements have been noted, yet tensions remain. Mitigation measures include aligning project priorities with the national strategies of Somalia and international commitments, and engaging high-level governance structures to manage policy changes proactively.

4.3.2. Project-specific execution risks (medium risk)

53. The project in Somalia is subject to risks due to ongoing political and security challenges. Mitigation plans are in place, utilizing the deep regional expertise of the AE and its strong field presence in Somalia to address these complex issues effectively. FAO has embedded multiple risk mitigation strategies at various levels, from site selection and enhanced local collaborations at project design to adaptive management measures and regular monitoring during implementation, as well as contingency budget provisions, which are included in the term sheet.

4.3.3. GCF portfolio concentration risk (low risk)

54. In the case of approval, the impact of this proposal on the GCF portfolio concentration in terms of results area and single proposal is not material.

4.3.4. Compliance risk (medium risk)

55. The project will be executed by the AE, FAO and the Government of Somalia, acting through the MoECC and the MoAI. The project activities generally present relatively lower risks of money-laundering/terrorist financing (ML/TF). However, the AE highlights that the operating context on the ground is currently variable, which could in turn impact the overall ML/TF risk during project implementation. Therefore, the AE has assessed ML/TF inherent risk as high. However, the AE considers the residual risk to be low on account of key mitigating measures that will be put in place, such as anti-money-laundering/countering the financing of terrorism (AML/CFT) clauses in the project agreement with the Government of Somalia, as well as the due diligence processes and AML/CFT controls of FAO itself. Moreover, the implementation arrangements are further augmented by the inclusion of a central project implementation unit (CPIU), which will be responsible for day-to-day project implementation, will be led by a Technical Advisor and National Technical Coordinator appointed by FAO, and will include a Compliance Officer whose role is to ensure AML/CFT risks are identified and appropriate controls are effectively applied throughout the project cycle.

56. In addition, the AE assesses the risk of post-distribution aid diversion as high. To mitigate this, the project will include monitoring and evaluation protocols such as the use of tracking and tracing technology, as well as post-distribution transaction monitoring. The AE has assessed that the combined effect of these measures reduces the risk level to medium.

57. Given the project-specific risks identified, the mitigation measures incorporated into the implementation plan, and the projections of the AE of ongoing external factors that could have a significant impact on the ML/TF risks throughout the project cycle, the Secretariat determines that the overall risk remains high.

4.4 Fiduciary

58. As the AE, FAO will be responsible for the overall management of the project, including (i) all aspects of project appraisal; (ii) administrative, financial and technical oversight and supervision throughout project implementation; (iii) ensuring funds are effectively managed to deliver results and achieve objectives; (iv) ensuring the quality of project monitoring, as well as the timeliness and quality of reporting to GCF; and (v) project closure and evaluation. FAO will ensure these responsibilities are fulfilled in accordance with the detailed provisions outlined in the Accreditation Master Agreement between FAO and GCF.

59. The project will be executed by FAO and the Government of Somalia acting through MoECC and MoAI in a co-execution modality to deliver the project activities funded by GCF proceeds. FAO will act as EE and will ensure strong country-driven execution of project activities and will be in charge of the execution of selected activities funded by GCF proceeds based on its comparative advantages. This will allow Somalia to benefit from the technical and operations experience of a specialized development assistance agency of the United Nations, while providing opportunities for the government to increase its capacity through technical assistance and the development and implementation of activities under the three project components. FAO will also execute the activities co-financed by FAO.

60. In order to fulfil the AE functions, FAO will set up a dedicated project task force in line with FAO project cycle guidelines. The project task force will be composed of the Budget Holder, the Lead Technical Officer, the Funding Liaison Officer, the HQ Technical Officer and other technical officers, as appropriate, and will remain independent from the EE functions performed by FAO.

61. GCF proceeds received by FAO in its capacity as AE will flow to the EEs, namely FAO-Somalia, MoAI and MoECC, for the implementation of project activities. The provisions

regarding MoAI and MoECC responsibilities as EEs, together with all financial details, will be included in the project agreement, which will also serve as subsidiary agreement, signed by the Government of Somalia. On the other hand, the TRANSFORM project funded by the United States Agency for International Development, to be executed by FAO, will provide in-cash (grant) co-financing.

62. The project will establish a CPIU, which will be functional for the entire duration and be responsible for day-to-day implementation of the project, with support FAO offices in each federal member state. The main functions of the CPIU, following the guidance of the Project Steering Committee and the Project Technical Committee, will be to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual workplans and budgets. The CPIU will be led and managed by a project-recruited Technical Advisor and National Technical Coordinator, who will be appointed by FAO and will be responsible for overall project management and coordination with project stakeholders. During implementation, the project will engage many other stakeholders, who will be selected in accordance with relevant FAO Manual Sections.

63. A Project Steering Committee will be established to provide strategic guidance for the project. It will be chaired by MoECC and co-chaired by FAO-Somalia. The CPIU will serve as Rapporteur to the committee. The role of the Project Steering Committee will be to (i) provide overall guidance and direction to the project, ensuring that it remains within any specified constraints; (ii) address project issues as raised by the national Project Implementation Coordinator; (iii) monitor project risks and the effectiveness of mitigation measures, provide guidance on new project risks and agree on possible countermeasures and management actions to address specific risks; (iv) review project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans; (v) review and approve the annual workplan and provide the necessary strategic guidance for its implementation; (vi) appraise the annual project implementation report, including the quality assessment rating report; (vii) make recommendations for subsequent workplans to build on achievements and address any shortcomings; and (viii) provide ad hoc direction and advice for exceptional situations when the Project Coordinator's tolerances are exceeded. The Project Steering Committee will be supported by a Central Project Technical Committee and regional project technical committees.

64. Financial management and control and procurement processes will be implemented as per FAO rules and regulations. FAO utilizes the Oracle-based enterprise resource planning system, the Global Resources Management System, in its offices worldwide; it provides all FAO employees, in all locations globally, with travel, human resources, procurement and finance functionalities. Using this system improves the flow of financial information, supports financial monitoring and reporting, increases transparency and visibility, and strengthens internal control. FAO maintains a chart of accounts which is used by the whole organization and that allows for a separation of income and expenditure by donor and project, and supports and provides a standardized coding structure that enables data to be recorded, classified and summarized to facilitate internal management and external reporting requirements.

65. As AE, FAO will have overall responsibility for quality assurance and oversight of co-EEs and will assume fiduciary responsibility in accordance with FAO standards and procedures. In addition to this, FAO will be responsible for the financial execution of GCF funds according to FAO rules and regulations, mainly contained and detailed in the FAO Handbook (including those related to financial monitoring, audit and procurement). During implementation, FAO will provide oversight and quality assurance in accordance with its policies and procedures. This may include monitoring missions, spot checks and participation at project governance meetings. The project will be audited internally and externally following FAO financial regulations.

4.5 Results monitoring and reporting

66. The funding proposal is based on a sound theory of change and is linked to a logical framework, allowing the project to measure results and evaluate its impact. The monitoring and evaluation (M&E) plan submitted by the AE lays out the data-collection and measurement tools to be deployed along with a sufficient M&E budget consistent with the requirements of the Integrated Results Management Framework and the GCF Evaluation Policy.

67. The project's theory of change illustrates three distinct and complementary outcomes that target all four GCF adaptation results areas and contribute to improving the enabling environment for national and local institutions. The sustainable landscape management and livelihoods-based adaptation for farmers supported by access to climate information systems provide a multi-pronged approach to enhance the resilience of rural communities and ecosystems in the targeted regions. Logical pathways from activities to outputs and outcomes are clear, and the barriers targeted through them are mapped. Critical assumptions that allow the achievement of project outputs and outcomes are noted, with the most important being the overall sociopolitical stability and the continued involvement by the national and state governments beyond the completion of activities.

68. The logical framework is linked with the climate adaptation outcomes and project outputs identified in the theory of change. The most important outcome indicators such as direct and indirect beneficiaries reached (core indicator 2), value of physical assets made more resilient to the effects of climate change (core indicator 3) and hectares of natural resources brought under improved climate-resilient management practices (core indicator 4) allow the measurement of adaptation impact across all GCF results areas. The supplementary indicators on climate-resilient livelihood and water security will measure the depth of the respective adaptation benefits within the targeted communities. Project-specific indicators have also been proposed to measure results at every level of the results chain.

69. The M&E plan gives a high-level understanding of how the various M&E-related activities and systems will be operationalized. The plan provides sufficient details on the roles and responsibilities of various actors in collecting data, monitoring risks and results, and quality assurance reporting to stakeholders. In addition to monitoring the project activity and annual reporting, the entity will conduct midline and endline beneficiary surveys to measure adaptation impact results. The AE will also organize a baseline survey in the first year to inform the logical framework of the latest context. Finally, the AE confirms that a sufficient budget is set aside for conducting independent project evaluations at this scale and as per the GCF Evaluation Policy.

4.6 Legal assessment

70. The Accreditation Master Agreement was signed with the AE on 8 June 2018, and it became effective on 4 October 2018. The five-year accreditation term of the AE lapsed on 3 October 2023 but was extended by decision B.37/18, paragraph (q) until three years from the date the five-year accreditation term lapsed or the date on which a revised accreditation framework is adopted by the Board, whichever is earlier. The Board approved the re-accreditation of the AE pursuant to decision B.37/18, and negotiation of the amended and restated Accreditation Master Agreement is ongoing.

71. The AE has provided a certificate confirming that it has obtained all internal approvals and it has the capacity and authority to implement the project.

72. The proposed project will be implemented in Somalia, a country in which GCF is not provided with privileges and immunities. This means that, among other things, GCF is not protected against litigation or expropriation in this country, which risks need to be further assessed.

73. The Heads of the Independent Redress Mechanism and the Independent Integrity Unit have both expressed that it would not be legally feasible to undertake their redress activities and/or investigations, as appropriate, in countries where GCF is not provided with relevant privileges and immunities. Therefore, it is recommended that disbursements by GCF be made only after GCF has obtained satisfactory protection against litigation and expropriation in the country, or has been provided with appropriate privileges and immunities.

74. To address the matters raised in the previous section, it is recommended that any approval by the Board be made subject to the following conditions:

(a) Signature of the funded activity agreement in a form and substance satisfactory to the Secretariat within 180 days from the date of Board approval; and

(b) Completion of the legal due diligence to the satisfaction of the Secretariat.

Independent Technical Advisory Panel's assessment of FP246

Proposal name:	Climate Resilient Agriculture in Somalia (Ugbaad)
Accredited entity:	Food and Agriculture Organization of the United Nations
Country:	Somalia
Project/programme size:	Medium

I. Assessment of the independent Technical Advisory Panel

1. This is the first submission of the funding proposal for the programme titled "Climate Resilient Agriculture in Somalia" under the standard proposal approval process. The assessment by the independent Technical Advisory Panel (iTAP) is based on the funding proposal package presented to the iTAP on 19 July 2024, slightly revised on 8 August 2024,[1] and informed by a set of written questions and answers further discussed in an online meeting between the iTAP and the accredited entity, the Food and Agriculture Organization of the United Nations (FAO), on 7 August 2024.

2. The accredited entity requests a grant contribution from GCF of USD 79,707,268. The full project budget amounts to USD 94,901,497 and includes a co-financing contribution from FAO of USD 15,194,229.[2]

3. The executing entities are FAO (i.e. FAO Somalia) and the Government of Somalia, acting through the Ministry of Environment and Climate Change and the Ministry of Agriculture and Irrigation.

4. The project helps communities to manage resources and restore degraded landscapes, with the support of strengthened government extension services and climate information systems. There are three main components:

(a) **Outcome 1: Restored landscapes are resilient and sustainably managed**. The project seeks to restore productive landscapes (watersheds) and facilitate ecological resilience, supporting ecosystem adaptation to climate change, so that they can provide crucial ecosystem services and sustain the agricultural livelihoods of local communities;

(b) **Outcome 2: Local livelihoods are resilient to climate change**. Targeting key value chains (maize, sesame, sorghum) and resilient water supplies, the project seeks to ensure that local communities derive increased and improved climate-resilient livelihoods from agriculture; and

(c) **Outcome 3: An improved institutional enabling environment for sustainable landscape management and climate-resilient agriculture is in place at the state and federal level.** Capacity-building seeks to ensure that authorities can implement new norms for sustainable landscape management and climate-resilient agriculture. The

[1] The funding proposal package (version 5) was received by the iTAP on 19 July 2024. A slightly amended version (version 6, dated 8 August 2024) fixed a few typographical errors and adjusted the language on "enforcement" towards the broader concept of "implementation", which, in the view of both FAO and the iTAP better captures the intention of the proposed activities.

[2] Constituted by a cash (grant) co-financing through the TRANSFORM project funded by the United States Agency for International Development and executed by FAO.

project considers legal frameworks, monitoring and coordination, and the generation and dissemination of climate information.

5. The iTAP has assessed the funding proposal against the six GCF investment criteria.

1.1 Impact potential *Scale: Medium to high*

6. This project is intended to contribute to all four GCF adaptation results areas (ARAs). In order of budget priority these are ARA 2 – Health and well-being, and food and water security; ARA 1 – Most vulnerable people and communities; ARA 3 – Infrastructure and built environment; and ARA 4 – Ecosystems and ecosystem services.

7. The project outcomes relating to food and water security stand to directly and indirectly benefit more than 2 million people across Somalia, many of whom have a recent history of living with conflict and instability. Landscape management using improved agricultural, agropastoral and agroforestry methods is expected to cover an area of 41,800 hectares.

8. Adaptation benefits are expected to arise from increased yields of maize, sorghum and sesame from the application of climate-resilient agricultural practices and improved access to water. The project should also improve the efficiency of livestock production, for example through fodder production, and the diversification of pastoral livelihoods.

9. The project is also intended to contribute to the strengthening of institutional capacity and regulatory systems for climate-responsive planning and development, along with the increased generation and use of climate information in decision-making, especially at the local level.

10. With a well-designed project in a challenging environment, the impact potential – strengthening of adaptive capacity and reducing exposure to climate risks – is assessed as medium to high.

1.2 Paradigm shift potential *Scale*: *Medium to high*

11. The project's theory of change statement suggests that "IF local communities' capacity is strengthened to implement sustainable landscape management and climate resilient agriculture and an institutional enabling environment is improved, THEN the resilience of local communities and ecosystems to climate change will be enhanced, BECAUSE livelihoods will be derived from sustainably managed landscapes and adapted climate resilient agriculture and supported by adequate enabling environment."[3]

12. The project is likely to catalyse impact beyond a one-off investment. The project's logic and emphasis on training and capacity-building – in support of farming and pastoral communities as well as authorities at the state and federal level – is convincing and coherent with the project's participatory approach.

13. Substantively, the project addresses the degradation of rangelands and the decline of pastoral systems by way of promoting a transformation of pastoral systems into agropastoral systems, with more diversified livelihoods. The project works with Farmer Field Schools to facilitate access to markets and irrigation technologies, and with the relevant authorities to support the production systems through extension services and climate information.

14. A system of water fees is to be developed to maintain upgraded or repaired irrigation infrastructures. Albeit a challenge in itself, such an arrangement stands to increase the chances

[3] Funding proposal, version 6, para. 34 (see footnote 1 above).

of the refurbished economic infrastructure remaining operational after the project's implementation period.

15. The project works with crop and livestock producers to simultaneously restore the ecological resilience and the economic productivity of degraded landscapes. Parts of Somalia are under "green" water scarcity, implying that the rainfall is insufficient to meet crop water demand. Under such circumstances, degradation may still be halted and productivity increased by way of optimum/supplementary irrigation, water conservation, reduction in crop water demand (e.g. through multi-cropping or shading) and by enhancing soil quality.

16. The project also seeks to form part of a broader shift away from Somalia's present dependence on humanitarian assistance, namely by investing proportionally more in early response and resilience-building. FAO reporting suggests that farm-level disaster preparedness induces an agricultural performance under hazard conditions twice that of unprepared farms.[4]

17. With a capacity-enhancing project in a challenging environment, the paradigm shift potential – diversifying livelihoods to be more climate resilient – is assessed as medium to high.

1.3 Sustainable development potential *Scale: High*

18. The proposed project should yield substantial sustainable development benefits in several dimensions.

19. Expected environmental co-benefits from the implementation of landscape management plans include the regeneration of the natural land cover through reforestation, agroforestry and rangeland rehabilitation. Biodiversity stands to be enhanced by using local species and removing invasive ones (e.g. Prosopis).

20. Landscape management – organized around sub-watersheds – should also contribute to environmental and economic benefits such as reduced erosion and flooding, and improved soil fertility and soil moisture, with greater water availability. This is likely to increase land productivity and reduce emissions from the land-use sector, providing both economic and environmental co-benefits.

21. Social and economic co-benefits would also include the employment generated by farm-level activities, food processing and tree nurseries.

22. Enhanced household income also stands to improve food and nutritional security, allowing more to be spent on food. This is of critical importance across Somalia, and particularly in conflict-affected areas and among internally displaced persons, where more than 4 million people face acute food insecurity, and some 1.7 million young children suffer from acute malnutrition.[5]

23. In target areas, social co-benefits can also be derived from local institution-building in the form of water user associations and landscape management committees. The project involves farming communities through a participatory approach and pays attention to gender parity and the inclusion of the most marginalized.

24. The participation of women as decision makers and agents of change is fostered through the project's gender action plan. This includes recognizing and addressing the limitations and barriers women currently face in accessing land, productive assets, education, information and

[4] FAO. 2023. *The Impact of Disasters on Agriculture and Food Security 2023: Avoiding and reducing losses through investment in resilience*. Available at https://openknowledge.fao.org/handle/20.500.14283/cc7900en.

[5] See: www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Somalia_Acute_Food_Insecurity_Malnutrition_Jan_Jun2024_Report.pdf.

finance. The project also seeks to safeguard women against additional risk of violence or harassment that could be induced by their increased access to assets and influence.

25. Addressing the needs of smallholders and those that are marginalized and/or discriminated against in a participatory manner, the sustainable development potential of the proposed project is assessed as high.

1.4 Needs of the recipient *Scale: High*

26. Somalia is one of the most fragile countries in the world, facing rampant inequality, displacement and conflict, all worsened by limited economic opportunities and escalating climate change. The effects of recent heavy rainfall and flooding across Somalia are exacerbated by the lingering effects of previous droughts.[6]

27. The gender assessment and project-level action plan (annex 8 to the funding proposal), referring to Somalia's national adaptation programme of action, describes three groups (pastoralist communities, internally displaced persons and women) as the most vulnerable groups to climate change: Pastoralists depend on rangeland grazing for their livestock and have very few fixed assets, which makes them vulnerable to the impacts of climate change. Internally displaced persons face limited livelihood opportunities and heightened pressures on natural resources around their settlements. Finally, women are made vulnerable because of the gender division of labour, their unequal access to resources, low level of literacy and limited participation in decision-making.

28. Gender roles and relationships on the project sites are characterized by clan systems with a strong patriarchal culture. Women and girls have limited rights under customary laws, and are thus excluded from decision-making institutions in the community.

29. Smallholder farmers in the sorghum, maize, sesame and fodder value chains face similar challenges – lacking inputs such as improved certified seeds, fertilizers and mechanization services – which limit agricultural productivity.

30. Women farmers face additional barriers relating to land access and tenure insecurity, as land is inherited through patrilineal lines. Women can be allocated land to grow fodder and vegetables by their husbands but have additional challenges accessing extension services or financial credit.

31. The project's gender action plan recognizes the limited livelihood opportunities and discrimination affecting women. In the targeting and selection of beneficiaries, the project seeks to include women from minority clans or ethnic groups in consultation activities. The project will also include a gender assessment of the rural advisory services system to identify barriers and good practices to improve women's access to advisory services and develop a gender strategy for the agriculture extension department.

32. The project's analysis and endeavours to overcome inequality and deprivation are commended. The needs of the recipient investment criterion is assessed as high.

1.5 Country ownership *Scale: Medium to high*

33. Somalia grapples with a fragile political system, insecurity, poverty and climate change related shocks. Its 2021 nationally determined contribution[7] points to the contradiction that Somalia has little historical or current responsibility for global climate change, but nonetheless

[6] See: https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156834/?iso3=SOM.
[7] Available at https://unfccc.int/sites/default/files/NDC/2022-06/Final%20Updated%20NDC%20for%20Somalia%202021.pdf.

suffers disproportionately from the climate crisis. The effects in Somalia include droughts, floods and locust infestations resulting in loss of livestock and agricultural production.

34. The project aligns with Somali policies relevant to climate change and natural resources management. The fostering of adaptive capacity and climate-resilient development fits neatly with the views on climate-smart agriculture, livestock and land use emphasized in a 2024 draft update of the nationally determined contribution (see funding proposal, para. 180).

35. The project contributes to the achievement of national adaptation priorities by way of providing local farmers with training and support, and supporting relevant authorities in coordinating and improving the enabling environment for climate-smart agriculture and providing climate information.

36. The accredited entity, FAO, has an important presence in Somalia with over 400 staff and six offices across the country, along with a support office in Nairobi. With a portfolio of 76 programmes,[8] the organization works towards the transformation of agrifood systems in Somalia.

37. The programme is to be executed by FAO Somalia and the Government of Somalia, as follows:

(a) FAO, according to the funding proposal (para. 126) "will ensure strong country-driven execution of project activities", allowing Somalia to "benefit from the technical and operations experience of a specialized development assistance agency from the United Nations";

(b) The project also provides opportunities for the Government of Somalia to increase its capacity through technical assistance and development and implementation of activities. The government acts through the Ministry of Environment and Climate Change, which is also the national designated authority, and the Ministry of Agriculture and Irrigation; and

(c) As emphasized in the call between the iTAP and the accredited entity, state governments and the Ministries' representation at the state level will play an important role in project implementation.

38. A Central Project Implementation Unit will be established for the day-to-day project implementation, with FAO support offices in each member state. FAO will appoint a Technical Advisor and National Technical Coordinator to lead implementation, with guidance from a Project Steering Committee and Project Technical Committee.

39. Effective engagement with communities is necessary to ensure that land-use plans are acceptable and beneficial to local stakeholders, but such engagement is often limited by lack of trust in authorities and insufficient mechanisms for public participation. International organizations and government bodies are working to develop better governance structures and build local capacities. As state structures are recovering, developing integrated landscape-level natural resource management approaches will be crucial, both as a way of promoting climate-resilient sustainable development and as a way of preventing further conflict.[9]

40. During project design, stakeholder consultations were conducted at various levels: (i) at the federal level with main government and non-government stakeholders as well as international partners; (ii) in target federal member states with government and non-government stakeholders as well as with international partners; and (iii) at target district level, with local authorities and communities (annex 7, para. 2). Community- and institution-level consultations are meticulously reported upon in the documentation constituting annex 7.

[8] See https://www.fao.org/somalia/en/.
[9] Funding proposal, paras. 39 and 40.

41. Whereas most execution is vested in an international organization, the stakeholder consultations and participatory approach are convincing, and there are pertinent indications of commitment to the project endeavours at the community, state and federal level. Hence, the country ownership investment criterion is assessed as medium to high.

1.6 Efficiency and effectiveness *Scale: Medium*

42. The funding proposal (para. 185) estimates the cost per beneficiary for the GCF grant at USD 69.18 per direct beneficiary and USD 37.51 per beneficiary for all beneficiaries combined, and for total funding at USD 82.36 and USD 44.66 respectively.

43. Two economic and financial modelling perspectives were appraised using Representative Concentration Pathway 2.6 and 8.5 climate scenario assumptions to show how the results might change under differing climate hardships. Calculated over 20 years, using a conservative level of discount rate of 15 per cent, it is suggested that the expected benefits will outweigh the costs.[10]

44. The accredited entity is providing cash co-financing at the level of 16 per cent of the total budget, in the form of a complementary project funded by the United States Agency for International Development to be implemented by FAO Somalia.

45. The largest project component, outcome 2 (local livelihoods are resilient to climate change), absorbs 44 per cent of the budget, where most funding goes to increasing access to water and irrigation infrastructure. The second-largest component, outcome 1 (restored landscapes are resilient and sustainably managed), absorbs 36 per cent of the budget, dedicated to landscape restoration.

46. Project component 3, outcome 3 (improved institutional enabling environment for sustainable landscape management and climate-resilient agriculture is in place at the state and federal level), absorbs a lesser share of the budget at 6 per cent. It is hoped that the important capacity-development efforts included in the first two components will have positive spillover on the enabling environment to ensure the sustainability of the project's endeavours.

47. As emphasized in the funding proposal (executive summary): "Given the fragile conditions of the Government of Somalia, strengthening of capacity is required to ensure that Federal Member States can implement new norms for sustainable landscape management and climate resilient agriculture." For this, output 3.1 considers legal frameworks, implementation (rather than "enforcement" as initially worded), monitoring and coordination, and output 3.2 strengthens the government's informational capacity, in particular its capacity to generate and disseminate useful, relevant and timely climate information to last mile users.

48. Project management absorbs 6 per cent of the budget, and monitoring and evaluation 5 per cent. The project also has a contingency budget amounting to 2 per cent of the total. This is to support the adaptive management of the project endeavours. The adaptive project management will be important given the risks and challenges of the project environment, including a fragile institutional context.

49. The project seeks to build on best practices and lessons learned from recent projects and programmes and to closely coordinate with other efforts to rebuild Somalia following years of conflict. The project draws on a range of climate adaptation technologies, many of them ecosystem-based, which should have the potential to be appropriately and iteratively developed through community/stakeholder engagement coupled with technical expertise provided by the Government of Somalia and FAO.

[10] Funding proposal, para. 190.

50. The project operates in a fragile institutional environment and will need to adaptively manage changing circumstances. Substantive financial and human resources will need to be invested to achieve success. The efficiency and effectiveness potential investment criterion is assessed as medium.

II. Overall remarks from the independent Technical Advisory Panel

51. The iTAP finds that the proposed project, "Climate Resilient Agriculture in Somalia", is well designed and well aligned with the updated Strategic Plan for the GCF 2024–2027 by accelerating climate action for the most vulnerable.

52. The iTAP recommends that the Board approve this funding proposal.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP246)

Proposal name:	Climate Resilient Agriculture in Somalia (Ugbaad)
Accredited entity:	Food and Agriculture Organization of the United Nations
Country:	Somalia
Project/programme size:	Medium

Impact potential
The AE acknowledges that the overall impact potential is assessed as **medium to high** by ITAP.
Paradigm shift potential
The AE acknowledges that the overall paradigm shift potential is assessed as **medium to high** by ITAP.
Sustainable development potential
The AE acknowledges that the overall sustainable development potential is assessed as **high** by ITAP.
Needs of the recipient
The AE acknowledges that the overall needs of the recipient is assessed as **high** by ITAP.
Country ownership
The AE would like to reconfirm that the Government of Somalia including the governments of federal member states in which this project operates have been extensively consulted during design and will be actively involved in all aspects of project's implementation to ensure full country ownership.
Efficiency and effectiveness
The AE would like to reconfirm that the capacity building activities included in the first two components are designed to foster the emergence of an enabling environment that will create conditions for sustainability, replication and upscale of the project strategies to overcome the barriers to adaptation and resilience to climate change. The AE would like to also highlight that the project will generate multiple non-monetary benefits to communities currently living in extreme climate and social vulnerability.

Overall remarks from the independent Technical Advisory Panel:

The AE acknowledges iTAP overall assessment and recommendation for the Board approval.

Food and Agriculture Organization
of the United Nations

Annex 8

Gender assessment and project-level action plan

For the GCF-FAO Project "Climate Resilient Agriculture in Somalia (Ugbaad)"

Contents

ACRONYMS AND ABBREVIATIONS

B2B	Business to Business Meeting
CEDAW	Convention on Elimination of All Discrimination Against Women
FGM	Female Genital Mutilation
GII	Gender Inequality Index
HDI	Human Development Index
IDP	Internally Displaced People
MESAF	Ministry of Employment Social Affairs and Family
MWHRD	Ministry of Women and Human Rights Development
MSME	Medium Small and Micro Enterprise
ND-GAIN	Notre Dame Global Adaptation Initiative
SDG	Sustainable Development Goals
SGBV	Sexual and Gender Based Violence
SIGI	Social Institutions and Gender Index
TVET	Technical and Vocation Education Training
VSLA	Village Saving and Loan Association

Part 1. Introduction

Objective of the project, country, and target areas.

1. **Climate Change in Somalia**: The Horn of Africa (Somalia, Kenya, Uganda, Ethiopia, Djibouti, Eritrea, Sudan and South Sudan) – is vulnerable to climate variability and security-related threats such as violent conflicts – due to its food insecurity and fragile livelihood systems which are vulnerable to climate change. Somalia is listed as a Least Developed Country by the UN and also ranked among the 11th most vulnerable countries by the Notre Dame Global Adaptation Initiative (ND-GAIN) Index, which measures vulnerability to climate change. Women, children, elderly people, people living with disabilities, minority clans, and other marginalized people often bear the brunt of climate change.
2. In Somalia pastoralists constitute over 50% of the population, inhabiting arid or semi-arid areas with very high temporal and spatial rainfall variability. The adverse changes in rainfall and weather patterns due to climate change have led to prolonged and recurrent droughts in Somalia, which have exacerbated famines and the scarcity of pasture and water resources. Agricultural production systems have also constantly recorded below long-term average returns, against a backdrop of Somalia being a net importer of cereals and grains even on bounty seasons. Protracted and recurrent exposure to shocks has resulted in low capacity to absorb, respond, mitigate, cope, adapt to climate shocks and conflicts. The coping capacity of institutional and physical infrastructure is also generally poor or lacking across the country, cutting across health services, early warning, food systems, and economic opportunities, which adds another structural layer of vulnerability for affected communities
3. **Impact on Women**: The climate in Somalia is projected to become drier, warmer, more erratic and extreme – with grave impacts on livestock, crops, forestry and fisheries-based livelihoods. Cumulative impacts of droughts negatively affect livelihoods, resulting in chronic food insecurity, massive displacement and resources-based conflicts. Women and children constitute over 80 per cent of internally displaced persons (IDPs). Women's high dependence on climate sensitive livelihoods make them particularly vulnerable to shocks, affecting their ability to adapt and recover. This is compounded by their limited and/or constrained access to economic and natural resources, rights of ownership and control over land and decision-making power, a dynamic that is aggravated in displacement settings. In developing countries, including Somalia, women contribute up to 45 – 80 percent of production across crop, livestock, and fisheries value chains (Kibria, 2016). However, gender inequalities and dynamics have excluded them from, or limited their participation in decision-making, production systems, rights of ownership and management of natural resources, as well as resolution of conflicts emanating from the same.
4. The project aims to scale up climate resilient agriculture, sustainable landscape management and ecosystem based adaptation to increase resilience of communities and ecosystems to climate change and extreme weather events that affect agriculture and other livelihoods. It will directly benefit 1.1 million people (50% women). It consists of three outcomes: (i) restored landscapes are resilient and sustainably managed, (ii) local livelihoods are resilient to climate change, and (iii) an improved institutional enabling environment for sustainable landscape management and climate resilient agriculture is in place at Federal Member State and Federal Levels.
5. The targeted areas of the project were identified based on a climate risk analysis, which considered climate hazard, exposure, and vulnerability, and the agroecological zones in Somalia. The government provided a list of priority districts within the target regions, most of them being newly liberated districts.
6. The states, regions, and districts where the project will be implemented are listed below.

    - Southwest state, Lower Shabelle region, Afgoye, Baraawe, Kurtunwaarey, and Qoryooley districts
    - Hirchabelle state, Middle Shabelle region, Cadale district
    - Jubaland state, Lower Juba region, Kismayo district
    - Puntland state, Nugal region, Eyl and Garowe districts
    - Somaliland state, Todgheer region, Odweyne district
    - Galmudug state, Mudug region, Hobyo district

7. **Women's adaptive capacity and vulnerability to climate change in Somalia**: Women in Somalia, especially those in rural areas, are most affected due to reliance on natural resources affected by climate for their livelihoods. They are at the frontline confronting the challenges of climate change but are poorly equipped and under-resourced to respond to the challenges. They have limited access to economic resources, rights of ownership and control over land and decision-making power. As climate change increases the scarcity of resources and men migrate, women are pushed to assume new responsibilities becoming heads of households. However, they are not included in key decision-making spaces due to socio-cultural norms and gender-based discrimination. Conflict has eroded the gains made in education, healthcare, and employment before the civil war and deepened gender inequality. Women and girls are more likely to engage in risky coping mechanisms and be exposed to gender-based violence.[1]

8. The Somalia National Adaptation Plan of Action describes pastoralist communities, IDPs, and women as the most vulnerable group to climate change due to low access to information, markets, services, and technology required for climate-resilient livelihoods. Women are vulnerable because of the gender division of labor, their unequal access to material and resources, non-material and their low participation in decision-making.

Objective and rationale for the gender assessment

9. Gender inequality is very high in Somalia, as various global gender inequality measurements indicate. This gender inequality heightens the vulnerability and lowers the adaptation capacity of not only women but also their families, who depend on them and their communities. Therefore, it is important to understand how existing gender relations contribute to gender inequality and women's ability to participate in and benefit from the project, as well as how gender relations might prevent the project's objectives from being achieved. This understanding is created through a gender analysis, which will identify potential gender-based constraints the project needs to address and strategies that can be used to address the identified gender-based constraints.

10. The objective of this gender assessment is to understand how gender relations in Somalia and the project districts, in particular, affect the way men and women experience the problem of climate change and their ability to participate in and benefit from the interventions of this project Based on the findings of the assessment, g a gender action plan that can be implemented by the project to address identified gaps is developed, along with a list of indicators that can be used to measure progress in closing these gender gaps.

1 Draft Somalia NDC Implementation Plan and Institutional Frameworks, Resource Mobilization and Monitoring & Evaluation Plan

Part 2. Methodology

11. The methodology for the assessment included desk review, primary data collection through a survey administered to farmers, and key informant interviews. Extended consultations have taken place in the project target districts at community level: (i) in Odweyne district, Todgheer region, Somaliland, (ii) in Cadale district, Middle Shabelle, Hirshabelle, (iii) in Hobyo, Mudug region, Galmudug, (iv) in Kismayo district, Lower Juba, Jubaland, (v) in Eyl District, Nugaal region, Puntland, (vi) in Garowe District, Nugaal region, Puntland. Focus Group Discussions have been conducted at community level have been conducted with small holder farmers where women and youth were represented. Semi-structured interviews were conducted with Farmers' Cooperatives where women and youth were also represented.

12. Gender and climate change-related national policy documents, national gender profiles developed by FAO and UN Women, and documents like the last Demographic and Health Survey of Somalia were included in the desk review.

13. A telephone survey questionnaire was administered to 257 mostly women farmers in seven project districts located in six states: Afgoye, and Cadele, Hirshabelle state Eyi, and Garoowe, Puntland state Hobyo of Galmudug state. Kismaayo, of Juba land state and Odweyne Somaliland state. The survey respondents were selected from the following livelihood and demographic categories.

    - Participation in agro-pastoralist livelihood and any one of the following three major Value Chains: Sesame, Maize and Sorghum
    - Representatives of various age groups
    - Representatives of different clans including minorities
    - ingle women heads of households including widowed women making up (10% to 15% of the sample).

14. Finally, key informant interviews were conducted in Somaliland state with the Ministry of Employment, Social Affairs, and Family, the Ministry of Livestock, and a civil society organization called PENHA, a women-led network that supports livelihood activities in Odweyne district.

15. The survey questions administered to farmers tried to capture information on gender relations in agriculture, including the participation of men and women in various agricultural activities; their access to extension services, inputs, and markets; their roles in decision-making over agricultural activities and income; and the distribution of responsibilities for unpaid care work.

16. The key informant interview questionnaire was used to capture more qualitative information about gender relations in agriculture. Key informants were asked about the livelihood activities that men and women engage in and the kind of challenges they face; how farmers are targeted for the provision of various agricultural services, such as extension services and credit; the existence of farmers' organizations and barriers to participation in the organizations; and the needs of men and women farmers in livestock and crop agriculture.

Part 3. Legal and Institutional Framework

3.1. National gender policy framework and implications for the project

17. Provisions that protect the rights of women were first included in the Federal Republic of Somalia's provisional constitution when it was formulated in 2012. The constitution recognized the need to ensure the representation of women in national institutions and the three branches of government, protect their social and economic rights, protect women from violence, and eliminate discrimination against women in the workplace. Consequent national development plans also integrated gender equality provisions. The New Deal framework developed in 2013 included commitments to address gender disparity in various sectors. [2]

18. The 9th National Development Plan of Somalia (2020-2024) had adopted strengthening gender, human rights and social equity as one of its cross-cutting policy objectives. The four pillars of the National Development Plan: Inclusive and accountable politics, improved security and the rule of law, inclusive economic growth and improved social development have each gender related targets and indicators. Under the inclusive and accountable politics pilar, increasing the representation of women in district councils and local governance institutions is set as one target. Under the economic development pillar, investment in livestock and agriculture sectors to create employment opportunities for rural women and youth is prioritized. In order to diversify the economy, investment in in skills training in TVETs targeting sectors where women are overrepresented is encouraged. Under the social protection and human development pilar national policies and strategies are developed to protect vulnerable groups. Among these are the development of the Somali Women's Charter, the FGM Act and the National Gender Policy.[3]

19. Somalia has made good progress regarding Women Peace and Security (WPS)/ National Action Plans (NAPs), having launched its NAP in September 2022, led by the Ministry of Women and Human Rights Development, supported by the Government of Sweden through UN Women Somalia. The NAP acknowledges inclusion and participation of Somali women in peacebuilding and decision-making at all levels as a critical foundation for effective governance, sustainable peace, and development. In addition, the NAP seeks to address issues that plague women in Somalia such as sexual and gender-based violence, access to justice, participation in transitional justice mechanisms, as well as climate change among others.

20. **A National Gender Policy** was adopted by the Federal Government of Somalia in 2016 to guide gender integration in its peace and state-building process. The objective of the gender policy is to create an enabling legal, policy, and institutional environment to achieve gender equality and equal opportunities. Specific policy objectives consist of eliminating all forms of gender-based discrimination and reducing gender inequality, increasing women's participation in decision making, promoting behaviour change to shift gender norms and taking affirmative action as a corrective measure to equalize opportunities. Other main objectives of Gender policy include enacting international legal frameworks like Convention on Elimination of All Discrimination Against Women (CEDAW) and introducing new bills against FGM and sexual offenses. It also aims to increase women's representation in political and leadership positions and track public budget allocation to gender equality objectives.[4]

21. The National gender policy has four thematic priority areas: economic empowerment, health, education and political participation. Under the economic empowerment thematic priority area, the policy aims to increase the representation of women in national chamber of commerce to address concerns of women entrepreneurs. It also aims to establish funds accessible to women, support them to diversify income sources, establish a quota for women's employment in decision making positions in private and public sector and develop national vocational entrepreneurs' skills enhancement programme. 5

22. States such as Puntland and Somaliland also drafted their state gender policies. For example, the Somaliland National Gender Policy was developed in 2009 by the Ministry of employment and social

2 UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
3 Somalia National Development Plan, 2020-2024
4 UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
5 Federal Republic of Somali, 2015. National gender policy.

affairs and family. The overall goal of the policy is to facilitate the mainstreaming of the needs and concerns of women, men, girls and boys in all areas of sustainable development and poverty eradication. The policy has several priority areas covering different sectors. Its specific objectives include elimination of inequality in access to resources, ensuring equal participation in decision making in social, political and economic life, changing attitudes and practices that are discriminatory and mainstreaming gender in all sectors of development. Under its poverty reduction and economic empowerment and livelihoods thematic area, the policy aims to create an enabling environment for women to participate in natural resources management and support small scale entrepreneurs to create jobs and adult literacy.[6]

23. At the Federal level, the Ministry of Women and Human Rights Development (MWHRD) of the Federal Government of Somalia is mandated to advance the promotion and protection of gender equality and human rights, including the rights of women, children and other vulnerable groups. The Ministry of Women and Human Rights Development was established by the federal government in 2013 to lead the development of laws and policies that help to implement the National Gender Policy and coordinate the efforts of various sector ministries and development partners. Gender focal points are expected to be established in all sector ministries. Periodic stakeholder forums are expected to be carried out for consultation and review of the implementation of the gender policy. [7]

24. The states of Puntland and Somaliland set up similar state-level women's machineries. The Ministry of Family Affairs in Puntland is responsible for mainstreaming gender in different sectors, and in Somaliland, this responsibility is taken by the Ministry of Employment, Social Affairs and Family (MESAF).[8] The mandate is to serve specific target groups of the society, especially women, children, people with disabilities, and other socially disadvantaged groups including refugees, asylum seekers, IDPs, returnees, and minorities to ensure their rights of accessing basic services, fair employment opportunities, and protection support are protected. MESAF is expected to set up multi-sectoral committees from national to district levels to ensure gender mainstreaming, coordination and implementation of a multi-sectoral approach. Gender focal points are expected to be created in each government ministry to enhance coordination and mainstreaming across sectors. Implementation of the gender policy will be in a collaborative effort between government, NGOs and UN agencies and development partners.[9]

25. However, despite the development of the Federal and state level National Gender Policies and the efforts, in national development plans, the implementation leaves a lot to be desired.

26. **National Climate Change Policy** of the Federal Government of Somali developed in 2020 recognizes that gender equality is an important precondition for successful climate change adaptation and mitigation response. The policy states the need to generate data on gender to understand gender specific needs and impacts of climate change. It highlights the importance of collaborating with women rights organizations and bringing them to the table in climate change discussions and processes. It stresses the importance of building the capacity of relevant institutions to mainstream gender in climate change policy formulation and the need for gender equitable financing to integrate gender dimensions in the design of climate funds. The policy commits to increase the resilience of vulnerable groups including women through community led adaptation, livelihood diversification and better access to basic services and social protection.[10] In the state of Somaliland National Climate change policy developed in 2023 as well gender mainstreaming is stated as one of the policy priority areas.[11]

27. **The National Adaptation Programme of Action on Climate Change** developed in 2013 recognized women, youth, and pastoralist communities as the most vulnerable to climate change. Women and youth groups participated in the consultations that led to the identification of priority areas for adaptation both at the federal level and in the states of Puntland and Somaliland. However, in the actual adaptation plans of both the federal government and the state of Somaliland, there are no specific strategies

6 The Republic of Somaliland, National gender policy, 2009.
7 Federal Republic of Somali, 2015. National gender policy.
8 FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
9 The Republic of Somaliland, National gender policy, 2009.
10 Somalia National Climate Change Policy, 2020
11 Somaliland National Climate Change Policy, 2023

developed to target and address the needs of women. The only document that specifically references women is the adaptation plan of the state of Puntland, which mentions "providing training and support to women given their large role in agriculture."[12]

28. **The Nationally Determined Contributions (NDC)** of Somali updated in 2021 recognizes that women are at a disadvantage compared to men in all socio-economic and human development indicators and that the impact of climate change disproportionately affects women because of their lack of access and control to critical resources to adapt to changing climate conditions. The NDC calls for gender equality and the empowerment of women in climate change decision making. Specific gender targets developed under the NDC consist of allocation of a quota of 30% for representation of women in climate change decision- making, making the Ministry of Gender and Human Rights part of the NDC governance structure, and mainstreaming gender in national and sub-national climate change policy frameworks. The document also commits to undertaking gender analysis to inform climate adaptation and mitigation sector's gender needs, to strengthening the of the most vulnerable including women through social safety nets and promoting meaningful access and transfer of climate finance to promote gender responsive technology. Finaly, the document also highlights the need for developing insurance systems to enable vulnerable groups, including women to rebuild economic life following exposure to disaster and support vulnerable groups, particularly women in climate change adaptation efforts.[13]

29. Overall, the assessment of the national policy framework and institutions indicates that there is a strong political will to promote gender equality in climate change. However, there are gaps in the institutional capacity of the government to turn this commitment into action. The project needs to build the capacity of national partners on gender-sensitive agriculture program delivery to ensure the project's interventions reach and benefit both men and women. The gender action plan needs to include further assessments and capacity-building plans on gender for ministries of agriculture at federal, state, regional, and district levels.

3.2. Gender legal framework and implications for the project

30. Somalia has ratified both the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights as of January 24, 1990. Article 3 in both covenants calls for states to ensure the equal rights of women and men in the enjoyment of the rights outlined in the covenants. However, Somalia has yet to ratify major international conventions that protect the rights of women and girls. For example, Somalia has signed the Convention on the Elimination of Discrimination Against Women (CEDAW) and the Protocol of the African Charter on Human and People Rights and the Rights of Women in Africa. However, both conventions have not been ratified by the state to become part of the national legislation. The Federal Ministry of Women and Human Rights established a CEDAW ratification and advocacy committee in 2019 to fast-track the process. However, ratification has not taken place to date.

31. Somalia has also signed and recognized the Beijing Declaration and the Platform for Action on Gender Equality and Women's Empowerment, which is the first comprehensive and transformative global agenda for the achievement of gender equality and the empowerment of women and girls.

32. New national laws that protect women's rights are under development. The Federal Government of Somalia and the states of Somaliland and Puntland have developed bills on FGM/C and sexual offenses that are waiting for approval by the states. The federal government and both states have also introduced quotas for women's representation in national leadership positions. In the federal government and Puntland state, a 30% quota for women's representation in leadership positions has been instituted, while in Somaliland, a 25% quota is assigned.[14]

33. The assessment of the legal frameworks shows that fundamental laws that protect rural women's rights to own assets and access services are not yet in place in Somalia. For example, ratification of the CEDAW convention would have required states to implement Article 14 of the convention, which

[12] Federal Republic of Somalia, 2013. National Adaptation Programme of Action on Climate Change (NAPA)

13 Draft Somalia NDC Implementation Plan and Institutional Frameworks, Resource Mobilization and Monitoring & Evaluation Plan, 2024

[14] UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context

compels states to provide equal opportunities to women in rural areas and take measures that achieve gender equality in the agriculture sector. Therefore, the project needs to engage traditional and clan leaders and communities to sensitize them on the importance of ensuring women's participation and representation in landscape and natural resource governance committees in the absence of legislation that can mandate these measures.

Part 4. Overview of Gender Inequalities in the Country

4.1. Poverty and demography

34. Women make up 49% of the population in Somalia, according to the 2014 population estimation survey carried out by the UNFPA and the Somalia Ministry of Planning. Women-headed households make up 32% of total households. Male migration due to drought and conflict has resulted in an increased trend of female household headship. There is a high level of poverty in Somalia, especially among nomadic communities and rural dwellers.[15] The Human Development Index (HDI) of Somalia is one of the lowest in the world, with a value of 0.380, putting the country in the lowest human development category in 2022. A higher proportion of women-headed households in nomadic communities and urban areas live in poverty as compared to male-headed households.[16] FAO's food security and nutrition analysis shows that female-headed households are overrepresented in the category of households with poor food consumption and have fewer assets.[17]

35. Various global measures show the prevalence of a high level of gender inequality in Somalia. The Gender Inequality Index (GII) for Somalia is 0.776 (with a maximum of 1 denoting complete inequality), placing the country as the fourth-lowest country for gender equality globally. The Social Institutions and Gender Index (SIGI) in Somalia for 2014 was 0.4594, categorizing the country as highly discriminatory against women.[18]

36. Women's participation in the labor force and employment is lower than that of men. A 2016, UNFPA data showed that the labor force participation rate is 64% for men and 37% for women, while the employment rate is 49% for men and 27% for women. Reasons for women's low labor force participation include women's unpaid care work responsibility, enrolment in schools, and lack of permission from male members of the family, according to a 2017 World Bank report. For men, the reasons include enrolment in schools, disability or illness, and conflict.[19] Sixty percent of men and 68% of women are employed in the agriculture sector. Most employed women are self-employed (55%) or employed by a family member (28%) in both agricultural and non-agricultural sectors. And 43% of women employed in the agriculture sector are not paid.[20]

37. **Young people** in Somalia have fewer livelihood opportunities, and they are affected by unemployment and low access to resources such as land, livestock, and credit. A 2016 UNDP survey showed that 40.2% of young people between the ages of 25 and 29 (54% men and 29.5% women) are employed. Over 45% of young people were economically inactive, not working or looking for work. Young people, especially young women, face difficulty securing livelihoods due to a lack of available jobs, poorly developed skills, and limited access to credit and capital assets. Young women's employment options are lower than men's because of lower levels of education, discrimination, and social and family pressure to marry early. Lack of livelihood opportunities leads poor young women to engage in prostitution, while young men migrate or get involved in extremist militant groups.[21]

38. Young men own less land than older men because ancestral land is becoming less and less with each sub-division, and existing portions are now almost too small to sub-divide. Young men are given few

[15] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey.
[16] Somalia National Bureau of Statistics, 2023. Somalia Poverty Report.
[17] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
[18] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
[19] UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
[20] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey.
21 Somalia country gender profile: trends of change in a fragile and fragmented context, AFDB & UN Women

heads of livestock when they marry, and the livestock ownership of younger men is less than that of older men. Young women have even less access to land and livestock.[22]

39. **Elderly people** aged 60 and above made up 4.5% of the population in 2020. There is a lack of data on the situation of elderly people and their vulnerability to poverty in Somalia. A study conducted by HelpAge International among internally displaced people (IDP) in Somalia showed elderly people make up 15% of those living in IDP settlements. The majority of the elderly people were women who were widowed or divorced and single heads of households. There were few programs that specifically target and support elderly people and address their needs. The study also found declining community support for older people. There was limited consultation with elderly people in program development and the provision of support to IDP communities. Older women were often victims of sexual and gender-based violence. Many older women worked as sanitation workers or maids in host communities, were poorly paid, and suffered from health problems like chronic back pain because of the tasks associated with their work. Older men did not work and depended on their wives for support. There was no system of home delivery of food rations for vulnerable people because food is distributed through blanket general distribution centres.[23]

40. **Women headed households**

41. Four in 10 households in Somalia are headed by women. The proportion of women-headed households is high in Mogadishu and other urban centers (52%) and IDPs (54%), compared to rural households (37%). Women-headed households are grouped into two categories: de jure women household heads, who are divorced, separated, or widowed, and de facto female household heads, who are married but their husbands are living away from the family home.[24]

42. A World Bank survey in 2019 showed that the incidence of poverty is higher for male-headed households than for female-headed households in IDPs and non-displaced communities. However, the difference in incidence of poverty between male and female-headed households is smaller in non-displaced communities (3%), while it is higher in IDPs (11–14%). Among the non-displaced community, widow-headed households have a higher risk of poverty. IDP families with children with single female caregivers experience higher poverty than IDP families without children. In IDP households, where there are more female income earners, the risk of poverty is lower. The study suggested looking beyond the gender of the household head to several other factors, like the number of children and the number of income earners in a family, to understand vulnerability to poverty. It also highlighted that the association between a household's demographic composition and its income profile shows women's lack of economic empowerment and caring responsibility elevates poverty risk, even in the context where male-headed households have an overall higher risk of poverty.[25]

43. **Other vulnerable groups**

44. Poverty rates are high in Somalia, with 7 out of 10 households living below the poverty line. However, some communities are more affected and deprived. Three-fourths of the population in rural areas, IDP settlements, and households living among nomadic communities live in deeper levels of poverty. For example, IDP households are 10% more likely to be poor than non-IDP households.

45. Twenty-six percent of the population in Somalia lives in nomadic areas. Twenty-eight percent of nomadic households are headed by women. Looking at multi-dimensional indicators of poverty, nomadic households experience more deprivation compared to other households or communities. Ninety percent of nomadic households are in the lowest wealth quantile.

46. Nomadic households have low access to education. The net enrolment rate among nomadic communities is 12% for primary and secondary education levels. Seventy-three percent of the people in nomadic communities live more than 30 minutes away from the nearest school. Only one in five people living in nomadic communities can read and write. Seventy-eight percent of nomadic male household members and eighty-four percent of female household members have no access to

22 FAO 2024. Gender baseline assessment report for the Somalia information and resilience building action phase II.
23 Crisis affected older people in Kenya and Somalia, HelpAge International, 2012.
24 World Bank, 2019. Somali Poverty and vulnerability assessment: findings from wave 2 of the Somali high frequency survey.
25 World Bank, 2021. Differences in household composition: hidden dimensions of poverty and displacement in Somalia.

education. They have low access to health services, and most women receive no assistance from health professionals during childbirth.

47. Nomadic households have poor access to water supply and sanitation services. Only 35% of nomadic households have access to water, compared to 55% of rural households and 76% of urban households. A higher proportion of nomadic households need to travel longer than 30 minutest to fetch drinking water compared to rural and urban households. No nomadic household uses appropriate water treatment before drinking. Only 1% of nomadic households have access to improved sanitation, compared to 26% of rural and 23% of urban households. Less than 1% of nomadic households use electricity for lighting.

4.2. Health

48. The health system in Somalia is fragmented and under-resourced to meet the healthcare needs of the population. Various health measurements indicate the general low health status of the population, including women. Life expectancy at birth was 53 in 2021, which is lower than the average of 71 years for the Arab world. The infant mortality rate of 71 per 1,000 live births is high compared with the Arab world average of 26 per 1,000 live births.[26] Maternal mortality at 692 per 100,000 live births in 2020 is one of the highest in the world. Only 32% of births are assisted by a healthcare provider and 31% of mothers receive antenatal care. The main obstacles for women to access health services include lack of money (65%), distance of health facilities (62%), and lack of permission to access health services (42%). Poor women and women living in nomadic communities are most affected by a lack of health services.[27]

49. Women and children are affected by poor nutrition and the prevalence of diseases. Twenty-eight percent of children under the age of five and 12%, respectively, are affected by stunting and wasting. Twenty-six percent of women in nomadic communities and 16% in rural communities are underweight. Diseases such as acute respiratory disease due to the high use of firewood and shrubs for cooking in households and diarrhoea affect children the most.[28]

50. The prevalence of HIV/AIDS is low in Somalia (0.55%). Sixty-six percent of women aged 15–49 have heard of HIV/AIDS. The proportion of women who have heard of HIV/AIDS is lower among those in nomadic and rural areas (45 percent and 69 percent, respectively) than in urban areas (81 percent).[29]

51. Early marriage and teen pregnancy are prevalent in Somalia. The 2020 DHS found that 16% of ever-married women were married by the age of 15, and 34% were married by the age of 18. Fourteen percent of women between the ages of 15 and 19 have given birth or are pregnant with their first child. Teen pregnancy is highest among the lowest-income groups. Sixty-two percent of women between the ages of 15 and 49 know about modern contraception methods. However, despite the high level of knowledge, actual use of modern contraception methods is low (7%). There is a high level of unmet contraception needs (37%) in rural and nomadic areas.[30]

52. More than half of the population in Somalia has access to improved drinking water and sanitation facilities. Sixty-five percent of households use improved sources of drinking water. Access, however, is low for nomadic communities (34%) and rural communities (55%). Forty-five percent of nomadic households and 13% of rural households have to travel more than 30 minutes to get improved drinking water. Few households (16%) treat water before drinking. Fifty-seven percent of households have access to improved sanitation facilities. However, access to improved sanitation facilities is low among rural households (49%) and inexistent among nomadic communities.[31]

[26] World Bank Database
[27] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[28] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[29] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[30] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[31] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey

4.3. Literacy and education

53. Educational attainment among women is very low. Overall, 75% of women aged 15–49 have not attended any formal schooling. Twelve percent of women have some level of primary education, but only 3% completed primary schooling. Moreover, 5% of women attended secondary school, but only 3% completed secondary education. Three percent of women have completed higher levels of education.

54. Literacy among women aged 15–49 varies by place of residence. Among women residing in urban areas, 50% are literate, compared to 37% among those living in rural areas and 5% among women living in nomadic areas.[32]

4.4. Voice and Representation

55. A patriarchal culture prevails in Somalia, and women are often excluded from political decision-making at national and community levels. At the national level, women hold 25% of the seats in the federal parliament through a quota system. In the states of Puntland and Somaliland, women hold only 1% of the parliament seats. Twenty percent of the federal government cabinet positions are held by women, while in Somaliland, women make up only 4% of the cabinet positions, and in Puntland, only 1 out of 18 cabinet positions are held by women.

56. Women's limited representation in leadership and national decision-making positions is one of the reasons for the slow implementation of gender commitments included in the national gender policy and development plans and for the slow ratification of international conventions protecting the rights of women. There is high resistance from traditional clan and religious leaders to implementing the political office quotas assigned to women.[33] At the community level, in rural areas, most decisions are made by clan-based committees that are entirely composed of men, excluding women.[34]

57. Women's decision-making at the household level is low compared to men. In the 2020 DHS, 90% and 60% of women, respectively, reported that they take part in decisions about how to spend the cash they and their spouses earn. However, 45% said husbands alone make decisions on major household purchases. A significant proportion of women respondents also said decisions on their health care and mobility are made by their spouses. Forty-five percent of women said their spouses decide whether they should seek health care, and 48% said their spouses decide whether they can visit family members and relatives.[35]

4.5 Entrepreneurship

58. In the economic sector, women are overrepresented in the informal sector. Women's entrepreneurship is constrained by low levels of literacy and access to support services and networks. Women have limited access to financial literacy, vocational, and business skills training. They have low access to formal credit due to their limited ownership of property and productive assets, including land. A study commissioned by FAO and UNDP in sorghum, maize and sesame value chains in Somalia showed that women's participation in the value chains is constrained by their limited access to land and finance. Seventy one percent of women participating in the study expressed lack of finance to buy drought resistant improved seeds and to access irrigation water by clearing or desilting water canals that pass through their farm.[36] Although there is an emergence of micro-finance institutions, such as Micro Dahab, which provide loans to MSMEs, and a growing trend in the development of village-level saving and loan associations (VSLAs), women's main source of capital to start their businesses is remittance. Most women entrepreneurs are engaged in petty trading ventures as a survivalist-oriented business activity. Women's limited mobility due to shortage of time because of their unpaid care and domestic work

[32] Somalia Health and Demography Survey, 2020
[33] UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
[34] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
[35] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey.
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responsibility or socio-cultural norms that restrict women from moving freely in public spaces constrains the development of their businesses[37]

4.6. Access to and control over resources

59. Women in Somalia play a key role in both livestock and crop agriculture activities. They are responsible for the production of smaller livestock, dairy processing, and marketing, while men are responsible for the herding, slaughtering, and selling of larger animals. In crop agriculture, women are responsible for labour-intensive tasks such as sowing, weeding, harvesting, threshing, and dehusking, while men are responsible for tasks such as land preparation and ploughing. In the fisheries sector, women participate in processing. Women are also fully responsible for unpaid care work activities, such as fuelwood collection, which is time-consuming and exposes them to security risks, especially for women living in internally displaced people's (IDP) camps. In marketing, men are involved in agriculture export activities, while women engage in selling small amounts of produce (cereals and vegetables) in local markets. Women also participate in the sale of fodder and grass.[38]

60. Despite their role in the household economy, women have limited access to and control over land and other assets. Results from the 2020 DHS show only 15% and 35% of women own land and a house, respectively, jointly with their spouses or alone. Older women are more likely to have ownership of land and a house compared to younger women. For example, 60 percent of women aged 45-49 years own a house, compared to 10 percent of women aged 15-19. Twenty-six percent of women aged 45-49 own land, compared to 4 percent of women aged 15-19.[39]

61. Land is communally owned in Somalia and assigned to households for specific use by elders. Women's access to land is curtailed by discriminatory customary practices. Customary laws do not consider women as independent legal people, and they are excluded from owning land. Women don't own land, but they can have access rights through their husbands or brothers. However, they can easily lose their access to land when they become widows if they have no children or if they remarry outside of the family. Land grabbing by male relatives after the death of a husband or father is very common in south-central Somalia. Traditional land dispute settlement mechanisms usually do not favour women's land claims, as traditional and religious leaders often resist women's land rights. Land insecurity is especially high among women-headed households.[40]

62. Women have control over smaller livestock, such as goats, sheep, and chickens, while men have control over larger cattle and camels. However, the formal ownership rights of all livestock lie with the male heads of households. The marketing of livestock is usually controlled by men, who also decide on the income earned from the sale. Women have control only over the income earned from selling milk.

4.7 Access to information

63. Women's access to agriculture extension services is limited due to time and mobility constraints as a result of unpaid care work responsibilities and social norms. Women often don't participate in technical and vocational training as they tend to be organized far away from their village. Low levels of education and literacy among women are also a constraint on their participation. Women are not able to access veterinary services offered by the government, such as livestock vaccination services. Agriculture extension agents or animal health workers tend to be mainly dominated by men because it is considered socially unacceptable for women to move around without supervision.[41]

64. Ninety-three percent of women in Somalia do not access any form of media, including newspapers, radio, and TV, at least once a week. Media access is especially low among the poorest category of women. TV is relatively more used by women in the highest wealth category to access information, while for the poorest households, radio is the most frequently used source of information. The use of

[37] UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
[38] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
[39] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[40] FAO, 2016. Women's land rights and territorial rights of Somali minorities in Somaliland.
[41] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en

the internet is very low. Only 17% of women have ever used the internet. Among rural women, only 12% have ever used the Internet, while in nomadic communities, only 1% have used the internet before. Mobile ownership is high among women with 75% of women owning a mobile phone. Mobile ownership is slightly less among women with no education (72%) compared to women with higher education (98%). Sixty-seven percent of rural women and 59% of women living in nomadic communities own a mobile phone. [42]

4.8. Access to finance

65. Women's access to and control over credit is limited. A study commissioned by FAO and UNDP in sorghum, maize and sesame value chains in Somalia found that 71% percent of women participating in the study expressed lack of finance. The reason for lack of finance for 44% was their inability to qualify for loan from banks. This was due to limited financial literacy for 29% of the respondents, because banks require a male guarantor for 25% of the respondents and lack of security to access loans for 20% of the respondents. Sixteen percent of the respondents also said they were not allowed to take loan and another 16% said capping the amount money women can access from banks was a problem for them.[43]

66. Only 4% of women in Somalia have bank accounts, according to the 2020 DHS. Although very few women own bank accounts, the introduction of mobile money has enabled women to have a level of financial control. Sixty-four percent of women use their mobile phones for financial transactions.[44]

4.9. Sexual exploitation, abuse, and harassment (SEAH)

67. Conflict and displacement have heightened the risk of sexual and gender-based violence (SGBV) against women and girls. Men die due to the conflict or migrate from home, leaving women to assume headship roles. Women-headed households, especially those living in areas under the control of extremist groups, are displaced due to the loss of economic opportunities. Women and children make up 70–80% of the population in IDPs.[45] SGBV is common in IDPs because of instability, social breakdown, and limited leadership and control. Single women and women from minority groups are especially vulnerable to abuse because of the lack of clan protection. The persistence of clan mediation in SGBV cases exempts men and boys from facing prosecution, and there is a tendency to stigmatize and shame victims. Women in IDPs have little access to formal legal recourse.[46]

4.10. Other forms of GBV

68. Spousal violence is prevalent in Somalia. In the 2020 DHS, 12% of ever-married women reported that they had been abused physically by a spouse, while 4 percent reported emotional abuse by a spouse. The prevalence of spousal violence is high in urban areas (20%), compared to rural (14%), and Nomadic areas (11%). Few women (17%) out of those who experienced spousal violence have sought help. Thirty-six percent of women believe a husband is justified in beating his wife for a given number of reasons. The attitude that justifies spousal violence is especially high (44%) among women in poorer households.

69. FGM is highly prevalent in Somalia. Among women aged 15–49 years, 99 percent have been circumcised. Out of these, 64% have gone through pharaonic circumcision, which is the most severe form of circumcision. A huge proportion of women respondents (76%) in the 2020 DHS said they want the practice to continue, while 72% believed that it is a religious obligation.[47]

[42] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
43 SCALA Private Sector Engagement Facility Report 2024
44 The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey
[45] FAO. 2021. National gender profile of agriculture and rural livelihoods – Somalia. Mogadishu. https://doi.org/10.4060/cb6316en
[46] UN Women and AFDB, 2020. Country gender profile: trends of change in a fragile and fragmented context
[47] The federal democratic republic of Somalia, 2020. The Somali Health and Demographic Survey

Part 5. Gender Inequalities Exacerbated by Climate Change

70. The Somalia National Adaptation Plan of Action describes pastoralist communities, IDPs, and women as the most vulnerable groups to climate change. Although most communities must face climate risks and impacts, vulnerability of individuals varies depending on their adaptive capacity which is influenced by their gender, geography, types of livelihoods, and age.

71. Pastoralists depend on range land grazing for their livestock and have very few fixed assets, which makes them vulnerable to the impacts of climate change. People living in IDP camps due to conflict or drought are vulnerable due to limited livelihood opportunities and pressure put on natural resources around IDP settlements. Women are vulnerable because of the gender division of labor, their unequal access to material and nonmaterial resources, and their low participation in decision-making. Women play a vital role in the management of natural resources and are often the most affected when negative impacts of climate variability and associated conflicts strikes. Conflicts disrupt social, economic, and natural systems, with devastating impacts on women's livelihoods, household poverty, and agricultural productivity. Gender inequality and disempowerment among women further exposes women to vulnerability given their lack equal rights of ownership and control over land, property and other productive assets compared to their male counterparts. Their lack of participation in decision-making on the above matters undermines their capacities to cope, recover and adapt to climate change shocks, the situation is further compounded when gender roles and household structures are altered, for example when men die in conflict, or migrate with livestock in search of pasture and water, women assume the role of heads of households - forced to provide for their homes despite the customary disempowerment.

72. During a drought, while men migrate in search of employment, women are forced to become heads of households and primary breadwinners with limited assets and resources at their disposal. In crises, women must find solutions to feed their families. They must walk long distances, 5-8 km at times, to get water. They have challenges accessing fuelwood for household use and face security risks as they travel in search of fuelwood. When community elders meet to resolve issues around natural resources and disasters, women are not represented.

73. FAO's recent publication has revealed that extreme weather events would reduce the incomes of female-headed households significantly more than those of male-headed households[48]. Due to women's limited participation in economic sectors including non-farm employment, female-headed households have less opportunities to compensate on-farm income loss by off-farm earnings, compared to men.

74. Women play a key role for food security in Somalia. Women are forced to adopt negative coping strategies when food is limited during droughts due to limited resources. They cope by limiting food consumption and prioritizing other members of the household, which exposes them to malnutrition.

75. Climate change would increase the vulnerability and exposure of women and girls to GBV and SEAH. Young girls are forced to go into commercial sex work for survival in the event of droughts. Women are also exposed to an increased risk of sexual and gender-based violence in IDP camps during migration.[49]

76. Increased frequency and intensity of extreme weather events could increase the risk of families undertaking early marriage for their female children. As families are anxious to secure economic security in case of extreme weather events, there has been an increased trend in cases of FGM to ensure marriageability of their female children[50].

[48] FAO. 2024. The unjust climate – Measuring the impacts of climate change on rural poor, women and youth. Rome.
[49] Federal Republic of Somalia, 2013. National Adaptation Programme of Action on Climate Change (NAPA)
50 UNFPA Somalia, 2021, Situation of Women and Girls - Drought in Somalia

Part 6. Gender Issues in the project implementation sites

6.1. Gender profile of the implementation sites

77. The project implementation sites are located in six states of Somalia, namely, South West, Hirsabelle, Puntland, Galmudug, Jubaland, and Somaliland. Most of the households in the implementation districts can be categorized as poor (74%), while about 26% are categorized as being in the middle wealth group.

Table Population in target districts

Region	District	Children	Men	Women	Elderly	Total
Lower Juba	Kismayo	201,831	46,777	43,510	11,581	303,700
Lower Shabelle	Afgooye	289,821	83,436	81,201	17,766	472,223
	Baraawe	34,657	9,203	9,662	1,253	54,775
	Kurtunwaarey	42,617	10,188	9,454	2,209	64,467
	Qoryooley	81,036	21,419	20,264	3,824	126,545
Middle Shabelle	Cadale	45,884	10,958	11,714	2,370	70,925
	Jowhar	241,759	57,966	53,777	12,398	365,900
Mudug	Hobyo	99,265	27,968	25,622	6,161	159,016
Nugaal	Eyl	87,316	22,738	22,028	11,752	143,834
	Garowe	173,307	49,628	45,802	11,820	280,557
Togdheer	Owdweyne	50,341	14,009	14,440	4,099	82,889

Source: UNFPA, 2014, Somalia - Subnational Population Statistics

78. The main sources of income for households in the project sites are farming (51%), followed by livestock sales and cash assistance (28%), and humanitarian cash support (14%). Very few households (7%) rely on income from small businesses. The main crops cultivated by households include maize, sorghum, cowpeas, mug beans, and vegetables. Fodder production is also common in Somaliland.

79. Women are more involved in crop farming activities, carrying out tasks such as planting, weeding, harvesting, and collecting. Men are responsible for watering crops or irrigation. In livestock production, women are responsible for the production of smaller livestock like goats and sheep and dairy processing and marketing, while men are responsible for moving livestock to range lands and selling large quantities of livestock.

80. Gender roles and relationships on the project sites are similar to gender relations in the broader country context described in the previous sections. A strong patriarchal culture based on a clan system predominates in the project sites. There are huge gender inequalities in various aspects of life. Women and girls have limited rights under customary laws, and they are excluded from decision-making institutions in the community.

6.2. Gender gaps identified

81. The project sites are largely agro-pastoral areas where households rely both on crop and livestock production for their livelihoods. Most farm decisions, such as the type of seed varieties to cultivate, farm inputs and technologies to use, or the type of livestock breeds to rear, are made by men. According to survey respondents, these decisions are made by men alone in 50% of the cases or in consultation with women in their households in 30% of the cases. In the survey, women made decisions alone in 12% of the cases where the households were led by single women.

82. Survey respondents in the project sites mentioned that women are reached by agricultural extension and nutrition training in 83% of the cases. However, previous assessments carried out by FAO and UN Women show women's access to agriculture extension services is limited due to time and mobility constraints as a result of unpaid care work responsibilities and social norms. A qualitative assessment carried out with key informants in Somaliland also indicated that women's time is limited by unpaid care

work responsibilities in addition to their roles in agriculture production. Men typically perform less than 1 hour of work on domestic and unpaid care work activities and usually work for half a day on productive activities. Women, on the other hand, work from 5 a.m. to 10 p.m. in various productive and care activities. This can limit their ability to participate in agricultural training, visit marketplaces, develop their network, and access information.

83. Access to credit is limited for both men and women in the project sites. The most common sources of credit are vendors. Households get goods and services on credit from stores and pay them off in kind. Mobile financial transactions are common. There is also an emergence of village-level saving and loan associations organized with the support of NGOs. Women are engaged in VSLAs and able to pool small funds.

84. VSLA (Village Saving and Loan Association) is a self help group of women who come together, form groups, save small amount of money every month and take small loans from those savings. The groups are trained on the VSLA methodology and life skills. The groups have five management committees and a guiding constitution. Through VSLAs, group members would learn the culture of saving. This would give women the opportunity to access loans that can be used to start or improve an existing business, cover emergencies since access to formal loans is a challenge and it requires documentations. FAO works towards linking these VSLA groups to formal financial services and this would give women the opportunity to access ample amount of loans that can be used to improve and diversify their income

85. Both men and women engage in the marketing of agricultural products. However, their level of engagement is hugely different. Men usually sell large quantities of livestock in local and export markets, while women sell livestock products such as meat and dairy in local markets. Income from the sale of livestock is controlled by men, while women can control income earned from the sale of dairy and meat.

86. Key informants interviewed indicated that women in the project sites have needs for training on livestock production, information about markets, support to access markets, and extension services such as vaccination services, fodder, feed, and water for livestock. Women also indicated the need to improve their control over income from livestock production. Men indicated a need for access to fodder, feed, and water.

6.3. Barriers

87. The barriers to gender equality in agriculture in the target areas are socio-cultural norms and capacity gaps at institutional and policy levels.

88. Socio-cultural norms influence various aspects of life that contribute to limiting women's roles, opportunities, and the benefits they can enjoy in agriculture. Gender-based social norms assign almost all unpaid care work to women, which limits the time they have to engage in productive work, participate in agricultural trainings and meetings, participate in political activities, or spend time on their businesses. Social norms also restrict women's ability to travel to access various agricultural services, inputs, and markets. Social norms influence who makes decisions in the household on agricultural inputs and technologies, the use of assets like land and livestock, and the use of income from agricultural production. Most of these decisions are made by men with very limited consultation with women. Women's ability to make decisions on a wide variety of issues, starting from their engagement in economic activities to mobility and their health, is curtailed by social norms.

89. Gender-based social norms also indirectly restrict women's ability to access agriculture extension advisory services. Various studies show women's access to agricultural extension is improved when there are female extension agents. Literature review and key informant interviews in the project districts show there are no or a very limited number of female extension agents because of the belief that it is inappropriate for women to move from place to place without supervision.

90. At the institutional level, there are capacity gaps in agriculture advisory services to provide gender-sensitive services. Extension services don't take into account women's mobility restrictions or unpaid care work responsibilities. There is limited entrepreneurship training support for women engaged in the

off-farm segment of agrifood systems. Although there are some positive developments, financial institutions do not have products that are responsive to the needs of women entrepreneurs.

91. At the national level, there are challenges in turning policy commitments into action. Gender targets set in national development plans are not turned into implementation programs backed by budget. Policy documents like the NAPA, while recognizing women's vulnerability to climate change, fail to identify specific measures to reduce their vulnerability in the action plan. Women's land and property rights are challenged because of the failure or slow process to ratify international legal instruments that protect women's rights, like the CEDAW, and enact national laws that can check the customary practices that discriminate against women.

6.4. Gender roles and barriers in maize, sesame, sorghum and fodder value chains

6.4.1. Sorghum value chain

92. About 80% of the sorghum production in the project districts is produced by subsistent smallholder producers who grow sorghum mostly for their own consumption, with little surplus sold directly to consumers, middlemen, or retailers. Sorghum is used by smallholders for household consumption and as fodder for livestock in agro-pastoralist areas.

93. Smallholder producers usually use family labor for production and rarely use inputs such as certified seeds and fertilizers for sorghum production. They usually use their own seeds saved from the previous harvest or emergency seed provided by NGOs. Most of the production activities and harvesting are done using hand tools.

94. Women are involved at all stages of the value chain in production, processing, and marketing. In some production areas, they own about 50% of the total sorghum production. Women are involved in planting sorghum, weeding, harvesting, winnowing, storing, and processing it into flour. Men are responsible for land preparation and threshing, and they also participate in plating, weeding, harvesting, and transporting together with women. Women are solely responsible for processing, taking sorghum to mills in small towns.

95. Women make up most of the retail vendors in local cereal markets, working in open-air stores and selling sorghum grains with the husk removed or as flour. They buy the sorghum from whole sellers in off-seasons or directly from producers in harvest seasons. Young people are mostly involved in the marketing and distribution of sorghum.

96. The profit margins of retailers and wholesalers are low compared to other actors who participate in the value chain, such as producers and middlemen. Due to the high quality of imported sorghum, retailers of locally produced sorghum don't make much money.

97. Farmers access production information on best practices of sorghum cultivation, land preparation, planting, climate-related information, pest management, and harvesting from extension workers or other farmers. They get information on market demand, consumer preference, and pricing from traders and middlemen.[51]

6.4.2. Maize value chains

98. About 70% of the maize production in the project districts comes from smallholder producers with an average land size of 0.2–3 hectares. Maize production systems are irrigated, but rain failure in the Shebelle river basin affects farmers ability to irrigate their farms. Climate-related temperature variations are also increasing the risk of pests.

51 FAO 2024, Sorghum, Maize and Sesame value chains in Somalia, Scala private sector engagement facility report.

99. Both men and women participate in maize value chains in production and marketing. Men are responsible for the purchase and application of inputs such as fertilizers and pesticides. Both men and women participate in planting, irrigating, weeding, and harvesting.

100. Women are involved in trading maize, selling small volumes of maize in local markets. They also sell maize stalks for fodder. Men are involved in transporting large quantities of maize to markets to sell to commercial traders.[52]

6.4.3. Sesame value chain

101. Sesame is a commercial crop in the project districts. Smallholder producers and commercial farmers are involved in sesame production. Most of the producers are smallholders with 1–2.5 hectares of land. Commercial production accounts for only 20% of the total sesame production. Sesame is produced in both irrigation and rain-fed systems.

102. Village traders buy from small producers and aggregate and sell to whole sellers, oil millers, and exporters. Oil millers or processors are mostly located in the capital city of Mogadishu, with a few processors also located in towns like Baidoa and Jowhar. Retailers serve as links between processors and local consumers. About 25% of the production is exported. Waste from the processed oil is used as animal feed.

103. Women play a key role in the sesame value chain. Women make up 70% of the work force in the sesame value chain. At the production stage, while land preparation and planting are done by men, most other activities are undertaken by women and youth. Women are engaged in processing, cleaning, salting, and drying. Women dominate small-scale sesame trading and oil processing cooperatives.

104. There are projects that support women in accessing information about good farming practices in sesame production through farmer field schools and demonstration plots and by hiring female extension agents to reach women farmers.[53]

6.4.4. Fodder Value chain

105. The fodder value chain in the project districts includes fresh cut green grass, maize, and sorghum chopped and fed to animals, as well as whole dry sorghum stalks stacked, milled, and fed to animals.

106. Both men and women participate in the fodder value chain. Men are responsible for planting sorghum, maize, and millet that will be used for fodder, applying pesticides to fodder crops, and cutting and stacking sorghum stover. Women are responsible for preserving seed for the new season, preparing irrigation trenches in fodder farms, doing the weeding, harvesting green sorghum and maize fodder, and, together with men, transporting sorghum stovers on a donkey to markets. Organized women groups participate in the fodder value chain by leasing land to grow sorghum for use as green or dry fodder and engaging in fodder processing, such as milling, adding grain, and packing.

107. Women are also fully responsible for feeding and fattening livestock and milk production and marketing. However, their control over livestock is limited. Women usually own only goats and sheep that have been given to them as gifts. However, they have control over the money from all milk production. They particularly control sheep and goats.[54]

52 FAO 2024, Sorghum, Maize and Sesame value chains in Somalia, Scala private sector engagement facility report.
53 FAO 2024, Sorghum, Maize and Sesame value chains in Somalia, Scala private sector engagement facility report.
54 FAO, 2024. Gender baseline assessment report for the Somalia Information and Resilience Building Action Phase II.

6.4.5. Challenges and gender related barriers in the value chains

108. The challenges smallholder farmers face in the sorghum, maize, sesame and fodder value chains are similar. In all three value chains, a lack of inputs for producers, such as improved certified seeds, low use of fertilizers, and mechanization services, is a challenge for smallholders. It contributes to low productivity.

109. The absence of adequate extension and research services to support farmers in making decisions on the selection of appropriate seeds and farming techniques is another challenge. Access to credit for smallholders is also limited. Middle men provide credit to farmers, sometimes accepting surplus grain as profit.

110. Lack of access to market information and market opportunities is a challenge for women cooperatives engaged in sesame and fodder production. A project on promoting inclusive markets in Somalia has tried to address the gaps in market access by developing a digitalized market information system that provides real-time data on market prices, demand, and supply.

111. Women participating in the value chains face additional barriers due to gender relationships. For example, women have limited access to land or face land tenure insecurity arising from socio-cultural norms and a lack of legal systems that protect their right to land. Land is passed through patrilineal lines. Women don't inherit land. Widows with children may have control over land and decide on it together with male relatives and grown-up children. Women can be allocated land to grow fodder and vegetables by their husbands.

112. Women have challenges accessing extension services due to their unpaid care work responsibilities, which limit the time they have, to participate in agricultural trainings and meetings.

113. Although both men and women farmers lack access to credit, women's access is further constrained because they are not able to meet the requirements for credit, such as collateral. Socio-cultural norms do not allow women to take out loans from financial institutions. Banks ask women who apply for loans to prove a male guarantor or cap the amount of loan women can access. Banks consider women borrowers to be at high risk. Poor literacy levels also prohibit women from borrowing.

6.5. Intersectional nature of gender inequality

114. While the gender assessment showed women as a group have limited access to assets and resources, livelihood opportunities, and decision-making power as a result of gender relationships, it also indicated that other factors such as geographic location, age, household demographics, and wealth status contribute to the social and economic empowerment and wellbeing outcomes of individuals and households. People can experience deprivation and inequality as a result of their age, wealth, geographic location, and household composition. These other forms of inequality, however, interact with gender inequality to create multiple layers of vulnerability and deeper levels of deprivation for women and girls.

115. In the project districts and in the country at large, most households are poor and live below or close to poverty lines. However, men and women living in rural areas, IDPs, and nomadic communities experience deeper levels of poverty. Multidimensional indicators of poverty show nomadic communities have the highest level of deprivation, with low access to education, health, water supply and sanitation, electricity, and internet services.

116. Age is a factor affecting the economic and social wellbeing of individuals, with young and elderly people experiencing discrimination and inequality. Young people have lower access to land, livestock, and other assets and have limited livelihood opportunities. However, the situation of young women is even more vulnerable than that of young men because, in addition to age, gender-based socio-cultural

norms restrict their livelihood opportunities. Young women are even less likely to own assets such as land or livestock. They have fewer opportunities for employment due to discrimination. They face pressure to marry early. Young women from poorer households are vulnerable to engaging in commercial sex work. Elderly men and women are increasingly experiencing vulnerability due to weakening community support mechanisms and the absence of targeted programs that address their needs. Elderly women living in IDPs experience deeper levels of vulnerability. Age combined with household status can create worse outcomes for elderly women. Elderly widows are vulnerable to poverty, and they are often victims of sexual, gender-based violence in IDPs.

117. Household size and composition affect households' vulnerability to poverty. Female-headed households are not necessarily poorer than male-headed households. However, looking beyond the gender of the household head at other household dynamics reveals that different household demographic factors combined with gender heighten households' vulnerability. For example, widow-headed households have a higher risk of poverty. Families with single female heads, a large number of children, and a lower number of people earning income in the household are at greater risk of poverty. Land insecurity is higher among women-headed households. Women-headed households living in areas controlled by extremist groups have lower economic opportunities and are vulnerable to displacement. Single women and women from minority clan groups are vulnerable to SGBV in IDPs and have little option for formal legal recourse.

Part 7. Strategies to integrate gender into the project

7.1. Formulation and implementation

118. The gender action plan in this section is developed by analyzing how the gender relationships described above will affect the way men and women can participate and benefit from the project intervention. The section below provides gender-based constraints that can affect the realization of the objectives of the project under each of the project components. This is followed by strategies and actions that can be adopted by the project to address these gender-based constraints. The final section also includes inward-looking strategies that will help the project staff and partners develop the capacities needed to deliver a gender-sensitive project.

119. The gender action plan takes account of the deeper levels of inequality and deprivation experienced by women in IDPs and rural communities and widowed women who are heads of households as well as women headed households with larger number of children and lower number of economically active members in the household. The gender action plan also recognizes the limited livelihood opportunities and discrimination affecting young women and the specific vulnerabilities experienced by elderly women. All of these factors will be taken into account in targeting and selection of beneficiaries under the different components of the project. The project will ensure the inclusion of women from minority clan/ ethnic groups in all consultation activities. The implementation of the gender action plan will be led by an international Gender, Social Inclusion and IP Specialist (part time) and a national Gender Specialist (full time) in collaboration with the National Project Coordinator, international Technical Advisor as well as relevant technical experts.

120. Under component one, the project aims to establish participatory landscape and natural resources management and governance systems at sub-watershed levels. Due to social norms that restrict women's mobility and representation in the public sphere, women are likely to be excluded from the consultation process and management committees. Young people, especially young women are also likely to be excluded from the consultation processes and management committees. The project will address the barrier to women's participation by organizing community dialogues targeting clan and traditional leaders, men and women, on the importance of including women in landscape management committees and in consultations to design landscape management plans. The project will also set quotas for the representation of women and young people in landscape management committees at various levels as well as for proportion of women who will participate in landscape management

consultations. In addition, gender assessment (including SEAH/GBV related risks) will be included in a detailed conflict sensitivity assessment to be conducted under sub-activity 1.1.2.2, which will inform the project implementation approach.

121. Component two of the project aims to develop the resilience of local livelihoods to climate change by improving the management of water supply systems, building capacities on climate-resilient agriculture practices, and supporting farmers to develop climate-resilient value chains. Existing gender relations can pose various challenges that affect the achievement of the project objectives under this component. While the involvement of women in Water User Association Committees (WUAC) can improve the sustainable management of water supply schemes, traditional norms can restrict the participation of women in WUACs. Women's ability to benefit from the trainings on climate-resilient agriculture practices may be limited due to time and mobility restrictions and a culture of exclusion by agriculture extension agents who do not consider women as clients. A gender-blind value chain development intervention can limit women's ability to benefit from value chain development activities as women have limited access to entrepreneurship support services and credit due to structural barriers.

122. The project will address these barriers in the following ways: The project will set a quota to increase the representation of women in WUACs and train women committee members on scheme management and basic maintenance. The training on scheme management and basic maintenance will also target young people, especially young women. Training and supporting women to engage in traditionally male-dominated roles has the potential to shift attitudes within the community about gender roles, and the trained women can also become role models for other women in the community. To ensure women's access to advisory support in climate-resilient agriculture practices, the project will make a conscious effort to select women among the lead farmers/ facilitators who will receive TOT and facilitators training by setting a quota system. Effort will also be made to include young people, especially women among the trainees to become facilitators on climate resilient agriculture extension practices. Women extension agents and facilitators are better able to reach other women farmers. Each lead farmer and facilitator will be expected to reach from 15 to 30 other farmers.

123. The project will also include a gender assessment of the rural advisory services system to identify barriers and good practices to improve women's access to advisory services in the country and develop a gender strategy for the agriculture extension department. The gender and rural advisory services assessment will be conducted in partnership with the ministry of agriculture using a tool developed by FAO, Gender Sensitive Rural Advisory Services Assessment Tool (GRAST).

124. Following the assessment, capacity-building training on how to develop and deliver gender-sensitive advisory services will be cascaded down, targeting agriculture extension staff at various levels. The training will be based on the gaps identified in the gender and rural advisory services assessment. The training will be conducted using a training manual developed by FAO for agriculture extension agents. The topics that will be covered in the training include: basic gender concepts and why gender equality matters; gender gaps in Somalia in agriculture and extension services; the role of women in agriculture production and the gaps in access to assets and advisory services; gender analysis tools that can be used by extension agents, such as, the use of seasonal calendars and daily activity chart to plan and deliver agriculture extension activities; gender division of labour in agriculture and extension advisory services using different scenarios as examples on how extension agents can reach and provide services to women farmers; institutional mapping of extension service providing organizations and women's access to these organizations; gender sensitive stakeholder analysis and gender sensitive agriculture value chains development. At the end of the training, the extension agents will be asked to develop short- and long-term action plans that will help them address the challenges they face in reaching women farmers in extension advisory services and the support and resources they need to implement the action plan.

125. The training will be conducted at the national level to train national and state agriculture department staff on a TOT of gender-sensitive advisory services. Then the training will be conducted in each of the six project states, inviting extension agents from the project districts in collaboration with national agriculture experts who have received the ToT. The results of the training and changes in the knowledge and practice of extension agents will be monitored using the action plans developed at the

end of the training. The training will also have a KAP assessment that will be administered at the beginning and end of the training.

126. Under component 2, the project will support women candidates for being elected as board members of WUACs through capacity building for the WUACs including raising awareness of the importance of women as women representation in the decision making positions need to be enhanced. Under Activity 2.1.2, the project will rehabilitate and restore irrigation and water supply infrastructures based on a detained needs assessment. The project will also consult with WUACs to develop frameworks for equitable access to water and conflict prevention mechanisms. In addition, the project will deploy water-saving techniques to farmers, such as drip irrigation kits and solar-operated pumping systems, and provide training to increase water use efficiency. In this activity, it is important to ensure that the water infrastructure constructed and rehabilitated is also informed by the water use needs of men and women. For example, in addition to using water for productive purposes, women also shoulder the responsibility of securing water for cropping and for livestock. The training on water-saving technologies should include women and youth farmers. Women and youth farmers should also be supported to access drip irrigation kits and solar operating pumping systems organized in farmer groups.

127. The project will undertake several activities to ensure the benefit of women from value chain development interventions. A gender-sensitive seed value chain analysis will be conducted to understand sources of seed for women and men, their ability to pay, and storage capacity to develop a subsidy system that takes account of the needs of both men and women. Women's groups engaged in seed production will be identified and supported through training to engage in the seed multiplication business. The project will also identify value chains where women are overrepresented and have a potential for growth to provide support to women entrepreneurs in vocational and business skills development and investment readiness, linking them with financing institutions and markets. In targeting of beneficiaries in value chain development interventions the project will target groups of women who are vulnerable to poverty, such as, single women heads of households with large family size and fewer number of economically active household members and widowed women heads of households with limited ownership of assets. The targeting will also focus on young people, especially young women with limited livelihood opportunities.

128. The success of women entrepreneurs supported by the project will be measured through indicators such as the number of women entrepreneurs who have been able to enter into new and more lucrative value chains and the number of women entrepreneurs who have been able to access new markets and increase their sales and income.

129. The project will engage financial institutions to influence the development/improvement of financial products that are suitable for women agripreneurs, such as non-collateral-based credit systems, for example, loans through group guarantee systems. Selected women agripreneurs will be supported to develop business plans using FAO's Rural Invest Tool. B2B meetings will be organized between women business owners and financial institutions to help them present their business plans and identify funding opportunities. Finally, the project will also train women entrepreneurs on financial readiness and provide them with small grants to register their businesses, carry out audits, and fulfil other requirements that prepare them to access credit. In targeting and selectin of women entrepreneurs for support attention will be paid to include young women and single women heads of households supporting large families and widowed women heads of households as much as possible.

130. Under activity 2.3.4, the project will support the rehabilitation of market infrastructure, including rural roads and cattle corridors, to ensure that access is un-interrupted even during climate extremes. Furthermore, the project also creates new market poles to promote local exchanges and increase economic activity among local users. Given that women play a significant role in agriculture trade, especially in local markets, it will be important to ensure that they are consulted in the construction of market infrastructure, such as rural roads and district and village-level regrouping points for small ruminants. Gender-sensitive market infrastructure would include sex-segregated sanitation facilities and measures to ensure safety and security in the market.

131. Component three of the project focuses on developing an institutional enabling environment for sustainable landscape management and climate-resilient agriculture at the state and federal levels.

One of the outputs to realize this outcome is increasing farmer and livestock producers' access to climate information through digital early warning and decision-making tools through agreements with cell phone service providers. Although a significant proportion of women in the project sites have mobile phones, most women don't access the internet. There is no evidence of the use of mobile devices to access information for agriculture. The project will conduct a gender assessment on how men and women farmers access information on agriculture and the barriers to using digital services to access information on agriculture, including good practices and approaches that facilitate access and use of digital information for agriculture decision-making by men and women farmers. The assessment will inform the development of the early warning system and other digital agriculture advisory services. Care will be taken to ensure the information shared through the digital platform is relevant to women and the value chains they are engaged in, and the format is accessible to women with low levels of literacy. The project will also organize sensitization events to encourage the use of digital tools by women to access information on agriculture.

132. Finally, the project will organize a gender capacity-building training for FAO and partners' staff to enable them to deliver the project activities and outputs in an inclusive manner. The training will cover topics such as basic gender concepts, how to undertake gender analysis and use information from gender analysis to inform the project cycle, sector-specific approaches, and strategies that can be used to integrate gender in climate change programs and projects. The training will also strengthen the capacity of participants to become fully aware of SEAH/GBV risks and involved in preventing and responding to SEAH/GBV related issues. An annual gender review will be carried out by the country's gender focal point to monitor the progress in gender mainstreaming in the project and to bring partners together to review progress and share experiences around gender mainstreaming.

133. The project team will ensure that female field staff either from FAO field offices or from the Service Providers will be involved when the project engages with communities and provide trainings. The project team will make sure, with the support of local authorities and village elders, that women will be invited to trainings, meetings and FFS sessions in target communities by raising awareness of local authorities and village elders on the importance of gender equality. Female field staff with the support of international and national gender specialists will assess in each of the target districts whether separate training sessions/meetings need to be organized for women or whether mixed groups of women and men can be targeted. Female field staff will play a role on influencing an individual's self-confidence or self-awareness while enhancing a woman's capacity to speak and to be able to determine what is more likely to work in their situation. Any barriers for women to participate in the project activities will be further assessed by field staff and international/national gender specialists at the inception phase and throughout the project implementation.

134. The project will address GBV/ SEAH and gender inequality using an integrated approach that will enhance the interaction among Gender on economic activities. The project will use approaches such as the Gender Action Learning System as part of operationalization of VSLAs under sub-activity 2.3.3.1. Gender Action Learning System (GALS) is a community-led empowerment methodology using specific participatory processes and diagram tools that aims to give women as well as men more control over their lives as the basis for individual, household, community and organizational development[55]. The methodology as well as the steps of the GALS methodology are described in a manual described by IFAD[56]. This methodology includes 5 phases : (i) **Change catalyst** starts with a change catalyst workshop which is an introduction to GALS basic tools (1 to 2 months), (ii) **Community Action Learning** starts after the catalyst workshop, and includes implementation of desired change, upscaling through peer sharing, monitoring and documentation (12 months), (iii) **Participatory Gender Review** which is a qualitative and quantitative assessment of achievements in terms of gender relations, (iv) **Livelihoods and Value Chain Development** which focus is to increase income, production and access to market and mainstreaming into economic and social dynamics and, (v) **Sustainability** which includes linking into national institutions public and private actors with community volunteers.

55 https://p4cda.net/gender-action-learning-system-gals/
56 https://www.ifad.org/documents/38714170/45173373/htdn_gals.pdf/38ec05a9-d0a9-3559-6306-d73b5db550dc?t=1648470620545

7.2. Monitoring, evaluation, and reporting

135. The project will collect sex-disaggregated data throughout the log frame where relevant. Gender-sensitive quantitative and qualitative indicators will be used to monitor and measure the progress of outputs included in the gender action plan. The section below provides a list of gender indicators included under different project outputs and outcomes.

136. Under component one, the project will collect data on the proportion of women and young people who are included in landscape management committees. The project will also monitor the number of dialogue meetings organized with traditional and clan leaders and other members of the community to sensitize people about the importance of including women and young people in consultation processes during the participatory design of landscape management plans and the need to ensure they are represented in community structures established for landscape and natural resources management.

137. Under component two, the project will collect quantitative data on the proportion of women and young people represented in WUACs and the proportion of women lead farmers selected and trained in climate-resilient agriculture practices. Data will also be collected on the number of trainings organized and the number of agriculture extension agents trained in gender-sensitive extension advisory services. On the development of climate-resilient value chains, the project will collect data on the number of women's groups supported to organize in seed multiplication groups and the number of women and youth entrepreneurs trained in business skills development, financial management, and vocational training. The project will collect data on the number of women and youth entrepreneurs who have been able to enter into new and more lucrative value chains and the number of women and youth entrepreneurs who have been able to access new markets and increase their sales and income. The project will also collect data on the number of dialogue meetings organized between financial institutions and women and youth entrepreneurs, the number of women and young people who are supported to develop business plans, and the number of women-led businesses and businesses owned by young people that received credit. The project will also monitor the number of gender sensitive financial products and services developed by financial institutions engaged by the project.

138. Under component three, the project will monitor the proportion of women users out of the total users of digital early warning and agricultural advisory services. Various gender assessments will also be conducted throughout the project, which will help to capture qualitative information.

139. Under output 3.1, improving legal frameworks and implementation modalities on natural resource management, the project will conduct a gender review of the legal and institutional framework on sustainable land management to identify gaps. Following the review, policy dialogues will be conducted to address gaps identified in the gender review of the legal and institutional frameworks of sustainable land management and to improve coordination between different sectors.

140. There will be a participatory annual project review to assess the progress made in mainstreaming gender in the project implementation. The review will also be used as an opportunity to bring implementing partners together and share experiences on what is working well and what needs to be improved in gender mainstreaming in the project.

7.3. Mitigation of the risks related to SEAH and GBV

141. The project will be guided by FAO's guidelines on gender equality and the prevention of gender-based violence, which are included in the organization's Framework for Environmental and Social Management. The guideline aims to strengthen capacity to prevent, mitigate, and respond to GBV and abuse that may occur in connection with any FAO-supported activity. It also aims to prevent and minimize the unintended negative effects that can increase vulnerability and exposure to GBV, heighten tension between men and women, and ensure proper and timely referral to relevant services for cases of disclosure of GBV and other abuse, including sexual exploitation and abuse, that may occur in connection with any FAO-supported activity.

142. The project will raise the awareness of stakeholders participating in the project about the links between GBV/SEAH and food insecurity in the context of the project in Somalia and opportunities for FAO to prevent GBV/SEAH and contribute to the protection of vulnerable individuals. The project will

build the capacity of staff and other project stakeholders on the rights of serviced communities and the responsibilities of FAO personnel, implementing partners, and suppliers. It will also build their capacity on the guiding principles outlined below, which will be implemented by the project.

143. The guiding principles that will be implemented by the project to address the risks of gender-based violence include: (1) Understand local context and build on local capacities, respect to local culture; (2) Ensure safety and dignity of all people and avoid causing harm; (3) Ensure inclusive access paying attention to issues that prevent people from accessing services and support provided by the project; (4) Ensuring participation and empowerment of men and women by communicating the program activities and engaging them in the project cycle using locally appropriate channels; (5) Coordination and partnership with organizations with GBV/SEAH expertise within the project areas; (6) Ensuring accountability to target population by setting up mechanisms to receive feedback on adequacy of interventions and to understand and address concerns

144. The project will also adhere to a zero-tolerance policy for sexual exploitation, sexual abuse, and sexual harassment. The project will adopt victim-centered feedback, a compliant mechanism, and referral services.

145. FAO Somalia has a dedicated unit dealing with GRM and in-house developed GRM system (Co-Compliance, Complaint and Feedback) to handle complaints and feedback, and associated policies. CoCO is a system that integrates and manages the data on compliance, complaints and feedback gathered via the different tools available (hotline, call centre, TiMO-monitoring via digital solution, SMS surveys, emails, etc). The CoCo system enables FAO to respond to communities' concerns systematically and timely, thus increasing community voice and power. CoCO is accessible and responsive to vulnerable people, including women, people with disabilities and other minority groups. FAO Somalia Staff who handle the CoCO system are trained in gender sensitivity as well as on Prevention of Sexual Exploitation and Abuse (SEA/PSEA).

146. Beneficiaries are made aware of FAO's toll-free Hotline number, operating on 24hours basis, that they can call at any time to provide feedback, complaint and report cases of fraud, diversion, sexual exploitation, and abuse. Beneficiaries can also lodge complaints or give feedback regarding FAO activities in the field via FAO's Implementing Partners and Local Representatives who are recorded in FAO's E-Platform. Hotline is communicated via several means such as during sensitization and communication sessions, in the consent form, radio campaigns, leaflet, call centre and mandatory bulk SMS Voice messages. FAO's Hotline is in FAO Hargeisa field office and is handled by two FAO staff members who are Somali speakers and speak also local dialect. The Hotline number is toll-free to the callers and covers the entire Somalia thus allowing the most vulnerable to call without cost.

147. Awareness/radio campaigns are launched to accompany all major activities to inform the population at large and beneficiaries specifically of activities, criteria and entitlements associated with participation in FAO projects. Bulk SMS (text and voice) are sent systematically to beneficiaries before activity starts to provide FAO Hotline and entitlement. FAO conducts regular radio Public Service Announcements specific to PSEA/GBV to encourage beneficiaries and communities to report incidents to FAO and provides FAO's Hotline number and information where else to denounce it.

148. FAO Somalia established clear reporting channels and response mechanisms for beneficiaries and community members and favors the direct contact with beneficiaries via the Call Centre, FAO's toll-free hotline, Voice SMS and AAP staff handling CoCo; however other mechanisms are available to communities via elders, implementing partners, district authorities, other platforms managed by other organizations (TalktoLoop, Radio Ergo), and anonymous emails.

149. The GRM will be survivor-centered and gender-responsive and will have specific procedures for SEAH, including confidential reporting and safe and ethical documenting. To ensure the GRM is accessible, inclusive, and survivor-centered, clear information on how to access the GRM will be widely disseminated among stakeholders. The GRM will be designed to be easily accessible to all project stakeholders. Training and awareness-raising sessions will be conducted to ensure all personnel involved in the grievance process understand the importance of a survivor-centered and gender-responsive approach. There will be set timelines to monitor timely responses to grievances submitted. This includes a 10-day period to acknowledge receipt of a grievance and a 30-day resolution period,

during which time efforts will be made to resolve the grievance comprehensively. Detailed information on the mechanisms that will be set up for the prevention of sexual exploitation and abuse, harassment, and grievance response mechanisms is provided in Annex 6 and 7 of the proposal.

Part 8. Gender Action Plan (GAP)

Gender Action Plan of the project " Climate Resilient Agriculture in Somalia **"**				
Project Expected Results	**Indicators and Targets**	**Timeline**	**Responsibility**	**Budget**
GCF Outcome level: Reduced emissions and increased resilience				
ARA1 Most vulnerable people and communities	Core 2: Direct and indirect beneficiaries reached 1,152,142 direct beneficiaries (576,071 women) 972,689 indirect beneficiaries (486,344 women)	By the end of the project (Y7)	FAO	Reaching women beneficiaries requires 50% of total project budget, i.e. USD 47,450,749
ARA2 Health, well-being, food and water security	Core 2: Direct and indirect beneficiaries reached 1,152,142 direct beneficiaries (576,071 women) 972,689 indirect beneficiaries (486,344 women)	By the end of the project (Y7)	FAO	Reaching women beneficiaries requires 50% of total project budget, i.e. USD 47,450,749
ARA1 Most vulnerable people and communities	Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options 629,612 direct beneficiaries (314,806 women)	By the end of the project (Y7)	FAO	Reaching women beneficiaries requires 50% of the project budget for outcome 1 and 2, i.e. USD 38,167,345
ARA2 Health, well-being, food and water security	Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security 899,300 (449,650) direct beneficiaries benefitting from improved access to water	By the end of the project (Y7)	FAO	Reaching women beneficiaries requires 50% of the project budget for output 1.2 and 2.1, i.e. USD 27,150,434

ARA1 Most vulnerable people and communities		Supplementary 2.4: Beneficiaries (female/male) covered by new or improved early warning systems 949,799 direct beneficiaries (474,900 women)			By the end of the project (Y7)							FAO	Reaching women beneficiaries requires 50% of the project budget for outcome 3, i.e. USD 3,036,191	
GAP Expected Outcomes, Activities and Targets													**Cost**	
Project activity/ sub-activity	**GAP activity**	**Indicator**	**Baseline**	**Target**	**Y 1**	**Y 2**	**Y 3**	**Y 4**	**Y 5**	**Y 6**	**Y 7**	**Responsibility**	**Exclusively dedicated for GAP**	**Included in Project Activity**
Component 1: **Outcome 1: Restored landscapes are resilient and sustainably managed** ***Expected gender outcomes: Landscape and natural resource management and governance structures are responsive to the needs of women as well as men in the community***														
Output 1.1 Improved participatory landscape and natural resources management and governance are established at watershed and village levels														
1.1.1 Strengthen the information base for climate-informed local land use planning	N/A													
1.1.2. Develop climate-informed inclusive landscape management plans	Organize community dialogues targeting clan leaders, traditional leaders, men, and women on the importance of including women in landscape management	# of dialogue meetings organized	0	31	X	X						FAO	6,000	

	committees and in consultations to design landscape management plans as well as issues related to SEAH/GBV.													
	Conduct a gender assessment (taking SEAH/GBV risks into account) as part of conflict sensitivity assessment	# of conflict sensitivity assessment including gender assessment	0	1	X							FAO		119,089
	Set quotas for representation of women and young people in consultation meetings on landscape management	Proportion of women and young people participating in landscape management consultation meetings	0	50% for women 30% for young people, half of whom are women	X	X	X	X				FAO		1,236,038.8
	Set quotas for the representation of women and young people in landscape management committees and for participation of women in meaningful positions	Proportion of women and young people in landscape management committees and proportion of women in meaningful positions.	0	50% women 30% young people, half of whom are women	X	X	X	X				FAO		Already included in the project budget, GAP activity not require significant specific budget
Output 1.2. Agricultural and Agro-pastoral Landscapes are restored and under sustainable management														
1.2.1. Conduct landscape restoration through local	Ensure women receive material and technical support for the implementation of landscape management	Promotion of women and young people receiving material and technical support	0	50% for women 30% for young people, half of whom are women		X	X	X	X	X	X	FAO		Already included in the project budget

landscape management committees and community-based associations	Set a quota to increase the representation of women in the landscape management Committees for participation in training	The proportion of women in Landscape Management committees	0	50% for women 30% for young people, half of whom are women		X	X	X	X	X	X	FAO		Already included in the project budget
Component 2: **Outcome 2: Local livelihoods are resilient to climate change** ***Expected gender outcomes: Women in the project districts have improved resilience to climate change***														
Output 2.1. Resilient water supply is secured and sustainably managed														
2.1.1 Strengthen water management capacity at State and local level	Set quota to increase the representation of women in water user association committees (WUAC) and train women on scheme management and basic maintenance, (preventative maintenance)	Proportion of women and young people in water users committees	0	50% women, 30% young people of whom half are women								FAO		Already included in the project budget, GAP activity not requiring significant specific budget
	Training for women in leadership and community dialogues with WUACs on the importance of women's representation and participation. The trainings will focus on influencing an individual's self-confidence, knowledge, or self-awareness while enhancing a woman's capacity to speak and	# of leadership trainings organized for women WUAC members	0	31	X	X	X	X				FAO	5,000	311,250

	to be able to determine what is more likely to work in their situation													
2.1.2. Increase access to water resources and climate-smart irrigation infrastructure	Women will be consulted in the development and rehabilitation of water infrastructures	Proportion of women participating in consultation meetings in the development and rehabilitation of water infrastructures	0	50% of those participating in water infrastructure consultation meetings	X	X						FAO		Already included in the project budget, GAP activity not requiring significant specific budget
	Quotas are set for representation of women and young people in consultation on equitable access of water and conflict prevention mechanisms organized with water users associations	Proportion of women and young people participating in consultation meetings on equitable access to water and conflict prevention	0	50% women, 30% young people of whom at least half are women	X	X						FAO		
	Quotas are set for the number of women and young farmers trained in water saving technologies and efficient use of water in different cropping systems Quotas are set for the number of women and young farmers groups who will be supported to acquire drip irrigation kits and solar operated	Proportion of women and young frames trained in water saving technologies # of women and youth farmers groups who have acquired drip irrigation kits or solar pumps	0	50% women trained, 30% young people trained of whom half are women	X	X	X	X	X	X		FAO		149,042

	pumping systems through the project													
Output 2.2. Local communities practice locally-specific Climate Resilient Agriculture														
2.2.1 Disseminate CRA practices to farmers	Make a conscious effort to select women and young people among the lead farmers who will receive TOT and facilitators training, by setting a quota system, as they are better able to reach other women farmers.	Proportion of women and youth lead farmers trained # of additional women and youth farmers reached per trained lead farmers	0	50% women 20% youth of whom half are women 20 addition women and youth farmers reach per trained lead farmer/facilitators	X	X	X	X	X	X		FAO		1,848,116
2.2.2 Build the capacity of MoA at Local, State and Federal level to support communities in the adoption of CRA practices	Conduct a gender assessment of the rural advisory services to identify barriers and good practices to improve women's access to advisory services in the country and develop a gender strategy for the agriculture extension department.	# of gender and rural advisory services assessment conducted	0	1	X							FAO		8,000
	Organize cascading down capacity-building training of agriculture extension staff at national state and regional levels on how to develop and deliver gender-sensitive advisory services.	# of trainings organized # proportion of women farmers reached by trained extension agents as a percentage of the total farmers they have reached	0	7 trainings organized At least a 20% increase in proportion of women farmers reached by trained extension agents out of the total farmers they have reached		X	X	X	X	X		FAO		20,000
Output 2.3. Farmers derive additional income from climate resilient value chains														

2.3.1 Improve access to climate resilient inputs for crop and livestock production	Conduct a gender seed value chain analysis to understand sources of seed for women and men, ability to pay, and storage capacity in order to develop a subsidy system that takes account of the needs of both men and women.	# of gender-sensitive seed value chain studies conducted	0	1	X							FAO	30,000	
	Identify/ organize women groups to engage in seed multiplication, nurseries and feed production cooperatives and provide them with training	# of women seed multiplication/ nurseries/ feed production groups supported	0	30		X	X	X				FAO		1,203,980
2.3.2. Build the capacity of producer groups to develop sustainable climate-informed business plans	Identify value chains where women and youth are overrepresented and have a potential for growth and provide support to women and youth entrepreneurs in vocational and business skills development, and investment readiness and link them to financing institutions and markets	# of women entrepreneurs supported by the project # of youth entrepreneurs supported by the project # of women and youth entrepreneurs joining new value chains # of women and youth entrepreneurs	0	50% of the total target number of entrepreneurs (for women) 30% of total target number of entrepreneurs half of whom are women (for youth)		X	X	X	X	X	X	FAO		1,641,558

		accessing new markets # of women and youth entrepreneurs who have increased their sales and income												
2.3.3 Increase MSME, cooperatives and farming group access to agricultural credit	Engage financial institutions to influence development of financial products that are suitable for women and youth agripreneurs, such as non-collateral based credit systems, for example loans through group guarantee systems.	# of dialogue meetings organized with financial institutions and women and youth entrepreneurs	0	6			X	X	X			FAO		6000
	Support women and youth agripreneurs to develop business plans using FAO's rural invest tool and Organize meetings between women business owners and financial institutions to help them present their business plans.	% of women and youth agripreneurs supported to develop business plans	0	60				X	X	X		FAO		36,000
	Train women and youth entrepreneurs/cooperative members/VSLA members on financial readiness that	# of women and youth trained on financial readiness	0	50% of the total target number of entrepreneurs/ cooperative/VSLA members (2,100 women)		X	X	X	X			FAO		319,376

	prepares them to access credit	# women who are accessing finance	0	50% of the total target number of entrepreneurs/ cooperative/VSLA members (1,750)		X	X	X	X			FAO		
	Train communities (including SEAH/GBV issues) by using GALS approach	% of VSLA members received training (including SEAH/GBV issues)	0	100			X	X	X			FAO	200,000	
2.3.4 Increase all-season access to market for smallholder producers, cooperatives and farmer groups	consultations will be organized with women groups on the construction of market infrastructure, such as rural roads and district and village-level regrouping points for small ruminants Gender-sensitive market infrastructure such as sex-segregated sanitation facilities and measures to ensure safety and security in the market place will be implemented	# of consultation meetings held with women groups on construction of the market infrastructures Evidence of measures taken to ensure gender sensitivity of the market infrastructures	0	10				X	X	X	X	FAO		Already included in the project budget, GAP activity not requiring significant specific budget
Component 3 **Outcome 3 : An improved institutional enabling environment for sustainable landscape management and climate-resilient agriculture is in place at State and Federal Levels** ***Expected gender outcomes: Early warning systems and services are more sensitive to the needs of women farmers***														
Output 3.1. NRM legal frameworks and implementation modalities are improved														
3.1.1 Update legal and institutional	conduct a gender review of the legal and institutional framework on	# of reviews conducted	-	1	X							FAO	30,000	

frameworks for sustainable landscape management	sustainable land management to identify gaps												
3.1.2 Strengthen policy dialogue and coordination between sectoral ministries at State levels	conduct policy dialogues to address gaps identified in the gender review of the legal and institutions frameworks of sustainable land management and to improve coordination between different sectors	# of dialogues conducted	-	6 (one policy dialogue meeting per state)		X	X					FAO		12,000
3.1.3 Strengthen the capacity of the MoECC to access and channel climate finance	Promote women's staff participation in training	% of women participants	0	30 % women				X	X	X		FAO		496,722
3.1.4 Build capacity for the monitoring, assessment, analysis and early warning related to the impacts of climate on food and nutrition security	Promote women's staff participation in training	% of women participants	0	30 % women	X	X	X					FAO		164,390

3.1.5 Build capacity of MoAI for climate informed irrigation planning	Promote women[57]'s participation in consultation	% of women and youth participants	0	50 % women			X	X				FAO		10,000
Output 3.2. Increased access to climate information among last mile users														
3.2.1 Collect, disseminate and share relevant climate and land data to support decision making at all levels	Conduct a gender assessment on how men and women farmers access information on agriculture and the barriers to use digital services to access information on agriculture, including good practices and approaches that facilitates access and use of digital information for agriculture decision making by men and women farmers.	# of assessment on gender and digital services in agriculture	0	1		X						FAO	18,000	
	Use the gender assessment to inform the development of the early warning system and other digital agriculture advisory services. Ensure the information shared through the digital platform is relevant to women and the value chains they are	Proportion of women users out of the total users of the early warning and digital advisory service	0	50% of total users			X	X	X			FAO		500,000

[57] Including female youth

	engaged in and the format is accessible. Organize sensitization events to encourage the use of digital tools by women to access information on agriculture.												
Project management													
	Conduct training on gender mainstreaming in projects, gender-based violence and links with food insecurity, FAO's guideline and key principles on prevention of sexual exploitation, abuse and harassment, responsibilities of FAO personnel, partners and suppliers under the guideline for FAO staff and implementing partners	# of trainings (including SEAH/GBV related risks) organized	0	6 trainings	X	X	X	X	X	X		FAO	72,000	
	Setup a project grievance response mechanism and train project staff and partners involved in grievance response process	# of trainings organized # of cases SEAH and GBV cases reported # of reported SEAH and GBV cases resolved/ addressed in a timely manner	0	6 trainings	X	X	X	X	X	X		FAO	72,000	

	Raise awareness of various community groups participating in the project activities (e.g. natural resource management committees, Wash committees, cooperatives etc) on GBV, prevention of sexual exploitation and abuse and grievance response mechanisms	# of sensitization events conducted	0	24	X	X	X	X	X	X		FAO	7,200	
		# of SEAH and GBV cases reported using the grievance response mechanism	0	TBD	X	X	X	X	X	X	X	FAO	70.000	
…	Conduct annual gender reviews to review progress in mainstreaming gender in the project and share lessons on what is working well and what needs improvement Annual gender reviews will be used to revise the training on prevention of sexual exploitation and abuse	# of gender review reports produced # of review meetings organized	0	5		X	X	X	X	X	X	FAO	30,000	
	Engagement of International Gender, Social Inclusion and IP Specialist (part time) & National Gender Specialist (full time)				X	X	X	X	X	X	X	FAO	578,676	
TOTAL													1,118,876	8,082,562

APPENDIX 1: FIELD CONSULTATIONS: PARTNERS AND QUESTIONS

1. Consultation Partners

Federal Member State	Region	District	Location	Date	Type of Stakeholders	Female Participants	Male Participants
Galmudug	Mudug	Galmudug, Mudug, Hobyo	Hobyo	March 6	Communities	3	7 (2 Youth)
Hirshabelle	Middle Shabelle	Hirshabelle, Middle Shabelle, Cadale	Cadale		Communities		
Jubaland	Lower Juba	Jubaland, Lower Juba, Kismayo	Jeerinley		Communities	1	9
Puntland	Nugaal	Puntland, Nugaal, Eyl	Eyl		Communities Smallholder farmers		6
Puntland	Nugaal	Eyl	Godobjiran		Farmers' cooperative		
Puntland	Nugaal	Puntland, Nugaal, Garowe	Cuun Village		Communities : Cuun Cooperative	1	4
Puntland	Nugaal	Garowe	Cuun Village		Small farmers' community	3	13
Puntland	Nugaal	Garowe	Dangoroyo village		Farmers' cooperatives, small holder farmers	4	10
Toghdeer	Odweyne	Somaliland, , OdweyneOdweyne	Qaloocato and Abdi Farah Villages	March 11	Communities	10	20

2. Questionnaire for telephone calls

Series Number

2. Date

3. Name of Provider

4. Telephone Number

5. Call Status Reached- participated in survey

Reached- not willing to be interviewed

Wrong number

Not answering

Switched off

Inexistent

6. Beneficiary name provided

7. What is your name as registered by the NGO?

8. Name match No Yes N/A

9. Gender of respondent Female Male

10 Age of the respondent?

11. What is the relationship of the respondent with the head of the household? A) Respondent is the head of the household. B) The respondent is the spouse of the head of the household C) The respondent is the child of the head of the household D) The respondent a sibling or relative of the head of the household E) others, specify

10. District provided

11. Which district do you live in?

12. District match No Yes N/A

13. Village provided

14. Which village do you live in?

15. Village match No Yes N/A

16. Are you the owner of this phone number? Yes No

17. Are you a farmer?

18. do you own land for farming?

19. which member of the household has the ownership right? (the male head of the household, the spouse, children?) Do different members of the household have ownership rights over different plots of land?

19. What type of seeds did you grow?

20. Who in the household makes the decision about the type of seeds to grow? (the male head of the household, the spouse, children?) And why?

20. What are the main types of wealth in your community (for example, rich, middle-class, or poor households)?

21. what are the Main sources of household income?

22. Who in the household controls each of the different sources of household income? (the male head of the household, the spouse, children) Are specific income sources solely controlled by the male head of household? Why? Are there specific sources of income controlled solely by women in the household? Why?

22. Which breed of livestock do you prefer? Which breed of livestock is preferred by men in the household? Which breed is preferred by women in the household?

23. Do you received any livestock and agriculture trainings?

24. Which member of the household usually participates in livestock and agriculture training? Why?

24 If yes, do you receive any GAP and nutritional training?

25. Which member of the household usually receives the GAP and nutritional training? Why?

25 If yes, do you receive any treatment and vaccination training?

26. which member of the household usually receives treatment and vaccination training? Why?

26 Do you have any market to sell livestock and livestock products in your villages?

27. Which member of the household usually sells livestock and livestock products in the village? What kind of livestock and livestock products are sold by male members of the household? Why? Which type of livestock and livestock products are sold by female members of the household? Why?

27 if yes, how frequently do you visit the market? How frequently do men in the household visit the marketplace? How about women?

28. On average, how much do you take to sell per visit?

29. Is there a difference between the amount sold by male and female members of the household per visit? Can you explain the difference?

29. On average, how much do you sell annually?

30 How much do women members of the household sell on average annually? How about male members of the household?

30. How do you transport the produce to market? How do men in the household transport produce to market? How about women?

31. Who does unpaid care work activities in the household, for example, looking after children and the elderly, cooking, fetching firewood and water, cleaning and washing? How many hours per day do women spend doing these activities? How about men?

32. What are the kinds of activities performed by women in crop and livestock production and processing in the household?