



Role Of Primary Co-Operative Milk Societies In Dairy Industries Of Walwa Tahsil Of Sangli District, Maharashtra

Dr. Hemant R. Sawant

Department of Geography, Yashwantrao Chavan Mahavidyalaya, Islampur.

Corresponding Author - Dr. Hemant R. Sawant

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Abstract:

Agriculture is the backbone of Indian Economy. More than 70% population depends upon agriculture. Indian agriculture depends upon Monsoon seasons. So the income from agriculture is very inadequate. So there is need of substitute business to the farming. One of the important substitute Agro business from which the farmers can get good income, is dairy farming. 70.5% farmers have less than one hector land. So they are less land holder. They have turn to dairy farming. In the Sangli district of Maharashtra the dairy Industries started from 1970. There is lot of progress in this field from last 20 years. The Researcher has the topic for today's conference, "Role of primary Co-operative milk Societies in dairy Industries of Walwa tahsil of Sangli district, Maharashtra." Primary milk co-operative societies give a clue to understand the social background of milk producers. This also helps to understand rural development through dairy activity in the study region. There are 945 primary co-operative milk societies in the study region; with their cooperation all these milk unions and co-operative milk societies have developed a dairy culture in entire tahsil.

The Walwa tahsil is divided into four agriculture divisions. These agriculture divisions are Kasegaon, Ashta, Islampur and Kurlap. These divisions are taken as unit of analysis for this particular study. The role of Co-operative milk societies in dairy Industries to understand the study, some indicators are used such as Nature and age of the primary milk co-operative societies, employees and their ability, infrastructural facilities, total milk collection, rate of milk, facilities provided by primary co-operative milk societies etc.

Key words: *Agriculture, Monsoon, substitute, culture, Industries, division, societies*

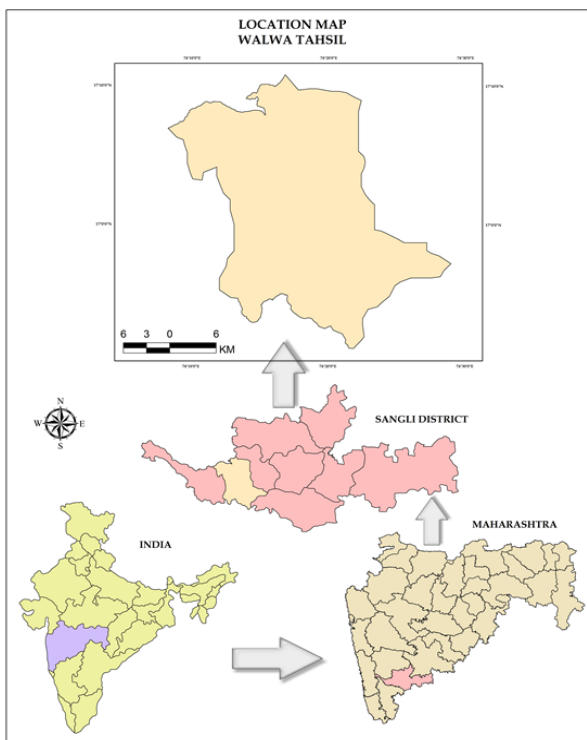
Preface:

The Walwa tahsil is divided into four agriculture divisions. These agriculture divisions are Kasegaon, Ashta, Islampur and Kurlap. These divisions are taken as unit of analysis for this particular study.

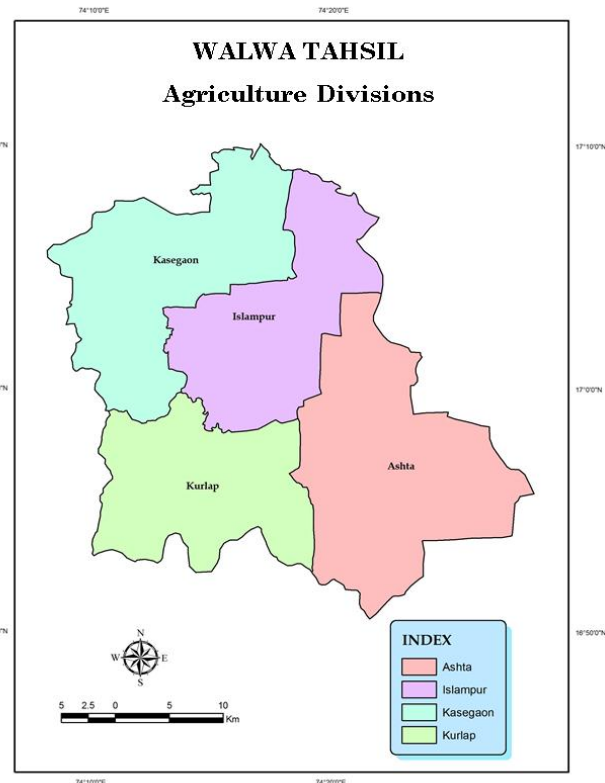
In this paper, an attempt is made to analyze the role of Co-operative milk societies in dairy Industries to understand the study, some indicators are used such as Nature and age of the primary milk co-operative societies, employees and their ability, infrastructural facilities, total milk

collection, rate of milk, facilities provided by primary Co-operative milk societies

etc. These aspects are studied respectively in this Research paper.



Map No.1



Map No.2

Study Region:

The Walwa tahsil is divided into four agriculture divisions. These agriculture divisions are Kasegaon, Ashta, Islampur and Kurlap. Walwa tahsil is located in western part of Sangli district, Maharashtra having 787.81 sq. Km. (78781 hector) geographical area. Walwa tahsil lies between 16⁰ 51' 08" North latitude to 17⁰ 10' 47" North latitude and 74⁰ 07' 42" East longitudes to 74⁰ 28' 30" East longitudes (ISO Toposheet).

Objective:

To study the role of Co-operative milk societies in dairy Industries of Walwa

tahsil of Sangli district is main objective of this Research paper.

Methodology:

This study is based on primary data, which is collected during the fieldwork. The data is collected through the pre-tested schedules. The schedule consists of all aspects regarding the primary milk co-operative societies. The stratified random sampling technique is used for collection of data. The sample size for the present study is 10 villages in each agriculture division and 2 primary co-operative milk societies from each selected village. About 80 primary Co-operative milk societies are personally contacted and

schedule is filled up by them which make possible to assess the study of primary Co-operative milk societies in the study region.

Analysis:

Collection of milk is important role to the primary milk Co-operative

Societies; therefore, it is necessary to assess the study of primary Co-operative milk societies and understand the social background of primary Co-operative milk societies and this also help to understand rural development through dairy activity in the study region.

Nature of primary co-operative milk societies:

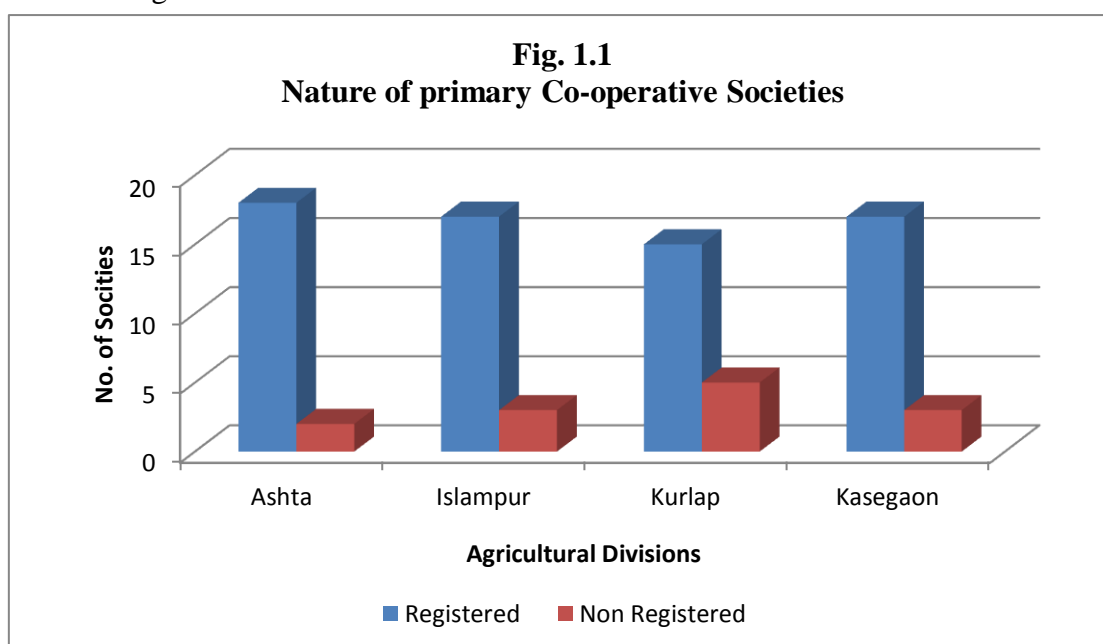
Table No.1.1 Nature of Primary Co-operative Milk Societies

Primary Co-operative Milk Societies	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Registered	18 (90%)	17 (85%)	15 (75%)	17 (85%)	67 (83.75%)
Non Registered	2 (10%)	3 (15%)	5 (25%)	3 (15%)	13 (16.25%)
Total	20	20	20	20	80

Source: Field Work (2022)

As above mentioned 20 primary co-operative milk societies are selected as sample among them few co-operative milk societies are registered while some of them

are non-registered. Table 1.1 highlights the issue.



Source: Based on Field Work (2022)

According to the table, there is highest non-registered milk co-operative societies in the Kurlap division, there are 05 (25%) non registered milk co-operative societies. Kasegaon and Islampur

divisions each have 03 (15%) non-registered milk societies, while Ashta division has only 02 (10%) milk society which is non-registered.

Establishment of primary Co-operative milk Societies:

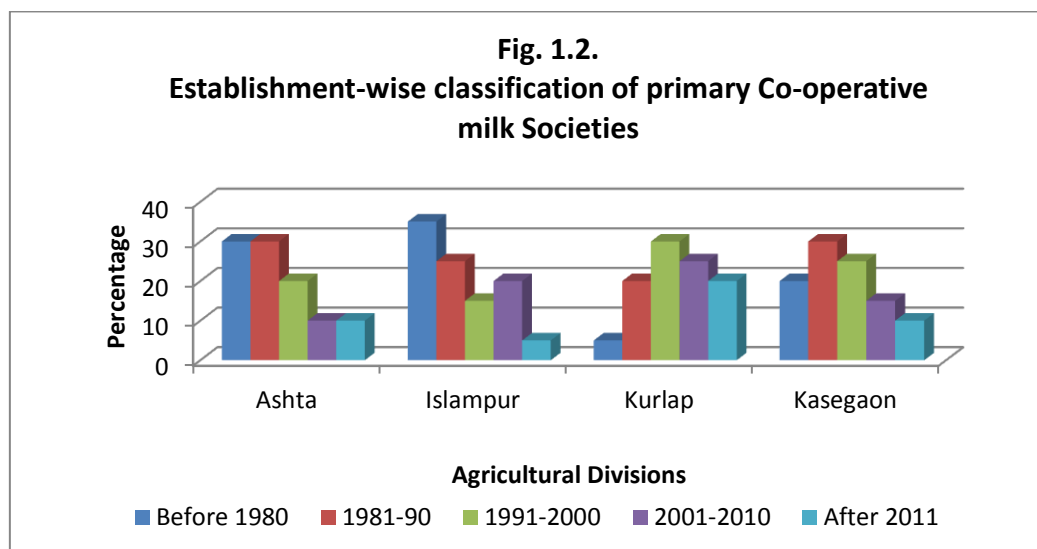
Table No.1.2 Establishment-wise Classification of Primary Co-operative Milk Societies

Year of Establishment	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Before 1980	6 (30%)	7 (35%)	1 (5%)	4 (20%)	18 (22.5%)
1981-90	6 (30%)	5 (25%)	4 (20%)	6 (30%)	21 (26.25%)
1991-2000	4 (20%)	3 (15%)	6 (30%)	5 (25%)	18 (22.5%)
2001-2010	2 (10%)	4 (20%)	5 (25%)	3 (15%)	14 (17.5%)
After 2011	2 (10%)	1 (5%)	4 (20%)	2 (10%)	9 (11.25%)
Total	20	20	20	20	80

Source: Field Work (2022)

Age of any co-operative organization is an important parameter to understand the impact of various schemes adopted by Government. It also indicates the fulfilment of milk producers' requirements of particular area. It is necessary to understand the year of

establishment of Primary Co-operative Milk Societies. The table 1.2 shows the stage of development of selected sample Primary Co-operative milk Societies from their establishment.



Source: Based on Field Work (2022)

The above table shows that 26.25% (21) Primary Co-operative milk Societies is establishment during the year 1981-90, followed by 22.5% (18) during the year before 1880 as well as 1991-2000 and 17.5% (14) during 2001-2010. Only 11.25% (9) Primary Co-operative milk Societies are established after 2011.

The table also shows that, in Islampur division 35% Primary Co-operative milk Societies are established during before 1980, followed by 25% during 1981-90 and 15% during 1991-2000. While 4 (20%) Primary Co-operative milk Societies are established during 2001-2010. In Ashta division 30% Primary Co-operative Milk Societies are established before 1980 as well as during 1981-90. During 1991-2000 years 20% (4) societies established and 10% Primary Co-operative milk Societies are established in both 2001 -2010 and after 2011 decades.

In the Kurlap division 30% (6) Primary Co-operative milk Societies are established during 1991-2000, followed by 5 (25%) and 4 (20%) during 2001-2010 and after 2011 respectively. While only one (5%) Primary Co-operative milk Societies is registered before 1980. 30% Primary Co-operative milk Societies from Kasegaon division are established during 1981-90 and 25% are established in between 1991-2000. Only 2 (10%) Primary Co-operative milk Societies are established after 2011.

Employees of primary Co-operative milk Societies:

Primary co-operative milk societies need the employee for the measuring quantity and quality of collected milk. The following table shows the numbers of employees working in the sample Primary Co-operative Milk Societies in the study region.

Table No.1.3 Employee Wise Classification of Primary Co-operative Milk Societies

No. of Employee	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Below 2	6 (30%)	3 (15%)	13 (65%)	5 (25%)	27 (33.75%)
3 to 5	9 (45%)	11 (55%)	7 (35%)	13 (65%)	40 (50%)
More than 5	5 (25%)	6 (30%)	0 (0%)	2 (10%)	13 (16.25%)
Total	20	20	20	20	80

Source: Field Work (2022)

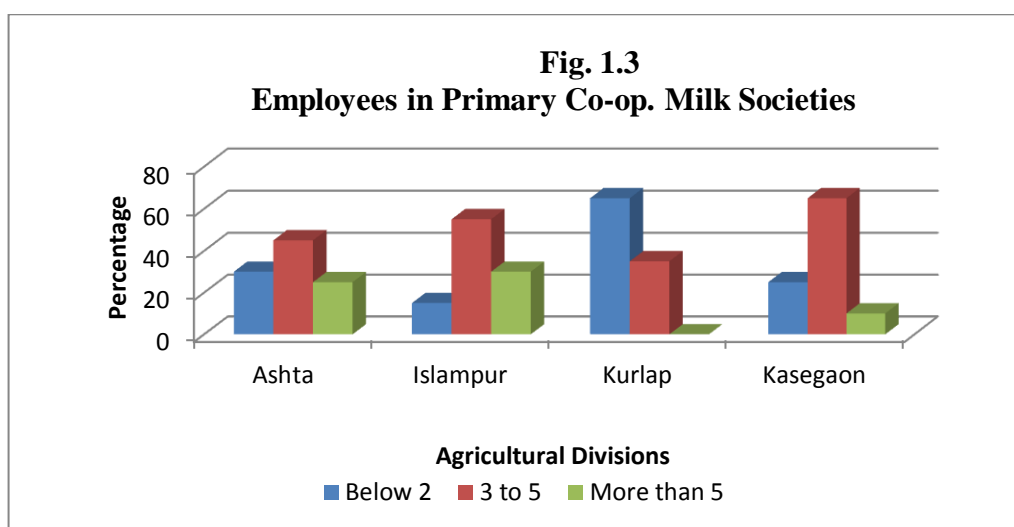
Above table 1.3 shows the employee wise classification of the Primary Co-operative Milk Societies. Here 50% Primary Co-operative Milk Societies

have 3 to 5 employee followed by 27 Primary Co-operative Milk Societies which have at most 2 persons working in the society as well as some large Primary

Co-operative Milk Societies are observed in the Walwa tahsil of Sangli District which have more than 5 employees.

In the division wise analysis, Islampur division has the 55% Primary Co-operative Milk Societies with 3 to 5 employee and 30% milk societies Primary Co-operative Milk Societies have more than 5 employees. In the Kurlap division small Primary Co-operative Milk Societies are observed therefore 65%

societies have at most 2 workers. In the Ashta division 45% Primary Co-operative Milk Societies have 3 to 5 worker and 25% Primary Co-operative Milk Societies have more than 5 workers therefore some large Primary Co-operative Milk Societies are observed in this division. 65% Primary Co-operative Milk Societies from Kasegaon division have 3 to 5 employee and only 10% societies have above 5 employees.



Source: Based on Field Work (2022)

Over all the division of the milk union i.e. Ashta and Islampur have the large Primary

Co-operative Milk Societies working with at least 3 workers

Classification of Employees according to skills:

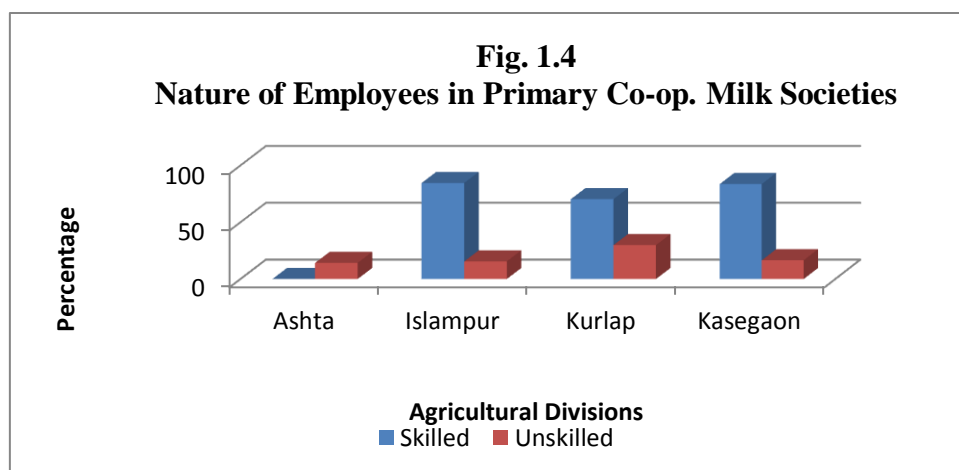
Table No.1.4 Classification of employees according to skill of Primary Co-operative Milk Societies

Classification of Employees	Agriculture Revenue Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Skilled	67 (85.90%)	71 (84.52%)	33 (70.21%)	61 (83.56%)	232 (82.27%)
Unskilled	11 (14.10%)	13 (15.48%)	14 (29.79%)	12 (16.44%)	50 (17.73%)
Total	78	84	47	73	282

Source: Field Work (2022)

Performance of any organization is mostly depending up on educational level of its employees. In the dairy industry skilled labours are required but due to lacks of skilled labours there are unskilled labours are also working in the Primary Co-operative Milk Societies.

The above table depicts the classification of workers according to skills. In total 82.27% skilled employees and 17.73% unskilled workers are present in sample Primary Co-operative Milk Societies of the study region.



Source: Based on Field Work (2022)

In the Ashta division out of 78 employees 67 (i.e. 85.90%) are skilled and 14.10% are unskilled workers are working in Primary Co-operative Milk Societies. In the Islampur division 84.52% skilled and 15.48 unskilled workers are present in Primary Co-operative Milk Societies. 70.21% employees from Kurlap division are skilled and 29.79 unskilled workers are working in the Primary Co-operative Milk Societies.

Basic facility in primary Co-operative milk Societies:

Automatic fat machine and electric weighting machine do faster and accurate work in Primary Co-operative Milk Societies and the payment of the milk depend on these two elements. Therefore, infrastructure is very essential in the dairy collection centre. The following table shows these facilities in the sample Primary Co-operative Milk Societies in the study region.

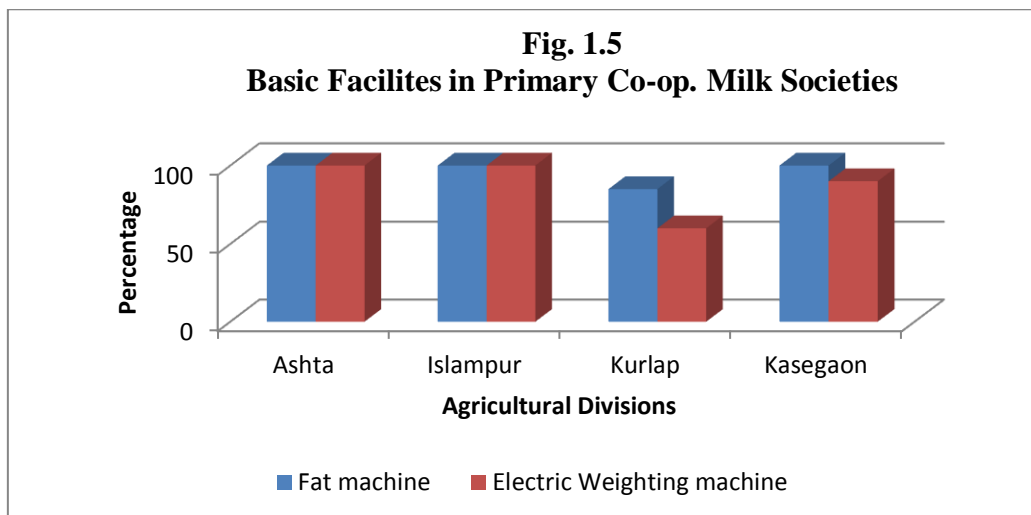
Table No.1.5 Classification of Primary Co-operative Milk Societies according to Basic Facility

Particular	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Fat machine	20 (100%)	20 (100%)	17 (85%)	20 (100%)	77 (96.25%)
Electric Weighting machine	20 (100%)	20 (100%)	12 (60%)	18 (90%)	70 (87.5%)
Total	40	40	29	38	147

Source: Field Work (2022)

In the Walwa tahsil 96.25% Primary Co-operative Milk Societies have the Automatic fat machine and 87.5% Primary Co-operative Milk Societies have

the electric weighting machine and it is clearly indicated that most of the societies have the modern dairy equipment's.



Source: Based on Field Work (2022)

In the Ashta and Islampur division all sample Primary Co-operative Milk Societies i.e. 100% have both the Automatic fat machine and the electric weighting machine equipments. In the Kasegaon division 100% societies have automatic fat machine and 90% Primary Co-operative Milk Societies have Electric Weighting machine. The Kurlap division 85% and 60% Primary Co-operative Milk Societies have Automatic fat machine and electric weighting machine respectively which is lowest as compared to other divisions in the study region.

Facilities provided to milk producers of primary Co-operative milk Societies:

Primary Co-operative milk societies provide Loan, cattle feed, veterinary

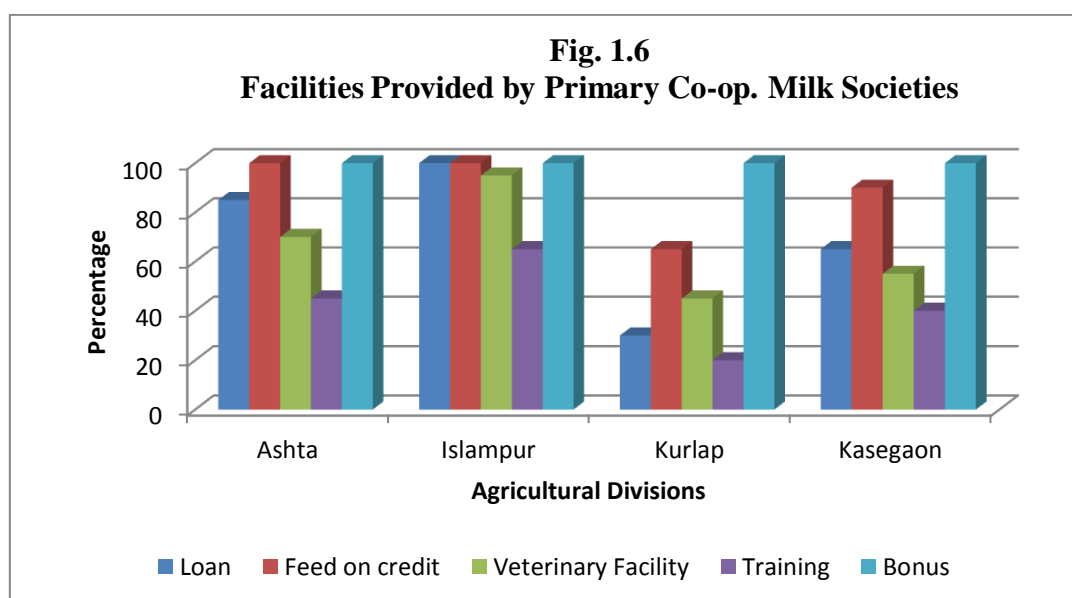
facilities, training courses and bonus etc. to milk producers.

Table No.1.6 depicts the facilities provided by the Primary Co-operative Milk Societies to milk producer members. In the Islampur division 100% Primary Co-operative Milk Societies provide Loan, Fees on credit as well as bonus to members while 95% and 65% Primary Co-operative Milk Societies provide veterinary and training facilities to milk producers respectively. In the Ashta division 100% Primary Co-operative Milk Societies provide the feed on credit and bonus while 85% milk societies give loans and 70% milk societies provide Veterinary Facility.

**Table No.1.6 Classification of Primary Co-operative Milk Societies
According, to Facilities Provided**

Particular	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Loan	17 (85%)	20 (100%)	6 (30%)	13 (65%)	56 (70%)
Feed on credit	20 (100%)	20 (100%)	13 (65%)	18 (90%)	71 (88.75%)
Veterinary Facility	14 (70%)	19 (95%)	9 (45%)	11 (55%)	53 (66.25%)
Training	9 (45%)	13 (65%)	4 (20%)	8 (40%)	34 (42.5%)
Bonus	20 (100%)	20 (100%)	20 (100%)	20 (100%)	80 (100%)
Total	80	92	52	70	294

Source: Field Work (2022)



Source: Based on Field Work (2022)

Minimum Primary Co-operative Milk Societies from the Kurlap division provide all facilities to the milk producers in that only 65% Milk Societies give feed on credit while 45% milk societies provide veterinary facility. 90% Primary Co-operative Milk Societies from Kasegaon division provide feed on credit as well as 65% and 55% milk societies provide loan and Veterinary Facility respectively.

Overall in the Walwa tahsil 88.75% milk societies provide feed on

credit and 70% milk societies provide loans. While, 100% Primary Co-operative Milk Societies give bonus to the milk producer members.

Total milk collection by primary Co-operative milk Societies:

The following table indicates the daily milk collection by the primary Co-operative milk societies.

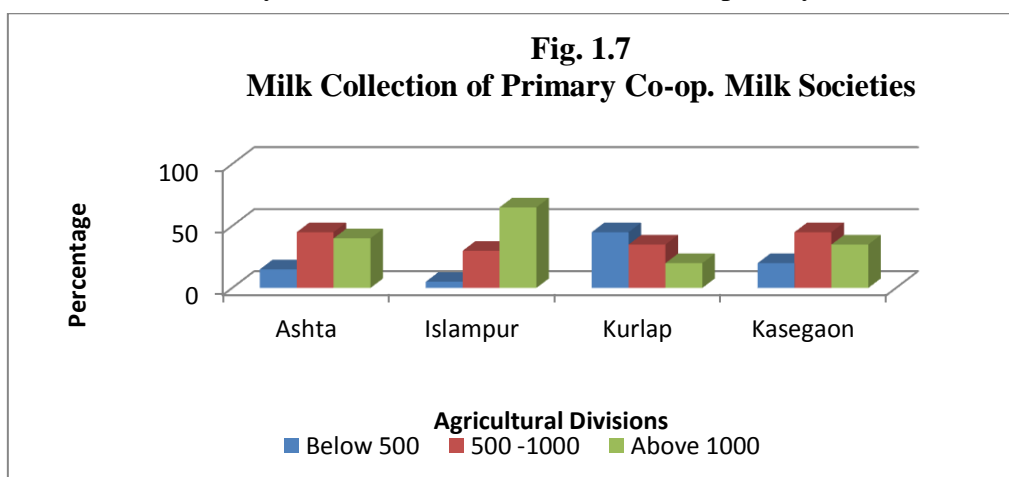
Table No.1.7 Classification of Primary Co-operative Milk Societies according to Total Milk Collection

Milk Collection (in Litre)	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Below 500	3 (15%)	1 (5%)	9 (45%)	4 (20%)	17 (21.25%)
500 -1000	9 (45%)	6 (30%)	7 (35%)	9 (45%)	31 (38.75%)
Above 1000	8 (40%)	13 (65%)	4 (20%)	7 (35%)	32 (40%)
Total	20	20	20	20	80

Source: Field Work (2022)

Above table No.1.7 depicts daily milk collection of sample Primary Co-operative Milk Societies in the study region. Where 40% society collects more

than 1000 lt. milk per day while 38.75% societies gathered 500 to 1000 lt. milk and only 21.25% milk societies collect below 500 lt. milk per day.



Source: Based on Field Work (2022)

Primary Co-operative Milk Societies from the Islampur division collects more milk in that 65% milk societies collect above 1000 lt. milk followed by 30 per cent collect 500 -1000 lt. milk per day. In the Ashta division 45% Primary Co-operative Milk Societies collects 500 -1000 lt. while 40% collects more than 1000 lt. milk per day. Only 15% milk societies collect below 500 lt. milk per day.

Kurlap division has maximum (45%) Primary Co-operative Milk Societies which collect below 500 lt. milk and

minimum (20%) Primary Co-operative Milk Societies which collect more than 1000 lt. milk per day this is highest and lowest numbers of Primary Co-operative Milk Societies as compared to other divisions in the tahsil. 45% and 35% Primary Co-operative Milk Societies from Kasegaon division collect 500-1000 lt. and more than 1000 lt. milk per day respectively.

Sale of milk by primary Co-operative milk Societies:

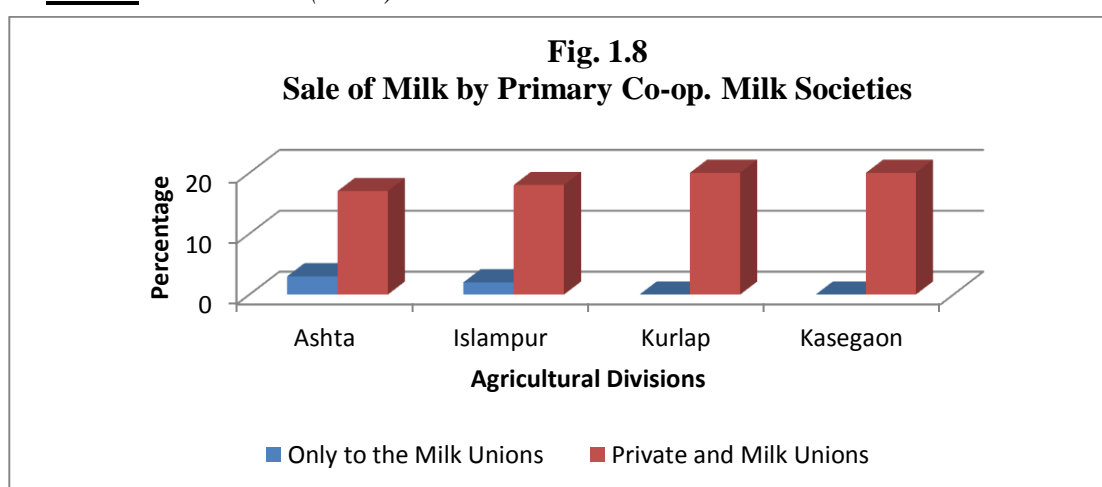
Primary Co-operative Milk Societies are basically collect milk for the

milk unions but they also sell the milk privately but mostly they sell low quality milk directly and send high quality milk to the union.

Table No.1.8 Classification of Primary Co-operative Milk Societies according to Sale of Milk

Sale of Milk Co-operative Societies	Agriculture Divisions				Total
	Ashta	Islampur	Kurlap	Kasegaon	
Only to the Milk Unions	03	02	00	00	05
Private and Milk Unions	17	18	20	20	75
Total	20	20	20	20	80

Source: Field Work (2022)



Source: Based on Field Work (2022)

The above table No.1.8 shows the sale of milk by the sample Primary Co-operative Milk Societies from Walwa tahsil. It is obvious thing that, there is 100% milk societies are attached to the Milk Unions, and they sell their collected milk to the respective unions. Apart from that there are 75 among 80 milk Co-operative societies sell their collected milk directly to the customers as well as milk union also.

The all samples of Primary Co-operative Milk Societies from all divisions sell their milk to the union because they are working for these unions. Apart from that all the milk Co-operative societies

from Kurlap and Kasegaon division sell their collected milk to both milk unions and customers. Only 5 among 80 Primary Co-operative Milk Societies are not selling milk privately to the customers and they send their entire collected milk to the respective milk unions.

Findings and Conclusions:

1. At present, all the milk unions and milk co-operative societies have more than 80% skilled and trained workers, but still are inadequate.
2. Many facilities provided by the Primary Co-operative Milk Societies to milk producer

members. F.eg. automatic fat machine (96.25 %), electric weighting machine (90 %)

3. All the milk co-operative societies give rate of milk to the milk producers as per the fat of milk.
4. In the Walwa tahsil, 40 % milk Societies collect more than 1000 litre milk per day.
5. All the Primary Milk Co-operative Societies give bonus to the milk producers every year.
6. Primary Milk Co-operative Societies give credit or loan for purchasing milch animals; cattle feed to the milk producers.
7. All the milk Co-operative Societies provide a subsidiary business to the farmers.

Suggestions:

1. It is suggested that primary Dairy Co-operative Societies should appoint skilled and trained workers preferably.
2. It is necessary to increase participation of women in primary co-operative milk societies to eliminate gender biasness in the dairy activities.
3. To establish a fodder bank for availability of good quality fodder

at reasonable price during the scarcity period.

4. The extension education and training programmes related to maintenance and health care of milk animals be organized in all the villages of the tahsil.

By considering the suggestions given above, the Dairy activities in the region should be strengthened for the economic development of the region.

References:

1. Diddee, J., *et. al.* (2002): *Geography of Maharashtra*, Rawat Publication, Jaipur and New Delhi, pp.296-301
2. District census Handbook, Sangli (2001 & 2011): The Maharashtra Census Directorate, Mumbai.
3. Districts in Maharashtra (2008): 'K' sagar publication, Pune p.152
4. Maharashtra State Gazetteers (1977): "Sangli & Satara District" Government Press, Nagpur, pp.1-16
5. Socio-Economic Review and District Statistical Abstract of Sangli District 2012 to 2014.
6. Agriculture Department, Islampur, official records (2021-22).
7. Based on Field Work (2022).