

Tunisia: Rural Development Jendouba Forests

Ex-post evaluation report

| | | | | |
|---|---|-------------|--|-------------|
| OECD sector 1) Rural Development Forest Areas 2) Jendouba Forestry Project | Agricultural land resources -31130 Forest development - 31220 | | | |
| 1) Rural Development Forest Areas 2) Jendouba Forestry Project | 1) 1983 65 249 (Investment / Phase 1) 1983 70 199 (Complementary measure) 1995 66 951 (Investment / Phase 2) 2) 1990 66 242 (Investment) | | | |
| Project-executing agency | Office du Developpement Sylvo-Pastoral du Nord-Ouest (ODESYANO) | | | |
| Consultant | 1) INSTRUPA (Phase 1) | | | |
| Year of ex post evaluation | 2006 | | | |
| | Project appraisal (planned) | | Ex post evaluation (actual) | |
| | 1. ("PCF") | 2. ("PDZF") | 1. („PCF“) | 2. („PDZF“) |
| Start of implementation | 1983 | 1991 | 1983 | 1991 |
| Period of implementation | 20 years | 7.5 years | 22 years | 20 years |
| Total cost (in EUR million) | 34.2 | 10.2 | 25.3 | 11.6 |
| Counterpart contribution | 17.5 | 4.1 | 9.7 | 5.7 |
| Financing, of which Financial Cooperation (FC) funds | 16.7 | 6.1 | 15.6 | 5.9 |
| Other institutions involved | GTZ (cooperative project since 1993) | | | |
| Performance rating: | 2 | | | |
| • Significance / relevance | 2 | | | |
| • Effectiveness | 3 | | | |
| • Efficiency | 2 | | | |

Brief description, overall objective and project objectives with indicators

The objective of the project was to stabilise the water catchment areas in the mountainous regions in the north-west of the country that are of national importance for Tunisia. The German assistance comprised both FC and TC measures and was officially implemented since 1992 as a cooperative project (CP) in selected micro zones in the Governorate of Jendouba. The project comprised measures on public lands (reafforestation, improvement of pastures, erosion control and selected measures in the "El Feidja" national park) and measures on private and community land (integrated erosion control, improvement of pastures). These measures were accompanied by the extension of regionally important roadways, measures to support agriculture (especially in the 1980s), smaller measures to improve the economic and social infrastructure as well as measures to improve the equipment and infrastructure of the project-executing agency.

The overall objective of the project was to make a contribution to sustainable resource protection, in particular in the water catchment areas of supra-regional importance, and to improving the living and production conditions in the programme area. The common objective of the FC and TC projects was to achieve a rational, sustainable and ecologically acceptable management of natural resources in the programme area. In addition, the individual projects implemented in the context of the "PCF" rural development project (BMZ project IDs 83 65 and 95 66 951) were expressly targeted at the proper use of the rural infrastructure by the local population.

Programme design / major deviations from the original programme planning and their main causes

The original design of the programme was basically in line with the requirements, but did not sufficiently include the interests of the population. The planning of measures for PCF 1 mainly pursued a sovereign-technocratic approach according to which the population was not actively involved in the planning and organisation. Accordingly, targets had to be redefined, investments had to be corrected and changed and the work on the target group to be intensified because previous implementation and maintenance quality had at times been unsatisfactory. As a consequence to a "conceptual learning process", a participatory implementation concept ("API") was introduced as from 1989, which was implemented by the project-executing agency in the following years with high dedication and much better results.

Changes in the estimate of quantities had to be made especially in the following areas:

- Erosion control, agroforestry systems and improvement of pastures on private and community lands: The achievement of these measures fell short of the estimated targets by 10% to 20 %. This was caused by the application of the "API" concept, which took the priorities of the population and its implementation capacity much more into account. In addition, subsequent improvement measures had to be implemented, for example with regard to erosion control, which were required because a number of structures established at the beginning of the project were no longer functioning due to lack of maintenance (see final follow-up report).
- Reafforestation and erosion control on public lands (PDZE): The originally defined area targets for reafforestation measures were increased from around 700 ha to over 2,000 ha and the erosion control areas were more than doubled after it had become apparent that the project-executing agency was much more efficient in the implementation of the measures than had been expected in the beginning.
- The achievement of infrastructure measures (schools, health stations, water supply) remained between 25% and 50% below the targets. This was mainly the result of the reconciliation of the demand calculated and the activities by other protagonists: Besides ODESYANO, several other Tunisian authorities (Ministries of Construction/Education/Health, local administrative bodies, the state-administered "Solidarity Fund") and other donor organisations supported social and economic infrastructure measures in the programme region.

1 Key results of the impact analysis and performance rating

The overall objective of the project was to make a contribution to sustainable resource protection, in particular in the water catchment areas of supra-regional importance, and to improving the living and production conditions in the programme area. These objectives were achieved to the planned extent.

- A sustainable contribution to *resource protection* was made by the forest and reafforestation areas as well as protective plantings and mechanical protection barriers on public ground (especially along the reservoirs), and also by the tree cultures planted on private land, which developed very well ("agroforestry systems"): The erosion damage

which had been discovered in 1988 in an area of approx. 2,000 ha (which makes up more than two-thirds of the ultimate intervention zones) was no longer detected when a new remote inspection was made in 2005. However, the extent to which additional acute erosion damage was avoided could not be exactly determined with the methods used. The impacts of protection and pasture improvement measures on private and communal lands are clearly visible, especially in comparison with areas where no measures were implemented. However, there are limitations with regard to long-term maintenance, which from the viewpoint of the peasants is considered as not attractive or as an additional work load.

- The project had a positive impact on the living conditions of the population: According to a survey conducted in 2003 households earn more than 50% of their incomes in agriculture (as compared with about 30% in the 1980s), with a distinct increase in the overall income level. Factors that contributed to this development were in particular the introduction and spread of more intensive livestock farming and agroforestry (olives and fruit trees), and, due to the road construction measures, the improved linking of previously largely subsistence-based villages to the road network (and to markets).

In an overall assessment we assume that the programme and its measures helped to significantly improve the living conditions of at least 20,000 people in the project region. At the start of the project at least 75% of these 20,000 people belonged to poor sections of the population.

The measures to improve the water supply and to build schools and rural roads had clearly positive effects on the situation of women in the sense that their work has been facilitated and in terms of gender equality (school attendance of girls). Due to the better access to the project region – in combination with the increased income level in the region – it was possible to switch almost entirely from fuel wood to butane gas. This in turn has reduced the workload of women because they need to carry less fuel wood.

The environmental impacts of the project are assessed very positively because erosion was reduced overall as a result of the reforestation and erosion control measures and the extensive olive plantations that were established.

Overall, we assess the impacts of the project as follows:

- The project objectives were met. It has to be added, however, that support granted for agricultural activities (especially in phase 1 of PCF) was limited mainly to cattle breeding and largely neglected sheep and goat husbandry. For this reason, and due to the fact that maintenance carried out in the context of erosion control and pasture improvement measures on private and communal lands was not satisfactory, we rate the effectiveness of the project as sufficient (rating 3).
- Due to its concept the project made a significant contribution to the orderly management of natural resources and rural development in the programme region, and the expected microeconomic, macroeconomic and ecological impacts were largely achieved. Further structure-building effects are evident insofar as the participatory approach pursued with in the programme helped to spread the use of such concepts also beyond the local and sectoral context of the programme. Therefore, we consider the significance and relevance of the project to be satisfactory (rating 2).
- Overall, the unit costs of the investment measures financed from FC funds were adequate, however with certain limitations in the area of erosion control, where additional improvement measures were required. The macro and microeconomic impacts of the project are positive. The project's efficiency can be classified as satisfactory overall (rating 2).

Taking the above mentioned key development criteria into account, we judge the developmental efficacy of the programme to be satisfactory (overall rating: 2).

General Conclusions

- Resource protection measures on private and communal lands usually only have a long-term impact if the people that cultivate the land can draw a concrete benefit, i.e. they get paid for "external environmental services" they have rendered. Advisory services and sensitisation campaigns are a necessary but not sufficient condition for this. If commercial enterprises benefit from protection measures, they should be included at an early stage in designing the concepts for such "broad interest" programmes so as to ensure that the operators are given sufficient incentive structures from the very beginning.
- Given the methodological difficulties with retrospective impact analyses on the vegetation cover it is recommended for projects that focus on land use (and the related changes aimed at) to make a corresponding baseline study at the very outset of the project in order to be able to accurately measure changes produced in the course of the project implementation.

Legend

| | |
|--|---|
| Developmentally successful: Ratings 1 to 3 | |
| Rating 1 | Very high or high degree of developmental effectiveness |
| Rating 2 | Satisfactory developmental effectiveness |
| Rating 3 | Overall sufficient degree of developmental effectiveness |
| Developmental failures: Ratings 4 to 6 | |
| Rating 4 | Overall slightly insufficient degree of developmental effectiveness |
| Rating 5 | Clearly insufficient degree of developmental effectiveness |
| Rating 6 | The programme is a total failure |

Criteria for the Evaluation of Programme Success

The evaluation of the "developmental effectiveness" of a programme and its classification during the ex-post evaluation into one of the various levels of success described in more detail below concentrate on the following fundamental questions:

- Are the **programme objectives** reached to a sufficient degree (aspect of programme **effectiveness**)?
- Does the programme generate sufficient **significant developmental effects** (programme **relevance** and **significance** measured by the achievement of the overall development-policy objective defined beforehand and its effects in political, institutional, socio-economic and socio-cultural as well as ecological terms)?
- Are the **funds/expenses** that were and are being employed/incurred to reach the objectives **appropriate** and how can the programme's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the programme conception)?
- To the extent that undesired (**side**) **effects** occur, are these tolerable?

We do not treat **sustainability**, a key aspect to consider for programme evaluation, as a separate category of evaluation but instead as a cross-cutting element of all four fundamental questions on programme success. A programme is sustainable if the programme-executing agency and/or the target group are able to continue to use the programme facilities that have been built for a period of time that is, overall, adequate in economic terms, or to carry on with the programme activities on their own and generate positive results after the financial, organisational and/or technical support has come to an end.