## WHITE REVOLUTION IN LOHARDAGA

## **OVERVIEW:**

Majority of the village population in Lohardaga earn their subsistence from agriculture and forest. And this is not enough to provide a good source of income for their livelihood. The district administration, thus, decided to take up various livelihood activities from RSVY in the year 2004-05 viz poultry, dairy, vermin compost, piggery, hybrid vegetable cultivation etc to increase their source of income and hence, improve their standard of living.

The dairy program under the RSVY was conceived as a livelihood program for the rural tribal communities of Lohardaga, with special focus on women. Under this program each beneficiary has to buy two cross-bred cows and construct a cattle shed. All the farmers are members of a block level cooperative which provides them with all the inputs and services required for this business at their doorsteps. The forward linkage for this project is provided by the government dairy plant, SHANKH DHARA which procures the milk from the villagers at fixed rate.

### **OBJECTIVE**:

This program is aiming to help the women self help groups to start dairy as their major livelihood activity by organizing them into milk cooperatives. Apart from helping them to get the loans through SHG-Bank linkage, it is providing the necessary subsidy and techno-managerial support through training and capacity building so that the women will start making a reasonable profit from the beginning. It also aims at providing extension services through artificial insemination and fodder cultivation.

#### WHY DAIRY?

- Ø Jharkhand is a milk deficit state. Ranchi, the capital city is a growing market and most of the milk comes from outside the state. Lohardaga is very close to Ranchi and has the potential to become the production hub.
- Ø Lohardaga already has a CHILLING AND PASTEURISING PLANT named **SHANKHDHARA** with a capacity of 10,000 LPD which was procuring only1500-2000 LPD before starting the program. There was opportunity to utilise this capacity as well as provide farmers assured forward linkage facility.
- Ø Since most of the tribal communities have land it will be possible to integrate farming system with the requirement of dairy farming. There is an opportunity to grow maize, oilseed and fodder which can bring down the cost of milk production.

### **DAIRY ACTIVITY UNDER RSVY:**



Seeing the immense potential of dairy activity in the district, the district administration, under the leadership of Deputy Commissioner, Ms Aradhana Patnaik, decided to take up this activity on a mass scale. The program was taken in two phases. The first phase was initiated in the year 2004-05 with 400 SHG members. All the members belong to SC & ST category. The total cost involved is as under:

Total Subsidy from RSVY	Total Peoples	Total Bank	Total cost of the
fund	contribution	Loan	project
97.00 lakhs	17.2 lakhs	100.6 lakhs	214.8 lakhs

### The Unit Cost:

A unit consists of construction of a cow shed, induction of two cross bred cows on an interval of 4 to 6 months, cost on insurance and cost of feeding to cows for a short duration.

Subsidy from RSVY fund	Peoples contribution	Bank Loan	Unit cost
24,250	4,300	25,150	53,700

Apart from this, Rs 51,700 was invested on purchasing of cryo-cans for artificial insemination for breed up gradation.

Seeing the immense success of the program and demand from community, in the year 2005-06, another such 300 units were taken based on the same unit cost. The detail of the cost involved is as under:

Total Subsidy from RSVY	Total Peoples	Total Bank	Total cost of the
fund	contribution	Loan	project
55.78 lakhs	12.9 lakhs	75.45 lakhs	161.1 lakhs

# Increase in milk production:

The daily milk collection of the union has gone up to more than 5000 lit per day and very soon the chilling plant will be operating at its full capacity with the induction of all the cows of the RSVY program.

# Infrastructure creation:



With the increase in milk production, need for creation of infrastructure was felt. A bulk cooler of 500 lit per day capacity was installed. This bulk cooler will save the farmers of remote villages to transport the milk to the milk union chilling plant. This would save the time as well as chances of spoilage of milk. One such unit would

benefit around 100 farmers. The unit cost of such unit is as under:

Sl. No.	Particulars	Amount (Rs. in lakhs)
1	500 litres bulk cooler	2.847
2	Furniture / Laboratory equipment/ Chemical / Detergent & miscellaneous expenditure (unseen items)	0.50
3	Working Capital	0.50
	Total	3.847

# Training and Capacity building:

The new farmers were given practical hands on training (in the shed training) by NGO, PRADAN in coordination with Dairy Development Officer and Animal Husbandry Officer before initiating this activity followed by intensive on the field follow up for instilling the proper micro-practices.7 days inhouse training was provided to the beneficiaries under expert supervision. Apart from technical and managerial trainings, members were trained about the different aspects of co-operative.

## Fodder cultivation under RSVY:

For economical milk production, green fodder is the most essential part. Rearing crossbred cows completely on concentrate and dry fodder is not economical. To tackle this problem, the district administration decided to take up fodder cultivation under RSVY. Two types of fodder have been taken - Hybrid Napier, which is an annual crop and is generally cultivated round the year and Barsim, which is cultivated during the Rabi season and assured irrigation is required for this. By extending green fodder cultivation in the irrigated land from this year with 200 farmers, this will help to bring down the cost of production and increase productivity.

Unit cost for cultivation of Barseem & Hybrid Napier in 0.50 acre of land:

Fodder	RSVY Subsidy (Rs)	Contribution (Rs)	Bank Loan (Rs)	Unit Cost (Rs)
1	2	3	4	5
Barseem (200 Units)	452.37	300.00	452.37	1204.74
Hybrid Napier (200 Units)	3288.35	150.00	3288.35	6526.71
Total cost of the fodder project for 400 units	7,48,145	90,001	7,48,145	15,86,291

## Up gradation of chilling plant under RSVY:

With the increase in milk collection from a meager 1200 lpd to 5000 lpd, urgent need to upgrade the chilling plant and increasing of milk products for marketing was felt. The equipments in the chilling plants are old and their up gradation and modernization is needed. Apart from up gradation, the district administration decided to go in for diversification of milk and milk products. Milk by products like Sweet Curd, Paneer, Ghee, Cheese were decided to be taken up. These products would be supplied to nearby districts. Ranchi will be the major market, which is only 80 km away.

Up gradation is being done under RSVY and would be completed by the end of July. The Unit cost is as under:

SI.No.	Item Description		Budgetary Price
1	Establishment of Dahi Section	1 unit	695000.00
2	Establishment of Ghee Section	1 unit	400000.00
3	Establishment of Ice Cream Section	1 unit	1005000.00
4	Establishment of Khoa and Peda Making Unit	1 unit	130000.00
5	Homogenizer (Capacity: 2000 ltrs/hr)	1 No.	750000.00
6	Tri Purpose Centrifuge (Capacity: 2000 LPH)	1 No.	825000.00
7	Additional pipe (fittings SS and MS)	1 Lot	300000.00
8	Electrical cabling with cable tray, MC Control panel and other accessories	1 Lot & 1 No.	500000.00
9	3-phase stabilizer (Capacity - 40 KVA)	1 No.	150000.00
10	Milk Can (Capacity - 40 ltrs) / Milk Pouch Crate (Cap - 10 Litrs) / Insulated box (Material – Plastic)	600 / 500 / 50	1405000.00
Total			6160000.00
11	Vat, Installation Etc.		320000.00
Grand Total			6480000.00

# Marketing of milk and milk products:

Lohardaga is a small town with nearly 10,000 families. A lot of milk booths (outlets) are functional in the town. With the increase in milk production, need to strengthen the marketing system as well as new avenues for marketing was felt. The district administration decided to spread its market to nearby districts viz Gumla, Simdega, Jaspur etc. and hence, a mobile van worth Rs 5,50,000/- was purchased from RSVY.

# Testing Equipments:

With the increase in the number of collection centers, it was becoming difficult to ensure the quality of milk sold to the dairy and check adulteration. The farmers were also not satisfied with the manual system of milk testing as they found it complicated and inaccurate and frequently complained of less payment. Hence, the district administration decided to provide testing equipments at the collection

centre itself. 25 such collection centres have been provided with testing equipments worth Rs 3,25,000 in the first phase. Integrated automatic system of milk collection, testing and payment will soon be introduced in all collection centres to improve quality of milk collection, bring transparency and accountability. This will also help farmer to get better price from the dairy.

## **ACHIEVEMENT:**

- § 700 SC/ST farmers have already stated this activity.
- § Milk production has increased from 1200 litres per day to 5000 litres per day.
- § Approximately Rs15,00,000 has been distributed to farmer as profit so far.

## **OUTCOME**:

- Ø This activity has directly benefited 700 SC/ST families. Apart from increasing their annual income, it has improved their standard of living.
- Ø The farmers are using most of the cow dung as organic manure in their agricultural field, which will help to increase farm productivity. Each farmer now has 3-4 tractor load of manure in a year. Normally most of the tribal farmers use very less organic manure in their field, as they cannot afford to buy it. Results will be visible from this year it self.
- Ø The veterinary service network created under this project not only helps the dairy farmer but is providing services to the villagers in managing the existing livestock like their bullocks, goats, pigs etc.
- Ø Services like timely and proper vaccination and artificial insemination is available to all villagers near the project villages.

## Future Plans for the dairy program:

- ∨ To meet the dry fodder requirement we plan to establish fodder bank in villages, which will purchase dry fodder from surplus areas after paddy harvest and store for use during crisis.
- V Establish a small state of art diagnostic facility in the district for proper treatment.
- ∨ Recent survey revealed that farmers of some villages were not getting the expected profit. The district administration has decided to impart fresh training to such beneficiaries this year ie 2006-07. Also fodder cultivation would be taken for them to reduce the feeding cost.