

Jordan: Yarmouk Agricultural Resources Development Project

Item	Assessment Remarks	Rating
Country & Project Name	Jordan- Yarmouk Agricultural Resources Development Project	
Loan Number	509-JO	
Project Id.	1092	
Board Date	April 1999	
Effectiveness Date	April 2000	
Original Closing Date	June 2006	
Final Closing Date	December 2008	
Total Project Cost USD(M)	USD 25.6 million	
IFAD loan USD (M)	USD 10.14 million	
Cofinanciers (if any)	USD 3.5 from GoJ; USD 5.0 from OPEC fund; USD 5.0 from the Abu Dhabi Fund; USD 2.0 from beneficiaries	
Implementing Agency	Ministry of Agriculture	
Principal Components	The project's goal was to improve, in a sustainable manner, income and food security of resource poor rural households in areas threatened by soil erosion and water scarcity. The project objectives are to promote: (a) sustainable use of land and water resources; (b) financially viable rural women micro enterprises; and (c) diversified and increased on-farm and off-farm incomes. YARDP components included: (i) resource management; (ii) agricultural development; (iii) rural roads; (iv) rural finance; and (v) project coordination and management.	
Project Performance		
Design	The YARDP is a multi-faceted project aiming at improving the livelihoods of the rural poor by supporting sustainable soil and water conservation structures (SWC), irrigation rehabilitation, feeder roads and provision of farmers access to extension, training and rural finance. It builds on the lessons learned from the three predecessor projects. YARDP design was innovative , with a demand driven approach for individual actions at the farm level, complemented by a participatory planning and decision making approach for collective off-farm SWC actions at the micro watershed level. However, the concept of participatory planning proved to be too premature in the socio-economic context in Jordan. Therefore, it was not embraced by the communities. The project was also based on a cost-sharing incentive approach, with a 65% to 85% contribution by the project as a financial incentive; the difference being provided in kind and in cash by the beneficiaries.	4
Implementation	Overall, project's implementation was quite good. As a result of the 2006 MTR, a loan amendment took place in March 2007 as well as funds' reallocation process. At MTR the project was also extended by two years until 2008. As far as project's supervision, until the end of 2005, YARDP was supervised by the Arab Fund for Economic and Social Development (AFESD); thereafter, it was supervised by UN Office for Project Services (UNOPS). With regard to the promotion of community participatory planning and involvement for sustainable management of SWC at watershed level, this had been identified at appraisal as a long-term undertaking to be addressed with initial assistance from specialized NGOs. However, during project's implementation there was a lack of in-country available qualified NGOs. The PMU attempted to fill this gap but without success. For the M&E system, PMU performed well in the collection of large quantities of relevant quantitative and qualitative information on project implementation activities, outcomes and impact and in the provision of improved quality reports.	4
Relevance	YARDP's appears to be relevant in addressing the main causes of poverty in rural Jordan and in meeting the needs of the target groups. In addition, its focus on sustainable increases in agricultural production and on household income diversification through empowering women rural micro-enterprises, was very much consistent with government's overall strategies for poverty reduction as well as with IFAD's Country Strategy (1998-2002). As far as project components, they were carefully conceived to address the constraints impeding the productivity of the agriculture sector. However, an important constraint limiting the relevance of project's approach was the lack of farmers' commitment and active involvement in planning of village-level micro watershed development, which was necessary for fully applying the integrated ridge-to-valley approach and for establishing community-based organizations for O&M (operations and maintenance) of off-farm collective SWC harvesting structures.	4
Effectiveness	The project has mostly met the objectives at appraisal. The <u>sustainable use of land and water resources objective</u> was largely achieved as far as the effective maintenance of the on-farm SWC structures by individual farmers; however, this	5

Item	Assessment Remarks	Rating
Country & Project Name	Jordan- Yarmouk Agricultural Resources Development Project	
	objective was not achieved with respect to viability of village-level collective actions for an integrated ridge-to-valley watershed development approach nor for the maintenance of the off-farm riverbanks protection structures. The objective of <u>developing financially-viable rural women micro enterprises</u> is largely achieved in an effective manner in most cases. Over 77 per cent of the microenterprises established through Agricultural Credit Corporation (ACC) lending are still operational, active and repaying regularly their loans. Over 91 per cent of the established rural microenterprises are led by women and cover diverse income generating activities including dairy, lamb meat and poultry production, beekeeping, mushroom cultivation and fruit and vegetable processing. Effectiveness in achieving the objective of <u>increased and diversified on-farm and off-farm incomes</u> of the poorest households has been remarkable at project completion. The Project has contributed effectively to diversification of farm income through farmers' adoption of a wide range of high value fruit trees that included olive, almond, pistachio, grape, apple and pomegranate. The income generated by the microenterprises ranged from an average of USD 2500 per year for 75 per cent of the beneficiaries to an average of USD 4200 for 25 per cent of the beneficiaries.	
Efficiency	The project substantially exceeded most of the MTR output targets and has remained within the adjusted budget. Project efficiency benefitted from a proactive approach that reallocated realized and anticipated savings and scaled up or downsized some of the activities to reflect beneficiaries' effective demand for project services. In addition, the level of actual unit cost per key output was found to be lower than the appraisal estimates. The actual cost per beneficiary is USD 2 740 (90 per cent of appraisal estimate); the cost per km of rural road is USD 11 000 (52 per cent of appraisal estimates); the cost per hectare of spring rehabilitation is USD 2200 (85 per cent of appraisal estimates); and the cost per m3 water storage by mini earth dams is USD 3.2 (75 per cent of appraisal). At project closing, project's funds were all disbursed. An attempt has been made to assess actual economic returns of the Project as compared to projections of economic returns made at appraisal. The estimated ex-post economic internal rate of return (EIRR) is based on data on increase in orchards affected by SWC, agricultural development, credit, extension and rural roads. The post-project EIRR is estimated at 20 per cent compared with the appraisal estimate of 15 per cent , providing full justification for the investment.	5
Partner Performance		
IFAD	As the initiating institution for the YARDP, IFAD had been effective in distilling the lessons learnt from three relevant previous interventions and in taking them into consideration at design and during implementation for ensuring the consistency of the project with the national rural policy reduction strategy and agricultural priorities and IFAD strategic objectives. During implementation and particularly the phasing out period (year 3 to year 4) of AFESD, IFAD has been effective in filling the supervision gap , by being directly engaged in reviewing the performance of the project, and contributing in a timely manner to the assessment and resolution of technical, implementation and loan administration issues.	5
Cooperating Institution	As cooperating institution during the first five year of the project, AFESD performance was satisfactory in the area of loan administration, but minimal in the areas of technical and instructional implementation issues. When AFESD phased out in 2005 as cooperating institution, UNOPS took over this responsibility and performed satisfactorily in terms of timely and efficient loan administration, and in fielding a supervision mission per year within the limited budget available.	4
Government	The Government of Jordan (GOJ) demonstrated a strong ownership to the Project's goal and objectives. It met all its financial obligations and provided timely and relevant support through the MOA, as well as guidance during YARDP implementation through the Permanent Steering Committee for the Project. The Ministry of Agriculture (MOA) through its Regional Directorates in the project area played a major role in the implementation of the YARDP activities related to resources development, spring rehabilitation, agricultural development and extension; it also participated in the supervision of construction works. The PMU established in the project area has been successful in operating as a lean structure by integrating project activities with those of the Regional Directorates of the MOA and by collaborating successfully with all the different governmental institutional partners involved in the YARDP implementation. It created effectively the needed environment for cooperation, complementarities and synergies among these institutions. The Ministry of Public Work and Housing (MPWH) performed well its responsibilities for the implementation of the rural road component including the management of the design process and the construction works and assumed the role of road maintenance. The Agriculture Credit Corporation (ACC) performed	5

Item	Assessment Remarks	Rating
Country & Project Name	Jordan- Yarmouk Agricultural Resources Development Project	
	highly its implementation responsibilities of the rural finance component providing agricultural lending to farmers for SWC structures and orchards development, as well as micro enterprise lending for rural women.	
NGO/Other	Several public and private service providers were contracted by the project to implement various activities. The main partners had been: NCARE for training and technology transfer; CARDNE for the socio economic and environment study; El-Zanaty & Associates for the RIMS survey; ACEASES for marketing study on commodities produced by rural women income generating activities. All the above service provides delivered quality outputs in a timely manner.	5
Cofinancier(s)	As cofinanciers, OPEC and Abu Dhabi Fund had been efficient partners with smooth and timely provisions of their financial contributions. They both relied on IFAD for project supervision and reporting.	5
Combined Partner Performance		5
Rural Poverty Impact		
Physical Assets	Within this impact domain YARDP's impact has been notable in establishing new orchards , in improving the existing ones, and in rehabilitating irrigated orchards. In addition, the construction of 287 km of rural roads benefitted over 13000 households inhabitants and improved access to 13600 ha of cultivated land.	4
Financial Assets	In terms of qualitative information, the PCR mentions increases in farm and rural enterprise incomes. The contribution of farm income to total household income is reported to have increased from a 25 per cent average (corresponding to USD 1260 per year) before the project to a 57 per cent average (corresponding to USD 3780 per year) after the project. In terms of poverty reduction, on the basis of an average size of 8 persons per household, it translates into an increase from an annual per capita income estimated at USD 625 or USD 1.7 per day before the project to an annual per capita income of USD 825 or USD 2.3 per day after the project. Considering a poverty line of USD 2 per day as a reasonable benchmark for Jordan (IFAD 2008-2012 COSOP for Jordan), the project was effective in contributing to lift the beneficiaries above the poverty line. Finally, as a result of SWC, spring rehabilitation and rural roads, the market value of agricultural land increased by up to 50 per cent resulting into further financial assets accumulation.	5
Food Security	As a result of project-generated increases in agriculture production and in farm and rural enterprise incomes, there was a positive impact on the nutrition level of benefitting households through home grown fruits and incremental expenditure on food items. Project beneficiaries had become self-reliant producers covering their needs in olive oil, milk and basic seasonal fruits to diversify their diets. A positive impact was also found on reducing child malnutrition.	5
Environment	Overall the project has initiated an important and promising long-term process towards a positive impact on the environment and common response base, with a focus on improved land and water management. Farmers started moving away from risky and environmentally unfriendly land use patterns based on cereal crops, to more productive and environmentally sustainable land use systems based on perennial fruit trees. However, a serious limitation on environmental impact is the lack of community readiness to engage in collective actions for off-farm SWC activities and take over the responsibility of maintaining the common off-farm riverbank protection structures. Finally, the intended integrated ridge-to-valley approach for sustainable watershed and agricultural development has not been fully embraced and applied by farmers.	4
Human Assets	The YARDP had specific impact on human assets with high likelihood to increase overtime. The rural road component had a positive impact on access to health, education facilities and markets in the project area. Moreover, the intensive training and skill development of the regional staff of the MOA resulted in a better extension delivery to farmers and rural women. The quality extension and transfer of technology services benefitted directly over 3 700 farmers and rural women, corresponding to a penetration rate of 40 per cent, which is considered a good result compared to the benchmark ratio of 35 per cent for similar agricultural projects.	4
Social Capital and Empowerment	The project has been less effective in promoting local social relations to facilitate cooperation and make collective actions for sustainable natural resources management. The initial steps taken in the formation of 10 out of 21 spring water management committees (SMCs) constituted an attempt for the formal establishment and registration of water user's associations for O&M of the rehabilitated irrigation infrastructure. This was not the case for the maintenance of riverbanks protection structures and the operations and maintenance of the two off-farm water harvesting small earth dams constructed on state land. The lack of	3

Item	Assessment Remarks	Rating
Country & Project Name	Jordan- Yarmouk Agricultural Resources Development Project	
	suitable arrangements amongst neighbouring farmers for collective actions prevented the formation of Rehabilitation Bank Protection Committee (RPC) and of Earth Dam Committee (EDCs).	
Ag. Productivity	YARDP has been quite successful, through cost sharing incentives, in stimulating farmers to shift from risky and environmentally unfriendly land use patterns based on cereal crops, to more productive and environmentally sustainable land use systems based on perennial fruit trees with focus on olive trees that are particularly resilient in the face of climate change. As a result of project's intervention, there was an increase in productivity of the orchards on 4445 ha in rainfed agriculture land, and in 191 ha of irrigated land. The increased production from rainfed orchards was a result of several factors: improved soil fertility, better orchard management, on-farm water harvesting for supplementary irrigation, access to improved extension and finance services. Project impact will be further enhanced in the near future, with the expected yield increase of young trees overtime and incremental productivity from improved technology and production skills brought about by extension.	4
Institutions and Services	Impact on institutions has been achieved through all project components. A Soil and Water Conservation Unit with experienced staff and budget has been created for the first time and integrated in the structure of the Regional Directorate of Agriculture at district level. For agriculture development, the capacities of the regional extension services have been strengthened to better respond to farmers and rural women needs. For rural finance, the outreach branches of ACC had been expanded, a micro credit revolving fund established and group lending incentives adopted. For rural road, the MPWH strengthened its regional services and took over and budgeted for the maintenance of the new rural roads constructed by the project.	5
Markets	The PCR does not tell us much about this impact domain. The project has contributed to improving access to markets through the development of 287 km of rural roads network. In addition, this network reduced by 70 per cent the transportation costs for farmers and increased transport services with pick-ups movement in the project area increasing by 80 per cent.	4
Rural Poverty Impact		4
Overarching Factors		
Innovation	The YARDP design included the introduction of three innovative features: (1) community participatory planning and involvement to apply an integrated ridge-to-valley approach for sustainable management of SWC at watershed level; (2) establishment of users' groups to take over the management and the maintenance of collective off-farm SWC structures , namely riverbanks protection and mini earth dams; (3) establishment within ACC of an Income Generating Credit Line with focus on women to be managed with the help of an NGO and to evolve into a revolving fund after the project completion. However, YARDP had been less effective in mainstreaming the above innovations. As the project was unsuccessful in fostering off-farm collective actions, the first innovation was not embraced by the communities, and it certainly requires a long term perspective in the context of Jordan. As a result, the related second innovation on users' groups establishment was adopted only partially for the spring irrigation rehabilitation with some Spring Management Committees formed. The third innovation had been satisfactorily implemented by ACC without assistance from an NGO. The Income Generating Credit line had been established and ACC outreach branches at district level functioned as micro-finance outlets.	4
Replicability and Scaling-up	The GOJ has decided to continue, with its own financing, project activities beyond the 31 December 2008 IFAD loan closing date for 2 more years (2009-2010). At this regard, the PMU gained valuable experience and is capable of effectively manage a follow up national programme for up scaling the project. In addition, according to the PCR, the post project ERR estimated at 20% (compared with project estimate at appraisal of 15%) provides full justification for project's replication to the entire Yarmouk basin and nationwide through a follow up integrated watershed agriculture development programme with co-financing from likeminded donors.	5
Innovation, Replicability and Scaling-up		5
Sustainability and Ownership	Project's sustainability presents a mixed figure. On one hand, the sustainability of efficient use and maintenance of on-farm SWC structures, fruit tree orchards and microenterprises facilities and rural roads is substantial too high. On the other hand, the sustainability for spring irrigation infrastructures, for riverbanks and earth dams structures is seriously at risk. With regard to women's micro enterprises, their financial viability is expected to be further enhanced with the recent establishment by ACC of a revolving-fund credit line for rural micro enterprises and	4

Item	Assessment Remarks	Rating
Country & Project Name	Jordan- Yarmouk Agricultural Resources Development Project	
	the introduction of group lending. As far as the objective of achieving increased and diversified on-farm and off-farm incomes of the poorest households, financial gains will be higher in the coming years with the expected yield increase of young orchards and growth of rural microenterprises overtime. Finally, through the creation of field implementations units at the district level, the PMU integrated project activities with those of the Regional Agricultural Directorates. This early integration paved the way for mainstreaming project's activities after IFAD loan closing.	
Targeting	The project used a geographically based targeting approach , covering the most vulnerable households in 90 villages of five poorest districts (Irbid, Bani Kenana, Mafraq, Ramtha and Mazra) in the Yarmouk basin. The project paid increased attention to women's needs . No further differentiation of beneficiary population is specified in the PCR.	5
Gender	Gender was one of the YARDP's guiding principles in its strategy. In this regard, the project aimed at actively promoting the inclusion of women-headed households as direct beneficiaries from the resources and agricultural development components, as well as it aimed to establish a specific income-generating line of credit for rural women. Among the direct beneficiaries from productive asset creation (in the form of orchards and rural micro-enterprises establishment), women represented 27 per cent. For 38 per cent of women beneficiaries, microenterprises represented the predominant source of income.	5
Overall Performance		5
Estimated number of beneficiaries	Estimated number of beneficiaries were 8 540 households as direct beneficiaries for on-farm and off-farm productive assets	
PCR Quality		
Scope	Overall in line with guidelines. Annexes VII and VIII missing. Final stakeholder workshop held.	4
Quality	The overall quality is quite good. However, some sections could have benefitted from an in-depth qualitative and quantitative analysis.	4
Lessons	Lessons learned are relevant for a new project design.	5