

TERMS OF REFERENCE

Annexure A

Consultant to conduct data collection for an agri-food system survey in North Bangladesh

Project: Transforming Agri Food Systems in South Asia (TAFSSA), 204020.001.500

Background

The International Water Management Institute (IWMI) is seeking a qualified survey firm to conduct fieldwork for an agri-food system survey in Bangladesh under the CGIAR Initiative, “*Transforming Agri-Food Systems in South Asia*” (TAFSSA). The survey aims to do the following :

- Understand the energy-water-food nexus in North Bangladesh
- Characterize the irrigation markets
- Understand the impact of weather and price shocks on irrigation practices
- Compare the shock mitigating capacity of different energy sources of irrigation

The data will be collected at the household and village level using pre-tested questionnaires and survey instruments. The survey will be conducted in January 2023 in the North Bangladesh divisions of Rajshahi or Rangpur. The survey will include interviews with the heads of rural households and key informants at the village/ward level.

The survey will sample rural populations, and the primary sampling unit (PSU) will be villages. PSUs will be selected from National Census or Electorate data from the division, using a Probability Proportional to Size (PPS) sampling strategy. In the first stage of sampling, villages will be selected at random, with a probability proportional to the number of households that reside in the given PSU. In the second stage, an equal number of households will be selected randomly from each PSU. Prior to the main survey, a household listing for each sampled village was to identify eligible households prior. A key concern of the sampling strategy will be to ensure adequate variation in energy sources of irrigation within a village.

The sample is expected to include 30-35 villages comprising a total of 600 households from one division (either Rajshahi or Rangpur). The household survey will take 60-90 minutes. The final sampling approach and eligibility criteria of households will be determined in consultation with the selected survey firm and will account for budget and contextual considerations.

Essential Duties

In coordination with IWMI, the survey firm will be responsible for the following:

1. Survey preparation

- i. Provide experienced enumerators and supervisors as required to carry out household, key informant, and trader/retailer interviews in locations that are selected by the IWMI (in collaboration with IFPRI) researchers and the survey firm.
- ii. Participate in survey design and preparation, which will include:
 - a. Developing safety protocols and procedures for conducting enumerator training and data collection during the pandemic. Identifying and ensuring availability of personal

protective equipment (PPE) and other supplies needed to mitigate risk of exposure to COVID-19 for all staff and study participants. Conducting COVID-19 tests of all study staff before enumerator training begins and once during each month of data collection.

- b. Obtaining local IRB, including approval and appropriate clearance/authorization documents to conduct fieldwork during the COVID-19 pandemic.
- c. Providing sampling expertise, including observations and clients' selection.
- d. Providing questionnaire translation services. (English to Bangla)
- e. Pre-testing the survey questionnaires on 2-3% of total sample households
- f. Preparing Computer-Assisted Personal Interviews (CAPI) forms for data collection.
- g. Enumerator training. All logistics of the training need to be arranged by the vendor.

2. Data collection and data entry

- i. Conduct house listing of 100-150 households per village.
- ii. Conduct a survey of 600 households and 30-35 key informant interviews. The selection of households to be surveyed will be done by IWMI.
- iii. Document in appropriate detail and keep records of field activities. Field activity records should be developed to update the number of eligible households interviewed.
- iv. Design computerized data input system with logical checks, and provide data entry, cleaning, and documentation services.
- v. Periodically share progress of data collection and data entry (electronically).

3. Data cleaning

- i. Ensure data completeness and validity.
- ii. Prepare all household and key informant datasets with labels of variables and values in English.
- iii. Provide responses to queries from IWMI (in collaboration with IFPRI) in relation to data processing or cleaning, as needed.

Consultancy duration

This is a 4-month consultancy, to take place from December 2022 – March 2023

Project manager/Reports to Deepak Varshney (IWMI) and Aditi Mukherji (IWMI). Research Collaborator: Avinash Kishore (IFPRI).

Application deadline: November 25, 2022

Required Qualifications:

1. Demonstrated experience successfully conducting large household surveys.
2. Knowledge and experience with work on agriculture and diets.
3. Ability to provide adequate logistical resources to recruit, train, deploy, and supervise enumerators.
4. Ability to conduct interviews in local languages (Bangla) while providing data and documentation in English.
5. Experience in building trust and good relations with village leaders, interviewees, and communities.
6. Strong program management skills and demonstrated experience successfully coordinating large field teams and managing deliverables.
7. Excellent computer skills and experience using CAPI software packages.

Annexures :

1. House Listing Questionnaire
2. Household Questionnaire
3. Village Questionnaire

Annexure 1

Household Listing Questionnaire

A. Enumerator and HH Identification

1.	Enumerator Name	To be filled from a drop down menu in the CAPI device
2.	Enumerator Code	To be filled from a drop down menu in the CAPI device
3.	Zilla Name	To be filled from a drop down menu in the CAPI device
4.	Zilla Code	To be filled from a drop down menu in the CAPI device
5.	Upazilla Name	To be filled from a drop down menu in the CAPI device
6.	Upazilla Code	To be filled from a drop down menu in the CAPI device
7.	Union Name	To be filled from a drop down menu in the CAPI device
8.	Union Code	To be filled from a drop down menu in the CAPI device
9.	Village Name	To be filled from a drop down menu in the CAPI device
10.	Village Code	To be filled from a drop down menu in the CAPI device
11.	Cluster ID	To be filled from a drop down menu in the CAPI device
12.	Date of sampling	[dd-mm-yyyy]

B. Consent for HH Listing :

S.No. of HH	HH Visit No. Fill = 1,2, or 3	Date & Time of Visit	Response Status Fill YES if someone above the age of 15 has responded NO if nobody above the age of 15 has responded	Reason for non response If NO in response status then fill column Fill answer number code 1. Nobody lives in the HH 2. Nobody was available 3. HH does not exist	Consent (read out consent question and fill YES or NO) Consent Question : "Hello I am XYZ from the International Food Policy Research Institute. We will be conducting a survey to understand irrigation practices in coming weeks. Right now we are listing participants. Would you like to participate in the survey and answer a couple of questions right now?" If YES proceed to House Listing Questionnaire
[1]	[2]	[3]	[4]	[5]	[6]

C. House Listing Questionnaire :

S.No. of HH [1]	Name of HH head [7]	Address of HH [8]	Phone Number 1 of HH head [9]	Phone Number 2 of HH head [10]	No. of HH members [11]	Does the HH cultivate any land? Fill YES or NO [12]

S.No. of HH [1]	Does this HH own any land? Fill : YES or NO [13]	Does this HH irrigate any land that it cultivates? Fill : YES or NO [14]	Does this HH own any pumps? Fill : YES or NO [15]	What type of pumps? Fill Ans Codes : 1 = Diesel/kerosene 2 = Electric 3 = BMDA pump 4 = Solar pump 5 = Both diesel and electric [16]	Does this HH rent any pumps? Fill : YES or NO [17]	What type of pumps? Fill Ans Codes : 1 = Diesel/kerosene 2 = Electric 3 = BMDA pump 4 = Solar pump 5 = Both diesel and electric [18]

