

CHAPTER-IV: INCOME GENERATION AT FARMERS'
(MILK PRODUCERS) LEVEL

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CHAPTER-IV

INCOME GENERATION AT FARMERS' (MILK PRODUCERS) LEVEL

4.1 Introduction

India is an agricultural country. Agriculture is a way of life of Indian people. It is a soul of rural India. According to 1981 population census about 80 per cent people were living in villages. Their main means of livelihood is agriculture. Nearabout 69 per cent of the total population depends upon the agriculture. Indirectly 20 per cent urban population also depends upon agriculture.

Importance of Agriculture in India

Agriculture is a primary sector of the Indian economy. The share of agriculture production in national income constitutes nearabout 43 per cent in the year 1984-85. The industrial development of the country also depends upon agriculture. The industries like tea, coffee, rubber, paper, hide and dairy which depend upon agriculture, is the source of income to the government. By the way of land revenue, agricultural income tax and betterment levy are imposed. Agriculture provides foodgrains to the people and fodder for cattle. It is also a source of foreign currency and basis of both internal and external trade. Agriculture is a main source of employment to the rural people. Nearabout 70 per-

-cent of the rural people are engaged in agriculture for their livelihood. Besides this the development of transport also depends upon agriculture. Agricultural marketing surplus is a source of capital formation for the backward countries which are caught in vicious circle of poverty. It has also importance from the view point of country's defence, because, most of the soldiers in Indian Army are from villages.

But the tragedy of the Indian agriculture is that its productivity is low as compared to other countries. This we can put as under.

Table No. 4.1

Productivity of wheat and rice of the selected countries

Countries	Per hectare production of wheat	Countries	Per hectare production of rice
India	1,340 Kgs.	India	1,830 Kgs.
Canada	1,800 ,,	China	3,230 ,,
France	3,890 ,,	Japan	6,190 ,,
U.S.A.	2,060 ,,	Australia	6,200 ,,

Sources: 1. Indian Agriculture in Brief, 1978.
2. Statistical outline of India, 1978.

The main causes of low productivity are as under:

- How does this affect productivity?
- 1) Uncertainty of rainfall,
 - 2) Decay of cottage and small scale industries during the
time of British regime,
 - 3) Uneconomic holding of agriculture and fragmentation and subdivision of agriculture because of high pressure of population on agriculture due to lack of alternative employment opportunities for rural population excepting during the sowing and harvesting seasons,
 - 4) Lack of capital
 - 5) Slow pace of industrialisation
 - 6) Defective marketing system,
 - 7) Indebtedness of farmers,
 - 8) Outdated method of cultivation,
 - 9) Rigid social structure and traditional outlook of farmers.

No. 2, 5, 6, 9
How are they linked to productivity?

These socio-economic factors are responsible for low productivity.

Need for Alternative or Supplementary Occupation

In order to improve the condition of both farmers as well as agriculture there is a need of alternative occupations like poultry, piggery, fishery, Gur-production, Bee-keeping, Stock-breeding and Dairy and other agrobased industries.

Among these mentioned occupations dairy occupation has

proved to be subsidiary from the small holders point of view and hence needs to be paid attention to. Dairy business requires rather less capital and it is one of the most effective instruments for supplementing farmers' income and generating employment in rural sector. Dairying requires one million rupees to create an employment potential of 290 persons a year as against 120-200 persons a year if investment is made in crop production.¹

This fact has been pointed out by M.S. Randhawa while addressing the XII Annual Dairy Industry Conference, 1976, held at Ludhiana.

Importance of Dairy Occupation

In rural Indian economy stock-breeding occupation is utmost important. The share of cattle rearing business in national income is nearabout 7 per cent. The yearly milk production is nearabout worth Rs. 1,000/- crores. Yearly ghee production is nearabout 30 million tonnes. The value of manure is also nearabout Rs. 1,000/- crores. The transport service value of the animals is nearabout 400-500 crores. Out of total world hide production in India, it is 20 per cent.

According to Planning Commission the total income from the animals is Rs. 664 crores, which is 60 per cent of the total agricultural production.

Dairy animals comprise cows and buffaloes, goats and

sheep. Apart from milk production they contribute a huge quantity of organic manure which is one of the major inputs in our agriculture. Dairy farming is also very important supplementary occupation. It provides employment to millions of unemployed and underemployed and particularly to small farmers, marginal farmers and landless labourers in villages.² *No precise figure?*

Landless labourers account for 21 per cent of all rural households. They have no share in the total land holdings.

The green revolution in Punjab, Hariyana has created the problem of inequalities of income. Because the fruits of revolution are swallowed by rich farmers. It has resulted in perpetuating poverty. On such a background it is essential to organise and enlarge animal husbandry and dairy activities in rural sector because it will help in reinforcing the income of economically weaker section of the society constituted by landless and small farmers.

Milk is an important source of nourishment for both vegetarian and non-vegetarian, for old and young alike. "According to National Sample Survey, the total expenditure on milk and milk product of urban people is 7 per cent of the total expenditure in urban area".³

The country, India, is one of the largest milch animal population (1/5 of the total world's milch population exists in India).⁴

4.2 Milk Collection by Koyana Sangh Through Primary Dairy Cooperative Societies

This dairy has extended its net in various villages of Karad and Patan talukas through its 255 primary dairy cooperative societies. Out of these societies 142 primary dairy cooperative societies are working in Karad taluka and the remaining 113 in Patan taluka.

Here an attempt has been made to study the milk collection throughout the year by individual society. These societies have been classified in 7 groups as shown in the Table No. 4.2.

Table No. 4.2

Groupwise milk collection of primary dairy of KSDUPS Ltd., Karad (Year 1985-86)

Group	Karad Taluka	Patan Taluka	Total
Lowest milk collection upto 5000 litres	01	01	002
From 5001 to 75000 litres	63	92	155
From 75001 to 1,50,000 ltrs.	40	16	056
From 1,50,001 to 2,25,000 ltrs.	14	02	016
From 2,25,001 to 3,00,000 ltrs.	10	Nil	010
Above, 3,00,001 litres	13	01	014
Topmost milk collection	01	01	002
Total	142	113	255

It appears from Table No. 4.2 that the number of societies collecting lowest milk per year, that is up to 5,000 litres each are two, one each in Karad and Patan talukas. However, it is significant to note that there are 155 societies which have been collecting milk around 75,000 litres per year of which 92 belong to Patan taluk and the remaining 63 belong to Karad taluka. These 155 societies have been working in villages which are easily accessible and are in constant touch with the officials of the Sangh, Veterinary doctors and could provide cattlefeed to their animals and hence production of milk is rather fair. There were 2 societies viz., Nanaidevi Dudh Utpadak Sahakari Sanstha, one located at Koriwale and one at Umerkanchan which have collected the lowest milk, that is 3,190 litres and 2,430 litres respectively. The village Koriwale is located in the interior of the ranges of Sahyadri hills where even cart track is not existing and is semi-drought prone and is isolated from main town. Naturally, the geographical location has affected adversely on the production of milk. The situation is more or less similar with the village Umerkanchan, whereas highest collection of milk has been recorded by Rethare Budruk society which is 10,13,075 litres per year. Similarly Koyana Krishak Sarvaseva Sahakari Sanstha of Malharpeth (Patan Taluka) has recorded 4,37,841 litres. The village Rethare Budruk is one of the progressive semi-town in all respects and is under direct influence of the known Krishna Sahakari Sugar Factory Ltd. This

factory has provided loans through its bank to the deserving milk producers towards purchase of cows and buffaloes.

Similarly, this factory has concentrated on the byproducts like distillery and cattlefeed which is known as Krishna Khadya, which is being provided to the milk producers on loan as well as on credit. One important thing is to be noted that the area is directly and heavily irrigated by the lift irrigation schemes launched on the river Krishna which has benefitted the cane cultivators as a result of which the animals get green grass throughout the year available to the animals and hence this society could collect very rich amount of milk.

4.3 Milk Collection of Selected Primary Dairy Cooperative Societies

For the purpose of study of primary dairy cooperative society, seven societies from Karad taluka and six from Patan taluka were selected at random on the basis of amount of milk collection. Table No. 4.3 on the following page shows the same.



Table No. 4.3

Selected primary dairy cooperative societies on random sample basis
from Karad Taluka. Year = 1985

Sr.No.	Name of Primary Dairy Cooperative Society	Buffaloes' milk collection (Litres)	Cows' milk collection (Litres)	Total milk collection (Litres)
1.	Ninaidevi Dudh Utpadak Sahakari Sanstha Maryadit, Koriwale, Tal. Karad	2,633	557	3,190
2.	Nawajinath Sahakari Dudh Vyavasayik Society Ltd., Kiwal	7,750	4,436	12,186
3.	Janaidevi Dudh Utpadak Sahakari Society Ltd., Karawadi.	9,674	77,345	87,019
4.	Krishnai Sahakari Dudh Vyavsayik Sanstha Maryadit, Karad	1,03,316	50,923	1,54,239
5.	Hanuman Sahakari Dudh Utpadak Sanstha Maryadit, Malkapur	42,466	2,57,076	2,99,542
6.	Karve Dudh Utpadak Sahakari Society Ltd., Karve	1,86,519	4,76,152	6,62,671
7.	Rethare Bk. Sahakari Dudh Utpadak Society Ltd., Rethare Bk.	3,69,910	6,43,165	10,13,075

* Base of groupwise milk collection in Karad Taluka

Here efforts have been made to categorise milk under two heads, namely, cows and buffaloes. It is seen that the amount of milk of buffaloes is comparatively greater in three societies, one is Ninaidevi society of Koriwale, which collects 2,633 Ltrs. of milk of buffaloes as against 557 litres of cows'. Secondly, Nawajinath Sahakari Dudh Vyavasaik Society Ltd., Kiwal collects 7,750 litres of buffaloes' milk as against 4,436 litres of cows'. At last Krishnai Sahakari Dudh Vyavasaik Sanstha Maryadit, Karad collects 1,03,316 litres of buffaloes' milk as against 50,923 litres of cows'. In the remaining cases the highest amount of milk of cows is collected. In that case Rethare Bk. Sahakari Dudh Utpadak Society Ltd., Rethare Bk. tops the rank which amounts to 6,43,165 litre of cows' milk. Next to this society the Karve Dudha Utpadak Sahakari Society Ltd., Karve ranks second which contributes 4,76,152 litres of cows' milk, which is followed by Hanuman Sahakari Dudha Utpadak Sanstha Maryadit, Malkapur, which supplies 2,57,076 litres of cows' milk per year.

Of the total production of milk in Karad taluka, it is observed that 64 per cent of the total production is of cows' milk and the remaining 36 per cent belongs to buffaloes. On the same line six dairy cooperative societies from Patan taluka were selected. Table No. 4.4 on the following page shows the milk collected by these six societies in the year 1985.

Table No. 4.4

Selected primary dairy cooperative societies on random sample basis from Patan Taluka

Sr. No.	Name of Primary Dairy Cooperative Society	Buffaloes' milk collection (Ltrs.)	Cows' milk collection in (Ltrs.)	Total milk collection in Ltrs.
1	Ninalidevi Sahakari Dudh Utpadak Sanstha Maryadit, Umarkanchan	2,430	Nil	2,430
2	Rudreshwar Sahakari Dudh Vyavasayik Sanstha Maryadit, Yeradwadi	28,018	36,573	64,591
3	Hanuman Sahakari Dudh Vyavasayik Sanstha Maryadit, Vihe	34,803	1,04,034	1,38,837
4	Mhawashi Sahakari Dudh Vyavasyik Sanstha Maryadit, Mhawashi	1,47,190	35,914	1,83,104
5	Nil	Nil	Nil	Nil
6	Nawadi Sahakari Dudh Utpadak Sanstha Maryadit, Nawadi	1,10,469	97,782	2,08,251
7	Koyana Krishak Sarvaseva Sahakari Society Ltd., Malharpeth	1,51,619	2,86,222	4,37,841

* Base of Groupwise milk collection in Patan Taluka.

This table shows that the highest amount of cows' milk is contributed by the Koyana Krishak Sarvaseva Sahakari Society Ltd., Malharpeth, which is 2,86,222 litres. Secondly, Hanuman Sahakari Dudha Vyavasayik Sanstha Maryadit, Vihe contributes 1,04,034 litres of cows' milk. Two societies viz., Mhavashi Sahakari Dudha Sanstha Maryadit, Mhavashi and Navadi Sahakari Dudha Utpadak Sanstha , Maryadit, Navadi are supplying buffaloes' milk greater than cows' i.e., 1,47,190 litres and 1,10,469 litres respectively. However, if we take into consideration the average milk production it is seen that 65 per cent of milk is of cows and the remaining 35 per cent of the buffaloes in Patan taluka.

Naturally, here question arises that why the large amount of milk of cows is produced in both the talukas? In this context informal discussions were carried out with the dairy officials and individual members, which proved to be useful. No doubt, the popularity of taming cows on commercial basis has been rapidly increasing among the farmers especially in wet villages. The reasons which came forward through discussions are listed below:

- 1) The average milking capacity of a cross-breed cow is definitely more than an Indian cow.
- 2) The dry period of cow is comparatively less than an Indian cow's and buffaloe's.
- 3) These cows require green grass throughout the year which is plenty in these two talukas.

- 4) No cowboy is required as the animals are to be kept tied in cow sheds.
- 5) A service of insemination is available easily.
- 6) Veterinary doctors' visits are scheduled, which is benefited and guarantees the health of cows and the most important factor that must be mentioned is the cooperation extended by the Sangh towards purchase of animal in the form of loan. This is supported by the conditional insurance of cow which is a must.

which sense?

4.4 Milk Collection of Selected Milk Producers

After having studied the nature of milk collection one must look into the milk producers' economic conditions, their class, social strata etc. For this purpose producers are classified into four categories on the basis of income. They are shown in Table No. 4.5

Table No. 4.5

Income Groupwise classification of milk producers

Income group	Karad Taluka	Patan Taluka	Total	Percentage
Upto Rs. 5,000/-	05	05	10	15.38
From Rs. 5,001 to Rs. 12,000/-	16	09	25	38.46
From Rs. 12,001/- to Rs. 24,000/-	09	12	21	32.30
From Rs. 24,001/- to Rs. 48,000/-	05	04	09	13.86
Total	35	30	65	100.00

Table No. 4.5 shows that out of 65 selected milk producers, 15.38 per cent milk producers have upto Rs. 5,000, 37.46 per cent milk producers have income in the range of Rs. 5,001 to Rs. 12,000, 32.30 per cent milk producers have income in the range of Rs. 12,000 to Rs. 24,000 and the remaining 13.86 per cent milk producers' income is from Rs. 24,000 to Rs. 48,000.

These 65 milk producers were interviewed and discussions were held. The main theme of the discussion was why did they turn to this subsidiary occupation? The answers given by 71 per cent (Groups 2 + 3) (38.46 per cent + 32.30 per cent) milk producers are summarized here in brief.

- 1) These milk producers do not get full employment and sufficient income from agriculture throughout the year and hence they have undertaken milk production.
- 2) It was possible and within the reach of farmers and small holders so that they could make some financial arrangement and can invest moderately and hence it was not necessary to depend upon some financial institution to purchase dairy animals.
- 3) In case of small holders and deserving rather moderate investors the assurance was given by the society itself and secondly they can lease or mortgage their land for the purpose.
- 4) The human power or the labour force required for the

purpose is domestic one.

- 5) The green grass is assured throughout the year in sufficient quantity in case of those who cultivate sugarcane.
- 6) Banks have promoted the interest of the educated unemployed who are supported by granting loans.

First Income Group: Most of the members of the first income group are landless labour and are living below poverty line. It is interesting to note that the strata below poverty line have inclined to this occupation. In this study 15 per cent people below poverty line have adopted this occupation. However, this percentage is quite disappointing one. The reasons are to be located as to why the good number of individuals below poverty line have not turned to this occupation? The reasons are:

- 1) The fixed capital towards the purchase of animals is not possible or not available.
- 2) The required cattlefeed cannot be produced as they do not possess any land and it is not affordable to purchase the cattlefeed for the purpose.
- 3) These people do not have even a piece of land for their residence. It is natural that they cannot dream of having their own animals.
- 4) Banks do not give loans unless a party gives assurance or is ready to mortgage land or immovable property. It was

brought to the notice of the investigator with a very depressed mood that the various schemes to be implemented for the betterment of rural poor are exploited in the way political leaders or the officials desired and the benefit is looted by the well to do individuals.

Similarly, it is to be noted that economically top class has also not turned to this occupation. Only 14 per cent have accepted this as secondary occupation. The reasons for this are diverse in nature, of which a few are listed below:

- 1) This class holds rather good land and being the main source of income the great concentration is made on farming. This does not allow them to divert the attention to other fields.
- 2) Since these are rich farmers and have mainly engaged in farming, cannot provide labour force and other required necessities to this occupation and hence prefer to be aloof.
- 3) Those who are interested have to solely rely upon the servants who do not care for and hence they have given up the thought.

While discussing these two extreme poles one must not forget the position of second income group milk producers, as well as third income group milk producers who are from the middle class. It is found that these two income groupwise milk producers look after cultivation as primary and dairy occupation as secondary

occupation. This class have efficiently invested its capital labour etc. with systematic planning and have proved dairy as the best and constant source of income.

4.5 Income Generation at Selected Farmer Levels

In order to study the income generation created by these individuals as a result of secondary occupation, their two levels of income viz., pre-occupational level and post-occupational level are considered. As such an average pre-occupational income and post-occupational income was calculated which is shown in Table No. 4.6.

Table No. 4.6

Average income generation at selected farmer level in Karad Taluka (in Rs.)

Income group	No.of members	Pre-occupation			Post occupation	Difference	
		Land	Wages/salaries	Other Total			
Upto 5000	05	-	3100	600	3700	7200	3500
5001 to 12000	16	4800	6000	-	10800	22500	11700
12001 to 24000	09	7200	14400	-	21600	43200	21600
Above 24000	05	4000	-	18500	58500	102000	43500
Total	35	52000	23500	19100	94600	174900	80300

Notes: 1) Pre-occupation = Before taking milch animal

2) Post-occupation = After taking milch animal

Before accepting dairy as a subsidiary occupation the average income of farming was 55 per cent whereas the income from employment, labour etc. was 25 per cent, which was supported by 20 per cent income from other sources. After adopting subsidiary occupation the income of farmers whose income was below 5,000/- has been doubled. This group mostly comprises landless labourers who have obtained Rs. 300/- a month as a result of dairy occupation.

As far as second group is concerned, it is noted that they were getting Rs. 10,800/- p.a. from farming, employment etc. But as a result of subsidiary occupation their income ^{has} (is) increased by 110 per cent.

In a next group i.e., below Rs. 24,000/- the income (is) increased nearly two times as a result of subsidiary occupation i.e., 100 per cent. This shows that farmers of this class have paid adequate attention.

In the last group i.e., the families having annual income of Rs. 24,000/- and above, all are essentially farmers and nobody has turned up to employment and they have invested in poultry. But after having accepted dairy as a subsidiary occupation their income is increased by 78 per cent. Though this income is significant they cannot concentrate on dairy due to lack of labour force and time.

On the same line the income generation of farmers in Patan

taluka is studied which is shown in Table No. 4.7.

Table No. 4.7

Average income generation at selected farmer level in Patan taluka

Income group	No. of members	Pre-occupation			Total	Post-occupation	Difference
		Land	Wages/salaries	Others			
Upto 5000	05	-	3000	200	3200	6200	3000
5001 to 12000	09	4100	7000	-	11100	19000	7900
12001 to 24000	12	6700	14400	-	21100	36800	15700
Above 24000	04	34000	-	18200	52200	86400	34200
Total	30	44800	24400	18400	87600	148400	60800

In toto it is observed that apart from their regular income derived from cultivation, employment and other sources, 75 per cent income is added as a result of dairy occupation. It can be stated that the 5 individuals below Rs. 5000/- p.a. were landless labourers who were gaining Rs. 250/- per month as a daily wage and Rs. 200/- from poultry but with the dairy occupation their income has risen by 95 per cent.

In the second group, the income from agriculture, employment etc. was Rs. 11,100/- p.a. But with the introduction of dairy

their income increased by 78 per cent.

The third income group is Rs. 12,000 to 24,000 in which respondents were getting 34 per cent income from cultivation and 66 per cent from employment. Since these respondents found this income inadequate they turned up to dairy as a subsidiary occupation as a result of which their income plussed by 76 per cent.

In the last group there were four respondents who were big farmers and have invested in poultry as well as in dairy. The income of poultry was 32 per cent of the total income. Dairy has increased their income by 68 per cent even though they do not want to concentrate on dairy.

After having studied the income groups in both the talukas it is understood that the income of all members has increased as a result of dairy occupation. But this income is noticeably increased in second and third groups. In Karad taluka this increased income is 110 per cent and 100 per cent respectively. Whereas in Patan taluka it is 78 and 76 per cent respectively. So, it is obvious that the members of these two groups are carrying out this occupation with utmost care and interest.

The members of lowest income group have increased their income by 100 per cent and 95 per cent respectively in Karad and Patan talukas. But due to the lack of capital they cannot concentrate on dairy occupation.

4.6 Economical Benefits to Milk Producers

The dairy farming activities confirm a number of benefits to farmers:

- 1) It provides employment to small farmers and landless labourers and thus helps in reducing the volume of underemployment in rural areas. *How much?*
- 2) Standard of living of both rural and urban people has been improved because of consumption of milk and milk products.
- 3) It helps in overcoming the problem of fuel crisis because of manure is used in bio-gas plants.
- 4) The agriculture by-products are used as fodder and hence the cost of rearing the animals is reduced.
- 5) Farmers can meet the daily expenses hence their dependency for money on moneylender has been reduced. They are freed from the clutches of village money lenders.
- 6) It helps in making the supply of agricultural inputs like manure which enhances the fertility of soil.
- 7) Farmers can fetch fair prices for their milk product and chain of middlemen is wiped out between producers and consumers. Hence it protects the interest of both farmers

(milk producers) and consumers by providing market facilities, for the milk products.

- 8) Lastly there is a full utilization of manpower and time which has resulted in increasing country's income.

NOTES AND REFERENCES

- 1 M.S. Bedi "Dairy Development, Marketing and Economic Growth", Chapter No. 1, p. 10.
- 2 Ibid., p. 10.
- 3 Ibid., p. 11.
- 4 Ibid.

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