# Intensive vegetable cultivation

A DRIP IRRIGATION SYSTEM FOR 50 FARMERS





This pilot project by Indian Rural Association (IRA) illustrates that drawing benefits from existing water resources can enable farmers in becoming self-sufficient through income generating activities. Fifty farmers are provided assistance for vegetable cultivation in 50 acres of community land developed under the watershed development project. Drip irrigation ensures sustainable use of water. The project also provides support for development and management of a nursery, storage infrastructure, vermi-compost units, marketing and transportation as well as training and capacity building activities.

#### **PROJECT RATIONALE**

Deoghar district is a good market for vegetables. At present, the demand is being met through nearby markets in Kolkata and Patna. The introduction of vegetable cultivation can improve self-reliance of the district for vegetables.

Project villages like Jitkunda, Goslidi and Tatkio are predominantly inhabited by resource poor households. Scarce water resources had rendered vegetable cultivation impractical in the area. The watershed development project supported farmers through various watershed development activities and through the establishment of water harvesting structures. This helped them enhance water availability for agriculture and drinking purposes.

#### **PROJECT FACTS**

UPNRM Support	Term Loan of Rs. 7,121,000 Grant of Rs. 673,000 Organizing trainings and exposure visits; hiring of technical expert; Management Information System (MIS); and establishing a village knowledge centre.
No. of Participants/ Beneficiaries	50 farmers
Project Duration	2013 - 2016

### **Project Approach**

The approach for the project included:

The project motivated 50 farmers to take up vegetable cultivation with drip irrigation systems and marketing support. It helps increasing the farmers' incomes by engaging them in commercially viable farm related activity.

- 1. Introduction of intensive vegetable cultivation through drip irrigation technology.
- Selection of 50 beneficiaries with preference given to those in clusters and in proximity to the water resources.
- 3. Formation of Joint Liability Groups (JLGs) / Activity Based Groups (ABGs) of vegetable growers responsible for the entire credit operations.
- 4. IRA, the implementing agency, assumes responsibility of coordinating all activities.
- 5. Support to the individual beneficiaries for one acre of land each.
- 6. The drip system provider assumes responsibility for the installation and maintenance of the systems.
- 7. Setting up of a common pump house, sand filtration unit, irrigation system, etc. on two of the four waterstructures in the project area.
- 8. Establishment of one net house for nursery and hardening of seedlings, enough to supply seedlings to 50 farmers all year around.
- 9. Selection of vegetable crops suitable for the season, area, water availability and demand.

- 10. Provision of package of support to the farmers (i.e. farm land preparation to marketing of produce).
- 11. The loan amount per farmer is Rs. 142,000, which includes support towards installation of the drip, input cost for production of vegetables for one acre per season, storage, marketing arrangement, etc. The entire loan is provided in one instalment for one crop season only. For subsequent crop seasons, the surplus (profit) from the earlier crop has to beutilized.
- 12. Three vegetable crops in a year are introduced (one each in a season).
- 13. An information and marketing centre is developed in the project area. This centre provides internet facilities that help in identifying current rates of vegetables in the adjacent market areas, i.e. Deoghar, Dhanbad, Asansol, etc.
- 14. IRA purchases the entire produce at pre-decided rates and manages the sales in local and nearby markets. The producer group will gradually assume the entire responsibility.

## Impact of the Project

The project is in its second year of operation. Some of the most visible impacts of the project so far are:

- Formation of 10 JLGs/ABGs.
- Fifty farmers have been capacited through a training on vegetable cultivation.
- Development of 50 acres of land for vegetable cultivation, introducing three vegetable crops per year.
- Establishment of a net house as nursery and for hardening of the seedling.
- Establishment of a common pump house, a sand filtration unit and an irrigation system.
- Establishment of an information and marketing system equipped with internet facilities.





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