

Sustaining Development: Results from a Study of Sustainability and Exit Strategies among Development Food Assistance Projects—Bolivia Country Study

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This brief summarizes the approach to and findings and recommendations of the sustainability and exit strategies study in Bolivia. Additional findings from the Bolivia study and other country studies are available at www.fantaproject.org.

Background

From 2009 to 2016, the Tufts University Friedman School of Nutrition Science and Policy, a partner on the U.S. Agency for International Development (USAID)-funded Food and Nutrition Technical Assistance III Project (FANTA), conducted a multi-country study to assess the effectiveness of USAID's Office of Food for Peace (FFP) development food assistance projects' sustainability plans and exit strategies for achieving sustainable impacts after the projects exited their implementation areas.¹ In Bolivia, funding for FFP development projects ended in 2009, which provided the study team an opportunity to observe how project activities, outcomes, and impacts evolved over the 2 years after project exit.

FFP development projects were implemented by four organizations in Bolivia in the technical sectors of maternal and child health and nutrition (MCHN); water and sanitation (W&S);

¹ This study defines sustainability plans and exit strategies as follows:

Sustainability Plan: A plan describing those elements of a project that incorporate sustainability concerns and increase the likelihood that project activities, outcomes, and impacts will continue after exit.

Exit Strategy: An operational plan for withdrawing from target communities without jeopardizing progress toward project goals.



Source: Anne Tinker/Photoshare

and agriculture, income-generating activities (IGAs), and natural resource management (NRM). Cross-cutting infrastructure projects were also implemented in support of agriculture, IGA, and NRM interventions.

Objectives

The objectives of the study were to determine the extent to which activities, outcomes, and impacts of FFP development projects were sustained after the withdrawal of FFP funding; identify project and non-project factors that made it possible to sustain project benefits after the projects ended;

assess how project design, sustainability plans, the development of exit strategies, and the process of exit affected sustainability; and provide guidance to future project implementers and funders regarding how to improve sustainability.

Methods

Three rounds of qualitative data collection were implemented 1 year apart, starting at the time of each project's exit in 2009. During qualitative data collection, the study team conducted key informant interviews and focus group discussions with project participants and non-participants, as well as with service providers and other stakeholders. The study team also visited and observed farmers' fields and infrastructure created by the projects. Two years after the projects' exited (2011), the study team also implemented a quantitative follow-up survey that replicated the endline evaluation surveys conducted by the projects. Indicators of project outputs, outcomes, and impacts at endline were compared with the same indicators at follow-up to assess what activities, outcomes, and impacts had been sustained. Primary data collection was complemented by information from baseline and midterm evaluation reports, as well as from other project documents.

Results

As successive rounds of data collection were implemented, the study team identified three factors that it considered to be critical to sustainability: an ensured source of **resources** to sustain the activities that contribute to sustainable impact, sufficient technical and managerial **capacity** on the part of project participants and service providers to continue implementing activities independent of the projects, and **motivation** on the part of service providers and project participants to continue engaging in these activities post-project. The study team also found that a fourth factor, **linkages** (including vertical linkages, such as from a community health worker to the Government of Bolivia's health system, and/or horizontal linkages, such as among local committees), was also essential to consider, and appropriate linkages were critical to sustainability for most technical sector interventions. In addition, the study team found that the process of exit affected sustainability: **Gradual exit**, with the opportunity for project participants to operate independently prior to project closure, made it more likely that activities would be continued without

project support. The results from each technical sector supported the importance of these factors.

Sustainability was judged in terms of the continuation of service delivery and service use, the adoption of practices promoted by the projects, and the maintenance or further improvement of project impacts. One of the key results applicable to all technical sectors was that evidence of significant impact at the time of project exit did not necessarily predict sustainability 2 years later. There were many examples of project impacts that were significant and positive at exit that were maintained or even improved 2 years later. Equally, there were many examples of positive impacts at exit that were not sustained and, in some cases, declined to baseline levels or below at follow-up. A synopsis of findings by technical sector follows.

MATERNAL AND CHILD HEALTH AND NUTRITION

In the MCHN sector, projects trained volunteer community health workers (CHWs) to promote maternal and child health in the community by organizing mothers' groups; conducting monthly growth monitoring sessions combined with educational talks on nutrition and health; and undertaking home visits to encourage good nutrition, health, and hygiene practices. The projects worked to link CHWs to the national health system so that they would continue to receive supervision, training, and resources to conduct their work after project exit. The results were mixed: Where CHWs were effectively linked to the health system or to health projects implemented by other nongovernmental organizations, they continued to provide services. Where such linkages had not been established, many CHWs lost motivation and stopped working. In addition, the withdrawal of free rations at the FFP projects' end affected beneficiary mothers' motivation to continue attending growth monitoring sessions, and these declines in attendance also reduced CHW motivation. However, the study's qualitative data indicated that after project closure mothers appeared to be following the projects' advice to substitute locally available foods for the project rations and were using project-provided recipe books to facilitate these substitutions. The projects had promoted the formation of CHW associations as a means of sharing best practices and providing mutual motivation for their continued work, but even though CHWs expressed interest in

these associations, they lacked financial resources to travel to association meetings.

At the time of exit, the Government of Bolivia was initiating two new MCHN-focused programs: Desnutrición Cero (the Zero Malnutrition National Health Program), which provided nutritional supplements at *unidades de nutricional integral* (UNIs) (comprehensive nutrition units), which in turn offered growth monitoring and nutritional advice to mothers of young children, and a conditional cash transfer, which provided cash vouchers to women who attended public health clinics to comply with primary health care recommendations (e.g., antenatal and postnatal checkups, vaccinations, and growth monitoring). These government programs



Source: Meghan Olivier/Photoshare

incentivized mothers to make use of clinic-based UNI services, rather than the community-based CHW services. As a result, mothers' participation in growth monitoring was high 2 years after exit, but not necessarily because of services accessed within the community.

Rates of exclusive breastfeeding until 6 months of age increased during the life of the FFP development projects studied in Bolivia, and these increases were well maintained after the projects' exit. However, some other health and hygiene practices, such as

appropriate feeding during diarrhea and correct handwashing behaviors, were less well maintained, possibly because the substitution of clinic-based for community-based service provision reduced CHW home visits to monitor and encourage these practices. In terms of impact, the substantial improvements in rates of stunting achieved during the life of the projects were maintained or improved after exit in all project areas.

WATER AND SANITATION

The main intervention in the W&S sector was to support the construction of community water systems that would provide piped water to households. The FFP projects supported construction of piped water units that included a sink, in many cases a shower, and a flush toilet or improved latrine. Beneficiary households paid a connection fee for the units and a monthly fee for use of the piped water. The projects also organized water committees or, in instances where such committees were already operational, strengthened them with training in two key areas: maintenance and repair of the piped water system and administration of the fees collected. The W&S intervention combined all of the critical factors for sustainability: Beneficiaries greatly valued having piped water and were therefore motivated to pay for it, these fees provided the resources needed to ensure the continued function of the water systems, and the water committees demonstrated good technical and managerial capacity to administer the systems effectively. As a result, 2 years after exit, more than 75 percent of households in all areas, and as many as 95 percent in some areas, reported having piped water. Between 75 percent and 100 percent of these systems were maintained by the recipient community.

The projects worked to establish linkages between community water committees and municipal governments with the expectation that municipalities would be able to provide resources for repairs and refresher training in system maintenance when needed, but water committees did not take advantage of these linkages, citing concern that the resources from user fees would be diverted to other municipal priorities. This concern proved to be justified in at least one case where the municipality took over administration of the community water system, raised fees, and used the fees for purposes other than water system maintenance.

The implementation of microbiological testing of water quality and of chlorination at the tank was less well maintained. For these activities, all of the critical factors for sustainability were not present. Beneficiary households did not value (and, in many cases, because of taste, resisted) central chlorination of water, so water committees were not motivated to maintain these activities even though user fees could have provided the resources needed to carry out this treatment. In addition, gradual transition of water quality testing from the projects to the communities during project implementation was not done in most



Source: Naman Shah/Photoshare

cases. According to the water committees visited during qualitative fieldwork, the FFP projects had arranged for water quality testing up until their exit; the committees did not do so independently prior to the projects' closure.

AGRICULTURE, INCOME-GENERATING ACTIVITIES, AND NATURAL RESOURCE MANAGEMENT

All of the FFP development projects studied in Bolivia worked to improve agricultural productivity, introduce improved crop and (in some cases) livestock production techniques, and diversify agricultural production by introducing new crops. After the midterm evaluations, the projects

increased their emphasis on promoting the commercialization of production by linking farmers to markets and market information. Projects trained model farmers in the community and gave them inputs to use on their demonstration plots so that the model farmers could then train other farmers, who were organized into farmer groups. The projects expected that model farmers would continue providing training to farmer groups after project exit, despite no longer receiving free inputs from the projects. However, at follow-up, almost no model farmers were providing training to other farmers, and the percentage of farmers who reported having received training since the projects' exit was very low. Use of training and technical assistance had fallen among all of the project-targeted communities by follow-up, but decreased most dramatically in areas where project-supported training was provided free until project exit, with a charge instituted after project closure. These results relate to the key factors of resources, capacity, and motivation identified earlier, in that although model farmers had the technical capacity, they stopped providing services when resources were no longer provided, as these resources served as incentives that, when removed, reduced their motivation.

The projects also organized and strengthened producer associations (PAs) with the goal of giving farmers a means of marketing their products (as produced or after processing) and purchasing inputs collectively to obtain more favorable prices. The PAs imposed quality and quantity requirements on the products that they worked with and usually charged a fee for membership. Projects worked to establish linkages between PAs and municipalities for continued assistance with access to markets and price information after the projects ended. Between endline and follow-up, however, participation in PAs fell, as did the proportion of farmers selling through PAs, while the proportion of farmers selling individually rose. Nonetheless, there were many examples of project-supported PAs that had successful long-term contracts with buyers, and some of the buyers were providing technical assistance and credit to PA members. Many PAs were also receiving support from the municipality, and some had joined with larger, regional PAs to further increase their market power.

Overall, the proportion of farmers selling any agricultural products fell from endline to follow-up in two of the FFP development project areas, but was maintained in the other two areas; the

proportion selling was nonetheless fairly high, from more than 75 percent to 100 percent among all farmers at follow-up.² Agricultural incomes (adjusted for inflation) fell between endline and follow-up, but in all cases agricultural incomes 2 years after exit remained substantially higher than at baseline, although the post-project downward trajectory is troubling. Incomes of PA members at follow-up were significantly higher than incomes of non-members. In addition, although the proportion of farmers using agricultural techniques learned in the project fell in all targeted areas from endline to follow-up, the practices that were still being applied by a substantial proportion of farmers appeared to be those that improved productivity (which motivated their continued use) and did not require a high level of resources or technical capacity to implement.

In the area of NRM, where the context was appropriate, projects established irrigation systems that charged a fee for water use; the projects then trained irrigation committees to manage these systems. Projects implemented NRM interventions using demonstration plots to encourage use of soil-conserving techniques, and used food for work (FFW) and free inputs (such as seedlings) to engage communities in conservation activities, such as reforestation. After the projects' midterm evaluations, projects specifically targeted NRM techniques directly associated with improved productivity and/or resilience to climate shocks, and such techniques were found to be better maintained at follow-up than those that were not linked to such factors. While NRM practices that provided clear benefits were more likely to be sustained, the withdrawal of free inputs reduced the sustainability of those NRM activities that had used them. In contrast, where projects established commercial nurseries to provide seedlings to local communities as a profit-making venture, many of these nurseries were still functioning 2 years after exit, based in part on a business model that offered both motivation and resources (return on sales) and independent functioning (capacity) prior to project exit.

Conclusions and Recommendations

As previously noted, the study findings in Bolivia demonstrate that results evaluated at the time

of project exit do not necessarily predict the persistence of those same results 2 years later. Impact and sustainability are distinct achievements, and an exclusive focus on impact at exit may jeopardize sustainability. For example, providing free resources up to the time of project exit may maximize project impact, but the withdrawal of those resources poses a bigger threat to sustainability than a gradual withdrawal with the development of substitute resources. Project funders and implementers need to incorporate sustainability into project evaluation criteria to avoid an exclusive focus on the situation at the time of exit.

The study results strongly supported the importance of having all three critical factors—resources, capacity, and motivation—in place before project exit to improve the likelihood of sustainability. Many examples from the study demonstrated the necessity of all three of these factors and emphasized the likelihood that sustainability will not be achieved if any one factor is missing. While linkages were not universally critical, vertical linkages (e.g., of CHWs to the health system and of farmers and PAs to buyers) were in many cases essential to the successful continuation of former project activities.

The study's results also demonstrate the importance of establishing independent operation among community-based groups and organizations before project exit: Gradual exit with a transition from project-assisted to independent operation improved the likelihood of sustainability. Phase over of responsibility to municipalities or other donors or nongovernmental organizations proved to be effective in some cases but not in others, and plans for such phase over need to be made with a realistic assessment of the resources, capacity, and motivation of these other entities to continue supporting project-initiated activities. Finally, when a project provides free resources—whether food rations to mothers, agricultural inputs to model farmers, or food for work to community members—withdrawal of those resources can threaten motivation for the continued participation of those who had received them and can jeopardize sustainability.

The results of the study in Bolivia led to the following recommendations for project designers, managers, and donors/funders, and for future research.

² The organizations implementing the endline evaluation collected data only from participant farmers. At follow-up, the study team collected data from a representative sample of all farmers in project communities, but included information to allow comparison of participant farmers at endline with the same group at follow-up.

Programmatic Recommendations

RECOMMENDATIONS FOR PROJECT DESIGNERS AND MANAGERS

- Build sustainability plans into project design from the beginning: Identify the exit approach (phase-over or phase-out) and the specific roles and responsibilities each entity engaged with the project will have after project exit.
- Ensure that the critical factors—resources, capacity, and motivation—are addressed in the design of the sustainability plan for the project and in the project itself.
- Carefully assess the long-term sustainability of linkages intended to support project-related activities after project closure based on the resources, capacity, and motivation of the institution or entity involved. Focus on ensuring local capacity to negotiate future linkages given political turnover and changing priorities.
- As part of project design and sustainability planning, make explicit plans for replacing any material benefits provided by the project, including food, once project resources are withdrawn.
- Realistically assess the potential reach and coverage of project activities, and address barriers to inclusion so that sustainable benefits affect a majority of the population of a given implementation area, if possible.
- Carefully assess the likely benefit of each component of an intervention to the individual participants; those that offer a tangible benefit are more likely to be sustained.
- Withdraw resources and support gradually, allowing local institutions and organizations to operate independently while project support is still available.

RECOMMENDATIONS FOR DONORS/ FUNDERS

- Incorporate indicators of sustainability into project assessment (monitoring and evaluation) and build time into the project cycle after resources are withdrawn and implementation has been completed to evaluate sustainability. This may require extending the overall timeframe of the project cycle.
- Integrate indicators of sustainability into project monitoring and evaluation across the project's life of activity to ensure that a focus on endline impacts does not jeopardize investment in longer-term sustainability.
- Require projects to maintain archives of baseline, midterm, and endline evaluations, as well as associated data, along with information derived from routine project monitoring and associated reporting.
- Set aside funding for post-project impact evaluation.

RECOMMENDATIONS FOR FUTURE RESEARCH

- Incorporate into sustainability studies, when possible, a control (randomly assigned) or comparison group to permit an experimental research design in order to strengthen conclusions.
- Collect information on activities, outcomes, and impacts at the level of the target communities and beyond, rather than focusing only on the intended direct beneficiaries. That is, design sustainability studies to capture not only direct, but also second- and third-order indirect effects (for example, project impact not only on agricultural income, but on household income from all sources).
- Consider studies to compare the long-term impacts on low-income communities of targeting project resources to the poorest of poor farmers versus targeting those with more resources who may have greater potential.



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