

Terms of Reference (ToR)

For engaging a consultant to undertake a Endline Study for
“Formalization of Plastic Recycling Value Chain by forming Recycling Business Units in Bangladesh”

Summary of Purpose	The purpose of the endline survey is to assess the progress made towards improving knowledge, attitudes, and practices regarding plastic bottle collection and recycling among households, as well as their engagement with the Recycling Business Unit (RBU) in the targeted areas covered by the project. This survey will measure the changes in key indicators and intermediate results outlined in the project’s objectives. Additionally, the endline survey will provide valuable insights into the evolution of plastic bottle waste generation by communities, particularly in relation to informal waste pickers and bhangaris. It will evaluate shifts in their self-practice, management systems, awareness, knowledge, and connections with supporting actors since the baseline study, offering a comprehensive understanding of the project's impact and effectiveness.
Scope of Work of the Consultant	Submission of an inception report (study design), preparation, implementation, data cleaning and analysis, and reporting of the Endline Study.
Summary of Methodology	The study will utilize mixed method(s), employing both quantitative and qualitative approaches, adapted to the local context. This will include a questionnaire-based household-level survey, Focus Group Discussion (FGD), In depth Interview (IDI) and Key Informant Interview (KII).
Audience	Local bhangari (small, medium and big) and local recycling shops, agents, Informal Waste Pickers (IWP) (waste pickers, van drivers, feriwala/ hawkers), middleman/local supplier/local entrepreneur, recycling factories, local plastic bottle vendors, local community people & households.
Commissioner(s)	Centre for Development Innovation and Practices (CDIP) and Bangladesh Petrochemical Company Limited (BPCL)
Reporting to	The consultant will report to the Centre for Development Innovation and Practices (CDIP); Manager- Social Intervention, PLEASE project.
Location of Project Sites	Rupgonj, Narayangonj; Dagonbhuyan, Feni; Bangla Bazaar, Cox`s Bazar; Mijmiji, Narayangonj; Baropur, Bogura; Moynamoti, Cumilla and Bayezid Bostami, Chittagong
Expected Start Date	April 8, 2025.
Expected Duration	30 calendar days (April 8, 2025 – May 10, 2025).

1. BACKGROUND AND OBJECTIVES

1.1. Background and Goals of the Project

Bangladesh Petrochemical Company Limited (BPCL) and the Centre for Development Innovation and Practices (CDIP) have been jointly implementing the project titled "Formalizing the Plastic Recycling Value Chain to Ensure Steady Collection of Recyclable Plastic (RP) and Remove Them from the Environment by the Introduction of Recycling Business Units (RBUs)." BPCL has focused on the production and manufacturing aspects of the project, while CDIP has managed the social intervention and overall activities as the Social Intervention Partner (SIP). The project has involved a range of integrated interventions, such as the formation and strengthening of Informal Waste Pickers (IWP) and Bhangari Associations, along with consumer awareness campaigns. These efforts have aimed to improve the economic wellbeing, personal safety, health practices, and behaviors of targeted IWPs and bhangaris. Life skills and soft skills training have empowered the lower-tier workers in the waste management sector, helping them improve their working and living conditions, and fostering their participation in decision-making processes.

The project also aimed to formalize the operations of bhangaris and establish a strong network of well-functioning Recycling Business Units (RBUs) to collect and process rigid recyclable plastics (PET, HDPE, LDPE, PP). Through the micro-franchising model, RBUs have facilitated smoother access to markets, enhanced waste collection management, and supported waste suppliers in expanding their businesses through skills development, market linkages, and access to finance.

The purpose of the Endline Survey is to evaluate the overall impact of the project, assessing the progress made toward the professionalization of bhangaris, the formalization of their operations, and the development of efficient and sustainable RBUs. The survey will measure changes in the economic, social, and occupational conditions of IWPs and bhangaris, evaluate the effectiveness of waste collection and management systems, and determine the long-term outcomes of the project's interventions. By comparing results with baseline data, the endline survey will provide a comprehensive understanding of the project's success in meeting its objectives and contributing to a cleaner and more sustainable environment.



1.2. Project area

Key intervention	Location
Professionalize IWPs and Bhangari Shops; Local Plastic Bottle Recycling Practice and Supply Chain; Recycling with better environment and facilities; Social Barriers of IWPs and Bhangari shops.	Rupgonj, Narayangonj; Dagonbhuyan, Feni; Bangla Bazaar, Cox`s Bazar; Mijmiji, Narayangonj; Baropur, Bogura; Moynamoti, Cumilla and Bayezid Bostami, Chittagong

1.3. Project/Program Stakeholders

This project is a partnership between CDIP and BPCL, with BPCL handling production and CDIP serving as the Social Intervention Partner (SIP), responsible for social activities and project oversight.

1.4. Objectives of the Endline Study

The purpose of this endline study is to evaluate the effectiveness and impact of the project interventions, focusing on the progress made in plastic bottle recycling practices and the social and economic improvements in the community. Firstly, the endline survey will assess the changes in knowledge and practices regarding plastic bottle recycling among the households and communities adjacent to the Recycling Business Unit (RBU), comparing it with baseline data. This will help evaluate the success of the project's educational and awareness initiatives in promoting sustainable recycling practices. Secondly, the survey will examine the current status of plastic bottle waste generation and recycling at the community level, with a focus on the reduction or changes in bottle dumping hotspots and recycling volumes, particularly adjacent to the RBUs. It will provide a clearer understanding of the long-term impact of the project on plastic waste management and recycling efficiency.

Thirdly, the endline study will evaluate the socio-economic changes among Informal Waste Pickers (IWPs) and bhangaris, including improvements in their income, working conditions, and health and safety practices. The survey will also assess the degree of women's participation in waste management activities and the overall empowerment of women-led actors. By comparing these results with the baseline, the endline survey will provide insights into the project's contributions to enhancing the economic and social wellbeing of the community, particularly marginalized groups such as IWPs and bhangaris.

Overall, the endline survey aims to assess the progress made in achieving the project's objectives, including improvements in community knowledge, recycling practices, waste management, and the socio-economic empowerment of informal workers. The results will be compared with baseline and midline data to evaluate the project's overall impact and inform future strategies and interventions.

2. SCOPE OF WORK OF THE ENDLINE CONSULTANT

The consultant will be responsible for ensuring that the endline survey utilizes relevant and appropriate tools and techniques to assess the effectiveness and impact of the project interventions. This will involve a thorough process of data collection, analysis, and reporting to evaluate the project's outcomes and compare them with baseline and midline results. The scope of work includes several key tasks that will guide the consultant's responsibilities throughout the endline survey process.

- The first task involves reviewing secondary sources of information. The consultant will collect and review relevant data, reports, and publications related to the project and plastic bottle recycling components, focusing on the progress made since the baseline study. This review will include examining project-related reports and plastic bottle recycling data, with a particular focus on changes and progress made during the course of the project, from baseline to midline, and ultimately through to the endline phase.
- The second task is the finalization of the endline survey tools, which will be done in close consultation with the project team. The consultant will provide technical support in finalizing the questionnaire(s) for the household and community surveys, ensuring that the tools are aligned with the project's objectives and desired outcomes. Once finalized, the consultant will transfer the questionnaire(s) into relevant technological platforms to enable mobile data collection and ensure smooth submission to an online server, if applicable. Additionally, the consultant will ensure that the data collection tools are translated into local languages where necessary and will provide orientation to enumerators regarding the context and use of the questionnaire.
- The third task is the actual conduct of the endline survey, also carried out in close consultation with the project team. The consultant will be responsible for recruiting and training enumerators, providing them with the necessary guidance and support to ensure that they collect high-quality data. The consultant will establish mechanisms to ensure the accuracy and reliability of the data collected during the survey process. As the lead coordinator, the consultant will oversee the data collection process, ensuring that it is conducted effectively, efficiently, and in alignment with the project's requirements.
- The final task focuses on data management, analysis, and reporting. After the data is collected, the consultant will clean and consolidate the findings from the endline survey. The consultant will then analyze the data, comparing it with baseline and midline data to evaluate the project's progress, impact, and effectiveness in achieving its objectives. The consultant will prepare a comprehensive Endline Survey report, summarizing the findings and providing a comparison with earlier results to assess changes and improvements. Finally, the consultant will present the endline results to the project team and other relevant stakeholders, offering an analysis of the overall project outcomes, highlighting lessons learned, and making recommendations for future interventions.



3. ENDLINE METHODOLOGY

3.1 Study Methodology

The consultant/s are free and encouraged to be as creative as possible in arriving at a suitable methodology that will ensure that the objectives of the study are fully met in a timely and efficient manner, if methodology meets the standard and recommended methods and proposed sampling parameters indicated in this term of reference. Moreover, the consultant is also suggested to adhere to gender analysis and incorporating gender dimensions in all possible stages throughout the baseline study.

3.1.1 Household Survey: Household surveys (i.e., either on-site enumerator-assisted in depth interviews or on-site local volunteer-assisted in-depth interviews) where the consultant may use mobile devices for using apps such as ODK or Kobo Toolbox to collect data from the field. For the interview, the head of household will be the preferred as respondent in this study, however, in case of absence of the head of household, another adult member of the household can be chosen. The selected household survey sample will ensure proportionate representation in terms of gender and ethnicity of the population of the target areas.

3.1.2 Focus Group Discussion (FGD), Key Informant Interview (KII), and In-Depth Interview (IDI): The endline study will also incorporate FGDs, KIIs and IDIs to gather more qualitative data which will provide additional in -depth information and allow to triangulate data in coordination with project team. Gender perspectives will also be incorporated while selecting the participants for conducting FGD, KII and IDIs.

4. SAMPLING PARAMETER

Geographic Scope	The geographic scope of the study will be the same as that of the project.	
Target Population	The number of sampled households, bhargaris, Recycling Business Unit (RBU)s & IWPs will be proportionately allocated by total population in selected communities. As there is no requirement that all project's target communities/unions/wards be included in the household survey, a representative sample can be proposed at the discretion of the consultant. The process for this should be clearly indicated in the inception report. As much as possible, national census data should be taken as reference to ensure proper representation of respondents from the inclusion perspective.	
Sampling unit	The study will utilize both primary and secondary data where the former will rely on data collection from primary sampling units (PSU) at the household level, bhargaris, & IWPs while the latter will rely on data collection from other available sources, such as past assessments/evaluations and reports.	
Sampling method	The proposed sampling method for the study is probability-simple (random) sampling, or any suitable proposed sampling method from the consultant.	
Sample size parameter	The consultant should also clearly describe process and other relevant parameters (see proposed sample size parameters below) for determining sample size in the inception report. The consultant should also indicate anticipated non-response rate in the inception report. Also, the sample size needs to be calculated using scientific formula/ standard formula.	
	Significance level	95%
	Estimated Baseline Value of Key Indicator ¹	35%
	Expected Future Value of Key Indicator at End-line	55%
	One or Two-Tailed Test	One
	One Design Effect (10 on-test samples for tools test)	2

The consultant will also undertake a descriptive analysis (means, confidence intervals, etc.) of the data collected from the baseline survey as part of the overall analysis and reporting of the baseline survey.

5. WORK PLAN AND EXPECTED DELIVERABLES

5.1 Work Plan (indicative): The study period will be for a maximum of 30 calendar days. The consultant will be required to provide and confirm a detailed work plan during the inception period.

5.2 Expected deliverables for the Endline study are as follows:

- a. Inception Report (study design)
- b. Finalized data collection tools, in English and the local language.
- c. Knowledge sharing workshops for field staff, in English and the local language.
- d. Data entry software designed for survey (for use with mobile devices).
- e. All data files in SPSS & Excel (raw data sets, modified data sets, log files, code book).
- f. Sampling weights used in data analysis (if applicable).
- g. Report with preliminary study results.
- h. Draft report (based on feedback provided from initial version with preliminary results).

¹ There is a set of indicators in the project MEL plan. Consultant must adhere to those indicators and additional indicators that can help the implementation as well as wider contribution to strategy and policy works. The set of indicators will be shared with consultant from the project MEL team.



- i. Final report. The final report should include detailed information on the following: Executive summary, Sample size calculation, sample design - Allocation of units across stages, selection of units at each stage - Methodology for selecting respondents at the final stage - Questionnaire finalization - Training of enumerators - Listing operations - Quality control measures and ethics - Data cleaning and analysis (including non-response, variance estimation technique used and how complex sample design was accounted for) - Lessons learned to inform future surveys and assessments including experiences in utilizing ODK/mobile phone data collection. In addition, the endline report needs to come with the following template: acknowledgement, abbreviations and acronyms, executive summary, endline value, table of contents, list of figures, introduction, Endline study purpose and objectives, geographical locations and targeted beneficiaries of endline study, project background, sampling plan for quantitative data collection, sample distribution for the qualitative data collection, data triangulation, findings, socio-economic and demographic situation, conclusions, and recommendations
- j. Sharing the raw data and information with the project team for further utilization.
- k. Submission of Final Endline Report including Submission of an Inception Report (study design), preparation, implementation, data cleaning and analysis, and reporting of the endline study.

6. OPERATIONS

6.1 Administrative and Logistic Support

The consultant is expected to use her/his own laptop/computer. Approved administrative and logistical costs will be reimbursed by the project team.

6.2 Reporting Relationship

The consultant will report to the Manager-Social Intervention of PLEASE project.

6.3 Quality Assurance and Ethics

The consultant will be required to establish mechanisms to ensure data quality and compliance to standard research ethics for the Endline study. This should be clearly indicated and described as part of the inception report.

7. QUALIFICATION, APPLICATION, AND SELECTION

7.1 Qualification of Consultant

The required qualifications and experience are as follows:

- Three to Five years' experience conducting and leading survey research and assessments, both quantitative and qualitative, of which should be with international organizations (NGOs, UN, and other humanitarian agencies).
- Post graduate degree, from a recognized institution, in social science, survey methodologies, or monitoring & evaluation.
- Demonstrated experience in questionnaire development and testing.
- Demonstrated experience in training and managing data collectors/enumerators.
- Experience with survey work in Plastic Recycling or related sectors.
- Experience in Monitoring and Evaluation (preferably in Recycling or related sectors).
- Excellent knowledge and skills in research methodology and statistical analysis.
- Demonstrated experience and expertise in designing, managing, and analyzing data for multifaceted survey designs (stratified, clustered, multistage, disproportionate selection probabilities, etc.).
- Experience in using mobile device-based data collection.
- Advanced computer skills (SPSS and Excel).
- Excellent communication skills for training and facilitation, and leadership to manage and coordinate a team of data collectors/enumerators.
- Excellent report writing skill in English and local language skills is highly desirable.
- Ability to work independently, ability to juggle and coordinate various tasks simultaneously, ability to prioritize tasks, well organized, reliable, and trustworthy.

7.2 Application Procedures

The application proposal should not exceed 10 pages² with utilizing, and should use the following outline:

- Consultant experience (with detailed CVs attached) of all professionals who will work on the endline study. This section should highlight experience of the consultant in conducting sample surveys and assessments, preferably with complex sample designs in developing countries. The section should mention names, qualifications and experiences of all persons who would be involved in various aspects of conducting the survey, along with level of efforts.
- Methods: Study objectives, methodology, sample design-calculation-selection, and an analysis plan. If local volunteer-assisted in-depth interviews will be utilized with appropriate remote training provided to the local volunteers, then this should be clearly indicated and described with appropriate rationale provided. If alternative methods (in addition to or in place of what is recommended in this ToR) are proposed to align with the current COVID-19 operational context, this should be clearly described with appropriate rationale provided.

² To increase the readability of your proposal and to prevent it from looking too "busy," it's best to use no more than three fonts in your proposal template. A suggested list is Arial for headings (e.g., font size 16 for Heading 1 and size 13 for Heading 2) Times New Roman 12 point for body text.



- Work plan: The proposal should clearly describe all relevant activities to be conducted, including preparatory work, training, sampling and data collection work, data entry, data processing and analysis, results and report writing. The timeline and person(s) responsible for each activity needs to be clearly mentioned.
- Field team: If there is more than one consultant on the proposed team, please provide the number of persons needed for data collection and other proposed activities. Please utilize the table below as reference to provide the level of effort (in number of days) of each team member for all proposed activities:

Name of person/s	Level of Effort (in day/s)								
	Data Collection development	Tools	Training	Field work	Data entry and cleaning	Data analysis	Report writing	Presentation of findings	

Training:

State that who will be responsible for training of data collectors/enumerators and include information on prior experience. Describe how the training will be done, the topics covered, expected duration and logistic and administrative support needed from the project team.

- Quality control and ethics: For the method(s) proposed, provide a section detailing the mechanisms to ensure data quality by clearly specifying steps for data validation. This section may also include supervisory mechanism for data quality and the role of field editors. Measures for compliance to standard research ethics should also be stated here.
- Data entry and processing plan: This section should clearly describe preparation and mechanism for data entry, validation checks and data processing activities.
- Data analysis: Provide details on the analyses that will be carried out, and on the person(s) responsible for data analysis (including prior experiences).
- Progress updates: This section should clearly indicate the mechanism that would be used to communicate with relevant officials to provide regular updates about proposed field activities, coverage rate, data entry status, etc.
- Proposed Budget: A breakdown of all associated costs for the Baseline study should be provided in BDT and USD both. The consultant is requested to provide a proposed budget: the package that includes enumerator-assisted on-site in-depth interviews for household surveys with on-site training to enumerators. If alternative methods (in addition to or in place of what is recommended in this ToR) are proposed to align with the current COVID-19 operational context, this should be clearly reflected in the budget with appropriate cost breakdown analysis provided.
- Professional references: Provide three references from your previous clients.
- Writing Sample: Provide one sample of a recent endline study (or related work) completed for another client where you are the lead author and principal researcher.

7.3 Selection Criteria

Parameter	Weightage (in %)
Qualifications section	15%
Cost	20%
Experience in quantitative and qualitative research methodologies	25%
Experience in Plastic Recycling sector	25%
Number of Days and Timeline availability	15%

Please submit your proposal application in English no later than **5 April 2025** to procurement@cdipbd.org. In the subject line please include your full name along with the following words “Consultancy Application: Endline Study for PLEASE Project”. Only short-listed candidates will be notified and contacted for an interview. Applications received after the deadline or incomplete applications will not be considered.

8. TERMS OF PAYMENT

Payment will be based on agreed on key deliverables:

- 30% of consultancy fees will be paid one week after submission of Inception Report and Finalized Data Collection Instruments.
- 30% of consultancy fees will be paid within one week after submission of draft report with key findings and presentation of draft report and stakeholder consultation/review.
- 40% of consultancy fees will be paid within one week after submission of Final Report with the approval of the authority and the dataset used for the report. The fees will be paid by cheque/bank account transfer upon agreement with the consultant. VAT and TAX will be deducted as per local government policies.

