Northwest Tunisia: Rural Development and Natural Resource Conservation

For the people of hilly northwest Tunisia, land for farming has become increasingly scarce but animal husbandry and cropping are still the main source of income. Farmers cultivate narrow, vertical plots on steep slopes, which causes erosion and soil degradation. The erosion is hastening the siltation of the Sidi Salem reservoir and jeopardizing irrigation investments on the Medjerda River.

In 1981, the Tunisian government began to address these problems through the Bank-funded Northwest Rural Development Project (NWRDP), recently audited by OED. The project supported the first part of a 15-year program administered by the newly-created Sylvopastoral Development Authority for the Northwest (ODESYPANO). The project successfully provided badly needed infrastructure, including water supplies and schools, and raised consumption levels. But it did not persuade farmers to change their cropping and livestock practices. Its expectations for changes in these practices would have been recognized as unrealistic sooner if basic ecological conditions in the project's various micro-regions had been better understood.

Goals and design

The project took six and a half years to come to the Bank's Board for approval. Interested parties agreed on the need to redress the region's problems but differed on the strategy. Tunisia's Planning Ministry envisaged a group of punctual interventions. The Bank's programs department envisaged an integrated, poverty-oriented, area-based project, and this eventually formed the basis of the project's design. The Agriculture Ministry and the Bank's agriculture division doubted that enough was known to justify investment in an area with such limited potential, but NWRDP passed through the Bank's final reviews with important technical matters left unresolved.

As approved, NWRDP's goals were to:

- Eliminate the causes (by altering current livestock and farming practices) and alleviate the effects (impoverished soils and downstream siltation) of resource degradation in the project area, raising farmers' incomes in the process.
- Provide public services, including roads, water supply, and schools.

NWRDP aimed to persuade rural communities to intensify their livestock raising by improving pastures on the middle slopes. This would free the upper, steeper slopes for reforestation. Cropping was to be concentrated on the gentler slopes. Soil conservation measures were to be introduced, using as much local participation as possible. A forest belt was to be planted around the Sidi Salem reservoir.

Agricultural specialists recognized that the prescribed changes in land use would not be immediately profitable to farmers and pastoralists, but it was hoped that the improved practices recommended by the project would be diffused gradually throughout the project area.

This did not happen. With hindsight, Tunisia might have been better off had NWRDP concentrated on building rural infrastructure, remedial soil-conservation works, and action research to identify land-use system changes acceptable to farmers.

Implementation

Despite the borrower's initial resistance, ODESYPANO was created as a new, autonomous project authority. Project implementation was hampered by the decentralization of Agriculture Ministry operations and by a hiring freeze that caught ODESYPANO short of field personnel.

Organizing rural communities and eliciting their participation was more difficult than expected. The loan closing was extended by three years. Overall,
Summary of Lessons

- It is easier to provide rural public works and services than to convince farmers and pastoralists to change their practices.
- Without a sound technical package, there can be no sustainable improvement in living standards.
- For forecasting the adoption of new farming practices, there is no substitute for a thorough understanding of ecological and agronomic conditions.
- For farmers to feel part of an enterprise, participation has to involve more than getting paid for prescribed manual work.
- Project outcome ratings are inevitably influenced by the original expectations set for the venture: the Bank’s unsatisfactory rating (in relation to the demanding farming system changes that had been visualized) contrasts with the borrower’s satisfactory rating (in relation to more modest expectations).

Construction of stone terraces along contours met targets, but all vegetative contour bunds soon disappeared. Stone contour terraces were accepted on fallow land because the collection of stones made the land fit to cultivate. Pasture improvement met only one-fourth of the target.

- Where ODESYPANO tried to change farm and stock-keeping systems, results ranged from negligible to modest. Farmers were not willing to stop cultivating steeper slopes, and production did not intensify on gentler slopes. Since little improved grazing land has stayed that way, project efforts to increase livestock numbers may have been counterproductive. Milk and livestock production continued to increase in Sejnane and expanded modestly into adjacent project areas; no genetic improvement was achieved in sheep.

Though optimists believe that the program is on track, the improved practices being promoted are unlikely to be widely adopted because they are not adapted to the ecology of the various areas being served. Finding conservation cropping systems that are acceptable to area farmers will depend on sociologically-sensitive experimentation.

ODESYPANO’s soil and water conservation engineers commented on the involvement of local people in the project: “But of course they participated,” said the engineers; “we paid them, and they carried the stones and planted the seedlings.” Many of ODESYPANO’s engineers believe that, with patience, the top-down approach to soil and water conservation, regional planning, and civil engineering will work. But the government, the Bank, and other financiers now agree on the need to recast ODESYPANO to elicit beneficiaries’ participation in changes that affect them. Seminars and government studies on partnership and participation reveal a growing drive for ODESYPANO to adapt. Whatever happens, it is unlikely that future public efforts will be as directive and top-down as in the past.

The Bank’s Country Department notes: State forests are being brought under management plans which are closing them to access in order to undertake plantation and natural regeneration. Pilot improved pastures are being established on state land in such cases for use by herders and as compensation for traditional forest use which is increasingly unavailable. Local participation is actively promoted in the establishment and use of these improved pastures, which is proving successful.

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