



India

41 Afforestation and Pasture Development Project along Indira Gandhi Canal Area

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This project's objectives were designed to improve productivity by increasing production of firewood and fodder and to conserve the infrastructure and the land through planting trees to protect canals, roadways, and farmland, etc., in the desert region of western Rajasthan State, and thereby contribute to the alleviation of poverty in the region.

Loan Amount/Disbursed Amount: 7,869 million yen/4,711 million yen

Loan Agreement: January 1991

Terms and Conditions: Interest rate, 2.5%; Repayment period, 30 years (grace period, 10 years); General untied

Final Disbursement Date: February 2002

External Evaluator: Ayako Namura (IC Net Limited)

Field Survey: July 2003



Evaluation Result

In this project, afforestation and pasture development and other activities, were carried out for the protection of waterways, roadways, farmland, and etc., almost as planned. The project period was extended considerably beyond the planned period due to the delay in water supply availability because construction of the canals and waterways was behind schedule and due to the delay in the afforestation project itself because of unexpected drought, etc. The project cost was less than planned because the devaluation of local currency exceeded the rate of inflation. Through this project, 66,853 ha were afforested, which was more acreage than originally planned (cf. this is 1.5 times the area of Yokohama, which is 437 km²). According to the executing agency, the Forest Department of the Government of Rajasthan (population approx. 56 million), it is estimated that the project created employment of 5.18 million man-days (e.g. a man -day is equivalent to the time work by one worker for one day). Residents are no longer obliged to move in search of fodder thanks to the development of pasture that provides fodder, and in addition, residents can economize on firewood since they can use small branches from the afforested areas as firewood. Moreover, not only are the villages and infrastructure protected from desertification, but the water supply has also increased because the afforested areas protect the irrigation waterways, making it

possible to raise two crops per year. In these ways, this project has contributed to improvements in the lives of local residents and the alleviation of poverty. Under the Joint Forest Management programme where the Rajasthan's Forest Department and the local residents cooperate together, Village Forest Protection and Management Committees (VFPMC) maintain and manage the afforested areas. There are no problems in the technical capacity or the operation and maintenance system of the executing agency or the above-mentioned committees, and their financial condition is favorable.

Third-Party Evaluator's Opinion

Poverty alleviation and environmental improvement are aspects that are stressed by the United Nation's Millennium Development Goals. The project area is located in the desert which has harsh natural conditions. This afforestation project has increased the availability of fuel wood; this has benefited women immensely since they can save time and money. The project also increased the supply of animal feed; this allowed the local people to settle permanently.

Third-Party Evaluator: Mr. Subrata Mandal

Obtained a doctorate in economics from Jawaharlal Nehru University. Presently holds the post of Senior Economist, National Institute of Public Finance and Poplity. Specializes in economics, environmental policy, energy policy, etc.

What is the Joint Forest Management (JFM) programme?

JFM is a programme where the state government agency (the Forest Department, in the case of India) and the local residents cooperate to carry out nurturing and management of the forest. Rajasthan State put a law for this into effect in 1999. Under this programme, the State's Forest Department contracts with an association formed by residents, and they establish a VFPMC (Village Forest Protection and Management Committee). In JFM, the VFPMC participates from the planning stage and consults with the Forest Department concerning division of responsibilities and distribution of firewood, etc.

Sand dune stabilization trees in Jaisalmer



The Jaisalmer sand dune stabilization contributes to the conservation of infrastructure and land, as do the sand dune stabilization in Bikaner, another region where the afforestation project was carried out.