## Third Party Evaluator's Opinion on Indira Gandhi Canal Region Afforestation Project

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## Relevance

The objective of the project is to alleviate poverty by improving the environment through afforestation programs implemented in the Indira Gandhi Canal Region of Rajasthan. The objectives are consistent with the Indian Governments' policy of poverty alleviation followed during the successive Five-Year Plans in the last fifty years and the State Government's policy to combat desertification. Poverty alleviation and environmental improvement are aspects that are also stressed by the recently formulated United Nations' Millennium Development Goals

The project area is located in Bikaner and Jaiselmer districts of the Thar Desert. The area has scant vegetation and there has been a huge deficit of fuelwood and animal feed. Fuelwood is used for cooking and it is collected by women members of the household. Scarcity of fuelwood availability put pressure on women who have to spend longer time for collection and consequently, have less time to perform other household activities. Any forestry program which increases supply of fuelwood would help the women of the region.

Livestock rearing is one of the main occupations of the people of the region and the dependence has grown over the years. Livestock population has grown at a very high rate since seventies, demand for animal feed too has increased with the increase in livestock population. The forest is the main source of animal feed, an increase in forest area or density would help to ease the fodder constrain for livestock development in this region.

The formation of sand dunes is a typical feature of arid regions of the Thar Desert. High velocity of winds often shifts these mounds of sand, sometimes even covering a whole village. Tree cover has the potential to hold the sand on the ground and prevent the shifting of dunes thus, giving protection to the villages. Besides, the tree cover helps in retention of soil moisture and increases the productivity of land. The tree cover gives protection to the canal from the shifting sand dunes and also minimizes the evapo-transpiration rate of the canal water, thus preserving it for a longer time

Hence, it can be concluded that the project is extremely relevant for the region and consistent with the national priorities and local needs.

## **Impact**

The impact of the project has to be understood along with other complimentary components of the Indira Gandhi Nahar Project. Tree canopy along the irrigation waterways has allowed water to be carried to longer distances and minimized loss of water due to seepage and erosion control effect. Thus the tree canopy has increased the productivity of water by not only providing more water but also bringing more area under irrigated cultivation than otherwise possible. The afforestation program has increased productivity of agricultural crops like wheat, mustard and other vegetables grown during the winter season due to increase in soil moisture during the relatively drier period.

The project increased the availability of fuelwood, this has benefited women immensely since they can save time and money. Further, the project also increased the supply of animal feed; this allowed the local people to settle permanently rather than move around in search of it for rearing livestock which is the main occupation of the region. The project also provided a windbreak and a more acceptable and enjoyable ambience for living.

The afforestation project has contributed positively towards increased income generation and employment. The increase in agricultural activity has created more employment opportunities.

Forest plantation and collection of forest products have also engaged local residents and allowed them to supplement their income.