1.1 Introduction
The Thwake Multipurpose Water Development Program (TMWDP) being implemented by the Ministry of Agriculture and Irrigation is jointly funded by the Kenya Government and African Development Bank (AfDB). The Thwake Multipurpose Water Development Program consists of construction of Thwake dam of 681 million M3 of water, development of 40,000 hectares of irrigation, development of 20 megawatts of hydropower and development of water supply system to provide clean water to 1.3 million people. It will also provide regulation of flows on Athi River downstream of the dam for flood and drought mitigation. The TMWDP targets broad improvement in productivity and livelihoods over a ten-year period, ending 2023. The Program recognizes the symbiotic relationship between Kenya’s water secure and water insecure regions by spanning both the lower and higher levels of the economy to ensure national economic growth is both inclusive and sustainable. The program has three components; viz; Thwake Multipurpose dam of 681 million M3 of storage constructed and functional comprising of Embankments and Civil Works Supervision Consultancy; Environmental and Social Support which comprises of Catchment Conservation, Goods and Services & Support to WRMA and Studies & Campaigns covering Dam Break Analysis & Emergency Preparedness, Investment Opportunities for PAPs, Communication Campaigns (HIV/AIDS, Progress) and Baseline; and Program Management and Capacity Building covering Hydrological, Operational & Geotechnical Studies, Athi River modeling, Thwake Reservoir Modeling, Study on Dam Management & Operation, Feasibility of Commercial Sediment Harvesting

1.2 Program Objective
To reduce poverty through increased water security for agriculture, energy and water supply developments.

The Dam construction project seeks to meet the following specific objectives:-

a) To enable access to and increase water supply for both domestic and irrigation purposes
b) To facilitate water storage and reduce rain water losses
c) To provide alternative water supply paths and increase reliability and improved water quality in the areas
1.3 Purpose of the Assignment
The objective of the consultancy is to develop a Program Integrated Management Information System (IMIS) to facilitate data and information management at the different project levels to allow Program Implementation Team (PIT) and National Program Steering Committee (NPSC) oversee routine tracking of the progress and performance of implementation over time in a systematic manner across all project components.

There is therefore the need to develop an automated Integrated Management Information System (IMIS) with a feedback loop that will facilitate the efficient processing of management information for effective decision making. The system should incorporate mechanisms to help the management identify challenges in activity implementation and resource utilization and make appropriate adjustments; and should be customized to guide program implementation and elaborate the results chain based on the Key Performance Indicators and program implementation operation procedures. The customized Integrated Management Information System will require defined and interlinked: (i) Intermediate outcome indicators, (ii) Outputs, (iii) Activities, and (iv) Inputs.

TMWDP seeks to recruit a highly qualified expert(s) to support/assist the Program Implementation Team (PIT) to develop an M&E IMIS to ensure Program outcomes and output indicators are tracked through monitoring and reporting at all levels.

2 SCOPE OF THE ASSIGNMENT
The expert(s) will work with the Program Implementation Team (PIT), key water sector institutions and other relevant stakeholders. In meeting the overall objective of the assignment it is imperative to understand the Program implementation operational procedures, key performance indicators, intermediate outcomes and outputs. The assignment therefore calls for a consultancy to develop a customized monitoring and evaluation integrated management information system for TMWDP.

2.1 System Design
The design of the envisaged M&E IMIS will be anchored on the Program results framework and the associated arrangements for results monitoring (tracking plan) to facilitate efficient linkage of the results chain from inputs – activities – outputs – intermediate outcomes indicators for each project components and the outcome indicators, project components in addressing the project goal.

The design should aim at a system that is efficient, effective and allows for continuous observation, data collection and analysis, communication/reporting and data/information storage that keeps the management well informed of the current progress and any need to revise/modify the set objectives, strategies or schedules. The system is expected to actively involve the targeted beneficiaries as much as possible. The consultant’s task therefore is to define responsibilities at different levels and demonstrate how these levels will interact and exchange information/data.

The developed system should ensure that:-
- For each identified indicator, the type, key performance indicator for the measurement of outputs and outcomes and source of data to be collected, procedure/approaches/methods of data collection and frequency of data collection/recording is defined.
• Set out the most suitable analytical procedures required to transform the collected/recorded data into useful monitoring and evaluation information presented in a simple standard format for timely use in decision-making.

• Set out suitable mechanisms/procedures for ensuring effective reporting and feedback if monitoring reports/information to and from different levels of project management including the type of information/reports, their origin and recipient, format of such information/reports and frequency of reporting.

• Develop practical/user friendly computer system capable of storing and retrieving the information and data that are compatible with systems/formats from other sources so that findings from similar activities can be compared. The developed system should take into account accessibility and security concerns. A key requirement in the system design is for the partitioning between the MIS and the data storage mechanism so that system failures do not imply loss of data and information. The stored data and information from monitoring as well as those from other sources shall be used in project evaluation at various stages of implementation.

The M&E IMIS must also be designed in compatibility with the Financial Monitoring and Reporting system that GOK uses for the financial management of projects. The design of the MIS should therefore incorporate the requirements for expenditure reporting. This will enable the Program team to develop the annual project activity work plans in synchrony with disbursement and procurement plans. In addition to the regular M&E and project implementation, the system will also provide information during the project Impact Evaluation.

It should also provide component and sectional heads at the project management office with a platform on which to key in management information including trainings, consultancies and progress on policy development, consultative processes and forums. It should also allow component and Sectional heads to generate component reports when deemed necessary.

There will be need also to assess the required capacity at all levels to adequately manage and maintain the proposed system including an assessment of implementers/beneficiaries and their training needs.

2.2 Schedule of activities/tasks for development of the M&E IMIS
The consultant/(s) shall be expected to design, develop and install the IMIS and accessed by the Program implementers at all levels.

Due to the nature of the task, the consultant/(s) will collaborate with the members of the Program Implementation Team (PIT) to review the project in the context of the design issues raised above. This should sufficiently guide the consultant on how to steer the process. This will involve:-

• Holding meetings with the Program Implementation Team (PIT), (management and component leaders) to discuss the type, specified key performance indicators, detail/description, and frequency of information needed.

• Review the current reporting/documentation procedures and indicate scope for improvement at all levels.

• Hold discussions with the field officers and take their requirements into consideration during the system design.
• Review Program reports and the M&E framework and consider recommendations contained therein.
• Determine the appropriate relational database for the IMIS Platform, develop a schematic design and discuss with the project implementation team.
• Design the IMIS
• Develop specifications for the hardware required to host the system
• Procure, install and configure the hardware (Server, router, network tools, anti-virus and any other required accessory)
• Prepare training/user manual.
• Undertake a training workshop with the project implementation teams on the implementation and management of the IMIS
• Install/update the IMIS at all project levels for initial review (piloting) and test-running.
• Oversee initial go-live and launch the system
• Provide system backstopping for one year and handover.

The consultant(s) shall liaise with the Program Implementation Team (PIT), to plan and organize for necessary meetings to facilitate mechanism to achieve the assignment.

2.3 Deliverables
The deliverables to the client by the consultant for this contract include:

• An inception report to the project team on the interpretation of the TORs and the technical approach of the design two weeks after signing the contract
• A presentation/demonstration of the interim system incorporating all user requirements and key design features
• Procure and install hardware for hosting the system
• Complete system (Hardware and Software) ready for training and piloting
• A training/user manual for the IMIS
• Key project staff trained on the IMIS
• Installed and launched system at all levels
• Post implementation support for two (2) year

2.4 Reporting Requirements
The consultancy firm will report to the Project Coordinator, and will work closely with the program Monitoring and Evaluation specialist and other PIT members.

3 Human Resource Requirements
Key Experts required for the assignment will include but not limited to the following:

• **Management Information Systems/M&E Expert** (team leader) should have at least eight (8) years’ experience in developing monitoring & evaluation management information systems for development projects. Should have a Masters degree from a recognized University in Information Technology, Management Information Systems, Project Management, or Business Administration. The consultant must have previous experience in review of M&E systems and designing custom based IMIS for M&E of complex development projects and/or of large organizations with good communication and presentation skills.
• **Data Analysis expert** with experience of 5 years working with various datasets such as relational databases, spreadsheets, and other analytical tools. Extensive knowledge in research and assessments (i.e. data tools development, sampling, data collection, analysis and reporting with good communication and presentation skills.

• **Database/GIS Expert** - Should have an undergraduate degree in IT with experience in developing and administering web databases for at least 4 years. Ability to integrate relational data with GIS based spatial databases will be an added advantage. Should have good knowledge of internet and network-based systems, web security and database management with good communication and presentation skills.

4  **CONTRACTING TERMS**

The consultant is expected to provide weekly updates to the client on progress made and the difficulties encountered, if any. The consultancy duration is expected to take a period of three (3) months and a one year support phase and is based on a lump sum contract for the assignment period. The following reports will be submitted to the Program Manager through the Project Coordinator;

- Inception Report to be submitted within 2 weeks of the signing of the contract, setting out the work programme to complete the assignment.
- An interim report on the key design features of the IMIS including a training/user manual for the MIS and completion of training for the users.
- Implementation report and smooth operation of the system
- Post implementation/final report (1 year after commencement date)

4.1  **Payment Schedule**

- 10% - On submission and acceptance of the Inception Report.
- 40% - After design, training and submission of the interim report.
- 30% - upon submission of implementation report and smooth operation of the system
- 20% - upon submission of post implementation/final report