

Assessing the impacts of IFAD's investments

How do we measure impact?

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SKD Learning Notes bring lessons learned through the interaction of data, operations and evidence and benefit from the advice of the Knowledge Unit

Background

IFAD measures the impacts of its investments by conducting Impact Assessments (IAs) on a sample of about 15 per cent of projects closing in each replenishment period.¹ The methodology relies on ex-post quasi-experimental IAs to estimate projects' impacts that are subsequently aggregated through meta-analysis and extrapolated from the entire IFAD portfolio of projects. This allows IFAD to assess corporate-level achievements against some development indicators.² State-of-the-art sensitivity analyses and robustness checks ensure that the findings are reliable.

The overall objective of this learning note is to showcase the methodology used for these IAs and how they measure IFAD's impact on the lives and livelihoods of its project participants.

How does the selection of projects for the IAs work?

STEP 1. Select at least 15 per cent of projects (known as the "IA Universe") from the entire list of those expected to close during each replenishment period.

STEP 2. To ensure feasibility and rigor, apply a set of inclusion and exclusion criteria to the list of projects (see box 1, page 2).

STEP 3. List the projects that meet the eligibility criteria by region and discuss with regional divisions.

STEP 4. Select the final list of projects and create a replacement list if any of the selected projects drop out by exclusion criteria, which could be, for example, due to local or national conflicts that prevent data collection or no government buy-in.

¹ Each IFAD replenishment period lasts three years. The 11th Replenishment (IFAD11) lasted from 2019-2021.

² More specifically its TIER II Development Results. See IFAD's Results Measurement Framework (RMF) dashboard: <https://www.ifad.org/en/rmf-dashboard>.



Box 1. Inclusion criteria

- ✓ **Potential to learn lessons:** projects that provide an opportunity to learn lessons from thematic, design or implementation are preferred.
- ✓ **Feasibility of conducting a scientifically rigorous IA:** projects for which a suitable comparison group can be identified are selected.
- ✓ Projects with **buy-in from governments and support from the project management unit (PMU)** are selected due to easier access to M&E data, targeting criteria and approaches used in selecting project participants.
- ✓ **Capacity of a project to represent IFAD's overall portfolio:** it is important that the selected projects are as similar as possible to most of the projects IFAD supports.
- ✓ **Relevance of the IA for subsequent project phases:** projects that are potentially going to be replicated either in the same country or other countries with a similar approach are preferred.

Household sample and data collection

The sampling design is one of the most important steps to ensure a robust counterfactual. It is implemented using statistical matching techniques and validation procedures, including geo-referenced data combined with socio-economic data.

The first level requires identifying comparison sites to the areas where projects' participants are located. Once these are identified, data from geographic information system (GIS) sources and available censuses are used to select comparable sites through propensity score matching³, validated through expert consultations.

The final sample of areas of intervention is randomly selected for both the project participants and the comparison groups.

Then, households from the treated and the comparison sites are randomly selected to be interviewed. Household surveys are conducted through computer-assisted personal interviewing (CAPI) tools using tablets to collect quantitative data.

Impact analysis on a sample to proxy the population

Project-level IAs are conducted using robust methodologies to estimate project impacts on a large set of indicators that measures IFAD's goal, strategic objectives and mainstreaming themes' goals, as well as the project's specific Theory of Change indicators to maximize learning.

Statistical analyses are conducted to check if the sampled projects differ significantly from the IA universe regarding project ratings and characteristics. If they are different, the potential for ex-ante selection bias can be ruled out. If not, statistical methodologies to correct the sample selection are employed to assess the robustness and sensitivity of the results.

Aggregation

IFAD's aggregate development effectiveness is measured using a meta-analysis of individual project impact estimates. Meta-analysis outcomes are treatment effects (mean effect sizes) that represent the impact of projects in the IA sample and can also be interpreted as percentage changes over comparison groups for each development impact indicator. Meta-analysis results are used to compute aggregate corporate impacts.

³ Propensity score matching is a quasi-experimental method in which the researcher uses statistical techniques to construct an artificial control group by matching each treated unit with a non-treated unit of similar characteristics.

Sensitivity analysis

The mean effect sizes from the meta-analysis are validated by estimating impacts using the pooled household-level data. IFAD re-runs analyses by combining the individual IA micro-level data and running a pooled data analysis, which controls country-/project-level unobserved characteristics influencing impacts.

Projection methods

The results of the meta-analysis are used to calculate the following goals and strategic objectives (SO): the number of beneficiaries with increased income (overarching goal), increased productive capacities (SO1), increased market access (SO2), stronger resilience (SO3) and, starting from IFAD11, better nutrition (mainstreaming goal).

The projection requires determining the number of targeted beneficiaries across the universe of eligible investments, which was equal to 112 million beneficiaries for all IFAD11 projects.

The total number of beneficiaries who have achieved results above the target set in the Results Management Framework (RMF) is obtained by: 1) randomly drawing a normal distribution of impacts (with an associated mean and standard deviation as empirically estimated from the meta-analysis) for 112 million people;

and 2) counting the number of people that have experienced an increase that exceeds the threshold set for the corresponding outcome (or IFAD RMF indicator).

IFAD11 IA results

For each goal, except for better nutrition, the results outperformed the targets initially set.

Regarding IFAD's overarching goal, investments collectively improved the incomes of 77.4 million beneficiaries by at least 10 per cent, against the total target of 44 million (over three years).

Productive capacities (SO1) of 62.4 million beneficiaries were improved against the target of 47 million, and the market access (SO2) of 64.4 million beneficiaries increased against a target of 46 million – in both cases, by at least 20 per cent. Around 38 million beneficiaries have seen their resilience (SO3) improve by at least 20 per cent. The target of 12 million people with improved dietary diversity (by 10 per cent or more) is the only target not met during IFAD11.

Table 1. IFAD11 Impact Assessment Results

Goal/SO	RMF Indicator	Definition (Threshold)	IFAD11 target (million people)	IFAD11 impacts (million people)
Overarching Goal	2.1.1	Number of people with increased income (by at least 10%)	44	77
SO1	2.1.2	Number of people with improved production (by at least 20%)	47	62
SO2	2.1.3	Number of people with improved market access (by at least 20%)	46	64
SO3	2.1.4	Number of people with greater resilience (by at least 20%)	24	38
Mainstreaming Goal	2.1.5	Number of people with improved nutrition (by at least 10%)	12	1

Source: IFAD12 RMF Document (IFAD12/3/R.2/Add.1), October 2020

Way forward

IFAD is committed to strengthening its methodological approach to measuring corporate impact. To ensure that results feed into new project design and strategies, lessons learned have been distilled from each IA. In addition, a parallel effort is being made to support the data collection for the Core outcome indicators (COI) that are required for all projects designed from 2020 onwards.

The need for better linkages between project monitoring and evaluation (M&E) and corporate results reporting is vital. Starting in IFAD12 (2022-2024) all projects will carry out COI surveys at the baseline, midterm and completion stages. This is the best way to capture the results of a project intervention over the course of its implementation.

By linking and synchronizing M&E and IA activities as part of the survey implementation, it will be possible to conduct the IAs using a more extensive set of projects. This will allow a move towards measuring the development impact indicators using data from the M&E system, thereby transforming monitoring and evaluation into monitoring for evaluation (M4E).

As the average duration of an IFAD project is around eight years, in 2030, by the time we achieve the SDGs deadline, IFAD will be the only international financial institution to rigorously measure progress toward SDGs using its own M&E data comparing project participants to a counterfactual group.



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SKD congratulates the team of the Research and Impact Assessment Division (RIA) for the work with impact assessments which credibly show how IFAD's investments impact the lives and livelihoods of smallholder farmers and poor rural people.

For more information, please visit:
[IFAD Impact Assessment Report 2019-2021](#)