

# Democratic Socialist Republic of Sri Lanka

## Dry Zone Livelihood Support and Partnership Programme Impact Evaluation

### Executive Summary

1. As a part of IFAD-wide commitments for the Ninth Replenishment period (2013-2015), the Independent Office of Evaluation of IFAD (IOE) in 2013 conducted its first impact evaluation of an IFAD-supported project. This report presents the impact evaluation of the Dry Zone Livelihood Support and Partnership Programme (DZLISPP) in Sri Lanka.
2. The entire range of project-level evaluation criteria outlined in IFAD's Evaluation Manual was applied in the evaluation. For the first time at IFAD extensive primary data collection and analysis were undertaken, including a qualitative survey (30 key informant interviews with project staff and relevant government officers, and 41 focus group discussions with beneficiaries), and a quantitative survey of over 2,560 households - both project and comparison households.
3. The DZLISPP was approved by the Executive Board of IFAD in September 2004 and completed in March 2013. Actual costs amounted to US\$27.2 million and were financed by an IFAD loan of US\$21.97 million and a grant of US\$0.34 million for policy work on land tenure, while the remainder was funded by the Government of Sri Lanka and the beneficiaries. The project was under the responsibility of the Ministry of Agriculture. It included five components: (i) rainfed upland agricultural development, through farmer field schools; (ii) marketing and enterprise development; (iii) irrigation rehabilitation; (iv) microfinance and income-generating activities; and (v) priority community infrastructure development.
4. The project design was relevant, with priority accorded to disadvantaged communities. Originally designed as a project in support of subsistence agriculture, DZLISPP gradually aligned itself to changes in the country context, such as the transition from low- to middle- income status and from a conflict- affected to a post-conflict phase (after 2009). In particular, the project increasingly sharpened the focus on: (i) higher-value crops and livestock products; (ii) linkages to processing and marketing channels within existing value chains (e.g. milk, fruits and vegetables); and (iii) technology for seed multiplication (potato, onion). This transition was possible thanks to a new project management team and input provided by the midterm review.
5. The project was broadly effective. Outreach figures are high (at least 120,000 households as compared to the appraisal target of 80,000 households) although the quality of implementation did not always keep pace with the scale of outreach. The support to livestock development, initially not a major area of emphasis, succeeded in integrating livestock production systems into dryland farming. The project rehabilitated traditional village irrigation tanks, affecting a command area of 7,900 hectares (compared to the target 6,600 hectares), 3,362 of which were incremental. Overall the quality of work was good, but the water users' associations were still relatively weak after completion. The DZLISPP helped expand marketing opportunities that established linkages between farmers and private firms. The latter cofinanced equipment and construction of processing and collection centres for agricultural and dairy produce.
6. The project was moderately efficient. Similar to other IFAD projects, the DZLISPP suffered from serious delays during the first three years of implementation but managed to attain most of its targets by completion. The actual project management cost ratio was roughly 22 per cent. This is a relatively high proportion partly justified by the need to serve a scattered target population and to compensate for the capacity

constraints of local extension agencies. At completion, the estimated internal rate of returns was high (19.6 per cent) but as this figure is heavily dependent on monitoring and evaluation (M&E) data, it may not be reliable.

7. **Methodological issues.** One of the fundamental constraints in the context of this evaluation was the absence of a baseline dataset. For this reason, the quantitative component of the survey employed two strategies: (i) an attempt to reconstruct baseline information through recall methods; and (ii) a quasi-experimental approach using statistical techniques that do not strictly require baseline data. In particular, the evaluation adopted "propensity score matching" as well as the "treatment effect model" (an application of the Heckman sample selection model) to test for consistency and robustness of results. Both can help address sampling bias when project participants have not been randomly selected.
8. In addition to the absence of a baseline dataset, the impact evaluation faced other major constraints and issues: (i) sample selection bias due to targeting; (ii) confounding effects of the general economic growth and poverty reduction experienced by Sri Lanka over the past eight years; (iii) the possible spreading of benefits from target to non-target groups; and (iv) issues related to the project "incubation time" in that although the project began in late 2005, most project interventions took place during the three-year period between late 2009 and early 2013.
9. **Targeting of disadvantaged communities.** As confirmed by the evaluation's survey, the project - in line with design - focused on more isolated communities, with a lower endowment of basic infrastructure such as primary and secondary schools, police posts and community markets. Within those communities, households assisted by the project cultivated more crops and had slightly higher education status but a poorer asset base, reflecting a tendency by project field staff to focus on households on the basis of their needs and interest in project activities.
10. **Impact.** The project M&E data tend to show significant and generalized improvements in the welfare of beneficiaries, including agricultural productivity, incomes and assets. This evaluation acknowledges the efforts made by the project M&E system to collect a wide array of data and information. At the same time, the following limitations have been found: (i) inaccuracies in reporting at the district level (e.g. double counting, incorrect entries); (ii) non-representative sampling; and (iii) lack of comparison with households not benefitting from the project (raising an attribution issue).
11. The evaluation benefited from primary data that are better representative and from comparisons with households that were not assisted by the project. Moreover, it triangulated between different methods and sources and tested the robustness of the analysis. The findings on impact are positive but more nuanced when compared to the project M&E findings. Evidence suggests that the project has exposed small farmers to new crops and improved agricultural techniques. It has promoted a number of initiatives that can play a role in helping modernize agriculture in the dry zone of Sri Lanka. At the household level, socio-economic changes in assets and expenditures are mixed and the results are sensitive to alternative estimation methods. The effects of project-supported training and extension services are, to a large extent, still emerging.
12. Through the farmer field school approach, the project exposed smallholder farmers to new techniques in onion cultivation practices and crop varieties such as turmeric and ginger, groundnuts and fruit trees (e.g. mango, papaya). In a few instances, more advanced technology was introduced through the Department of Agriculture such as seed production for B-onions and hydroponics for potato tuber production (Badulla district).
13. The project contributed to the development of grassroot networks at the village level, particularly through support given to water tank societies, crop societies and dairy societies, and their federations. In many of these, women held the positions of president, secretary or treasurer.

14. Results in terms of household income and assets are mixed. The findings suggest that given the project's emphasis on dairy farming, project-supported households have invested in cattle and purchased fewer household assets due to external financial constraints. In most cases, participating households had to self-finance dairy farming investments, not only to buy cattle but also to build equipment and purchase special feed for lactating cows. The fact that the beneficiaries had to finance the new investments encouraged by the project may explain why they had to forego the purchase of other household assets. In assessing the project impacts, this evaluation has taken into account that most of the project initiatives took place between 2009 and early 2013.
15. The project contained sustainability elements: (i) the formation of farmer and producer societies (e.g. village irrigation tank, crop and dairy societies) and their federations; (ii) linkages with relevant government departments; (iii) grants for future maintenance of minor tanks and revolving microfinance and microcredit funds; and (iv) linking farmers with private sector agribusiness companies (fresh fruits and vegetables, milk). Most of the project initiatives need further technical/organizational support as they were implemented over the last 36 months of the project. Fledgling farmers' organizations are not yet fully confident with accounting and marketing strategies.
16. **Pro-poor innovation and scaling up** has been satisfactory. The project has made direct efforts to bring farmers closer to available technology such as multiplication techniques for seed potato, chilling technology for dairy farming, and quality seeds for cowpeas, maize and groundnuts., The project worked with both private sector companies and provincial and district departments on the diffusion of the above innovations. Some partnerships are already under way. Current national policies favour larger infrastructure and plantation agriculture and tend to disregard the fact that successful commercial agriculture is not at odds with smallholder farming.
17. The project's performance in gender equality and women's empowerment is assessed as highly satisfactory. Both men and women participate in household management and income generation. Women are strongly represented in crop societies and account for 43 per cent of society presidents, 64 per cent of secretaries and 54 per cent of treasurers. The majority of loan beneficiaries are also women (60– 100 per cent).

### **Recommendations**

18. **Need for a follow-up phase and advocacy from IFAD.** Pioneering interventions such as this project require years to consolidate results; a single project phase is not sufficient. Focusing on the dry zone is consistent with the current priority accorded by the Government for the modernization of agriculture. IFAD needs to convey this perspective more forcefully to the Government.
19. **A more selective project format is required, revisiting several components and concepts.** In particular, it is important to: (i) promote further linkages with existing value chains through public-private sector partnerships; (ii) support grassroot societies (e.g. crop, village tank, dairy) and their federations as an entry point for public extension programmes and for agreements with private-sector operators; and (iii) avoid subsidized interest rates in credit schemes (as lump-sum matching grants may be a better option).
20. **Continued advocacy on policy issues.** This involves not only macro policy issues that are politically entrenched, such as land tenure, but also meso-level and practical issues such as the formal registration of village-level societies.
21. **Project commitments need to be honoured.** In the short term, the project's commitment to provide a financial contribution to revolving funds for maintenance of village tanks and other schemes needs to be honoured.

22. **Better accuracy and quality control in M&E data is required.** Conducting thematic studies is good practice and deserves to be retained. A simple baseline survey with both project and comparison observations is recommended and its database needs to be carefully preserved.

#### **Selected methodological considerations for future similar work at IFAD**

23. Absence of baseline data and a comparison group is a typical constraint encountered in impact evaluations at IFAD. This is further complicated by the targeting approach of many projects, which is likely to generate a serious sampling bias. Use of statistical techniques that do not strictly require a baseline (propensity score matching, difference in differences, using recall questions and the treatment effect model) is a viable option although it may not fully replace baseline data. It is also to be noted that the selection, development and testing of the econometric approach can be extremely time-consuming.
24. **Timing of the survey.** Some reviewers may believe that it is preferable to wait until a project has gone through a sufficiently long "gestation period" before conducting an impact evaluation. However, undertaking an evaluation ex post (i.e. when the project has been closed for a few years and the management team is no longer in place) can be extremely challenging; significant information on the project area context may be missing and could result in survey design and sampling errors. When impact evaluations are conducted during implementation or just after project closure, surveys may have to focus more on shorter-term indicators such as technology adoption.
25. Other challenges include: (i) practical sampling arrangements in which projects target specific agroecological areas thus making it problematic to find valid comparison areas and communities; and (ii) the multi-component nature of many IFAD-funded projects means that interventions are non-homogenous bundles of activities, making the cause-to-effect relation difficult to detect and explain, and data collection and analysis highly time-consuming.
26. Finally, econometric analysis results are rarely self-explanatory and need to be interpreted. Mixed methods, combining both quantitative (mini-surveys) and qualitative techniques can help disentangle the causal nexus. A way forward for IFAD projects could be to conduct more thematic studies combining a simple survey format with more qualitative techniques. This would provide more context-specific findings adapted to each component that can be used to inform project implementation as well as final assessment at completion.