

Integrated project for biogas, organic farming and livelihood development through NRM



This is a first of its kind collaborative project under UPNRM. It merges support from a district cooperative bank (DCCB) and an NGO (Bhagirath Gramvikas Pratishthan). DCCB is the main channel partner responsible for the implementation of the project. The NGO - Bhagirath Gramvikas Pratishthan - entered the picture as it has a long standing association with both DCCB and NABARD. Under this model, both the agencies lend their core strengths to the successful functioning of the project in the Sindhudurg district of Maharashtra. The responsibilities include DCCB enabling financing, recovery management and administration, and Bhagirath Gramvikas Pratishthan guiding and ensuring the implementation of the project at the ground level.

PROJECT RATIONALE

The underlying objective of the project is to bring about lifestyle improvements and enhance the standard of living through NRM-based financial-cum-technical support. The project aims at helping villagers have access to smoke-free kitchens. This is done by promoting the use of biogas. On-farm biogas plants collect cow dung from adapted cattle sheds, mix it with water and channel it into fermentation pits. The resulting gas is fed directly to the farmer's household to provide energy for cooking. Use of biogas is environmental friendly as it curbs the decomposition of open cow dung producing methane, a gas that significantly contributes to global

PROJECT FACTS

UPNRM Support	Term Loan of USD 0.31 Million (INR 18.6 Million) Grant of USD 0.02 Million (INR 1.33 Million)
No. of Participants	Around 600
Project Duration	2013 - 2016

warming. The project's livelihood enhancement activities are mini dairy units and organic turmeric plantation along with backyard poultry.

Project Approach

The programme is being implemented in a unique way by involving two different agencies viz. a Bank and an NGO.

The project is a classic example of true integration of related activities and effective convergence of various programmes. Farmers working with dairy animals are supported in the installation of biogas plants, poultry farming, and organic vegetable cultivation. Biogas units produce a nutrient rich fertilizer, called 'biogas-slurry'. This is a safe and organic fertilizer that is good for crop growth and soil fertility. It is estimated that usage of slurry on land boosts crop yield by 15-20% as compared to the usage of chemical fertilizers. Slurry can be enriched by the addition of poultry excreta. A substantial saving on money is expected when a farmer switches from the use of chemical fertilizer to slurry. Additionally, this also has environmental benefits and enhances soil health.

The project successfully converges with Government schemes, mobilizing subsidy available for biogas and cattle insurance. Each biogas plant constructed under the project receives a subsidy of around Rs. 9,000 from the Government of Maharashtra and Zilla Panchayat. Furthermore, the Implementing Agency

has entered into an MoU with Carbon Advisory, a Mumbai based company. The carbon revenue will be shared with the Implementing Agency, beneficiaries and the Corporate.

Biogas plants are being integrated with one or more of the following components:

1. Construction of biogas unit (ferro cement model)
2. Organic vegetable/ turmeric/banana cultivation
3. Dairy farming units with two animals each
4. Small backyard poultry farms in which the NGO has the expertise
5. Construction of toilet blocks in the identified villages to ensure hygiene, dignity, and safety of women. The toilet blocks are linked with the biogas units

Impact of the Project

Benefit to banks:

The Implementation of UPNRM has been a rewarding experience for the Bank. The indirect benefits far outweigh the direct benefits as indicated below:

- Increased outreach and loan diversification (personal loan, housing loan, etc.)
- The Credit plus approach has increased the bank's confidence to reach out to clients who typically fall outside traditional banking.
- Increased familiarity and enhanced interface of the bank with the customers.
- Enhanced business prospects for the bank as it gets them repeat customers.

Benefits to the beneficiaries:

- Use of Biogas for cooking saves women nearly 3 to 4 hours of work load per day. Earlier women used this time to collect firewood and operate crude cookstoves. The saved time is now invested in other activities such as farming and dairy and children's education. The ease of cooking also motivated men to take on kitchen chores like preparing tea, porridge, etc.
- Enhanced crop diversification by introducing turmeric and yam cultivation in the project villages.
- The 50 rural youths, who were trained as biogas masons by Bhagirath, have increased their annual income by Rs. 1 lakh during the lean season.



National Bank for Agriculture and Rural Development

Plot No. C-24, 'G' Block, Bandra-Kurla Complex, Bandra (E), Mumbai - 400 051.

E-mail : fsdd@nabard.org • Website: www.nabard.org