

Effective natural resource management for sustainable agriculture



Lack of technical know-how and water scarcity leads to low productivity of cotton, a main cash crop of the region. The project enhances water-use efficiency through the promotion of drip irrigation systems in the drought prone areas of the Aurangabad and Jalna district of Maharashtra. Training on optimum cultivation practices and exposure visits help farmers gauge the technical knowledge on increasing cotton productivity.

PROJECT RATIONALE

Farmers in drought prone districts of Marathwada regularly witness water scarcity. The unpredictable rainfall is one of the primary factors adversely affecting agriculture in the region. The Indo-German Watershed Development Programme spelled relief for the villagers as it helped them break their dependence on tankers. However, the challenge is to address the lack of skills among the villagers to efficiently manage the water made available through the watershed development or micro irrigation systems. The flood irrigation methods have taken a toll on the soil health and productivity of cotton, the main Kharif crop of the region. Creation of awareness on water saving technology is crucial. Promoting drip irrigation helps in saving water and increasing cotton productivity. This also enhances soil health. Subsidies for drip irrigation are widely available from the State-Government. However, support for initial investment through medium term finance remains a distant dream for most farmers. The project's financial-cum-technical assistance has proved to be beneficial for many small and marginal farmers.

PROJECT FACTS

UPNRM Support

Loan and grant component with time period

Term loan assistance of USD 0.25 Million (INR 15.00 Million)

Grant assistance of USD 0.04 Million (INR 2.47 Million)

No. of Participants

Around 600 farmers

Project Duration

3 Years (2013-2016)

Project Approach

SPMESM has adopted some unique approaches:

- The project collaborates with the Plast India Foundation, an apex plastic manufacturing body, to select and negotiate with suitable drip irrigation suppliers. Bulk orders have helped ensure the quality of drip sets at competitive rates and facilitated the provision of post installation services.
- Dealers of the selected drip suppliers have borne the back-end subsidy cost till the time it accrues to the farmers' accounts. Thus, farmers could be given the loan amount net of subsidy, lessening their loan burden, and increasing the outreach.
- Beneficiaries have been selected through a village based screening committee, consisting of self help group (SHG) members, farmer clubs and other progressive farmers.
- With the help of a private donor, SPMESM was able to set up a risk fund that covers any unforeseen default.
- SPMESM contributes Rs. 2,50,000 per annum towards the project's implementation and monitoring.
- For effective drought proofing, SPMESM has been implementing additional watershed development activities in 4 project villages.

Impact of the Project

A total of 600 farmers are benefiting from the project interventions.

Impacts include:

- Better understanding on the usage of drip irrigation during drought conditions thus increasing the farmers' resilience and coping mechanisms towards meeting shortfalls or in case of erratic rainfall.
- The productivity of drip irrigated cotton has almost doubled (average 14-16 qn/acre) as against 7-8 qn in flood irrigated plots, resulting in a nearly 100% income increase from cotton cultivation.
- Drip irrigated cotton crops could survive the drought of 2012.
- Drip irrigation helped reduce the incidences of reddening of leaves, a major risk of cotton yield, by 50%
- Agriculture extension activities like frontline demonstrations, workshops, and exposure visits have helped farmers adopt better cotton practices.



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