KINGDOM OF CAMBODIA

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MINISTRY OF WATER RESOURCES AND METEOROLOGY

CLIMATE ADAPTIVE IRRIGATION AND SUSTAINABLE AGRICULTURE FOR RESILIENCE PROJECT

Executive Summary

ENVIRONMENTAL, SOCIAL AND CLIMATE MANAGEMENT FRAMEWORK

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Prepared by

the Ministry of Water Resources and Meteorology

1. COUNTRY CONTEXT

Cambodia's agriculture sector is crucial for the economy but also highly susceptible to the effects of climate change. The country is ranked 151 out of 181 countries in the 2020 ND-GAIN Index and was the 12th most disaster-prone country among 172 countries between 1999–2018 and remains one of the few Least Developed Countries (LDCs) in Asia. Annual economic losses resulting from natural disasters in the country were estimated at 0.7% of GDP in 2011. The World Risk Index of 15.8% indicates a very high risk of disaster as a result of extreme natural events, with an exposure index of 27% and a vulnerability index of 59%. Approximately 80% of the country is within the Mekong River and Tonle Sap basins, increasing exposure to floods, storms, and droughts.

The country has a high reliance on the agriculture sector, which accounted for nearly 22% of its GDP in 2021. The rural population represents 75.8% of the national population in Cambodia. Since 2020, the negative impacts of climate change and the pandemic have led to a 10% loss in Gross Domestic Product (GDP). In addition to negative climate impacts, stagnating global agricultural commodity prices, rising labour costs and the limited scope for cropland expansion in the country pose challenges for the agriculture sector. Relatively low yields, coupled with frequent natural disasters, contribute to temporary food shortages for vulnerable communities. Livelihoods of the Cambodian farmers rely heavily on rain-fed agriculture and non-poor households are vulnerable to falling back into poverty in the event of extreme or frequent climate shocks. Women and children are among the most vulnerable groups to climate change.

The lack of irrigation water is a crucial barrier for farmers; alongside projected increase in dry days and rising temperature aggravating climate change-induced water shortages which prevent the cultivation of more than a single crop each year. Studies suggest that shifting to irrigated cultivation could result in annual overall production increases of up to 40%. The lack of timely information on droughts and floods (seasonal forecasts, the changing length) is a major problem. Farmers lack the knowledge and tools to adapt their farming practices and production techniques to climate change; they are largely unaware of climate resilient practices, stress-tolerant seed varieties and improved planting materials, efficient input management, or the benefits of applying these practices. Agricultural emissions in Cambodia increased by ~3% each year between 1994 and 2016 – the main driver being rice cultivation (see Climate Context); changes in rice management practices (irrigation, fertilizer use, residue / straw) are also important to reduce the GHG emissions from rice production. Cambodia is unlikely to achieve 5% of its annual agricultural growth target by 2030, without more investment in climate adaptation, sustainable irrigation, flood control and drainage schemes. Persistent poverty, limited access to finance, and insufficient institutional capacities have left the rural agrarian population vulnerable to the negative impacts of climate change, economic slowdown, and environmental degradation.

2. PROJECT OBJECTIVES

The project objective is to enable resilience and adaptation to the negative impacts of climate events, mitigate GHG emissions in rice production, and improve the livelihoods of smallholder farmers and vulnerable rural communities in four provinces of Cambodia. This objective will be achieved by implementing three components that aim at addressing climate change vulnerabilities, increasing agriculture productivity, and developing institutional capacities.

- **Component 1: Improving farm-level climate adaptation, resilience, water use efficiency.** Component 1 focuses on climate resilient crop-water management practices, food security and income generation in rice (including alternate wetting and drying, rice straw management, laser land leveling), vegetable, poultry and aquaculture production – through Farmer Field Schools and will leverage agro-meteorological information to ensure farmers can better plan their production / management actions, anticipate extreme events such as floods / flash floods, and efficiently manage irrigation and water resources; it will provide opportunities for greater market integration through rural roads and other

enabling environment actions (multi-stakeholder platforms, public-private partnership facility). Component 1 has four sub-components:

- 1.1 Deployment of farm-level climate adaptation and water use efficiency measures
- 1.2 Climate adapted, value added, and market led agricultural investment
- 1.3 Improve enabling conditions, capacities and disaster risk management strategies (agrometeorological information services)
- 1.4 Resilient farm/rural roads

- **Component 2: Irrigation Infrastructure for increased resilience.** Component 2 is linked with Component 1 such that it facilitates the implementation of climate resilient irrigation system for adapting to both increasing flood and drought condition and ensure a climate resilient water delivery to farmers with reduced damage to crops and infrastructures. It will focus on rehabilitating and modernizing of irrigation and flood protection/drainage infrastructure in the 7 sub-projects, including irrigation and drainage canals, flood control embankments, and ponds, to provide high-efficiency climate-resilient irrigated agriculture systems for adapting to both increasing flood and drought conditions. Component 2 has four sub-components:
  - 2.1. Modernization of irrigation scheme and ponds
  - 2.2 Flood-proofing and Drainage improvements
  - 2.3 Establishment and training of Farmers Water User Communities
- **Component 3 Institutional Strengthening.** This Component aims to strengthen Government institutions, mainly the MOWRAM, Ministry of Environment (MoE) and the National Committee for Sub-National Democratic Development (NCDD) and the FWUC. While the focus for MOWRAM will be on up-grading technical capacity in various aspects of climate resilient irrigation design and management, key focus area for MoE will be on strengthening climate policies and strategies and in building capacities for monitoring climate actions at the national level. Component 2 has two sub-components:
  - 3.1 MOWRAM capacity Support.
  - 3.2 Strengthening of NDA and NCDD

3. PROJECT BENEFICIARIES

CAISAR is expected to impact **500,000 people directly** and **2,300,000 people indirectly.** The direct beneficiaries are expected to benefit from adopting improved and climate resilient cropping and diversification patterns, improved access to water, enhanced water governance, greater market integration for improved access to adaptive inputs and early warning systems. The combined impact of these investments will be to enhance water and food security. The indirect benefits for households will be generated through wider dissemination of the adaptation practices and technologies through lead farmers, private sector and agriculture extension workers, and enhanced availability of inputs in the market once the practices are adopted and generate a demand to which private suppliers respond. Benefits are also expected to accrue as a result of the more sustainable production technologies and increase in yields along the selected value chains through greater resilience, early warning and climate information systems, and enhanced access to water.

4. PROJECT IMPLEMENTATION SCHEDULE & BUDGET

The project is scheduled for implementaiton from 2025 – 2032 (7 years). The total project cost is expected to be **240 million USD** (AIIB: 100 million USD, GCF: 80 million USD, IFAD: 45 million USD, and the Royal Government of Cambodia: 15 million USD).

5. ENVIRONMENTAL, SOCIAL, CLIMATE RISKS AND IMPACTS

Project activities have potential environmental and social risks and impacts during the following phases: 1) Pre-construction Phase, 2) Construction Phase, and 3) Operations Phase.

IDENTIFICATION OF THE POTENTIAL RISKS & IMPACTS (INDICATIVE LIST ONLY)

	DESIGN PHASE	CONSTRUCTION PHASE	OPERATIONAL PHASE
ENVIRONMENTAL RISKS AND IMPACTS	○ **Land Use Changes**: The design that cause conversion of land for project purposes may alter local land use patterns, impacting agricultural and forestry activities. ○	○ **Biodiversity Degradation and Habitat Destruction:** Construction activities can result in the direct destruction of natural habitats, including wetlands, forests, and aquatic ecosystems. New irrigation systems may fragment habitats, resulting in new risks to flora or fauna. Temporary changes in river flow or stagnant water bodies may occur. A need for borrow materials and disposal of dredging materials also have potential risks and impacts to biodiversity and environment. ○ **Vegetation Clearance**: Clearing land for construction can lead to habitat destruction and loss of biodiversity. Land clearing should be carefully planned and managed. ○ **Soil Erosion and Sedimentation:** Excavation, grading, and land clearing can increase soil erosion or riverbank erosion, leading to sedimentation in nearby water bodies, affecting water quality and aquatic ecosystems, (plausibly) increasing or influencing flood risk, and exacerbating riverbank erosion. If materials for construction (sand, gravel) are excavated from sensitive locations, this can exacerbate river erosion or change water course – ultimately impact floods and contributing to uncertainty in flood forecasting models. ○ **Water Pollution**: Construction machinery, equipment, and runoff from	○ **Increasing Demand on Water Extraction**: Inadequate water management during operations can lead to over-extraction of water resources, which may cause downstream water scarcity, altered hydrology, and harm to aquatic ecosystems. Upstream developments (water use for agriculture and industries, deforestation and degradation) can affect the quality and quantity of water available in the project area. ○ **Change in Water Quality and Nutrient Flow**: The irrigation system's operations can affect water quality, with potential risks of contamination from agricultural runoff, pesticide use, or improper wastewater disposal. The system may also disrupt natural nutrient cycling and aquatic resources. ○ **Erosion and Sedimentation:** Ongoing maintenance and operation activities can contribute to soil erosion and sedimentation in water bodies, impacting water quality and aquatic habitats. Improperly planned irrigation systems can worsen flooding or sedimentation risks resulting in loss of lives, livelihoods (crop, livestock) and assets; it can also make flood modeling by adding elements of uncertainty. ○ **Invasive Species:** Poorly managed water flows can facilitate the spread of invasive aquatic species in different environments from upstream, potentially harming native ecosystems. ○ **Increasing demand on Energy Use:** The energy requirements for pump stations and flood control systems can result in increased carbon emissions if not managed efficiently. There is embedded carbon emissions (from energy use)

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		construction sites can introduce pollutants, such as sediment, oil, and chemicals, into nearby water bodies. ○ **Noise and Air Pollution:** Construction activities generate noise pollution and emissions from heavy machinery, impacting local air quality and disturbing wildlife. ○ **Resource Consumption**: If construction materials, water, and energy are consumed in large quantities, this could result in resource depletion and increased carbon emissions. ○ **Waste Management** – Waste generation from construction activities and campsite can potentially impacts on water quality and aquatic resources if not properly managed. All wastes shall be managed properly and disposed at the safe/approved dumping site by the local authority.	in materials used for irrigation system construction (cement, steel). At the farm level, there will be some reduction in GHG emissions when farmers are encouraged and supported to switch to solar irrigation – instead of using diesel generators. ○ **Waste Management:** Increasing water storage capacity and accessibility can increase frequency of cultivation in the command area. As consequence, it let to increase in using chemical fertilizers and pesticide. Wastes from chemical and pesticide uses are hazardous waste, which is required safe disposal at the safe/approved dumping site by the local authorities/provincial department of Environment. Poor baseline solid or liquid waste management practices may result in unsafe water being used for irrigation (or domestic use).
SOCIAL RISKS AND IMPACTS	○ **Economic Impacts and Land Acquisition issue:** The project will have potential impacts on people's livelihood and land tenure if the design have been proposed on the new alignment and/or outside the right of way of the irrigation. The process of acquiring land for the project can disrupt local communities, potentially leading to land tenure issues and conflicts. ○ **Livelihood Disruption**: Even before construction starts, the anticipation of project impacts can disrupt local livelihoods as residents may alter their activities or move. ○ **Community Concern:** Site visits of the project team may lead to community concern	○ **Physical and Economic Displacement:** The construction activities may potentially impacts on movable structures and crops of the local people who encroach the public land in the right of way of the irrigation. However, the impacts are minor and temporary. The designs have been mainly proposed on the existing alignment. ○ **Traffic and Access Disruption**: Increased construction-related traffic can disrupt local transportation networks, impacting communities and businesses along transportation routes. ○ **Health and Safety:** Construction sites pose health and safety risks to workers and nearby communities. Accidents and exposure to	○ **Land Use Conflicts**: Conflicts over water allocation and land use may arise among competing stakeholders, such as farmers, leading to disputes and social tensions. ○ **Access to Water:** Unequal access to water resources during the operations phase can exacerbate social inequalities, impacting vulnerable communities and livelihoods. ○ **Health and Safety:** Ongoing maintenance and operations work can pose health and safety risks to workers and nearby communities, particularly if safety measures are inadequate. ○ **Water conflict:** Limited capacity and lack of financial support (from water collection fees) for ensuring the smooth and accountable water

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	about the potential impacts from the project specially among people in downstream. Engaging with local communities during the pre-construction phase is critical to understanding their concerns and needs, helping to design mitigation measures as well as to disseminate the right messages and expected risks and impacts from the project activities in both negative and positive. ○	construction-related hazards can have serious consequences. ○ **Chance Finds for Cultural Heritage:** Construction activities and in migration of labor may threaten cultural heritage sites or disrupt local traditions and practices, leading to social and cultural impacts. ○ **I** ○ **Gender Inequities –** Potential inequities and lack of project opportunities and benefits due to labor influx from outside the local community.	coordination and allocation can lead to have water conflict among people in upstream and downstream. Maintaining effective communication and engagement with local communities is crucial to address their concerns and ensure the equitable distribution of benefits. ○ **Gender Inequities –** Potential inequities and lack of project opportunities and benefits. Women are not involved in water user groups is an issue? Women-managed agricultural crops do not get access to irrigation systems could also be an issue?
CLIMATE RISKS AND IMPACTS	○ **Climate Data Analysis:** It's important to analyze historical climate and hydrology data during the design phase to identify climate-related risks that may affect project design and location. ○ **Future Climate Projections**: Understanding future climate projections, such as changes in rainfall patterns or increased frequency of extreme weather events, can inform the project's design for resilience. ○ **Adaptation Planning:** Design phase should involve design and planning for climate change adaptation measures, ensuring the project can withstand anticipated climate impacts. Floods have historically destroyed roads, irrigation canals and drainage structures, design appropriate design for high floodwater flow / excessive sedimentation is critical. ○ . ○ **Data Collection**: Establishing baseline data on environmental conditions, community demographics, and climate variables during the design phase is crucial for monitoring and evaluation throughout the project's lifecycle.	○ . ○ **Climate-Related Disruptions**: Extreme weather events, such as heavy rainfall or flooding, can disrupt construction activities, leading to delays and increased costs. ○ **Water Management**: Managing water resources during construction, including temporary diversion of rivers or drainage, can impact local hydrology and potentially lead to downstream flooding. ○ **Infrastructure Vulnerability:** The construction phase may expose infrastructure to climate risks, such as flooding or storm damage, if proper precautions and design considerations are not taken into account. ○	○ **Climate Variability:** Changes in rainfall patterns, increased temperature, or more frequent extreme weather events can affect water availability and the effectiveness of flood protection systems. Farmers may be reluctant to adopt intermittent flooding practices (alternate wetting and drying) if there is uncertainty in availability of irrigation water. ○ **Extreme Events**: The irrigation and flood protection infrastructure must be resilient to withstand extreme weather events, including floods, droughts, and storms. ○ **Maintenance Challenges**: Climate-related impacts, such as increased sedimentation or infrastructure damage from extreme events, can pose challenges for ongoing maintenance and operations. ○ **Energy Efficiency**: Climate mitigation efforts should focus on optimizing embedded energy use in farm operations (e.g., integrated fertilizer management, reduce straw burning) and transitioning to cleaner energy sources (e.g., solar irrigation instead of diesel generators) to reduce greenhouse gas emissions associated

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			with ongoing operations. ○ **Adaptive Management:** The operations phase should include adaptive management strategies to respond to changing climate conditions and ensure infrastructure remains effective. ○ **Community Resilience**: Local communities will require support to build resilience to climate-related risks, such as training in climate-smart agriculture or flood preparedness. ○ **Water Management**: Climate-related changes may necessitate adjustments in water management practices to ensure sustainable and equitable water distribution.

PROPOSED MITIGATION MEASURES (These are not exhaustive)

	DESIGN PHASE	CONSTRUCTION PHASE	OPERATIONAL PHASE
ENVIRONMENTAL RISKS AND IMPACTS	○ **Habitat Assessment and Preservation:** - Conduct a detailed habitat assessment and implement measures to preserve critical habitats, such as wetlands and forests, by avoiding or minimizing construction within these areas. ○ **Sustainable Land Use Planning**: - Work with local authorities and communities to develop land use plans that minimize negative impacts on agriculture and forestry. -	○ **Habitat Protection and Restoration:** - Establish construction exclusion zones around sensitive habitats to prevent disturbance. - Implement habitat restoration programs in areas where construction has occurred. ○ **Erosion and Sediment Control:** - Install erosion control measures such as silt fences, sediment basins, and check dams to prevent soil erosion. - Implement best management practices for construction site runoff, including sediment ponds. ○ **Water Pollution Control:** - Properly manage construction chemicals, fuels, and waste to prevent water pollution. - Use environmentally friendly construction materials and techniques to reduce the risk of pollution.	○ **Sustainable Water Management:** - Implement efficient water management practices to prevent over-extraction and ensure equitable water distribution. Water use management – could describe the aim / their role in sustainable water use - Monitor water quality regularly and implement measures to reduce contamination, such as the responsible use of pesticides and proper wastewater treatment. ○ **Erosion and Sedimentation Control:** - Develop and implement erosion control measures to minimize soil erosion and sedimentation in water bodies. - Regularly maintain sediment basins and silt fences to manage sediment runoff. ○ **Invasive Species Management:** - Implement monitoring and control programs to prevent the spread of invasive aquatic species in

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		○ **Noise and Air Pollution Management:** - Implement noise barriers and schedule noisy activities during non-sensitive hours. - Ensure construction equipment meets emissions standards and maintain equipment properly. - Spraying water to reduce dust. ○ **Resource Efficiency:** - Reduce resource consumption by optimizing construction material use and recycling where feasible. - Implement energy-efficient construction practices and use renewable energy sources where possible. ○ **Waste Management** - Implement waste management plan	irrigation and flood protection infrastructure. ○ **Energy Efficiency:** - Optimize energy use through efficient pump systems, renewable energy integration, and regular maintenance of energy-consuming equipment. ○ **Waste Management** - Implement waste management plan. - For solar irrigation, farmers will need to assisted with long-term arrangements for disposal of solar panels.
SOCIAL RISKS AND IMPACTS	○ **Economic Displacement Impacts and Land Acquisition Issues:** - Proposed designs follow the existing alignment and if it is necessity to widening, the design shall be proposed within the right of way under public land. In case of widening, follow Resettlement Planning Framework and develop a fair and transparent land acquisition and resettlement plan, ensuring affected communities are adequately compensated and resettled, if necessary. -	○ **Community Engagement:** - Maintain ongoing communication with affected communities to address concerns and keep them informed about construction activities. - Implement grievance mechanism to address community complaints and issues promptly. ○ **Displacement and Resettlement:** - Implement resettlement plans, ensuring affected communities receive fair compensation, land, and livelihood restoration support. - Support affected households in finding alternative housing and income opportunities. ○ **Health and Safety:** - Enforce strict health and safety regulations on construction sites to protect both workers and nearby communities. - Provide appropriate training and personal protective equipment to workers. - Signboards	○ **Stakeholder Engagement:** - Maintain transparent and ongoing engagement with local communities and stakeholders to address concerns and ensure the equitable distribution of water resources. - Establish mechanisms for conflict resolution and dispute management related to land use and water allocation. ○ **Access to Water:** - Ensure that water access is fair and inclusive, with mechanisms in place to support vulnerable and marginalized communities in accessing water resources. ○ **Health and Safety:** - Continue to enforce strict health and safety regulations for workers and nearby communities during ongoing maintenance and operation activities. - Provide ongoing safety training and personal protective equipment to workers. ○ **Gender Participation:** - Implement Gender Action Plan and measures

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		○ **Cultural Heritage Protection:** - Conduct archaeological surveys before construction in culturally sensitive areas. - Develop mitigation strategies to protect cultural heritage sites and involve local communities in preservation efforts. ○ **Gender Participation:** - Implement Gender Action Plan and measures to promote female beneficiaries for improved participation in project planning and implementation, and economic empowerment.	to promote female beneficiaries for improved participation in project planning and implementation, and economic empowerment.
CLIMATE RISKS AND IMPACTS	○ **Climate-Resilient Design**: - Incorporate climate resilience into the project design by considering future climate projections and ensuring infrastructure can withstand extreme weather events and changing climate conditions. ○ **Adaptive Management:** - Develop adaptive management plans that can be adjusted based on changing climate conditions, ensuring the project's long-term viability. ○ **Baseline Data Collection**: - Establish baseline data for environmental, social, and climate variables during the pre-construction phase to enable effective monitoring and evaluation throughout the project's lifecycle. ○ **Climate Risk Assessments:** - Regularly assess climate risks and vulnerabilities during the pre-construction phase to identify emerging issues and adjust plans accordingly. ○ **Community Resilience**: - Support local communities in building resilience to climate change through capacity-building programs, education, and access to climate-resilient livelihood options. ○ **Green Infrastructure:** - Consider the use of green infrastructure	○ **Climate-Resilient Construction:** - Incorporate climate-resilient design features into infrastructure construction to withstand climate- related risks. - Implement flood and stormwater management measures to prevent construction site flooding. ○ **Temperature Extremes:** - Implement heat stress prevention measures for workers, such as shaded rest areas and hydration stations in hot weather. - Provide adequate clothing and equipment for workers during cold weather. - Ensure all vendors provide training on key risks (e.g., how to stay safe during lighting and thunderstorms). ○ **Community Resilience Building:** - Support local communities in building climate resilience by providing training and resources for climate adaptation. ○ **Monitoring and Compliance:** - Establish regular monitoring and reporting mechanisms to ensure compliance with environmental, social, and climate mitigation measures. - Conduct periodic audits to assess the effectiveness of mitigation efforts and	○ **Climate-Resilient Infrastructure:** - Regularly assess and maintain flood protection and irrigation infrastructure to ensure its resilience to changing climate conditions. - Develop flood and drought management strategies based on climate projections. ○ **Maintenance and Repairs:** - Implement a robust maintenance program to promptly address damage or sedimentation issues caused by climate-related events. - Ensure that infrastructure components remain in good working condition to maintain their effectiveness. ○ **Energy Transition:** - Transitioning to cleaner energy sources such as solar pumps to reduce carbon emissions associated with irrigation. - Promote carbon mitigation practices in rice production (straw management, alternate wetting and drying, laser land leveling that can increase efficiency of water use on farm). ○ **Adaptive Management:** - Establish adaptive management plans that allow for adjustments in water management and infrastructure operations in response to climate variability and extreme events.

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	solutions, such as natural flood management techniques, to complement traditional engineering approaches and enhance climate resilience.	make necessary adjustments.	○ **Community Resilience Building:** - Support local communities in building climate resilience through education, capacity-building programs, and climate-smart agriculture practices. - Encourage community-led initiatives for flood preparedness and disaster risk reduction. ○ **Water Management Adjustments:** - Be prepared to adjust water management practices, such as reservoir release schedules, in response to changing climate conditions and hydrological patterns. ○ **Monitoring and Reporting:** - Continue regular monitoring and reporting on environmental, social, and climate-related factors to assess the effectiveness of mitigation efforts and make necessary adjustments.

6. INSTITUTION ARRANGEMENTS

- National Level:

The Ministry of Water Resources and Meteorology (MOWRAM) is the project executing agency. MOWRAM will establish a Project Management Unit (PMU) for the implementation of the CAISAR Project. The PMU will be led by the Secretary of State of MOWRAM as the National Project Director (NPD), and managed by a project-recruited National Project Coordinator (NPC). The NPC will be responsible for overall project management and coordination. Within the PMU, project-recruited staff and staff seconded by the government will collectively comprise a project delivery team that will ensure sound and effective project implementation. The PMU will also include an Operations Officers, Gender Specialist, Finance Officer, Human Resources and Administration Officer, Procurement Officer and Monitoring and Evaluation Officer. Consulting firms and individual consultants will be recruited to support the project implementation and undertake detailed design services and construction supervision.

- **Sub-national Level**

The Project Management Unit will consist of personnel from MOWRAM, the Department of Hydrology and River Works (DHRW) of MOWRAM, and Provincial Departments of Water Resources and Meteorology (PDWRAMs) of the four provinces in which the project will be implemented. The PDWRAMs will be responsible for coordinating all field activities with Farmer Water User Committees (FWUCs). The Department of Farmer Water User Committees (DFWUC) has personnel at the central level but no office or personnel at the Province and District level. For the effective operation of the committees, the Department of FWUC will appoint additional personnel at the provincial and district levels.

MOWRAM responsible for overall supervision and guidance, and the DFWUC responsible for preparing the annual work plan and budgets, initiating and coordinating communication, coordinating with the Ministry of Agriculture, Forestry and Fisheries (MAFF) on agriculture support activities, and implementing social and environmental safeguards, among other tasks. The PDWRAM will assist the PMU in disseminating information and coordinating with the Ministry of Economy and Finance-General Department of Resettlement (MEF-GDR) to implement the resettlement plan, among other tasks.

National Committee for Sub-National Democratic Development (NCDD) will work in close coordination with the provincial and district agencies for agriculture to implement the activities under the Component 1. NCDD will coordinate with the MAFF program team, Ministry of Commerce and Ministry of Rural Development to ensure strong synergy with the extension and farmer organizations that have been organized under these projects.

7. GRIEVANCE REDRESS MECHANISM

The project has in place complaint handling procedures for various types of potential grievances, including grievances related to but not limited to 1) general complaints, 2) land acquisition, 3) labor and working conditions, and 4) sexual exploitation and abuse and sexual harassment (SEA/SH). These procedures are established in accordance with the requirements of AIIB Environmental and Social Framework and IFAD's Social, Environmental and Climate Assessment Procedures (SECAP).

MOWRAM is responsible to establishing and maintaining the project grievance logbook to ensure grievances are recorded, resolved apprriately and timely. The Contractors will be required to install notice boards at the construction sites to publicize the name and telephone numbers of the representatives who are designated to receive and document complaints.

8. STAKEHOLDER CONSULTATION AND DISCLOSURE OF ESCMF

AIIB, IFAD and GCF require that consultations be held with the project affected people, local communities, vulnerable persons/ethnic minorities, and other relevant stakeholders. The consultations should provide information on the following aspects: a) purpose of the project; b) results of the environmental and social assessment; and c) presentation of the complementary studies required, in any instances where they apply. This ESCMF has been prepared through a consultative process that is extensive and continous. The consultation have been taking place as the project design evolves. This amis to ensure feedback from both project beneficiaries, people potentially adversely affected, and other interested stakeholders are informed of project's intended activities to avoid/minimimize environmental, social and climate risks and impacts.

The Environmental, Social, Climate Management Framework (ESCMF) is an overaching E&S risk management framework that cover the following E&S documents:

- Land Acquisition and Resettlement Planning Framework (LARPF)
- Indigenous Peoples Planning Framework (IPPF)
- Gender Action & Social Inclusion Plan (GASIP)
- Stakeholder Engagement Plan (SEP), and
- Environmental, Social, Climate Impact Assessment Report (ESCIA), and Environmental, Social, Climate Management Plan (ESCMP).