

# **Climate Smart Irrigated Agriculture Project (CSIAP)**

## **Technical Auditing**

### **Terms of Reference**

## **1.0 Background**

### **1.1 Project Introduction:**

The Government of Sri Lanka and the World Bank have agreed on the implementation of the Climate Smart Irrigated Agriculture Project (CSIAP). The project aims to improve the productivity and climate resilience of smallholder agriculture in selected hotspot areas in Sri Lanka. The project design is based on an integrated watershed development approach to climate smart irrigated agriculture with specific interventions related to irrigation and drainage management, improved on-farm water management, and improved agriculture development. The project intends to build on successful experiences in the country and the sub-region and will have four components: (A) Agriculture Production and Marketing; (B) Water for Agriculture; (C) Project Management; and (D) Contingent Emergency response. The total size of the project is USD 125 million, which has a World Bank share of about USD 110 million.

### **1.2 Implementation Arrangement:**

The project is integrated into the GOSL administration, and the implementation is designed to capitalize on existing government agencies at the national, provincial, district, divisional, and Grama Niladhari divisional levels. A Project Management Unit (PMU) has been established under the Ministry of Agriculture. At the provincial level, there are DPD Offices set up in each of the participating Provinces to implement the project. The Provincial DPD offices have been set up at Kilinochchi, Kurunegala, Anuradhapura, Trincomalee, Hambantota and Moneragala Districts under the Chief Secretaries of respective Province, and they are expected to cover the district level activities of the respective districts.

Overall project implementation responsibility is on the Ministry of Agriculture (MOA). The day-to-day management and operation of the project are, carried out by the Project Management Unit (PMU), headed by a Project Director appointed by MOA and assisted by key Specialists. The project will pay attention to institutional coordination across departments, agencies and strategic partners involved in the implementation of project activities. The overall project oversight is the responsibility of the National Project Steering Committee (NPSC), established in the Ministry of Agriculture and chaired by the Secretary. The main responsibility of the NPSC is to provide strategic guidance for the implementation of the project and to act as the interface between the central and provincial agencies. The NPSC also approves the annual work program and budget for the project, endorses the working arrangements with strategic partners, and is briefed by the Bank (and the Project Director) on the outcomes of implementation support and review missions carried out with the Bank team, at least twice annually.

## **2.0 Objectives**

**2.1.** The main objective of the Consultancy is to review, report and advise the Employer on the implementation of the Project in particular the quality of the civil works and processes and procedures that are being followed by the Engineer/ Contractor and whether it is as per the standards and guidelines adopted by the CSIAP and the project implementation plan. The Consultant shall review and report on

preliminary investigation reporting, full investigation reporting, feasibility studies, designs and cost estimates, procurement process, contract management, the effectiveness of the Supervision of the Engineer, quality control and quality assurance practices by the Contractor, Contract progress and payments recommendation by the Implementing Agencies (IA), and carried out by the Office of DPD and/or PMU etc. In addition, the Consultant shall review and report on the Contract / voluntary work done by the farmer organization, Social Audit Committee participation and the effectiveness of the project.

**2.2.** The Consultant shall recruit suitable Part-time and full-time key professional staff as specified with stipulated minimum academic and/or professional qualifications with work experiences. Senior Technical Officers / Technical Officers recruited by the CSIAP will be assigned to the Consultancy Service as Counterpart staff to discharge the duties and responsibilities listed in TORs in order to working with Irrigation Engineers and the Project Manager. All other resources that are required to produce the expected outputs within the scheduled time period shall be provided by the Consultant.

## **3.0 Scope of Services**

### **3.1. General**

3.1.1 Technical Audits will be carried out to enable the Project Management Unit (PMU) of CSIAP to critically assess the implementation of the Project, in particular the quality of the Civil Works and processes and procedures that are being carried out by the Engineer/ Contractor. The services of the Consultant are to be carried out the Technical Audits for the period between 2022 and 2023. This assignment will be funded by the World Bank Credit for the CSIAP. The Consultant shall engage a team of qualified professional staff to provide project management support and use counterpart technical staff from the Employer to ensure the successful implementation of the assignment.

3.1.2 There are 961 irrigation schemes (irrigation tanks, agricultural roads, drainages and agriculture-related buildings) selected for rehabilitation in the hotspot area of six provinces. The Technical Audit Consultants will select 33% (Thirty Three percent) of the subprojects/schemes (321 No's out of 961 No's or total Items under Construction whichever is lesser) with the consultation of DPD, subjected to PD's approval. Thereafter, subject them to a rigorous audit to ensure that the Work that is being carried out conforming the requirements, standards and criteria set by CSIAP. The accuracy and reliability of the site-specific social, environmental, hydrological and geological data used for the project design will be examined. Site investigations will be undertaken as necessary. The designs and construction work of the engineering infrastructure used in rehabilitation will be continuously reviewed and supervised. A detailed review of their costs will be carried out. A review of quality assurance and quality control during the construction of civil works will also be carried out. The auditing will be on preliminary investigation reporting, full investigation reporting, feasibility studies, designs and cost estimates, procurement process, contract management, and the effectiveness of the Supervision by the Engineer to the Contract. In addition, the Consultant shall review and report on the Contract / voluntary work done by the farmer organization under the participatory management practices and Social Audit Committee participation and their effectiveness on the project.

3.1.3 The consulting services ("the Services") include: (i) allowing an independent team to form a professional opinion on the compliance of civil works carried out under CSIAP with the technical specifications and standards described in the relevant bidding documents in their respective contracts, and (ii) ensuring the Client that the rehabilitation works are implemented efficiently, in compliance with all the prevailing statutes and regulations, according to the schedules with expected quality. In addition,

the Consultant will verify the appropriateness of the applied various measures used for rehabilitation, from the perspective of modern soundness of methodology and the concepts employed for achieving the climate-smart resilience improvement.

3.1.4 A team of full-time professional specialists will be engaged to provide the Services such as technical guidance and management support in specific and special areas. The team will comprise: (i) one Project Manager (PM) (Full-time); (ii) Six Irrigation Engineers (IE) (Full-Time); and (iii) Twelve Counterpart Technical officers (Civil) (Full-Time).

## **3.2 Audits**

### **3.2.1 Contract familiarization, initial auditing, reporting and advising Employer**

1. Assess necessary documents required to get an understanding of the relevant activities to the Consultancy Contract including contract documents, post and pre-tender documents and any other reports.
2. Check the adequacy of mobilization of the Design and Supervision Consultants/ Engineer and Civil Works Consultant/ Engineers and their bearing on the Contract performance.
3. Check whether the relevant Engineer to the contracts has ensured the mobilization of the civil works Contractors as per the work execution schedule and its adherence by the relevant Contractors.
4. Check whether the Engineer has looked into the sufficiency of laboratories and instruments, competence & skills of the staff deployed by the Contractors for the labs, and its adherence by the Contractors.
5. Check the content and sufficiency of checklists, formats agreed/issued between the Contractor and the Engineer/ Implementing Agency (IA), to have an accurate and timely information support system.
6. Check whether the Engineer/ (IA) has done adequate evaluations and approval of Contractors' safety plans, environmental management plans and their implementation if any.
7. Check whether the Engineer/ IA has adequately assessed the contractor's work execution schedule, Q.A, Q.C. Procedure, methodology statements other requisites. Check timely attendance to work for the same by both the Contractor and the Engineer.
8. Check whether the schedule of handing over of sites, prepared by the Engineer has covered all the important aspects such as schedules are in line with the contract.
9. Review the Engineers' assessment of the sufficiency of the bonds, insurances and guarantees and check any potential risks that are not inbuilt in the Contract or any contradiction in stated policies.
10. Review the Engineers' decisions with regard to the selection of material, materials sources, and disposal sites in terms of quality procedures and compliance with environmental/social regulations.
11. Assess the actions taken by the contractor on utility surveys, re-locations, if any, and the Employer's/ Engineer's coordination on the same in the light of the potential impact on the construction schedule due to any delays caused.
12. Check and review the directions given by the Engineer on the design concepts, proposals and broad dimensions of the structures to identify any unnecessary constructions and facilities outside the scope of the project and/or to ensure that the goals specified in the Scope of the work are achieved.

13. Review and comment on the Engineers' assessment of the Contractor's technology and equipment choices and methods and the contractor's compliance with the same. Also, review on incidence of any additional or extra cost to the Employer and comment on whether any improvements in the assessments and compliance are required. Also, assess the Engineers' reporting of the same from the point of view of the practicality of said methods and choices.

14. Review and comment on the planning of farmer contribution under the participatory management practices and Social Audit Committee on the effectiveness of the project.

### **3.2.2 Intermediate Auditing, reporting and advising Employer**

1. Assess Engineers/ IA monitoring system and degree of supervision to see whether the contractor follows the approved method of executing the work and uses safe methods, tools and practices in the construction activities.

2. Review and report **individual contract progress** under the assignment as per approved work execution schedules, progress and overall progress compared to Contracts and advise Employer mitigating the delay if any.

3. Review whether the Engineer has adequately done the evaluations of the initial construction schedule, revised construction schedule and resources schedules of individual contract packages and report important observations to the Employer. Also, assist the PMU on evaluations of extension of time (EOT) on requests if any and identify possible delays that should be attended.

4. Identify problems and recommend improving the contract performance, particularly for Contracts that occurred time and cost overruns and/ or quality issues. Review the actions taken by the Contractor/ Engineer in improving said situations and actions taken on any non-compliance.

5. Check timely attendance of the Engineer in forecasting for balance work and in issuing instructions in advance and notify Employer accordingly.

6. Visit sites regularly and identify the bottlenecks in timely completion of the Work in terms of physical activities, Contractor's efficiency, and responsiveness of the Engineer. Assess responsible / partly responsible party to delay where it happens.

7. Verify the performance of the construction activities including maintenance of the sites as per the terms of the contract, to avoid any inconvenience to the citizens/road users.

8. Review the Contact management by the Engineer for the following activities including;

- Issuance of instructions/ notices to the Contractor
- Identification of reasons for delay and cost overruns
- Approving/issuing designs and working drawings, setting out of work, issuing instructions.
- Approved certificates including Certification of Completion.
- Accident recording and subsequent compensations, measures taken for mitigation, etc.

9. Assess the Contractor's site management, and resource supply on stipulated progress.

10. Check the variations on a sample basis to ensure that procedures and guidelines pertaining to the employer's approvals of such variances are followed. Monitor the process of obtaining the necessary approvals for the variations, with a view to avoid any delay in the issuance of instructions to the contractor. Monitor and forecast the effect of variations on the contract price.

11. Check and advise the Employer, as per contract agreement, on the effectiveness of the level of authority retained by the employer in approving variations with additional costs, in approving significant variations of quantities of major items of work and in approving the sub-letting of any part of the work.
12. Ensure whether the Engineer/ Implementing agency has introduced proper recording methods and accessibility for survey references, its values, levelling records and dimensional references of the structures etc.
13. Ensure that the Engineer has introduced proper record keeping of measurements, resource stocks, resource usages for Work, Contractor's requisitions, Engineer's approval, weather conditions and other related and check their effectiveness on the progress.
14. Review the Contractor's statement submissions (Bills) status, compliance and conformity with the Contract.
15. Check whether the Engineer has attended to the Payment Certificate on time, review the last Payment Certificates and assess whether bill items, variations, and claims and its conformity with the Contract. Also, assess the time taken for processing the contractor's payment requests and actions taken to avoid potential claims that arise out of delay of payments.
16. Review and comment on documentation such as periodical reports, meeting minutes and instructions and response to Contractor's correspondence. Also comment on their adequacy, potential positive and negative consequences of the contents of the Contract and their timely actions.
17. Verify whether the Engineer has done the assessment of the contractor's performance on the following aspects and communicate to them to the Contractor satisfactorily and periodically for better performance of the Contract. Comment on the Contractor's Responses on the same.
  - Quantity, capacity, quality and appropriateness of all type of resources; plants and equipment, operators and labours
  - Site organization and site management
18. Consultant shall monitor and report, on the progress of designing, cost estimation and procurement process status of all ongoing activities carried out by IA/ DPD offices.
19. Review whether the Contractor/ Engineer has taken adequate measures to ensure site safety as per their contractual obligations including emergency health care facilities, sanitary and service facilities, industry practices and the prevailing governing regulations that are stated in the methodologies and the contract.
20. Consultant shall continuously monitor the quality of Work and in cases where there is a need to recheck the conformity of the quality of Work, Consultant shall carry out a required test after notification to DPD and/or IA.
21. Assess the systems available with both Contractor and Engineer to monitor, record and respond to accidents at work, and review the actions taken on such accidents, public comments and complains
22. Assess the sufficiency of the actions taken by the contractor/Engineer in fulfilling his responsibility for compliance with environmental and regulatory frameworks. Also, assess the performance of the Engineer on the same.
23. Investigate the background of any nonconformity or surveillance records of work reported and measures taken to prevent the same.

24. Review whether the Contractor has adequately addressed the QA & QC procedure as specified in the contract on material sources, material and disposal sites along with the frequency of testing, laboratory facilities, and test results reliability.
25. Assess the Engineers' monitoring system on testing of material and material sources on the frequency of testing, laboratory facilities, test results reliability and test record system and Contractor's adherence to maintaining the quality of Work.
26. Investigate the credibility of material testing and quality assurance ensured by the contractor/ Engineer on a random basis where required.
27. Check on minimization of identified problems and their rectifications as informed in the previous audit.
28. Monitor any political and social issues attributed to the Contract performance. Review necessary and prevailing relations between institutions related to the Contract; relevant Ministry, Chief Secretary, Project Management Unit, implementing Institutions, utility agencies and any other institutions for the effective performance of contracts.
29. Review and comment on the planning, participation, effectiveness, issues encountered and necessary improvement to be made for farmer contribution under the participatory management practices and Social Audit Committee regarding the effects on the project.

### **3.2.3 Final Auditing, reporting and advising Employer**

1. Review Engineers' reporting of the outstanding work components at the substantial completion of work and the Contractor's performance on completing the snag list.
2. Assess the actions of both the Engineer and the Contractor on as-built drawings, test reports and records, measurements and payment data, site correspondence and any other records such as minutes of meetings, whether it conforms with all aspects of the Contract
3. Review the Engineers' actions on overseeing as-built plans and their adequacy in terms of the Contract and future use for the Employer.
4. Check and inform Employer on any contractual obligation that has not been fulfilled either by the Engineer or by the Contractor.
5. Review whether the Engineer has studied any necessity of further testing (post-construction audit) required to assess the quality of work based on the available documents and field observations.
6. Assess the Completion Reports of the Engineer, focusing on key aspects such as quality of work, quality control records, and payments including variations and claims.
7. Assess the Engineers performance in defect liability period and timely issuing of Completion Certificate at the end of defect liability period.

## 4.0 Reporting Requirements

The Consultants shall produce an Inception Report, monthly status reports, and Quarterly and Final Reports of the assignment to the Project Director of CSIAP and with copies to the respective Deputy Project Directors at the provincial level.

Reporting Requirements	Description	Timelines
Inception Report	Shall confirm the mobilization and operational status of the Consultant, the Consultant's Contact details, the confirmed real-time (dated) work schedule/work plan; and any changes the Consultant wishes to propose in the TOR based on the initial assessment. To be submitted in the format acceptable to the Client	Within 4 weeks of commencement of this service
Reporting Requirements	Description	Timelines
Important Notifications to the Employer	Where there is an important notification to be given immediately on any auditing matter that affected the progress/quality of the project, Consultant shall inform Employer in writing, within a reasonable time of such awareness.	Not later than 7 days of awareness
Monthly Reports	Shall include all details as stipulated in the initial and Intermediate Auditing activities relevant to the current month based on individual Contracts and categorized province-wise. The report should also record key issues and recommendations for each case in the format acceptable to the Client	Within 5 days after completion of the reporting period (Monthly)
Interim Special Reports	Shall include all details as stipulated in the Intermediate Auditing activities relevant to the current period based on individual Contracts and categorized province-wise. The report should also record key issues and recommendations for each case in the format acceptable to the Client	As and when needed
Quarterly Reports	Shall include all details as stipulated in the Intermediate Auditing activities relevant to the current quarter based on individual Contracts and categorized province-wise. The report should also record key issues and recommendations for each case in the format acceptable to the Client	Within 10 days after completion of the Reporting Period; Quarterly

Annual Reports	Shall include all details as stipulated in the final Auditing activities relevant to the current year based on individual Contracts and categorized province-wise. The report should also record key issues and recommendations for each case in the format acceptable to the Client	Within 2 weeks after completion of the reporting period; yearly
Final Report	Shall include all details as stipulated in the final Auditing activities relevant whole contract based on province wise separately and format acceptable to the Client.	Within 1 month after completion of Consultancy Contract

- The Consultants shall produce an electronic/soft copy of the drafts report to PMU and DPD office.
- The Employer shall provide comments on any of the Draft Reports within Ten (05 Working days) calendar days from submission.
- Consultant shall submit one hard copy and a soft copy for PMU and each DPD office after attending to the Employer's comment and within 7 days of comment received.

## 5.0 Contract Period

The Service of the Consultant will be for 12 calendar months from the date of commencement of the assignment.

## 6.0 Key Personnel, Requirements and Minimum Qualifications - Consultant

The Consultant shall recruit Personnel who meet the minimum academic/professional qualifications and years of related experience specified, to perform the tasks and services enumerated in the TOR. The Consultants shall also provide required all related resources such as accommodation for the Personnel, local transportation, computers and office equipment, stationery items, printing, etc. to deliver the expected outputs by the personnel as per the time schedule.

### 6.1 Key-Experts for Technical Auditing and Other Time-Based Tasks

This Technical Audit will be undertaken by a Consultant firm as an independent vital activity for reviewing the quality of the civil works and processes and procedures that are being followed by the Engineer/ Contractor for improving the same.

A Project Manager will be directing the overall Technical Audit and other time based tasks and will work from the head office of the CSIAP. There will be an Irrigation Engineer responsible for undertaking the Technical Audit in each of the 6 Provinces under the direction of the Project Manager. Hence a total of 6 Irrigation Engineers are required. The Project Manager and Irrigation Engineers responsible for the Province are national Key Experts. Furthermore, in each Province there are Districts where CSIAP operations are concentrated on. At each District level there would be a Senior Technical Officer to be provided by the Consultant firm as National Non-key Experts working under direct supervision of the Irrigation Engineer of the Province. The total minimum National Key-Experts will be 84 *person months*



and the total minimum national non-key experts to be provided by the Consultant firm would be 132 person-months. These details are summarized in **Table 1**.

Being a Technical Audit of an independent nature, the staff associated with CSIAP cannot be mobilized for the above mentioned Key Expert and Non-key Expert positions. However, CSIAP/ Employer will assign 11 Technical Officers as counterpart staff to assist and understudy the procedures of the Technical Audit which enables them to supervise the works of the Contractors in the future.

**Table – 1 – Summary of Experts for Time Based Task**

<b>Key-Experts</b>				
	Position	Person Months		Total MM
		International	National	
K-01	Project Manager (Full Time)	-	1x12	12
K- 02	6 Irrigation Engineers (Full Time)	-	6x12	72
		-	<b>84</b>	<b>Total 84 MM</b>
<b>Non Key-Experts</b>				
	Position	Person Months		Total MM
		International	National	
NK – 01	Senior Technical Officers	-	12 X 11	132
<b>Grand Total</b>				<b>= 132 MM</b>

**6.2 Key-Experts qualification for Technical Audit**

<b>Position</b>	<b>Qualification and Expérience</b>
<b>K-01- Project Manager (Full-time)</b>	<p>Civil Engineer preferably with a B.Sc. Degree in Civil Engineering from a recognized university or equivalent qualification with Full Membership of relevant Professional Institution and MSc/PG Diploma in the relevant field, and a minimum of 15 years of relevant experience in construction industry out of which 10 years of experience in Irrigation Infrastructure development in Project Management, Contract Management, Construction Management, field investigation, field survey works, estimation, quality control and assurance and field measurements and payment preparation and certification, etc.</p> <p>The expert must have experience in World Bank/donor funded projects.</p> <p>Very good coordination, and excellent verbal Communication, and written reporting and presentation skills in English Language is required.</p> <p>Experience of working with all government staff at all level from national to community level, including leading similar assignments in countries with similar geographical and topographical features.</p> <p>The Project Manager (PM) will be a full-time consultant and is fully responsible for the implementation of Technical Auditing in 11 districts. PM will be assisted by six (6) Irrigation Engineers (IEs) and eleven (11) Nos of Senior Technical Officers (STO's) /Technical Officers (TOs).</p> <p><i>The expert will be responsible leading and contributing to all tasks with reference to the assignment, and for undertaking the following activities, among others:</i></p> <ol style="list-style-type: none"> <li>1. Preparation of the strategic audit plan in consultation with PD, DPDs and IAs, under the guidance of PMU to ensure satisfactory completion of the proposed rehabilitation activities in the field within the stipulated time frame.</li> <li>2. Oversee the performance of the IEs who will technically guide the implementing staff on operational activities.</li> </ol>

Position	Qualification and Experience
	<p>3. Guide the IEs in achieving the target set for completion of all identified project activities with quality assurance and environmental mitigation measures.</p> <p>4. Along with IEs, educate technical staff, Farmer Organizations and contractors, and ensure adoption of the specifications in Technical Guidelines and institutionalizing the system to ensure acceptable construction quality and workmanship of civil works during project implementation.</p> <p>5. Guide the IEs to assess the status of construction sites and assist the contractors with timely execution and work completion by adopting appropriate technologies and methods ensuring the stability and sustainability of created or rehabilitated assets.</p> <p>6. Guide the IEs in checking, supervising and progress monitoring of implementing activities at sites at regular intervals with respect to rehabilitation of subproject schemes and reporting to IAs and DPD with remedial measures on shortcomings and delayed works.</p> <p>7. Guide the IEs in discussing and sharing project-related matters and issues with the IAs and the DPDs and other project staff members of the working team and cooperate in implementing all project activities successfully.</p> <p>8. Guide the IEs in the preparation of the technical report and other project documents concerning the rehabilitation of subprojects/ schemes.</p> <p>09. Submission of the proposed monthly program and performance report within the stipulated time period to the PD.</p> <p>10. Submission of the field inspection report to the PD, with a copy to the DPD, containing the details of the sites inspected, officers accompanied, observations, problems identified and proposed solutions, recommendations, etc. within a stipulated time period from the date of visit.</p> <p>11. Undertake and ensure completion of any other works related to the rehabilitation of subprojects/ schemes as assigned by the PD from time to time.</p>
<p><b>K- 02 – Irrigation</b></p> <p><b>Engineer</b> <b>(Full Time)</b></p>	<p>Civil Engineer preferably with a B.Sc. in Civil Engineering from recognized university or equivalent qualification, and minimum of 10 years of experience Civil Engineering Construction out of which 05 years in Irrigation Infrastructure development activities in Contract Management, Construction Management, field investigation, field survey works, estimation, quality control and assurance and field measurements and payment preparation and certification, etc.</p> <p>The expert must have experience in World Bank/donor funded projects.</p> <p>Very good coordination, and excellent verbal Communication, and written reporting and presentation skills in English Language is required.</p> <p>Experience of working with all government staff at all level from national to community level, including leading similar assignments in countries with similar geographical and topographical features.</p>

Position	Qualification and Experience
	<p>The Irrigation Engineer (IE) will be a full-time consultant and is fully responsible for the implementation of Technical Auditing in the assigned province, IE will be assisted by a number of Senior Technical Officers (STOs) who will be assigned for the work of each District of the assigned province.</p> <p><i>The expert will be responsible leading and contributing to all tasks with reference to the assignment, and for undertaking the following activities, among others:</i></p> <ol style="list-style-type: none"> <li>1. Preparation of the strategic audit plan in consultation with DPDs and IAs, under the guidance of PMU to ensure satisfactory completion of the proposed rehabilitation activities in the field within the stipulated time frame.</li> <li>2. Technically guide the implementing staff on operational activities concerning needs identification, field investigation and survey, feasibility study, preparation of design proposals, estimation, preparation of bidding documents, construction supervision, quality control and assurance, field measurements and payment checking and payment certification, contract administration, handing over to the ACAD/PID on completion, report preparation, etc.</li> <li>3. Achieving the target set for completion of all identified project activities with quality assurance and environmental mitigation measures.</li> <li>4. Educate technical staff, Farmer Organizations and contractors, and ensure adoption of the specifications in Technical Guidelines and institutionalizing system during the project implementation, to ensure that the quality of civil works meets the specified standards.</li> <li>5. Assess the status of construction sites and assist the contractors for timely execution and work completion by adopting appropriate technology and methodology ensuring the stability and sustainability of the newly created or rehabilitated assets.</li> <li>6. Checking, supervising and progress monitoring of implementing activities at sites at the periodic interval with respect to rehabilitation of minor irrigation schemes and reporting to IAs and DPD with remedial measures on shortcomings and delayed works.</li> <li>7. Discussing and sharing project-related matters and issues with IAs and DPDs and other project staff members of the working team and cooperating to implement all project activities successfully.</li> <li>8. Preparation of technical reports and other project documents concerning the rehabilitation of minor irrigation schemes.</li> <li>9. Collecting and compiling data related to all construction activities of the project and reporting to implementing agency monthly.</li> <li>10. Submission of the proposed monthly program and performance report within the stipulated time period to implementing agency.</li> <li>11. Submission of the field inspection report to implementing agency, with a copy to the PD, containing the details of site inspected, officers accompanied, observations, problems identified and proposed solution, recommendation, etc. within set target of the time period from the date of visit.</li> </ol>

Position	Qualification and Experience
	12. Undertake and ensure completion of any other works related to the rehabilitation of irrigation schemes as assigned by the implementing agency from time to time.

### 6.3 Indicative qualifications and experience for Non-Key Experts for Technical Audit

Position	Qualification and Experience
<b>Senior Technical Officer (STO) / Technical Officer (T / O)</b>  (Fulltime)	<p><b>National</b></p> <p>Preferably a Senior Technical Officer (STO) / Technical Officer (T / O) with a 03 Year Full Time Diploma in Irrigation / Civil Engineering or related with minimum of 20 years' experience out of which 15 years relevant experience in construction Supervision of Earthen dams, Irrigation and Drainage Canals and provision of irrigation facilities in gravity Irrigation schemes.</p> <p>The expert should be competent in setting-out, Surveying and Leveling, quality assurance and quality control, Health, safety and Environment compliance with safeguards, Contract Management, Checking and taking joint measurements for payments, etc.</p> <p>Excellent verbal, written and presentation skills in Local Languages, and conversant in English language.</p> <p><b>Experience in working in similar projects at similar geography, topography and climatic conditions.</b></p>

### 6.4 Office staff and Logistical arrangements.

The Consulting Firm shall provide the entire Technical Professional, Administrative, and support staff needed to carryout their Services. Sufficient number of skilled office staff is required in order to meet the needs of the Offices, and all associated logistics of the Consulting assignment. Table – 2 will reflect the indicative positions, numbers, qualifications and activities of each staff member. However, the positions and actual numbers are at the discretion of the Consultancy Firm, and will cost them accordingly as out of pocket, fixed rate expenses in their time based financial proposal. It is not required to furnish the CVV of supporting staff as part of the Technical proposal since it will not be evaluated as part of Expert team.

	Position	Indicative Nr	Qualification and Experiences	Activities
1	Assistant office Manager / Secretary.	01	Experience in working with a Consultancy company at International donor funded projects as Secretary with good verbal, written skills in English and National Languages. Computer skills in MS Office packages with relevant certificates.	Office support, data entry, letter typing, Report preparation and printing, etc. There will be 01 position at Colombo over the project period.
2	Drivers	06	Good English and National Languages. Appropriate category of driving license with 10 years of god driving experience.	Driving in and in-between Colombo, and Project Areas, etc. Regular daily and periodic maintenance of vehicles including but not

Table - 02				
	Position	Indicative Nr	Qualification and Experiences	Activities
				limited to washing and keeping clean interior and exterior.

### 6.5 Other out of Pocket expenses of the Consulting Firm.

Following is a brief description of the expenses but the Consultant is responsible to clearly identify any other cost, if any, and indicate it in their financial proposal.

- a. All other necessary facilities and logistic support including living accommodation and per diems for the staff.
- b. National travel, and miscellaneous transportation.
- c. Day to day office utilities, communication and other miscellaneous cost which may be required to carryout the service as per Contract.
- d. Printing, Publishing and transmittal of all reports and deliverables excluding items comes under provisional Sum.

### 6.6 Client's Input:

The PMIU shall provide the Consultant with all documents, drawings, Maps and other documents that are available, and at their disposal. All the requirement needed to carry out the Consultancy Service, unless otherwise mentioned in these TOR, shall be a responsibility of the Consultant.

1. Services, facilities and property to be made available to the Consultant by the Client:
  - a) The client will make available the rights of way for construction purpose, on base of lay-out information given by the Consultant.
2. Client will provide office space in Project Director Office building in Colombo for the Project Manager (Part-Time) and Office of DPD at respective Provinces for the Irrigation Engineer's. The Client will provide the office space with Furniture, Electricity and water supply. The Consultant shall take responsibility for the consumables and upkeep including but not limited to printing, communication, etc.
3. The Consultant will be responsible for providing appropriate living accommodation and related facilities to their staff.
4. No Government staff will be deployed to work under the Consultant, and adequate Counterpart personnel to be assigned by the Client to the Consultant's team in order to work with them. Therefore, 11 No's of Senior Technical Officer (STO) / Technical Officer (T / O) will be assigned to assist and understudy the procedures of the Technical Audit. The Consultant is required to supply these staff with transportation when necessary.
5. All the Goods, Material and Equipment's procured under the Consultancy Service Contract are the properties of the Project, and shall be returned to the Government after completion of the Services in good working condition.
7. **Specific Request for Proposal Information**

**In addition to what is requested in RFP, and any other information that the Consultant wish to submit, the following shall be submitted by the Consulting Service Bidder (Consultant Firm):**

#### a. The Consultant firm's experience in

1. **Implementing Technical Audit Contracts where it is required to take careful management and programming.**
2. **Construction and Contract Management of multiple Contract packages which is being offered concurrently.**
3. **Implementing ESMP and HSMP.**
4. **Managing multidisciplinary teams located across multiple offices.**

**5. Overall responsibility in whole project implementation management.**

- b. The Consultant Firm's experience in planning, preparing feasibility assessment in the water resources sector including planning and supervision of site investigations, Surveys and other relevant but not limited to Hydrometeorological studies, etc.**
- c. The Consultant Firm's experience in preparing detail Engineering Designs and Cost Estimates. Experience in preparation of Bidding Documents and Contract documents preferably under CIDA in irrigation systems and related structures:**
- d. The Consultant Firm's experience in Technical Auditing in Civil works Construction Projects preferably under FIDIC Redbook Contracts specially construction of irrigation systems**
- e. The Consultant Firm's or proposed "Key-Experts" experience in preparing and implementing: Technical Auditing in similar Construction Project; and QA and QC plans for similar construction projects.**
- f. The CVV of Key-Experts should be submitted in same order as Table 1**

Additional information can be requested during the pre-proposal conference. The **pre-proposal conference attendance is optional.**

**8. Availability of Documents for Consultants**

Available approved project and work-related documents will be available at the offices;

1. Project Appraisal Documents
2. Project Implementation proposal
3. Preliminary rehabilitation Assessment
4. Monthly Progress and Annual Progress report
5. Available Contract agreement and building document
6. Five-year Work plans and action Plan
7. Procurement Plan
8. Technical Guideline
9. World Bank Mission Aid Memoire
10. Any other available document.