

TARGETING MILK SECURITY OF THE STATE

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State level cattle population has dwindled over the years. But the total milk production has not decreased in the same proportion which however is a consolation and points to the fact that productivity of our animals have improved thus compensating the negative trend of animal population. Economic review (2007) also supports that cross bred population has increased from 68% in 1996 to 83% in 2003. The objective of this paper is to narrate the present scenario of milk production in the State and to suggest measures to improve milk production and milk security of the State.

Milk requirement/ Production in the State

According to Economic review 2007, daily milk production in Kerala during 2006 was 58.02 lakh liter against the requirement of 67.20 lakh per day. If ICMR recommendations of 240 ml/ individual is used as a criteria, for a population of 3.2 crore, the requirement during the same period will be 76.8 lakh liters /day. With improved purchasing power and increased urbanization some estimates peg the requirement of the State at 80 lakh litres/ day.

Milma has an installed capacity to handle 10.5 to 11 lakh liters/ day. It procures far less than this from the farmers of Kerala and sells more than the installed capacity. The deficit is made up by importing milk from neighbouring States. This gap is widening year by year, forcing the State to depend more on outside agencies thus jeopardizing the milk security of people of Kerala.

Traditional Milk Production System

Small units with 1 to 2 animals still form the backbone of milk production in Kerala. More than 80% of the total milk produced in the State comes from this group. Sadly, no new units are added up over the years and at the same time the attrition rate in this group is high. A number of reasons

including high feed cost, lack of labour, lack of fodder, fragmented land holdings, increased urbanization etc. added to this. Income from a crossbred cow reared in Kerala conditions may give something between Rs.1500/- and Rs.3000/- a month under ideal management conditions. This is much less than the expectations of an average farmer of the State. No new entrants are coming to this group due to social stigma of being identified as a cattle owner which is not commensurate in terms of social status and income. Luckily for the state the improved life expectancy has resulted in those already in dairying continuing it.

New Commercial Ventures

In the last two or three years a number of commercial ventures in dairying have come across the state. In the same pace a number of these units have also been wound up. Strictly speaking "commercial" means anything which is profitable. If we check the history, commercial cattle farms were also present in the past with those people having large tracts of land especially paddy fields. But the difference was that the farm had more number of working animals. Commercial exploitation was done by putting these animals to work and thus catering the energy demands of agricultural operations.

In a commercial dairy farm the entrepreneur alone has to take care of feeding, milking, maintenance of records and other production related activities, and marketing. This leads to the loss of focus since each of these items demands special attention for a successful venture. The concepts and principles applicable to a 1-2 animal unit cannot be in toto extrapolated to a mid-size farm of 10-30 animals, which is usually practiced by these new generation farmers eventually leading to failure.

Commercial does not mean that we should have more than 10 or 20 animals segregated at a

place. In the context of Kerala, it would be advisable for a farmer already having one or two animals limiting it to a maximum of five animals. Ten such farmers can form a consortium or a self help group. Now they can produce 500-700 liters of milk per day. Fodder production, feed manufacture/procurement can be done together so that the bargaining power will be more than a single unit. In these units they can think of sharing mechanization cost. Eg: a common portable milking machine which can cater all the members of the group. They can think of marketing milk directly to the consumer, production of value added products etc.

Hi-tech large farms

It is known that the government intends to start large Hi-tech farms at Idukki and Wayanad Districts. This is a welcome move because the large tracts of land available in these two districts with the government can be effectively utilized for milk security of people of Kerala and also safe guarding the areas from ecological and environmental perspective. It is advisable to declare special milk zones in these two districts to start these ventures in a public-private participatory mode. Coming up of these large ventures definitely will be a moral boost for new entrepreneur in dairying across the state.

Need for promoting small commercial dairy ventures

The traditional system, commercial ventures and Hi-tech large farms should be considered separately by the government as three pillars or tiers of bridging the milk deficit of the state.

With the economic recession, costs of agricultural products have come down and revenue from traditional industries is also badly affected. The predictions are that about 10 lakh jobs from the Middle East and an equal number engaged in textile industry within the country will lose their jobs in the coming years. Unfortunately, a large number of these folks are Keralites turning the situation grave for our State. Most of these people are not in a position to invest large amounts and for them commercial dairy ventures is a good opening. The ill effects of economic melt down can be exploited by Kerala for dairy development in particular if proper

planning is done in this regard. For this every district should have an office where officers from Department of Animal Husbandry (DAH) and Department of Dairy, KLDB (Kerala Livestock Development Board), Department of Agriculture, Milma, Kudumbashree and Financial agencies are available. This single window should cater all the needs of new entrepreneur in dairying. Usually what happens is that a farmer intending to start a small venture has to go separately to all these agencies in search of help.

Do we need to improve the genetic potential of our cows further

Average milk yield of a cow in Kerala is 7.5 lit/ day/ animal. Progressive farmers are demanding animals with high production potential. In this juncture it is to be remembered that out of 14 districts of the state, 9 falls in the coastal belt. Hot humid climate prevalent in these coastal districts are not supportive to exploit the full genetic potential due to heat stress related problems. At the same time to cater the needs of progressive farmers high quality semen should be made available in places where the environment is congenial

(High ranges) and where there is sufficient biomass on payment basis. More than 80% of farmers are small producers with traditional know how for whom high end management is not possible. To cater to their needs, semen of bulls with optimum production potential and adaptable to local conditions needs to be provided without hindrance.

Prevention of genetic drain- role of government policies

Most of the elite farmers are not caring their calves since they have realized that purchasing of milking animals is more profitable than rearing a calf to milk. This indirectly leads to genetic drain of progenies of high-producing cows. The calf subsidy scheme currently in operation through Department of Animal Husbandry is a laudable project in conserving the calves which has to be extended to more number of animals. Currently this facility is being extended to farmers who have a milking cow and calf where there is every chance for siphoning calf ration to the cows. New schemes can be envisaged where the calf feed subsidy is extended

to the farmers who are interested in rearing premium calves identified by government agencies in the field. While dairy related projects are planned at Panchayath level, thrust is always given to purchase new milking animals to augment production. Some farmers avoid maintaining milch animals to escape from the burden of milking and marketing of excess milk, at the same time they have enough land for which organic manure is demanded. So new schemes where calves are supplied to these farmers and taken back before calving can be envisaged.

Role of cooperative societies

There are about 3000 cooperative societies spread throughout the state. Their main role presently is only procurement of milk from farmers. They have to take lead roles in other activities related to dairying.

Eg:(a) Fodder banks - Organize farmers to cultivate fodder in available lands and act as a fodder bank. Once a market and price is assured for fodder more and more people will evince interest in fodder production even if they don't have dairy animals.

(b) Labour banks - There is acute shortage of skilled labourers especially milkers. Societies can take a lead role to form labour banks with skilled milkers. Portable milking machine can be supplied to them so that the farmers need not worry about milking related activities. This also gives a respect to the role of milker's thus attracting jobless youth to this work. They can also try to collect milk from the producers to the society thus reducing the work load of farmers.

(c) Instead of banks lending money for purchase of animals, the same can be routed through the societies. This establishes a bond between farmers and societies. The money can also be easily realized from the cost of milk.

Need for starting new feed factories

The government and private feed factories together have the capacity to produce 1300 to 1700 tonnes of feed daily. This accounts to only 2/3rd of the requirement of the State. The government is planning to start a new factory at Quilon under the management of Kerala Feeds Ltd. which is welcome

to bridge the gap. In Kerala one of the main problems affecting production is sub acute ruminal acidosis. To compensate the shortage of roughage in the State, farmers feed more concentrates which in long run leads to acidosis, destruction of ruminal epithelium and thus microorganisms gain entry in to the system leading to septicemia, mastitis, joint ill, liver abscess, laminitis etc. which are detrimental to production.

Complete feeding is the technology adopted in developed countries to overcome this. Here every bite of feed is well balanced in concentrate : roughage proportion. In districts like Palghat, Alleppey and Kollam fields of paddy straw were mechanized harvesters are used, the paddy straw is wasted in the field. The government can plan to start small complete feed block manufacturing units in these areas so that this wasted straw can be efficiently converted into good quality feed. Setting up such a plant with a capacity of 50-60 tonnes per day comes to 1.25 to 1.5 crores including building construction. At this hour, we feel the government should take care of capital investment in this regard and the same may be handed over to local block or district panchayats to carry out production. This mechanism also helps easy transport of paddy straw which otherwise occupies large amounts of space.

Conserving energy and protecting environment

In recent years there was sporadic outbreak of vector borne diseases of public health concern due to poor sanitation measures. There is no doubt, in the years to come, if this is to be repeated the blame falls on ill managed animal sheds further hampering morale of producers. To overcome this, scientific designs pertaining to locality and herd size should be prepared and made mandatory for the farmers. To control pollution and related problems biogas units should be made compulsory thus saving energy for household cooking purpose. Pollution control norms for livestock sector should be established with legal framework to protect farmers and livestock sector.

Need for improving the quality of milk

At the national level less than 1% of the total milk produced is exported. Milk to meet the export requirement should confirm stringent quality norms of the world market. Unfortunately even though the

farmers are aware of these facts they are not interested in improving the quality of milk since it is not being recognized in terms of monetary benefits. Quality milk production can be encouraged among farmers by giving premium price on a three axis pricing policy. In primary society level, dye reduction test and at the processing plant, somatic cell count or E. coli test may be introduced in some selected areas as a step towards quality assurance.

Fixing the price of milk

This is a much debated issue, but still lot of complaints persists. We don't want to blame milma in this regard because no farmer is compelled to sell his milk to the societies. Only marketable surplus from the farmer find way to local society. The situation would have been even grave if such a set up is not available.

Why cant we think of a " Price basket" with a basic pay (Support price) and a variable component which has to be revised in every six months based

on the cost of feed ingredients (which contributes 80% of cost of production). This protects the farmers and also the consumers. Each time the government need not worry about fixing the price. It is worth mentioning at this juncture that the price of Skimmed milk powder in international market has come down from \$4000 per ton in 2007 to almost \$1800 in 2009.

References

Economic Review (2007), Government of Kerala

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