

**MODERNIZATION OF CATTLE FEED PLANT BY GOA STATE CO.OPERATIVE MILK
PRODUCER'S UNION LTD., CURTI, PONDA, GOA UNDER RKVY SCHEME**

A SUCCESS STORY

1.0 OVERVIEW OF MILK PRODUCTION & MARKETING IN GOA

The Goa State Co.op. Milk Producers' Union Ltd. is the only cooperative milk union in the state of Goa which procures, processes, packs and markets liquid milk and milk products. The Goa milk union has 1.1 lpd capacity dairy plant at Ponda. The milk union procures milk from its 19,100 registered members thru' 174 Dairy Cooperative societies spread over the state. The Goa Milk Union has been marketing around 25.29 million ltrs. packed milk per annum whereas the local milk procurement from the state is only 14.63 million ltrs. and the union is required to import 11.47 million ltrs, milk every year from the adjoining states of Maharashtra and Karnataka.

The Goa Milk Union has been providing technical inputs to its producer members in the form of veterinary services, AI services, Vaccination, emergency veterinary services, fodder seeds, farmer's training and price incentives. They are also supplying balanced cattle feed.

MILK MARKETED BY GOA SANGH

Year	Milk marketed Ltrs / year	Local procurement ltrs./ year	Out side purchase ltrs./ day	Share of out side Milk, %
2006-07	29,146,141	16,775,036	13,963,387	47.91
2007-08	27,566,175	14,517,339	13,557,027	49.18
2008-09	27,624,812	13,733,929	14,372,250	52.20
2009-10	26,708,764	12,869,573	15,545,579	58.20
2010-11	25,341,531	13,372,326	12,818,218	50.58
2011-12	25,290,919	14,633,130	11,466,577	45.34

AVERAGE MILK PRODUCTION IN GOA STATE

Year	'000 Tons / Year	% over last year
2006-07	57.00	
2007-08	58.00	1.75
2008-09	59.00	1.72
2009-10	59.00	0.00
2010-11	60.00	1.69

It is observed that in the past milk production has increased marginally during the five years from 2007 -2011. However, the local procurement had slightly increased from 2010 -11 onwards. Therefore, the Goa Sangh was compelled to purchase milk from neighboring states of Maharashtra. Also, the market share of Goa Sangh has decreased by 13.05% during the last five years. This was mainly due to lower milk production in the state and overdependence on the outside suppliers. Hence, the Goa Milk union was unable to meet the market demands.

However, after the commissioning of the Modernized Cattle Feed Plant in Goa the milk procurement has raised from 13.37 million ltrs in 2010-11 to 14.63 million ltrs. during 2011-12. This increase is partly due to availability of good cattle feed to the milch animals, incentives to the milk producers etc.

The Goa Milk Union and the Govt. of Goa have been working together to enhance the milk production in the state. The State Govt. of Goa has launched the Kamdhenu Scheme to boost the milk production in the state. The Milk union and the Deptt. of Animal Husbandry of the Govt. of Goa are providing veterinary and AI services to the milk producers. However, still there was not significant increase in milk procurement. This could be attributed to the non-availability of adequate balanced cattle feed.

2.0 ENHANCING MILK PRODUCTION THRU BREEDING, FEEDING & MANAGEMENT

The animal productivity is mainly dependent on breeding, feeding and management of the milch animals. One of the major reasons for the decline in milk production and procurement in the Goa State was non availability of adequate balanced cattle feed and fodder at affordable prices.

The breeding facilities, especially AI services are provided by the State Govt. as well as milk union. The Management is solely under the control of milk producers. However, the Goa milk union has been regularly offering the milk producers training, guidance and other services thru their extension programs.

The third and most important factor is feeding of the milch animals. The Goa Milk union had therefore decided to modernize the existing 35 years old cattle feed plant at Usgaon and approached the the Directorate of Agriculture, Govt. of Goa for financial assistance under RKVY Scheme of Govt. of India. The Directorate of Agriculture after the detailed study of the difficulties faced by the Goa Milk Union in providing adequate balance cattle feed to the milk producers of the state recommended the Project of Modernization of Cattle Feed Plant to the Govt. of India. The State Level Sanctioning Committee rightly understood the magnitude of the problems faced by the Goa Milk Union in supplying the balanced cattle feed & granted the financial sanction for Rs.840 lakhs. for the Modernization of Cattle Feed Plant under the RKVY Scheme.

3.0 CONCEPTULIZATION OF THE PROJECT

The Goa milk union had appointed M/S. Dairyplant.com, Mumbai as the Technical Consultants for the Modernization of the Cattle Feed Plant at Usgaon, Goa. With proper assessment of the future requirement of the cattle feed in Goa it was decided to install totally new plant to produce, pack & distribute 100 tons per day cattle feed with maximum possible automation. The project was completed within 10 months with the prompt decisions by the Board of Directors of Goa Milk Union and proper coordination by thr the Technical Consultant, Goa Milk Union officers & all the contractors.

4.0 PROJECT EXECUTION

The foundation stone of the project was laid on 8th October 2011 and the plant was commissioned on 13th August 2012. The major stages of project execution are given below.

15.05.2011	Proposal for Cattle Feed Plant under RKVY
27.06.2011	Sanction letter from RKVY
31.08.2011	Tender for Cattle Feed Plant and Civil works
09.09.2011	Letter of intent issued to Civil and Mechanical contractors
09.09.2011	First Project Review meeting at site
17.09.2011	Second Project Review meeting
01.10.2011	Civil works started at site
01.10.2011	Third Project Review meeting
07.10.2011	Fourth Project review meeting
08.10.2011	Foundation Stone Laying Ceremony
24.10.2011	Fifth Project Review meeting
12.11.2011	Mechanical erection team reported at site
14.11.2011	Sixth Project Review meeting
20.11.2011	Seventh Project Review meeting
13.01.2011	First Installment of Funds received from RKVY
18.01.2012	Eigth Project Review meeting
07.02.2012	Ninth Project Review meeting
08.02.2012	Tender for Electricals
19.02.2012	Tenth Project Review meeting
27.02.2012	Electrical Order
05.03.2012	Eleventh Project Review meeting
17.03.2012	Twelfth Project Review meeting
30.03.2012	Thirteenth Project Review meeting
31.03.2012	Total funds received from RKVY
13.04.2012	Fourteenth Project Review meeting
27.04.2012	Fifteenth Project Review meeting
04.05.2012	Sixteenth Project Review meeting
17.05.2012	Seventeenth Project Review meeting
25.05.2012	Eighteenth Project Review meeting
22.06.2012	Nineteenth Project Review meeting
10.07.2012	Twentieth Project Review meeting
26.07.2012	No Load Trials
31.07.2012	Twenty First Project Review meeting
13.08.2012	Production started
23.08.2012	Full load Trials

5.0 BENEFICIARIES OF THE PROJECT

The Modernized Cattle Feed Plant is assisting enhance the milk production in the state which is slowly changing the socio-economic scenario of the State of Goa. The supply of quality balanced cattle feed at affordable prices will meet the nutritive requirements of the animals in milk as well as dry animals.

Following are the direct benefits derived from this project.

- More than **76,000** animals are getting balanced cattle feed at affordable prices
- Milk production in the state has increased more than 9.43% during last year
- Earnings of more than **19,100** milk producer families will be increased by way of additional income due to enhanced milk production
- More than **4270** milk producer families belonging to **BPL, SC, ST & NT** will be directly benefited as rearing animals & milk production is their sole occupation
- More than **3290** women members will be directly benefited as they are dependent on rearing of milch animals
- Reduction in the Green House gases due to supply of balanced cattle feed which shall comprise easily digestible by-pass proteins
- Dependence on the adjoining states for the supply of milk and milk products is reducing
- Additional jobs are being created in the rural areas due to increased milk production viz. milk collection, transportation of raw milk, transportation of pasteurized packed milk, distributors, vendors etc.
- Overall GDP of the Goa State will be increased
- The tourists visiting Goa will be assured of good quality milk and milk products

6.0 OTHER BENEFITS OF PROJECT

Besides the direct benefits to the animals and milk producers there are several indirect benefits as listed below.

- a. The cattle feed produced in this modernized plant is totally homogenous and all the ingredients are thoroughly mixed in the feed.
- b. Use of molasses upto 10-12% is possible due to molasses mixer, steaming etc. Molasses is good source of energy at lesser cost.
- c. Exact ratio of various ingredients is maintained due to automatic weighing & mixing
- d. The feed is not wasted as the total pellets are consumed by animals due to sweetness on account of addition of molasses.
- e. Less wastage of raw material due to mechanized automatic operations
- f. Human comfort & higher efficiency due to clean working atmosphere in the plant
- g. No air pollution because of the localized dust collection systems
- h. Lesser power consumption per unit of production due to efficient systems & operations.
- i. Higher capacity will enable maximum production upto 150 tons per day in three shifts. This will help the Goa Milk Union to produce & market more cattle feed and thus reduce the cost of production and also earn profits for the union.

7.0 CONCLUSION

The Modernized Cattle Feed Plant installed under the RKVY Scheme is a landmark project in the history of Goa Milk Union. This project will help the Goa state to become self sufficient in milk production and will help make available good quality milk & milk products to the people of Goa. It will also help raise the standards of living of rural milk producers by enhancing the productivity of the animals and add to GDP of the state.

8.0 PHOTOGRAPHS OF THE NEW CATTLE FEED PLANT ATTACHED



1.0 Ton wood fire boiler





Wood storage for Boiler

Electrical panels and Transformer

