

Collective fodder cultivation

an idea worth emulation from Idukki, Kerala

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Idukki, the central district of Kerala with its abundant natural resources and favourable climate fits well for dairy farming. Dairying is one of the main subsidiary occupations and source of income for the farmers of the district. The agro-climatic conditions of Idukki are well suited for the cultivation of plantation crops like tea, coffee, rubber, coconut, cardamom, pepper etc. and the district has second place in Kerala in agriculture produces. The district also has a fame dairy history of hosting the Indo-Swiss Project at Mattuppeti which then subsequently transformed to the Kerala Livestock Development Board. Also Sunandini, the new breed of cow which was developed specifically for the State as a part of the project, had its origin of Idukki.

Key words: Cow, Cultivation, Dairy, Fodder

REALIZING the potential of the district in dairying, many projects were implemented in the past for boosting the milk production by different departments. For example the *Ksheera Sagaram Samagra* project was launched by the Kudumbasree, the State Poverty Eradication Mission (SPEM) during 2009-10. Initially the project was aimed to provide employment to poor families through dairying with the purchase of good yielding animals. It was operationalized by forming, 98 Joint Liability Groups of women dairy farmers (group of 5 each) as per the norms set by National Bank for Agriculture and Rural Development (NABARD). The project boosted the milk production of the district by 10,000 litres/day and significantly contributed to the socio-economic empowerment of the project participants. But the dairy producers are witnessing a host of challenges today. Spiralling cost of packaged cattle feed, non-remunerative milk prices, prevalence of diseases like mastitis etc. are plaguing the cattle owners, more than ever before.

Adding to this woe, acute fodder shortage makes the situation more complicated.

The fodder scenario of Kerala

Fodder shortage is the major challenge faced by the dairy farmers of the State. Fodder crops are cultivated on 7,000 ha which produces green fodder to meet only about 2% of the total dry fodder requirement of the state. Kerala with a cattle population of 17 lakh, requires 6.0 million tonne of dry fodder per year, whereas only 4.0 million tonne is available. Due to constraints of land, there is a severe shortage of green fodder. The State is currently has the availability of only 40% of its fodder requirement leaving behind, a yawning deficit of 60 %. This scarcity of the green fodder will be at its peak during summer. Moreover with the shift in cropping pattern of Kerala, the area under rice cultivation has come down by more than 50 % over the last two decades leading to drastic reduction in the availability of straw, another cattle feeds supplement. It is estimated that the state produces only

60 % of the roughage requirement for cattle in Kerala. As a result roughage in the form of straw is being brought in to the state from adjacent states at exorbitant rates. Hence there is an urgent need for promoting the cultivation of fodder, if the dairying has to sustain in the State. The Agriculture Development Policy (2015), Kerala explicitly recommends the need for promoting the fodder cultivation on a mission mode on a commercial-scale through the intervention of co-operatives, Self-help Groups and Food Products Order's (24.5 Policy 184, 22.78 Policy 166) to ensure its availability to the farmers at affordable cost.

The situation of Idukki is not so different from that of the overall fodder scenario of the State. Earlier farmers used to fetch natural fodder from the fallow lands or from nearby land, which was left unutilized. Also abundant green pastures were available for the cattle to graze. But over the years, the farming dynamics of the district changed. Availability of pastures declined drastically once the people started using their lands economically by cultivating



Fodder being grown on the roadside by farmers due to unavailability of land



Mrs. Vilasini at the model fodder growing plot of her group.



Mrs. Vilasini with her animals

plantation crops. And once the project like *Ksheera Saagaram* was commenced, there was a swift jump in the number of animals in the district. Many people ventured into dairying, started using their land for grazing own animals and restricting the public grazing or collection of natural fodder by other farmers. This led to drastic decline of the available grazing land and shortage of green fodder. Many farmers are now buying fodder from distant places by paying price which once was available to them at free of cost. Hay, another feed supplement is not so available at Idukki since cultivation of paddy is marginal in the highland areas of the district. Idukki, with 661 ha of area under paddy (0.3% of total paddy area in the State) has the lowest area under paddy cultivation in the State (*Agricultural Statistics in India*, 2013-14). Hence the farmers are getting hay, which is mainly coming from Kambam, Tamil Nadu, located adjacent to the district. They are charged anywhere between ₹ 18 and 28 for 1 bundle of hay (around 2 kg) excluding the transportation charges. Thus purchase of hay is economically not feasible for dairy farmers. During summer (from March to May) this demand will be at its peak and farmers usually find great difficulty to fetch fodder for their animals.

All the group members were the beneficiaries of *Ksheera Saagaram* Project. The group took the initiative under the leadership of Mrs Vilasini, an enterprising group member. She is a traditional dairy farmer and owns a couple of bovines of Holstein Friesan breed and a calf at her farm located at Rajakkad Panchayath of Idukki. In 2012, district Agricultural Technology Management Agency took the initiative to organize Commodity Interest Groups of

women milk producers. So Vilasini, along with 11 other members, all of which were active dairy farmers jointly formed a group. In their monthly meetings these women discussed about issues related to milk production of their animals, cattle disease management, dairy related schemes and programmes etc. In one such meeting they had a discussion on the ways to address fodder scarcity and the members put their heads to scratch together to address the fodder shortage. Finally they ended up with an idea to do cultivation of fodder in any of the group members' land.

Among the group members, Mrs Chinnamma had more number of cattle, owned 4 bovines and 2 calves, most in the group. So getting regular supply of fodder was essential for her to feed her animals. She also owned agricultural land of 2 acres (0.808 ha), which earlier was utilized for cultivation of banana. Due to the labour shortage she was unable to continue the banana cultivation in her land. So the land was laying fallow, which she used for grazing her cattle. Following the group meeting, the group members decided to go ahead with growing of fodder in her land. Mrs Chinnamma agreed to the proposal mainly because she could ensure availability of good quality fodder round the year, from her land. There was a canal flowing adjacent to the plot ensuring water supply for irrigation purpose. So the idea of growing fodder found to be feasible in her land. Once the plan was finalized, they got financial support of ₹ 75,000/- from the Dairy Development Department for starting a model fodder farm in 1.5 acres (60.60 ha) of land. With that amount they cleared and tilled the land, purchased good quality fodder stubbles. All members joined, pooled

their work force and started growing Bajra Napier varieties ('Co 3' and 'Co 4') in the land. Starting from the land preparation, planting, irrigation and other cultivation practices, all the works had been carried out by these women together. Now the group has abundant supply of fodder round the year. While Mrs Chinnamma harvests the fodder at her will to feed her cattle, other group members have the liberty to collect the fodder-based on their need. Now the system is that, once in a week all other group members go and get the fodder for their animals together. Around 30 to 60 stacks of fodder, each weighing around 5 kg is harvested in each week. The harvested fodder is transported to each ones home by hiring a common goods-carrier.

SUMMARY

The efforts of these women became a success mainly because of their cooperation and among them to work together to meet their common objective. i.e. to meet the fodder demand without any conflicts. Also the timely support which they got from the Dairy Development Department became a crucial factor in their success. Such initiatives are of worth replication in other parts of the state too, as fodder scarcity is the most serious challenge that the dairy farmers face today. The Dairy Development Department, the nodal agency for fodder development activities on its part can promote such Self-help Groups/ Joint Liability Groups/Food Product Orders who are willing to take up fodder cultivation.

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