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# **Mexico**

# Community-based Forestry Development Project in Southern States (DECOFOS)

# **About the project**

**Objective**. The Community-based Forestry Development Project in Southern States (DECOFOS) was designed to address and overcome problems linked to deforestation and forest degradation in rural communities of marginalized forest areas in Campeche, Chiapas and Oaxaca. The project was carried out through the restoration and reforestation of degraded areas together with the provision of technical and financial support for the development of microenterprises and sustainable production initiatives.

**Financing**. The project was designed and implemented with contributions from the Government of Mexico, IFAD, the Global Environment Facility (GEF) and project beneficiaries for a total cost of US\$18.5 million.

**Timing**. Project activities started in March 2011 and were completed in September 2016.



# The project's theory of change

The DECOFOS project was designed based on an analysis of the problems affecting Mexico's forestry sector, particularly in the states of Campeche, Chiapas and Oaxaca. These problems are driven mainly by deforestation and lack of resources, investments and technical capacity. The project had two main components. The first component aimed to improve the organizational, planning and managerial capacities of local communities/ejidos through the delivery of training courses and workshops related to (i) climate change effects and the adoption of good agricultural/environmental practices to adapt and mitigate these effects; and (ii) the formulation of local development plans, participatory environmental assessments and business plans. Through the second component, the project supported the start-up of micro entrepreneurial projects and small businesses related to sustainable production of timber and non-timber forest products and eco-tourism, and promoted the adoption of agroforestry and good environmental practices for climate change mitigation and adaptation.

DECOFOS was expected to have impacts at the household level by improving their livelihoods through increased income and greater **diversification of economic activities** related to the sustainable production of timber and non-timber forest products as well as through strengthened social capital. At the environmental level, the project aimed to contribute to climate change mitigation and adaptation through the adoption of **agroforestry and good environmental practices** as well as through the conservation and valorisation of forest natural resources.

# **Project outreach and outputs**

Determining the overall impact of the project requires first understanding whom the project reached and what outputs it generated.

Beneficiaries reached: 180,000

Organizations supported: 431

Ejidos (44 per cent), participatory groups of common interest (36 per cent), communities (12 per cent), associations (8 per cent)

People trained in local management, business management, natural resources management, climate change, competitiveness, rural businesses and markets: **9,441** (22 per cent women)

Seedlings produced in established community nurseries that contribute to the removal of greenhouse gases (GHGs): **1 million** 

Rural forest microenterprises legally constituted and registered: 58

Rural microenterprise projects executed: 126

# **Project impact**

As part of IFAD's Development Effectiveness Framework, DECOFOS has been subject to a rigorous ex post impact assessment.

## **Data and methods**

The impact assessment of DECOFOS made use of a mixed-methods approach that combines non-experimental statistical methods and qualitative analysis to compare a sample of project beneficiaries with non- beneficiaries. The main data collection instruments for this impact assessment were household and community questionnaires. The data collection for both surveys was completed between December 2017 and January 2018, including information referring to the 12 months preceding the survey implementation.

The project reflected the topographical, agroecological and socio-economic differences among the three southern states involved. It put more emphasis on reforestation and agroforestry interventions in Campeche (34 per cent), on off-farm and other income opportunities in Chiapas (24 per cent), and on the first component and various other types of interventions in Oaxaca (21 per cent).

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# **Key impact estimates**



+37%
Households sustainably exploiting natural resources in Campeche



+US\$52 Income from sales of natural resources per year in Campeche<sup>1</sup>



+0.3
Number of parcels
operated by the
household in Campeche



**+22%**Total **income** per year



+15% Total assets



The impacts of the DECOFOS project on the population of interest were carefully analysed using impact indicators related to environmental benefits and resilience, economic mobility, food insecurity, dietary diversity, social capital and access to markets. The analysis also looks at different types of income sources, including those related to the use of natural resources and forestry, business activities and crop income.

The DECOFOS project significantly increased the total asset wealth of beneficiary households by **15 per cent** as well as the productive asset ownership by **41 per cent**, which resulted in a **22 per cent** increase in total income per year among beneficiaries.

Overall, the results suggest positive environmental impacts. This is particularly true for the state of Campeche, where the focus of the project was precisely on strengthening the sustainable use of natural resources and on increasing forestry and agroforestry. Indeed, in Campeche the use of natural resources from common land increased by a **37 per cent** for beneficiaries, with a rise of about **US\$52 per year**¹ of income from sales of natural resources compared with non-beneficiary households. Furthermore, the normalized difference vegetation index (NDVI), a remote sensing indicator assessing the live green vegetation of the targeted areas, showed a significant increase in project areas compared with non-project areas, indicating that the reforestation and agroforestry activities were successful in increasing green mass and thus mitigating CO₂ emissions.

Impacts were also found on off-farm activities. In Chiapas, where the project intervention concentrated on supporting small business enterprises, total income per year increased by 39 per cent among beneficiary households, which translates into a higher average income from business activities of about US\$165 per year<sup>2</sup> compared to non-beneficiary households.

Reported impacts on social capital were not very strong except for the greater presence of women's groups and of at least one association in participant villages.

Finally, results tend to be particularly strong where interventions have been more focussed and designed based on local needs and characteristics of natural and capital endowments, especially in Chiapas and Campeche. In Oaxaca, where project components were equally distributed and the intervention was smaller in terms of both financing and number of beneficiaries, results are weaker. This suggests that a well-structured intervention that follows a strong logic with interlinked components is more effective in transforming rural economies and achieving impacts than highly diversified types of interventions.

<sup>&</sup>lt;sup>1</sup> Relative to an average of US\$6 for the comparison group.

<sup>&</sup>lt;sup>2</sup> Relative to an average of US\$22 for the comparison group.

### **About the brief**

This brief draws upon the findings of an IFAD-funded impact assessment of DECOFOS in Mexico, which was prepared by Romina Cavatassi, Federica Alfani, Adriana Paoloantonio, and Paola Mallia.

The impact assessment report on DECOFOS is available upon request.

### Lessons learned

- The project in its practical implementation tried to represent and reflect
  the topographical, agroecological and socio-economic differences
  among the three southern states involved (Campeche, Chiapas and
  Oaxaca). Impact assessment results are perfectly aligned with the different
  strengths and emphases the project put on the different components in the
  different states.
- The project shows successful results with regard to environmental benefits. Project beneficiaries seem to be more resilient to shocks, particularly to climatic shocks, and also less affected by drought and this kind of shocks in terms of negative impacts.
- Incomes from off-farm activities increased significantly, especially in the state of Chiapas. On a more general level, total assets, particularly productive assets, also increased, reflecting investments in business enterprises and improvements in the domain of economic mobility.
- In terms of social capital, DECOFOS reported limited impacts which were found only with respect to a greater participation of women in groups and a higher presence of associations in participant villages.
- Overall, the project showed interesting and good results, which are stronger for the activities that were more focussed and more tailored to development needs and characteristics of the states participating in the project.

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March 2019

