

## DAIRY DEVELOPMENT : GEARING UP PRODUCTION AND PRODUCTIVITY

Dhurjati Mukherjee

*India is world's largest producer and consumer of milk with a global share of about 18 per cent. Another factor that makes India leading producer in milk is the technology, which enables it to increase productivity.* According to reports, the dairy sector is one of the highest contributors in the country's economy, as the milk production grew at a rate of 4 per cent per annum vis-à-vis world growth rate of 1.5 per cent.

India has drawn up a plan to create a 'white grid' or a milk grid in South Asia that will seek to replicate the success of the white revolution launched in the 1970s. The proposed regional milk grid will benefit dairy farmers in the region by linking milk surplus countries with the deficit ones. India will also push for tariff reduction to less than 5 per cent under the South Asia Free Trade Area (SAFTA) agreement to facilitate the grid.

It is understood that just like the energy grid there would be milk grid to facilitate liquid milk trade between the SAARC countries so that the dairy farmers benefit. Earlier SAARC countries had agreed to a South Asia electricity grid to trade power within the eight nations at the summit Kathmandu in 2014.

According to reports, the dairy sector is one of the highest contributors in the country's economy, as the milk production grew at a rate of 4 per cent per annum vis-à-vis world growth rate of 1.5 per cent. With this it has also emerged that India is world's largest producer and consumer of milk

with a global share of about 18 per cent. Another factor that makes India leading producer in milk is the technology, which enables it to increase productivity in the field, and this needs to be transferred to build supply capabilities, so that there is enough milk for the region as a whole.

**India produced 140 million tonnes of milk in 2013-14 as against 132 million tonnes in 2012-2013.** It is also said that going by the existing rate of growth in milk production, in next ten years, India may have the potential to export. This steady growth of milk production has helped to boost the nutritional status of the population of the country. According to projections by the National Dairy Development Board (NDDB) the country's demand for milk is expected to be around 155 million tonnes in 2016-17 and 200 mt in 2021-22.

It is heartening to mention that the purchasing power of the Indian consumers is on the upswing with growing economy and continually increasing middle class population. In fact, milk production in the country is a regular part of the dietary

programme – specially of children and lactating mothers – irrespective of region and thus demand is likely to rise steadily. The increased production of milk has



improved the per capita milk availability to 250-255 gms, but it still falls short of the recommended nutritional requirement of 284 gms by the Indian Council of Medical Research (ICMR).

**As of now, the trade in dairy products within the SAARC countries is considerably low. The country's top milk brand Amul, which is part of the Gujarat Cooperative Milk Marketing Federation having 17 milk cooperatives, exported Rs 250 crores in 2014-15 and the firm plans to focus on the SAARC countries in the coming years. Thus milk grid would be highly beneficial to the company to expand its export base.**

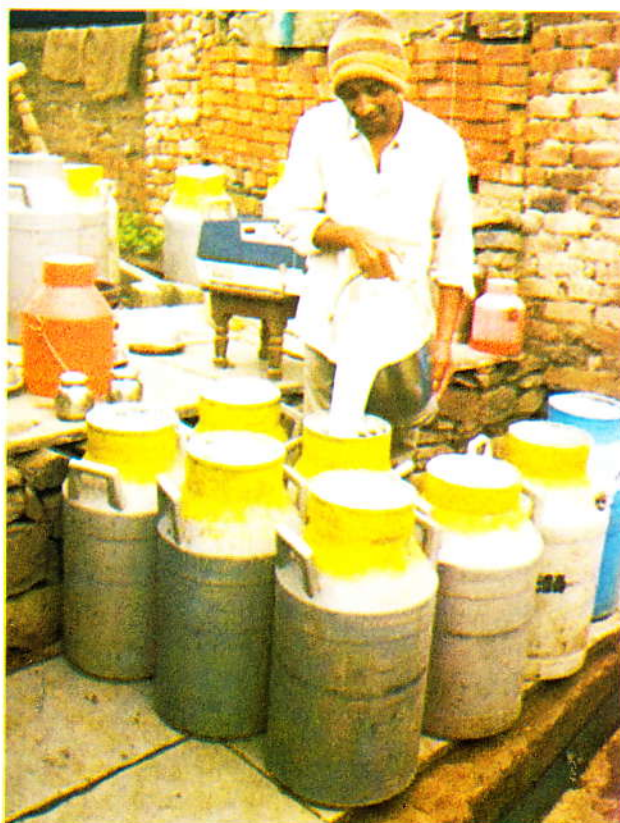


An agricultural country like India with majority of the population living in villages, in spite of high GDP growth has been fighting poverty and social injustice. Although the economic conditions of the people have substantially improved and the standard of living changed to a large extent, the country continues to face economic problems of great magnitude. Among the various development programmes on the economic front is the plan to exploit further the natural resources in the production of milk and go in for commercial dairy farming.

It is also noteworthy to mention that the dairy sector was in some time back because of focus reports of milk adulteration. As per the Food Safety Standards Authority of India (FSSAI) national milk survey, which found that nearly 70 per cent of the 1791 samples, picked up from different states failed to conform to FSSAI standards. Even some leading private companies in the dairy sector did not conform to national standard norms, thereby making it mandatory for milk manufacturers to adhere to certain tests, specially e- coli.

Another study conducted recently by Bengal Engineering and Science University (BESU) found adulterants like rice starch, raw sugar and salt as also detergents and pathogens like e-coli in milk by the major suppliers.

Intensive cross breeding implemented throughout the country over the past one or two decades has helped in the country's emergence as a premier dairy nation. There are tremendous opportunities for large-scale investment and scope for specialized commercial dairy farming. The entry of big business houses in the dairy sector and setting up of a large number of milk processing plants -- each handling around 10 lakh litres per day -- could lead to further enhancement in milk processing capacity.



Keeping this in view, the government decided to increase production by developing indigenous breeds of cows. Two national centres would be set up to develop new breeds of 'desi' cows and support a network of Integrated Indigenous Cattle Centres -- called *Gokul Gram* -- across the country. One centre will be in a northern state and the other in the southern part of the country and work to improve the genetic makeup of *desi* breeds of cows and also increase their stock.

**The centres would be established under the National Gokul Mission, aimed at enhancing production of indigenous breeds of cows through professional farm management and better nutrition. During the 12th Plan, the Mission received Rs 500 crores and an additional Rs 150 crores has been allotted during the current financial year.**

The genetic improvement of our dairy stock is imperative keeping in view the needs of the country. It is well known that Artificial Insemination (AI) technology has been utilized the world over for improving the genetic merit of the stock and for higher reproductive efficiency. Nevertheless, in India, AI coverage is dismally low – below 20 per cent. There is need to boost up AI services utilizing the semen of high genetic merit bulls. The state animal husbandry departments should take a lead in this matter and motivate farmers to adopt AI technology. Private firms may also be encouraged to set up their field insemination services and charge the farmer a fixed amount for each pregnancy. Efforts have to be made for AI coverage to be increased to over 60 per cent within the next 4-5 years or so.

Obviously, the germplasm of exotic breeds of cattle namely Holstein Frisian (HF) and Jersey breeds will continue to be the choice for crossbreeding indigenous breeds of cattle. The cattle breeding policy should be guided as the National Project for Cattle & Buffalo Breeding (NPCBB) for enhancing the productivity of cows for milk and buffaloes for both milk and meat. It also needs to be pointed out here that efforts for genetic improvement of nutrient requirements of improved cows and buffaloes need proper attention in order to realize their high production potential.

The advent of green revolution in the country had been credited largely to the establishment of a strong and vibrant agricultural service network. However, such an extensive service is virtually

non-existent in case of animal husbandry or specifically dairy development. Over the years, the concerned government departments have not been successful in imparting relevant knowledge to the farming community though the scenario has started changing in recent times.

Thus, considering the importance of the dairy sector in socio-economic development of the country, it is imperative for proper planning and policy formulation so that the second white revolution could be ushered in. The dairy sector has in-built strengths, which can be harnessed for propelling further growth. The vast dairy animal production could prove to be a vital asset for the country and, unlike many other natural resources, which will deplete over the years, dairy production will continue to propel the Indian economy.

### **Amul Experiment**

**The example of Amul, which is part of the Gujarat Cooperative Milk Marketing Federation having 17 milk cooperatives, exported Rs 250 crores in 2014-15 is recognized the world over as a unique success story where a cooperative has helped transform the dairy sector.** Not only that, it has helped in improving the livelihoods of those involved in the trade. It has demonstrated that a near-arid environment is no hindrance, animal husbandry, including scientific breeding can do wonders for milk productivity.

Various types of Amul's dairy products have not only been a monopoly in the domestic market but also exported to many Asian markets, earning valuable foreign exchange. It is gratifying to note that the Company now plans to focus on the SAARC countries in the coming years.

*(The author writes on environment and developmental issues. He is presently working as a freelancer)*

# **Kurukshetra**

**FORTHCOMING ISSUE**

**November 2015**

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**Panchayati Raj**