GCF DOCUMENTATION COUNTRIES

Readiness Proposal

with FAO for Libya

21 November 2024



Readiness and Preparatory Support

Proposal Template

Proposal title: Strengthening Governance and Institutional

Framework for Integrated Climate-change, Water, Energy and Food Security Strategies in

Libya.

Country(ies): Libya

National Designated Authority(ies): Ministry of Environment

Delivery Partner: Food and Agriculture Organization of the United

Nations (FAO)

Date of <u>first</u> submission: 8 March 2024

Date of <u>current</u> submission: 13 September 2024

Version number: Version #3



Section 1. Summary

1.1 Country submitting the proposal	Country name:	Libya
	Name of institution representing NDA or Focal Point:	Ministry of Environment
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1.2 Date of initial submission	8 March 2024	
1.3 Last date of resubmission	13 September 2024	Version number V.3
1.4 Institution that will implement the Readiness grant	□ National Designated Authority ☑ Delivery Partner	
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READINESS AND PREPARATORY SUPPORT

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1.5 Title of the Readiness support proposal	Strengthening Governance and Institutional Framework for Integrated Climate-change, Water, Energy and Food Security Strategies in Libya.	
1.6 Readiness objectives of the proposal	 ☑ Objective 1. Capacity Building ☑ Objective 2. Strategic frameworks ☐ Objective 3. Adaptation planning¹² ☐ Objective 4. Pipeline development ☑ Objective 5. Knowledge sharing and learning 	
1.7 Total requested amount and currency	USD 999,790.00	
1.8 Implementation period3	24 months	
1.9 Is this request a multiple-year strategic Readiness implementation request?4	□ Yes ⊠ No	

¹ ESCWA, 2016. The water, energy and food security nexus in the Arab region. https://www.unescwa.org/sites/default/files/pubs/pdf/water-energy-food-security-nexus-arabregion-english.pdf

²Please note that for adaptation planning proposals, only the box for objective 3 may be ticked.

³The implementation period shall begin on the date the grant is effective.

⁴Please note that proposals for adaptation planning support (objective 3) cannot be submitted as multiple-year strategic Readiness proposals.

1.10 Brief summary of the request (maximum length: 500 words)

i) Climate background and institutional and policy context:

Water, energy, food and ecosystems form an interconnection at the heart of sustainable development in Libya. Agriculture is the largest consumer of freshwater resources, and water is used to produce most forms of energy yet is also one of the largest energy consumers through groundwater extraction.

The country is naturally exposed to an absolute scarcity of water and is expected to face a severe intensification of water shortage in the upcoming years amidst a changing climate. Climate change poses a significant threat to Libya's economic development and sustainability, and climate variability is likely to increase the impacts of natural hazards on agriculture production, food and water security.

Governance continues to face critical challenges, given the current political context. Libya does not have a systematic Water, Energy, Food and Ecosystems (WEFE) Nexus strategy due to years of political instability; rather, water, energy, food and ecosystems are being managed separately due to the lack of national coordination mechanisms and strategic frameworks for cross-cutting sectors to facilitate collaboration and exchange of data and information; developing sectoral strategies is the main challenge for the concerned Ministries and national institutions. Regulation to control the use of groundwater for agricultural purposes is absent, and alignment of water, food-security and energy policies to the national climate change strategy and plans for sustainable development is necessary. Additionally, due to the conflict, baseline information relevant to the four sectors has not been updated since 2009 and specific data on the impact of climate change on these sectors does not exist.

Recently, however, during World Food Day 2023, the Ministry of Agriculture and Livestock (MoAL), the Ministry of Water Resources (MoWR), the Ministry of Electricity and Renewable Energy (MoERE) and the Ministry of Environment (MoE) established a Libyan Initiative for Water, Energy and Food (LIWEF-Libya) as a strategic framework for collaboration and partnership with all national actors involved in the water, energy, agriculture, and environment sectors towards National Collaborative, Participatory and Prospective Water, Energy and Food Security Strategies within climate changing conditions in Libya.

ii) Problem statement:

Despite the recent progress made toward taking a more collaborative, holistic approach to addressing climate change, without updated baseline information and specific climate change impact data on affected sectors and a national coordination mechanism to ensure effective structure, collaboration, knowledge sharing and communication channels, the development and implementation of clear, interconnected strategies and meaningful progress towards a more climate resilient country will remain out of reach.

iii) Goal and objectives:

The proposed Readiness project leverages past and current initiatives to enhance stakeholder coordination, conduct baseline studies, and promote an open-source database to address climate change challenges in Libya's water, energy, food, and ecosystems sectors, while integrating climate risk into national strategies and policies.

The proposed readiness project aims to:

- Strengthen the LIWEF-Libya framework and integrate an ecosystems management component to become the LIWEFE-Libya framework
- Introduce a climate risk approach to the management of the waterenergy-food-ecosystems nexus aligned with current reforms and national strategies;
- Develop stakeholder coordination mechanisms for the agriculture, water, energy, and environment sectors, including relevant national institutions, the private sector, Civil Society Organizations (CSOs) and academia;
- Develop baseline studies and climate risk and vulnerability assessment that serve as pillars for future strategies and sectorial strategic frameworks;
- Further empower the use of the recently established MerWat-Libya Geospatial Platform through the project's activities of collecting, sharing, and dissemination of knowledge between water, energy, environment and food sectors on climate change impacts and scenarios in the country.
- Develop a WEFE-Nexus concept note and pre-feasibility study.

iv) Direct and indirect beneficiaries:

The direct beneficiaries of this proposal are the *Ministry of Environment, Ministry of Agriculture and Livestock, Ministry of Water Resources and Ministry of Electricity and Renewable Energy.* The indirect beneficiaries are the *Man Made River Authority, Libyan Centre for Remote Sensing and Space Science, Libyan Meteorological Centre, University of Tripoli, University of Sebha, Agricultural Research Centre of AlBayda, and Academic sectors in Alkhofrah, Ghadames, and Alweahat. Indirect beneficiaries include civil society organizations* 5, farmer-based associations, Cooperatives, and Societies 6, and key private sector players in the agriculture, environment, energy and water management sectors with large market share, research and development and technology transfer capabilities, and public sector development funds and private banks/commercial lenders in Libya engaged in water, energy, environment and agriculture project development.

⁵Libya Agriculture and Environment Organization; Libyan Organization for Organic Agriculture; Wan Mahogaj Association for Heritage and Culture; Desert Knights Association for Youth Development in the municipality of Thala; Wa'atamah Association for the Protection of Palm Trees in Al-Jufra; and Qatroun Youth Foundation for Change

⁶ General Union of Libyan Farmers and Breeders; Agriculture Cooperative in Hun; Agriculture Cooperative Ghat Society; Agriculture Cooperative in Albouwanees;
Agriculture Cooperative of Wadi Ashshati: Fezzan Grain Producers Association: Sebha Grain Producers Association: and Hathitha Agricultural Association

1.11 List of abbreviations

Abbreviation	Meaning
CEDAW	Convention on the Elimination of all forms of Discrimination Against Women
CSERS	Center for Solar Energy Research and Studies
CSOs	Civil Society Organizations
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GCF	Green Climate Fund
GECOL	General Electricity Company of Libya
GFDRR	Global Facility for Disaster Reduction and Recovery
GNU	Government of National Unity
LCRSSS	Libyan Center for Remote Sensing and Space Science
LIWEF	Libyan Initiative for Water, Energy and Food
LIWEFE	Libyan Initiative for Water, Energy, Food and Ecosystems
LP	Libyan Parliament
MoE	Ministry of Environment
MoWR	Ministry of Water Resources
MoERE	Ministry of Electricity and Renewable Energy
MoAL	Ministry of Agriculture and Livestock
MMR	Man-Made River Authority
MoOG	Ministry of Oil and Gas
NDC	Nationally Determined Contributions
NPC	National Planning Council
NCCS	National Climate Change Strategy
NCCC	National Committee on Climate Change
NCP	National collaborative platform
NESDB	National Economic and Social Development Board
NDA	National Designated Authority
NFP	National Focal Point

NSREEE	National Strategy for Renewable Energies and Energy Efficiency
RE	Renewable Energy
REAOL	Renewable Energy Authority of Libya
REHC	Renewable Energy Holding Company
RPBA	Recovery and Peacebuilding Assessment
SCT	Stakeholder Coordination Team
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollars
WB	World Bank
WEFE	Water, Energy, Food and Ecosystems nexus

Section 2. Situation analysis

2.1. Country's background and context

Since the end of 2020 and following the Libyan Political Dialogue Forum Agreement in Geneva, the Government of National Unity (GNU) was established in March 2021. One of the primary responsibilities of the GNU has been to improve the equitable delivery of services to Libyan citizens and to foster cooperation and exchange knowledge and information between all involved Ministries and institutions in the four vital sectors - environment, water, energy, and agriculture - to achieve harmonized sectoral strategies. The context of these four vital sectors is shaping all GNU initiatives.

Libya covers an area of 175,954 thousand hectares, but only 0.97% is arable land and 8.72% is agricultural area. This agricultural area increased from 13,025 thousand hectares in 1970 to 15,350 thousand hectares in 2019 growing with an annual rate of 0.34%. The total irrigated area is 372 thousand hectares of which 78% are cereals producing 209,000 tons in 2020. Permanent crops increased with an annual rate of 0.20% reaching 330,000 hectares in 2019. Agricultural productivity is impeded by limited renewable water resources, climatic limitations, and poor soil quality. As a result of these constraints, Libya relies on imports for around 75% of its food. The sector contributes about 1.9% of gross domestic product (GDP) and employs 17% of the population. Rainfed cultivation is dominant in sparsely populated semi-arid areas while larger-scale agriculture in the Mediterranean region depends on water resources from non-renewable aquifers.

Internal renewable water resources per capita for Libya is 106 cubic meters per year and is globally ranked as the sixth most water stressed country, which implies that Libya is experiencing an absolute water scarcity. According to Global Facility for Disaster Reduction and Recovery (GFDRR), absolute water scarcity is classified as a high hazard risk and is applicable to the whole country, with droughts expected to occur every 5 years. This situation, exacerbated by climate change, poses a growing threat to national water security and economic development and food security. Absolute water scarcity and land

degradation constitute a significant threat to agriculture sectors which are the major water user, affecting all dimensions of food security such as food availability, food accessibility, food utilization and stability of food systems.

In 2020, water supply in Libya was estimated at 3,820 million cubic meters per year. The sources are comprised largely (95%) of non-renewable groundwater with a total of 3,001 million cubic meters per year and by supply from 19 dams with a total storage capacity of 390 million cubic meters per year. With demand estimated at around 4,309 million cubic meters per year, it becomes evident that there is a significant and concerning deficit.

In this context, agricultural water withdrawal is estimated at 404,110.3 million cubic meters per year. This agricultural consumption comprises 79% of total freshwater resources, making agriculture the largest consumer of water use. Water use in agriculture is highest in the south of the country (Fezzan region) where agricultural production relies on irrigation.

In addition to water use, the agricultural sector is also an important energy user. Energy is an essential component for agricultural and water sectors' growth and viability, and electricity drives food security and exports.

Current electricity production in Libya relies on polluting and non-renewable sources such as oil and natural gas, despite the country's high potential for renewable energy. In fact, electricity production is the primary industrial cause of air pollution in the country, putting more carbon dioxide into the air than any other sector. In the face of climate change conditions, the current status quo will have exacerbated impacts on the environment, water, energy, and agriculture sectors.

Libya is heavily susceptible to the impacts of climate change. The country is one of the driest countries in the world; less than 2 percent of the country receives enough rain to support agriculture, and only 5 percent of the country receives more than 100 mm of rainfall per year. Regional downscaled and FAO data suggest that the Maghreb subregion, which includes Libya, will witness some of the most severe changes in precipitation owing to climate change ^{7,8}. Agricultural areas in the Maghreb face a temperature increase ranging from 1.1 °C to 2.5 °C (2017 data). Under RCP 8.5, a trend of increasing number of hot days is expected by 2100. Projected annual temperature increases between 1.5 °C and 2 °C are estimated to reduce crop yields by up to 30 percent by 2060 °P.

With an expected increase in both temperatures and number of drought days, agricultural draws from aquifers are likely to increase, and rain-fed agriculture and pastoralism may no longer be viable for the rural populations in semi-arid areas. On the other hand, projected increases in the frequency of extreme weather events such as floods,

⁷United Nations Economic and Social Commission for Western Asia (ESCWA) et al. 2017b. The Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR), https://riccar.org/

⁸FAO. 2012. Actions to Adapt to and Mitigate Climate Change Impacts on Natural Resources: the Case of Fisheries and Aquaculture, Forestry, and Livestock in the Near East. FAO Regional Conference for the Near East Thirty-first Session.

⁹Atlantic Council - Climate Profile: Libya: https://www.atlanticcouncil.org/programs/ Climate profile: Libya.

sandstorms, and dust storms are likely to damage fields and irrigation infrastructure and further reduce crop yields.

Libya, together with Tunisia and Egypt, is one of the countries in the Arab region that is most at risk to sea level rise and the expected seawater intrusion to groundwater resources and coastal agriculture¹⁰. Libya's coastal mixed farming systems are at the same time highly exposed to increased heatwaves and drought¹¹. The salinization of soil due to sea level rise and floods is expected to affect agricultural production.

The majority of the most climate-vulnerable populations with low adaptive capacities practice dryland mixed farming systems, where diversification creates some resilience for farmers. Wheat and barley dominate these systems, along with the production of olives, dates, onions, melons and potatoes. FAO analysis suggests that limited options currently exist to maintain agricultural production amidst increasing frequency of heatwaves and drought and given limited arable land and low water availability ¹². Diversification is also offered by the proximity of dryland mixed farming systems to major Libyan cities such as Tripoli and Benghazi. However, a high degree of internal instability, pressures from migration flows as well as water scarcity and other natural resource pressures create high competition for livelihoods.

Furthermore, desertification, driven by a combination of factors such as high rates of urbanization and overexploitation of water resources and natural vegetation, poses risks of further loss of already limited arable land, potentially impacting food security.

The most important future challenge for Libya is to sustainably provide water, energy, and food security for the continuously increasing population amidst a changing climate. The present readiness project will support the NDA and other Libyan Governmental institutions involved in these key sectors by further building their capacity and equipping them with the data and tools necessary to provide new approaches for developing integrated WEFE actions adapted to the current and future contexts of Libya and supporting and aligning the relevant reforms and national climate-related strategies.

This support will complement and build on the previous Readiness grants received in the country. In December 2018, Libya received support from the GCF to strengthen its readiness for climate finance, which led to the establishment of a National Designated Authority (NDA) and positioned climate change as a key issue to be integrated into the vital sectors' strategies. The country's capacity to better confront climate change issues has been strengthened by establishing the NDA, setting up a coordination mechanism to support its activities, establish a non-objection procedure, and mobilize and engage the different stakeholders in a consultative process. Moreover, a communication and

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¹⁰FAO, 2012. Actions to Adapt to and Mitigate Climate Change Impacts on Natural Resources: the Case of Fisheries and Aquaculture, Forestry, and Livestock in the Near East. FAO Regional Conference for the Near East Thirty-first Session.

¹¹FAO, 2018, Impacts of climate change on farming systems and livelihoods in the Near East and North Africa. Cairo, FAO. Available online: www.fao.org/3/ca1439en/CA1439EN.pdf.

¹²FAO, 2018, Impacts of climate change on farming systems and livelihoods in the Near East and North Africa. Cairo, FAO. Available online: www.fao.org/3/ca1439en/CA1439EN.pdf.

awareness-raising strategy has been established with the implementation of some communication actions and tools.

In 2020, a second readiness support grant was delivered based on Libya's plan to further strengthen the capacities of its NDA by endowing it with a permanent secretariat and through the development of strategic documents, such as the national climate change strategy. The NDA was the main beneficiary of the project that was aiming to capitalize on the results of the first readiness, through the development of strategy to guide government action on climate change. It permitted to identify and strengthen the capacity of potential national entities to meet the accreditation requirements of the GCF. It contributed to strengthening country ownership and harnessing the role of the stakeholders in supporting the country mobilization of resources for climate change projects.

2.2. Institutional and Policy Framework

i) Policy framework

Nationally Determined Contribution (NDC) and National Climate Change Strategy (NCCS)

Libya has elaborated neither a national climate change strategy nor a National Determined Contribution (NDC). Currently, within the framework of the Readiness support (LBY-RS-002), there has been progress made in elaborating the necessary studies, modeling efforts, and other data-gathering efforts in order to develop an ambitious climate change strategy, including long-term orientations to achieve net-zero emissions. This climate strategy will be based on precise knowledge of the relevant sources of emission and an assessment of the associated opportunities and risks for companies business models. It will create a framework to guide and provide guidance for the further development of private sector contributions to implementing the NDCs through the country program.

Libya's environmental policies

Over the past decades, progress in practically addressing environmental issues in the Libya has been extremely limited after the Environmental Protection Law No. 7 of 1983 and the Improvement Law issued in 2003. This has led to an exacerbation of environmental threats and increased losses. Several factors contribute to the worsening challenges, including Libya's vast land area, the failure of governmental policies to address environmental developments, the lack of prioritization of environmental issues in national transformation programs, the absence of comprehensive government plans and programs, as well as insufficient allocations for environmental projects and programs addressing impacts, mitigation, and adaptation. Furthermore, the structural and institutional instability in the environmental sector has led to repeated transfers of its oversight to multiple authorities. The sector has been linked to various legislative and executive bodies, including the Ministry of Health, the Ministry of Oil, municipalities, a Technical Center for Environmental Protection, the General Environmental Authority, it has also been linked to legislative bodies previously, and finally, the Ministry of Environment. These shifts have scattered the sector's authority, all in the absence of a clear national vision and a stable national strategy, coupled with an inability to harness scientific and technological advancements in this field. Libya has actively engaged in

international environmental protection efforts and climate change mitigation. The country signed the UN Framework Convention on Climate Change on June 29, 1992, ratified it on September 12, 1999, approved the Kyoto Protocol on August 24, 2006, and signed the Paris Agreement on April 22, 2016, ratifying it in August 2021. Additionally, Libya is a member and partner in various international environmental protocols and conventions.

Libyan National Strategy for Renewable Energies and Energy Efficiency - NSREEE (2023-2035)

NSREEE was launched on December 11, 2023, and aiming to create a conducive environment for the development of renewable energy and improve energy efficiency. It will enable Libya to fulfill the security of energy supply for sustainable economic and social development that will not be impaired by the depletion of energy resources or environmental degradation. NSREEE is also aiming to maximize the utilization of renewable energy resources by integrating them into the national energy mix and increase awareness of consuming energy effectively but also create a 'free' energy supply that can be used for the development of the country and further increase the standards of living. The strategy will also contribute to human capacity building and the development of technology for renewable energies and will increase public awareness of renewable and energy efficiency. An implementation plan was also established to identify and define the specific activities, timelines, and institutional responsibilities to achieve each policy and measure in the action plan and to coordinate the implementation of these activities with the stakeholders. A monitoring and evaluation of NSREEE implementation will be conducted by the General Committee for Industry, Economy and Trade through the establishment of a specialized unit for monitoring and evaluation. At the higher level, energy indicators and renewable energy targets will be monitored and evaluated through the General People's Committee for Industry, Economy and Trade.

Libya Agriculture and Food Security policy

For the Libyan economy, the agricultural sector used to play a bigger role: its contribution to the GDP was 26 percent in 1954, but in 2008 - the last available data - it was only 1.8 percent. This figure clearly indicates the lack of a clear vision and strategy for the sector. Thus, Libya has experienced critical threats to food security since the mid-1970s due to the increasing demand for agricultural products, demographic growth, and a significant rise in revenue after oil extraction in the 1960s. The situation was further complicated by increasing global food prices and a gradual decrease in focus on the agricultural sector, coupled with financial challenges. These issues intensified food shortages, leading to greater dependence on imports to meet the gap between domestic demand and supply. The contribution of agriculture to the Gross Domestic Product (GDP) remained modest, at no more than 10.6%. Government strategies over the years have not adequately secured food security for the population. Libya's food security is increasingly threatened by climate change, resource scarcity, and environmental degradation. Factors like land degradation, labor availability, and water supply shortages, exacerbated by population growth and displacement, hinder achieving food security, especially in conflict situations.

The National Economic and Social Development Board is responsible for preparing the national food security strategy within the complex challenges including climate change, water resources management, nutrition, and the need for inclusiveness and preparedness for emergency responses.

During 2023, several meetings held at the headquarters of the National Council for Economic and Social Development in Tripoli² showcased development partners' resolve

to dovetail efforts and strengthen partnerships to launch the process for Libya's national food security strategy. To achieve this goal, a coordination working group and a technical task force to drive the strategy have been established. As a first step, support from international organizations and Donors is ongoing. The proposal will facilitate the coordination of the whole process.

Libya water policy

In Libya, serious efforts to address the water deficit problems were made including the execution of major hydrogeological studies at basin level and master plans for the expanding urban centers. A National Water Strategy covering the period 2000 –2025 was prepared to cope with the water crisis. The strategy emphasized the importance of managing water demand through appropriate agricultural policies and by adopting an effective water pricing system along with improving and enforcing legislation. On the supply side, the strategy emphasized the need to create additional water resources, particularly from non-conventional sources such as desalination and wastewater treatment or through inter-basin water.

On January 23, 2024, the Libyan Ministry of Water Resources unveiled its intention to update its water security strategy and started looking for support from international organizations and Donors. The update will be through the improvement of the regulatory, legislative and strategic water framework with the following objectives and in a context where political instability is making it more difficult to combat climate change:

- Minimize Libya's water budget deficit,
- Raise the level of institutional performance,
- Meet the challenges of climate change,
- Manage and reduce the impacts of development on the environment,
- Maintain and enhance biodiversity and the ecosystem,
- Manage and reduce water losses,
- Solve long-term water allocation problems, and
- Contribute to sustainable economic growth.

Libyan Initiative for Water, Energy, and Food (LIWEF-Libya):

During the World Food Day 2023, the Ministry of Water Resources and the Ministry of Agriculture and Livestockproposed to launch the Libyan Initiative for Water, Energy, and Food (LIWEF-Libya) as a strategic framework for collaboration and partnership with all national actors involved in the water, energy, and agriculture sectors towards National Collaborative, Participatory and Prospective Water, Energy, and Food Security Strategies in Libya. LIWEF-Libya aims at giving new approaches adapted to the current and future contexts of Libya by supporting and aligning the reforms and national strategies in progress and in particular energy, water, and food security strategies in a context of climate change. During the first coordination meeting between the two Ministries held one month after launching the initiative, it was suggested to deeply partner with the Ministry of Environment. This proposal envisions to bolster the LIWEF initiative by integrating environment, climate and ecosystems, transforming it to become the Libyan Initiative for Water, Energy, Food and Ecosystems (LIWEFE).

ii) Institutional framework

Climate related issues fall under the authority of the Ministry of Environment (NDA), General Government Authority; the Ministry of Agriculture and Livestock; the Ministry of

Water resources; and the Ministry of Electricity and Renewable Energy. Libya coordinates its climate change issues and projects through its National Committee for Climate Change, which is headed by the Ministry of Environment, with its most important stakeholders(sectors) represented in the committee. Sectors represented in the Committee include the Ministry of Agriculture and Livestock, Ministry of Water Resources, Ministry of Oil and Gas, Energy, and Research centers.

The Ministry of Environment is responsible for executing government policies and its vision regarding environmental aspects. Where the ministry's role lies upon providing a set of regulations and acts that embraces environmental protection and protect environmental heritage from violations. Among its affiliated entities, the National Committees regarding the implementation of international climate and environment agreements supported by the Office/administration of Development and Climate Change and the Administration of Environment.

The National Economic and Social Development Board (NESDB) is a State of Libya institution that focuses on Economic and Social development and policy reform. It is supporting the government by proposing initiatives and economic and social policies, evaluating their impacts and encouraging social dialogue and promoting the principle of decentralization, to achieve stability and sustainable development. NESDB is responsible for preparing the national food security strategy. In the meantime, the National Planning Council (NPC) of the Libyan Parliament (LP) has a special team responsible for developing agricultural, marine resources, and food industry policies.

Ministry of Agriculture and Livestock exercises the responsibility of implementing policies and plans, and setting the necessary programs to implement the legislation in force in the fields of agriculture and livestock in accordance with the scientific method that ensures the achievement of society's goals and following up their implementation to achieve the required goals and results. The ministry monitor the changes in natural resources and take the necessary measures to preserve and develop them. The department implement legislations related to agriculture, animal and marine wealth, in a manner that ensures their compliance with economic and environmental changes, and protecting agricultural, animal and marine lands. The department set the programs for developing and protecting agricultural lands, pastures, forests, reserves, water and fish wealth in coordination with the relevant authorities and follow up their implementation.

Ministry of Water resources is responsible for executing government policies regarding water resources preservation through defining regulations and maintaining the state's water resources. The department oversees the study, monitoring and evaluation of groundwater and surface water resources. A key role of MWR is the follow up of irrigation and drainage activities in the country with focus on the efficient use of water resources and advising on the most suitable irrigation systems and the assessment of the drainage systems when applicable.

Ministry of Electricity and Renewable Energy regulates and controls the electricity sector. Under the ministry, the General Electricity Company of Libya (GECOL) is in charge of generation, transmission and distribution of electricity; and it also works closely with the Renewable Energy Authority of Libya (REAOL) that is in charge of the renewable energy policy at the country level and the Center for Solar Energy Research and Studies (CSERS) that provide knowledge and information on solar energy potential and application' opportunities in the country. The Renewable Energy Holding Company, (REHC) develop and operate infrastructures for the generation of renewable energy in the country. The ministry and its specialized departments provide key technical and regulatory expertise on the energy sector and the governance of WEFE.

Libya National Committee on Climate Change (NCCC)

The National Committee for Climate Change was established in 1989 and initially chaired by the Minister of Energy, included members from various sectors such as Industry, Transportation, Agriculture, Culture, Economy, and Foreign Affairs. It underwent several restructurings: first under the Oil and Gas Minister, then moving to the General Authority for the Environment in 2005, where it expanded its focus to include ozone layer protection initiatives. In 2012, it was restructured again, incorporating members from the National Center for Meteorology, the Ministries of Electricity and Renewable Energy, and Water Resources. In 2020, due to issues with membership qualifications, resources, administrative structure, and political and security conflicts, the NCCC stopped its activities related to their public awareness program but continued organizing meetings mainly to identify investment projects for a new Country Programme. Therefore, the Presidential Council established an advisory committee under the General Authority for the Environment that assessed the National Committee's work and proposed restructuring amendments and improving functionality. Detailed assessment and comprehensive recommendations suggested the need to incorporate climate changerelated issues into policies and public programs in addition to integrating more representatives of active Ministries and national institutions in the National Committee on Climate Change (NCCC).

In the **energy sector**, the key stakeholders are experts and executives of ministries directly or indirectly involved in Renewable Energy (RE) (e.g. Prime Minister's Office, Ministry of Planning, Ministry of Finance, including corresponding inter-ministerial expert committees or bodies with an advisory function) and subordinate authorities or institutions, e.g. Renewable Energy Authority of Libya (REAOL), General Electricity Company of Libya (GECOL), the state project development company for RE (Renewable Energy Holding Company, REHC) and municipalities. The Center for Solar Energy Research and Studies (CSERS) as well as municipal representatives may play an important role in planning and drafting the regulatory framework.

2.3. Gender equality analysis

In Libya, it is documented that women experience the impacts of climate change in a disproportionately adverse manner. For example, the gender study developed under the first readiness proposal in the country, found that Libya is a profoundly patriarchal and paternalistic society with a strongly gendered division of roles in households, workplaces and civic life, reinforced by law and policy. This has an impact on women's mobility, and economic opportunities, leaving them more vulnerable to changing climatic conditions. On the other hand, female literacy and education levels are very high, and women's rights advocates are active.

Female inclusion and equality are notable in the south, where tribal structures dominate. The pandemic and climate change are multiplying pressures on women to be responsible for adaptation to climate change impacts mainly extreme events, children's education, to care for food availability and for sick people, and to enhance household sanitation and hygiene. Financial hardship due to war, climate change impacts and COVID-19 may be increasing some women's economic participation, perhaps particularly in the south.

Libya has shown its commitment to equality between women and men on paper, starting with its ratification of the Convention on the Elimination of All Forms of Discrimination

Against Women (CEDAW) in 1989. However, its general reservation based on Sharia law leaves an open door to conservative forces who question the foundation of that equality. While the principle of equality is outlined in the draft Constitution and in the Libya Peace Dialogue Framework (LPDF) roadmap, the overall legal framework on women's rights remains weak and has not translated to gains in women's empowerment in practice.

Furthermore, women in Libya are severely underrepresented in the political landscape and decision-making institutions involving directly or indirectly in climate change. Only 30 of 188 parliamentary seats (16%) are currently held by women and 5 of 33 ministers (15%) are women. This mirrors the situation in the peace process: Of the 75 Libyan delegates to the LPDF, a process stewarded by the international community, only 16 (21%) were women. Advocates for women's rights confront organized and targeted campaigns by entrenched conservative forces whose goal is to actively obstruct women's participation and empowerment.

With respect to labour, women have lower labour force participation and receive less compensation for their work. In 2019, women's participation rate in the labour market stood at 36.5 percent compared to 68.8 percent for men. Unemployment rates remain stubbornly high at over 20 percent in 2020, particularly for women standing at 26 percent and youth at 51.5 percent (female 70.9 percent, male 43.5 percent). On average, women in Libya earn nearly three times less than men. The highest income levels among women have been in the capital, Tripoli.

This proposal will seek to promote increased engagement of women in all activities and gender balance among participating stakeholders will be sought. Additionally, the content of trainings will include a section focused specifically on gender issues in the context of climate change, in order to sensitize participants on the disproportionate impact of climate change on women, and the importance of designing approaches that respond to this.

2.4. Gaps and Barriers

The interconnected impacts of climate change on key sectors (Environment, Water, Energy, Agriculture) in Libya are acknowledged by the relevant Ministries and there is clear interest in, and recognition of, the importance of addressing these impacts in a structured and integrated manner. The Libyan Initiative for Water, Energy and Food (LIWEF) clearly demonstrates this interest, and its importance affirmed by the different concerned Ministries during the National Policy Dialogue organized in Tripoli in October 2023. There is also clear recognition, demonstrated through the previous readiness, and previous work including high-level stakeholder mapping and sectoral strategic orientation studies of the gaps and barriers preventing effective implementation of the development of national sectorial visions and strategies with deep integration of climate change impacts. The following barriers have shaped this readiness and the proposed interventions:

Barrier 1: Lack of capacity to integrate climate change impacts among the action of the key targeted Ministries:

Ministry of Environment, Ministry of Agriculture and Livestock, Ministry of Water resources, and the Ministry of Electricity and Renewable Energy lack the capacity to effectively address climate change at the institutional, technical and management levels. Indeed, the previous readiness assessing capacity development needs identified limited knowledge among these Ministries on the impact of climate change and how to address it. Additionally, there is high turnover and therefore lack of institutional knowledge. These challenges persist because of the lack of a national institutional knowledge framework for reinforcing capacities and ensuring institutional knowledge, as well as the absence of an established mechanism across all relevant Ministries to effectively collaborate, share knowledge, and coordinate.

Barrier 2: Lack of coordination mechanism between all four sectors to effectively implement cross-sectoral initiatives:

The needs assessment report produced under the first readiness project "Preparation of Libya to climate finance through GCF country programming and the establishment of the GCF designated national authority" in 2018 and the establishment of the GCF National Designated Authority highlighted the absence of a clear national structure explicitly dealing with climate change. Although a coordination mechanism was established under this project, it only included the Ministry of Environment and the Ministry of Finance. Key institutions such as the Ministry of Agriculture and Livestock, Ministry of Water Resources, Ministry of Oil and Gas, and Ministry of Energy were not fully involved due to weak communication strategies and a lack of synergy among national institutions. Additionally, the identification of relevant stakeholders was incomplete, rendering the mechanism non-operational.

The NCCC conducted detailed assessments in regard to incorporating climate-change related issues into policies and public programmes. These findings indicated that key barriers included the absence of specialized units for climate change within institutions, lack of integrated administrative systems and inter-institutional coordination, inadequate financial resources, unclear regulations, insufficient coordination, limited capacity and understanding of climate negotiations, restricted scientific and technical knowledge, inconsistent supervisory responsibilities, and sub-optimal engagement from officials.

The launch of the Libyan Initiative for Water, Energy, and Food (LIWEF-Libya) during World Food Day 2023 marked the first substantial initiative involving the Ministry of Agriculture and Livestock, the Ministry of Water Resources, the Ministry of Electricity and Renewable Energy, and the Ministry of Environment.

Supported by the proposed Readiness project, this initiative aims to incorporate the environment sector into LIWEF-Libya, forming LIWEFE - the operational framework for coordination and strategic collaboration among all national actors in water, energy, agriculture, food, and environment sectors. This initiative will focus on developing national collaborative strategies for water, energy, ecosystems, and food security under changing climate conditions.

The readiness proposal will also support in reviving all activities of the National Committee on Climate Change (NCCC) and create a WEFE sub-committee housed

underneath. Members of the NCCC will be engaged in all capacity development initiatives and work to clearly delineate roles and responsibilities and governance structures to re-create one that better suits the current context, and utilizing the LIWFE operational framework, in addition to developing the WEFE sub-committee with close collaboration of the already functioning National Committee on Sustainable Development¹³.

Barrier 3: Lack of database to house relevant climate change and sectoral information:

The relevant Ministries and institutions do not have a national integrated database to house relevant climate change and sectoral information related to environment, water, energy, and agriculture. These shortcomings were confirmed during the previous readiness projects and recently implemented FAO projects (lagWat and MerWat, 2023)¹⁴. This Readiness proposal dedicates a large part of its activities to empowering the recent MerWat-Libya Geospatial Platform¹⁵ by collecting, sharing, and disseminating knowledge on sectoral baseline data as well as climate change impacts and scenarios in Libya between water, energy, environment and food sectors and, in addition to housing all trainings and curriculum developed. Furthermore, it will be used for risk assessment and filled with updated climate risk information developed by this project. The platform will be able to house the data necessary for Early Warning Systems and be utilized as a practical tool to understand projected climate risk and adaptation options. Training on the platform will teach users how to maintain the system and the NCCC and WEFE subcommittee will be tasked to ensure that the data included in the system is as updated as possible.

MerWat-Libya, recently launched on 28th March 2024, is a national information platform used to support sustainable cropland and water management providing access to crop and water consumption information and sustainable practices and will be reinforced by including data for energy, environment and climate change data through this proposal. This platform is embedded to the FAO's open-access Hand in Hand (HIH) platform for evidence-based acceleration of agricultural transformation toward food security. It is hosted by the Ministry of Agriculture and Livestock, the Ministry of Water Resources and the Libyan Centre for Remote Sensing and Space Science.

The MerWat-Libya Geospatial Platform will be open-access and represent the first database platform in the country housing information on all four sectors, and therefore represents a significant stride in water, agricultural, energy and environmental

¹⁴https://www.fao.org/documents/card/en/c/CC5906EN

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¹³ The Ministry of Planning created an institutional framework to follow up on the implementation of the Sustainable Development Goals through the establishment of the National Committee on Sustainable Development. This Committee includes a number of Specialists from the different sectors and related entities (water, agriculture, energy and environment), and has been assigned a set of tasks, the most important of which is adapting and integrating the objectives of sustainable development in national development strategies and plans in coordination with different sectors, and to follow-up progress in achieving sustainable development goals, preparing and reviewing voluntary reports. In 2020, Libya's Voluntary National Report on Sustainable Development Goals was prepared in the context of a broad community participation led by the Ministry of Planning through the Libyan Forum for Sustainable Development as a platform for dialogue, interaction, exchange of experiences, coordination of efforts and integrating and promoting the participation of all stakeholders, as this forum was a key support for the work of the National Committee on Sustainable Development.

¹⁵https://data.apps.fao.org/merwat-libya/?lang=en

management within the climate change context. Building on the established cross sectoral coordination mechanism of the Platform, which will stipulate the roles and responsibilities of the Ministry of Water Resources, Ministry of Agriculture and Livestock and the Libyan Center for Remote Sensing and Space Science, the project will expand this mechanism to include the energy and environment sectors, thus strengthening cross-sectoral planning, decision making, joint programming and implementation of climate projects in Libya¹⁶.

Barrier 4: Inability to forward a meaningful climate change agenda due to lack of updated baseline data on the water, energy, environment, and agricultural sectors, including the impact of climate change on these sectors:

The weakness of capacities to implement a climate change agenda and to develop an integrated national climate strategy, water security strategy, food security strategy and agriculture energy use strategy within climate change context was clearly highlighted during the previous Readiness projects and by the Operational Country Action Plan for Libya (FAO, 2023). It was further pointed out that this is due to the absence of updated baseline data on the water, energy, environment and agricultural sectors, including the impact of climate change on these sectors.

Over the last decade, the continuous political instability and security issues weakened the strategic planning and decision-making of the different technical department in the four target Ministries. The Ministry of Water Resources, responsible for gathering and managing water data, informed during stakeholder consultations the need for updating baseline data to be used for the development of the water security strategy and confirmed that last available data related to the status of water infrastructure, water supply and water demand are from 2010. The Ministry of Agriculture and Livestock, responsible for collecting and managing relevant data, is looking to update the agricultural inventory dated from 2006. Data relating to energy use in the agricultural sector is managed by the Agriculture and Energy Ministries, and both have indicated that information related to energy use has not been updated since 2010.

This readiness will support the updating of baseline data, which is essential for developing sectoral climate-smart strategies. It will ensure the sustainability of the proposed approach through on-the-job training and capacity building on the applied methodology, enabling regular and autonomous updates of the dataset.

GREEN CLIMATE FUND

¹⁶ The MerWat Libya Geospatial Platform will serve as a valuable tool for data and training that the target NEXUS ministries, the National Committee on Climate Change (NCCC) and WEFE sub-committee can use for integrated and multidisciplinary decision making. These entities will learn not only how to use, but also how to apply the information it houses to the larger policy and programming context. The Platform can be used to support sustainable cropland and water management by providing access to crop and water consumption information and sustainable practices. By including data for energy, environment and climate change, it will support cross-sectoral decision making by providing knowledge on sectoral baseline data as well as climate change impacts and scenarios in Libya between water, energy, environment and food sectors as well as updated climate risk information. It will also provide links to all relevant trainings, curriculum, and GCF information housed under the OSS platform.

2.5. Problem statement

The Government of Libya is currently faced with an absence of integrated strategies related to climate change impacts on food security, water security, agricultural development, and energy use; limited capacity at the institutional, human, technical and managerial level to coordinate, develop and implement these strategies, in addition to outed or non-existent baseline data that would serve as the pillar of the different strategies and the sectorial strategic frameworks to inform them. Without this integrated, data-based climate approach, the end-users of water and energy, including farmers, pastoralists, and rural and urban communities will continue to be affected by water scarcity, unsustainable energy use, unsustainable production, and food insecurity.

The Readiness proposal will facilitate the establishment of a national institutional framework that will integrate climate-change, water, energy, and food security strategies in the country. Moreover, it will address the challenges facing the development of these sectoral strategies. It will tackle the main gap related to the lack of synergy between and among national Ministries and institutions and the current deficiencies observed in terms of collection, sharing, and dissemination of data, information and knowledge between the four sectors (Water, Agriculture, Energy and Environment).

Additionally, supporting and aligning the reforms and national related-climate strategies in particular water, energy, environment, and food security strategies will provide the needed new climate-related approaches adapted to the current and future contexts of Libya. It will also develop stakeholder coordination mechanisms for the agriculture, water, energy, and environment sectors, including the private sector, Civil Society Organizations (CSOs) and academia.

2.6. Beneficiaries

The direct beneficiaries of this proposal are the Ministry of Environment, Ministry of Agriculture and Livestock, Ministry of Water Resources and Ministry of Electricity and Renewable Energy.

The indirect beneficiaries are:

- Man Made River Authority, Libyan Centre for Remote Sensing and Space Science, Libyan Meteorological Centre, Agricultural Research Centre of AlBayda, Academic sectors in Alkhofrah, Ghadames, Alweahat.
- The civil society organizations: Libya Agriculture and Environment Organization, Libyan Organization for Organic Agriculture, Wan Mahogaj Association for Heritage and Culture, Desert Knights Association for Youth Development in the municipality of Thala, Wa'atamah Association for the Protection of Palm Trees in Al-Jufra, Qatroun Youth Foundation for Change.
- Farmers-based associations, Cooperatives, and Societies: General Union of Libyan Farmers and Breeders, Agriculture Cooperative in Hun, Agriculture Cooperative Ghat Society, Agriculture Cooperative in Albouwanees, Agriculture

Cooperative of Wadi Ashshati, Fezzan Grain Producers Association, Sebha Grain Producers Association, Hathitha Agricultural Association.

Key private sector players in the environment, agriculture, energy and water management sectors with large market share, research and development and technology transfer capabilities, and public sector development funds and private banks/commercial lenders in Libya engaged in water, energy, environment, and agriculture project development.

2.7. Stakeholder engagement

The implementation of the previous readiness projects highlighted the importance of involving all relevant stakeholders (public sector, private sector, researchers, academics, civil society, etc.) in the project to strengthen country ownership of climate change adaptation and coordination processes. Due to the lack of clarity on the governance and underlying institutional arrangement for climate change, the stakeholder engagement has been so far ad-hoc, relying on existing structures to conduct different activities without a clear strategy and understanding of their respective roles and responsibilities.

During the first readiness project, a series of workshops were organized to identify key national actors involved in the mobilization of financial resources dedicated to climate, considering gender equality. This helped to identify key national actors involved in the mobilization of financial resources dedicated to combat climate change. Additionally, the first readiness established the premise for strengthened coordination among stakeholders and within the government.

In formulating the present readiness proposal, regular meetings were held with the NDA, Ministry of Agriculture and Livestock, Ministry of Water Resources and Ministry have Electricity and Renewable Energy. The focus of these meetings has been to clearly understand the priorities of the country within the context of GCF and climate change more broadly, as well as what are the key barriers hindering effective engagement. Following the meetings, the formulation team would incorporate this information into the proposal, then share with NDA for additional feedback. Ad hoc calls and in person meetings were arranged as relevant to further brainstorm together and address any pending issues/queries. This process continued until final endorsement was received by NDA and the aforementioned Ministries.

2.8. Synergies and Complementarity

Details of Readiness grants in the country (date of approval and implementation status/period, DP)	Objectives and key results expected / delivered	Synergies and Complementarities	Key implementation challenges and learnings
Grant reference: LBY-RS-001	Focus on the standardized	- Stakeholders engaged in	- During the implementation, one
Title: Preparation of Libya to climate finance through GCF country programming and the	readiness package for the establishment of a coordination mechanism and strengthening the	consultative processes with all stakeholder consultations conducted with	of the important challenges was related to the complexity for the NDA coordination

establishment of the GCF designated national authority Approved budget: USD 300,000.00 Duration: 24 months01/11/ 2017 to 31/10/2018 DP: Sahara and Sahel Observatory	Focal Point (and later the NDA once established), and the development of strategic frameworks for engagement with the Fund.	equal representation of women with engagement of private sector - Enabling environment for crowding-in private sector investments at national, regional and international levels The proposed project also includes support for preparation of Libya to access and manage GCF finance but, extended to water, energy and agriculture sectors and actors at technical and managerial levels in addition to environment sector which show the complementarities with LBY-RS-001. The proposed project will upscale the result achieved by the previous project and reach out to more stakeholders and under collaborative framework of WEFE approach.	team to fulfil its roles and responsibilities - As lessons learned, experts' consultations were very useful for the implementation of the action plan. - Coordination and liaison with different involving national Ministries and institutions still an important challenge. - Strategic Engagement Framework and ownership development among and between the partners facilitated the coordination between all of them.
Grant reference: LBY-RS-002 Title: Enhancing institutional, human and technical capacity of Libya system for climate finance Approved budget: USD 765,000.00 Duration: August 2020/ ongoing	This proposal aims to identify and strengthen the capacity of potential national entities to meet the accreditation requirements of the GCF and provide support for the development pipeline of high-quality project concept notes for priority mitigation and adaptation projects.	The implementation of the readiness project allowed to highlight the importance of involving all relevant stakeholders (public sector, private sector, researchers, academics, civil society, etc.) in the project to strengthen the country ownership on all	- Awareness-raising activities on climate change at all levels and the identification of national priorities for climate change (adaptation and mitigation) remain the most important challenges. - Developing communication tools and well-structured

DP: Sahara and
Sahel Observatory

Further, the engagement and the role of the private sector and civil society will be at the core of this proposal. This will strengthen the country ownership and harness the role of the stakeholders in supporting the country mobilization of resources for climate change projects.

processes. It allowed to develop a knowledge management framework and synergy could be ensured for implementation with this grant.

This proposed project will ensure synergies with ongoing efforts by the grant LBY-RS-002, build partnerships with implementing partners including OSS and build on results recorded by the grant. The partnership with OSS will be smooth given the long term collaboration and the ongoing MoU discussion between FAO and OSS.

The synergy will be extended to the use of the MERWAT platform that can be offered for data processing and display interface. Coordination with OSS, NDA and national parties will be engaged to ensure complementarity and better impact and sustainability of the 2 projects' results.

However, no assessment of the capacity needs and institutional arrangements were conducted to map relevant stakeholders and strengthen the engagement between non-state actors and governments facilitated the all the implementation phases.

READINESS AND PREPARATORY SUPPORT

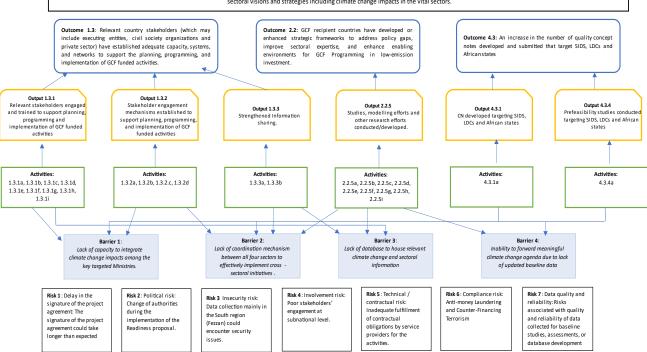
coordination mechanism.

The proposed project also includes institutional and technical capacity building which shows complementarities of the institutional capacity building targeted by the project LBY-RS-002. The proposed project can make best use of capacity and information generated and ensure sustainability of access to information and processing tools by offering the MerWat platform to host and process the information for decision support. The platform can also serve as training support for advanced technical experts.

Section 3. Theory of change (ToC)

3.1. Theory of Change - Diagram

IF Libya strengthens its institutional and technical capacities among the Environment, Water Resources, Energy and Agriculture and Livestock Ministries for developing and coordinating integrated and cross sectoral dimate change strategies and initiatives; updates sectoral baseline data and climate change impact data; bolsters agovernment-wide platform to store and disseminate information and knowledge on WEFE sectors and climate change and develops a GCF pipeline focused onWEFE-Nexus THEN the country will be better positioned to implement the LIWEF initiative and develop integrated and cross sectoral strategies to address climate change BECAUSE key decision makers and stakeholders will have an operational coordination mechanism, data and database necessary, and clearconsensus on a shared future, sectoral visions and strategies including climate change impacts in the vital sectors.



Assumption A (linked to outcome 1.3): Start the dialogue on the project agreement with the government the earliest possible stage (after the first feedback from the GCF).

Assumption B (linked to outcome 2.2): A monthly progress report should be addressed to the involved authorities to keep them informed and updated.

Assumption C (linked to output 1.3.1): All the field data collection should involve local expertise and implication of Municipalities and local civil societies with agriculture police.

Assumption D (linked to output 1.3.2): From the inception phase, the process should inclusive and participatory, creating trust by sharing each other's values, concerns and interests and communicate outcomes to stakeholders regularly.

Assumption E (linked to output 1.3.3): Terms of reference should be well detailed highlighting the minimum required competency with deadlines for all the deliverables or the services to be provided.

Assumption F (linked to output 2.2.5): FAO will be responsible for overseeing the development of Terms of Reference (ToRs) and related work plans, ensuring clear roles and responsibilities are defined.

Assumption G (linked to outcome 4.3): All relevant stakeholders, including NDA and GCF, will provide timely feedback and assist in the identification of a project proponent.

3.2. Theory of Change - Narrative

The goal statement of this proposal is: **IF** Libya strengthens its institutional and technical capacities among the Environment, Water Resources, Energy and Agriculture and Livestock Ministries for developing and coordinating integrated and cross sectoral climate change strategies and initiatives; updates sectoral baseline data and climate change impact data; bolsters a government-wide platform to store and disseminate information and knowledge on WEFE sectors and climate change; and develops a GCF pipeline focused on WEFE-Nexus **THEN** the country will be better positioned to implement the LIWEF initiative and develop integrated and cross sectoral strategies to address climate change **BECAUSE** key decision makers and stakeholders will have an operational coordination mechanism, data and database necessary, and clear consensus on a shared future, sectoral visions and strategies including climate change impacts in the vital sectors.

As shown in the TOC diagram above, this proposal aims to enhance governance and institutional frameworks for Integrated Climate-change, Water, Energy and Food Security Strategies in Libya.

The Readiness proposal will facilitate the establishment of the national institutional framework that will integrate climate change, water, energy, and food security strategies in the country. Moreover, it will address the challenges facing the development of these sectoral strategies. It will tackle the main gap related to the lack of synergy between and among national Ministries and institutions and the current deficiencies observed in terms of collection, sharing, and dissemination of data, information and knowledge between the four sectors (Water, Agriculture, Energy and Environment).

The following barriers have shaped this readiness proposal and the proposed activities:

- Barrier 1: Lack of capacity to integrate climate change impacts among the key targeted Ministries.
- Barrier 2: Lack of a coordination mechanism between all four sectors to effectively implement cross-sectoral initiatives
- Barrier 3: Lack of database to house relevant climate change and sectoral information.
- Barrier 4: Inability to forward meaningful climate change agenda due to lack of updated baseline data on the water, energy, environment, and agricultural sectors, including the impact of climate change on these sectors

<u>Outcome 1.3</u>: Relevant country stakeholders (which may include executing entities, civil society organizations and private sector) have established adequate capacity, systems, and networks to support the planning, programming, and implementation of GCF funded activities.

Output 1.3.1: Relevant stakeholders engaged and trained to support planning, programming and implementation of GCF funded activities (addressing barriers 1 and 3).

Activities:

1.3.1a Organize a high-level national inception workshop to explore the potential synergies between the four nexus Ministries (Environment, Water Resources, Energy and Agriculture and Livestock), NCCC and special sub-committee for WEFE and

complementarities with the Libya Initiative for Water, Energy and Food (LIWEF) and sign the pledge for collaboration on the implementation of the LIWEF. The pledge for partnership will build consensus on a shared future vision, make sure consultations and decision-making processes are inclusive and participatory, create trust by sharing each other's values, concerns and interests and communicate outcomes to stakeholders regularly.

Number of participants: 60, with a target of 50% women.

Deliverables:

- Signed pledge for partnership
- Workshop report

1.3.1b Organize a national awareness workshop for stakeholders and technicians from the four ministries Environment, Energy, Water Resources, and Agriculture and Livestock, as well as Civil society organizations, and private sector actors that will be involved in the WEFE sub-committee and baseline data and knowledge collection teams. Participants will be identified during 1.3.2.a.

This national awareness workshop will focus on:

- Launching the sub-committee on WEFE under the umbrella of the National Climate Change Committee.
- Selecting 15 trainers for the TOT (three trainers per target NEXUS ministry and another three from the Libyan Remote Sensing Center) based on terms of reference.
- Presenting the WEFE concept and the climate change impacts on WEFE sectors.
- Presenting available solutions, collection of good practices for scaling up and lessons learnt from Libya and the region including incentives such as subsidies, tax breaks, or access to credit, that Libya can provide for farmers, agribusinesses and renewable energy companies to adopt climate-smart practices and technologies.
- Presenting the Merwat Libya geospatial platform and its operational mechanisms as an example of knowledge generation and sharing for decision support.
- Explaining the use of multistakeholder mechanisms for promoting collaborative and coordinated policies addressing CC impacts on WEFE (including the importance of engagement with non-government stakeholders and gender-responsive actions)
- Summarizing the planning, programming and implementation of GCF funded activities in the areas of the WEFE nexus

Number of participants: 60 including the members of the NCCC, private sector, municipalities, and CS with a target of 50% women.

Deliverable:

- Pre-and post-workshop survey reports
- Stakeholder survey

1.3.1c Assess the capacity requirements of NCCC and the special sub-committee for WEFE, established under activity 1.3.2d, for the planning, programming, and implementation of GCF funded activities in the areas of WEFE nexus. The capacity needs assessment will establish key indicators to follow, monitor and assess the sustainability of the generated impacts in the involved beneficiary institutions.

Deliverables:

- Capacity needs assessment report targeting NCCC and WEFE sub-committee
- **1.3.1d** Develop training of trainers curriculum on gender-responsive, climate resilient WEFE projects in addition to multistakeholder mechanisms to be used by the 15 selected trainers from the 4 target Ministries and LCRSSS.

This activity will utilize and build on the results of the capacity needs assessment on project development and monitoring from LBY-RS-001 and LBY-RS-002, in addition to the capacity building activities of the members of the NDA's interministerial coordination mechanism.

Deliverable:

- -Training of trainer's curriculum
- **1.3.1e** Conduct seven ToT training of 2-day sessions for the 15 selected trainers of the four involved Ministries and LCRSSS on the curriculum developed in activity 1.3.1d.

Deliverable:

- TOT session reports (including list of participants and pre and post evaluation results).
- **1.3.1f** Support the 15 selected trainers trained during 1.3.1e conduct two in house training sessions over the project implementation period at their respective institutions. Trainees will be relevant members of each of the Ministries, engineers and technicians based on the recommended program and action plan developed under the capacity needs assessment. The total number of in-house training sessions will come to ten, comprised of two sessions for each of the Ministries and LCRSSS, and will include 10 people per session with a target of 50% women.

Deliverable:

- -Training reports (including list of participants and pre and post evaluation results).
- **1.3.1g** Conduct five two-day training workshops to develop capacities on the use and updating of multi-stakeholder mechanisms for promoting collaborative and coordinated policies addressing climate change impacts on water, energy, environment and agriculture sectors.

Number of participants from the four ministries Environment, Water Resources, and Agriculture and Livestock, Civil society organizations, private sectors: 100, with a target of 50% women.

Deliverable:

Training reports (including list of participants and pre and post evaluation results).

1.3.1h Organize 3 training sessions (2 days each session) on access, use and application of the established MerWat Libya Geospatial and OSS platforms for operators and various users and contributors. Targeted audience will be the technical departments of the Agriculture, Water, Energy, Environment sectors from public administration and universities at national and local level as well as targeted CSO and private sector, in addition to members of the WEFE sub-committee.

Number of participants: 90, with a target of 50% women.

Deliverable:

Three training session reports

Three pre-and post-training survey reports

1.3.1i Conduct regular action-learning meetings for the WEFE sub-committee coordinated by the National Committee for Climate Change (at least 4 per year) to build knowledge and skills, and to agree on updated operational procedures for planning, programming, and implementing of the coordination mechanism.

Deliverable:

Minutes of WEFE sub-committee meetings.

Output 1.3.2: Stakeholder engagement mechanisms established to support planning, programming, and implementation of GCF funded activities. (Addressing barriers 1, 2, and 4).

Activities:

1.3.2a Develop coordination mechanism in which the WEFE sub-committee will act as the core of the mechanism under the coordination of the NCCC.

A Multi-Stakeholder Process (MSP) will be set up for participatory decision-making and information sharing between Ministries of Environment, Water Resources, Energy, and Agriculture and Livestock. The mandate of the coordination team will include the sustainable coordination between all national involving institutions for joint planning and programming.

Deliverables:

- Coordination mechanism terms of reference including the institutional structure with clear tasks and responsibilities of all involving Ministries and national institutions as well as timeline for regularly scheduled meetings of the WEFE sub-committee.
- Terms of reference for the selection of the beneficiaries of each of the planned trainings sessions and workshops.
- Multi-Stakeholder Process (MSP) reporting led by the National Committee for Climate Change (NCCC) and playing the role of decision-maker.
- **1.3.2b** Conduct a stakeholder mapping for those involved in the WEFE nexus including an initial situation analysis to identify the key stakeholders and their interests on WEFE nexus, expectations of this partnership, and relationships, and clarify common objectives in relation to climate resilience enhancement or integration in the WEFE sectors and climate finance.

Deliverable:

Stakeholder mapping with initial situation analysis report.

1.3.2c Develop institutional arrangements and operational manual to strengthen the National Climate Change Committee (NCCC) coordination mechanism (form, durability, legal status, representativeness, roles and mandates).

Deliverables:

Institutional arrangements report including the institutional structure

1.3.2d In coordination with the existing National Committee on Sustainable Development and the National Committee on Climate Change, establish a sub-committee on WEFE to support sustainable collaboration with signed institutional framework composed of nominated focal points from each of the ministries and national institutions involving in the sectors of Environment, Water, Agriculture and Energy. Arrangement of at least four meetings per year (Mapping, Consultation, Validation, Signature and Adoption) will be adopted. The mandate of this sub-committee on WEFE will include the sustainable coordination between all national involving institutions.

Deliverables:

- Minutes of coordination team meetings.
- Signed institutional framework.

Output 1.3.3 Strengthened Information sharing. (Addressing barriers 2 and 3).

Activities:

1.3.3a Create a user's manual on how to use the OSS platform developed under LBY-RS-002 and the MerWat Libya Geospatial Platform synergistically. This activity will entail a review of the two platforms to identify areas where systems could be linked and how, in addition to drafting the user manual detailing navigation and use for each platform and how to use them both together, providing links to relevant trainings conducted under output 1.3.1. The OSS platform will be used to store training materials and other knowledge products generated by the project in complementary of MERWAT platform dedicated for field and geospatial data storing, processing and analysis.

Deliverable:

User's manual on how to synergistically use OSS and MerWat Libya Platforms

1.3.3b Integrate all elaborated databases focusing on technical aspects relating to climate risk assessments, baseline analysis of the WEFE nexus in Libya, and geospatial data (water, energy, environment, and agriculture) to support decision-making and the development of climate projects in the MerWat-Libya Geospatial Platform, in addition to links to relevant trainings on how to use and apply this data housed on OSS platform.

MerWat-Libya Geospatial Platform is an open source, hosted at the Ministry of Water Resources, at the Ministry of Agriculture and Livestock and at the Libyan Centre for Remote Sensing and Space Science and will be extended to the Ministry of Environment and Ministry of Energy through this proposal. This platform is now operational with a coordination mechanism and signed pledge for collaboration to sustain the platform. This platform is embedded in FAO's open-access Hand in Hand (HIH) for evidence-based acceleration of agricultural transformation towards food security.

Deliverable:

Report on metadata generated by the project.

Updated MerWat-Libya platform including data generated by the project.

Expected results:

The expected result relate to coordination and collaboration of relevant country stakeholders from water, environment, energy, and agriculture sectors with the goal of reinforcing them with adequate capacity, systems, and networks to support the planning, programming, and implementation of GCF-funded activities. Furthermore, a comprehensive stakeholder engagement mechanism will be established to guide their interaction between relevant stakeholders from water, environment, energy and agriculture sectors and the NDA to clarify at national level and structure where the different consultations in connection with climate change impacts on environment, water, energy, and agriculture sectors and the GCF, will be carried out. The Readiness proposal will reinforce sharing data, information and knowledge through the empowerment of the MerWat-Libya Geospatial Platform by collecting, sharing, and disseminating knowledge between water, energy, environment and food sectors and climate change impacts and scenarios in Libya.

<u>Outcome 2.2</u>: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF Programming in low-emission investment.

Output 2.2.5 Studies, modelling efforts and other research efforts conducted/developed.

Activities under this output will take a more explicit approach in considering climate perspectives in the assessments, including the identification of climate impact on water, energy, food and environment sectors with the practices in managing these climate impacts currently, and to what extent are climate impacts considered in decision-making. The studies will also look at more practical solutions including incentives, such as subsidies, tax breaks, or access to credit, that Libya can provide for farmers,

agribusinesses and renewable energy companies to adopt climate-smart practices and technologies. (Addressing barriers 1, 3, and 4).

Activities:

2.2.5a Carry out a desk review to produce baseline studies related to the Water-Energy-Food-Ecosystems (WEFE) nexus through initial collection and summary analysis of the main sectoral data, studies, previous strategies, and existing data platforms. The review will also look at the multisectoral nature of the available information. The report will include a chapter on multisectoral studies.

Deliverables:

- Desk review report on water sector.
- Desk review report on agricultural energy use.
- Desk review report on agriculture and food sector.
- Desk review report on ecosystems sector.
- **2.2.5b** Carry out preliminary interviews with key players for Environment, Water, Energy and Agriculture sectors at the national level to complete the analysis, understand their expectations, if there is a need for vision and strategy and glean suggestions on how it could be developed. The interviews will feature questions related to multisectoral dimensions and reflect on gaps and opportunities of nexus for better sectoral planning.

Deliverables:

- Interviews report for water sector.
- Interviews report for agriculture sector.
- Interviews report for environment sector.
- Interviews report for energy sector.
- **2.2.5c** Carry out, in a concerted and participatory manner, an inventory of ecosystems and the environment, water, energy and agriculture sectors based on the analysis of data and the results of previous studies and strategies and highlight the main constraints and challenges of the different sectors relating the integration of climate change in those sectors and to access finance with sustainable use of resources. This will result on gaps analysis and recommendations to support climate smart food and water security strategies. The inventories will also report on the cross-sectoral analysis.

Deliverables:

- Inventory report for water sector.
- Inventory report for agriculture sector.
- Inventory report for environment sector.
- Inventory report for energy sector.
- Report on gaps analysis and recommendations to support climate smart WEFE strategies for food and water security.
- **2.2.5d** Develop water baseline study and mapping including water accounting, water footprint, virtual water, water tenure and water governance. The study will look at the trend of water resources requirement for food, energy, and ecosystems services under the climate change scenario.

Deliverable:

Baseline study report for water sector in Libya.

2.2.5e Conduct assessment of land cover & land use and management practices: total land area, arable and permanent cropland, permanent pasture, forest and woodland, irrigated land, and other lands. The study will look at the trend of land resources requirement for food, energy, water and ecosystems services under the climate change scenario.

Deliverable:

Assessment of land cover & land use report in Libya.

2.2.5f Conduct assessment study of agriculture and food systems: food systems assessment. Value chains assessments, labor force assessment under climate change scenario and the requirement for water and energy and natural resources.

Deliverable:

Assessment report of agriculture and food systems in Libya.

2.2.5g Develop baseline mapping study of the agricultural energy use situation linked to renewable energy potential and trend and the energy requirement for water, food and ecosystems services under climate change context.

Deliverable:

Assessment report of agricultural energy use situation in Libya.

2.2.5h Develop a National Climate Risk and Vulnerability Assessment with a focus on the WEFE nexus, clarifying the types of interactions that generate risk, and where they originate. The assessment will focus on the importance of interacting drivers of climate change risk and of interactions among multiple risks. It will give a deeper understanding and increases the relevance of climate change risk assessment for a diversity of decision makers involving in the vital sectors: water, energy, agriculture and environment. In the meantime develop climate change scenarios projections and their implications on food security in Libya building on the ongoing efforts on the recently updated national climate change strategy, to introduce the climate risk approach in the management of LIWEFE nexus for food and water security.

Deliverable:

- Assessment Report of National Climate Risk and Vulnerability of WEFE sectors
- Climate change scenarios projections
- **2.2.5i** Develop environmental baseline study that examines the relevant significant issues of the current state of the environment in relation to: biodiversity, agriculture, energy, water, and climate change impacts as well as the interrelationships between these priorities.

Deliverable:

Environmental baseline study in Libya.

Expected results:

One of the major deliverables of this Readiness proposal is to develop the assessment of National Climate Risk and Vulnerability of WEFE sectors, the water baseline study and mapping, the assessment study of land cover and land use, the assessment study of agriculture and food systems, the baseline mapping study of the agricultural energy use situation, the climate change scenarios projections, and their implications on food security in Libya and, the environmental baseline study. In conducting this activity, the proposal will capacitate key country stakeholders to develop visions and strategies of the vital sectors: water, energy, agriculture and environment with the integration of climate change impacts.

Outcome 4.3: An increase in the number of quality concept notes developed and submitted that target SIDS, LDCs and African states. (Addressing barriers 1, 2, and 4)

Libya, one of the MENA region's countries most at need for GCF financing, is also one of the countries in the region with no GCF project. This readiness aims to utilize the data gathered under output 2.2.5 and build on existing initiatives in the country to draft a GCF concept note and pre-feasibility study to help further support the country's climate agenda through facilitating access to climate finance.

Output 4.3.1: Concept Note developed targeting SIDS, LDCs and African states Activities:

4.3.1a Develop a GCF concept note for WEFE Nexus Climate-Smart Agricultural project. The project will focus on the innovative approach water-energy-food-ecosystems (WEFE) Nexus for analysing the interconnectedness of global resource systems and achieving sustainability goals. In Libya, implementing an integrated WEFE Nexus approach is crucial where water scarcity, climate change, agriculture, energy and environmental degradation pose significant challenges.

Under this activity, a project proponent will be identified, and the concept note will be informally shared with GCF for a first round of reviews.

Deliverable:

GCF concept note for WEFE Nexus Climate-Smart Agricultural project for Libya.

Output 4.3.4: Prefeasibility studies conducted targeting SIDS, LDCs and African states. (Addressing barriers 1, 2, and 4)

Activities:

4.3.4a Develop and support pre-feasibility study of the elaborated WEFE Nexus Climate-Smart Agricultural project.

Deliverable:

Pre-Feasibility study of the WEFE Nexus Climate-Smart Agricultural project

Risks and assumptions

The risks that could impact the implementation of the proposal are: delay in the signature of the project agreement by the government; political risk due to a change of authorities during the implementation of the Readiness proposal; insecurity risk due to some unstable parts of the country where data collection would take place; Involvement risk due to lack of stakeholder engagement; technical or contractual risks due to the inadequate fulfillment of contractual obligations by the consultancies for the activities identified in the "logical framework", either with respect to failing delivery deadlines or with respect to the quality of the delivered products; compliance risk related to anti-money laundering and counter-financing terrorism; and finally data quality and reliability risks, particularly related to the quality and reliability of data collected for baseline studies, assessments and/or database development.

For sound project implementation, several key assumptions must be considered. Firstly, a spirit of collaboration at policy level and dialogue with the government institutions are in place that will facilitate the introduction of the project agreement at the earliest possible stage, after receiving initial feedback from the GCF (Assumption A). Secondly, the involved authorities are committed to regular monthly progress reports that should be addressed to keep them informed and up to date (Assumption B). Thirdly, for all field data collection, local expertise and the engagement of municipalities and local civil societies. particularly those involved in agriculture, are engaged to ensure comprehensive data gathering (Assumption C). Fourthly, inclusive and participatory processes should be present from the inception phase aimed to foster trust by sharing values, concerns, and interests, as well as communicating outcomes to stakeholders regularly (Assumption D). Moreover, the condition needed for terms of reference, they should be meticulously detailed, outlining the minimum competency required and setting deadlines for all deliverables or services, with the project coordinator maintaining weekly communication with engaged consultants and service providers (Assumption E). Additionally, there is a need that FAO will oversee the development of Terms of Reference (ToRs) and related work plans, ensuring clear roles and responsibilities, and engaging national and international consultants and firms from FAO's database and roster to carry out project activities. Field missions will be accompanied by escorts when necessary, and FAO will adhere to its fiduciary principles and standards, including conducting "know your customer" checks and complying with financial sanctions imposed by the United Nations Security Council. An important needed condition is that the project ensure proper adherence to the revised FAO Whistleblower Protection Policy, ensuring the protection and appropriate handling of whistleblower reports in line with FAO's guidelines (Assumption F). Finally, it is assumed that all relevant stakeholders, including NDA and GCF, will actively engage and provide timely feedback where relevant during the development of the concept note and pre-feasibility study, in addition to assisting in the identification of a project proponent.

Section 4. Logical framework

See attached logical framework

Readiness Results Management Framewor	ramework
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Objectives

Capacity Building	Outcomes						
	Outcome 1.3 Relevant	Outputs			Indicators		Activities
	country stakeholders (which may include executing entities, civil society organisations and private sector) have established adequate capacity, systems and networks to support the planning, programming and implementation of GCF funded activities	Relevant stakeholders engaged and trained to support planning, programming and implementation of GCF funded activities.	Indicator Indicator 1.3.1.1 Number of relevant stakeholders engaged and trained to support planning, programming and implementation of GCF funded Activities	Target 435	- Training sessions and workshops reports - Training courses and materials - Pre and post training surveys reports	Notes Seven key ministries / institutions to be engaged and trained, with a total number of stakeholders aimed at 435 total stakeholders to be engaged and trained from involved Institutions and organizations Activity 1.3.1a: Number of participants: 60, with a target of 50% women. Activity 1.3.1b: Number of participants: 60 including the members of the NCCC, private sector, municipalities, and CS with a target of 50% women. Activity 1.3.1e: 15 selected trainers of the four involved Ministries and LCRSSS Activity 1.3.1f: 100 trained, engineers and technicians from 4 ministries and	1.3.1a Organiz national inception workshop ansign the pledg for partnership 1.3.1b Organiz national awareness workshop 1.3.1c Asses the capacit requirements of NCCC and WEF sub-committee 1.3.1d Develo training of trainers' curriculum 1.3.1e Conduct 7 ToT session for selecte trainers 1.3.1f Support selected trainer conduct 2 in house session for 4 target ministries plut LCRSSS 1.3.1g Conductive 2-datraining workshops to develop capacties on us and updating of multi stakeholder coordination mechanisms

	LCRSSS. Target of	1.3.1h Organize
	50% women trained.	3 training
		sessons on
	Activity 1.3.1g:	MerWat Libya
	Number of	Geospatial
	participants from	platform and
	the four ministries	OSS platform
	Environment, Water	1.3.1i Conduct
	Resources, and	regular action-
	Agriculture and	learning
	Livestock, Civil	meetings for
	society	WEFE sub-
	organizations,	committee
	private sectors: 100	Johnnetoo
	beneficiaries with a	
	target of 50%	
	women.	
	women.	
	Activity 1.3.1h:	
	Number of	
	participants to	
	training workshops	
	tarreting technical	
	departments of the	
	4 ministries,	
	universities at	
	national and local	
	level as well as	
	targeted CSO and	
	private sector, in	
	addition to members	
	of the WEFE sub-	
	committee. : 90,	
	with a target of 50%	
	women.	
	Activity 1 2 1:	
	Activity 1.3.1i: WEFE sub-	
	committee action-	
	learning meetings:	
	10 participants per	
	meeting with a	
	target of 50%.	

Output 1.3.2					1.3.2a Develop
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Indicator	Target	Mov	Notes	coordination
Stakeholder	Indicator 1.3.2.1				mechanism
engagement					1.3.2b Conduct
mechanisms	Number of multi-				stakeholder
established to	stakeholder				mapping and
support	mechanisms		Ctakahaldar		situation
planning,	established to	1			analysis
programming	support planning,		Survey		1.3.2c Develop
and	programming and				institutional
	implementation of				arrangements
					and operational
activities	activities				manual of NCCC
					1.3.2d Establish
					sub-committee
					on WEFE nexus
					under NCCC
Output 1 2 2					1.3.3a Create
Output 1.5.5	Indicator	Tayaat	May	Notes	users manual on
Stranghtaned		rarget	IVIOV	Notes	how to use OSS
_	indicator 1.3.3.1				and MerWat
	Has an information				Libya Platforms
Silating					synergistically.
	i i sharing mechanishi i				by nor gioticuity.
	_		Stakeholder		1 3 3h Integrate
	been established to	Yes	Stakeholder survey		1.3.3b Integrate
	been established to provide access and	Yes			all elaborated
	been established to provide access and flow of information	Yes			all elaborated database in the
	been established to provide access and flow of information among climate	Yes			all elaborated database in the recent
	been established to provide access and flow of information among climate change	Yes			all elaborated database in the recent developed
	been established to provide access and flow of information among climate	Yes			all elaborated database in the recent developed MerWat-Libya
	been established to provide access and flow of information among climate change	Yes			all elaborated database in the recent developed
	engagement mechanisms established to support planning, programming	Stakeholder engagement mechanisms established to support planning, programming and implementation of GCF funded activities Output 1.3.3 Strenghtened Information sharing Indicator Indicator 1.3.2.1 Number of multi- stakeholder mechanisms established to support planning, programming and implementation of GCF funded activities Indicator	Stakeholder engagement mechanisms established to support planning, programming and implementation of GCF funded activities Output 1.3.3 Indicator Target Indicator 1.3.2.1 Number of multistakeholder mechanisms established to support planning, programming and implementation of GCF funded activities Indicator 1.3.2.1 Number of multistakeholder mechanisms established to support planning, programming and implementation of GCF funded activities Indicator 1.3.2.1 Indicator 1.3.3.1 Indicator Target Indicator 1.3.3.1 Indicator Target Indicator 1.3.3.1	Stakeholder engagement mechanisms established to support planning, programming and implementation of GCF funded activities Output 1.3.3 Strenghtened Information sharing Indicator 1.3.2.1 Number of multistakeholder mechanisms established to support planning, programming and implementation of GCF funded activities Stakeholder survey Stakeholder survey Stakeholder survey Indicator 1.3.3.1 Indicator Target Mov Indicator 1.3.3.1 Has an information sharing	Stakeholder engagement mechanisms established to support planning, programming and implementation of GCF funded activities Output 1.3.3 Strenghtened Information sharing Indicator Target Mov Notes Indicator 1.3.2.1 Stakeholder mechanisms established to 1 support planning, programming and implementation of GCF funded activities Indicator Target Mov Notes Stakeholder survey Stakeholder survey Stakeholder survey Indicator 1 survey Indicator Target Mov Notes Indicator Target Mov Notes

Outcomes							
Outcome 2.2	Outputs		Indicators				
have developed or enhanced strategic	Output 2.2.5 Studies, action plans, modelling efforts and other research efforts conducted/developed	Indicator Indicator 2.2.5.1 Number of studies, modelling efforts and other research efforts conducted/developed with the support of Readiness grants	Target 6	Document with all conducted studies	Notes	2.2.5a Carry of desk review produce base studies related the Water-Ene Food-Ecosyste (WEFE) nexus 2.2.5b Carry preliminary interviews key players Environment, Water, Energy Agriculture sectors 2.2.5c Carry an inventory environment, water, energy agriculture sectors based the analysis data and results of previstudies result on gap analy and recommendati to support climate sectors support climate sectors pased the support climate sectors based the analysis data and results of previstudies result on gap analy and recommendati to support climate sectors pased the support pased the supp	

		2.2.5f Conduct
		assessment study
		of agriculture and
		food systems
		2.2.5 g Develop
		baseline mapping
		study of the
		agricultural
		energy use
		situation.
		2.2.5h Develop
		National Climate
		Risk and
		Vulnerability
		Assessment on
		WEFE Nexus
		2.2.5i Develop
		environmental
		baseline study

Objective 4: Pipeline Development

Outcomes

4.3 An increase in the number of quality concept notes developed and submitted that target SIDS, LDCs and African states.

Outputs			Indicators		Activities
Output 4.3.1: Concept Note developed targeting SIDS, LDCs and African states	Indicator 4.3.1.1 Number of CN targeting SIDS, LDCs and African states	Target 1	Mov Concept note developed	Notes One GCF CN developed for WEFE Nexus.	4.3.1a Develop a GCF concept note for WEFE Nexus
Outputs	Indicators				Activities
Output					4.3.4a
4.3.4:	Indicator	Target	Mov	Notes	Develop
Prefeasibility studies conducted targeting SIDS, LDCs and African states	4.3.4.1 Number of prefeasibility studies produced targeting SIDS, LDCs and African states	1	Prefeasibility study		pre- feasibility study of the elaborated WEFE Nexus Climate-
			•		Smart Agricultural project.

Section 5. Implementation arrangements and other information

5.1. Implementation arrangements

FAO, who will serve as the Delivery Partner responsible for implementing this readiness grant, including all fiduciary and financial management, procurement of goods and services, monitoring, and reporting activities. These actions will adhere to FAO's policies and procedures, as well as the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement signed by GCF and FAO on 25 August 2020 (referred to as the "Framework Agreement").

It should be noted that FAO will implement the activities in a manner that emphasizes the ownership, coordination and leadership role of the NDA. The involvement of the NDA and other government institutions will primarily encompass providing guidance and oversight for project implementation. However, these entities will not have direct responsibility for executing the activities outlined in this proposal. Additionally, no GCF funds will be allocated to government staff, and FAO will not transfer any funding or obligations to these institutions.

To ensure effective governance and strategic decision-making for this Readiness proposal, a Project Steering Committee (PSC) will be established. The PSC will consist of the NDA, the Ministry of Environment, Ministry of Agriculture and Livestock, Ministry of Water Resources and Ministry of Electricity and Renewable Energy, and FAO. The primary objective of the PSC is to ensure strong inter-institutional coordination and oversight. The PSC engages with relevant stakeholders, fostering collaboration, and ensuring their input is considered in decision-making processes. Additionally, the PSC will review and validate technical products, with a specific focus on avoiding any overlap or duplication of work being carried out by other ongoing projects in Libya.

To ensure FAO's utmost accountability, it is imperative that the decisions made by the PSC adhere to high standards. These standards should encompass effective management for development results, value for money, fairness, integrity, transparency, and promoting effective international competition. By upholding these principles, FAO can ensure responsible and accountable project management, delivering optimal outcomes, ensuring efficient use of resources and maximizing the impact of the Readiness activities.

FAO will establish and oversee a dedicated Project Management Unit (PMU) responsible for the implementation of the Readiness activities and ensuring effective coordination with the PSC. The PMU will be managed and staffed by FAO, and it will be led by a Project Management and Operations Expert (PMO). Given the nature of the activities, the PMO will be based within the Ministry of Environment facilities. However, they will operate under the direct supervision of FAO to ensure seamless coordination and alignment with the grant objectives. The PMO will have the following responsibilities:

Day-to-day project management: Oversee and manage the project daily, ensuring smooth operations and progress towards project objectives.

Regular monitoring of results and risks: Continuously monitor project outcomes and assess associated social and environmental risks. This includes identifying potential challenges or obstacles and taking necessary actions to address them.

Transparency, responsibility, and accountability in reporting: Maintain a high level of transparency and accountability in reporting project results, ensuring accurate and timely reporting to relevant stakeholders.

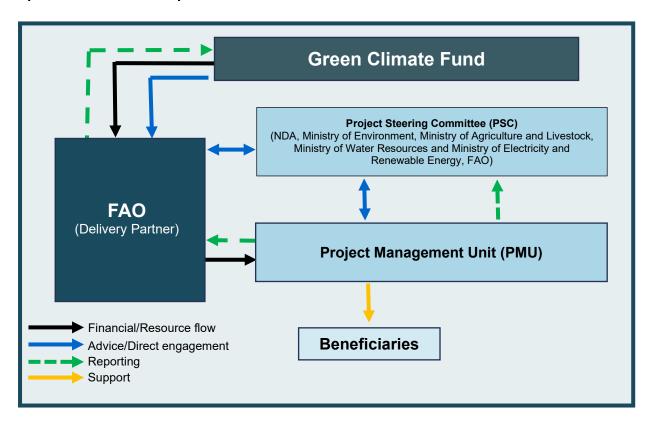
Reporting delays or difficulties: Promptly report any delays or difficulties encountered during implementation to the PSC. This enables timely support and corrective measures to be implemented to address issues and ensure project success.

Develop annual work plans: Collaborate with relevant stakeholders to develop comprehensive annual work plans that outline project activities, timelines, and deliverables.

Facilitate fluid communication: Foster effective and open communication channels among all project stakeholders, ensuring information flows smoothly and facilitating collaboration.

Act as the secretary of the PSC, ensuring that decisions made by the committee are duly executed and implemented, leading to the successful implementation of the Readiness proposal.

Implementation flow map



In accordance with the established procedures for FAO cooperation programme implementation, the government of Libya and FAO will sign a project agreement document that will serve as the legal basis for the project implementation, monitoring and reporting. FAO has an office in Libya that will manage and coordinate implementation of the grant.

Starting date and disbursements

The start date and disbursements will be made in accordance with the Framework Agreement.

5.2. Implementation and Execution Roles and responsibilities

Entity	Position Title	Outputs	Responsibilities	Minimum Qualifications
DP	National Project Management and Operations expert	1.3.1 1.3.2 1.3.3 2.2.5 4.3.1 4.3.4	Coordinate and manage all project management aspects of the proposal including the preparation of the annual project work plan and budget, including analysis and reporting, preparation of procurement plans and TORs, tracking and monitoring of project costs and deliverable, etc.	Academic qualifications: - High level diploma in project management, administration, finance or related field - Level C for English and Arabic languages Professional qualifications: At least 5 years' project management experience in project operations or finance
DP	National technical advisor and stakeholder coordinator	1.3.1 1.3.2 1.3.3 2.2.5 4.3.1 4.3.4	Stakeholder coordination and technical oversight of all project activities' implementation and deliverable preparation.	Academic qualifications: MSc of equivalent diploma natural resources or water or agriculture sectors, or similar Level C for English and Arabic languages Professional qualifications: Senior expert in WEFE- nexus matters and stakeholder engagement
DP	National Natural Resources Specialist	1.3.1	Responsible for assessment of the capacity requirements of stakeholders for the planning, programming, and implementation of GCF funded activities in the areas of WEFE nexus (1.3.1c)	Academic qualifications: MSc of equivalent diploma in natural resources Level C for English and Arabic languages Professional qualifications: Experience on GCF projects Experience conducting capacity assessments

READINESS AND PREPARATORY SUPPORT

DP	National Natural Resources Specialist	1.3.1	Development and delivery of a training of trainers' curriculum with needed material to plan for, develop and implement gender-responsive, climate-resilient WEFE projects, in addition to multistakeholder mechanisms (1.3.1d, 1.3.1e)	Academic qualifications: MSc of equivalent diploma in Natural Resources Level C for English and Arabic languages Professional qualifications: Experience on GCF projects 5 years' experience developing and delivering training of trainers curriculum
DP	FAO Technical Specialist	1.3.1 1.3.3 2.2.5	FAO senior MerWat technicians to provide support on development and delivery of training, development of materials and platform updating (1.3.1g, 1.3.3a, 1.3.3b) FAO senior technical staff of relevant fields to provide review and oversight of baseline studies (2.2.5a, 2.2.5d, 2.2.5e, 2.2.5f, 2.2.5g, 2.2.5h, 2.2.5i)	FAO senior staff responsible for development of MerWat Platform. FAO Senior Staff of relevant technical divisions.
DP	National Policy/Institutional Mechanisms Specialist	1.3.2	Stakeholder mapping including an initial situation analysis to identify the key stakeholders and their interests, expectations, and relationships. Develop coordination mechanism and set up multi- Stakeholder Process (MSP) Develop institutional arrangements and	Academic qualifications: MSc or equivalent diploma in Policy /Management Level C for English and Arabic languages Professional qualifications: 10 years' experience in policy and institutional sectors

			operational manual to strengthen the National Climate Change Committee (NCCC) Establish a subcommittee on	
DP	International Database Management Specialist	1.3.3	Perform the activities (1.3.3 a and b) related to collecting and creating a database that includes information on country-level GCF priorities and procedures, as well as activities, consultations, programs and projects on climate change, water, energy, environment, and agriculture. Provide all training sessions on MerWat-Libya Geospatial Platform	Academic qualifications: MSc of equivalent diploma in Database Management. Level C for English and Arabic languages Professional qualifications: 5 years' experience on data base, networks and platforms management
DP	International Climate Risk Analyst	2.2.5	Develop National Climate Risk and Vulnerability Assessment (2.2.5h)	Academic qualifications: MSc in Environmental Analysis or similar Level C for English Professional qualifications: At least 5 years' experience conducting Climate Risk Analysis
External	Consultancy for water baseline study and mapping	2.2.5	Development of water baseline study and mapping	National consulting firm or research center with extensive experience and technical capacities on water resources management and developing water baseline studies and mapping
External	Consultancy for land cover and land use assessment study	2.2.5	Development of land cover & land use assessment study	National consulting firm or research center with extensive experience and technical capacities on conducting land cover

READINESS AND PREPARATORY SUPPORT

				& land use the assessment studies
External	Consultancy for agriculture and food systems assessment	2.2.5	Development of agriculture and food systems assessment study	National consulting firm or research center with extensive experience and technical capacities on agriculture and food systems and the development of agriculture and food systems assessment studies
External	Consultancy for baseline mapping of agricultural energy use	2.2.5	Development of the baseline mapping study of the agricultural energy use situation.	National consulting firm or research center with extensive experience and technical capacities on agricultural energy use and development of baseline mapping studies on agricultural energy use.
External	Consultancy for environmental baseline study	2.2.5	Development of WEFE Nexus the baseline study	National consulting firm or research center with extensive experience and technical capacities on WEFE Nexus and conducting environmental baseline studies
DP	International WEFE Specialist	4.3.1 4.3.4	Develop concept Note and Prefeasibility Study	International expert with at least 8 years' experience on WEFE-nexus and previous experience drafting GCF concept notes. English proficiency
				required; knowledge of Arabic a plus

Roles of Government institutions and other partners

Agency/Key Type	Role in the project
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Ministry of Environment (NDA)	Government institution	GCF Focal Point/NDA. Oversight of the implementation of the readiness grant.
Ministry of Agriculture and Livestock	Government institution	Member of the Stakeholder Coordination Team (SCT) and Steering committee
Ministry of Water Resources	Government institution	Member of the Stakeholder Coordination Team (SCT) and Steering committee
Ministry of Electricity and Renewable Energy	Government institution	Member of the Stakeholder Coordination Team (SCT) and Steering committee
Libyan Centre for Remote Sensing and Space Science	Government specialized agency	Member of the Stakeholder Coordination Team (SCT) and Steering committee
FAO	Delivery Partner	FAO, as the Delivery Partner, will be responsible for implementation of the readiness support and will carry out all fiduciary and financial management, procurement of goods and services, monitoring and reporting activities under this proposal in compliance with FAO's policies and procedures and with the Framework Agreement. FAO will provide support and project assurance through the FAO country representation as well as through its regional office based in Tunis and headquarters in Rome. This will include project oversight, technical support, and monitoring functions. FAO will ensure compliance with the GCF's Revised Environmental and Social Policy, which includes Sexual Exploitation, Abuse and Harassment (SEAH) Investigations, updated Gender Policy and the Indigenous Peoples Policy for the implementation of this

5.3. Risk and Mitigation Measures

5.3.1 Risk Assessment and Risk Monitoring Plan

Risk category ¹⁷	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s) If relevant, specify the strategies adopted by the ongoing readiness grant in the country to mitigate the risks	Entity(ies) responsible to manage the risk(s)
Delay in the signature of the project agreement	The signature of the project agreement could take longer than expected	Low	Medium	Start the dialogue on the project agreement with the government the earliest possible stage (after the first feedback from the GCF).	NDA-FAO
Political risk Change of authorities		Low	Low	A monthly progress report should be	NDA-FAO- SCT

¹⁷ Risk categories can include: Operational, Political, Stakeholder engagement, Implementation, Natural-hazards related disasters, Unsustainability, Compliance, Money laundering, terrorist financing and prohibited practices, etc.

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	during the implementation of the Readiness proposal.			addressed to the involved authorities to keep them informed and updated. Regularly scheduled meetings with key stakeholders at multiple levels of government will take place, enabling consistent engagement and more rapid responses to any emerging political shifts and a cross-ministerial task force will be established to ensure that various governmental departments remain aligned and supportive throughout the project's duration. This approach aligns with the project's objectives of fostering comprehensive and sustained stakeholder engagement and will help mitigate disruptions due to changes in authorities, thereby ensuring continuity and stability in project implementation.	
Insecurity risk	The data collection throughout the country mainly in the South region (Fezzan) could face insecurity issue	Medium	High	All the field data collection should involve local expertise and implication of Municipalities and local civil societies with agriculture police	NDA-FAO- SCT
Involvement risk	Poor stakeholders' engagement at subnational level.	Low	Medium	From the inception phase, the process should be inclusive and participatory, creating trust by sharing each other's values, concerns and interests and communicating outcomes to stakeholders regularly. The Libya Initiative for Water, Energy and Food (LIWEF) and the pledge for collaboration that will be signed between the four Ministries	NDA-FAO- SCT

Technical/ contractual risk	Inadequate fulfillment of contractual obligations by the consultancies for the activities identified in the "logical framework", either with respect to failing delivery deadlines or with respect to the quality of the delivered	Low	Low	(Environment, Water Resources, Energy and Agriculture and Livestock will build consensus on a shared future vision, make sure consultations and decision-making Terms of reference should be well detailed highlighting the minimum required competency with deadlines for all the deliverables or the services to be provided. The Project Coordinators could communicate with the engaged consultants and service providers every week.	NDA-FAO- SCT NDA-FAO- SCT
Compliance	Anti-money Laundering and Counter- Financing Terrorism	Low	High	FAO will be responsible for overseeing the development of Terms of Reference (ToRs) and related work plans, ensuring clear roles and responsibilities are defined. To carry out the project activities, national and international consultants and firms from FAO's database and roster will be engaged. In line with FAO's procedures, field missions will be accompanied by escorts whenever necessary. In accordance with clause 11.01 (f) of the Framework Agreement, FAO will adhere to its own fiduciary principles and standards. This includes conducting "know your customer" checks, adhering to anti-money laundering	FAO

				(AML/CFT) measures, and complying with financial sanctions imposed by the United Nations Security Council. These measures enable FAO to align with the objectives of the Policy on Prohibited Practices and the principles of the AML/CFT Policy. Furthermore, the project will ensure proper adherence to the revised FAO Whistleblower Protection Policy, to ensure the protection and appropriate handling of whistleblower reports in line with FAO's guidelines.	
Data Quality and Reliability	There may be risks associated with the quality and reliability of the data collected for baseline studies, assessments, or database development. Factors such as outdated or incomplete data, inaccuracies, or biases in data collection methods could compromise the integrity of project outputs and undermine the effectiveness of decision-making processes in the future.	Medium	High	Robust data validation and verification procedures as mitigation measures to ensure data accuracy and completeness. FAO's experience in Libya in engaging subject matter experts and local stakeholders in data collection, which enhances data quality and relevance. Additionally, utilizing multiple data sources and triangulation techniques will help cross-validate findings and mitigate potential biases.	NDA - FAO

5.3.2 Sanctions and Restrictive Measures

In accordance with FAO rules and regulations, FAO will perform all necessary actions to ensure that the project is implemented in full compliance with any UN sanctions list that may be of relevance. No entities or individuals who are subject to or affected by United Nations Security Council sanctions regimes will be involved in these proposal/activities, either as counterparties or as beneficiaries.

For Libya the relevant sanctions measures are:

Arms	
Embarg	O

All Member States are required to prevent the sale or supply to Libya of arms and related materiel of all types, including weapons and ammunition, military vehicles and equipment, paramilitary equipment, and spare parts for the aforementioned (with an exception for the Libyan government for non-lethal materiel, technical assistance, training or financial assistance); prohibits the export by Libya, and procurement by Member States, of all arms and related materiel.

Travel Ban

All Member States are required to prevent the entry into or transit through their territories of all listed individuals.

Assets Freeze and business restrictions

All Member States are required to freeze all funds, other financial assets and economic resources that are owned or controlled, directly or indirectly, by the listed individuals or entities; no funds, financial assets or economic resources to be made available to or for the benefit of such individuals or entities; requirement to exercise vigilance when doing business with Libyan entities, if the States have information that provides reasonable grounds to believe that such business could contribute to violence and use of force against civilians.

Measures in relation to attempts to illicitly export petroleum

The Flag State of a designated vessel is required to direct the vessel not to load, transport, or discharge petroleum, including crude oil and refined petroleum products, from Libya, absent direction from the Government of Libya focal point.

All Member States are required to prevent the entry into ports of designated vessels designated by the Committee from entering their ports,

All Member States are required to prevent the provision of bunkering services, such as provision of fuel or supplies, or other servicing of vessels, to designated vessels.

All Member States are required to prevent financial transactions with respect to such petroleum from Libya aboard designated vessels.

5.3.3 Grievance Redress Mechanisms

Within the framework of this Readiness proposal, the NDA shall facilitate the resolution and/or clarification of any concern directly linked to implementation of the project that beneficiaries and involved stakeholders may have. In case the conflict refers to FAO, the NDA will present the complaints and claims to the Representation of the FAO in the country. If a notice of receipt of the claim is not received within 7 days, the complaint or concern must be sent to the FAO's regional office in Near East and North Africa (FAO-RNE@fao.org) for action. The project beneficiaries may send a complaint to the FAO Office of the Inspector General, who shall carry out an independent investigation. The procedure for the claims is detailed at http://www.fao.org/aud/. Email: Investigations-hotline@fao.org.

FAO is committed to ensuring that its resources are used solely for their intended purposes, that all operations are free from fraud and other corrupt practices, and to being held accountable to donors and beneficiaries for the implementation of its programs. To this end, the Organization has adopted a zero-tolerance policy in respect of fraud and other corrupt practices in all their manifestations. This policy applies, regardless of their location, to all activities and operations of the Organization, whether funded by Regular Programme or Extra-Budgetary Funds; administrative, technical, or operational in nature; or implemented by the Organization and/or an implementing partner, including any government agency. This policy applies to all FAO personnel and all contractual arrangements between the Organization and implementing partners, suppliers or other third parties for administrative, technical, or operational purposes. The FAO Whistleblower Protection Policy follows the guidelines to report allegations of possible wrongdoing in the activities of the project stated in the Administrative Circular 2019/06.

5.3.4 Anti-money Laundering and Counter-Financing Terrorism

As per clause 11.01 (f) of the Framework Agreement between the GCF and FAO, FAO will apply its own fiduciary principles and standards relating to any "know your customer' checks, AML/CFT, and financial sanctions imposed by the United Nations Security Council, which should enable it to comply with the objectives of the Policy on Prohibited Practices and the principles of the AML/CFT Policy.

Low risks of money laundering, terrorist financing, corruption or prohibited practices are foreseen during project implementation. The project team will use structures, national and international consultants contained in its database and roster, to ensure they have been working with UN agencies before. New consultants as well as new structures will be assessed before being recruited. Missions in the field will be escorted, when needed, as per FAO's procedures.

5.4 Monitoring

FAO will be responsible for monitoring and reporting. All reports to GCF will be put forward for consideration by the PSC to ensure that the information is clear and transparent before submission by FAO to GCF. Monitoring activities will be performed by the Project Coordinator, who will track down progress on activities on a continuous basis. Monitoring of outputs/activities will be done by tracking progress of the grant deliverables against the grant implementation plan. Biweekly team meetings will be set up to discuss progress and address any urgent issue as required. Indeed, monitoring findings will enable rapid project management decisions and adaptive management by involving different members of the project team, to facilitate the identification of diverse solutions, and mobilization of relevant inhouse support (e.g. technical teams, procurement teams, HR, etc.).

Reporting arrangements rely both on the periodical reporting to GCF through Progress Reports (see below), and continuous informal monitoring through biweekly meetings, documented through meeting minutes. For daily monitoring activities, project staff (and stakeholders as applicable) will receive on-the-job training by FAO at sub/regional/HQ level. Progress and completion report preparation is facilitated by extensive guidance (templates, webinars and direct support) developed by FAO in-house.

Progress Reports. Progress reports will be prepared by FAO every year, in coordination with the PSC and the project staff, and will be validated by the NDA. The progress reports will inform and monitor progress made from project effectiveness date and activities planned for the next reporting period. FAO will submit the reports to the GCF through the GCF PPMS Readiness system.

Completion Report. At the end of the implementation period, FAO will prepare and submit to GCF a completion report no later than six months after the end of the implementation period of the approved grant. This comprehensive report will be made available to the public through the NDA. It will summarize the results achieved (objectives, outcomes, outputs), lessons learned, challenges met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the proposal's results.

The reports (progress reports, completion and financial) to be submitted to the GCF will comply with the Framework Agreement and will include reporting against the logical framework included in section 3 of this proposal.

5.5 Other relevant information

Selection of Delivery Partner:

FAO was accredited by the GCF in October 2016, which allows it to develop donor-funded projects of up to USD 250 million in total size (including co-financing). It is also a partner for the implementation of Readiness proposals (preparing countries for the implementation of proposals to the GCF). Since FAO's accreditation, it has supported the development of projects that meet the fund's eligibility criteria in more than 70 countries globally.

FAO works closely with member states to promote the planning and implementation of climate-related policies, which include underrepresented groups, such as vulnerable communities and women. FAO seeks to improve the coherence of policies to ensure that climate action achieves a transformational change, and building climate resilience, reducing emissions, and promoting sustainable agricultural practices to ensure food security and sustainable development in the face of climate change.

At COP22 in November 2016, FAO and the GCF signed a Readiness Framework Agreement (second Amended and Restated Agreement of the Framework Readiness and Preparatory Support Grant Agreement entered between GCF and FAO on 25 August 2020). FAO has a strong track record in providing technical assistance related to risk and vulnerability analysis in agricultural sectors, and in facilitating national processes to prioritize adaptation practices and strategies.

FAO extends support in various critical areas of this proposal, including but not limited to gender balance and youth involvement.

FAO's selection as the Delivery Partner for previous Readiness grants stems from its track record of excellence in similar functions, its comparative advantage in the field, and its extensive technical knowledge. This decision is also based on the longstanding and successful collaboration between FAO and the country government through various projects and initiatives.

To avoid any possible conflicts of interest deriving from the Delivery Partner's role as an Accredited Entity, the prioritization of investments and projects, including the development of any concept notes, in the context of this readiness grant, will be made through a broad consultation process with relevant stakeholders, including other potential implementing entities

for Libya. The final validation of these priorities will be carried out through the countries' own relevant coordination mechanism and institutional arrangements, with the participation of other government agencies, as well as representatives from civil society and private sector as the NDA deems relevant, to ensure chosen priorities are fully aligned with national plans and strategies and adequately includes inputs from consulted stakeholders.

Exit and sustainability strategy:

FAO maintains a broad network of Libyan Ministries, institutions and NGOs and have been consulted during the preparation of this Readiness proposal. This participatory approach will guarantee the ownership and sustainability of the expected results.

At the occasion of the national inception workshop of the project TCP/SNE/3701, held in Tunis on 27 September 2019, Libya joined the pilot group of countries benefiting from the FAO Regional Water Scarcity Initiative (WSI) in the Near East and North Africa. The Readiness proposal will feed into and be supported by the WSI towards evidence-based policy formulation and institutional capacity building.

Within the context of the regional network of support provided by the Water Scarcity Initiative, the technical aspects of the existing Libya Initiative for Water, Energy and Food (LIWEF) will be strengthened between the Ministry of Environment, Ministry of Water Resources and the Ministry of Agriculture and Livestock and all their national partners to exchange data, systems and expertise for improving current data collection, monitoring and analysis in order to derive more timely and accurate information on water, agriculture, climate, environment, energy and food through the established MerWat-Libya Geospatial Platform.

The sustainability of the proposed collaboration framework will be ensured through a structured approach consisting of six key steps. The framework will involve assessing the drivers for each institution involved, which will help identify the motivations and incentives necessary for continued engagement beyond the project's duration. Next, effort will be made to foster the alignment of expectations among stakeholders to build mutual understanding and commitment to the collaboration, laying the foundation for sustained cooperation. The development of a comprehensive action plan will provide a roadmap for implementing collaborative efforts, ensuring clarity and accountability in achieving shared goals. The use of the MerWat-Libya Geospatial Platform will serve as the main infrastructure for facilitating ongoing data sharing and collaboration among stakeholders even after the project concludes. Training on how to update and keep the geospatial platform running will also facilitate this. The planned regular performance reviews will enable stakeholders to monitor progress, identify areas for improvement, and maintain momentum towards achieving long-term sustainability goals and finally, periodic re-examination of drivers will ensure that the collaboration framework remains responsive to evolving needs and priorities, thereby institutionalizing the results of the Readiness proposal and facilitating continued integration of climate change impacts across vital sectors such as Water, Energy, Food, and Ecosystems. These factors will help institutionalize and sustain the results of the proposed Readiness project towards improved integration of climate change impacts on the different vital sectors: Water, Energy, Food and Ecosystems.

The Readiness proposal gives gender equality consideration to the development and implementation of its activities, particularly those related to capacity development at national level and local level. For those activities, gender mix and representation will be considered in appointing appropriate stakeholders to the PTF, making merit-based appointment of technical and managerial staff for the project implementation, and when carrying out national and local

training workshops and awareness sessions for government personnel and private sector stakeholders.

Grant closure:

Grant closure will be made in accordance with Framework Agreement. Tangible and intangible assets procured by FAO will remain the property of FAO for the duration of the readiness grant. The Government will provide safe custody of such equipment, which is entrusted to it prior to the end of the readiness grant. Upon completion of the grant activities, the ultimate destination of all tangible and intangible assets procured under this proposal will be decided by FAO and the NDA.

Section 6. Budget, Procurement, HR and Implementation plans:

6.1. Budget Plan

Please see attached excel sheet.

6.2. Procurement Plan

Please see attached excel sheet.

6.3 Human Resources (HR) Plan

Please see attached excel sheet.

6.4 Implementation Plan

Please see attached excel sheet.



Readiness Grant Budget Preparation Guidelines

This file contains three specific planning tools to complete the supplementary information required when submitting a proposal for Readiness Programme support (including for Objetive 3. Aptation planning):

- Budget plan and accompany Budget notes
- Procurement and HR plan
- Implementation plan

The following considerations are important when completing the budget:

- 1. Before preparing the Readiness and budget, procurement and HR, and implementation plans, please read the full guidance contained in the Readiness Programme Guidebook, specifically Part IV Sections 5 and 6
- 2. You can select the appropriate budget categories from the dropdown list in the budget plan:
- 3. To insert additional rows, right click on the row number below where you wish to insert the new row and choose INSERT.
- 4. Additional budget categories may be added by manually typing them on the Budget Category sheet:
- The Budget Notes sheet should be used to record explanations, further details or cost breakdowns for individual lines

Project Management Cost:

Project management costs (PMC) are the direct administrative costs incurred to execute a grant. They should cover only incremental costs incurred due to the GCF contribution. In most cases, these costs are directly related to the support of a dedicated project management unit which manages the day to day execution related activities of the grant.

Budget Categories Audio Visual & Printing Audit Fee Consultant - Individual - International Consultant - Individual - Local Professional Services — Companies/Firm IT Equipment Office Supplies Travel - International Travel - Local Workshop/Training

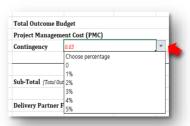


General Principles for PMC costs:

- 1. The percentage of PMC financed by GCF should not be more than the percentage share of the overall budget financed by GCF
- 2. PMC budget thresholds: Up to 7.5 per cent of total activity budget.
 - > PMC exceeding 7.5 per cent for the readiness (including NAPs) proposals, up to \$ 3 million will require detailed documentation and justification supporting the entire PMC budget.
 - > The PMC should be shown as a separate component in the project budget. A detailed breakdown of PMC should be provided by budget category.
 - > Indicative list of eligible project management costs:
 - > Project staffing and consultants: Project manager, Project Assistant, Procurement personnel, Finance personnel & Support/admin. Personnel
 - > Other direct costs: Office equipment, Mission related travel cost of the PMU, Project management systems and information technology, Office supplies, Audit cost

Contingency:

- 1. Select the appropriate % of Contingency Budget from the dropdown list :
- 2. Contingency budget for unforeseen costs arising during the grant implementation should not be included in the outcome budget separately.
- 3. Contingency budget must be used for any unforeseen programme (output level) cost that is unrelated to implementation/service fee.
- 4. Any use of contingency must be reported to and agreed by the GCF Secretariat in writing in advance provided with justifications that are acceptable to the GCF.
- 5. If by the end of the grant implementation period, you have not spent Contingency, you may not increase the scope of the project or make any other expenditures using the Contingency.



Budget Categories
5020 Locally Contracted Labour
5013 Consultants - Local
5013 Consultants - International
5014 Contracts
5027 Technical Support Services
5021 Travels - Local
5021 Travels - International
5023 Trainings & workshops
5024 Expendable Procurement
5025 Non-expendable Procurement
5028 GOE

Indicate additional budget categories

6.1 Budget Plan

Please add rows for Outcomes, Outputs and Cost Categories as required. Additional budget categories may be added by manually typing them on the Budget Category sheet.

				Detai	iled Budge	et (in US\$)					Expend	liture Plan		F	Postoret
	Objectives/Outcomes / Outputs		Budget Categories choose from the drop-down list	Unit	# of Unit	Unit Cost	Total Budget (per budget category)	Total Budget (per sub-outcome)	Total Budget (per outcome)	Year 1	Year 2	Year 3	Year 4	Executing Entity	Budget notes
			5023 Trainings & workshops	Lumpsum	17	2,800.00	47,600.00			42,000.00	5,600.00			DP- FAO	Α
			5023 Trainings & workshops	Lumpsum	10	400.00	4,000.00			2,000.00	2,000.00			DP- FAO	В
		Output 1.3.1	5013 Consultants - Local	W/day	44	250.00	11,000.00			11,000.00	-			DP- FAO	С
		Relevant stakeholders engaged and	5013 Consultants - Local	W/day	100	250.00	25,000.00			25,000.00	-			DP- FAO	D
		trained to support planning,	5013 Consultants - Local	W/day	143	150.00	21,450.00	177,530.00		10,725.00	10,725.00			DP- FAO	Е
		programming and implementation of GCF funded activities.	5027 Technical Support Services	W/day	5	1,146.00	5,730.00			5,730.00				DP- FAO	F
	Outcome 1.3 Relevant country		5021 Travels - Local	W/day	90	300.00	27,000.00			17,000.00	10,000.00			DP- FAO	G
	stakeholders (which may		5021 Travels - International	W/day	1	5,000.00	5,000.00			5,000.00				DP- FAO	Н
	include executing entities, civil society organisations		5028 GOE	Lumpsum	1	30,750.00	30,750.00			23,062.50	7,687.50			DP- FAO	
	and private sector) have	Output 1.3.2	5013 Consultants - Local	W/day	110	250.00	27,500.00			20,625.00	6,875.00			DP- FAO	J
Objective 1 : Capacity Building.	established adequate	Stakeholder engagement mechanisms	5013 Consultants - Local	W/day	66	150.00	9,900.00		304,972.00	4,950.00	4,950.00			DP- FAO	K
	capacity, systems and networks to support the	established to support planning, programming and implementation of	5024 Expendable Procurement	Lumpsum	1	1,000.00	1,000.00	44,650.00		1,000.00				DP- FAO	L
	planning, programming and	GCF funded activities.	5021 Travels - Local	W/day	10	300.00	3,000.00			3,000.00				DP- FAO	M
	implementation of GCF funded activities		5028 GOE	Lumpsum	1	3,250.00	3,250.00			3,250.00				DP- FAO	N
	tunded activities		5013 Consultants - International	W/day	80	500.00	40,000.00			20,000.00	20,000.00			DP- FAO	0
			5021 Travels - International	W/day	2	5,000.00	10,000.00			5,000.00	5,000.00			DP- FAO	P
		Output 1.3.3	5013 Consultants - Local	W/day	110	150.00	16,500.00 2,292.00	82.792.00		8,250.00 2,292.00	8,250.00			DP- FAO DP- FAO	Q
		Strengthened Information sharing	5027 Technical Support Services 5025 Non-expendable Procurement	W/day Lumpsum	1	1,146.00 7.500.00	7.500.00	02,702.00		6.000.00	1.500.00			DP- FAO	R S
			5028 GOE	Lumpsum	1	6,500.00	6,500.00			6,500.00	1,300.00			DP- FAO	Т
			5014 Contracts	Lumpsum	1	69,500.00	69,500.00			69,500.00				External contractor	U
	Outcome 2.2	Output 2.2.5 Studies, modelling efforts and other research efforts conducted/developed.	5014 Contracts	Lumpsum	1	69.500.00	69,500.00			69.500.00				External	V
	GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF		5014 Contracts	Lumpsum	1	69,500.00	69,500.00		00 414,444.00	69,500.00				contractor External contractor	w
Objective 2 : Strategic			5014 Contracts	Lumpsum	1	69,500.00	69,500.00	414.444.00		69,500.00				External contractor	х
Frameworks.			5014 Contracts	Lumpsum	1	69,500.00	69,500.00	,		69,500.00				External	Y
			5013 Consultants - Local	W/day	66	150.00	9,900.00			9,900.00				DP- FAO	Z
	Programming in low-		5013 Consultants - International	W/day	100	400.00	40,000.00			40,000.00				DP- FAO	AA
	emission investment.		5027 Technical Support Services	W/day	14	1,146.00	16,044.00			16,044.00				DP- FAO	BB
			5028 GOE	Lumpsum	1	1,000.00	1,000.00			1,000.00				DP- FAO	CC
			5013 Consultants - International	W/day	100	450.00	45,000.00			15,000.00	30,000.00			DP- FAO	DD
		Output 4.3.1	5013 Consultants - Local	W/day	80	150.00	12,000.00			6,000.00	6,000.00			DP- FAO	EE
	Outcome 4.3	CN developed targeting SIDS, LDCs and African states	5021 Travels - International	W/day	2	5,000.00	10,000.00	73,500.00		5,000.00	5,000.00			DP- FAO	FF
Objective 4 : Pipeline Development.	An increase in the number of quality concept notes developed and submitted		5028 GOE	Lumpsum	1	6,500.00	6,500.00		129,975.00	3,250.00	3,250.00			DP- FAO	GG
Development.	that target SIDS, LDCs and		5013 Consultants - International	W/day	70	450.00	31,500.00			18,000.00	13,500.00			DP- FAO	HH
	African states	Output 4.3.4	5013 Consultants - Local	W/day	63	150.00	9,450.00			4,725.00	4,725.00			DP- FAO	II
		Prefeasibility studies conducted targeting SIDS, LDCs and African	5021 Travels - International	W/day	2	5,000.00	10,000.00	56,475.00		5,000.00	5,000.00			DP- FAO	JJ
		states	5028 GOE	Lumpsum	1	5,525.00	5,525.00			2,762.50	2,762.50			DP- FAO	кк
Total Outcome Budget	Total Outcome Budget								849,391.00	696,566.00	152,825.00	-	-		
			5013 Consultants - Local	Month	24	2,545.00	61,080.00	Actual amount and % of	Maximum PMC that	30,540.00	30,540.00			DP- FAO	LL
			5025 Non-expendable Procurement	Lumpsum	1	2,000.00	2,000.00	PMC requested:	can be requested:	1,000.00	1,000.00			DP- FAO	MM
Project Management Cost (PMC) Up to 7.5% of Total Activity Budget			5028 GOE	Lumpsum	1	500.00	500.00	do not change the formula	do not change the formula	350.00	150.00			DP- FAO	NN
op to 1.5.0 or Foral Ablivity budget							-	63,580.00	63,704.33						
							-	7.49%	7.50%						

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY							
Breakdown (per budget category)	Total (per budget category)						
5020 Locally Contracted Labour	-						
5013 Consultants - Local	203,780.00						
5013 Consultants - International	156,500.00						
5014 Contracts	347,500.00						
5021 Travels - Local	30,000.00						
5021 Travels - International	35,000.00						
5023 Trainings & workshops	51,600.00						
5024 Expendable Procurement	1,000.00						
5025 Non-expendable Procurement	9,500.00						
5028 GOE	54,025.00						
5027 Technical Support Services	24,066.00						
0	-						
0	-						
0	-						
0	-						
Total Outcome Budget + PMC	912,971.00						

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Total Outcome Budget Project Management Cost (PMC) Contingency	7.5% requested 1% requested	849,39 63,58 8,49
Sub-Total (Total Outcome Budget + Contingence	921,46	
Delivery Partner Fee (DP) - Up to 8.5% of th	ne Sub-Total	78,3

Budget Notes

Budget Note	Detailed Description
Α	17 events (1 Inception workshop + 1 awareness raising workshop + 7 ToT training sessions + 5 training workshops + 3 training sessions) for activities 1.3.1a, 1.3.1b, 1.3.1e, 1.3.1g, and 1.3.1h @ USD 2 800 per event (including preparation, venue, food and refreshments, etc).
В	10 in-house training sessions conducted by trainers from Ministries and LCRSSS (2 sessions per ministry/LCRSSS) under activity 1.3.1f @ USD 400 per event
С	National Consultant, Natural Resources Specialist with experience on GCF projects for activity 1.3.1c related to the assessment of the capacity requirements of stakeholders for the planning, programming, and implementation of GCF funded activities in the areas of WEFE nexus. Duration 44 days with a daily rate USD 250
D	National Consultant, Natural Resources Specialist with experience on GCF projects for activities 1.3.1d, 1.3.1e, and 1.3.1f related to the development and delivery of a training of trainers' curriculum. Duration 100 days with a daily rate USD 250
E	National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of all activities' implementation and deliverable preparation under output 1.3.1. Duration 143 days with a daily rate USD 150.
F	FAO technical staff from MerWat development team seconded for activity 1.3.1g for 5 days at UN-FAO P4 rate of 1146 USD/day
G	Travel for national stakeholders for activities 1.3.1a, 1.3.1b, 1.3.1e, 1.3.1f, 1.3.1g and 1.3.1h @ 300 USD/travel
Н	Travel for international consultant developing CN and prefeasibility study to speak with workshop participants @ USD 5000/trip (incl. USD 76/day DSA; USD 56/day Danger Pay; USD 400/day compound lodging x 5 days)
I	GOE (amoured vehicles @ USD 650/day x 45 days, printing, events preparation, translation services, etc @ USD 1500) under output 1.3.1
J	National Consultant, Policy/Institutional Mechanisms Specialist for activities 1.3.2a, 1.3.2b, 1.3.2c, and 1.3.2d. Duration 110 dayswith a daily rate USD 250.
К	National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of all activities' implementation and deliverable preparation under output 1.3.2. Duration 66 days with a daily rate USD 150.
L	Expendable procurement under output 1.3.2
М	Travel for project staff and national stakeholders for 1.3.2b and 1.3.2d 10 days @ 300USD/travel
N	GOE under output 1.3.2 (armoured vehicle @USD 650/day x 5 days)
0	International Consultant, Database management specialist to perform activities 1.3.3a and 1.3.3b. Duration 80 days with a daily rate USD 500.
Р	Travel for international consultant under output 1.3.3. Two trips + DSA @ USD 5000/trip (incl. USD 76/day DSA; USD 56/day Danger Pay; USD 400/day compound lodging x 5 days)
0	National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of all activities' implementation and deliverable preparation under output 1.3.3. Duration 110 days with a daily rate USD 150.
R	FAO technical staff from MerWat development team seconded for activities 1.3.3a and 1.3.3b for 2 days at UN-FAO P4 rate of 1146 USD/day
S	Equipment (software) related MerWat-Libya Geospatial Platform @ 7500 USD
Т	GOE under output 1.3.3 (armoured vehicle @USD 650/day x 10 days)
U	National consulting firm or research center with extensive experience and technical capacities on water resources management to deliver activities 2.2.5a, 2.2.5b, and 2.2.5c related to water sector and then perform activity 2.5.2d related to the water baseline study and mapping.
V	National consulting firm or research center with extensive experience and technical capacities on land cover & land use to deliver activities 2.2.5a, 2.2.5b and 2.2.5c related to land sector and then perform activity 2.5.2e related to the assessment study of land cover & land use.
W	National consulting firm or research center with extensive experience and technical capacities on agriculture and food systems to deliver activities 2.2.5a, 2.2.5b and 2.2.5c related to Agriculture and food systems sectors and then perform activity 2.5.2f related to the assessment study of agriculture and food systems
Х	National consulting firm or research center with extensive experience and technical capacities on agricultural energy use to deliver activities 2.2.5a, 2.2.5b and 2.2.5c related to the energy sector and then perform activity 2.5.2g related to the baseline mapping study of the agricultural energy use situation.
Υ	National consulting firm or research center with extensive experience and technical capacities on WEFE Nexus to deliver activities 2.2.5a, 2.2.5b and 2.2.5c related to the environment sector and then perform activity 2.2.5i related to the baseline study of environment.
Z	National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of all activities' implementation and deliverable preparation under output 2.2.5. Duration 66 days with a daily rate USD 150.
AA	International consultant, Climate Risk and Vulnerability Analysis specialist to conduct activity 2.2.5h. 100 days at USD 400/day
ВВ	FAO technical staff seconded for 2 days for each of the following activities: 2.2.5a, 2.2.5d, 2.2.5e, 2.2.5f, 2.2.5g, 2.2.5h, 2.2.5i at UN-FAO P4 rate of 1146 USD/day
CC	GOE for conducting baseline studies @ USD 1000
DD	
EE	International consultant with experience on WEFE and drafting GCF concept notes to draft CN under activity 4.3.1. 100 days at USD 450/day National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of concept note
	development under 4.3.1. Duration 80 days with a daily rate USD 150.

GG	GOE under output 4.3.1 (armoured vehicle @USD 650/day x 10 days)
НН	International consultant with experience on WEFE and drafting pre-feasibility studies to draft pre-feasibility study under activity 4.3.4. 70 days at USD 450/day
II	National Consultant, Technical advisor and stakeholder coordinator for technical oversight and stakeholder coordination of prefeasibility study development under 4.3.4). Duration 63 days with a daily rate USD 150.
JJ	International Travel + DSA for 2 trips under activity 4.3.4 @ USD 5000/trip (incl. USD 76/day DSA; USD 56/day Danger Pay; USD 400/day compound lodging x 5 days)
KK	GOE under output 4.3.1 (armoured vehicle @USD 650/day x 8.5 days)
LL	National consultant, Project management and operations expert. Responsible for all project management related tasks, including annual project work plans and budget, reporting, preparation of procurement plans, TOR and procurement pacakges, etc. 24 Months, 25450USD/month
MM	PMC Non-expendable procurement (laptop) @ 2000 USD
NN	PMC GOE (printing, etc) @ 500 USD

xcured, please list the items, descriptions in relation to the activities in Section 3, estimated cost, procurement method, relevant threshold, and the estimated dates. Please provide a full procurement plan for the entire duration of the implementation period.

w, and remove the items before including the proposal's entries. At the proposal submision stage, please populate the raws dedicated to planned items.

Rev	ised1	(blank)						
Item Description	Category	Estimated Cost (US\$)	Current Estimated Cost (please indicate Procurement Method (e.g. open, limited latest estimated/actual cost) RFP,TB,RFQ)	Thresholds as per applicable procurement policy (Min-Max monetary value for which indicated procurement method must be used)	Name of Entity executing Procurement (DP/EE, etc.)	Date of initiating procurement (Tender Issuence)	Estimated contract start date	Remarks
Local travel	Non-Consulting Services	\$ 22,000.00		NA .	DP-FAO	M03 / Y01 M08/Y01 M03/Y02	M03 / Y01 M08/Y01 M03/Y02	Local travel, 100 trips for the support for participants coming outside Tripoli for Fezzan, Northeast and Northwestern region of Libya @ USD300 per trip. DSA not included in the procurement plan.
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
International travel	Non-Consulting Services	\$ 28,000.00	\$ 28,000.00 LTA	NA	DP-FAO	M03 / Y01 M08/Y01 M03/Y02	M03 / Y01 M08/Y01 M03/Y02	International travel (DSA not tincluded)
NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
NA Office supplies	Goods	NA 1,000.00	1,000.00 Very Low Value	Below 500	DP-FAO	M1/Y01	M2/Y1	Offices supplies for the development of the project for \$1000.
NA		NA	NA NA	NA	NA	NA .	NA	NA .
NA Software for Mer-Wat Geospatial		NA 7 500 00	NA .	NA	NA DP-FAO	NA .	NA M2/Y1	NA Equipment for Mer-Wat Geospatial platform (software, etc).
Platform	Goods	\$ 7,500.00 NA	\$ 7,500.00 Micro-Purchasing	500 - 2500 NA	DP-FAO NA	M1 / Y01	M2/Y1	Procurement will be done in batches.
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Laptop	Goods	\$ 2,000.00		NA NA	DP-FAO	M1 / Y01	M2/Y1	Laptop for PMC use
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
17 Workshops/Training sessions	Non-Consulting Services	\$ 47,600.00	47,600.00 RFQ	2500 - 10000	DP-FAO	M01 / Y01; M03/Y01; M08/Y01, M02/Y02 and M05/Y02	M01 / Y01; M03/Y01; M08/Y01,	To training sessions + 5 training workshops + 3 training sessions) for
NA		NA .	NA NA	NA .	NA	NA .	M02/Y02 and M05/Y02 NA	NA
NA		NA	NA NA	NA	NA	NA .	NA	NA
10 training sessions	Non-Consulting Services	\$ 4,000.00		2500 - 10000	DP-FAO	M4 / Y01	M4 / Y01	10 in-house training sessions conducted by trainers from Ministries and LCRSSS (2 sessions per ministry/LCRSSS) under activity 1.3.1f @ USD 400 per event
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Consultancy for water baseline study and mapping	Consulting Services (Professional Firms)	\$ 69,500.00		Above 10000	DP-FAO	M01 / Y01	M02 / Y01	National consulting firm or research centre with extensive experience and technical capacities on water resources management to deliver the water baseline study and mapping.
NA		NA .	NA NA	NA .	NA	NA .	NA	NA
NA Consultancy for land cover and land	Consulting Services (Professional	NA	NA NA	NA	NA	NA .	NA	NA National consulting firm or research centre with extensive experience
use assessment study	Firms)	\$ 69,500.00	\$ 69,500.00 Invitation to Bid	Above 10000	DP-FAO	M02 / Y01	M03 / Y01	and technical capacities on land cover & land use the assessment
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Consultancy for agriculture and food	Consulting Services (Professional Firms)	\$ 69,500.00	\$ 69,500.00 Invitation to Bid	Above 10000	DP-FAO	M03/Y01	M04/ Y01	National consulting firm or research centre with extensive experience
systems assessment NA		NA .	NA NA	NA	NA	NA .	NA .	and technical capacities on agriculture and food systems to deliver NA
NA .		NA .	NA NA	NA .	NA	NA .	NA	NA National consulting firm or research centre with extensive experience
Consultancy for baseline mapping of agricultural energy use	Firms)	\$ 69,500.00		Above 10000	DP-FAO	M04 / Y01	M05 / Y01	and technical capacities on agricultural energy use to deliver the
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Consultancy for environmental	Consulting Services (Professional	\$ 69,500.00		Above 10000	DP-FAO	M09/Y01	M10/Y01	National consulting firm or research centre with extensive experience
baseline study NA	Firms)	NA 03,000.00	NA	NA .	NA.	NA .	NA.	and technical capacities on WEFE Nexus the baseline study of NA
NA		NA .	NA NA	NA .	NA	NA .	NA .	NA
Natural Resources Specialist	Consulting Services (Individual Consultants)	\$ 11,000.00	11,000.00 FAO Roster	N/A	DP-FAO	M02/Y01	M03/Y01	National consultant - 44 days under 1.3.1c
NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
NA	Consulting Services (Individual			N/A	DP-FAO	MGS/Y01	M04/Y01	NA National consultant - 100 days under activities 1.3.1d, 1.3.1e and
Natural Resources Specialist	Consultants)	\$ 25,000.00	*					1.3.1f
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
NA		NA .	NA NA	NA NA	NA	NA .	NA .	NA
NA Policylinstitutional Mechanisms		NA .	NA NA	NA		NA .	NA	NA National consultant - 110 days under activities 1.3.2a, 1.3.2b 1.3.2c,
Specialist NA	Consulting Services (Individual Consultants)	\$ 27,500.00 NA	\$ 27,500.00 FAO Roster	N/A NA	DP-FAO NA	M05/Y01 NA	M06/Y01 NA	Nasional consultant - 110 days under activities 1.3.2a, 1.3.2b 1.3.2c, and 1.3.2d NA
NA		NA	NA NA	NA NA	NA	NA .	NA .	NA NA
Database Management Specialist	Consulting Services (Individual Consultants)	\$ 40,000.00		N/A	DP-FAO	M01/Y01	M02/Y01	International consultant - 80 days under activities 1.3.3a and 1.3.3b
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Technical Advisor and Stakeholder Coordinator	Consulting Services (Individual Consultants)	\$ 79,200.00		N/A	DP-FAO	M05/Y01	M06/Y01	National consultant - 24 months full time, providing operational and technical oversight of activities' implementation and deliverable preparation
NA		NA .	NA	NA		NA	NA	NA NA
NA Comments Birth America	Consulting Services (Individual	NA 40 000 00	NA S 40 000 00 FAO Roster	NA N/A	NA DP-FAO	NA M02/Y01	NA M04/Y01	NA
Climate Risk Analyst	Consultants)	\$ 40,000.00 NA	\$ 40,000.00 PAC Roster	N/A NA	DP-FAO NA	M02/Y01 NA	M04/Y01	International consultant - 100 days under activity 2.2.5h
NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
WEFE Specialist	Consulting Services (Individual Consultants)	\$ 76,500.00	\$ 76,500.00 FAO Roster	N/A	DP-FAO	M01/Y01	M02/Y01	International consultant - 170 days under activities 4.3.1a and 4.3.4a
Project Management and Operations Expert		\$ 61,080.00		N/A	DP-FAO	M01/Y01	M01/Y01	National consultant - 24 months full time, overseeing all project management related tasks
NA NA		NA .	NA NA	NA .	NA	NA .	NA .	NA .
NA		NA .	NA NA	NA .	NA	NA	NA	NA
Total \$(USD)		\$ 818,880.00						

6.3 Human Resources (HR) Plan
For staff to be employed for the duration of the grant.
Please use examples in the table below, and remove them before indicating proposal's requirements.

Item	Item Description	Estimated Cost (US\$)	Recruitment Method	Thresholds as per applicable policy (if any)	Name of Entity executing recruitment (DP/EE, etc.)	Date of initiating recruitment	Estimated contract start date
	FAO staff seconded for 5 days under 1.3.1g, 2 days under 1.3.3a and 1.3.3b and 14 days under activities 2.2.5a, 2.2.5d, 2.2.5e, 2.2.5f, 2.2.5g, 2.2.5h, 2.2.5i	24,066.00	NA - FAO staff secondment	N/A	DP-FAO	M05/Y01	M06/Y01
	Sub-Total (US\$)	\$ 24,066.00					

6.3 Implementation Plan

Column B: Please list all output codes the proposed proposal aims to achieve (e.g., 1.2.1 or 2.1.3., etc.)

Column C: Please indicate the month number in which the output will start the implementation (e.g., month 3 = 3)

Column D: Please indicate the month number in which the output will finish the implementation (e.g., month 9 = 9)

Column E: The duration of the implementation for each output will appear automatically using the formula (C-D); therefore, it is not expected for editing.

Column F: Dependency output(s): If the output listed is depending on other output(s), please list those outputs respectively; otherwise, please type "none"

Please check out the example in the table below, and remove them before including the proposal's entries

Output	Start Date (Month#)	End date (Month#)	Implementation period (Months)	Interdependency output(s)
1.3.1	2	23	21	None
1.3.2	2	5	3	1.3.1
1.3.3	4	24	20	2.2.5
2.2.5	3	9	6	None
4.3.1	14	22	8	4.3.4, 2.2.5
4.3.4	14	22	8	4.3.1, 2.2.5

	2025 2026					
Outcomes/Outputs/Activities	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24					
Outcome 1.3: Relevant country stakeholders (which may include executing entities, civil society planning, programming and implementation of GCF funded activities	y organisations and private sector) have established adequate capacity, systems and networks to support the					
Output 1.3.1 Relevant stakeholders engaged and trained to support planning, programming and in	mplementation of GCF funded activities.					
1.3.1a Organize national inception workshop and sign the pledge for partnership						
1.3.1b Organize national awareness workshop						
1.3.1c Assess the capacity requirements of NCCC and WEFE sub-committee						
1.3.1d Develop training of trainers' curriculum						
1.3.1e Conduct 7 ToT sessions for selected trainers						
1.3.1f Support selected trainers conduct 2 in-house sessions for 4 target ministries plus LCRSSS						
1.3.1g Conduct five 2-day training workshops to develop capacities on use and updating of multi stakeholder coordination mechanisms						
1.3.1h Organize 3 training sessions on MerWat Libya Geospatial platform and OSS platform						
1.3.1i Conduct regular action-learning meetings for WEFE sub-committee						
Output 1.3.2 Stakeholder engagement mechanisms established to support planning, programming	g and implementation of GCF funded activities					
1.3.2a Develop coordination mechanism						
1.3.2b Conduct stakeholder mapping and situation analysis						
1.3.2c Develop institutional arrangements and operational manual of NCCC						
1.3.2d Establish sub-committee on WEFE nexus under NCCC						
Output 1.3.3 Strengthened Information sharing						
1.3.3a Create users manual on how to use OSS and MerWat Libya Platforms synergistically.						
1.3.3b Integrate all elaborated databases in the recent developed MerWat-Libya Geospatial Platform.						
	ress policy gaps, improve sectoral expertise, and enhance enabling environments for GCF Programming in low-					
emission investment. Output 2.2.5 Studies, action plans, modelling efforts and other research efforts conducted/develop	ped					
2.2.5a Carry out a desk review to produce baseline studies related to the Water-Energy-Food- Ecosystem (WEFE) nexus						
2.2.5b Carry out preliminary interviews with key players for Environment, Water, Energy and Agriculture sectors						
2.2.5c Carry out an inventory of environment, water, energy and agriculture sectors based on the analysis of data and the results of previous studies resulting on gap analysis and recommendations to support the climate smart food and water security strategies.						
2.2.5d Develop water baseline study and mapping						
2.2.5e Conduct assessment of land cover & land use						
2.2.5f Conduct assessment study of agriculture and food systems						
2.2.5g Develop baseline mapping study of the agricultural energy use situation.						
2.2.5h Develop National Climate Risk and Vulnerability Assessment on WEFE Nexus						
2.2.5i Develop environmental baseline study						
Outcome 4.3 An increase in the number of quality concept notes developed and submitted that target SIDS, LDCs and African states.						
Output 4.3.1 Concept Note developed targeting SIDS, LDCs and African states						
4.3.1a Develop a GCF concept note for WEFE Nexus						
Output 4.3.4 Prefeasibility studies conducted targeting SIDS, LDCs and African states						
4.3.4a Develop pre-feasibility study of the elaborated WEFE Nexus Climate-Smart Agricultural						
project.						