



<b>1. Project Data:</b>		<b>Date Posted :</b> 09/22/2003	
<b>PROJ ID:</b> P005153		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Matruh Resource Management	<b>Project Costs (US\$M)</b>	29.5	33.1
<b>Country:</b> Egypt	<b>Loan/Credit (US\$M)</b>	22.0	21.9
<b>Sector(s):</b> Board: RDV - Agricultural extension and research (33%), Water supply (33%), Micro- and SME finance (16%), General public administration sector (10%), General agriculture fishing and forestry sector (8%)	<b>Cofinancing (US\$M)</b>	2.4	5.3
<b>L/C Number:</b> C2504			
	<b>Board Approval (FY)</b>		93
<b>Partners involved :</b> None	<b>Closing Date</b>	12/31/2001	12/31/2002

<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
Ridley Nelson	George T. K. Pitman	Alain A. Barbu	OEDST

**2. Project Objectives and Components**

**a. Objectives**

(i) Implement a program of sustainable natural resource management in order to conserve water, land and vegetative resources;

(ii) Alleviate poverty and improve the quality of life of the local Bedouin population .

"Special attention will be given to promote on-farm and off-farm income-generating activities, particularly among women and the rural poor. The underlying strategy is to develop a structure within the traditional tribal system which would serve as an effective mechanism to encourage active participation by the local Bedouin community in the sustainable management of their natural resource base and in alleviating rural poverty " (President's Memorandum, p. 14).

**b. Components**

(i) Soil and Water Resource Management, including building of cisterns, reservoirs and dikes and establishment of a Soil and Water Management Unit (MARC) (Actual cost, US\$16.7 million, 50 percent of the total);

(ii) Rangeland Management, including planting of trees on 12,000 feddans (1 feddan = 0.42 hectares, approx. 1 acre) of communal lands as well as over-seeding some 2,000 feddans (US\$1.8 million, 6 percent);

(iii) Adaptive Research, involving demand-driven dissemination of technologies to conserve natural resources and raise rural productivity (US\$5.1 million, 15 percent);

(iv) Extension and Training, involving establishment of an extension service with four Subregional Support Centers (US\$5.7 million, 17 percent);

(v) Rural Finance, emphasizing on-farm income generation targeted to small farmers, the landless and rural women (zero --see below);

(vi) Project Management and Coordination (US\$2.7 million, 9 percent);

(vii) Monitoring and Evaluation (US\$0.9 million, 3 percent)

**c. Comments on Project Cost, Financing and Dates**

The actual cost of the Soil and Water Resource Management component is double the appraisal estimate (which was US\$8 million). The Rural Finance component--canceled at mid-term--was estimated at appraisal to cost US\$3.8 million; no agreement could be reached with the participating banks to manage the line of credit and so no disbursement was made, funds being re-allocated to other components, primarily Soil and Water Resource Management. Financing was provided by beneficiaries, who contributed 2.2 times more than the appraisal estimate, mainly because 6,954 cisterns were built instead of the 800 that were anticipated. The actual cost for building cisterns was less than estimated at appraisal, helping to explain the large demand .

**3. Achievement of Relevant Objectives:**

The objectives were relevant and were substantially achieved with minor shortcomings . With respect to the *objective of sustainable natural resource management*, while much of the data remains related to inputs as opposed to outputs and outcomes, water storage volume exceeded the appraisal targets by about five times; about 60 percent of households benefited from water harvesting; irrigation and erosion control structures benefited about 4,000 feddans of the 6000 planned; an integrated watershed development planning system reduced erosion and provided a knowledge base; shrub planting and over-seeding benefited over 22,000 feddans of rangeland; and, awareness of sustainable resource management was increased among beneficiaries . With respect to the objective of *relieving poverty*, about 60 percent of households surveyed said their income increased due to the project; agricultural production rose; there were health benefits from safe drinking water storage; and, about two -thirds of households reported a reduction in the need for concentrate purchase for livestock due to improved fodder availability .

#### 4. Significant Outcomes/Impacts:

The project achieved a gradual development of participatory approaches for land management among the settled Bedouin, although not without some initial difficulties and an extended eight year project period . Given the traditional tribal society and the newness of the approach expecting rapid progress would be unrealistic . Construction of water storage facilities had positive impacts on poverty, public health, and livestock and agricultural productivity . Women's drudgery in carrying water was reduced . An adoption and impact study showed increases in income, due to water harvesting activities, increased livestock feed production, and income generating activities, but the evidence of impact quoted in the ICR is not entirely clear . 38 Community Action Plans were eventually implemented, although somewhat late in the project. Nearly 7000 water storage cisterns were constructed - well above the target of 800 (although by storage volume the ratio of actual to planned was somewhat less ). The livestock "feed gap" (need versus local supply) was closed by nearly 20 percent. There was a strong focus on technology . The Matruh Adaptive Research Center was established and an International Advisory Panel of four experts worked well in supporting the important early program design stages . A new barley variety combined with improved cultural practices and seed gave increased yields on demonstrations of at least 15 percent with a high 60 percent adoption rate.

#### 5. Significant Shortcomings (including non-compliance with safeguard policies):

- There was insufficient attention to allowing time and resources to build and strengthen local institutions to enable them to implement the project effectively .
- There were weaknesses in the extent to which the project was able to reach down to the poorer households, although it does seem to have had some success in that area .
- The rural finance component did not work and was canceled at the Mid Term Review largely because agreement could not be reached with local banks . Accessibility, lack of collateral, perceived risks in agriculture, and cheaper alternative funding, were some of the main difficulties .
- The Monitoring and Evaluation component was unsatisfactory, only getting underway in the final three years . There was particular weakness in environmental monitoring .

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome :</b>	Satisfactory	Satisfactory	Some questions about efficiency which warrant exploration in the proposed PPAR. Per household costs were quite high for a low rainfall zone with a low potential for production.
<b>Institutional Dev .:</b>	Substantial	Substantial	
<b>Sustainability :</b>	Likely	Likely	Processes have been established, both at community and government level which seem likely to be sustained . The follow-on project should help to consolidate the early achievements.
<b>Bank Performance :</b>	Satisfactory	Satisfactory	
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR :</b>		Satisfactory	

**NOTE:** ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

The most important lessons from the ICR are :

1. For multi-sectoral, multi-disciplinary natural resource management projects to work, early emphasis should be placed on the design of institutional relationships and capacity building .
2. Monitoring and Evaluation should be adjusted towards defining targets with communities and towards utilizing indicators that measure responsiveness to communities .
3. Trust needs to be built so that the communities and their representatives largely define those in need and agree on criteria to both deliver and monitor poverty -focussed interventions .
4. The development of effective rural finance calls for careful design accommodating constraints of both borrower

and lender (e.g. decentralized level of credit delivery, collateral, religious views about interest ) and calls for a phased approach towards a fully commercial operation .

5. A separate PCU may have a role to play initially where there is limited local government capacity but the phase -out transition must be explicitly planned .

**8. Assessment Recommended?**  Yes  No

**Why?** Four main reasons: 1. This project may have a number of positive lessons for work elsewhere in the Bank related to community approaches and for scaling up . 2. It would be a useful case for OED's CDD Study . 3. There may be some questions about economics . The ERR at 13% is somewhat marginal. Total project costs per household and operating costs per household appear high compared to many other projects . Yet technology adoption rates are quite high . 4. The use of a separate PCU seems to have helped, at least initially, although this is usually found to leave sustainability issues - there may also be lessons in this area .

**9. Comments on Quality of ICR:**

A good ICR with well drawn lessons . In some areas it is rather thin on evidence of outcomes as opposed to inputs . But this is probably partly due to the weak and delayed progress on M&E .