Chapter VIII

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Findings
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Chapter VIII

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The final chapter is divided into three sections: the first section brings together the major findings of the study and shows how the findings prove the hypotheses that were made in the beginning; in the second section the researcher gives certain conclusions based on the findings of the study; the third section provides certain recommendations based upon the findings, conclusions and the new insights that emerged in the course of study, followed by suggestions for further research.

8.1 FINDINGS

8.1.1 The programmes envisaged by the private sector dairy units are primarily aimed at improving the economic conditions of the weaker sections in rural areas. From the survey data it is revealed that almost all sample beneficiaries appreciated the plan and activities of private sector dairy units. All beneficiaries who reported an increase in annual income due to private sector dairy units have appreciated the role of private sector dairy units in increasing the welfare of beneficiaries. In the survey more than 95 per cent of beneficiaries, who realized an increase in annual income due to dairying, pointed out the positive role performed by the private sector dairy units. 98.8 per cent of beneficiaries who reported an increase in annual income by less than Rs. 1000/-, 97 per cent of beneficiaries who realized an increase in annual income between Rs. 1000/- and Rs. 3000/-, cent per cent of beneficiaries
who realized an increase in annual income between Rs. 3000/- and Rs. 5000/-
and 91.6 per cent of beneficiaries who realized an increase in annual income
above Rs. 5000/- found a major role performed by private sector dairy units in
increasing milk production and general welfare of people. But it is a common
feeling among beneficiaries that the general infrastructure for dairy
development proved to be insufficient to improve the income and standard of
living as it has been planned and projected by the dairy units.

8.1.2 During the sample survey the researcher observed some
inconsistency between the overall master plan envisaged by the authorities of
private sector dairy units and the needs and expectations of the beneficiaries.
The authorities of private sector dairy units have high ambitions and believe
that the project will promote co-operative spirit, leadership qualities, social
commitment, cultural integrity, religious tolerance, mutual respect, women
empowerment etc. in the project area along with economic advancement. But
most beneficiaries have only self interest and concerned only with the financial
aspects of their life. This is because majority of dairy farmers belong to the
lower strata of the society who have a hand to mouth existence. The poor
condition forces them to concentrate on the economic aspects of dairying since
the other ideals will only lead to distractions which would be at the expense of
their livelihood.

8.1.3 The private sector dairy units helped to increase the annual income
of the dairy farmer. In the survey data 92.4 per cent of beneficiaries reported
that they realized an increase in annual income due to their involvement in
dairying. Only 7.6 per cent of beneficiaries did not realize an increase in income.

* It is not at all a contradiction because “almost all beneficiaries.. dairy units” is the outcome
of the survey data (it is noted that 97.2% beneficiaries admitted a positive role of private
sector dairy units, in P. 303).
The second aspect “but it is a common feeling.. projected by dairy units” is the feeling of
beneficiaries that the entire vision of private sector dairy units is not fully actualized, as it has
been envisioned in their project proposal.
So the two statements are not contradictory.
This was mainly because they possessed local breed animals. The possession of crossbred animal increases the income because they give more quantity of milk to the dairy farmer. The main reason is that in the case of crossbred cows there is not much variation in the production of milk in the morning and in the afternoon unlike the local cows. It is reported that in crossbred animals there is a reduction of around 25 per cent milk in the afternoon from the morning production and in local breds there is a reduction of around 50 per cent milk in the afternoon from the morning production. This affects income generation from dairying.

8.1.4 For a poor dairy farmer rearing of more than one milch animal is not financially viable because it increases the cost of rearing the animals both explicitly and implicitly. Explicitly, it increases the maintenance cost specially feeding cost and implicitly it requires more time to look after the animals. In that case beneficiaries have less time to do other income generating activity like farming and daily wage work.

8.1.5 Profits from dairying is not limited to the income earned from the sale of milk alone. In the research it is found that other sources of income generation are as important as the sale of milk to make dairying profitable. They include income from the optimum use of dung, income from the sale of calves, and saving in medical expenses as a result of improved health status maintained by the consumption of milk. The smoke free environment in the family, due to the installation of gober gas plant, also, helps to reduce the medical expenses to some extent.
8.1.6 For the increase in annual income improvement in health plays a key role. All the 250 beneficiaries reported that the consumption of milk improves the health of the family members. The installation of gober gas plant facilitates low level fumes in their homes and thereby improved the health of the family members. Out of 39 beneficiaries who installed gober gas plant, all of them have reported that it reduced medical expenses due to the smoke free environment in the household.

Optimum use of dung is an important aspect to increase the annual income of beneficiaries. It is found in the research that all the beneficiaries, who reported an increase in annual income due to dairying, have used the dung for income generation as well. In the survey 11.2 per cent sold the entire quantity of dung for getting income, 32.5 per cent used the entire quantity for farming and 56.3 per cent used the dung partly for sale and partly for farming.

8.1.7 In the research it is found that repayment of loans depends on various factors. Firstly, those who earn income from the sale of dung are in a better position in loan repayment than those who sell milk alone to the dairy units. Among 115 beneficiaries who have taken loans, 92 (80 per cent) of them earn income from the sale of dung. No one was found irregular in loan repayment when the income from the sale of dung is between Rs. 300 and Rs. 1000 per month.

Secondly, it is found in the study that all those who install gober gas plant and thereby save medical expenses are either in the category of beneficiaries who have completed loan repayment or in the category of beneficiaries who regularly pay the installment amount.
Thirdly, those beneficiaries who are doing farming along with dairying are found better in the repayment of loans. Out of 115 beneficiaries who have taken loans for dairying, 109 [94.8 per cent] are doing farming along with dairying. Again, among those 109 beneficiaries, 106 [97.2 per cent] are found either in the categories of ‘repayment completed’ or ‘regularly paying the installment amount’.

Fourthly, income generation from the sale of calves also helped the proper repayment of loans. All the beneficiaries, who got annual income between Rs. 2000/- and Rs. 5000/- from the sale of calves, are found in the categories of beneficiaries who have either completed the repayment of loans or are regularly paying the installment amount. Similarly, 89 per cent of beneficiaries, who earn income between Rs. 1000/- and Rs. 2000/- are also found in the categories of beneficiaries who have either completed the repayment of loans or are regularly paying the installment amount.

8.1.8 The beneficiaries who got employment in the private sector dairy net work reported an increase in annual income more than those who are doing only dairying. Out of 33 beneficiaries who got employment in dairy units 31 [93.9 per cent] of them have reported an increase in annual income. The employment also helps the dairy farmer to improve the financial position better than those who do only dairying. Out of 33 beneficiaries, who got employment in the dairy units, 25 [75.8 per cent] of them have reported a financial improvement in life. In the survey data financial improvement was reported by 65.6 per cent of 250 sample beneficiaries. But the percentage rate found an
increase to 75.8 per cent when they are considered in the light of having employment.

The research revealed that 78.8 per cent of beneficiaries who sought employment in private sector dairy units are from the families who own less than half acre of land. This is because they are not in a position to undertake farming, a source of income in the rural area. To generate income for living some kind of employment is a must for them.

8.1.9 The private sector dairy units promoted saving habit among poor dairy farmers. The authorities of the private sector dairy units compelled the beneficiaries to open bank account and to deposit some amount periodically. In the research a high proportionality is found between increase in saving and increase in annual income. The survey data revealed that out of 231 beneficiaries, who reported an increase in annual income due to dairying, 158 [68.4 per cent] of them reported saving habit in their life. Employment opportunities also helped to develop a saving habit in life. Out of 33 beneficiaries, who got employment in dairy units, 25 [75.8 per cent] of them have reported savings in their life.

The saving habit helped to repay the loan promptly. Out of 115 beneficiaries, who have taken loans for dairying, 79 of them reported that they have saving after they entered into dairying. Among them 74 [93.7 per cent] are found in the categories of beneficiaries who have either completed the loan repayment or are regularly paying the installment amount.
8.1.10 The survey data provides a positive relationship between saving and the insurance of milch animals. The beneficiaries who reported that the terms and conditions of the insurance scheme as good, are found to save more than those who reported the terms and conditions as average. Out of 85 beneficiaries who have bank deposits due to dairying, 66 [77.6 per cent] of them have insured their milch animals and all of them reported the terms and conditions of the insurance scheme as good.

8.1.11 The private sector dairy units are instrumental in possessing certain financial assets like banks deposits, loans to others and purchase of shares and bonds by the beneficiaries. The research revealed that the possession of financial assets is related to certain variables. Firstly, it is related to the sale of milk. When the sale of milk is increased, the possession of financial assets also is increased.

Secondly, it is related to the insurance scheme. The beneficiaries who have appreciated the terms and conditions of the insurance scheme are found in possessing more financial assets than those who do not appreciate the terms and conditions of the insurance scheme. In the survey data 68.2 per cent have appreciated the terms and conditions of the insurance scheme and 72.3 per cent of beneficiaries reported an increase in financial assets due to dairying. Similarly a low percentage [5.4] of beneficiaries noted the terms and conditions of insurance scheme as ‘poor’ in the survey; and only a low percentage [5.3] of beneficiaries, possessing financial assets, have reported the terms and conditions as poor.
Thirdly the researcher has noted a positive relationship between the possession of financial assets and the repayment of loans. The beneficiaries who possess financial assets are found better in the repayment of loans. In the sample survey it is noted that 16.5 per cent of beneficiaries have completed the repayment of loans, 76.5 per cent are regularly paying the installment amount and 6.1 per cent are irregular in making the payment. The analysis between possession of financial assets and repayment of loans revealed that 20.3 per cent of beneficiaries, holding financial assets have completed loan repayment and 76.3 per cent are regularly paying the installment amount. Out of 7 beneficiaries who are irregular in making loan repayment, it is found that only one beneficiary holds financial assets. It is, again, noted that no beneficiaries maintain bank deposit among the ‘irregular’ in making loan repayment.

Fourthly it is found that the possession of financial assets is positively related to the income generation from the sale of calves by the beneficiaries. The sample survey highlights that out of 144 beneficiaries, who realized an income below Rs. 1000/- from the sale of calves, only 50 (34.7 per cent) have held financial assets, among 42 beneficiaries, who realised an income between Rs.1000/- and Rs. 2000/-, 26 of them (61.9 per cent) have held financial assets, among 26 beneficiaries who realized an income between Rs. 2000 and Rs. 5000/-, 19 (73.1 per cent) have held financial assets and among 4 beneficiaries who realized an income above Rs. 5000/-, 3 (75 per cent) of them have held financial assets.

Fifthly, farming along with dairying is much more helpful to acquire financial assets than doing only dairying. In the sample survey, 85 beneficiaries
reported that they have bank deposits and the data revealed that 62 [96.5 per cent] of them combine dairying and farming together. Similarly, the sample survey provides the information that 20 beneficiaries have given loans to others and the data show that all the 20 (cent per cent) beneficiaries do dairying and farming. The survey data shows that 4 beneficiaries have purchased shares and it is noted that all of them have done farming and dairying.

8.1.12 The researcher noted that the installation of the gober gas plant has improved the health of individuals because it helped the beneficiaries to avoid fumes in home while cooking food. In the sample survey it is found that all the 39 beneficiaries, who installed gober gas plant, noted a positive relationship between gober gas plant and improvement in health.

Improvement in health indirectly increases the saving among beneficiaries. All the 39 beneficiaries, who installed gober gas plant in the sample survey and experienced improvement in health, have also reported a financial improvement and saving in life. The impact of the gober gas plant in improving the health of beneficiaries can also be known from the study of the medical expenses of beneficiaries. All the 39 beneficiaries, who installed gober gas plant, have experienced a reduction in medical expenses after its installation. 27 beneficiaries experienced a reduction of below Rs. 300/- in a year, 11 beneficiaries have noted a reduction between Rs. 300/- and Rs. 500/- in a year and one beneficiary experienced a reduction between Rs. 500/- and Rs.1000/- in a year in medical expenses.

8.1.13 It is found in the research that when the beneficiaries are doing both dairying and farming it helps them to acquire more income because they
are complementary in nature. In the sample survey out of 231 beneficiaries who noted an increase in annual income, 94.4 per cent of them are doing both farming and dairying. The researcher found that possession of land gives a boost to involve in farming by the beneficiaries. According to the survey data 56.3 per cent of beneficiaries who possessed less than half an acre of land found a push from dairying to undertake farming. But when the land holding is around two acres, 76.2 per cent of beneficiaries found a push from dairying to undertake farming.

It is noted that the free supply of dung has persuaded the farmer to undertake farming. Out of 154 beneficiaries, who reported that dairying is a great support in farming, 153 (99.4 per cent) of them used the dung for their farming.

8.1.14 The possession of consumer durables by the beneficiaries brings certain findings. Firstly, though only 46.3 per cent of beneficiaries in the survey have purchased durables, all of them reported an increase in annual income.

Secondly, the beneficiaries who have more financial assets like bank deposits and loans given to others, have possessed only less number of consumer durables in their homes. This is because most of the poor beneficiaries would like to keep their savings in the form of liquid cash, bank deposits and loans to others than to purchase consumer durables. This is mainly to face the future contingencies easily.

Thirdly, more durables are purchased by those who completed their loan repayment. This is because of the increase in savings after the reimbursement of loans.
Fourthly there is a positive relationship between income from the sale of dung and the possession of consumer durables. When the monthly income from the sale of dung is below Rs. 300/-, 41.5 per cent have purchased consumer durables and when the monthly income from the sale of dung is between Rs. 500 and Rs. 1000, 85.8 per cent of them have purchased consumer durables.

Fifthly income generation from the sale of calves also helps the dairy farmer to possess consumer durables in their homes. Out of 107 beneficiaries who purchased consumer durables, 91.6 per cent of them have income from the sale of calves.

8.1.15 The private sector dairy units bring advancement in the socio-cultural field too. Many farmers are leaders in their local dairy sanghams. The researcher learnt that this has helped to develop their leadership skills and to acquire the skill to address the audience effectively, to organize meetings efficiently and to prepare and to present reports attractively. Many rural women also have come into leadership through their involvement in dairy units. Six women won the panchayat elections and became ward representatives in the survey area and they shared their feelings with the researcher that this was possible only due to their involvement in dairying.

8.1.16 The economic advancement of the dairy farmer is again visible in the socio-cultural field by the fact that they were able to educate their children in English medium schools and subscribe to newspapers in their homes. This brings more political and social awareness among dairymen. It is found from the research that educating children in English medium school is related to
their increase in annual income, increase in savings and possession of financial assets by them. When the increase in annual income was below Rs. 1000/-, no one could send their children to and English medium school; when the increase in annual income is between Rs. 1000/- and Rs. 3000/-, 22.2 per cent could educate their children in English medium school and when the increase in income is above Rs. 5000/-, 41.7 per cent could educate their children in English medium schools. Similarly it is found that a positive relationship exists between increase in annual income and leadership positions held by beneficiaries.

Increase in saving has a significant role in socio-cultural activities. It is found in the survey data that 63.9 per cent of beneficiaries who sent their children to English medium schools, are from the category of beneficiaries who reported an increase in savings. Similarly, among 61 beneficiaries, who subscribed to newspapers, 65.6 per cent of them fall in the category of ‘increase in saving’. Financial improvement helped the beneficiaries to come into the field of leadership activities as well. Among 61 beneficiaries who were involved in leadership, 58 (95.1 per cent) of them have realized financial improvement through dairying.

Possession of financial assets helps the beneficiaries to involve in socio-cultural activities too. It is found in the survey that all the 36 beneficiaries who sent children to English medium schools possessed financial assets and 93.8 per cent beneficiaries who subscribed for newspapers possessed financial assets.
8.2 CONCLUSIONS

The findings of the research helped to derive the following conclusions:

8.2.1 Dairying can be regarded as one of the best employment avenues in the rural setup. It is an activity wherein the entire family members can be involved. The head of the house can do the marketing of milk and purchase of inputs, the housewife can do the feeding and milking of animals and children can do washing and collecting green fodder for them. So it can be considered as a family occupation in a rural setup.

8.2.2 Dairying is a subsidiary income generating activity for the rural poor. In the rural areas majority of the poor people are either farmers who own a small piece of land or are daily wage earners. Dairying can be incorporated to their daily work without affecting their regular schedule because major portion of the dairying can be done before 8.00 am. and after 5.00 p.m. So it gives an alternate source of income to the rural poor. It has also been observed that a number of persons got involved in dairying as a part time job and when they saw that the return was much higher they made it a full time occupation. From this we can arrive at an important conclusion that the coming of primary co-operatives helped several part time wage labourers to find an alternate source of income.

8.2.3 One of the major problems faced by the beneficiaries is the low price for milk. There is no proportionality between the increase in the price of cattle feed and increase in the price of milk. The price of dairy inputs is
increasing at a faster rate than the price of milk. This has greatly reduced the profit margin of the poor cattle farmers*. The main reason is that there is no system whereby the farmers can control costs when the prices of farm inputs go up. At the same time there are effective controls over the price of milk. Hence the inference is that unless a system of correlating the prices of inputs with that of milk is not arrived at, the farmers would continue in this present state of very low profits which does not augur well for the future.

8.2.4 The private sector dairy units are committed to increase the income of beneficiaries and thereby to alleviate rural poverty. It is concluded from the research that income generation from dairying depends on various sources:

a) If the milch animals is of high cross bred quality the milk production and income generation are high.

b) The optimum use of dung helps to increase the income of beneficiaries. It should be used in farming or should be sold for getting income.

c) The income generation from the sale of calves is another avenue to have an increase in the annual income of beneficiaries.

d) Incorporation of farming with dairying helps to increase the annual income of beneficiaries.

8.2.5 Another way to generate income is to reduce the expenses of the household as much as possible. Among recurring expenses medical expenses consume much income of the dairy farmer. To reduce the medical expenses installation of the gober gas plant helps a lot. It provides a smoke free

* It is from the answers of beneficiaries in response to the question Nos. 42 and 48 in the schedule. This aspect is also discussed in page 208.
environment in the house and helps to give a boost to the health status of members. The gober gas plant has two advantages. All animal wastes can be effectively utilized and secondly there is saving on fuel for essential cooking purposes.

The farmers do not have the financial capacity to afford food of a high quality in their regular diet. So it is observed that malnutrition is a major problem especially among the children. The survey concluded that malnutrition due to the poor intake of quality food affected both the adults and the children alike. This brought many deficiencies in the proper maintenance of health. Dairying helped the farmers to consume milk and provided them with a balanced diet which consisted of essential proteins and vitamins.

Thus one can reasonably conclude that the increased use of the gober gas plant as well as the increased consumption of milk specially by the children can make this occupation not only economical but can develop a healthy new generation.

8.2.6 The survey has revealed that most of the farmers indulging in dairying have taken loans of one type or the other. The easy availability of the loans in the present liberalized setup is responsible for this situation. So the main conclusion arrived by this study is the problem of indebtedness which the farmers are facing. The collateral which all of them have offered is their farm and their milch animals on which depends their sustenance. These persons are always under threat of litigation as well as recovery proceedings from the institutions who have provided them with credit. This study has helped to derive certain conclusions on this aspect. The farmers who have dairying as their
sole occupation have very low repayment capacity. But those who have been more dynamic and have found additional occupations are in less debt. Moreover those farmers who indulged in agriculture along with dairying are much better off. Further many of them took up odd jobs in the dairy units and this helped them to repay their loans more easily. In short those with multiple occupations are far less in debt than those with dairying as their sole occupation.

8.2.7 Private sector dairy units promoted the saving habit among the poor beneficiaries in the rural areas. The opening of the bank account provides them with the incentive to save some amount on a monthly basis and to deposit this in their account. It can be concluded that this has brought about a refreshing change in their attitude towards spending. The necessity to maintain a minimum balance and the feeling that this amount is always easily available has further encouraged saving in the form of bank accounts.

8.2.8 The study shows that the insurance scheme of the milch animals has provided a good incentive to the farmers to expand their area of occupation further. Most of the farmers made highly modest beginnings. They began with a single milch animal and if anything happened to the poor animal, that meant a total loss of activity. Moreover farmers were also highly apprehensive while going in for an expansion of activity by purchasing new animals and that with the help of loans. The introduction of this insurance scheme has greatly minimized the risks involved in the business. In addition the study observed that the insurance premia were being paid by the private dairy units with whom these farmers established contact. The premium was conveniently deducted from the amounts due to the farmers and this further lightened their burden.
In short, this scheme of insurance has greatly helped the dairy farmers to not only move forward in their business with confidence but also reduce their burden in the process.

8.2.9 The private sector dairy units helped the beneficiaries to purchase some consumer durables in their home. It was possible because of the income generation and saving habit, a contribution of private sector dairy units to the beneficiaries.

8.2.10 The private sector dairy units brought advancement in the socio-cultural life of the dairy farmer as well. They impart socialization, leadership skills, political awareness, rights and responsibilities of citizens, and cultural advancement among dairy farmers. It is also instrumental to provide a better education to their children by sending them to English medium schools, and to have socio-political awareness by subscribing for newspapers in their homes. It helps the beneficiaries to develop their leadership skills by their active involvement in local body elections.

8.2.11 Dairying increases the family bond. All members of the family are involved in dairying. The little calf gives enjoyment to children in the family. It requires the cooperation of all family members and promotes unity and cohesion among them.

8.2.12 The emergence of private sector dairy units can be regarded as a natural response to the existing challenges in society. It is a response to the identification of the key problems of the area like unemployment and poverty and insufficient family income.
8.2.13 The researcher concludes that dairying is more suitable for women folk in the rural area. In the rural area majority of the women are housewives and unable to go for other works because there is no one in their house to look after the children if they go for work. So they remain at home and their earning is zero. They can very well manage one milch animal in the rural set up. They can feed, wash and milk the animal and take the milk to the nearest collection centers. If they go for other works, definitely, that will yield more income to them than dairying; since they are not ready to go for other works, dairying found much suitable for them, because its opportunity cost is zero.

8.3 RECOMMENDATIONS*

Based on the above findings and conclusions, the following recommendations can be made:

8.3.1. The study has found that the milch animal is the main source of revenue for the dairy farmers. A large number of the farmers have only one animal which is hardly sufficient for them to meet both ends meet. So it is recommended that the farmers should be provided with cheap credit facilities to purchase at least two milch animals. This is specially advantageous when one of the milch animals is pregnant or is sick and requires medical attention.

The importance of this occupation is that it can be undertaken with the minimum of skills and it can go a long way in alleviating poverty in the rural areas of the state. The availability of cheap credit and adequate subsidies would provide the necessary incentives for more and more poor persons to take up this as an employment. The presence of milk co-operatives in the vicinity of

* The recommendation are emerged from the findings and the reflection over the findings and conclusions made by the researcher.
their houses further encourages them to take up dairying as a viable and gainful employment.

8.3.2 The study had as one of its major findings the dependence of the dairy farmers on the price of milk for raising their income. However the price fixed by the societies rarely makes the farmers happy. The societies on their part are not able to raise the price to cater to the requirements of the farmers. So it is recommended that the milk received from the farmers should be toned into different quality specifications on the basis of fat content. That type which has more fat content in it, should be priced higher and this would help the milk societies to earn greater revenue and would be in a position to pass on these benefits onto the poor farmers in the form of a higher price.

In this connection it is also recommended that adequate publicity should be given regarding the advantages of milk as an essential ingredient of one’s diet. To make milk consumption attractive, milk in flavoured form should be made easily available through retail outlets. These days the private co-operatives are too much concerned only about distribution of whole milk and it is not in their interests to diversify their product to make better margins of profit.

8.3.3 In the dairy sector there exists a conflict in its pricing pattern. If the price of milk is reduced, it becomes unprofitable to the dairy farmer. On the other hand, if the price of milk is increased, it hits the consumers’ family budget. So the researcher recommends a scientific pricing pattern that promotes reconciliation between these two conflicting objectives in a viable manner.
At present in the agricultural sector there exists National Commission for Agricultural Prices and Costs to determine the prices of agricultural products. Similarly, Egg Co-ordination Committee is there to maintain the price of eggs. Like that it is recommended the formulation of a committee at national and state levels to price the milk products. It makes milk and milk products more sustainable, affordable and profitable.

The committee should be such that it should protect the interest of all persons and institutions which are associated in the production and distribution of milk. It should also be given sufficient statutory power to redress the grievance of any group which may be adversely affected by the decision of this committee. At the state level the committee may consist of the representatives of farmers, agents, co-operatives, local bodies and the state government.

8.3.4 The success story of Amul is worth mentioning in this context. The diligence and hardwork of a group of dedicated persons led by the “Milkman of India” Varghese Kurian made a small experiment of milk co-operatives developed into international proportions. Kerala is one of the largest consumers of Amul products. The people of Kerala are very much concerned when they do not get their morning quota of milk and they consume milk products in huge quantities. It is true that competing with Amul is not an easy task. But no attempt has been made on a concerted basis.

In these days of globalization importing technology is not a difficult task. Suitable technology should be imported by these co-operatives and they
should commence production of standard products like pasteurized butter, cheese, paneer, yoghurt etc. which are now very popular among the people. The people of Kerala may not have to depend on Amul for these requirements. Here it is also worth mentioning the fact that the ghee produced by “Milma” has become so popular that other brands are finding it very difficult to survive. Once we establish a good local market one can even think of exports in the present highly liberalised atmosphere. Further it is recommended that the co-operatives while thinking of new products should give adequate care to pack the products attractively to capitalize on “sight purchase”. By offering quality products at reasonable prices the milk products would be able to command not only a strong local market but also a national as well as an international market.

8.3.5 The private sector dairy units should provide the veterinary and artificial insemination facilities at the door step of the dairy farmers in villages. It helps to reduce the cost of rearing milch animals to some extent. The cost effective steps, now taken by the private sector dairy units, such as supply of feed at a concessional rate, free artificial insemination facility, credit facility at a low rate of interest, and insurance scheme of milch animals should be more intensified.

It is found in the research that the credit granted to the dairy farmer by the private sector dairy units is insufficient to possess a quality milch animal. The researcher, therefore, recommends that the loan amount sanctioned by the private sector dairy units should match the prevailing price of the quality milch animal.
8.3.6 For an increase in annual income it is found that dairying should be incorporated with agriculture. Agriculture helps the feeding of milch animals to a great extent and it is cost effective. Since dung is good manure for farming and available freely to the dairy farmer, it reduces the cost of farming to some extent. Dairying and farming signify the optimality in the management of time by the farmer. Major portion of the work for dairying can be done before 8.00 a.m. and after 5.00 p.m. The time in between is most conducive to do farming.

8.3.7 The private sector dairy units should insist more on the need of saving habits and the need of financial security in life. It is possible by curtailing unnecessary extravagances in life. To realize this, it should organize conscientization programmes for dairy farmers. Dairy units should encourage the beneficiaries to open bank account and insist on depositing some amount on a monthly basis. For example dairy farmers can be encouraged to save on a daily basis with scheme like Nithyanidhi which provides for saving in very small amounts, even one rupee a day.

Secondly, the attaching of the farmers with Self Help Groups [SHGs] encourages a lot of thrift among the farmers.

Thirdly, cooperative societies have a scheme called ‘thrift fund’ where a small portion of loan granted is made into a thrift fund and the farmers receive a small interest annually.

Fourthly, the system of interest subsidy can be introduced to those farmers who repay promptly. For example, the farmers who have not defaulted are eligible for 10% subsidy on their interest payment; 7.5% when the default
is only once; 5% when two defaults are made and 2.5% in the case of three defaults and so on. This would be calculated at the time of the payment of the last installment.

Fifthly, many charitable organizations started the ‘Credit Union Scheme’ to promote saving habits among rural poor. This can also be introduced among dairy farmers as well by the private sector dairy units.

8.3.8 Kerala faces the paradox of unemployment on one side and shortage of labour on the other. This is very evident in the agrarian sector where the second generation is interested in taking up occupations other than farming. One can find the same situation in dairy farming as well. The well-off dairy farmers have sent their children to good schools and provided facilities for higher studies. The second generation, therefore, shows very little interest in the occupation of their fathers. They prefer taking up some jobs even at lesser remuneration in the nearby towns to follow their family occupation. This has led to acute shortage of labour in this field.

So it is recommended that dairy farming technology should be made part of the curriculum in the stage of vocational higher secondary education. The younger generation should be made aware of the economic prospects of this occupation. This would create the necessary interest among the next generation for taking up dairying as an occupation. It solves not only the problem of unemployment which is very acute in the state but also make dairying an attractive proposition.
The interest instilled to the young minds regarding dairying also motivates them to settle down in villages and it helps to overcome housing problems in urban centres to some extent. It avoids overcrowding and in a way helps to protect the environment too. It is high time to motivate the younger generation to have eco friendly life to save our environment from disaster.

8.3.9 Gober gas plant system is suitable in rural areas and it should be promoted by government bodies and voluntary organizations. Though its initial cost is high, its recurring expenses are almost zero. So, the introduction of subsidies and other incentives are a must to popularize the system in rural areas. From the research the researcher learnt that it is highly suitable to avoid fumes in homes, to preserve health of inmates and thereby to reduce the medical expenses of the household to some extent.

There is scarcity of cooking gas in the state and its price is increasing year after year. The installation of the gober gas system is one of the best means to solve this crisis. So it is high time for the local authorities to initiate steps to popularize this system in rural areas.

8.3.10 In the rural set up dairying is recommended with its opportunity cost aspect in mind. Dairying is not viable if remuneration is allowed for each and every work undertaken by the respective household. In the rural area many households especially housewives’ contribution to the direct income generation of the family is almost zero. If they undertake dairying in small scale like rearing one or two milch animals, they can make use of their time productively to enhance family income. To realize it, the private sector dairy units can
establish “ayalkootams” (gathering of people settled in vicinity) of their own to give further direction and help.

8.3.11 The dairy sanghams should not have political affiliation or orientation. The researcher wishes to point out certain instances which are responsible for this recommendation. In the case of Nirmal Milk project a few sanghams which were running very efficiently faced unexpected set backs due to external political influence. Each sangham has a democratically elected managing committee which administers its affairs. Unfortunately during the process of electing new committees politics intervened, dividing the sanghams vertically on the basis of political affiliation. Unnecessary rivalry crept in causing a lot of disunity among dairymen which ultimately led to the closure of these sanghams.

Hence the researcher strongly recommends that the sanghams should be made free from politics and the leaders of the local dairy sanghams should be elected on the basis of leadership qualities, commitment to the organization, willingness to serve the community, and efficiency to plan and to organize activities of the sangham. The authorities of the private sector dairy units should be careful about it.

8.4 Suggestions for Further Research

1. In the dairy sector pricing of products is a key factor not only its profitability but also in its demand among consumers. Various factors like purchasing power of consumers, their diet habit, their perception of dairy products, their ethos and belief etc. play a major role here. The

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* The researcher learnt from the research that pricing pattern is very complicated in the dairy sector. As pointed out by the researcher, various factors to be taken into consideration in pricing the dairy product. So the researcher thinks that more research is needed in this area. Similar is the case of maintaining the sustainable number of cattle population. So suggestions for further research is an outcome the study.
procurement of pricing should consider all these factors in mind. So it is recommended that the procurement of pricing itself can be considered as an area of investigation and research in the dairy sector.

2. At present the grazing of lands are highly reduced in size and free access to forest area for collecting fodder becomes difficult due to the forest preservation rules of the government. Although it was recorded a reduction in the number of cattle population in the recent livestock census, it is not reduced in a proportionate manner as in the case of grazing lands. It leads to a shortage in the demand and supply of green fodder and thereby its prices become high. So it is recommended further research in the field to determine the sustainable number of cattle population in the state and in the country at large to make dairying feasible and profitable.

Conclusion

The effort of the private sector dairy units in improving the social and economic conditions of the dairy farmers in the rural areas of Ernakulam District is commendable. Through them dairy farmers are better organised, economically independent, socially enriched, culturally progressed, politically matured and are able to earn their livelihood. Regarding the profitability of dairying two points are worth noting. First, it is studied with the concept of opportunity cost in mind. The small scale dairying, managed by the household, is income generating because all the works of dairying are undertaken by family members. If the works are done with the help of labour with remuneration, small scale dairying is not profitable. In rural areas the unemployed and less
educated housewives’ direct contribution to the family income is almost zero. Dairying is recommended to them to have a regular flow of income because its opportunity cost is zero. Secondly, profitability in dairying is realised not only from the sale of milk but also from other sources of income like optimum use of dung, income from the sale of calves, the saving in medical expenses as a result of improved health status by the consumption of milk and have a smoke free environment in the home due to the installation of gober gas plant.

Thus, the dairy units are instrumental in increasing the income of beneficiaries, in developing agriculture, in improving the health status of beneficiaries and in disseminating the message of unity and harmony in the remote areas of the district. They empower the people in a special way and the researcher believes that their presence and activity will give further momentum to attain self sufficiency of villages in Ernakulam District.