

I. TERMS OF REFERENCE—CONSULTANTS

A. International Consultant (Impact Evaluation Survey Specialist)

1. The Impact Evaluation Survey Specialist would perform following tasks:
 - (i) Conduct an in-depth critical review of theoretical and empirical literature on the impact of water and sanitation interventions on gender, health, income/consumption, education and other socioeconomic development areas.
 - (ii) Identify modalities and key determinants of impact due to water and sanitation.
 - (iii) Based on (ii) above, refine the conceptual framework and evaluation matrix for the impact evaluation study with clear identification of indicators and their measurements at all levels.
 - (iv) Based on (iii) above, develop appropriate survey instruments for field data collection using both qualitative and quantitative methods. These would include knowledge-attitude-practice (KAP) surveys, household surveys, focus group discussions and key informant interviews.
 - (v) Pre-test data collection instruments in a rural Philippines community.
 - (vi) Provide guidance to data collection team in the field by email to ensure collection of quality data for the evaluation.
 - (vii) Develop a road map for qualitative analysis of field data, including selection of appropriate analytical techniques.
 - (viii) Based on field data, prepare a set of 6 case studies to demonstrate successful water supply schemes with demonstrated impacts for potential adaptation and upscaling.
 - (ix) Analyze qualitative and quantitative data and information collected from the field and prepare draft evaluation report in association with the international econometrician/impact evaluation specialist).
 - (x) Revise the draft evaluation report incorporating review comments from internal and external reviewers.
 - (xi) Prepare draft of a set of user friendly publications for dissemination of evaluation findings.
 - (xii) Undertake any other tasks assigned by the Team Leader pertaining to the impact evaluation study.
2. The consultant will work under the direct supervision of the Team Leader and s/he will be supported by an Advisory Panel based in Pakistan.

B. International Consultant (Econometrician and Impact Evaluation Specialist)

3. The Econometrician and Impact Evaluation Specialist would perform following tasks:
 - (i) Conduct an in-depth critical review of methodological, theoretical and empirical literature on the impact of water and sanitation interventions on gender, health, income/consumption, education and other socioeconomic development areas.
 - (ii) Identify modalities and key determinants of impact due to water and sanitation.
 - (iii) Based on (ii) above, refine the conceptual framework and evaluation matrix for the impact evaluation study with clear identification of indicators and their measurements at all levels.
 - (iv) Based on (iii) above, develop appropriate survey instruments for field data collection using both qualitative and quantitative methods. These would include

KAP surveys, household surveys, focus group discussions and key informant interviews.

- (v) Guide in pre-testing data collection instruments in a rural Punjab and incorporate changes arising from pre-tests..
 - (vi) Provide guidance to data collection team in the field by email to ensure collection of quality data for the evaluation.
 - (vii) Develop a road map for quantitative analysis of field data, including selection of appropriate analytical techniques.
 - (viii) Analyze quantitative data and information collected from the field and prepare draft evaluation report in association with the international impact evaluation survey specialist).
 - (ix) Revise the draft evaluation report incorporating review comments from internal and external reviewers.
 - (x) Prepare draft of a set of user friendly publications for dissemination of evaluation findings in association with the international impact evaluation survey specialist.
 - (xi) Undertake any other tasks assigned by the Team Leader pertaining to the impact evaluation study.
4. The consultant will work under the direct supervision of the Team Leader.
- C. National Consultants** (a group of national Water Supply and Sanitation Specialist or a firm)
5. The tasks of the Water Supply and Sanitation Specialists would be the following:
- (i) Prepare a list of all water supply and sanitation schemes handed over by Public Health Engineering Department to local community organizations (COs) in six pre-determined districts of Punjab, Pakistan under ADB supported Punjab Rural Water Supply and Sanitation Sector Project (PRWSSP) and Punjab Community Water Supply and Sanitation Sector Project (PCWSSP).
 - (ii) In consultation with the Team Leader, identify and develop a set of evaluation indicators reflecting quality of construction, community organization, status of scheme since handover including drainage and sanitation around water supply areas, water quality, water distribution arrangements, operations and maintenance mechanisms, cost recovery arrangements, and other sustainability related issues.
 - (iii) Prepare a water supply and sanitation survey instrument to gather relevant data in a systematic way.
 - (iv) Pre-test the survey instrument and translate the instrument in Urdu.
 - (v) Inspect a list of pre-identified schemes and conduct survey of approximately 130 schemes selected for household and KAP surveys through focus group discussions, meetings with COs and other key informants.
 - (vi) Identify critical technical, managerial and community factors exerting impact on the performance of water supply and sanitation schemes.
 - (vii) Prepare an analytical technical report based on the survey data.
 - (viii) Prepare 10 best practices adopted in other water supply and sanitation schemes, including those completed with external, NGO or national resources and compare their performance with ADB supported schemes.
 - (ix) Provide a set of key lessons for ADB for future operations, particularly in the area of technical design, operation and maintenance, cost recovery, capacity

constraints, financing mechanism, and management of water supply and sanitation schemes.

- (x) Undertake other related activities including meetings under the guidance of the Team Leader.

6. The consultant will work under the direct supervision of the Team Leader.

D. Domestic Consultant (Firm/Group of Experts)

7. The tasks of the domestic consultant/s would be the following:

- (i) Assist in the preparation of pre-coded data collection instruments: household survey, KAP survey and water supply scheme survey, focus group discussions and key informant interviews.
- (ii) Pre-test the survey questionnaires and improve the draft questionnaires.
- (iii) Translate all field instruments in Urdu.
- (iv) Develop a sample selection plan in consultation with the Team Leader and identify participants for household and individual interviews.
- (v) Follow the advice and guidance of the Team Leader
- (vi) Recruit and engage experienced enumerators and data collection supervisors and provide training as required.
- (vii) Lead, manage and conduct (a) a survey of 2,600 households (1,300 in project and 1,300 in control area, respectively); (b) a survey of 1,400 individuals assessing their knowledge, attitude and practice in hygiene and sanitation; (c) key informant interviews with relevant individuals, including local teachers, health practitioners, and local community leaders.
- (viii) Ensure data completeness, quality, and consistency to the highest standard in all surveys.
- (ix) Maintain confidentiality of information and data and provide a safe and secure area to store the completed questionnaires.
- (x) Input and process data accurately using user-friendly and most popular software.
- (xi) Provide the raw data and data dictionary to the Team Leader on a CD-ROM.
- (xii) Generate summary statistical tables as agreed with the Team Leader and Advisory Panel.
- (xiii) Provide survey data in usable form to the international consultant.
- (xiv) Prepare a comparative analytical report reflecting with and without project scenario on key parameters associated with water supply and sanitation.
- (xv) Incorporate relevant comments on draft report and finalize the draft.
- (xvi) Regularly update and assist the international consultants through e-mail exchange in conducting advanced statistical and econometric analysis.
- (xvii) Ensure that any data collected for the study is the property of Operations Evaluation Department (OED), Asian Development Bank (ADB). Under no circumstances, the contractor will sell, publish, use or permit use of collected data for any other purpose without the written authorization of OED.

8. The firm or group of experts will perform the work under the overall supervision of the Team Leader.

II. TERMS OF REFERENCE—OED STAFF

A. Evaluation Specialist (Team Leader)

1. Introduction

9. The Evaluation Specialist (Team Leader) is expected to provide over-all guidance to the completion of the Rigorous Impact Evaluation report. He is expected to deliver an output which conforms to OED's evolving Guidelines in conducting a rigorous impact evaluation.

2. Principal Tasks

10. The tasks of the Evaluation Specialist are the following:

- (i) Provide overall guidance to the international and national consultants in the conduct of the evaluation, including refinement of evaluation design, development of field data collection instruments, data analysis and report writing.
- (ii) Review relevant documents and obtain necessary background information through the collection of statistics and the conduct of interviews and discussions with the Government and various stakeholders as identified in the evaluation approach paper;
- (iii) Review Government plans, policies, and regulations on water supply and sanitation and water resources, and coordinate with other donor agencies engaged in the same field of assistance as applicable;
- (iv) Supervise the conduct of the Operations Evaluation Missions (OEMs) including surveys, focus group discussions, key informant interviews, site visits, and meetings with the various stakeholders including the Government and Executing Agencies and other development partners;
- (v) Review the outputs of the consultants and national evaluation officer and closely coordinate with all stakeholders involved in the study;
- (vi) In collaboration with other members of the OEM, evaluate/validate the project completion report (PCR) findings on the achievement of project outputs, including their quality and timing. Examine how the project outputs have contributed to the achievement of overall project objectives, and consequently determine its impacts on the beneficiaries;
- (vii) Take the lead in drafting the *Aide Memoire*, summary reports, and the Final Report by preparing relevant sections of the report;
- (viii) Identify key issues and lessons learned from the Project and formulate recommendations for future ADB assistance in the subsector;
- (ix) Respond to comments and suggestions from peer and inter-departmental reviews, including those from OED management;
- (x) Disseminate evaluation findings using appropriate method and forum under the guidance of OED management and with the support of Knowledge Management Unit/OED.

B. National Evaluation Officer**1. Introduction**

11. The National Evaluation Officer will assist the Evaluation Specialist (Team Leader) in providing over-all guidance to the completion of the Rigorous Impact Evaluation. He is expected to contribute to and ensure that the final output conforms to OED's evolving Guidelines for conducting a rigorous impact evaluation.

2. Principal Tasks

12. The tasks of the National Evaluation Officer are the following:

- (i) Review Government plans, policies, and regulations on water supply and sanitation; and the Projects' contributions to the positive development of plans, policies, and regulations, as applicable.
- (ii) Review relevant documents and obtain necessary background information through the collection of statistics, and the conduct of interviews and discussions with ADB project officers and various stakeholders, where applicable, as identified in the evaluation approach paper.
- (iii) Assist the Team Leader in the recruitment of consultants for the study as per ADB policy, guidelines, and procedures.
- (iv) Assist in the preparation and conduct of the OEM, including surveys, focus group discussion, key informant interviews, and stakeholder interviews.
- (v) If required, participate in the OEM to supervise quality consistency of surveys and interviewing for documenting best practices.
- (vi) Conduct data analysis as deemed appropriate to strengthen the outputs of other OEM members.
- (vii) In collaboration with other members of the OEM, evaluate and/or validate the PCR findings on the achievement of project outputs, including their quality and timing through desk review. Examine how the project outputs have contributed to the achievement of overall project objectives and how have these impacted on the beneficiaries;
- (viii) Provide inputs to the preparation of the draft Rigorous Impact Evaluation Report including relevant appendixes as determined by the Evaluation Specialist.
- (ix) Assist in processing identifying key issues and lessons learned from conducting Rigorous Impact Evaluation and formulate recommendations for future ADB assistance in the sector and the country as a whole for sustainable water supply and sanitation, and water resources management and development;
- (x) Assist the Evaluation Specialist in responding to comments and suggestions from peer and inter-departmental reviews, including those from OED management;
- (xi) Assist with the dissemination of evaluation findings using appropriate method and fora under the guidance of OED management and with the support of Knowledge Management Unit and/or OED.

C. Operations Evaluation Assistant

1. Introduction

13. The Operations Evaluation Assistant will provide a full range of secretarial support services and help coordinate activities for the Rigorous Impact Evaluation. As part of the evaluation team, she is expected to ensure the smooth flow of communications and documents related to the conduct of the evaluation, and that the format of draft reports conforms to OED's Guidelines.

2. Principal Tasks

14. The tasks of the Operations Evaluation Assistant are the following:

- (i) Ensure that all correspondence and documents, for the evaluation study, are correctly typed and prepared in compliance with ADB standards.
- (ii) Collect, compile, and analyze relevant information and data related to the assigned work area to produce routine and/or ad hoc statistics/reports as instructed by the Evaluation Specialist and the National Evaluation Officer.
- (iii) Ensure the effective coordination of the team's schedule by maintaining diaries and arranging appointments, meetings, travel and accommodation as specified by the Evaluation Specialist and in accordance with ADB procedures.
- (iv) Ensure that the evaluation study's filing systems and records are properly maintained and updated in accordance with an existing framework for easy retrieval.
- (v) Track the flow of documents with the use of databases for effective monitoring to meet deadlines.
- (vi) Ensure that the tasks pertaining to the study are accomplished on time.