Request for proposals: Endline survey data collection

3ie’s impact evaluation of a large-scale aquaculture program in Bangladesh

Invitation date: 16 August 2022
Deadline for applications: 30 September 2022, 23:59 BDT

1. Background

The International Initiative for Impact Evaluation (3ie) promotes evidence-informed equitable, inclusive and sustainable development. We support the generation and effective use of high-quality evidence to inform decision-making and improve the lives of people living in poverty in low- and middle-income countries. 3ie is conducting an impact evaluation of a large-scale aquaculture program in Rajshahi and Rangpur divisions in Bangladesh. The program called ‘Aquaculture: increasing income, diversifying diets, and empowering women in Bangladesh’ is being implemented by WorldFish, an international NGO with headquarters in Penang, Malaysia. Both implementation and evaluation are funded through separate contracts by the same funder.

The program aims to promote improved and sustainable aquaculture technology and management practices. These include carp polyculture with micronutrient-rich small indigenous fish species, clean, quality carp, and improved fish seed. Training tailored for smallholders will seek to bolster knowledge and raise awareness about better feeding practices, strategies for management of fish disease risks and optimization of seasonal food production aligned with market and consumer demands. In addition, the project seeks to improve women’s and children’s dietary quality and diversity through nutrition counselling with special emphasis on the importance of fish consumption. To empower rural women, the project will support female entrepreneurship, enhance women’s aquaculture and nutritional knowledge and work to expand women’s participation in different nodes of the aquaculture value chain, especially in downstream activities such as the marketing and trading of fish where women’s participation has been limited. Another important objective is to enhance women’s intrahousehold say in aquaculture and other decision-making domains.

An innovative feature of the WorldFish project is the split between two alternative and indirect models of delivery: (a) local service provider (LSP) or pure private sector model and (b) hybrid or NGO model. According to WorldFish, “the LSP model is a decentralized extension model where local actors (farmers, business owners, breeders, etc.) provide extension services (knowledge, technology transfer, products, etc.) to farmers.” LSPs are expected to sustain themselves as small businesses, e.g., through a commission on sales of products or by charging for the provision of services to farmers. A novel (and challenging) add-on is the responsibility of LSPs – after receiving capacity building and training – to also deliver the nutritional and gender transformative modules of the project. In the NGO model, NGOs working with WorldFish to identify and train LSPs.

3ie’s impact evaluation is clustered, multi-armed randomized controlled trial that uses a theory-based, mixed methods impact evaluation approach. The evaluation has been designed to identify the extent to which the project achieves intended impacts on aquaculture practices, productivity, smallholder income, nutrition and women’s empowerment and whether impacts are more pronounced for some sub-groups.
3ie is seeking a data collection partner to conduct an endline household survey (in person), and one round of telephonic survey with LSPs.

2. Scope of work

The data collection firm will be required to undertake activities towards the collection of high-quality data, following international best practices and protocols provided by 3ie. An indicative list of tasks is presented below. The final scope of work will be determined during contract finalization.

- Conduct a comprehensive endline survey following the baseline sample (approximately 3700 households in 550 villages across approximately 176 unions)
- Conduct one round of telephonic surveys with local service providers (approximately 200 LSPs)
- Translate survey modules provided by 3ie into Bangla and back into English for quality assurance
- Undertake the surveys using the technology platforms indicated, such as hand-held electronic devices for data capture and real-time data transfer using digital servers for data storage, popularly called computer-assisted personal interviewing (CAPI), and computer-assisted telephonic interviewing (CATI). 3ie already has survey instruments programmed into SurveyCTO from the baseline survey and would prefer the use of SurveyCTO for these rounds of the survey as well
- Develop, in accordance with 3ie’s specifications, electronic data collection modules to be run on hand-held electronic devices allowing for real-time data transfer to digital servers for storage and management. 3ie may provide specifications as needed. The modules should have built-in checks for data accuracy and completeness as it is entered and uploaded to servers. With some edits, the baseline survey instruments, as well as the programmed SurveyCTO application would inform translation and CAPI programming exercises for the endline instruments
- Pilot test CAPI/CATI-based surveys with at least 20 respondents/households in non-sample area to ensure the contextual and unbiased appropriateness of the questions and the technical functionality of the electronic platform and devices. After a pilot, work closely with the evaluation team at 3ie to adapt, revise and finalize the CAPI/CATI survey instruments and tools
- Develop a robust data entry application according to 3ie’s specification that satisfy at least the following conditions:  
  - to the greatest extent possible, the data entry program should conduct range and consistency checks, as the questionnaire is key punched
  - violations of these checks should lead to an immediate and transparent message sent to the key puncher, along with a practical method for correcting keypunch errors, and/or over-riding and documenting any answers that violate the range and consistency check rules
  - the program should allow valid open-ended and “other” textual responses outside of the response options provided in the questionnaire
  - variable names generated by the program should correspond clearly and logically to the question labels used in the questionnaire
  - coding strategy should be developed to maintain consistent, unique identifiers for households for matching longitudinal data
In addition, the agency should:

- Conduct an extensive initial enumerator training prior to the survey. The training must be attended by all staff working on the project, including team lead, field managers, data managers, supervisors, enumerators and back-checkers. The training will be 12 days long with at least three days of practice surveys in the field.
- Conduct refresher training during data collection to ensure data quality.
- Undertake specific training duties, including but not limited to, the following:
  - revise and translate training materials/manuals and detailed interviewer, supervisor and data entry manuals in close collaboration with the evaluation team.
  - conduct in-depth training of all field staff, including practice interviews, role plays and other similar exercises, and
  - hold field training to conduct interviews as per agreed procedures (initially by team supervisors).

The monitoring activities of the agency include:

- confirming that the locations of fieldwork are in accordance with the field plan approved by 3ie.
- conducting timely random quality field checks to ensure proper administration of survey and data collection.
- conducting accompaniments (the supervisors should sit through a full survey) with enumerators in the first 2 weeks of the survey.
- conducting spot checks (visual observation) of at least one interview of each enumerator on any given day.
- revisit by supervisors to a randomly-selected sample to double-check the data recorded in respect of key variables.
- back-end data scrutiny of all uploaded questionnaires to ensure that all information recorded is clear and consistent and, where deemed necessary, to clarify with respondents any inconsistencies in their answers with that of the enumerator.
- deploying a separate team of back-checkers in the field to confirm the veracity and quality of data collected.
- conducting high-frequency checks and reporting them to 3ie’s evaluation team. The details on data checks as well as reconciliation undertaken must be vetted by 3ie’s evaluation team. 3ie will conduct its own independent checks in parallel.
- developing systems to match back-check data with the main sample data and act for error reconciliation and provide regular feedback.
- conducting regular feedback sessions with the field team.
- reporting field errors observed and troubleshoot any data system errors that may occur during data collection.

With CAPI-based data collection, real-time data will be provided to the 3ie team. Before submitting the data to the 3ie team, supervisors will have to ensure the quality of all questionnaires using the methods described below. The agency’s responsibilities pertaining to data entry, management and quality assurance include:

- providing access to the internet or other platforms through which data can be transferred from hand-held devices to the server.
- providing the final dataset in STATA and/or ASCII formats providing copies of the datasets and data entry error reports/logs that show the frequency of discrepancies noted and actions taken to rectify.
- scrutinizing all errors and inconsistencies detected during data entry and consistency programs by revisiting households if major errors are detected.
• Making corrections and revisiting households, as necessary, should the 3ie team notice errors and inconsistencies in data entry
• providing the raw as well as final copies of the datasets, along with a complete codebook, after properly labelling all variables within two weeks of completion of fieldwork
• maintaining logbooks and documentation of fieldwork which would be submitted at the completion of the survey

Note: 3ie would retain the right to the full data, with complete access to all names, addresses, and survey data for individuals and households surveyed through this exercise. The agency must be available to respond to queries after the submission of the datasets.

3. Details of the surveys

The agency will ensure that the following surveys are conducted as per the sample plan prescribed and using the tools approved.

3.1 Endline survey

The endline survey to be conducted between January and March 2023 (at the latest) includes household and village surveys, according to the details below.

1. Household survey: The household survey schedule comprising multiple modules is expected to take about 4.5 hours with a male respondent and 2.5 hours with a female respondent in each household. However, the different modules can be administered to men and women in different time slots to avoid respondent fatigue. Male enumerators will administer modules to male respondents and female enumerators will administer modules to female respondents. The list of sample households, along with identifying information including contact details, (address and phone number) and GPS coordinates, will be supplied to the agency. Locating these households will be the responsibility of the enumerators and supervisors. The agency will be required to prepare materials for field staff, including maps, names of heads of household and any other identifying characteristics with the support of the evaluation team at 3ie. Any personal identification information should be securely kept with the field team, which must inform the evaluation team in case of any loss of sensitive data. The agency must be prepared to conduct repeated visits to complete the surveys in case of non-availability. If the households have moved to a different location within the division, the agency must visit and complete the required survey with the household as per household tracking protocol to be agreed with 3ie. The respondents to be interviewed for different modules will be determined by the evaluation team. The household survey will include, but not be restricted to:

• household characteristics (e.g., age, sex, education, occupation—formal and informal—income, migration, disability of individual household members; religion, ethnicity and caste of households)
• household assets
• household ownership of or access to (i.e., leasing of) fish ponds, access to aquaculture inputs, pond production, harvest and sale
• participation of individual household members in aquaculture-related decision-making and in fish-rearing and fish-selling activities
• household members’ interactions with local service providers (e.g., feed sellers)
• aquaculture-related knowledge of individual (adult and adolescent) household members
• health and nutrition status of individual household members
• anthropometric information: height and weight of children and women in the household
• detailed account of recent food consumption by each household member
• household food security
• empowerment (e.g., decision-making power, self-efficacy and so on) of female household members using WEAI-type and other tools

Different modules in the questionnaire will be designed for male and female household members, with consideration for adapting questions because of age where needed, and will need to be administered separately by male and female enumerators. Accordingly, the data collection partner should have a sufficient number of male and female enumerators available and should have experience in managing household surveys requiring male-female enumerator pairs.

Sample proposed for the household survey

<table>
<thead>
<tr>
<th>Treatment arm</th>
<th>Unions covered</th>
<th>Villages covered</th>
<th>Households covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>52</td>
<td>171</td>
<td>1,220</td>
</tr>
<tr>
<td>Treatment arms 1: T1 (LSP/Private sector)</td>
<td>52</td>
<td>189</td>
<td>1,253</td>
</tr>
<tr>
<td>Treatment arm 2: T2 (NGO)</td>
<td>55</td>
<td>191</td>
<td>1,243</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>551</td>
<td>3,716</td>
</tr>
</tbody>
</table>

2. **Village survey**: A village survey will be implemented in each sample village, along with the household survey. The survey will be conducted through key informant interviews with a group of (3-5) key informants. The protocol for informant selection will be provided by 3ie. Data collected in this survey will include information on locality characteristics, services, basic infrastructure, and local aquaculture markets.

3.2 **Local service provider (telephonic) survey**

The survey firm will also conduct one round of telephonic interviews with approximately 200 LSPs under the project during November-December 2022. The survey will capture details on characteristics of the LSPs, scope of their business, activities under the project, challenges faced, etc. The sample would include LSPs across both treatment and control unions. Each telephonic survey is approximately 30 to 45 minutes long and will require the expertise of enumerators who have experience conducting remote interviews. The survey firm will be responsible for making changes to existing baseline tools and finalizing CATI tools in English and Bangla, training enumerators, conducting telephonic surveys, monitoring the survey and assuring submission of high-quality and clean data.

4. **Institutional arrangements**

The agency will report directly to a team led by 3ie’s technical team leader for the project. The agency will regularly interact with the team throughout the project to seek approval on pre-
identified activities and deliverables. The agency will share weekly written or oral progress reports with the evaluation team.

The agency will be required to deploy the following staff:

**4.1 Key staff**

I. **One project manager**: Post-graduate degree in economics/rural management/business management/finance/engineering with a minimum of 10 years of experience in handling large-scale socio-economic household surveys.

II. **One field manager**: Post-graduate degree in economics/statistics/econometrics/rural management or other social sciences with a minimum experience of eight years in working with large household-level surveys for the Government of Bangladesh and/or multilateral agencies. Experience working with other surveys where data is entered concurrently with the interview/data collection process preferred.

III. **One data manager**: Post-graduate degree in computer applications or computer science or B.Tech in computer science or related fields with experience in developing applications using existing sophisticated data entry software (such as Survey CTO, CSPro, ODK) and managing large database construction and quality control with a minimum of five years’ experience. Programming experience using SurveyCTO is desirable.

**4.2 Field team**

Each field survey team should comprise a maximum of six enumerators and should be headed by one supervisor. Each household interview will be conducted by two enumerators, one male and one female. For the household survey, the entire sample needs to be covered in maximum two months. The agency is required to recruit and train 25% more personnel than needed to provide for replacement due to attrition. 3ie reserves the right to review and approve the selection of the enumerators and supervisors after training.

**4.2.1 Supervisor**

Each team will need to have one supervisor to oversee the survey work of four enumerators. The field supervisors will travel with their teams and be responsible for day-to-day supervision and logistics, including contacting community leaders in selected enumeration areas and arranging appointments with respondent households. The field supervisor will also exercise quality control on the information collected by his/her team by randomly attending some interviews and reviewing questionnaires. The spot checks are to be conducted for five percent of the sample. The field supervisor will further be responsible for organizing and tracking the daily supply of completed questionnaires and submission of the data.

In addition, each field supervisor will be responsible for completing the village questionnaire. Field supervisors should have experience in conducting or managing household surveys. The preferred educational requirement for field supervisors is a university degree. The ability to communicate in basic English would be preferred. Knowledge of Bangla is essential. In addition to supervision activities, field supervisors will participate in the pilot test. The agency shall also recruit and train at least 25% more supervisors than needed. The agency must ensure that attrition of supervisors is less than five percent during the entire course of the field survey.

**4.2.2 Enumerators/Interviewers**

The minimum educational requirement for enumerators is at least three years of education after school. As some knowledge of separate dialects may be required in remote areas, it is advised
that the agency recruit enumerators local to survey areas. This is not a mandatory requirement and is left to the discretion of the agency. The agency shall also recruit and train at least 30% more interviewers than required to ensure that suitable replacements are available for the team members leaving during fieldwork or those who do not demonstrate sufficient proficiency following training.

4.2.3 Back-checkers
Once data collection from a village is complete and CAPI questionnaires provided, the village would need to be revisited by one back-checker. The back-checker will be responsible for verifying the data submitted by ensuring that interviews were conducted according to protocol, the correct households were interviewed, field some modules of the questionnaires and match responses to check for fraudulent or erroneous data. A separate short questionnaire (approximately 20 questions) for back-checks will be provided by 3ie and the CAPI programme will be developed by the agency. Back-checks will be done for 15% of the sample. The sample for back-checks will be drawn randomly by 3ie and provided to the survey firm.

Back-checkers should have experience in conducting or managing household surveys. The minimum educational requirement for back-checkers is at least three years of education after school. The ability to communicate in basic English would be preferred. Knowledge of Bangla is essential. In addition to back-checking activities, they will participate in the pilot test. Back-checkers will also need to participate in the training. The agency shall also recruit and train at least 20% more back-checkers than required to provide for replacement due to attrition.

5. Key deliverables
- Inception Report, containing the overall approach and methodology for carrying out the survey, a detailed plan of work, fieldwork plan, outputs and staff assignments with levels of effort by task and sub-task
- Translated draft questionnaires in Bangla and independent back-translation in English by a separate independent translator hired by survey firm
- CAPI-based questionnaires, reports from piloting testing of questionnaires with comments and recommendations for changes, finalized CAPI-questionnaires in English and Bangla
- Electronic versions of the survey data as it is being collected on a continuous basis
- All soft and hard copies of final questionnaires in English and Bangla
- Training manuals for field staff and supervisors in English and Bangla
- Complete datasets in STATA or ASCII format with a codebook and a clear report on how data were corrected/reconciled
- A draft final completion report of the survey, including the dates for field visits for each village, supervision checks, problems encountered and methods of resolution

6. Eligibility and minimum requirements
Applicants must meet these minimum requirements to be considered:
- Only legally registered organizations and/or their consortia of registered organizations, not individuals, may apply
- The survey partner should be based in Bangladesh and have relevant and extensive experience in conducting large-scale household surveys
- The partner should have demonstrated experience and expertise in conducting CAPI using tablets and/or hand-held devices and CATI, including managing all aspects of programming, data entry, ethical data storage and management, and data quality
assurance

- The partner will have demonstrated expertise in collecting data related to:
  - Household economic activities
  - Aquaculture (desirable)
  - Health status, including anthropometrics
  - Women’s empowerment
  - Food consumption and dietary intake
  - Nutrition data
- The partner will have demonstrated expertise in data quality assurance, including conducting high-frequency checks during data collection, identifying and cross-verification of data discrepancies and data cleaning
- The partner must have sufficient expert staff, including skilled male and female enumerators and supervisors, on board with full-time availability to work from the time of signing the contract with 3ie
- For-profit organizations are eligible to apply, but the indirect cost recovery is limited to 10 percent of direct costs

7. Duration of work

Preliminary work for the baseline survey—including the development of electronic tools for data collection and enumerator training—is expected to begin immediately upon contract award, expected in the first week of October 2022. The partner will start the endline household survey by the second week of January 2023 and complete latest by 15 March 2023. The LSP survey would need to be conducted during November - December 2022.

8. Recommended proposal format

Proposals will include the following information:

- A description of the organization’s experience and qualifications to carry out the proposed scope of work (use the format in Appendix A)
- A work plan describing how the partner will complete the scope of work outlined above, a description of personnel roles and project management structure, duty of care policies and procedures in place, and risk identification and mitigation plans
- Indicative field plan with field team structure, team size (enumerators and supervisors) and expected productivity given the context to ensure timely completion of data collection
- Indicative data quality assurance plan charting out briefly how the survey firm will assure submission of high-quality data
- Financial proposal that indicates the all-inclusive fixed total contract price for the project and a budget using the 3ie budget template
- Estimated timeline for the completion of main activities, as well as a breakdown of the costs

The qualifications, methods and work plan should not exceed 15 pages, using 11pt Arial font, 1.15-line spacing and 1-inch margins.

9. Indicative budget

We expect proposed budgets to be in the range of USD 200,000 to USD 250,000 (including taxes). We will only consider proposals above this range that include a substantive and compelling justification in the proposal. Please note that the number of households to be
surveyed is approximately 3,716.

10. Selection

All proposals that qualify will be reviewed by a 3ie panel using a combined scoring method. The qualifications and methodology will be weighted a maximum of 70 percent, and combined with the price offer, which will be weighted a maximum of 30 percent. The technical part of the application will be assessed on the strength of the proposal that best fits 3ie’s needs, as well as previous experiences of the provider in executing similar projects. 3ie may provide comments and request a resubmission if the proposal does not receive adequate scores. 3ie will also conduct due diligence for shortlisted applicants per the indicative assessment questionnaire linked under grantee resources on the 3ie funding webpage. 3ie reserves the right to not award the contract in case no applicant meets the requirements.

11. Submission

Please submit complete proposals to aquaculture@3ieimpact.org, with the subject line, ‘Proposal for endline data collection in Bangladesh.’ The last date for submission of proposals is 30 September 2022 by 23:59 BDT. Only complete submissions meeting the eligibility requirements will be considered. 3ie will only contact shortlisted survey firms. Requests for clarifications before final application may be directed to aquaculture@3ieimpact.org