



**Terms of References (ToR)**

# **Bangladesh Household Energy Consumption Survey**

Implementation  
of  
Primary Surveys

**Centre for Policy Dialogue**



## Contents

1. Background .....	3
2. Objectives of the Primary surveys, and FGDs and Case Studies .....	3
3. Field Survey, and FGDs/ case studies: Survey, Technique and Coverage.....	3
3.1 Scope of Work.....	3
3.2 Target population.....	4
3.3 Sampling frame, Sampling and Stratification .....	4
3.4 Survey Equipment and Software .....	4
3.5 Implementation of training to the Survey Team.....	4
4. Survey Fieldwork.....	4
5. Survey completion.....	5
6. Data Entry, Format and Sharing .....	5
7. Data Quality and Non-Participation .....	5
8. Deliverables.....	5
9. Confidentiality and Data Ownership.....	6
10. Timeline .....	6
11. Eligibility (For Office Check) .....	7
12. Application requirement (For Office Check) .....	7
13. Finance-related special notes (For Office Check) .....	7
14. Health measures (For Office Check).....	8
15. Submission and Contact details .....	8

## **1. Background**

The Household Energy Consumption Survey (HECS) is a comprehensive study aimed at gathering accurate and up-to-date information on energy consumption patterns within households. The ToR outlines the objectives, scope, methodology, and key considerations for conducting the survey. This document provides a background explaining the rationale behind the HECS and highlights the importance of understanding household energy consumption trends.

As the global population continues to grow, the demand for energy escalates, leading to increased pressure on energy resources and environmental sustainability. Understanding how energy is consumed at the household level is crucial for policymakers, researchers, and energy providers to develop effective strategies for energy conservation, demand management, and the promotion of sustainable energy sources.

The household sector represents a significant portion of total energy consumption in most countries. By examining energy consumption patterns, factors influencing consumption behavior, and the efficiency of energy usage, policymakers can design targeted interventions to optimize energy usage and reduce carbon footprints. Additionally, accurate data on household energy consumption provides a foundation for energy planning, policy formulation, and the implementation of energy-efficient initiatives.

Under the above context, the CPD will conduct research based on primary information collected through field survey, and facilitate the integration of research evidence into policy. Hence, the CPD is seeking to recruit a survey implementation firm (henceforth the Consultancy firm) to implement the survey in Bangladesh.

## **2. Objectives of the Primary surveys, and FGDs and Case Studies**

The primary objectives of the Household Energy Consumption Survey are as follows:

1. **Assess Energy Consumption Patterns:** The survey aims to gather data on the types of energy sources used, the quantity of energy consumed, and the distribution of energy usage across different household activities.
2. **Identify Factors Influencing Consumption Behavior:** By investigating socio-economic factors, household demographics, and technological aspects, the survey seeks to identify the key determinants shaping energy consumption behavior within households.
3. **Evaluate Energy Efficiency Measures:** The survey will assess the adoption and effectiveness of energy-efficient practices, appliances, and technologies within households, highlighting areas for improvement and potential interventions.
4. **Analyze Regional and Socio-economic Disparities:** The survey will examine regional variations and socio-economic disparities in energy consumption, aiding in the identification of vulnerable populations and the development of targeted policies and programs.

## **3. Field Survey, and FGDs/ case studies: Survey, Technique and Coverage**

### **3.1 Scope of Work**

The selected applicant will collect primary information through field surveys using a structured questionnaire from 16 Upazilla of 16 districts of Bangladesh. The selected applicant will deliver



all activities related to the primary survey including data cleaning and processing and preparing a synopsis report of the surveys as per the following survey plan, technique and coverage.

### 3.2 Target population

The targeted people of the survey are households of rural, urban and peri-urban region. The survey should be conducted in such a way that all kinds of household based on income generation is covered.

### 3.3 Sampling frame, Sampling and Stratification

A total of 500 individuals will be surveyed at household level from 16 Upazilla of 16 districts under 8 divisions. The survey distribution is represented in the tables below:

*Table 1 Sample size for each division and sample distribution*

Division	Sample	Rural	Urban
Barishal	27	20	7
Chattogram	92	60	32
Dhaka	142	73	68
Khulna	55	41	14
Mymensingh	37	29	8
Rajshahi	65	50	15
Rangpur	55	43	12
Sylhet	27	22	5

*Table 2 Upzillas for each division*

Division	Upzilla 1	Upzilla 2
Barishal	Dashmina	Bhola Sadar
Chattogram	Alikadam	Halishahar
Dhaka	Demra	Goalanda
Khulna	Harinakunda	Kushtia Sadar
Mymensingh	Dewanganj	Bhaluka
Rajshahi	Panchbibi	Porsha
Rangpur	Char Rajibpur	Debiganj
Sylhet	Barlekha	Sulla

### 3.4 Survey Equipment and Software

Data will be collected based on the fixed questionnaire. Responses of each household should be updated on the preferred software on daily basis.

### 3.5 Implementation of training to the Survey Team

For survey implementation, training will be provided to the interviewers and field officers according to the questionnaire of the field survey.

## 4. Survey Fieldwork

The survey firm is responsible for writing, getting approval of, and sending letters and/or e-mails, making phone calls, setting appointments, visiting in-person, and otherwise making attempts to



secure high levels of participation. Fieldwork is needed to complete the survey responses. Substantial effort and resources should be allocated to the preparation and logistics before the fieldwork begins. The survey firm will be required to work with local government officials or Union Parishad officials to ensure participation in the survey, access the targeted regions, and maximise participation and response rates to each question. The CPD can help provide support, such as official letters from CPD if required. The survey firm is expected to collect and verify the phone number, and addresses of all respondents whenever available. GPS coordinates of the interviewed respondent's addresses need to be collected.

## **5. Survey completion**

This is determined by the CPD study team by taking into consideration the number of completed interviews and the quality and comprehensiveness of the data gathered from these interviews. For a survey to be completed, relevant information must be obtained and entered into the data base. No questions should be left blank except the ones skipped due to correctly applied skip patterns. The integrity and accuracy of the data are vital. The Consultant will establish procedures to check the quality of the interviews. At least ten percent (10%) of the completed interviews will be back checked by telephone by the Consultant; the proportion of callbacks will also depend on the quality control feedback provided by CPD. Managers of the survey will randomly check enumerators and accompany interviewers on some interviews. Representatives of CPD may accompany survey teams to monitor effectiveness, ensure quality and check for progress in the field.

## **6. Data Entry, Format and Sharing**

The survey firm will also provide the collected data at five predefined stages during the data gathering/entry process for consistency check and quality control. The first set will be delivered after ten percent (10%) of the total number of interviews have been completed and entered into a data base. The second set will be delivered after twenty-five percent (25%) of the total number of interviews has been completed. The third set will be delivered after fifty percent (50%) of the total number of interviews has been completed. The fourth set will be delivered after seventy-five percent (75%) of the total number of interviews has been completed. The final set will be delivered after completion of one hundred percent (100%) of the interviews. The survey data will be delivered to the CPD in Microsoft excel (including codebook) and STATA electronic format.

## **7. Data Quality and Non-Participation**

In order to ensure data quality and consistency, a survey data quality control procedure is in place. The first checking of the data will be completed and documented by the Consultant

- There are no errors in variables codes, questionnaire flow, skip patterns, number of missing values, etc.
- There is no "double counting
- Monitoring of collected data
- Flagging implausible data
- There are no errors in data's logical consistency or outliers
- Checking for straight-line answers, etc.

## **8. Deliverables**

The selected applicant will deliver all activities related to the primary survey and processing and preparing a synopsis report of the surveys.



Specific deliverables will be as follows:

- Undertaking the primary survey, FGDs and case studies in collaboration with the CPD study team;
- Provide the finalised codebook and translated questionnaire manual
- Engage qualified enumerators for conducting the primary surveys, FGDs and case studies.
- Conduct training of the enumerators based on the questionnaires prepared by CPD;
- Supervise and monitor enumerators in order to ensure quality and standard of data to be collected by the enumerators;
- Conduct pilot survey on 1-2 Upazilla prior to launching the surveys.
- Provide daily Data Quality and Non-Participation and Progress Reports that include summary of data quality, response rates differentiating between refusals and problems with the sampling frame in a format
- Provide the survey data to the CPD in appropriate format as per data sharing mentioned above
- Undertake repeat survey by the enumerators if necessary, in order to ensure accuracy and authenticity of data to be collected by the enumerators;
- Provide regular Staffing Reports noting any changes in staffing
- Design the structure of data entry by using appropriate software as suggested by the CPD study team;
- Compile and do the entry of the survey data as per the design frame and software suggested by the CPD study team;
- Undertake coding and cleaning of the data after data entry.
- Take necessary measures to ensure the accuracy of data entries and apply appropriate scrutiny tools for corrections of data as required;
- Provide the CPD with a clean labelled database comprised of a total of all completed interviews in separate database files for each individuals from a household is surveyed. The database will be in the Microsoft excel and STATA electronic database format. The database will contain all variables included in the questionnaires, following the codes included in them. Each respondent should have a unique numeric identifier including the location information of each interviewee: name, address, GPS coordinates of home location, phone number.
- Prepare a synopsis report based on the primary surveys, FGDs and case studies conducted as per the outline provided by CPD and provide quality control feedback.
- Prepare a technical report, in English, on the data describing all codes, sampling biases introduced in the survey implementation and other pertinent information for researchers. The report will cover observations/experiences arising from the survey and the methodology employed. Any data changed or removed in the “cleaning” process other than through clarification with the responding establishment will also be reported.

## **9. Confidentiality and Data Ownership**

The survey firm will ensure security and confidentiality of the completed questionnaires and safeguard the confidentiality and privacy of the collected information. The survey firm will protect the confidentiality of individuals participating in the survey at all stages. All data is confidential and the property of the CPD.

## **10. Timeline**

The timeline for completing the aforementioned deliverables will be from 4<sup>th</sup> June 2023 to 31<sup>st</sup> July 2023.



## 11. Eligibility (For Office Check)

The applicant will have:

- At least 2 years of professional experience in academic, development and action research, analysis;
- At least 1 year experience in conducting similar types of surveys applying similar methods;
- The applicant needs to have clear understanding on the issues of the research and communication ability with the participants of the survey;
- The applicant needs to have adequate number of qualified human resources;
- The applicant needs to have adequate number of Tablets or Smart Phones in order to collect accurate information;
- The applicant requires to declare that he/ she/ the firm does not have any conflicting interest/ affiliation with CPD or CPD employees in any means;
- The applicant should have competence in drafting reports in English.

## 12. Application requirement (For Office Check)

The applicant must submit the following documents alongside a Technical Proposal along with the survey implementation strategy and a GANTT CHART and Financial Proposal (including VAT and TAX) separately:

- Maximum 2-page profile highlighting primary survey, FGDs and case studies and related assignment along with client name, contract person and contact details;
- CV of the Lead Consultant (who will lead the assignment) – Maximum 2 page highlighting related assignment completed, role in the completed assignment;
- Other Team members (who will be involved in the assignment) one paragraph short CV highlighting related assignment completed and role;
- Technical Proposal (maximum three to four pages) according to the ToR, task to be accomplished as well as draft survey design and plan;

The following financial documents are required —

- Trade License
- TIN certificate
- Acknowledgment receipt for the last annual TAX return
- BIN Certificate
- Bank Account details

Financial Proposal: (For Office Check) The financial proposal should provide as per following format for services rendered.

## 13. Finance-related special notes (For Office Check)

All payments for the vendor will be made through Account Payee Cheques in favour of the vendor.

- CPD will deduct TDS from the billed amount as per Section 52AA, Income Tax Ordinance 1984.
- The vendor will need to provide CPD Mushak-6.3 with the bill at 15% rate, as per Statutory Regulatory Order (SRO) 149/20.
- CPD will deduct 15% VAT from the billed amount.
- The vendor will need to produce invoices/bills under ToR within this contract period.



## 14. Health measures (For Office Check)

The following information should be shared along with the proposal from potential applicants:

- The organisation's health policy;
- Specify if the applying organisation has a group health insurance or not. If yes, please share the relevant documents;
- Each individual affiliated with the applicant firm/individual in conducting these primary surveys should have a minimum coverage of BDT 2 lac group or personal life insurance;
- In the case of an individual applicant for the task, health insurance will be needed along with the application;
- If the individual applicant engages other human resources for the primary survey, health insurance for those human resources will also be needed;
- Outline the health protocol that will be observed during the traveling of the consultant(s) and also for participants traveling to survey venues.
- Elaboration of how these health guidelines will be implemented;
- CPD will not be liable for any health hazard and/or accident of the primary surveys' consultants and/or participants.

## 15. Disclaimers

- CPD reserves the right to select or reject any vendor who will drop the proposal for providing the service.
- Any attempt to unlawfully acquire and/or persuade to get the assignment will lead to immediate rejection of the respective service provider, and CPD may also take legal actions if required.
- Failure to deliver according to the terms of the TOR shall subject the vendor to penalties as will be stipulated in the final contract.
- If the seller breaches any term or condition of this TOR (part or all), or the conditions set out in any given Purchase Order/Contract, including, but not limited to quality of the Goods/Services, Price and Delivery requirements, the buyer shall be entitled to immediately purchases goods/services from any other sources/Suppliers, in addition to any remedy available in law or equity.

## 16. Submission and Contact details

Please send your proposal to [procurement@cpd.org.bd](mailto:procurement@cpd.org.bd).

Hard copies of the proposal can be sent to the CPD office at the following address:

### **Centre for Policy Dialogue (CPD)**

House-40/C, Road-11 (new)

Dhanmondi, Dhaka-1209, Bangladesh





**Contact:**

For further official information on ToR:

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**Application closing date: 22 June 2023**