



Government of Kerala

**WOMEN'S DAIRY UNIT IN
VAZHATHOPPE GRAMA PANCHAYAT,
IDUKKI DISTRICT**

A Quick Study Report

Evaluation Division

Kerala State Planning Board

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Abstract

The main objectives of the study were to analyse whether the production of milk and dairy products in the Vazhathope grama panchayat has increased or not towards self sufficiency and any livelihood improvement available for rural women through dairying. As far as first objective is concerned the average productivity of milk was increased to 6.5 litres per day after implementation of the project while it was only 4.3 litres per day during the previous year. Considering the livelihood objective, majority of the Vazhathope villagers are the farmers and they participate different agricultural activities and the dairying is an additional income source. Some of the dairy farmers find their family expenditure through dairying. One of the dairy farmer had achieved a bonus of ₹ 3000 during the last year for the maximum milk production in this area and the farmer has no other source of income for her livelihood.

Disclaimer

This working paper has been prepared by Shri. Abdul Salam. K.K, Research Assistant, District Planning Office, Idukki. The facts and figures in the report are based on quick field survey done by the author and do not reflect the views or policies of Kerala State Planning Board. The purpose of this document is to provide a comprehensive overview of the scheme/projects implemented by the Local Self Governments during XI Five Year Plan.

Introduction

'Women's Dairy Unit' was a project in productive sector implemented by Vazhathope grama panchayat in Idukki district during the financial year 2011-12. This project was taken for quick evaluation study. The study is conducted during a very short period of two months. This project was also included in special women component plan as well as in productive sector. The project was implemented and supervised by Veterinary Dispensary Surgeon of Vazhathope Grama Panchayat. The total beneficiaries of the project were 77. In addition to this general project, Vazhathope grama panchayat had also implemented a dairy project for SC categories. The subsidy norms of women's dairy unit were different for SC/ST and general categories.

The project explained that the beneficiaries were selected on the basis of the following conditions.

- 1) Beneficiary should be a woman
- 2) Preference to BPL family
- 3) Preference to widows
- 4) Preference to experienced hands

The project envisaged a total cost of a single dairy unit ₹ 20000. This amount was further divided as ₹ 18500 for purchasing a cow, ₹ 1000 for transportation cost and ₹ 500 for insurance purpose. 50 per cent subsidy was given to SC and ST beneficiaries, a fixed amount of ₹ 7500 was given as subsidy to BPL general category and 33 per cent subsidy, that is, ₹ 6600 was given to APL general category.

Dairying is an important source of subsidiary income to the majority of the farmers of Vazhathope grama panchayat, a high range region. Most of the farmers are occupying in agriculture along with cattle rearing. The agriculture farmers find cattle rearing as a good source of organic manure for improving soil fertility and crop yield. A number of schemes were implemented through local self government and Veterinary Dispensary of this region like Swaminathan Packages (Idukki Package), Department Schemes, Central Schemes and State Schemes.

Area of the Study

Vazhathope grama panchayat is in Idukki block panchayat of Idukki district. The majority of geographical area of the panchayat lies in the high land, characterized by high rainfall, cool and misty climate, surrounded by steep rocks, hills and steep valleys. Agriculture and allied activities are the main occupation and source of income in the Vazhathope grama panchayat. In earlier period, the main cultivation was rice and tapioca and later turned to rubber plantation and other cultivation like pepper, ginger, coco and coffee. Most of the farmers started cattle rearing as supplement to agriculture cultivation to create an additional income.

Objectives of the Study

The objectives of the study are

- ❖ to analyse increase in the production of milk and dairy products in the Vazhathope grama panchayat aiming towards self sufficiency and
- ❖ to analyse improvement in the livelihood options available for rural women.

Methodology

Both primary and secondary data were used for the study. Primary data were collected through sample survey. Random sampling procedure was adopted. The Panchayat was taken as one unit and beneficiaries were selected randomly. Sample size was 20. Primary data/information were collected through direct personal interviews as well as telephone interview using well structured and pre-tested schedule through direct observation of the dairy units. Personal and focussed group discussions were also conducted. Informal discussions were also held with the people's representatives of the panchayat, prominent experienced farmers and implementing officers. It was very difficult to conduct a survey within this limited time period especially in high range hill area.

Secondary data were collected from *Padhadi Rekha* and *Vikasana Rekha*, veterinary dispensary, local administrative body and other published documents.

Relevance of the Study

India possessed one of the largest livestock population in the world and ranked first in milk production. Livestock are an integral part of agriculture production. It contributes to growth and development of agriculture sector. Kerala, a consumer state, is not self sufficient in agriculture production. Majority of the people in Kerala are consuming packed milk and dairy products. The major contributors of milk production in Kerala are the poor village farmers and they got a very low income from dairying. Through dairying they can produce milk for their self consumption and surplus can be sold through co-operative societies. This will lead a self sufficiency in milk production and generate additional income to the village farmers. So, for evaluation study cattle rearing is more relevant at this present situation. Many scholars analysed the importance and scope of the dairying through the periods.

The livestock farming help to improve employment, food, nutritional rich products and generate income and employment especially to poor marginal farmers (Dr. Venugopal). The Livestock farming in Kerala is no longer a traditional business of certain group of people. Educated entrepreneurs from different social and economic backgrounds are now stepping in to it. Commercial dairy farms operate at lower costs and can implement more advanced technologies and systems, which are out of the reach of marginal poor farmers.

The landless dairy farmers mostly derive their bread from working as agricultural labours; they supplement their income from cattle rearing. The contribution of landless dairy farmers to the national milk production is quite substantial (Sukla, Brahma Kumar, Kevin Waldie, SNV Rao and S Ramkumar). Realising the potentiality of dairy cattle in improving the economy of resource poor people, especially the marginal landless farmers, the government of India has recognised dairying as an instrument of socio-economic change. The surplus labour in these families can best be utilised in rearing dairy cattle and thereby generate income and employment in rural areas.

(K N Nair) Kerala witnessed a rapid increase in milk production, between the year 1964-65 and 1978-79, which has been

attributed to increased productivity of milch animals brought about through genetic improvements. The Department of Dairy Development and Swiss Project have taken major programmes for cross breeding. The Indo- Swiss Project located high ranges in Western Ghats was started with objective of creating new species of crossed cattle adopted to Indian conditions and to encourage scientific production of fodder.

The dairy development also collaborated with the Indo-Swiss project under the special employment programme and they proposed massive crossbreeding to cover one million cattle by using semen collected exotic bulls of high production potential. In Fourth Five Year Plan massive crossbreeding programmes were started. ICDP also started during this period. Jersey and Brown swiss were used for crossbreeding in different districts of Kerala. During the plan period, frozen semen and liquid nitrogen were stored and supplied to the dispensary centres by Kerala Livestock Development Board.

The important revolution in the field of milk production was the starting of Operation Flood programme started by National Dairy Development Board (NDB) in 1970 made India the largest milk producer in the world. This programme with its whopping success was called as 'The White Revolution'. The main architect of this successful project was Dr. Vargeese Kurien, also called the father of White Revolution who passed away in September 2012. Operation Flood was completed in three phases. The dairy cooperatives were enabled to expand and strengthen the infrastructure required to produce and market increasing volumes of milk. Veterinary first aid health care services, feed and artificial insemination services, for co-operative members were extended along with intensified member education during this third phases.

This is only a bird's eye view of literature on dairy development programme. Very few studies were available on the actual implementation and assessment of productive sector especially on dairy development of Idukki district projects in case of either department schemes or state plan project schemes.

Survey Results and Discussions

Results of the study are presented and discussed under different sub heads.

1. Profile of Respondents.

All the respondents were fully literate. Out of 20 respondents, six belonged to SC category and fourteen to general category. Four respondents were widows who are the family head and find means through cattle rearing. Details are given in Table 1.

Table 1
Profile of the Respondents

Category	Number	Education	Number
SC	6	Literate	1
General	14	Literate	3

Source: Sample Survey

All respondents were full in the age range of 29 to 65 years. The average age of respondents was 43. Details are given in Table 2.

Table 2
Details of Age of Respondents

Age of Respondents	Frequency
25-35	2
35-45	4
45-55	12
55-65	1
65-75	1
Total	20

Source: Sample Survey

2. Main Occupation and Experience

The main occupation of 8 households were agricultural labour and also work in their own agricultural field which earn only a seasonal income and for them cattle rearing is an additional job and a supplementary income for their livelihood option. Out of twenty households, twelve households were fully engaged in cattle rearing and their main source of income was from cattle rearing. They have good experience in cattle rearing, that is, average experience of more than 25 years in this field. The local representatives of the Vazhathope grama panchayat were expressed their opinion at the time of beneficiary selection was that the dairy unit should be implemented only for those experienced and deserved that was seen at the time of data collection. Details are given in Table 3.

Table 3
Details of Occupational Experience

Category	Main Occupation		Average Experience in Cattle Rearing(Years)
	Agriculture	Cattle Rearing	
General	5	9	27
SC	3	3	18
Total	8	12	23

Source: Sample Survey

3. Mode of Acquisition of Finance and Cow

Most of the respondents availed financial source from their own income. The special component plan of the milk co-operative society in Kerala provided financial assistance in acquiring / purchasing animals. This kind of financial loan was being taken by three respondents. Details are given in Table 4.

Table 4
Source of Fund for Purchase

Category	Mode Finance		Purchasing of Cows
	Loan	Own	
General	2	12	From Tamilnadu
SC	1	5	From Tamilnadu

Source: Sample Survey

Majority of the livestock farmers and outside experts in this field were criticized the strict condition of purchasing cow from outside the state for the state plan implementation and the same time department schemes has no such restrictions and regulations. Some of the experienced beneficiaries were argued that when they purchase cow from outside state especially from Tamilnadu, often the animals were found uncomfortable and uneconomical for dairy farmers because of the geographical and climatic condition of Vazhathoppe area. Another argument was that the middlemen were offered a good quantity of milk at the time of purchasing cow from Tamilnadu while the livestock farmer's experience was entirely different. Thus the exploitation of the middlemen is one of the threats facing during the purchase of cow. They get only half of the quantity of milk they offered. Majority of the livestock farmers were expressed that ₹ 20000 was not enough to purchase a good variety of cow and the subsidy should be increased. The implementing officer supported the livestock farmer's opinion and he also cleared that the government of Kerala had increased dairy unit cost from ₹ 20000 to ₹ 30000. The existing women's dairy unit project was implemented before increasing the fund, so the benefit was not being given to the existing beneficiaries.

4. Income through Dairying

Contribution of income from dairying to the income of the family was significant in this region. All the livestock farmers sell their milk to the MILMA dairy societies after their self consumption. It is very common to notice that these families consume milk

whenever their animals are in milk, otherwise they normally do not purchase milk for family consumption. There are four major dairy co-operative societies situated in Vazhathoppe grama panchayat, that is, Vazhathope, Chottanikkada, Maniyarankudi and Karimban. Under each dairy unit there are two or more milk collection centres were working in well established manner. The dairy cooperative societies receive milk from the dairy farmers at the rate of ₹ 23 or ₹ 24 in the morning and evening. Majority of the livestock farmers had sold milk an average of 6.5 litres per day. The two major varieties of cows purchased during this project period were Jersey and Holstein Friesian. Details of milk production are given in Table 5.

Table 5
Details of Milk Production

Category	Average quantity of milk at present (in litre)	Average quantity of milk during last year (in litre)
General	6.5	4.3
SC	6.4	3.0

Source: Sample Survey

As per the dairy farmers' report, the milk production was increased during the last year compared to the previous year. The average productivity of milk was 6.5 litres per day after the project implementation period while it was only 4.3 litres per day during last year. But some of the respondents were opined that they were not able to quantify the exact efforts and benefit from dairying. Some of the dairy farmers were expressed that dairying is a passion and main source of income to them. Some of the respondents said that they did not know exactly how much the milk production was increased because they sell the cow when decrease the quantity of milk and purchase a new one and they had not maintained a proper income account or proper book keeping.

One of the dairy farmers had achieved a bonus of ₹ 3000 during the last year for the maximum milk production in this area and she had got cattle feed from dairy cooperative society on maximum subsidiary rate.

One of the suggestions put forward by the livestock farmers were that a dairy worker can't participate in any other work even in MGNREGS work, but the total remuneration from dairying is very less compared to other agricultural works and to the wage rate of MGNREGS activities. So the dairy farmers strongly demanded to consider and include their dairy farming in MGNREGS activities.

5. Uses of Dung and Other By-products.

Vazhathope Grama panchayat is basically an agrarian village. Majority of the people are engaged in Agriculture and allied activities. All the respondents in this area were replied that they fully utilised their own land by cultivating coco, pepper, coconut, tapioca, ginger, coffee and rubber. They used cattle dung for all these agricultural cultivation.

Other sources of income from dairying are given in Table 6.

Table 6
Other Sources of Income from Dairying

Category	Use of Dung for Agriculture	Exchange of Dung for Fodder Grass	Dung Used for Biogas
General	40 %	60 %	35%
SC	65 %	35 %	nil

Source: Sample Survey

One of the peculiarities of dairy farmers of this region noticed from primary survey was that after the use of cattle dung for their own agricultural fields, a major portion of dung was exchanged for fodder grass. This kind of barter system of exchange is present in the region. Landless dairy farmers or the surplus dung holders were exchanged their cattle dung for fodder grass and benefitted both of them.

Five dairy farmers, out of fourteen respondents under general category, were brilliantly executed biogas plant using cattle dung and save expenditure on cooking gas from their family budget.

Another four dairy farmers intended to establish biogas from cattle dung in near future.

Participation and Support

Even though, the project was being implemented as women oriented project, they got good support from their family members especially from their husband and children. All the dairy farmers were very impressed on Veterinary Dispensary's medical first aid health treatment and immense help and advice from their part. All the dairy farmers were registered in MGNREGS and participated in Kudumbasree activities and Gramasabha. Some of the dairy farmers were compared their wages to the wage of MGNREGS and they told that the working hours and wage rate of dairy farmers is very low at this region. They confessed that they have no leave from cattle rearing and they tied up with this cattle and their remuneration is below the MGNREGS wage rate. So they strongly demanded Government of Kerala to consider them as a part of MGNREGS worker.

In order to maintain them in dairying, all the respondents replied that the cattle feed price hike must be regulated and controlled by state government and *kalitheetta or cattle feeds* should be distributed to the dairy farmers on a reasonable subsidy rate, otherwise the existing farmers may withdrawn from this field.

Another issue noticed from the region is that because of the low remuneration and benefit from dairy farming and the introduction of MGNREGS activities which is less risky and high wage rate as compared to dairy farming, a major share of dairy farmers discontinuing dairy farming and engage in MGNREGS activities . This argument was being supported by Implementing Officer and local representatives.

Major Findings and Suggestions

1. Majority of the livestock farmers were aged above 47 years old.
2. Majority of the livestock farmers had an area of only one acre of land or below one acre.
3. Majority of the livestock farmers were having long experience in cattle rearing, that is, 80 per cent of farmers had experience of more than 20 years.
4. All respondents have good participation in MGNREGS activities, Kudumbasree and Gramasaba meeting. One of the suggestions forwarded by dairy farmers to consider them as MGNREGS worker and remuneration on the basis of MGNREGS wage rate.
5. There is a strict rule for purchasing of cattle from outside the state, the dairy farmers not much interested in purchasing of cow from outside the state mainly because of the reason that the animals are found uncomfortable in this geographical condition of Vazhathope and it become uneconomical to the dairy farmers. The exploitation of the middleman is another threat facing during this purchase. So this purchase law and rule may be modified.
6. The amount of dairy unit subsidy should be increased and the number of cows should be at least two or more in order to keep them in cattle rearing field.
7. Low productivity of milk in case of purchased cows.
8. There are different schemes of state, central and departmental in cattle rearing, dairy units and livelihood support schemes. If all these are to be clubbed, then the result will be more efficient than the existing one.
9. Hike in price of cattle feed should be controlled by Kerala Government and all the respondent replied that cattle feed – kalitheetta- should be distributed on reasonable subsidy rate to the dairy farmers.

10. A different kind of exchange system existed in this region that is the surplus cattle dung is exchanged for fodder grass, this will benefit to both of the farmers.
11. One of the dairy farmers had achieved a bonus of ₹ 3000 during the last year for the maximum milk production in this area.

Conclusion

Cattle are an integral and major part of rural agricultural farmers. Rearing one or two cows is an important livelihood activity to the women dairy farmers in the rural area of the Vazhathope village. Livestock, particularly cattle, have a strong role in livelihood option and poverty alleviation, although the degree and nature of their contribution varies. Cattle rearing provide regular cash income on which women has better control. Moreover, women can feel a proud and dignity when they earn income and to meet a part of family expenditure. Through dairy farming, the local milk production has increased at a large extent and dairy farmers find dairying is the main livelihood option for them.

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