



IMPACT BRIEF



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Chad

Rural Development Support Programme in Guéra (PADER-G)

About the project

Objective. The Rural Development Support Programme in Guéra (PADER-G) is an IFAD-funded project that was implemented in Guéra, Chad, to improve the food security and livelihoods of poor rural households. PADER-G aimed to manage food shortage risk by improving cereal storage among smallholder farmers through the construction and management of community cereal banks. This element of the project established community committees (COGES) and trained them in effective management of the cereal banks.

Financing. PADER-G was approved in December 2010 for a total US\$20.1 million, of which IFAD financed US\$17.4 million.

Timing. Project activities started in October 2011 and were completed by December 2016, after reaching 119,710 households and having achieved a disbursement rate close to 100 per cent.

The project's theory of change

The main logic of PADER-G is that **provision of cereal banks** would smooth grain consumption and **reduce food insecurity** among beneficiary farm households by allowing them to borrow stored grain from the cereal bank during the lean season, when grain availability is low and food prices are highest. During the following harvest season, the beneficiary households would repay the borrowed grain (principal) plus nominal interest in the form of grain. The intervention also established and **trained management committees**, which, in theory, would ensure that the cereal banks were well managed and effective in administering the grain loans and cereal bank operations. As a result of cereal banks, the beneficiary households could store more grain, reduce post-harvest losses and **avoid borrowing money** at usurious interest rates for food purchases during the lean season. They could also avoid selling off their assets to obtain cash for food purchases. Moreover, the ability to borrow grain from the cereal banks would prevent beneficiary households from sending their men away to look for wage labour during the lean season, a phenomenon observed in Guéra prior to PADER-G.

At the community level, PADER-G cereal banks could be expected to reduce price volatility in grain markets. During the harvest season the market supply of grain would be reduced because more farmers would be able to **store their output**, and during the lean season the market demand for grain would be reduced because cereal banks could cover some of the demand by distributing stored grain to beneficiary households. The intervention would also increase **social cohesion and cooperation** as different households in the community worked together to manage the cereal banks.

Project outreach and outputs

Determining the overall impact of the project requires first understanding whom the project reached and what outputs it generated.

Cereal bank beneficiaries: **119,710**

Cereal bank infrastructures constructed or rehabilitated: **66**

Cereal bank management committees (COGES) established, trained and supervised: **242**

Female COGES members trained: **367**

Metric tonnes of cereal stock stored in the cereal banks: **765.45**

Increase in duration of cereal storage: **4** months

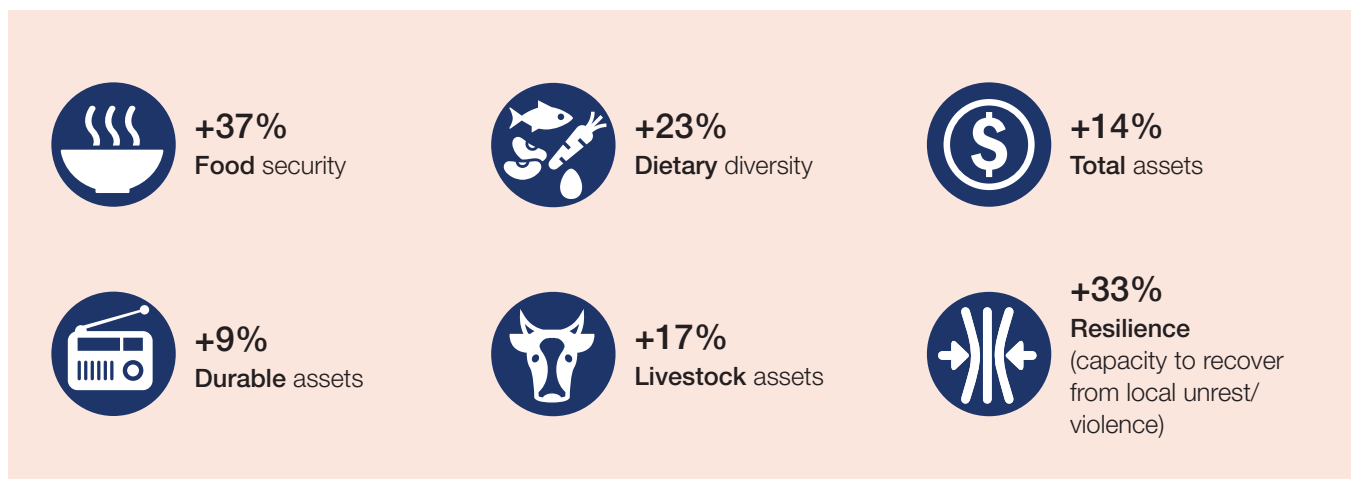
Project impact

As part of IFAD's Development Effectiveness Framework, PADER-G has been subject to a rigorous impact assessment.

Data and methods

Both qualitative and quantitative data were collected. The former were drawn from nine key informant interviews and seven focus group discussions conducted in beneficiary and non-beneficiary villages. In addition, community-level surveys were conducted to collect data on local market prices and pre-existing infrastructure characteristics. Using a household survey questionnaire, quantitative data were collected from 2,198 households (1,066 beneficiaries and 1,132 non-beneficiaries) from 94 villages in 11 sous-prefectures of Guéra. Quantitative data analyses employed several non-experimental propensity-score matching methods. These analyses provided robust estimates on the impacts of the PADER-G cereal banks on several outcomes of interest.

Key impact estimates



PADER-G increased food security by at least 37 per cent while increasing dietary diversity by **23 per cent** among beneficiary households. These improvements were on the back of an increase in production and yields of major grains and oilseeds (sorghum, millet, berebere, groundnuts and sesame). Quantities of sorghum and groundnuts stored increased by 77 per cent and 110 per cent, respectively. As a result of PADER-G cereal banks, household consumption of sorghum and groundnuts increased by 34 per cent and 54 per cent, respectively.

PADER-G helped households increase their asset holdings by about **14 per cent** overall. Productive assets as well as livestock assets increased by **17 per cent** while durable assets increased by about **9 per cent** for those households that benefited from PADER-G cereal banks. The improvement in assets was likely due to households' reduced liquidation of assets for the purposes of obtaining cash to purchase food during the lean season. In addition, results show that PADER-G beneficiaries were **more resilient** to incidents of violence or civil unrest taking place in their communities. These impacts likely emanate from increased cooperation and cohesion among members of the COGES.

Some non-beneficiary households resided in communities with older cereal banks previously constructed by other development organizations. These older cereal banks were found not to be as effective as the PADER-G cereal banks. One explanation given in qualitative interviews was that the older cereal banks were no longer well managed and had deteriorated. This finding highlights the commonly cited problem of unsustainable management of cereal bank infrastructure, underscoring the need for mechanisms to ensure sustainable impacts from PADER-G cereal banks.

About the brief

This brief draws upon the findings of an IFAD-funded impact assessment of the PADER-G project in Chad, which was prepared by Romina Cavatassi, Athur Mabiso, Mohamed Abouaziza and Eric Djimeu.

The impact assessment report on PADER-G is available upon request.

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Lessons learned

- One key lesson of this impact assessment is that in contexts where basic needs such as food security and basic public services are lacking, **setting smart goals and targets that are not overambitious is a practical approach that can lead to real impacts** for poor farm households **as well as set a firm foundation for future interventions**.
- Sustaining the impact of PADER-G cereal banks is critical: **mechanisms for continued maintenance and management** of the infrastructure will need to be put in place.
- A related lesson is that by **providing training to community cereal bank committees, PADER-G effectively built capacity** for management of the infrastructure. **This capacity strengthening may have contributed to the higher impact** of the PADER-G cereal banks compared with other cereal banks and is likely to promote the sustainability of the PADER-G cereal banks' impacts.
- The **role of markets is crucial** in influencing farmers' commercialization decisions. Because market linkages and profitability appeared limited for sorghum, farmers mainly stored sorghum for home consumption while they expanded groundnut production for sale. Whereas this had positive implications for food security and dietary diversity, it did not result in income increases through profits and gross margins from selling to the market. If the impact of cereal banks is to go beyond food security to include profitable market participation, **future interventions may consider deliberately supporting beneficiaries' access to markets for inputs, cereals and oilseeds**.
- Finally, it is encouraging to see that beyond the main objective of food security, cereal banks were able to achieve other impacts such as protecting household assets from distress sale, increasing dietary diversity and improving resilience to civil unrest and violence. These results imply that **cereal banks can be an effective platform for generating impacts on a number of development outcomes**.

