Multi-Sectoral Action for Nutrition (MSAN) Project (P158769)

Terms of Reference

Hiring Of Project Design and Implementation Support Consultant – PDISC

BACKGROUND OF PROJECT

To help reverse the increase in stunting, the Government of Sindh has approved an Inter-Sectoral Nutrition Strategy of Sindh (INSS) in 2013. Multi-Sectoral Action for Nutrition (MSAN) (P158769) MSAN activities will focus not only on specific investments to improve behavior around the key areas of sanitation and hygiene and food consumption, but it will also support institutional and implementation arrangements that incentivize cross-sectoral collaboration to achieve nutrition results.

Saaf Suthro Sindh Program is one of the components under MSAN Project in which the sanitation and hygiene intervention is to be carried out in 13 districts of Sindh. In each of the districts, the target population is 200,000 rural inhabitants residing in approximately 400 villages.

OBJECTIVE:

The project is planning to provide WASH facilities in 2600 Schools in 13 districts of Sindh, 600-700 village level water schemes in priority villages and 400-500 rehabilitation and construction of sewerage/drainage schemes in priority village in 13 districts of Sindh for which it is acquiring a Consulting firm for selection of above-mentioned sites as per following criteria i.e.

- 1. Village must have 150-300 households
- 2. High number of households under poverty line
- 3. High rate of incidence of water borne diseases
- 4. No access to safe drinking water

Moreover technical feasibility, development of designs and BOQs, soil testing, availability of water, pre and post testing of water quality for water schemes, Monitoring and supervision of all rehabilitation and construction activities as 'Engineer' and to ensure compliance of social safeguard and environmental framework as per World Bank's Environmental & Social Management Framework-ESMF will also be the responsibility of selected firm. Development of an Operation and Maintenance (O&M) Committee, its training on O&M and all relevant documentation and its submission to PIU will also be the part of scope.

SCOPE OF WORK

1. Following tasks are to be undertaken by firm to select a site

- a. Selection of priority villages as per criteria (Annexed as -1) out of total number of 5200 village @ 400 village per district in 13 districts of Sindh
- b. After meeting priority criteria of village, the firm has to decide the following;
 - i. Dialogue with community for Voluntary Land Donation VLD for water supply scheme
 - ii. Evaluation of technical parameters regarding availability and quality of water on WHO standards
 - iii. Technical evaluation of existing sewerage/drainage schemes and subsequent dialogue with community for VLD if applicable.
 - iv. Development and Signing of a Memorandum of Understanding MOU (having following features such as; (a) Tri-partied VDC, PDISC and LGD (b) Roles and responsibilities of all parties involved) which elaborates the roles and responsibilities of all parties (e.g. VDC will ensure VLD documentation and accessibility of land for all beneficiaries, etc., while firm will validate water and soil quality to ensure development of effective water/sewerage schemes and LGD for O&M etc.) between Village Development Committee VDC, PDISC and LGD.
- 2. Site selection as per above mentioned criteria for;
 - a. Small village level solar power water supply scheme (600 700 schemes approx.) in 13 districts of Sindh). Draft of proposed water scheme is attached as Annex -3
 - b. Rehabilitation of village level sewerage/drainage systems (400-500 schemes in 13 districts of Sindh)
 - c. Sites are already been selected for rehabilitation/new Construction of 2600 school WASH
- 3. Technical feasibility (detail design and development of BOQ's) for all rehabilitation and new construction activities along with yield test of ground water, pre and post testing of water quality, structural validation for rehabilitation of school WASH facility/existing sewerage/Drainage System, pre and post soil testing where applicable;
 - a. Small village level solar power water supply scheme (600 700 schemes approx.) in 13 districts of Sindh).
 - b. Rehabilitation of village level sewerage/drainage systems (400-500 schemes in 13 districts of Sindh).
 - c. Rehabilitation of existing and new construction of latrines with septic and soakage system and provision of water either through electric or solar pumping system, bore hole or any other source as per site of 2600 schools @ 200 school in each 13 districts of Sindh.
- 4. Monitoring, Supervision and Quality Control of all above mentioned construction activities as Engineer
- 5. Establishment of Operation & Maintenance Committees and training of same for O&M

GEOGRAPHICAL COVERAGE

The project is covering following districts in Sindh for above mentioned scope of work;

- 1. Dadu
- 2. Tando Muhammad Khan
- 3. Jacobabad
- 4. Sanghar
- 5. Tharparker
- 6. Umerkot
- 7. Thatta
- 8. Sujawal
- 9. Kashmore
- 10. Kamber-Shehdadkot
- 11. Larkana
- 12. Badin
- 13. Shikarpur

PHASING OUT OF SCOPE OF WORK:

PHASE - I (May'2020 - Aug'2020)

Rehabilitation of existing and new construction of latrines with septic and soakage system with Hand Washing Facilities and provision of water either through electric or solar pumping system, bore hole or any other source as per site of 800 schools @ 200 schools in each 04 districts i.e. Dadu, Jacobabad, Tando Muhammad Khan, Sanghar of Sindh.

Design and site selection of 800 schools are completed. The firm has to supervise, monitor and quality control the construction of new and rehabilitation of latrines along with other facilities as per BOQs and approved designs.

Firm will be responsible for site selection, design and BOQ preparation of following;

S.#	District	Estimated number of	Estimated number of
		Sewerage/Drainage Schemes	Water Schemes
1	Dadu	68	55
2	Jacobabad	25	32
3	Sangher	45	70
4	Tando Muhammad Khan	38	50
	Total	176	207

PHASE – II (September'2020 – December'2020)

Rehabilitation of existing and new construction of latrines with septic and soakage system with Hand Washing Facilities and provision of water either through electric or solar pumping system, bore hole or any other source as per site of 1000 schools @ 200 schools in each 05 districts i.e. Tharparker, Umerkot, Thatta, Sujawal and Badin of Sindh.

Site selection of 1000 schools are completed. The firm has to design, supervise, monitor and quality control the construction of new and rehabilitation of existing latrines along with other facilities. Design and BOQ should get approved by Project Implementation Unit – PIU.

Firm will be responsible for supervising, monitoring and Quality Control of following as in the Phase – I, site selection of the same and their design and BOQ were prepared;

S.#	District	Estimated number of	Estimated number of
		Sewerage/Drainage Schemes	Water Schemes
1	Dadu	68	55
2	Jacobabad	25	40
3	Sangher	45	70
4	Tando Muhammad Khan	38	55
	Total	176	220

Firm will be responsible for site selection, design and BOQ preparation of following;

S.#	District	Estimated number of	Estimated number of
		Sewerage/Drainage Schemes	Water Schemes
1	Tharparkar	10	15
2	Umerkot	10	35
3	Thatta	45	45
4	Sujawal	40	50
5	Badin	55	45
	Total	160	190

PHASE – III (January'2021 – April'2021)

Rehabilitation of existing and new construction of latrines with septic and soakage system with Hand Washing Facilities and provision of water either through electric or solar pumping system, bore hole or any other source as per site of 800 schools @ 200 schools in each 04 districts i.e. Kashmore, Kamber-Shehdadkot, Larkana and Shikarpur of Sindh.

Site selection of 800 schools are completed. The firm has to design, supervise, monitor and quality control the construction of new and rehabilitation of existing latrines along with other facilities. Design and BOQ should get approved by Project Implementation Unit – PIU.

Firm will be responsible for supervising, monitoring and Quality Control of following as in the Phase – II, site selection of the same and their design and BOQ were prepared;

S.#	District	Estimated number of	Estimated number of
		Sewerage/Drainage Schemes	Water Schemes
1	Tharparkar	10	15
2	Umerkot	10	35
3	Thatta	45	45
4	Sujawal	40	50
5	Badin	55	45
	Total	160	190

PHASE – IV (May'2021 – August'2021)

Firm will be responsible for site selection, design and BOQ preparation, supervision, monitoring and quality control of following;

S.#	District	Estimated number of	Estimated number of
		Sewerage/Drainage Schemes	Water Schemes
1	Kashmore	45	60
2	Kamber- Shehdadkot	40	55
3	Larkana	50	60
4	Shikarpur	40	60
	Total	175	235

PHASE - V (September'2021 - December'2021)

Though concrete number of schemes are presented in the four phases above, however, there may be some variations in context of districts, depending on preparatory work on ground. The firm should be flexible knowing that the total tally of water supply/drainage and school latrines will remain capped. In phase V, firm will also be responsible for completion of any leftover tasks of previous phases.

RESPONSIBILITIES:

A. RELATED TO SITE SELECTION:

- 1. Firm will be responsible to prioritize villages for provision of approximately 600 -700 village level Water supply schemes; out of the list of total number of 5200 village @ 400 villages per district in 13 districts of Sindh.
- 2. Firm will be responsible to prioritize villages for rehabilitation/new construction of approximately 400 500 village level sewerage/drainage schemes; out of the list of total number of 5200 village @ 400 villages per district in 13 districts of Sindh.
- 3. Effective documentations for selection and non-selection due to technical non-compliance of villages with proper justifications for both schemes should be submitted to PIU for ready references.
- 4. Final selection of villages for both schemes will be endorsed by District Coordination Committee for Nutrition DCCN and PIU.
- 5. After meeting priority criteria of villages for both schemes, the firm has to decide the following;
 - i. Dialogue with community for Voluntary Land Donation VLD for water and drainage schemes where applicable.
 - ii. Testing of technical parameters regarding availability and pre & post quality of water on WHO standards.

- iii. Documentation of sampling should be submitted to PIU.
- iv. Technical evaluation of existing sewerage/drainage schemes and subsequent dialogue with community for VLD if applicable.
- v. Development and Signing of a Memorandum of Understanding MOU which elaborates the roles and responsibilities of all parties (e.g. VDC will ensure VLD documentation and accessibility of land for all beneficiaries, etc., while firm will validate water and soil quality to ensure development of effective water/sewerage schemes) between Village Development Committee VDC and PDISC.

B. RELATED TO DESIGNING:

- 6. Consultant will be required to carry out a feasibility study (Sub project feasibility should include technical & financial aspects and preparation of safeguard documents in compliance with World Bank requirements) and detailed engineering design.
- 7. Prepare Detailed Project Report including environmental, social and financial feasibility and prepare BOQs for the bidding documents for the project in compliance with WB requirements.
- 8. In case the Local Authorities change the sub-projects due to the change in their preferences, it is the responsibility of the PDISC to even conduct a prefeasibility studies of the new projects and prepare prefeasibility report and then proceed with the other work as indicated in this ToR.
- 9. The overall design would cater for a period of over 20 years/ horizon as defined as per national planning norms and a projected population as determined by the consultant based on appropriate projection techniques. The designs shall conform to relevant/ latest applicable National and World Bank Standards. Wherever such standards are not available, appropriate standards shall be followed in discussion with the PMU.
- 10. In addition, the PDISC shall follow the requirements of the following documents in carrying out the services:
 - i. Environmental and Social Management Plans of the project
 - ii. Standard Bidding Documents for Procurement of Goods and Works by WB and of the Project
 - iii. Checklists Feasibility Checklists, Sector Specific Checklists and Detailed Design Checklist designed for the Project (If applicable)
- 11. Collect necessary data for design and implementation. The details given in the prefeasibility study, is only a reasonable preliminary basis. PDISC shall be wholly responsible for all the details provided in their reports on physical and site conditions, the execution methodology, and various other parameters etc. All data utilized in preparation of the reports shall be presented indicating the sources of the data and also the basis of assumptions, if any. i.e The consultant shall be responsible for all the data or designs and drawings given by them.
- 12. Prepare Detailed Project Report (DPR) inclusive of detailed cost estimates using market rates. (Necessary documents on quotations received should be

- made for assessment of market rates) and also prepare contract packaging plan.
- 13. For the given purpose and functional use of the respective sub-projects, proper design has to be developed following the World Bank standards. The consultants have freedom to choose the type of sub structure and superstructure, provided World Bank's and National code specifications and standards are met. The drawings and designs shall include a general arrangement drawing and a detailed longitudinal section drawing of all components in size A1 or A2. The level of detailing shall be such so as to enable check of conformance with code provisions, including detailed construction drawings and bar bending schedules. The responsibility of the preparation and issue of detailed construction drawings is that of the Project Design and Implementation Support Consultants.
- 14. PDISC needs to prepare project Implementation schedule and budget with monthly targets, furnish network analysis such as Critical Path Matrix/ Program Evaluation and Review Technique (CPM / PERT) for purposes of effective project monitoring and regular reports.
- 15. Carrying out social impact assessments of proposed development including land acquisition and its financial implication, and if found necessary.
- 16. If found necessary, prepare necessary environmental assessment reports such as an Initial Environmental Examination or Environmental Impact Assessment, in compliance with the ESMF of WB;
- 17. Prepare community development and public awareness programs, and identify training requirements if any as necessary for the subproject construction, operation and maintenance.

C. RELATED TO MONITORING AND QUALITY CONTROL:

- 18. The PDISC shall mobilize exclusive supervision staff for the supervision of construction including comprehensive quality checks and measurements of works including checking the invoices sent by the contractor. The PDISC is also responsible for certifying the quality of works.
- 19. Supervise construction of project components, monitor construction and quality control methods, assist to record measurements in accordance with the procedures followed in the World Bank, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractors' inputs in material, labor and construction method, furnish all revisions and detailed construction drawings as necessary during the continuance of the contract, attend third party inspections as necessary, check contractors' design and drawings for contracts, examine contractors' claim for extension of time and extra works, etc. and prepare recommendation for approval.
- 20. Check installation and commissioning, prepare measurement for works completed and in progress and certify bills for payment to the contractors/suppliers. Ensure that works are constructed to the prescribed quality in accordance with specifications in tender documents and quality assurance system;

- 21. Prepare inception report, monthly/quarterly progress reports and project completion report.
- 22. Prepare a simplified quality control manual for use of the field staff;

D. RELATED TO WATER SUPPLY/DRAINAGE SCHEMES – SPECIFIC TASKS

- 23. Based on feasibility, the Consultant is required to carry out a detailed engineering design including environmental and social studies and prepare, Detailed Project Reports and bidding documents for all the identified water supply sub-projects.
- 24. The overall design would cater for a period of over 20 years/ horizon as defined as per national planning norms and a population as determined by the consultant based on appropriate projection techniques. The designs shall conform to relevant/ latest applicable World Bank's and National Standards. Wherever such standards are not available, appropriate standards shall be followed in discussion with PIU.
- 25. Based on the pre-feasibility reports, the work involved and the study/output shall include, but not necessarily limited to the following as necessary:
 - i. Formation of O&M committee and their trainings
 - ii. Suggest proper zoning and block regulations if any, in order to give equitable water supply with optimal utilization to existing communities
 - iii. Identify potential options for the long-term system improvements with recommendations for addressing environmental, institutional and
- 26. Instrumentation: All necessary instrumentation shall be arranged and operated by the consultants at their own cost.

TIME DURATION:

- 1. Firm will be hired for 20 months.
- 2. The project closing period is 31 March 2022 and all works to be completed at least 3 months before the project completion period to facilitated completion work and processing of final bills and payments to be made within the project closing period.

QUALIFICATION CRITERIA:

<u>General Experience</u>: Must have at least five (05) years of experience in the field of Designing, Construction, Supervision of construction activities

Specific Experience: Design of at least 2 water supply, sewerage/drainage schemes and School WASH facilities in rural areas of Sindh

<u>Documentary Evidence</u> of having logistical and technical capability to undertake same nature of work.

SELECTION METHOD:

Consultant Firm will be selected in accordance with process stipulated in Section – III 3.7 Selection Based on the Consultants' Qualification (CQS) of "Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (January 2011) [Revised July 2014].

GRIEVANCE REDRESSAL MECHANISM:

Bidders may contact at Telephone No: 092+21-35157400 for redressal of their complaints.