

CAST Cambodia

Excerpt from M&E Plan

Edited version of ASA/WISHH's description of the Baseline Study adapted from December 5th, 2019 version of CAST's M&E Plan

File(s) of interest: CAST Cambodia Baseline RFP_01.14.19v2.pdf
 CAST Baseline Study FAQ_01.29.19v2.pdf
 CAST Abbreviated Strategic Analysis_01.29.19v2.pdf

IV. Baseline Study

Introduction: The Baseline Study will be conducted within the first twelve months of the project. This exercise is intended to establish indicator-specific baseline data against which the project will regularly measure performance. The external evaluator will be selected through a competitive process and assessed based on professional competency, cost, and experience evaluating similar programs in Southeast Asia. This entity should have a strong history of participatory evaluation and the ability to organize and complete a robust review of CAST's performance indicators and implement a scientifically rigorous and beneficiary-centered impact assessment. CAST's Director of M&E and other key staff will work closely with this firm to develop and refine stated research questions, determine an appropriate sampling strategy, draft valid and reliable measurement tools, and ensure that implementing partners understand the implications of these findings.

Evaluation Questions

A number of the project's preliminary program impact questions are described below. These questions, and others like them, will serve as the basis for assessing beneficiary outcomes for the project.

1. To what extent did the project have an impact on the productivity of feed mills, aquaculture producers, hatcheries and nurseries?
2. To what extent did the project have an impact on international soy protein trade and the agricultural and fish product trade?
3. To what extent did the project have an impact on the quantity and quality of feed and seed produced for aquaculture producers and its availability and accessibility?
4. To what extent did the project have an impact on the supply of premium quality Cambodian grown freshwater fish (e.g., snakehead, clarias catfish, red tilapia) to the local market?
5. To what extent did the project have an impact on beneficiaries' ability to access finance that is needed for business growth and development?

Target population: The participation of a wide cross-section of stakeholders is an essential component to the Baseline Study. These stakeholders include but are not limited to: 1) Ministry of Agriculture, Forestry and Fisheries (MAFF), 2) Royal University of Agriculture (RUA), 3) University of Battambang (UBB), 4) feed mills (e.g., Agri-Master), 5) aquaculture producers, and 6) hatcheries and nurseries. CAST's activity level performance indicators will measure the progress across multiple stakeholder groups with particular attention to appropriate and actionable data collection strategies.

Research Design and Methodology

The Baseline Study will use both quantitative and qualitative data collection methods to assess the status of the performance indicators and identify standard measures for comparison against the results of the midterm and final evaluation. This investigation will include a quasi-experimental design in which baseline figures will be gathered from the intervention provinces (e.g., Pursat, Kampong Thom) and a number of control provinces (e.g., Kampong Chhnang, Kampong Speu). Propensity score matching (PSM) will be used to estimate the effect of the intervention on individual beneficiaries. Population-based surveys will be developed for targeted communities and will be accompanied by direct observations and key informant interviews. Structured questionnaires and semi-structured interviewer guides will be developed with input from implementing partners and key stakeholders. The purpose of these discussions will be to better understand the barriers and facilitators to, for example, enrolling in program services, acquiring knowledge or skills, and/or adopting improved management practices and technologies. This mixed methods approach will also provide CAST with meaningful information about the level of interest and readiness of aquaculture producers, feed millers, and other value chain actors in the targeted areas. All data collection instruments will be drafted in English and translated into the local language before being piloted with a representative sample. The external evaluator will be expected to conduct a power analysis to determine the sample size needed for the intervention and control groups. They will also be responsible for developing a detailed implementation plan before starting this exercise. The team should again include at least one principal investigator and an appropriate number of research coordinators, community enumerators, and data clerks.

The M&E team will also incorporate a stepwise design where appropriate and the Baseline Study will serve as the foundation for this approach to establish a counterfactual condition. Data will be collected from beneficiaries whose initial involvement with the project will be delayed (e.g., smallholder farmers, feed millers, other value chain actors), allowing the M&E team to develop a repository of control data and the ability to compare outcomes within and between clusters of beneficiaries. PSM will also be used to help compare outcomes across levels of participation and will provide the foundation for establishing dose-response relationships. Beneficiaries who are less active with the program will be considered members of a pseudo control group which will provide our team with another level of analysis. Those included in the stepwise design will be divided into quintiles and program outcomes will be measured for each beneficiary across a predetermined number of covariates (e.g., gender, age, level of education). If possible, a confounder analysis will be conducted. The project's Data Analysis Plan will describe these processes in detail and will provide guidance for running descriptive and inferential statistics.