

Sustainable Livelihood Development through Pond Based Integrated Fish Farming in Kendrapada, Odisha



The project promotes adoption of traditional pond based livelihood system in Kendrapada, Odisha. Scientific fish farming is the mainstay of the system with integration of other livelihood activities such as vegetable cultivation, dairy, poultry, duckery, etc. The system generates livelihoods for local communities by sustainable utilization of available natural resources. Gram-Utthan, the NGO implementing the project, supported 132 women Self Help Group (SHG) members having unutilized ponds in adoption of the system by providing them credit and capacity building support under UPNRM.

PROJECT RATIONALE

Kendrapada district is one of the main vegetable, duckery/poultry and fish producing and consuming region in Odisha state. It is located on the eastern part of coastal Odisha having a coast line of 60 km. The district comprises of 5,000 unproductive ponds and nearly 20,000 people practise fishing and related activities. The fishery sector contributes about 2.5% to the net domestic product of the district with about 80% of the population consuming fish. Integrated fish farming has the potential for enhancing aquaculture productivity through enrichment of the heterotrophic or detritus food chain. The potential of integrated fish farming through organic recycling is very high.

PROJECT FACTS

UPNRM Support

Term Loan of USD 0.14 Million
(INR 8.1 Million)
Grant of USD 0.02 Million
(INR 1.03 Million)

No. of Participants/
Beneficiaries

132 farmers

Project Duration

2011 - 2014

Project Approach

The project follows a pond-based integrated approach of fishery-duckery-vegetable growing in Rajkanika, Aul and Pattamundai blocks of Kendrapara district. The main project activities include:

- Commercial fish farming: Introduction of scientific fish farming through renovation of existing ponds.
- Horticulture/vegetable cultivation around the pond for own consumption and generation of supplementary income. Pond silt serves as fertilizer, while the crops are used by live stock, poultry or as fish feed, ensuring a recycling of the ecosystem. The dyke of ponds is used for growing fruit bearing trees and for vegetable fields.
- Dairy provides additional income to the farmers. Cow dung is used as manure for plankton growth in the ponds.
- Duckery/poultry farming provides another source of income.
- Duck droppings are good organic fertilizers for fish farming.
- Technical support is provided by fishery, dairy and duckery experts as well as barefoot workers.
- Trainings on fish, dairy, duckery/poultry, horticulture/ vegetable cultivation; vaccination and medications, etc.
- Institution building through formation of farmer clusters.
- Knowledge centers provide farmers with information (similar to ITC's e-chaupal) and facilities for testing of soil and water. Farmers can avail of plankton and pH testing kit, fish/dairy feed, medicine, vitamins and minerals, hybrid/high yielding vegetable seeds, pesticides, sprayers and I.E.C. materials.

Impact of the Project

The project contributed significantly towards improvement of rural livelihoods. Some of the most visible impacts of the project so far are:

- Formation of 3 JLGs from 86 pre-existing SHGs for the project, with 50% of the beneficiaries belonging to the BPL category.
- More than 1,400 beneficiaries are given technical know-how on integrated fish farming through 47 training programmes and establishment of a knowledge centre. Moreover, two exposure visits were organized for 50 farmers.
- Development of pre-existing ponds covering an area of more than 150 acres.
- Fish productivity increased from 500-800 Kg per hectare to 3,000 kg per hectare, translating in a 400% increase in income. Subsequently, local migration reduced.



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