

# An Economic Analysis of the Dairy Farming–Special Reference to Kakkinje Grama Panchyath

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**Abstract:** Agriculture and allied activities, since very long time, are the traditional business of the mankind in globe. Earlier these tow activities were considered as non-business, coincident and complimentary activities and practiced for satisfying their self needs. Days lost agriculture and allied activities were become prime occupational business of the human life. But in recent days, they have hold individual identity in India as well as Karnataka by bifurcating each other. As a result, the problems of low income, low productivity, discussed and seasonal unemployment and so forth are become visible problems of the agriculture sector in India. Lewis (1954), in his theory of Unlimited Supply of Labour or Dual Economic model, stated that due to supply exceeds its demand for labour, marginal productivity of some workers in agriculture sector is almost zero (they getting subsistence level of wages). According to him if some workers withdrawn from the agriculture sector and transforming them to capital/industrial sector, marginal productivity of them exceeds the paid out wages in capital sector and transformation of such labour force should be continue up to equation of wages in agriculture sector with the wages of capital sector. In these days transformation of excess labour force from agricultural sector to industrial sector has created fresh additional problems in urban areas<sup>1</sup>. By disturbing Lewis original model, here, researcher has defined Lewis model in new way that some excess labour force must be withdrawn from agriculture sector and transforming them its subsidiary sectors (allied/livestock sectors). In other words, excess workers in agriculture sector must be transformed internally<sup>1</sup>.

**Key Words:** Dairy, Cattle, Buffalo, Cost of Production, Income, Animal Husbandry.

## 1. Introduction :

Animal husbandry is important subsector of agriculture economy and plays a significant role in the rural economy by providing gainful employment particularly to the small farmers, marginal farmer's, women's and agriculture landless labourer. This sector provide milk, eggs, meat, wool, hides, and skin, dung, bones, hooves, and draught power, manures and slaughter house by products are also source of energy. As on 2015-16, India was in front of total livestock population, Milk Production, Cattle Population, Buffalo Population, Cara beef Production, Goat Milk Production, and total Bovine Population in the world. Thus, worlds total buffalo population of about more than half of the (56.7%) of such population has found registered in India. Added to this, India's share in world's total livestock and cattle population was about 11.54 per cent and 12.5 per cent respectively, as on 2015-16. Former statistical data have evidenced the India's commitment in allied activities in the world.

According to the 19<sup>th</sup> livestock population census (2012), of India's total livestock population, Cattle, Buffalo, Sheep and Goat share was about 37.28, 21.23, 12.71 and 26.40 per cent respectively. As on 2015-16 of the India's total grass value is 12458642 crore of which 17.5 per cent (2175547 Crore) was Agriculture and Allied Activities and 4.5 (560613 crore) per cent of share was the re of Livestock sector. India is the second largest milk producer in the world<sup>1</sup>. Karnataka stands 6<sup>th</sup> in milk production in the country (it occupies 3<sup>rd</sup> position with Respect to milk production under co operative sector in the country). Karnataka government has started an organization know a Karnataka dairy development corporation in 1975 in Bangalore, Mysore, Hasan, and Tumkur cover all the Districts. The Dairy Development activities was continued under the organization of Karnataka milk federation (KMF) that came into existence as successor to Karnataka KMF is the 3<sup>rd</sup> largest co-operative in the sector in country.

## 2. Statement of the Problem and Issues:

<sup>1</sup> Worldwide, the largest cow milk producer is the United States the largest cow milk exporter is New Zealand, and the largest importer is China. The European Union with its present 28 member countries produced 158,800,000 metric tons (156,300,000 long tons; 175,000,000 short tons) in 2013 (6.8% cow milk), the most by any politico-economic union and in

The present study has been descriptive and analytical in nature. Allied activities are the supplementary business of agricultural farmer. Allied Activities includes poultry business, fishing, Dairy business and so forth. Here issue relating to the socio-economic conditions of dairy farmers has chosen for the study.

### 3. Review of Literature:

Accessible review of literature and documentary sources will help to have apparent knowledge about the Student research project that conducted in the particular area in the past. Issues relating to importance of Dairy farming, economic impact, marketing, problems and so forth have been reviewed and presented in chronological order.

Ashoke Kumar Ghosh and Keshav Lall Maharajan (2001), in their article “Impact of Dairy Cooperative on Rural Income Generation in Bangladesh” find out the answer for the question how small dairy farmers in Bangladesh are collectively operating their dairy farming and generating employment for better earnings through a cooperative system?<sup>2</sup> Humbongmayam Rishikanta Singh (2012), in his article “Economic Impact Of Integrated Dairy Development Project On Rural House Holds In Meghalaya State” conducted impact study on IDDP members and non-members with special focus on the economics of milk production, input-output relationship, resource use efficiency, production, consumption, marketed surplus and disposal pattern of milk, income and employment generation and viability of the project. It is found that there was not much difference in the average maintenance cost per day per Milk crossbred cow among member (125.14) and non-member group (125.62)<sup>3</sup>. Geetha. K. and V.L Lavanya (2013), in their research work on “Economic Analysis of Dairy Farming in Vellalore village Coimbatore District”, analyzed the different cost structures and returns in milk production dairy enterprises in Vellalore milk shed areas. The results indicated the cost function fitted to analyze the interrelationship between maintenance cost per day and yield of milk per day. The small farmers, expenditure on green fodder, dry fodder and human labour had positive and significant impact on milk production, while for medium farmers; the expenses on green fodder alone emerged as a significant factor to explain the variations in milk production. In the case of large farmers, the expenditure on green fodder and dry fodder emerged as significant factors explaining variation in milk production.<sup>4</sup>

Hansen.B and A. Greve (2014), in their combined work on “Explore the Value of Dairy Farmers”, were used 90 dairy farmers for the field study. The study checked out whether the farmer still produced milk in 2013, 6 years after the interviews. Most farmers had terminal value like keeping up to the traditional and to have an interesting work. Value combination with instruments value such as to earn money and to produce milk were common. The study realized that many farmers have given priority to terminal value over instrumental value<sup>5</sup> Suraj .M Popker and Guntur Anjana Raju (2014) ,in their article on “ Socio Economic Status of the Milk Producers of Primary Milk Society” endeavored the socioeconomic status of milk producers of primary milk societies. Further, of the total 90 milk supplying members interviewed from seven Dairy Primary Societies (out of fourteen societies having membership of 1027). The empirical results show that majority of member are above poverty line and 55.5% of earn between Rs. 5,000 to Rs.10,000 per month .The study also revealed that nearly 77.8 per cent of the respondents were felt happy with the dairy business<sup>6</sup>. Samir Kumar Paudel (2014), in his Ph.D. thesis on “Socio Economic Conditions of Dairy Farmers -A Case Study of Lamahi Chilling Centre, Dang District”, traced out the fact that about 20.33 per cent of household earn two thousand, followed by 26.67 per cent earn up to six thousand and only 3.33 per cent of household earn up to eight thousand rupees of income per month. Moreover, the study finds out the problems faced by dairy farmer in the study region such problems are: a) Lower price for milk in dairy, b) Milk holiday, c) Far away collection centre, and d) Marketing etc<sup>7</sup>.

Nizamuddin Khan and Ashishk Kumar Parashari (2014) in his article on “Employment generation through dairy farming”, revealed that the increasing demand for milk and milk products has resulted in the increase in milk production but low productivity per animal and unorganized channel of milk marketing is dominant in the study area. The major problems, faced by dairy farmers, are low pricing system, fodder crisis, absence of ready market, lack of veterinary service exploitation of milkman<sup>8</sup>. Agatha Popesou (2014), in his article “Milk Cost, Return And Profitability In Dairy Farming”, addressed the relationship between milk cost in terms of material cost and labour cost and estimate the influence of these costs on returns coming from milk and profitability in 5 small dairy farms from the Southern Romania. The Cobb-Douglas regression function  $Z = a \alpha x y \beta$  was used to determine the variation of the studied economic

<sup>2</sup> Journal Of International Development And Cooperation, vol:8, No1-(2001), pp-91-105

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<sup>4</sup> This article was published in journal of economic and social development, Vol:9 No1-2013, pp:25-37

<sup>5</sup> Agriculture and Food Science Journal, Edition 23, (2014), pp- 278-290

<sup>6</sup> International Journal of business Ethics in Developing Economies, Volume: 3, Issue-1, June, 2014, pp-19 to 27.

<sup>7</sup> A Thesis is submitted to Central Department of Rural Development, Tribhuvana University for the Degree of the MA in rural development.

<sup>8</sup> Published in international journal of emerging trends in science and technology, Vol-1, Issue-10, PP- 1665-1661

indicators and relationships between them. Profitability in dairy farms depends both on cost input and milk output as well as milk market price<sup>9</sup>.

Fathima Baby .D (2014) in her article “A study on women Dairy Farmer in Madurai District” found that there has been significant change in the economic condition of the women after practicing dairy farming. Shortage of fodder for cattle, lack of veterinary services, late payment by purchasers, sickness of dairy animals and lack of proper management were identified as the major Problems of dairy farmers<sup>10</sup>. Raju Kumawat et.al. (2014), in their article “Economic Analysis Of Cost And Return A of Milk Production” finds out that the average cost of production per liter milk was 14.27 and the average net return per liter of milk was 8.28. Out of total milk production, 7.47 per cent was consumed as fluid milk and 7.79 per cent used in processing for ghee, Dahi at home and remaining 84.74 per cent milk was sold as fluid milk<sup>11</sup>.

#### 4. Objectives:

The Prime objective of study is to analyze the economic status of the dairy farmers in the study region. The specific objectives are:

- To analyse the reasons for adopting dairy farming.
- To analyse the nature of milk marketing in the study region
- To find out the problem faced by the dairy farmers in the study Region.

#### 5. Scope, Relevance and Limitations:

The Present Study has been Geographically Restricted to Kakkinje, Gram panchayats of Beltangadi Taluk, Dakshina Kannada district. This study Analyse the Cost and Benefits of Dairy Business in the study Region. Further, Problem Faced by the Dairy Farmers in the Study Region have been Taken up for the Evaluative Study. This is a Student Research Project Which Will certain contributing the field of Agriculture Economic at minute level.

#### 6. Methodology:

The presence study has been partially analytical and descriptive in nature. The methodological part is presented in four sub divisions. The present students Research project has been Geographically Restricted to Kakkinje, Gram panchayat of Beltangady taluk, Dakshina Kannada district. The present student Research project has relied on both the primary and secondary data. Secondary data were contacted published and unpublished such as book, Government Report, Reputed Journal, Periodical, Monogram, Gazetaries and so on. Thus, latest information on the topic has accuracy by using relevant websites. Primary data were collected through Preparing well structure interview Schedules to the Dairy Farmers of the study Region. As per the record maintained local milk federation, there were 482 farmers practicing dairy business in the region of which more than 18 per cent say about 90 dairy farmers have been randomly chosen for the field survey and collected the information by using pre structured Interview Schedules. While interviewing preference has given to all categories of population. To draw inference and to verify the hypothesis set for the study data were gathered from primary and secondary sources have been presented by using appropriate aids like table, graph, charts, and suitable from primary level study have been analysed with the help of using simple statistical tools like average, Rating, method, percentage, weight point, score method at the time of discussion and interpretation.

#### 7. A brief Profile of the Kakkinje Village:

Kakkinje is one of the 76 villages in Belthangady taluk of Dakshina Kannada district. The village incorporates mix of religion denomination including Christian, Hindus, and Muslims. This place is located on the foothills of Western Ghats. Agriculture is main income of the place. Traditional crops like paddy and Areca nut, rubber are majorly grown. Tulu and Kannada are the local language of the village. As 2011 census, total population of the village was 2212 of which 1113 and 1099 were male and female respectively. Total area of Kakkinje is 2603 hectores. Like stock rearing play a very vital role in village economy in supplementing family income from agriculture and also providing employment. As per the 2012 Livestock, it is found that all types combined of about 436467 livestock population found registered in Dakshina Kannada District of which about 101453 livestock population found registered in Belthangady taluk. Belthangady taluk placed at is 3<sup>rd</sup> position in respect of both animal husbandry and livestock population. Milk production and marketing in Dakshina Kannada district and Udupi saw a growth of around 14 percent and 4 percent respectively during 2012-13. Dakshina Kannada corporative milk union stood at 2.23 lakh litter a day during 2012 -13

<sup>9</sup> Science papers Series Management Economic Engineering In Agriculture And Rural Development, Vol: 14, Issue:2(2014), pp:219-222.

<sup>10</sup> EPRA International Journal Of Economics And Business Review, Vol-2, Issue 8, pp-

<sup>11</sup> Singh N.K ,Chiranjeevi Lal Meena , Global Journal Of Science Frontier Research, vol:14,. Issues: 5(2014), pp 46-53.

against 1.96 lakh liters a day in 2011-12 recording a growth of 13.77 percent. State government to increase the subsidy to milk producer from RS 2 liter to Rs. 4 Litter would help milk farmer in the district. About 647 primary milk co-operative societies in Dakshina and Kannada district and Udupi district were come under jurisdiction of the union. However the demand for milk also increased in the market during 2012-13 on as average the union of market.

### **8. Research Results, Discussion and Interpretation:**

The present is devoted to analyse research results along with discussion and interpretation of field survey data which were gathered through structured interview schedules in the study region, have made. Totally 90 sample respondents (Dairy Farmers) from Kakkinje Grama Panchyath, Belthangady taluk of Dakshina Kannada district have been randomly chosen for the primary level survey. Issues relating types of livestock, reasons for the adoption of dairy farming, mode of getting dairy farm, cost and benefit, marketing, problems in dairy business, transportation used and so forth have discussed to know the socio-economic status of dairy farmers in the study region.

#### **General Information of Respondent**

Totally 90 Respondents have been randomly chosen and interviewed with the help of structured interview schedule and collected required data for the study. It is found from the study that an average size of the family is 5.2 members per house in the study region.

#### **Education level of the Respondents**

Education plays a vital role in any one's life and no doubt in its help in overall growth. Education is a powerful driver of development and one of the strongest instruments which helps in agriculture and allied field. Researcher randomly selected the, totally, 90 household respondents for the study. Total numbers of family members in the 90 house are 464. Here, researcher collected the all the members' education status and provided in Part-A of table- 2 It is traced out from the field study that about 27 per cent of the household members in the study region have completed primary level education followed by 20 per cent of them obtained SSLC level education. Further, field data revealed that about 17, 9 and 5 per cent of the members in respondents' house completed PUC, Degree and PG level education respectively in the study region. It is astonishing from field that considerable of 9 per cent of the respondents have not taken formal education (illiterate) in the study region.

#### **Occupation**

Occupation is a part of everyday life and may even form a part of a person's existence. The occupation discussed is not necessarily one's career choice but according to Kielhofner's it is "the doing of work, play or activities of daily living within a temporal, physical and socio-cultural context that characterizes much of human life". Occupations are also more personal and refer to long term goals. In this respect data are provided in Part-B of Table-2. It is found from the study that 20.81 percentages of agriculture labour. 20.41 percent cultivators was marginal and small size land holders. Self Employment is 27.34 percentages. Further data also revealed that business and non business 8.16 percent and 23.26 percent category in study region.

#### **Land Holdings**

The biggest challenge for Indian agriculture is the decreasing size of land holdings over the periods. Indian agriculture is undergoing a heavy stress as average land holdings is decreasing day by day. We are adding one crore farmers every five years. With smaller land at disposal, there is a decrease in farmers' capacity to invest in land. Small land holdings causes for decreasing of farmers living standard. In this respect, primary data gathered from field are presented in Part-A of Table No-3. It is found from the study that of the total cultivator respondents in the study area, together, about 76 per cent of cultivators was Marginal and Small Size land holders. Further data also revealed that about 20 per cent and 08 per cent was come under Medium and Larger size land holders category in the study region. By this, once again it is revealed that huge percentage of farmers belonged in marginal and small size land holding category and their income is also low. In such condition they have to other works for leading life.

#### **Respondents having Livestock Population**

Ownership status of the livestock of respondents in the study region is provided in Part-B of Table-3. It can be viewed from the study that of the total livestock population about 42.56 per cent was the improved (hybrid) buffalo followed by 10.57 and 15.15 per cent of local cows and improved coves in the study region. All the types of buffalos and cows population together counted about 73.08 per cent of which only 15.37 per cent of such population was local breed remaining was the improved or hybrid breed. Further data also revealed that of the total livestock population about 26.92 per cent belonged to other categories like sheep goat, pig, rabbit and others in the study region.

#### **Reasons for practicing Dairy Business**

Earlier it is revealed from the study that of the total about 76 per cent of the respondents were belonged to marginal and small scale land holders. With having 1 to 2 hectores of land, their income earning capacity is also low. In such condition, farmers find out the alternative income earning sources; among various alternative income earning sources, dairy business stay in front in farmers' life. Part-A of Table-4 represents the reason for start dairy farming in the study region. Of the total respondents interviewed about 90 respondents to Increasing for Income Nearly 49 percent and rest of 2 percentage respondents are to diversify source of Income. 49 percentage of respondent Increase Food security.

#### **Sources of Finance for Dairy Farming**

Capital is the one of the impartment factors in production process. Farmers are generally earning low income; to run another business, government support is most needed. To get finance from the banks and the government to run dairy activities is not easy task to them. Data regarding sources for finance for running dairy business of the respondents are provided in Part-B of Table-4. Primary level study revealed that of the total no of respondent about 16 percentage peoples are buying the cattle through credit by government. And further 77 respondent are purchasing the cattle through own source of income and less no of person purchasing cattle 5 percent from donors and 4 percent through in heritage by relative in study region.

#### **Duration of time spent in dairy farming (daily)**

There is a correlation between time spent on work and profit. If anyone spent more time in production activities, he/she will certainly get higher level of profit visa versa. The information regarding that provided in Part-A of Table-5. About 31.11 per cent of farmers spent up to 4 hours per day in dairy activity and 50 per cent of them spent 5 hours and more than 5 hours in dairy farming activities in the study region.

#### **Production of Milk (per day)**

Level of production and productivity are the measurement of the condition of the business. Information regarding production of milk per day of respondents in the study region is presented in Part-B of Table-5. Table 10 can be representing milk production per day. Out of 90 respondent 29 percent respondent produced 5 to 10 liters of milk. And 10 to 15 liters produced by 23 percent of respondent. Further 15 to 20 liter produced 15 percentages of respondent And 20 and above milk produced by 12 percentages in the study region.

#### **Means of Milk Marketing**

Marketing is the serious problem in rural India. Milk is the perishable goods which is not possible to store more than 12 hours. So, adequate marketing avenues in rural areas can only support the dairy business. In the regard, information collected from the field relating to the means milk marketing in the study region is provided in Part-A of table-6. it assume that milk soled center 10 percent of respondent sold in local markets like hotels, and some ordinary shops. 78 percent respondent sold in milk co-operative society. Further respondent sale others like neighbors' house and for the self consumption in the study region.

#### **Modes of Transport used for Marketing**

Transportation plays the vital role in economic development. Transportation and marketing have the supportive relationship. An adequate transport system will near the Marketing centers to producers and helps to receive remunerative prices for their produce. In this regard, information relating to the means of transportation used for reaching Milk marketing center is collected from the field and provided in Part-B of Table-6. In the table no 13 can represent the mood of transport in study region. Majority of respondent go to foot by selling the milk to the market it fallowed 47 percentage of respondent. And more no of respondent go by own vehicle to sell the milk it can be followed 50 percentage of respondent. Around 3 percentage of respondent go by bicycle to market in the study region.

#### **Income and saving level of Dairy Farmers**

Saving is that part of income which is not spent on current consumption. The relationship between saving and income is called saving function. Simply put, saving function (or propensity to save) relates the level of saving to the level of income. It is the desire or tendency of the households to save at a given level of income. Thus, saving (S) is a function (f) of income (Y). Saving can be negative at zero or low level of income and as Income increases, savings also increase as income increase but more than the increase in income. Information regarding Income and saving level of the dairy farmers in the study region are presented in Table-7.

It can be seen from the table-01 that an average income and saving of the 90 respondents in the study region was Rs. 11082 and 1342 respectively. Further, data regarding different level group of people of income and savings, of the total respondents interviewed 30 per cent of the respondents have an average Rs. 3037 of income and Rs. 556 of savings in the study region. It can be seen from the data that as income increase saving also increases statistically when on an average income has increased from Rs. 3037 to Rs.6766, on an average saving also increased from the Rs. 556 to Rs. 1014. The same analogy holds good in all the cases.

### **Expenditure of Dairy Income**

Investment is the one of the prime factors in the process of production of any goods and services. In agriculture sector, current year income is the result of previous year expenditure and current year expenditure. Data regarding expenditure nature of dairy income of the dairy farmers in the study region are provided in Part-A of Table-8 the next year expenditure requires investment. It is worth to note here that all dairy farmers have used the dairy income for maintaining the business as well as family maintenance. Further about 54.44, 33.33, and 40 percent of them used such income on children education, health and fixed assets in the study region. Added to this about 38.38 per cent of them utilized such income as reinvestment by purchasing additional cow or buffalos or sheep/got.

### **Problems in Dairy Farming**

Risk is associated everywhere. As like any business is not free from risk. In this regard, filed data related to problems faced by the dairy farmers in the study region are provided in Part-B of Table-8. Data revealed that of the total respondent interviewed, majority of about 72.22 per cent of them were faced the problem of lack of improved gross for cattle feeding in the study region, followed by 53.33 per cent of them facing market related problems. Very small amount of respondents' were bothering about the inadequate nature of existing veterinary hospital in the study region. Less number of respondent facing pasture land followed by 1 percentage of respondents in study region.

### **Per day on an milk production of respondents**

Per day on an average production, consumption and marketing, (together all the respondents) of milk in the study region has presented in Part-A of Table-9. It is revealed from the data that 90 dairy farmers were producing on an average of about 1214 liter of milk per day of which 120 liters used for self consumption purpose and remaining of 1094 liters of milk was selling in local market and milk co-operative society in the study region.

### **Dairy farmers received price per liter in different markets**

Part-B of Table-9 evidenced that that Milk producers have received on an average of Rs. 29.46 per litre of milk in the study region. The price of the milk is different from one market to another, in local market; they get 33 rupees per litre of milk, 27.50 rupees in private market and 30.77 rupees in milk dairy.

### **Respondents' opinion about price of Milk**

Dairy farmers in Maharashtra's once prosperous milk belt are struggling to get remunerative prices for the milk they sell in the market. In Kolhapur, which is known as the milk hub of Maharashtra, some of the dairy farmers are lucky to get Rs 23 per litre for cow's milk while most earn in the range of Rs 17-19 per litre. The price they get is even less than the price of bottled water which costs Rs 20 a litre. The price that consumers pay for milk once it reaches cities is Rs 40-44 a litre but farmers feel cheated as they don't receive a share of that. In this regard, researcher interested to know the satisfaction level of the dairy farmers about price received in market for their milk and presented such data in Part-C of Table-09. It is traced out from the primary level study that of the total respondents interviewed high of about 85.56 per cent of the respondents were dissatisfied with the price of milk in local and milk co-operative societies. Further, only 14.44 per cent of them satisfied with the rate price received for their milk in local and milk co-operative societies in the study region.

## **9. Findings of the study :**

Findings of the present micro level study have listed as follows.

- An average size of the family was 5.2 members per house in the study region and about 76 per cent of cultivators was Marginal and Small Size land holders.
- All the types of buffalos and cows population together counted about 73.08 per cent of which only 15.37 per cent of such population was local bread remaining was the improved or hybrid breed.
- About 77 per cent of the respondents run the dairy business through their own sources of finance; about 31.11 per cent of farmers spent up to 4 hours per day in dairy activity and 50 per cent of them spent 5 hours and more than 5 hours in dairy farming activities in the study region.
- About 29 percent respondent produced 5 to 10 liters of milk, 10 to 15 liters produced by 23 percent of respondent and about 78 percent sold the milk at locally established co-operative society.
- When on an average income has increased from Rs. 3037 to Rs.6766, on an average saving also increased from the Rs. 556 to Rs. 1014
- All dairy farmers have used the dairy income for maintaining the business as well as family maintenance. And about 54.44, 33.33, and 40 percent of them used such income on children education, health and fixed assets respectively in the study region

- Majority of about 72.22 per cent of them were faced the problem of lack of improved gross for cattle feeding in the study region, followed by 53.33 per cent of them facing market related problems.
- Dairy farmers were producing on an average of about 1214 liter of milk per day of which 120 liters used for self consumption purpose and remaining of 1094 liters of milk was selling in local market and milk co-operative society
- Milk producers have received on an average of Rs. 29.46 per litre of milk in the study region
- High of about 85.56 per cent of the respondents were dissatisfied with the received milk prices in local and milk co-operative societies.

#### 10. Suggestions:

Researcher has traced out some important finds under the present study. To resolve difficulties associating with the dairy business in rural areas, researcher has offered some useful suggestions. Such suggestions are as follows.

- It is trace out from the study that majority of the dairy farmers in the study region are not satisfied with government fixed milk price. In this regard, government has to take necessary steps to increase the price of milk for producers in general and particular in the study region.
- It is traced out from the study that majority of the dairy farmers faced the problem of gross for feeding animals in the study region. In this regard, government has to incentives to dairy farmers to supply gross for the dairy farmers.
- It found in the study that major proportion of dairy farmers run the business through their own sources. For dairy development, government has taken the supportive steps since long time. Even though the facilities available through government, farmers not aware about such facilities. So, government has to organize the camps to create awareness about the dairy development programmes.

#### 11. Conclusion:

In the light of above discussion, Dairy farming is a potential sub sector for generation of income and employment. This study traced out the fact in the study region 70 percent of farm families of small farmer, marginal farmer and land less labourers are employed in this sub-sector. Dairy farmers given mixed opinion about increasing the price of milk and expected more subsidies from the government for milk production in the study region and they have save more amounts per month it can spend for various reasons like cattle feeding, home expenses, education and so forth. Added to this, few respondents have facing problem in dairy farming like Related to milk quality, low price of milk etc. It also helps to promote women's empowerment program in the society.

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**Table-1: Livestock and Poultry status of the District**

Taluks	Buffaloes	Goats	Rabbits	Dogs	Total live stocks	Poultry
(01)	(02)	(03)	(04)	(05)	(06)	(07)
Bantwala	718	6201	227	27930	85400	611667
Belthangady	1087	2500	204	31151	101453	213676
Mangalore	1179	6488	450	43021	102812	259263
Puttur	488	6710	164	27264	94710	548283
Sulya	228	2729	121	17144	52092	89019
<b>Total</b>	<b>3700</b>	<b>24628</b>	<b>1166</b>	<b>146510</b>	<b>436467</b>	<b>1721908</b>

Source: Livestock/Animal Husbandry/census 2012

**Table No-2: Education Statuses of the Family Members**

Education Statuses		Occupation	
Level of education	No of respondent	Occupation	No. Of Respondents
(01)	(02)	(01)	(02)
Illiterates	42 (09)	Agriculture labour	51 (20.81)
Primary	124 (27)	Cultivator and Agri Labour	50 (20.41)
Secondary	61 (13)	Agriculture and self employment	67 (27.34)
SSLC	95 (20)	Agriculture and Business	20 (8.16)
PUC	80 (17)	Others	57 (23.26)
Degree	40 (09)	<b>Total</b>	<b>245 (100)</b>
PG	22 (05)		
<b>Total</b>	<b>464 (100)</b>		

Note : Figures in brackets are the percentage to total  
 Source : Data Collected from the field study

**Table No –3: land holding and Livestock population in study region**

Land Holdings		Livestock population in study region	
Size of land holding (acrea)	No of Respondent	No of livestock’s	No of animals
(01)	(02)	(01)	(02)
Up to 1 hector	43 (48)	Local buffalo	20 (4.80)
1 to 2 hector	22 (24)	Improved Buffalo	177 (42.56)
2 to 3 hector	18 (20)	local cow	44 (10.57)
4 & above hector	07 (08)	Improved cow	63 (15.15)
<b>Total</b>	<b>90 (100)</b>	Sheep/goat	86 (20.67)
		Other	26 (6.25)
		<b>Total</b>	<b>416 (100)</b>

Note : Figures in brackets are the percentage to total  
 Source : Data Collected from the field study

**Table-4: Reason for start dairy farming**

Reasons for practicing Dairy Business			Sources of Finance for Dairy Farming	
Reason for start dairy farming	Respondent	Average of respondent	Animal purchasing	No of respondent
(01)	(02)	(03)	(01)	(02)
To increase Income	90	49	credit by government	14(15.55)
To Increase food security	90	49	Through own source	69(76.68)
To Diversify source of income	03	02	pass on credit by donors	3(3.33)
<b>Total</b>	<b>90</b>	<b>100</b>	Inheriaged by Relatives	4(4.44)
			<b>Total</b>	<b>90(100)</b>

**Note** : Figures in brackets are the percentage to total  
**Source** : Data Collected from the field study

**Table -5: Duration spent in Dairy Farming (daily) and Production of Milk (per day)**

Duration	No. Of Respondent	Production of milk per day	No. Of Respondents
(01)	(02)	(01)	(02)
3 hour	16(17.77)	3 to 5	26(28.88)
4 hour	28(31.11)	5 to 10	21(23.35)
5 hour	17(18.88)	10 to 15	13(14.44)
5 and above	29(32.22)	15 to 20	11(12.22)
<b>Total</b>	<b>90(100)</b>	20 +	19(21.11)
		<b>Total</b>	<b>90 (100)</b>

**Note** : Figures in brackets are the percentage to total  
**Source** : Data Collected from the field study

**Table-6: Means of markets used for selling Milk**

Means of markets		Modes of Transport used	
Milk sold	No. Of Respondents	Mode of transport	No. Of Respondents
(01)	(02)	(01)	(02)
local market	9(10.00)	By Walking	42(46.66)
milk co-operative society	70(77.78)	Bicycle	3(3.44)
Other	11(12.22)	own vehicle	45(50.00)
<b>Total</b>	<b>90(100)</b>	<b>Total</b>	<b>90(100)</b>

**Note** : Figures in brackets are the percentage to total  
**Source** : Data Collected from the field study

**Table-7: Details of Income and Savings**

Items	No. of Respondents	An Average Income (In Rs)	An Average Savings (in Rs)
(01)	(02)	(03)	(04)
1000-5000	27(30.00)	3037	556
5000-10000	28(31.12)	6766	1014
10000-15000	15(16.66)	11595	1575
15000 and above	20(22.22)	25338	2453
<b>Total</b>	<b>90(100)</b>	<b>11082</b>	<b>1342</b>

**Note:** figures in brackets are the percentage to total  
**Source** : Data Collected from the field study

**Table-8: Dairy Income Spent On and Problems in Dairy Farming**

Particulars	No. Of Respondents	Problem of dairy farming	No of Respondents
(01)	(02)	(01)	(02)
Cattle feeding	90(100)	Improved grass	65(72.22)
Home expenses	90(100)	loan facility	16(17.77)
Education	49(54.44)	veterinary facility	6(6.66)
Health	30(33.33)	market of milk	48 (53.33)
Fixed assets	36(40.00)		
Cattle purchasing	35(38.88)		
Source : Data Collected from the field study			

**Table-9: milk production (per day) and price per litre in different markets**

milk production (per day)		price per liter in different markets			Get Reliable Prices	
Category	In litre	ITEAMS	No of respondent	Average price of per litre milk	Get Reliable price	No of respondent
(01)	(02)	(01)	(02)	(03)	(01)	(02)
Total milk Production	1214	Local Market	1	33.00	Yes	13 (14.44)
Self consumption	120	Private Market	2	27.50	No	77 (85.56)
Marketing of milk	1094	Milk Society	77	30.77	Total	90 (100)
		Others	10	26.60		
		<b>On An average Rs. Per litre</b>	<b>90</b>	<b>29.46</b>		
Note: figures in brackets are the percentage to total						
Source : Data Collected from the field study						