

### **Gadhinglaj Satellite Dairy – The Success Story**

Warana valley owes its revolutionary socio-economic development to the great visionary Late Shri V.A. alias Tatyasaheb Kore. 'Warana Sahakari Sakhar Karkhana' established in 1955. Warana Co-operative Sugar Factory provided income source for 10-15% farmers having irrigation facility. "Shri Warana Sahakari Dudh Utpadak Prakriya Sangh Ltd." one of successful Co-operative dairy was established in 1968 to improve the economic condition of remaining 85-90% landless labour and small land holding farmers with noble purpose of providing an additional income to the farmers from surrounding villages. Initially Panhala, Hatkanangale Taluka from Kolhapur district and Walwa, Shirala Taluka from Sangli District were under area of operation. The milk collection started with 30000 liters per day and has now reached up to 5 to 5.5 lakhs liters per day. Dairy has completed 50 years of successful operation and created "Warana" brand in market. Considering the collection of milk, Sangh has started chilling centers at Jat, Gadhinglaj, Hatkanangale, Mudhol, Bambavade and Kale. Milk & milk products are sold at Mumbai and main cities of state. Now wide range of milk & milk products are also sold in the state and outside the state.

In order to increase the milk collection, Sangh started its collection in Gadhinglaj, Ajara, Chandgad and Karnataka State border areas. Also started a milk chilling activity at Pancham Nijlingeshwar Pvt. Ltd., Chinchewadi, Taluka - Gadhinglaj , Dist –Kolhapur in 2001 on rental basis. As the capacity of this chilling facility was insufficient, The Sangh shifted milk procurement & chilling activity at 'Nalavade Dairy Ltd, Hanimanal, Taluka-Gadhinglaj, Dist-Kolhapur on rental basis in the year 2007. Milk chilled at this plant was transported to the head office plant at Tatyasaheb Korenagar (Warananagar). The same milk was processed and packed at head office and packed milk and milk products were transported to Gadhinglaj, Belgaum and Goa for distribution.

The daily milk collection at Gadhinglaj chilling center was 35000 Liters. However It was expected that the milk collection would be increased 65000 liters per day from Gadhinglaj, Ajara, Chandgad and State border area. In addition to this was planned to divert one lakh liters of raw milk from Mudhole & Sulaga centers as well as it was planned to supply one lakh liters of

processed milk for packing from head office plant to Gadhinglaj. In this way Gadhinglaj plant will process two lakh liters of milk per day and will pack three lakh liters of milk per day. Hence the increased procured milk will be handled properly. Similarly transportation cost of raw chilled milk from Gadhinglaj to head office, as well as milk and milk products distribution cost (transport expenses) from head office to Gadhinglaj and Goa will be reduced considerably. Also it is mandatory to strictly follow the rules and regulation of Food Safety and Standard Authority of India. Considering the above facts and existing inadequate capacity it was decided by Board of Directors to establish a new well equipped plant at Gadhinglaj. Sangh started discussion on buying land and purchased Plot No. A-2 (7695 Square Meter) at Gadhinglaj industrial area (MIDC), Shendri Road, Gadhinglaj, Dist. Kolhapur on 11/06/2014.

But now, the total expenditure on the project would come to about 25 crores and hence some grant was required. So it was necessary to apply for grant in appropriate Government scheme. Accordingly the proposal for the project was sent to Rashtriya Krishi Vikas Yojana through the Government of Maharashtra. The Government of Maharashtra positively accepted and approved the proposal on 10<sup>th</sup> July, 2015 of Rs. 23,03,91,165/- and sanctioned it under RKVY.

The Sangh appointed Mr. Anil Gadkari (BE MEch and M.Tech. in Dairy Engg, IIT Kharagpur, E.A. (BEE), F.I.V., Chartered Engr and Govt registered Valuer and a Former expert who has worked with NDDDB) as a “Technical Consultant” and Mr. Ambekar (Ambekar Consultants) as the Architect. It was decided that the project would be completed within the time span of two years. The catch point in the entire project was the handling of the effluent that would get generated after commencement of operations, as we have an Ayurvedic medical college and Hospital in the adjacent plot to proposed dairy plant. Detailed discussions were held and designing of the project was done successfully. To bring in more transparency, it was decided to go for e-tendering system for the purchase and work orders and allocate work to experienced parties.

The actual civil work started in February 2016, and parallely the required dairy equipments also started to be received. Water trials were started after completion of civil &

installation of machinery (like Dairy Machinery/Equipments, Boiler, Refrigeration systems, Piping and ETP etc.) in the month of June 2017. All the problems that occurred in the beginning during trials were overcome and all the machinery worked well with the help of representatives of the machinery manufacturer & contractor. Subsequently Milk Silos & Storage tanks insulation tests were done and trials on milk, Fill pack machines were taken. In this way entire milk handling was shifted to the newly constructed Dairy from our Old existing plant, on 14<sup>th</sup> July, 2017. The new Dairy was completed within one & half year with the co-operation of M/s Shrikrupa Electricals, JAPS Aircons, Hindustan Teams Marketing, Sbrooje Engineering, Master Electricals and Mr. Girish Rajadnya (Civil Contractor).

Prior to the newly built Satellite Dairy at Gadhinglaj, the milk collected at our Mudhol and Sulaga chilling centers was transported to our Main Dairy plant at Tatyasaheb Korenagar (Warananagar). Plant at Warananagar is 176 km from the Gadhinglaj, 330 km from Mudhol and 290 km from Sulaga, due to which the transport charges were at Rs. 18.04 per liter. But after the commencement of the new plant at Gadhinglaj, the transport expenses of milk from Gadhinglaj to Warananagar were reduced. As the distance from Mudhol to Warananagar (294 km) and Sulaga to Gadhinglaj (124 km), i.e. net 496 km reduced. Similarly the milk distribution cost also reduced for packed milk which is sent for sell at Nipani, Gadhinglaj, Belgaum and Goa.

The substandard grade milk especially in cow milk was brought down from 18% to 11.5%. The buffalo milk which had 6.0 fat and 9.0 SNF is now increased to 7.0 fat and 9.3 SNF. The sour milk was brought down from 0.30% to 0.10%. In the same way the bacterial load was brought down to 50 lakhs from 80 lakhs CFU/ml. The Methylene Blue Reduction (MBR) test improved from 120 minutes to 150 minutes.

#### **Rashtriya Krishi Vikas Yojana (RKVY):**

DPR (Detail Project report) as per the RKVY guidelines was made and after the approval of the Board of Directors of Warana, it was submitted to the Government. The Dairy Development office at Kolhapur and The Regional Dairy Development Office at Pune, both scrutinized the report and after the appropriate recommendations of both these Offices, the report was submitted to the Commissioner, Dairy Development office at Worli (Mumbai). The

respected Commissioner formed a committee of Government staff for the scrutiny of the said report, which had a detailed discussion with the Warana Officers in several meetings. Considering the legacy of Warana Dudh Sangh, the respected Dairy Commissioner approved and forwarded the Project report to the Secretariat. A power point presentation of the project was done before the Chief Secretary. The Government sanctioned the project of Rs. 23,03,91,165 and out of which 50% expenditure to be borne by Warana and 50% by the Government. In this way Government approved this project on 10<sup>th</sup> July 2015.

The real challenge before Warana was to complete the project within a stipulated time period of two years, which was as per the guidelines of the RKVY. Accordingly a Committee was formed which was headed by The District Dairy development Officer as President, Representatives of Dairy Commissioner Office, District Agricultural Officer, District Animal Husbandry Officer and the Managing Director of Warana as a Secretary. This committee worked with great coordination and enthusiasm and successfully contributed to complete the entire Project.

One more specialty of the Satellite Dairy is that the collection of milk sampling is done on the dock (RMRD) automatically. This system has helped to maintained the received milk quality, with accurate measuring of FAT:SNF ratio. Due to computerized system, the work is done in less time and quality of milk is enhanced.

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