SECTION [7]: TERMS OF REFERENCE

DROUGHT RISK AND RESILIENCE ASSESSMENT FOR JORDAN WATER SECTOR EFFICIENCY PROGRAM (P176619)

STEP Ref No. JO-WAJ-92-CS-QCBS

## I. Background of Jordan's Water Sector

Jordan faces severe water constraints as one of the world's most water-scarce countries. Climate change and population growth will further reduce water resource availability by an estimated 30 percent by 2040. Moreover, the refugee's influx has strained water services, affecting host communities. This has led to the recent shocks in Jordan's water and energy sectors which in turn have caused a sharp increase in the sector debt, impacting service sustainability and the country's fiscal position.

Despite international support and budget assistance for energy and water sector reforms, financial sustainability and service provision risks persist.

The Jordan Reform Matrix (2018-2024) identifies energy and water reforms as crucial drivers for economic competitiveness and growth. The recently approved Water Sector Financial Sustainability Roadmap (FSR) outlines the government's plan to reduce sector debt accumulation and improve financial sustainability in the water sector by 2030. The Government of Jordan (GOJ) is actively managing the water sector through the Ministry of Water and Irrigation (MWI) and the Water Authority of Jordan (WAJ). Efficiency measures, such as Sustainable Capacity Building Improvements, sustainable non-revenue water (NRW) reduction, along with integrating Energy Efficiency (EE) and Renewable Energy (RE) measures, are key initiatives to enhance water management and supply.

The HASHEMITE KINGDOM OF JORDAN has obtained financing in the amount of 200 million US Dollars from IBRD, 50 million US Dollars from GCFF and the equivalent of 50 million dollars from Agence Francaise Development (AFD) toward the cost of assist in the financing of the Project, as part of a series of projects aimed to improve efficiency, service delivery and financial sustainability of the water sector.

The World Bank funded project will have the following components:

- **Component 1**: Sustainable Non-Revenue Water (NRW) Reduction
- **Component 2**: Increased energy efficiency and reduced energy supply costs
- **Component 3:** Water security measures to underpin efficiency improvements
- **Component 4**: Institutional strengthening for water sector Efficiency
- **Component 5**: Contingency Emergency Response

A Project Management Unit (PMU) is established at the (Jordanian water companies / YWC) over the implementation period of five years. The PMU shall be responsible for the management of project activities including the fiduciary operations, contract management and the administration of the projects funds as well as implementation and monitoring of the environmental and social requirements and instruments.


Jordan is one of the most water-scarce countries in the world, with increasing vulnerability to drought due to climate change, population growth, and limited water resources. The water sector faces challenges in ensuring sustainable supply and mitigating the impacts of recurrent droughts. Addressing these challenges requires a comprehensive understanding of vulnerabilities, economic impacts, and targeted risk management measures, multi-sector assessment of drought risks and the development of strategies to enhance resilience.

Jordan makes advanced efforts to address drought and water resource challenges through robust strategies and tools. The Water Sector Policy for Drought Management of 2018, updated in 2023, forms the foundation of these efforts, emphasizing the integration of drought risk management into national water governance, the establishment of a Drought Management Unit (DMU), and the development of early warning systems. The DMU, under the Ministry of Water and Irrigation (MWI), has coordinated multi-sectoral drought preparedness and response since 2018, overseeing monitoring tools, contingency plans, and stakeholder collaboration for an effective drought response. In the context of consolidating drought preparedness, the Jordan's Water Sector Efficiency Program (P176619) was set to strengthen resilience by improving water use efficiency in urban and agricultural sectors, focusing on institutional capacity building and leveraging innovative technologies to optimize water allocation. In 2024, Jordan launched the Development of a Drought Monitoring and Forecasting System, utilizing remote sensing, ground-based data, and predictive modeling to establish a real-time system. This initiative planned for 2025-2027 period, aims at equipping decision-makers with actionable insights, aligning with the 2023 policy to enhance resilience across key sectors. Previous drought vulnerability assessments (2018-2022) have highlighted socio-economic and ecological risks, informing policies to reduce drought impacts and support sustainable adaptation strategies at national level.

The Legislative and Institutional Framework for drought management in Jordan was defined through Water Sector Policy for Drought Management 2023. The main objective of the water sector policy for drought management is to promote an integrated management approach to minimize the negative impacts of drought on society, economy, social values, environment, and natural resources, especially water.

In the current institutional setup, The Drought Management Unit at the Ministry of Water and Irrigation was established in 2018 and the formation of National Committee for Drought Management in addition to the establishment of a Technical Drought Committee.

Roles and responsibilities of the established Drought Management Unit include the following tasks:

1. Regular and timely collection, analysis, and dissemination of drought information.
2. Conducting drought risk and vulnerability assessments.
3. Collaborating with JMD and others to monitor and predict drought.
4. Providing decision-makers with information and recommendations for drought management.
5. Setting the technical criteria for drought.
6. Coordinating with other institutions to assess drought impacts and loss and damages in different sectors.
7. Follow up with the drought action plan, including preparedness, mitigation, and response actions.

An important pillar for drought management in Jordan will be the development of a drought monitoring and forecasting system.

The current Terms of Reference (ToR) are proposed under Component 3 of the project and will describe the assignment's requirements and objectives.

## II. Project Description

### (1) Project Development Objective PDO Statement:

The Project (SOP-1) Development Objective (PDO) is to improve the efficiency of water services in Jordan. Improving efficiency of water services includes: (a) improvement of services to beneficiaries through rehabilitated water distribution networks; (b) improving EE; (c) improving the drought management system.

The following are the PDO level indicators:

- PDO 1: Areas where foundations for NRW reduction are established (# DMAs) – this is defined as the number of District Metered Area (DMA) established, hydraulically isolated, with baseline established, and rehabilitation designs completed (#) and rehabilitation works completed (#);
- PDO 2: Beneficiaries with access to improved water services (number) - this is defined as the number of beneficiaries from improved water services: quantity of water, hours of service, water quality and/or responsiveness to customer complaints.
- PDO3: Electricity use reduced (kWh/y) – Reduced electricity use from the grid through project interventions (kWh/y reduced); and
- PDO 4: Drought management system operationalized (# components) – this indicator will capture operationalization of the drought management system, through actions such as: (i) drought monitor uses additional indicators and is validated in a regular basis; (ii) seasonal forecasting information is generated on a bi-weekly and monthly basis; (iii) drought vulnerability assessments completed; and, (iv) drought preparedness and contingency plans approved by Technical/Ministerial Drought Committee.

### (2) Proposed interventions are grouped around five components:

- **Component 1**. Sustainable non-revenue water reduction. This aims to improve efficiency by reducing waste of the available water resources (financial and commercial) and overall improvement in operational systems in the water sector,

in support of adaptation to climate change impacts on water availability. This component would strengthen NRW systems in the country to improve planning, operationalization, and help sustain NRW reduction over time.

- **Component 2**. Increased energy efficiency and reduced energy supply costs. The water sector in Jordan requires significant energy for operation - energy costs represent over half of the water utilities' operational costs - due largely to pumping costs associated with the extraction of deep groundwater, and conveyance of water from the source to population centers. This component would improve the efficiency of the water sector by reducing energy used, costs, and GHG emissions.
- **Component 3.** Water security measures to underpin efficiency measures. Given Jordan's extreme water scarcity and frequent and intense droughts, improved water allocation will support different mechanisms to enable efficient and fair management of water shortages. This component will strengthen drought management with aims to apply a comprehensive drought risk management approach to increase capacity to monitor, forecast, plan for, and respond to droughts in the water sector. This component will also support preparation of studies for rehabilitation of water storage systems.
- **Component 4.** Project management and implementation support. This component would focus on project management required to implement this project and to strengthen systems for the planned SOP.
- **Component 5.** Contingency Emergency Response. A Contingency Emergency Response Component (CERC) with zero allocation would be created and made implementation-ready to allow the GoJ to respond quickly in case of an eligible emergency. The mechanism will be defined in a specific CERC Operational Manual that will clearly outline the triggers, eligible expenditures, procurement thresholds, and procedures for using part of IBRD resources of the project to respond quickly in the event of an eligible emergency.

**Sub-component 3.1** of the WSEP ("Strengthening drought management and water allocation systems") aims to regularize informed water allocation planning and to apply a comprehensive drought risk management approach to increase capacity to monitor, forecast, plan for, and respond to droughts in the water sector. This sub-component will:

(a) Support the development of a **drought management system**, through:

(ii) Operationalizing a **drought monitoring system** for the regular and periodic monitoring of drought conditions, including seasonal forecast information to inform decision-making. This will require improvements to information management systems, including preparing and adopting data-sharing protocols, improving existing water information platforms, developing operation and maintenance plans, and capacity building.

(iii) Preparing **vulnerability assessments** to identify the most affected groups or sectors to various levels of drought intensity.

(iv) Preparing **preparedness and contingency plans** that will outline drought mitigation and response actions for at least two pilot systems.

(b) Support the improvement of **water allocation plans** that optimize water allocation among municipal supply, irrigated agriculture, industry, and refugee camps, based on an annual water balance utilizing information management systems for the integration, analysis, and reporting of estimates.

**(3) These components leverage Performance-Based Conditions (PBCs)** for priority activities that require a focus on institutional reform and strengthening. For more details, all public documents related to the project can be found in the link below:

https://projects.worldbank.org/en/projects-operations/document-detail/P176619?type=projects

**(4) Initial Environmental and Social Screening.** The environmental risks of the proposed program are expected to be "Substantial" and the social risks of the program are expected to be "Moderate". As preparation progresses, the Bank will continue to evaluate the risks arising from the program design and will agree on measures to mitigate these risks and strengthen client capacity to comply with Jordan's environmental and social requirements.

- **More details about E&S aspects of the project and project components can be found using the links below:**
  - https://documents1.worldbank.org/curated/en/099052223112531900/pdf/P176619 0c5f1090ed0b0a504b94b239c469.pdf
  - https://documents1.worldbank.org/curated/en/099205002022321951/pdf/P176619 029ad7604d0947302a481882d535.pdf
  - https://documents1.worldbank.org/curated/en/099052623124518529/pdf/BOSIB0d4798d310db097bc06922e98e0ee3.pdf

## III. Objective of the Assignment

The Drought Risk and Resilience Assessment (DRRA)[1] aims to conduct a detailed subnational evaluation of drought risk and resilience, mapping drought vulnerability at the district level and assessing the drought response across various sectors. This comprehensive assignment goes beyond identifying vulnerabilities and quantifying risks, assessing the economic impact of droughts, reviewing current drought response, developing a program of measures to enhance drought resilience and estimating their benefits.

Adopting a multi-sectoral approach, the DRRA will integrate agriculture, livestock, energy, transport, environment, and water sectors to ensure effective drought risk management. The assessment aims to select tailored vulnerability indicators that reflect district-specific conditions, incorporate high-resolution datasets, and prioritize stakeholder-driven customization. By engaging local authorities and stakeholders, the DRRA seeks to align its outputs with practical user needs.

The consultancy will directly support the Drought management Unit in Strategic Planning Affairs Directorate at the Ministry of Water and Irrigation (MWI), including the Technical Drought Committee (TDC), by providing clear and actionable information on current and future drought risks and clear recommendations for building Jordan's drought resilience.

## IV. Scope of Work

This assignment to be realized by a consulting firm, a non-profit organization or a mixed consortia encompasses a series of interconnected tasks to comprehensively address drought risk and resilience. During the inception phase (1 month) at the start of the assignment, the consultant is expected to

[1] The conceptual framework of the assessment is provided through World Bank's Methodology for DRRA (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099523412092414439/idu158af332718416146831b5531d53df9d1968d).

mobilize the experts, develop a detailed workplan and organize a kick-off workshop in Amman. Deliverable 1, the inception report is due at the end of inception phase. **Task 1** involves a review of existing drought hazard assessments, providing the foundation for understanding the spatial and temporal distribution of drought conditions. **Task 2** focuses on evaluating multi-sectoral drought impacts, examining effects across key sectors like water, agriculture, and energy, followed by **task 3**, the drought vulnerability assessment to identify exposure and adaptive capacities at various levels. **Task 4** synthesizes findings into a Drought Risk Assessment, integrating hazard, impact, and vulnerability insights to map and quantify risks. **Task 5** evaluates the country's preparedness and response mechanisms, identifying gaps and opportunities for enhancement. **Task 6** prioritizes potential drought risk management investments, ensuring actionable strategies aligning with national and local needs. Lastly, **Task 7** emphasizes training and capacity building, equipping stakeholders with the knowledge and tools to implement effective drought risk management measures. **Task 8** will synthesize the work to develop a final report and an executive summary. World Bank's Methodology for Drought Risk and Resilience Assessment (DRRA) provides the conceptual framework of this assignment and shall guide tasks 1 to 6. The consultant is expected to describe in the proposal how the framework will be applied and where deviations are considered.

**Task 1: Review of Drought Hazard Assessments**

This task focuses on evaluating the characterization of drought hazards in Jordan, based on a desktop review and leveraging existing work from the ongoing Development of a Drought Monitoring and Forecasting System. The consultancy will:

- Review scientific literature on current and future drought hazards in Jordan and the region.
- Analyze the current knowledge on how climate change will impact drought hazards in Jordan.
- Review and analyze drought hazard indices developed under the on-going work on the Development of a Drought Monitoring and Forecasting System.
- Propose, if deemed necessary, complementary drought hazard indices required for the DRRA.
- Based on the activities as detailed above, and on discussions with the Ministry of Water and Irrigation (MWI) characterize drought hazard and future drought hazard trends.

**Task 2: Evaluation of Multi-Sectoral Drought Impacts**

This task aims to assess the historical impacts of drought on across multiple sectors and on Jordan's economy as a whole. The consultancy will:

- Conduct a literature review and consultations with experts to identify major historical drought events.
- Collect and analyze data on drought impacts in key sectors, including agriculture, water resources, energy, and socio-economic systems for the selected historical events.
- Define drought impact chains to identify the pathways (cause-and-effect relationships) through which drought affects different sectors, communities, and ecosystems.
- Estimate economic damage caused by these events to underline the critical need for enhanced drought risk management, supporting advocacy efforts with ministries like the Ministry of Finance. Economic damage is to be estimated for each sector, but also for the whole economy, including a regional disaggregation (governorate and district).

**Task 3: Drought Vulnerability Assessment**

The objective of this task is to assess vulnerabilities to drought in Jordan by analyzing socio-economic and agro-ecological indicators. The consultancy will:

- Select and propose the most adequate methodology for drought vulnerability assessment.
- Select vulnerability indicators specific to drought risks, including socio-economic and environmental factors, based on the selected methodology and also considering data availability.

- Collect, assess and validate related data.
- Develop high-resolution vulnerability maps at the district level, tailored to support risk management efforts.

**Task 4: Drought Risk Assessment**

This task involves conducting a quantitative, impact-based drought risk assessment, integrating the outputs of Tasks 1, 2, and 3. The consultancy will:

- Carefully review and validate with MWI the results of Task 1,2 and 3.
- Perform an exposure analysis to map drought-related risks across sectors.
- Develop comprehensive drought risk maps at district level that integrate hazard, impact, and vulnerability data.

**Tasks 1,2, 3 and 4 will contribute to Deliverable 2, the Jordan Drought Risk Assessment Report.** This will provide an in-depth analysis of drought hazards, drought impacts, drought vulnerabilities and drought risks. The report will feature a detailed analysis of exposure and potential sectoral impacts and include comprehensive set of drought risk maps. The deliverable shall include a database with all the information used, as well as shapefiles and grid data for the maps.

**Task 5: Assessment of the Country's Drought Preparedness and Response**

This task assesses Jordan's current capacity to manage droughts effectively. The consultancy will:

- Conduct a desk review of existing national and regional laws and policies concerning drought risk management.
- Identify all institutions related to managing drought risks, including the institutions responsible for emergency response and assess their capacities.
- Review and assess existing instruments for reducing drought risks and for responding to drought. This shall also include existing contingency plans and all other instruments providing support during and after drought events for recovery, such as for example financial assistance to farmers impacted by drought.
- Review the capacity of existing infrastructure to deliver water, including water storage, infrastructure for water conveyance and their capacity to perform in periods of drought.
- Assess how institutions and instruments performed in earlier drought events.
- Validate findings through targeted engagements with key experts and decision-makers.

**Task 6: Identification and Prioritization of Potential Drought Risk Management Investments**

This task identifies and prioritizes policy measures and investments to reduce drought risks and enhance resilience. The consultancy will:

- Compile a list of structural and non-structural measures, including mitigation strategies and preparedness actions. This shall include measures already foreseen by the Jordanian government as found in existing plans and strategies, as well as additional measures to be proposed as part of this assignment.
- The consultant should do consultations on the newly proposed measures. For the consultations a list of relevant stakeholders shall be proposed and agreed upon with MWI.
- Conduct a benefit-cost analysis, including economic, environmental and social benefits to compare the advantages of proactive action versus the costs of inaction.
- Rank and prioritize measures.
- Develop implementation strategies, including the identification of potential financing for prioritized measures.

**Tasks 5 and 6 will contribute to Deliverable 3, the roadmap to strengthen Jordan's drought resilience.** The roadmap will include a detailed description of Jordan's current approach to reduce drought risks and to respond to drought events and a program of measures to strengthen drought

risk management and improve Jordan's drought resilience. The roadmap shall include a prioritization of measures, based on clear criteria, as well as defined next steps for its implementation.

**Task 7: Training and Capacity Building**

The goal of this task is to enhance MWI's technical capacity to operationalize the findings of the drought risk and resilience assessment. The consultancy will:

- Develop training modules and provide at least one full day of training to help MWI staff interpret, apply outputs such as vulnerability maps, risk assessments, and key metrics. (about 15 people)
- Develop training modules and provide at least one full day of training to help MWI staff to monitor the implementation of measures to reduce drought risk. (about 15 people)
- Equip technical teams with the skills needed to sustain and expand the use of assessment tools for long-term drought resilience through training sessions of together at least three full days. (about 15 people)

All the costs related to training and capacity building will be covered by the Consultant. This includes costs related to the venue, catering, logistical requirements, training materials, interpretation, etc.). Costs for task 7 are to be listed as a separate lump sum.

**Task 8**: **Compilation and synthesis of all activities and deliverables**

This task includes the synthesis of all activities and compilation of all reports developed under this assignment. Earlier deliverables shall be updated and complimented if needed and an executive summary is to be prepared.

**Tasks 7 and 8 will contribute to Deliverable 4, the Final Report.** This will compile and update the findings from the Jordan Drought Risk Assessment Report and the Roadmap to strengthen Jordan's drought resilience. It will also include an executive summary to summarize the key findings, recommendations, and priority actions identified throughout the assessment, providing a high-level overview for policymakers and stakeholders. Further it will provide an annex on capacity building to detail the training and capacity-building activities conducted during the consultancy. It will include training materials, participant feedback, and an evaluation of outcomes to ensure MWI's long-term capacity to apply the assessment tools and findings.

## V. Reporting Requirements for Deliverables

1) **Inception Report:** to outline the approach, methodology, and work plan for the consultancy, detailing the scope and structure of each task. It will also include a review of existing data and resources, as well as preliminary findings from initial consultations with stakeholders.
2) **Jordan Drought Risk Assessment Report (Tasks 1,2,3 & 4).** This will provide an in-depth analysis of drought hazards, drought impacts, drought vulnerabilities and drought risks. The report will feature a detailed analysis of exposure and potential sectoral impacts and include comprehensive set drought risk maps. The deliverable shall include a database with all the information used, as well as shapefiles and grid data for the maps.
3) **Roadmap to strengthen Jordan's drought resilience (Tasks 5 & 6).** The roadmap will include a detailed description of Jordan's current approach to reduce drought risks and to response to drought events and a program of measures to strengthen drought risk management and improve Jordan's drought resilience. The roadmap shall include a prioritization of measures, based on clear criteria, as well as defined next steps for its implementation.
4) **Final Report (Tasks 7 & 8).** This will compile and update the findings from the Jordan Drought Risk Assessment Report and the Roadmap to strengthen Jordan's drought resilience. It will also include an executive summary to summarize the key findings, recommendations, and

priority actions identified throughout the assessment, providing a high-level overview for policymakers and stakeholders. Further it will provide an annex on capacity building to detail the training and capacity-building activities conducted during the consultancy. It will include training materials, participant feedback, and an evaluation of outcomes to ensure MWI's long-term capacity to apply the assessment tools and findings.

All reports should be written in English language, with an executive summary in Arabic language (after acceptance of the deliverable).

The consultant should submit all the deliverables to MWI - Drought Management Unit with a copy to the Project Management Unit within WAJ.

## VI. Team Composition & Qualification Requirements for Key Staff and Non-Key Staff

a) Position K-1: Team leader: (12 months, out of which at least 2 months in Amman. Timing and duration of each visit to be decided by consultant
   1) At least 15 years of professional experience in technical assistance projects in water resources management.
   2) At least Master's degree in hydrology, meteorology, agriculture or related fields
   3) Relevant experience in the development of drought risk assessment and in the drought risk management.
   4) Experience working collaboratively with diverse stakeholders, including government agencies, local authorities, and international development partners.
   5) Experience in the region and in Jordan is considered a clear advantage.
   6) Languages: English.

b) Position K-2: Economist: (6 months, out of which at least one month in Amman, Timing and duration of each visit to be decided by consultant)
   1) At least 7 years of professional experience in economist.
   2) At least Master's degree in economy, agriculture economist or related fields.
   3) Familiarity with Jordan's socio-economic and agro-ecological context, particularly in drought-prone areas such as the Jordan Valley and eastern regions.
   4) Ability to conduct benefit-cost analyses to inform decision-making and align proposed measures with national strategies and SDG goals.
   7) Languages: English.

c) Position K-3: Specialist in data analyst: (12 months)
   1) At least 7 years of professional experience in the collection and analysis of data for water resources management.
   2) University degree in hydrology, meteorology, mathematics or related fields.
   3) Relevant experience in setting up or managing water information systems
   4) Experience in the region and in Jordan is considered an advantage.
   5) Languages: English.

d) Position K-4: Geographical information system Specialist: (9 months)
   1) At least 7 years of professional experience in GIS.

2) University degree in GIS, engineering or related fields.
3) Relevant experience in projects developing maps for decision making in disaster risk and/or water resources management.

8) Languages: English.

e) Position K-5: Social Expert: (6 months)
1) At least 7 years of professional experience in relevant areas.
2) University degree social studies, economy, or related fields.
3) Familiarity with Jordan's socio-economic and agro-ecological context, particularly in drought-prone areas such as the Jordan Valley and eastern regions.
4) Languages: English and Arabic

f) Position K-6: Water resource management expert: (6 months)
1. At least 10 years of professional experience in the agriculture and/or water resources management in Jordan
2. At least Master's degree in hydrology, agriculture, engineering or related fields
3. In-depth knowledge of the institutional landscape in Jordan
4. Work experience in relevant projects in Jordan
5. Languages: English and Arabic

g) Position NK-1: One Quantities surveyor and data collector
1. Diploma degree in civil engineering or land surveying or relevant with minimum of (7) years of experience in similar projects.
2. Languages: English and Arabic.

h) Position NK-2: One Communication and stakeholder engagement expert

**1.** University degree in communication or related fields with a minimum of (5) years of experience of similar projects.
2. Languages: English and Arabic.

i) Position NK-3: Capacity building and training expert

1. University degree in any related fields with a minimum of (5) years of experience of similar projects.
2. Languages: English and Arabic.

## VII. Consultant's Facilities

Office space, needed equipment, administrative support and logistical support, including secretarial and interpretation services to enable experts to focus on their primary responsibilities and to ensure smooth project implementation are to be provided by the consultant. The related costs are to be included in the consultant's expert overhead fees

## VIII. Timeline and Payment

The project is expected to span a period of 12 months, with an estimated staff input of 51 key-staff months and 6 Non-Key Staff months.

**Deliverable Submittal**

| Submittal | Duration |
|---|---|
| **1.** Inception Report. | ND + 1 month |
| **2.** Jordan Drought Risk Assessment | ND + 6 months |
| **3.** Roadmap to strengthen Jordan's drought resilience. | ND + 10 months |
| **4.** Final Report. | ND + 12 months |

Where ND: is the Notification Date of Contract.
Intermediate partial submissions of parts of reports and/or plans for the purpose of discussion are not considered official submissions. Review time is included in the time duration of services.

**Deliverable Payment**

| Submittal | Payment Schedule |
|---|---|
| **1.** Inception Report. | 10% of Tasks 1 to 6 Lump Sum due upon acceptance by MWI |
| **2.** Jordan Drought Risk Assessment. | 35% of Tasks 1 to 6 Lump Sum due upon acceptance by MWI |
| **3.** Roadmap to strengthen Jordan's drought resilience. | 35% of Tasks 1 to 6 Lump Sum due upon acceptance by MWI |
| **4.** Final Report. | 20% of Tasks 1 to 6 Lump Sum due upon acceptance by MWI |

## IX. Contract type

Lump-sum Contract

## X. Implementation Arrangement

MWI responsibilities encompass providing available data & information, and the needed correspondences that facilitate their work with other institutions. MWI will be responsible for receiving and reviewing all deliverables, providing comments and approvals as necessary, with copies of all

communications sent to WAJ. MWI will also designate a focal point to handle all communications with WAJ and the Consultant.

WAJ will be responsible for managing and administering all contractual matters, including but not limited to preparing and issuing amendments as needed, processing invoice payments after receiving MWI's approvals on related deliverables, and negotiating any additional tasks if required.

The Consultant will communicate all deliverables and technical matters to the MWI focal point, with copies sent to WAJ. For all contractual matters, the Consultant will communicate directly with the designated WAJ contract designated person, also providing copies to the MWI focal point.