



Tapping finite resources

Jordan: Agricultural Resources Management Project in the Governorates of Karak and Tafila (ARMP)

Water is extremely scarce in Jordan and is being exploited at 150 percent of sustainable levels. The project area is situated in the environmentally-fragile semi-arid southern highlands of Jordan. The Karak and Tafila governorates received far less investment in the mid-nineties than the northern areas: households there are reportedly amongst the poorest in Jordan. IFAD thus set out to improve natural resource management by arresting soil degradation and restoring fertility through the sustainable use of land and water resources. Improving the production potential of natural resources would help farmers to diversify and boost their incomes. Microcredit for poor households was also included to help provide alternative sources of income.

Key recommendations arising from the evaluation include:

- **Given the success of and high demand** by poor farmers for the Soil and Water Conservation Programme (SWC), it should be expanded to enable more farmers to benefit from spring rehabilitation and to increase the volume of water stored in cisterns.
- **Access to small loans for asset-less women** and poor rural households needs broadening by developing alternative mechanisms to loan collateral and guarantors. Market opportunities for income-generating activities need to be identified before deciding which are financially viable. In addition, loan amounts should be determined by how much money is needed to start up the microbusiness, and repayment periods by net cash flow.
- **A clear policy statement on community participation** and operational guidelines by the main implementing agency will assist in mainstreaming participation and ensure that the benefits of soil and water conservation are sustainable and that the local community is able to take responsibility for and set its own development agenda. ▶

Project data

Project cost	USD 18.6 million
IFAD loan	USD 12.8 million
Co-financiers	Government of Jordan (USD 2.9 million) and project beneficiaries (USD 2.8 million)
Implementing agency	Ministry of Agriculture
Total IFAD loans	USD 59.5 million (6 projects)
Loan effectiveness	November 1996
Closing date	April 2003
Evaluation fieldwork	September to October 2000

Main results

Increased soil and water conservation has resulted in higher productivity levels from natural resources, bringing benefits and economic growth to the 4 041 farmers originally targeted. Farmers' assets, particularly under the Soil and Water Conservation Programme (SWC), have increased in value five-fold: there is now more water for livestock and an increased recharge of groundwater. Indeed by mid-term, 70 percent of the stone walls (which reduce run-off and soil erosion) originally envisaged had been built. In the long term, farming systems will be more robust and more water will be available for irrigation, municipal and domestic use. Credit disbursements amounting to USD 1.3 million boosted income-generating activities and rural employment: goat and sheep-breeding loans increased returns on family labour, added to household income by up to 12 percent, and improved family nutrition. Rural women developed entrepreneurial skills and enhanced their economic clout and recognition. Higher income has given women greater financial autonomy and helped them meet food security needs, finance their children's education, and invest in assets such as house maintenance.



► Soil and water conservation

A major aim of the ARMP is to limit environmental degradation through the SWC Programme by building stone walls and terraces to check erosion and water run-off on farms. There is a high demand by farmers for involvement in the SWC and by mid-term, three quarters of the farmers originally targeted had participated and have indicated a four to five-fold increase in land values following SWC measures. Around 1 170 cisterns, which collect rainfall and irrigate by gravity, had been built on farms in project areas, saving farmers the cost of buying water and allowing them to plant trees, mostly olives. Good progress has also been made rehabilitating springs providing water for domestic and livestock use. The improvements will strengthen farming systems overall and ensure greater long-term water availability; indeed the mid-term evaluation concluded that future prospects for sustainability look high.

A farmer working on an olive plantation in the Kerak governorate. The Agricultural Resources Management Project assists poor farmers with less than five hectares of land to make better use of limited natural resources.



IFAD photo by Spauli



IFAD photo by Mona Bishay

The stone wall built around steep land in Wadi Bin Hammad helps reduce soil erosion and water run-off. Jordan is one of the world's most water-scarce countries: seventy-five percent of the country is desert or semi-desert.

Community participation

A systematic, integrated approach to community participation throughout the project is vital to enhance sustainability. Under the SWC Programme, community participation would help broadcast information more widely and would ensure that the project reaches the poorest people.

For the women's programmes, participation would put management of the small businesses on a more professional footing and create opportunities for economies of scale in production and marketing.

The slow start of community participation during the project's first four years meant that those involved in the project were not as active as they might have been in the development process. For a truly participatory approach to be effective, commitment from the Ministry of Agriculture and its staff, extra funds for technical assistance and training for all project and ministry staff, as well as a clear policy statement on participation – including operational guidelines and instructions for its implementation – are all essential ■

Further information

The Hashemite Kingdom of Jordan, Agricultural Resource Management Project in the Governorates of Karak and Tafila Mid-term Evaluation, Report N° 1159, June 2001, available from: Office of Evaluation, International Fund for Agricultural Development, Via del Serafico 107, 00142 Rome, Italy. The full report and Profile are online at www.ifad.org/evaluation; email m.keating@ifad.org or telephone +39 06 5459 2048.

Credit, but on whose terms?

The Agricultural Credit Corporation (ACC) is the only source of formal credit for farmers. Government-owned, the ACC is, however, now being formed into a bank. Its lending terms are stringent and do not always tie in with the poverty alleviation objectives of the ARMP. Given that a guarantor is essential, that loan repayments are deducted from salaries, and that physical access to the ACC can be difficult, women especially can face difficulties in taking out loans. Borrowers are further penalised where loan amounts are higher than necessary, a mechanism sometimes used to increase credit disbursement.

Limiting loan amounts to the outlay required and relating repayment periods to net cash flow, including necessary grace periods, would allow the ACC to take on more borrowers with the available funds. A family income ceiling for credit eligibility would help identify those who need credit the most. Training and technical support concerning markets, investment, packaging, storage, processing, and sales strategies would help boost returns on loans. Eligibility criteria, other than minimum land holdings, are needed to reach the poorest and mostly female-headed households. Poor people in the project area can be excluded from access to credit and conservation programmes because they do not have enough or any land and have no regular salary. Jordan's asset-less rural women, in particular, need small loans and alternative collateral requirements to finance income-generating activities.