



Supervision and Contract Administration Terms of Reference For

**Fast Track Flood Risk Reduction Works for Selected
Sections in Rift Valley Lakes Basin (RVLB) (Kulfo
River, Shashego (Boyo) and Lower Assas And Mandifa
Rivers) Works**

**January, 2025
Addis Ababa
Ethiopia**

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1.Introduction

Ethiopia Flood Management Project background

Multiple government entities play their respective roles in flood risk management, requiring close coordination and joint implementation of flood risk management-related activities. The Ministry of Water and Energy (MoWE) is the overarching institution for flood risk management, mandated for water resource management, flood protection, forecasting, and early warning, and the provision of meteorological services. It fulfills this mandate in coordination with a range of parastatal agencies and authorities structured under MoWE, including the Basins Development Offices (BDOs) and the Ethiopian Meteorology Institute (EMI). The BDOs are responsible for the major river basins, where it leads flood management efforts, including the construction, operation, and maintenance of flood protection measures (for example, river training, dikes, and retention basins), river and flow monitoring, and river basin development plans. Urban floods are under the responsibility of the Ministry of Urban Development and Infrastructure (MoUDI), resulting in coordination challenges related to the protection of cities from river floods and the encroachment of settlements into flood hazard areas. Weather and climate services are provided ‘in-house’ through EMI.

Infrastructures are constructed after major flood events, while the lack of financial resources and institutional capacity limit the geographic coverage and quality of those measures to adequately address the country’s needs for flood protection. Relatedly, data infrastructure and services for early warning and stream flow monitoring have improved in recent years, but the geographic coverage of observation and gauging stations to provide sufficient and accurate forecasting remains low. The lack, and under-exploitation, of hydrometeorological services and data presents a fundamental impediment to flood risk assessment and to the design of flood protection and drainage infrastructure, while poor monitoring and dissemination of early warning information limits the capacity of exposed populations to take precautionary measures in the event of flooding.

The Ethiopian Flood Management Project will fill the critical gaps related to DRM and flood risk management, which has so far received limited attention despite floods having long been recognized for many years as one of the main disasters affecting the lives and livelihoods of the poor and vulnerable in Ethiopia. The Project follows a request from the Ministry of Finance,¹ issued in response to the 2020 rainy season flood events, for the World Bank’s technical and financial assistance, including investments in flood protective measures in disaster-prone areas. The Project seeks to address Ethiopia’s underlying DRM challenges and vulnerability to climate shocks by addressing urgent flood protection needs in select high flood risk areas with vulnerable communities and by building the foundations to improve the DRM system for the longer-term disaster and climate resilience of the country. The Proposed civil works in Rift Valley Lakes basin will be financed by world bank

¹

1.1 Background

Flooding in Ethiopia has emerged as a significant challenge due to various anthropogenic and natural factors, including deforestation, urbanization, climate change, and inadequate flood management systems. The impacted regions suffer from substantial socio-economic disruptions, ecological damage, and threats to human well-being.

Three critical regions have been identified in the RVLB for urgent intervention:

Kulfo River in Arbaminch: Historically central to local livelihoods, the area now faces severe flooding challenges due to environmental degradation and river morphology changes, affecting approximately 75 hectares and numerous households.

Shashego, Weira Dijo, and Sankura Subwatersheds: These areas in the Rift Valley Lake Basin are vulnerable to recurrent seasonal flooding due to deforestation, land degradation, and erratic rainfall. These factors jeopardize agricultural productivity and community safety.

Lower Assas and Mandifa Rivers: Located in Meskan and Silte Woredas, these rivers experience severe flooding, leading to significant damage to infrastructure, agricultural lands, and displacement of local residents.

The Ethiopian Ministry of Water and Energy has launched this consolidated project to enhance resilience against flooding in these areas through structural and non-structural measures, focusing on flood protection, infrastructure safeguarding, and community engagement.

2.Objective

The primary objective is to supervise and ensure the timely implementation of flood protection measures that align with technical, environmental, and social standards.

The specific objectives include:

- Enhancing resilience against flooding through structural and non-structural measures. and non-structural measures could be part of riverbanks protection.
- Strengthening community engagement and awareness.
- Building the capacity of local stakeholders for long-term sustainability.

3.The Project area and Tentative interventions

The consolidated project covers three geographic zones:

Kulfo River Watershed: Located in the Southern Ethiopian Rift Valley, the area spans the flood prone zones of the lower Kulfo River.

Rift Valley Lake Basin Subwatersheds: Includes Shashego, Weira Dijo, and Sankura Woredas.

Lower Assas and Mandifa Rivers: Encompasses Meskan and Silte Woredas, affected by sedimentation and inadequate infrastructure.

3.1. Project Description

The project area encompasses selected regions of the RVLB, focusing on critical sites along the Kulfo River, Boyo Lake, and the Lower Assas and Mandifa Rivers.

3.1.1. Description of Kulfo River Sub Watershed

The Kulfo River watershed is situated near Arba Minch town, approximately 500 km south of Addis Ababa, the capital city of Ethiopia. The watershed encompasses an area of about 410 km² at its outlet into Lake Chamo, located between 5°55'N to 6°15'N latitude and 37°18'E to 37°36'E longitude

3.1.2 Description of Boyo Lake Sub watersheds

The **Boyo Catchment Sub watershed**, part of the Rift Valley in Ethiopia, spans UTM Zone 37 coordinates from 844862.08 N to 818274.00 N and 379459.26 E to 403460.45 E, covering a total area of approximately 813 km². This basin includes significant sub catchments draining from the high plateaus of Hadiya, Gurage, Siliti, and Kembata-Tembaro zones into Boyo Lake and subsequently flowing into the Bilate River. The project focuses on flood mitigation measures across three intervention Woredas: **Shashego, Weira Dijo, and Sankura**, located within the Rift Valley Lake

3.1.3 Description of Lower Assas and Mandifa Rivers

The project aims to address the recurring flood issues in Meskan and Silte Woredas, located in the lower reaches of the Assas and Mandifa Rivers in the Southern Ethiopian Rift Valley.

In the Silte Zone, the Mandifa (Goflala) Watershed is marked by severe land degradation due to soil erosion, flooding, and sediment intrusion into Lake Ziway. Numerous tributaries, such as Angelo, Labogarobe, Labo, Murtute, Garore, and Irinzaf (Bujanja), converge in Goflala, a low-elevation area that frequently floods, affecting 14 Kebeles, including parts of the Guraghe Zone. Sedimentation caused by the Waja Small Embankment Dam has further reduced the river's capacity, leading to significant elevation differences along the Mandifa River's 13 km stretch and exacerbating flood risks

3.1.4 Tentative Scope of Physical and non-physical Interventions

The following interventions are proposed as part of the initial scope:

I. Implementation of Flood Risk Reduction Physical Interventions:

- Erect structures to manage and control floodwaters effectively, reducing the impact of flooding.
 - 1) **Dredging**
 - Remove accumulated sediments to maintain the river's flow capacity and prevent blockages, ensuring smooth water flow.
 - 2) **Channel Widening**

- Adjust river channels to improve water flow and reduce the risk of flooding. This includes widening and deepening sections of the river.

3) Riverbank Stabilization

- Implement measures to stabilize riverbanks using a variety of techniques such as vegetation planting or gabions.

- **Gabion Implementation:**

- Deploy gabion structures for bank stabilization to prevent erosion, maintain channel integrity, and provide additional support and stabilization to riverbanks.

- **Vegetation Planting:**

- Plant appropriate vegetation on slopes, where applicable, to control erosion and enhance environmental sustainability, contributing to the overall health of the ecosystem.

- **Description of project interventions**

This table summarizes the different components involved in the flood protection projects for each site, including the specific activities and their respective measurements.

Table 1. Summary of the work items in each Specific projects

Item No	Activities Description	Unit	Kulfo River	Boyo Lake Sub Watershed	Lower Assas and Mandifa Rivers	Remark
1	Channel Widening	km	6	15	9.5	Both River Bank sides
2	Dredging	km	6.6	10.5	34.52	
3	River Bank Stabilization					
3.1	Gabion Works	Km	4.5	2.5	2.75	
3.2	Masonry(stone) works	km	5	3.5	3.2	
3.3	Plant vegetation on slopes and river bank	Km	1.5	2.5	2	
Total		km	23.6	34	51.9	

	km	109.5	
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Scope of Services, Tasks, and Expected Deliverables

4.1 Scope of Services

The consultant will be responsible for:

- Reviewing contractors t work schedule required
- and contractor deliverables.
- Supervising construction and ensuring adherence to technical specifications.
- Monitoring compliance with the Environmental and Social Management Plan (ESMP).

4.2 Duration of the Project

The project completion is anticipated within a total duration of 6 months. The project encompasses three distinct components, each managed by separate contractors:

- **Kulfo River Flood Protection Project**
- **Boyo Lake Subwatersheds Flood Protection Project**
- **Lower Assas and Mandifa Rivers Flood Protection Project**

The construction phase for each site will take 6 months, ensuring construction supervision activities are completed within the 6-month timeframe.

4.3 Scope of civil work

It covers three sites as explained on earlier scope and to implemented in 6 months for each site

Clearing of sites

- ❖ Top soil within 10cm depth and 5m width near river banks that may include shrubs and grass and vegetations

River dredging and widening

- ❖ It is the main activities that silt deposited or accumulated inside the river channel and it will be dredged and widening of the channels for uniform flow of water and reduction of overtopping from the river channels

Disposal of dredged material

- ❖ the dredged material will be transported and disposed up to 1km away from the river channels avoiding any potential negative effects that may have back effects.

Gabion works

- ❖ Suitable on flood plain for wide enough with high protection is required

Masonry(stone) works

- ❖ Riprap(mixed) is a layer of large stones that protects soil from erosion in areas of high or concentrated flows

Vegetation covers

- ❖ Slope protection with vetiver grass in order to reduce erosion

5. consultancy Services

- ❖ The general scope of the consultancy services is to assist flood protection listed under the scope of works in simultaneously with monitoring, on-site supervision, management of the works contract and flood protection works supervision including time control, cost control and quality control aspects of the works and environmental and social management compliance.

For this purpose, the consultancy firm will provide team of experts at site and office levels during period for supervision of the works contract.

5.1 Project Supervision

5.1.1 Site handover

- ❖ Issuance of site handover notice to the Contractor(s) as per the general conditions of contract in coordination with the beneficiaries.
- ❖ Mark-out the bench marks within the sites

5.1.2 Review of Contractor's Implementation Schedule

- ❖ The Contractors work methodology & Schedule shall be reviewed thoroughly by the Consultant.
- ❖ Interrelations between the various activities shall be carefully reviewed particularly with respect to time allocation, commencement and completion dates.
- ❖ At the end of this procedure, an agreed implementation schedule should be provided by the contractor(s) to the satisfaction of all parties.
- ❖ Review and approve Physical, Machinery, Equipment, Manpower and Financial flow Schedule of the contractor as per the contract agreement document.

5.2 Supervision and Contract Administration of works

- ❖ The Consultant shall review and recommend for approval the contractor's detailed work program, method statement for flood protection works and commissioning, availability and ensuring the adequacy of contractors' inputs in terms of machineries or output, equipment, machinery, and human resources in accordance with the provisions contained in the work specifications / general conditions of contract / particular conditions of contract.
- ❖ The Consultant shall provide the necessary supervisory staffs to be employed during the period of implementation in executive and supervisory capacities in respect of the contracts.
- ❖ The Consultant shall check and evaluate the contractor's mobilization on site with respect to machinery and personnel related to the project flood protection as per the provisions of the

contract and their suitability and acceptability on site within the framework of the work and advise the PMU Representative Engineer (RE) for granting permission to start the work.

- ❖ The Consultant is responsible in checking setting out the alignment of the river channel, and other related works as per engineering practices based on the dimensions and data provided in the approved on the ground.
- ❖ The Consultant shall supervise the works that are executed by the contractor on a day-to-day basis and ensure that all the works are executed as per the technical specifications and in respect to the work schedule, as per the specified time line and cost.
- ❖ The Consultant shall Monitor and enforce, as detailed in the Contractor's Safety Manual, the measures established to ensure safety of the workers, other project personnel, the general public, the works in particular and the environment in general.
- ❖ The Consultant is responsible in efficient contract management, time control, quality control and cost control by monitoring all clauses of the Contract scrupulously.
- ❖ The consultant is responsible to write daily site diary which shall record all events pertaining to the administration of the Contract, requests from and orders given to the Contractor, and any other information which may at a later date be of assistance in resolving queries concerning execution of the works;
- ❖ The Consultant shall check the Bi-weekly, Monthly Progress and Final project completion Reports prepared by the contractor and prepare in agreed formats for the project (each sub-project) in a suitable project monitoring software, including physical and financial progress, variations, time extensions, problems and risk analysis issues, etc...
- ❖ The Consultant is responsible in checking all quantity measurements and calculations required for payment purposes and ensure that all measurements and calculations are carried out in an acceptable manner and at the frequencies specified in the contract documents;
- ❖ The Consultant is responsible in evaluating and processing contractors' requests for interim payment;
- ❖ The Consultant is responsible in identifying problems including delays and recommend to the Resident Engineer (RE) about action(s) to expedite progress if the works fall behind schedule;
- ❖ The consultant is responsible in advising to interpret and apply various provisions of the contract documents with respect to the Contractor's conformance and compliance with his contractual obligations in general and with respect to compensation events leading to time extension, variations, additional compensation or payment of extra cost and disputes raised by the Contractor in particular and recommending appropriate decisions;
- ❖ The consultant is responsible in preparing detailed activities and recommendations to the Resident Engineer (RE) for contract change orders and addenda, as necessary, to ensure the best possible technical results are achieved with in the budget available as per client's order

- ❖ The consultant is responsible in advising the Contractor to carry out all such works or to do such things as may be necessary in his opinion to avoid or to reduce the risk of any emergency affecting the safety of life or of the works or of adjoining property;
- ❖ Advise the client in checking the As-Built and as per the given standards that are submitted by the contractor on completion of work;
- ❖ The Consultant is responsible in preparation of completion report of the whole works; · The Consultant is responsible in conducting provisional taking over of the project together with the client and contractor;

Table 2. Professional Requirement

No.	Job Title	#	Qualification & Education	Specific Experiences	General Experience	Time (Months)
1	Resident Engineer	3	MSc in Civil or Hydraulic Engineering or related fields	Supervision of integrated flood management projects, Project manager or resident Engineer	15+ years	18
2	Site Engineer	3	BSc in Civil or Hydraulic Engineering or related fields	Construction of hydraulic structures and flood mitigation works	10+ years	18
3	Quantity surveyor	3	BSc in Civil Engineering or Quantity Surveying or related fields	Quality control and quantity measurement for infrastructure projects	10+ years	18
4	Senior Environmentalist and social specialist	3	MSc or BSc in Environmental Science or a related discipline	Environmental safeguard compliance and monitoring donor financed Projects	10+ years	18
5	Surveyor	3	BSc in Surveying or Geomatics or related fields	Conducting topographic and land surveys for flood management projects	10+ years	18

6. Specific tasks of staffs

6.1 Resident Engineer

- ❖ Review and approve the flood protection methodology and schedule submitted by the contractor;
 - Implement. flood protection management system for the works;
 - Check contractors' setting out;
 - Taking measurements for the purpose of certifying payments and claims; ·
 - Quantity control of the machineries or output and works;
- ❖ Coordination with the relevant authorities and/or stake holders on site during. flood protection;
 - Keep daily records of all aspects of the supervision works;
 - Approve the machineries or output and equipment's brought by the contractor
 - Monitor the environmental impact during. flood protection;
 - Check monthly measurement of work and certify payment;
 - Ensure that complaints from the public and other stakeholders are attended expeditiously and take the necessary action to resolve any conflicts arising;
 - Ensure that any dispute arising with day-to-day work is resolved at site level;
 - Advise Project Manager on claims, disputes and defect corrections certification;
 - Report progress, trends which are likely outcome of contracts and other information required to the Client's Project coordinator/delegated Engineer.
- ❖ Assist the site Engineer and other staff in the day-to-day management of flood protection works and related activities.
- ❖ Assist all staff in planning, control, and management of the teams' work.
- ❖ Assist in monitoring progress, evaluating results and identification and resolution of constraints.
- ❖ Prepare reports including inception, monthly, end of season and final reports.
 - Assist in developing a flood protection management system for the works;
 - Assist in developing Quality assurance & control plan.

6.2 Quantity Surveyor/Engineer

Responsibilities of the Quantity Engineer will include but not limited to the following:

- ❖ Report to the Resident Engineers;
- ❖ Carry out joint measurement of quantities for verification of contractor's interim and final statements;
- ❖ Based on these measurements, make verification on eligible Payments to the contractor;
- ❖ maintain full record of payment data related take off sheets, flood protection activities and as-built drawings and survey data's

- ❖ undertake all the drafting activities; prepare topographic maps and drawings where necessary;
- ❖ delivers appropriate payment related data; and
- ❖ Give assistance in contract administration.
- ❖ Review and approval of the contractor's detailed Quality assurance & control plan for different component of work in accordance with contract provision;
- ❖ Supervising and monitoring the Contractor's activity to ensure satisfactorily standards, quality assurance, control of workmanship and progress
- ❖ Review the suitability of sources of machineries or output and their quality on the basis of inspection, test results, and/or manufacturer's certificates;
- ❖ Check Contractor's machineries/equipment as per standard frequency specified in relevant specification and impart training to Contractor' personnel to conduct different tests;
- ❖ The QC Engineer shall check all the records required to be maintained by the contractor as per quality assurance plan periodically;

6.3 Senior Surveyor

Responsibilities of the Senior Surveyor will include but not limited to the following:

- ❖ reports to the resident engineers;
- ❖ prepare and oversee all the survey work during the. flood protection period;
- ❖ carry out joint measurement of quantities for verification of contractor's interim and final statements;
- ❖ Coordinate and manage the survey team during. flood protection period.
- ❖ Maintain full record of survey data's

6.4 Site Engineer

Responsibilities of the Site Inspector will include but not limited to the following: · reports to the resident engineers;

- ❖ Follow up on-site activities and keep track of the works progress and quality of performance in compliance with the technical specifications;
- ❖ Act as focal points for the Resident Engineers and other key staff for day-to-day monitoring of the site activities;
- ❖ Assistant Resident Engineers in preparing relevant records, work measurements, collecting and keeping the records for use by the Contract Specialist in resolving claims and disputes, preparation of progress reports, financial statements, etc.

6.5. Environmental and Social specialists

6.5.1. Environmental specialist

The environmental specialist will be available at the construction site during the construction stage. The specialist will

- Manage the implementation and management of all environmental safeguard activities under the ET-FMP in RVLB project sites,
- Create a detail action plan that includes environmental monitoring checklists to ensure that the environmental management system in accordance with the environmental and social risk management instruments is established, implemented, maintained.
- She/he will ensure environmental risks and impacts are managed during the construction works,
- Provide trainings and briefings to ensure that contractors and workers are aware of environmental and social risk regulations, standards and requirements of the government and World Bank,
- Ensure baseline monitoring and reporting of contractor's compliance with contractual environmental and social risk and impact mitigation measures during supervision stage.
- Assist the contractor to develop and implement detail sub-project specific contractor environment management plans (SSEMPs) for civil works and activities under ET-FMP project, OHS plan and community health and safety measures,
- Lead in the oversight of implementation of environmental risk management and compliance with the Government and World Bank (ET-FMP) environmental and social framework in consultation with the PMU and ET-FMP management unit.
- Ensure that the preparation/design and implementation of all project activities are fully aligned with the country's regulations and project's Environment and Social Management Framework (ESMF),
- Assess and approve use of temporary construction areas identified during construction such as camps, laydown areas, access roads, etc.
- Monitor on environmental safeguards during construction including ambient environmental monitoring (air quality, soil quality, water quality and noise levels) in accordance with national laws, World Bank guidelines and international best practices and on ESHS performance of the contractor as set in the site specific ESMP.
- Evaluate the contractor's submitted works activities and schedules relative to the requirements of the approved SSEMPs.
- Provide sufficient detail regarding the incident or accident occur during construction of ET-FMP (if any), indicating immediate measures taken or that are planned to be taken to address it,
- Estimate the volume of dredged material/waste to inform evaluation of dredged waste disposal prior to initiation of dredging activities, and assess and select proper waste disposal option for removing the dredged waste,
- Prepare reports on ET-FMP environmental compliance performance, including progress reports and completion reports.in separate from main task

6.5.2. Role of Social specialist

Carry-out the following activities consistent with the Works contract to be supervised, including but not limited to the following

- Conduct community and stakeholder consultations regarding the social impacts and grievances that might face during the implementation of fast track works
- Conducting social impact assessment to identify project affected people and prepare mitigation for the social impacts and consult contractors and stakeholders
- support the Works employer to organize an SEA/SH conference, ensure appropriate representation in the conference and follow-up on any agreed actions by the attendees;
- monitor contractor's compliance with its SEA/SH Prevention and Response Obligations in the Works contract, and take appropriate contractual actions if non-compliance is identified, including upon identification of potential non-compliance by a dispute board;
- ensure that any allegation of SEA and/or SH that are received by the Consultant are documented, maintaining appropriate confidentiality, and promptly submitted to the Employer and the Contractor;
- prior to its engagement for the Works, verify that, any proposed subcontractor not named in the contract, is qualified in accordance with the provisions of the SEA/ SH performance declaration for sub-contractors;
- provide appropriate support and relevant documents that a dispute board may need in reviewing SEA/SH contractual compliance
- Supervising the contractor/s regarding the provision safeguard training and community awareness raising
- Consult on the adherence of and implementation of environmental and social management included in the contractual agreement of the supervising consultant and contractors
- Monitoring the progress and preparing reports on social issues, consultations, impacts, implementation of mitigations, grievances arise and management of complaints and stakeholders participated handling complaints in the process of implementation of fast track works

7. Progress Reporting and Reviews

7.1 Progress reporting:

The Consultant shall prepare as of world bank standard and submit bi weekly, monthly reports of the works, for each site independently including:

- ❖ information on measurements of works executed,
- ❖ machineries supplied to site; used and/or stored
- ❖ flood protection machineries or output and equipment;
- ❖ variation orders, if any;
- ❖ payments made to the Contractor(s),
- ❖ acceptance tests of machines,
- ❖ problems encountered and recommendation made by the consultant,
- ❖ Photographs showing the progress of the works.

- ❖ The Consultant shall also prepare and submit seasonal report at the end of each working season describing the progress of the works package wise and indicating the problem areas and actions required to overcome accordingly.
- ❖ The Consultant shall also prepare and submit Package Completion Report on completion of the whole works.
- ❖ The Consultant shall prepare and submit inception reports describing the working methodology and work program for the services within one month of the mobilization period.
- ❖ The Consultant shall prepare and submit final report of the services on completion of the Services and shall advice on the issue of the provisional and final hand-over certificates.
- ❖ The Consultant shall arrange site meetings with Contractor(s) at regular intervals to discuss progress and quality of works, and resolve any pertaining problem.
- ❖ The Consultant shall issue Variation order and claims for extension of time or any change in works, if any, based on to the contract after obtaining the approval from the Client. The Consultant shall also monitor the contract costs relative to the Client's budgetary provisions.

7.2 Schedule of Reporting and Deliverables

All reports should be submitted as required below and in an electronic and hard copy format

At the completion of the project the Consultant shall provide to the Client, free of charge, a full copy of the drawings recording any changes in the original working drawings.

The Consultant is responsible in providing information and reports on the on-going activities and progress of work.

The consultant is required to submit, for each sub-project, the following reports to the Project Manager.

- Inception report in 3 (three) copies plus a soft copy, one week after the issue of letter for commencement of work. This report should include the related work arrangements, the staff deployment schedule, and details of program of works.
- Assessment Report on Baseline condition of the project site in parallel to construction works
- Environmental and Social Compliance Performance progress and completion Report
- Minutes of Community and Stakeholder consultation meetings
- Quality Assurance Plan in 3 (three) copies plus a soft copy one week after the commencement of work.

- The report should include type and nature of quality control tests to be conducted, acceptance criteria, frequency of tests, standard observation sheets, and documentations based on approved. flood protection tender document.
- Progress reports in 3 (three) copies plus a soft copy at monthly intervals and at the end of each. flood protection season, summarizing financial situation of all work and contracts, progress achieved, difficulties encountered and issue to be resolved,
- Project Completion Reports on completion of each package in 3 (three) copies plus a soft copy.

7.3 Review & Coordination Meetings

- ❖ Weekly review meeting with the consultant, contractor and the client to review and evaluate the progress of the work as per the schedule submitted by the contractor in weekly bases which is cascaded from the master schedule.
- ❖ To give a solution for any problem encountered during the execution of the. flood protection activities, the minutes of meeting signed and sealed will be attached with the monthly report and distributed to all parties.
- ❖ Monthly review and coordination meetings shall be held with the Consultant's team leader; expert team members and representative of contractors shall be held with the Project Manager/ Superintending Engineer to review the flood protection works.
- ❖ Quarterly review and co-ordination meeting with the Consultant's team leader expert team members and contractors shall be held with Client's PMU at site or head office in order to review implementation and progress of the assignment.
- ❖ All the suggestions and comments that are made during such meetings shall be taken into consideration and implemented by the respective parties.

7.4 Environmental Safeguards Compliance

1. *carry-out the following activities consistent with the Works contract to be supervised, including but not limited to the following:*
 - (a) *support the Works employer to organize an SEA/SH conference, ensure appropriate representation in the conference and follow-up on any agreed actions by the attendees;*
 - (b) *monitor contractor's compliance with its SEA/SH Prevention and Response Obligations in the Works contract, and take appropriate contractual actions if non-compliance is identified, including upon identification of potential non-compliance by a dispute board;*
 - (c) *ensure that any allegation of SEA and/or SH that are received by the Consultant are documented, maintaining appropriate confidentiality, and promptly submitted to the Employer and the Contractor;*

- (d) prior to its engagement for the Works, verify that, any proposed subcontractor not named in the contract, is qualified in accordance with the provisions of the SEA/ SH performance declaration for sub-contractors;*
- (e) provide appropriate support and relevant documents that a dispute board may need in reviewing SEA/SH contractual compliance*

8. Consultant's Office and Equipment:

- ❖ The authorized officials of Client may visit the Consultant's offices any time during office hours for inspection and interaction with the Consultant's Personnel.
- ❖ It is not expected from the Consultant to carry out the operations from the Head/Home Office.
- ❖ The Consultant shall mobilize and demobilize its Professional Personnel and Support Personnel with the concurrence of the Client's PM and shall maintain the time sheet/ attendance sheet of all Personnel.
- ❖ These time sheets/ attendance sheets shall be made available to the Client as and when asked for and a copy of such record shall be submitted to the Client bi weekly

9. Schedule

The flood risk reduction work is intended to be completed within 6(six) months and the consultant is expected to distribute the resources used for the service accordingly on logical pattern and manner.

10. Client's Input and Counter Part Personnel

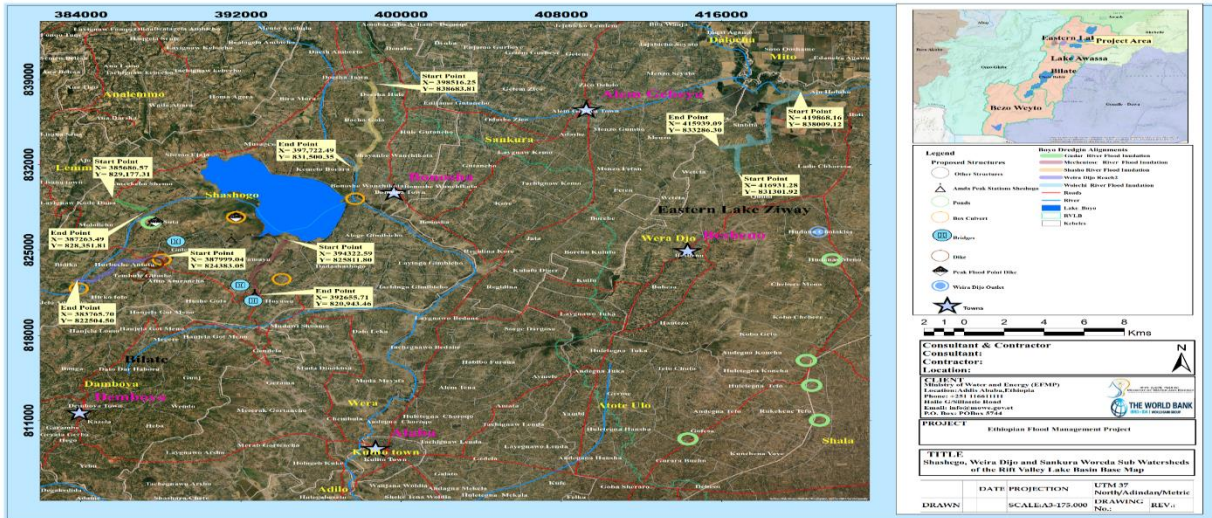
The followings are the inputs and facilities to be provided by the Client;

- ❖ Access to all available reports, studies, data, maps, and institutions relating to the works,
- ❖ access to all sites for surveys and investigations.
- ❖ Facilitating all contacts necessary for proper implementation of the project.

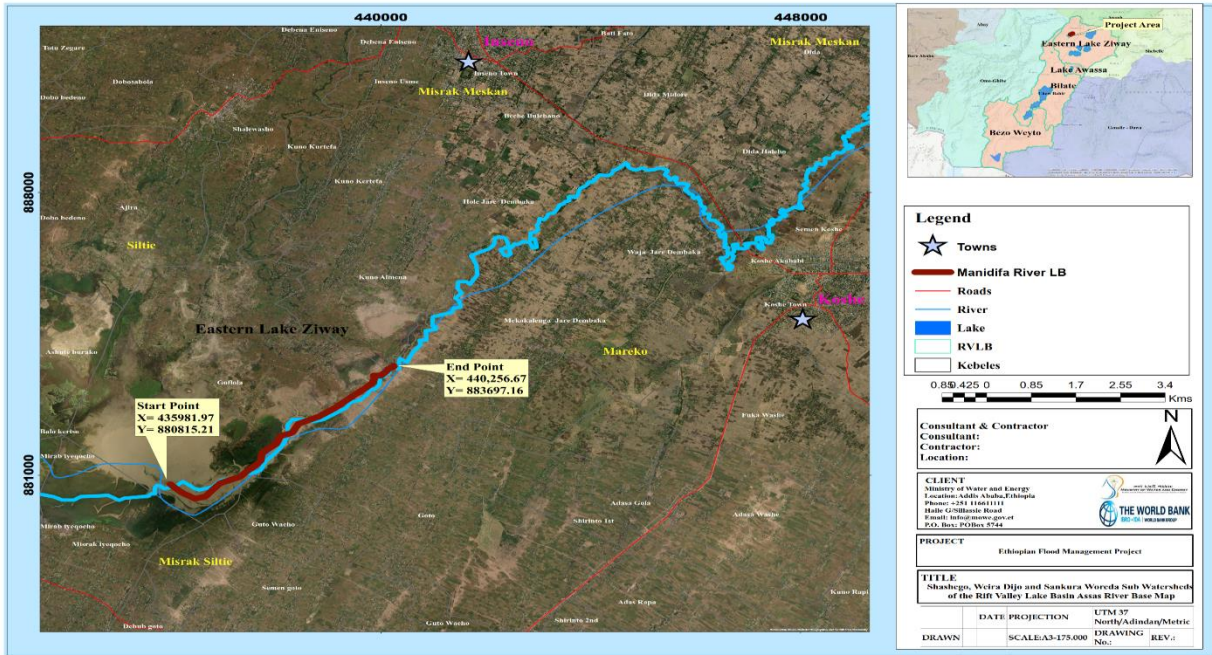
The Client or Project offices may assign its staffs to the Consultant



Map 1. Location map of the Kulfo River intervention project site



Map 2. Location map of the Boyo Lake intervention project site



Map 3. Location map of the Mandifa and Assas River Intervention project site