# **EFFECTS OF COVID-19 ON DAIRY FARMING**

# (A Case Study of Sangavi Village in Phaltan Tehsil of Satara District, MH)

Mr. Shende Popat<sup>1</sup> Dr. Jadhav Ashish<sup>2</sup> Mr. Kadam R. S.<sup>3</sup> Mr. Mane S. P.<sup>4</sup>

Ph. D Research Scholar, Department of Geography, Shivaji University, Kolhapur, Maharashtra<sup>1</sup>
Asst. Prof. Geography Dept, Shikshanmaharshi Dr. Bapuji Salunkhe College, Miraj, Dist. Sangli<sup>2</sup>
Vice Principle, Sahakarbhushan S. K. Patil College, Kurundwad, Tal. Shirol, Dist. Kolhapur<sup>3</sup>
Asst. Prof. HOD Dept. of Geography Sameer Gandhi Kala Mahavidyalaya, Malshiras, Dist. Solapur, MH

#### **1. INTRODUCTION**

India has achieved a rapid and remarkable growth in agriculture during last few decades. But we were facing the challenging task of maintaining food security, and how to meet the demand of its ever over growing population. Agriculture is the main source of income and food for more than seventy percent population. But these days agriculture is not very rewarding enterprise especially for marginal and small farmers with small land holdings. On the other hand, allied agricultural sectors such as vegetable cultivation, floriculture, dairy farming, Poultry and Beekeeping etc. have greater potentialities for uplifting the growth and livelihood sustainability. India is a high densely populated country and maximum people live in villages. Out of them are involved in agriculture. As compare to world milk production we produce only five percent of the total quantity of milk. This amount is too insufficient to meet the country's demand. The supply of milk in some parts of India is higher than the local demand. On the other hand, supply of milk in the rest of the country as well as in urban areas is much lower than the demand. Many dairy cooperatives have been formed to meet local demand and to develop dairy industry.

Coronavirus disease (Covid-19) is an infectious caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. The impacts of that virus on various sectors mostly in agricultural. Present research paper shows that the impacts of corona on dairy farming in Sangavi Village. Milk rates are very low in that period, so most of the milk producers affected & their problems to money loss.

# ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

## 2. STUDY REGION

Sangavi village is located in Phaltan tehsil of Satara district in Maharashtra State (fig. 1). It is situated bank of Nira and Banganga Rivers. India. It is situated 10 km away from sub-district headquarter Phaltan and 75 km away from district headquarter Satara. As per 2009 stats, Sangavi village is also a gram Panchyat. The total geographical area of village is 1762.88 hectares. Sangavi has a total population of 5, 915 peoples. There are about 1, 245 houses in Sangvi village. Phaltan is nearest town to Sangavi which is approximately 10 km away. Nira River in North Side, South boundary are bounded by Vidni Villages, Eastern side are bounded by Songaon and Western side bounded by Somanthali Village. Sangvi village is promoted by Grampanchyat as a main administration center. It has a 5 election wards like, Bhairavnath, Savtamali, Laxmi, Datta and Hanuman. Sangvi have 13 members including Sarpanch and Deputy Sarpanch. It have 6 Zilha Parishad (ZP School) Schools and One High school of Phaltan Education Society's Sangvi High school Sangavi. It has a one bank, Satara District Co-operative bank and VIKAS society and Datta Society. It has Two Milk Sangh, Heritage milk (formerly Vikram Dudh) and newly established Yash Agro and Govind Chilling Center. It has a big multipurpose hall Named by Social Worker Lat. Yashwantanna Jagtap, 'Yashwant Lons'.



Fig. 1: Location Map of Sangavi Village



www.junikhyat.com

## **3. OBJECTIVE**

• To study the effects of COVID-19 on dairy farming in Sangavi village.

## 4. DATABASE AND METHODOLOGY

For the proposed research paper we are collected the primary and secondary data. In a secondary data sources we obtained a Sangavi village .shp file (Village area boundary) from USGS data bank, list of milk producers Heritage Milk, Swaraj Milk, Shri Datta Primary Co-Operative Society, Dnynoba PCMS, Hanuman, Laxmi Dairy and Devansh Milk of the Sangavi and adjoining areas. The primary data obtained by Observation, direct interviews with questionnaire. All the primary data are collected in March-April-May, 2020 on field work.

Out of the total households, for the study researcher are selected those milk producer's households who are affiliated to mentioned union or Primary Milk Cooperative Society (PMCS) of the study region. 128 milk producers are fulfilling the mentioned criteria.

### **5. DISCUSSION**

Here, researcher discussing on Sangavi Village scenario of dairy farming, Quantification of animals, Affilation of farmers to union or PMCS, rate of milk given by union or PMCS to milk producer in the period of before Corona, High Risk Corona and Risk Corona effects.

## I) Milk Producers of Sangavi Village

Sangavi village are the vibrant village in agronomy especially in Dairy activity because it have a two private milk unions and one chilling center. Both are collected daily more the 55000 liter milk collection. Out of the total milk collection of these unions more than 10,000 liters milk is producing by Sangavi villages producers.

Dairy Farming of Sangavi village are supporting each and every families to managing their daily routine. Cow play a crucial role in Dairy Farming, more than 700 cows is in-milk condition; Buffaloes also playing a remarkable role in uplifting dairy farm as well as farmer's family. In the cow's there Holston Frizius (HF), Jersey and Gir Cross cows are played crucial role. Normally crossbreed buffaloes are used for milking.

## ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

#### **II)** Quantification of Milch Animals

Table 1 are shows the details of farmer-wise quantification of animals. There are 737 are milk animals available in Sangavi village of them 715 cow's and 22 are buffaloes. Out of the total 128 farmers, 68 farmers are having less than 5 milch animals. They have 241 milch animals. All 241 are cow milch animals. 38 farmers are having milch animals within the 5 to 8 animals, which are containing 264 milch animals. All are cows. There are 22 farmers are having more than 8 animals. They have 232 milch animals out of them 210 cow's and 22 are buffaloes. It is shown that the numbers of animals are high that time possibility of containing a buffaloes is high.

Farmer	Affiliation to Union/	Human	Total	Cowa	Buffaloes	
ID	Sangh Name	Population	Animals	Cows		
1	Heritage Milk	14	3	3	0	
2	Heritage Milk	4	3	3	0	
3	Heritage Milk	8	6	6	0	
4	Heritage Milk	6	7	7	0	
5	Heritage Milk	7	8	8	0	
6	Heritage Milk	6	3	3	0	
7	Heritage Milk	7	3	3	0	
8	Heritage Milk	8	3	3	0	
9	Swaraj Milk	6	4	4	0	
10	Swaraj Milk	7	5	5	0	
11	Shri Datta PMCS	8	6	6	0	
12	Shri Datta PMCS	6	7	7	0	
13	Hanuman PMCS	7	8	8	0	
14	Shri Datta PMCS	6	3	3	0	
15	Dnyanoba PMCS	7	3	3	0	
16	Shri Datta PMCS	8	3	3	0	
17	Swaraj Milk	6	4	4	0	
18	Laxmi PMCS	7	5	5	0	
19	Dnyanoba PMCS	7	6	6	0	
20	Govild Milk Chiling Center	6	7	7	0	
21	Shri Datta PMCS	7	8	8	0	
22	Hanuman PMCS	6	3	3	0	
23	Dnyanoba PMCS	7	3	3	0	
24	Heritage Milk	7	3	3	0	
25	Heritage Milk	6	3	3	0	
26	Heritage Milk	7	4	4	0	
27	Heritage Milk	7	5	5	0	
28	Heritage Milk	6	6	6	0	
29	Heritage Milk	7	7	7	0	
30	Heritage Milk	7	8	8	0	
31	Heritage Milk	7	3	3	0	
32	Shri Datta PMCS	7	3	3	0	
33	Hanuman PMCS	6	3	3	0	
34	Shri Datta PMCS	7	4	4	0	

**Table 1: Quantification of Milch Animals and Affiliation of Farmers** 

www.junikhyat.com

# ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

35	Swarai Milk	7	5	5	0
36	Dryanoba PMCS	6	6	6	0
30	Shri Datta PMCS	7	7	7	0
38	Hanuman PMCS	7	8	8	0
30	Dovonsh Milk	7	3	3	0
40	Sworei Mille	7	3	2	0
40	Swaraj Wilk	1	2	2	0
41	Silli Dalla PMCS	0	3	3	0
42	Shri Datta DMCS	7	4	4	0
45	Shiri Dalla PMCS	/	3	5	0
44	Hanuman PMCS	9	0	0	0
45	Heritage Milk	6	/	/	0
46	Heritage Milk	1	8	8	0
47	Heritage Milk	6	3	3	0
48	Heritage Milk	7	3	3	0
49	Heritage Milk	7	3	3	0
50	Heritage Milk	6	4	4	0
51	Heritage Milk	7	5	5	0
52	Heritage Milk	7	6	6	0
53	Shri Datta PMCS	6	7	7	0
54	Hanuman PMCS	7	8	8	0
55	Dnyanoba PMCS	7	3	3	0
56	Shri Datta PMCS	7	3	3	0
57	Swaraj Milk	6	3	3	0
58	Hanuman PMCS	7	4	4	0
59	Govild Milk Chiling Center	7	5	5	0
60	Heritage Milk	6	6	6	0
61	Heritage Milk	7	3	3	0
62	Heritage Milk	7	3	3	0
63	Heritage Milk	6	3	3	0
64	Heritage Milk	7	3	3	0
65	Heritage Milk	7	4	4	0
66	Heritage Milk	6	5	5	0
67	Heritage Milk	7	6	6	0
68	Hanuman PMCS	7	7	7	0
69	Shri Datta PMCS	6	8	8	0
70	Shri Datta PMCS	7	3	3	0
71	Swarai Milk	6	3	3	0
72	Hanuman PMCS	7	3	3	0
73	Dnyanoba PMCS	7	4	4	0
74	Heritage Milk	6	5	5	0
75	Heritage Milk	7	6	6	0
76	Heritage Milk	7	7	7	0
70	Heritage Milk	6	8	8	0
78	Heritage Milk	7	3	3	0
70	Heritage Milk	6	3	3	0
80	Heritage Milk	7	3	3	0
<u> </u>	Heritage Mills	7	<u>з</u>	<u> </u>	0
01 92	Shri Datta DMCS	6	<del></del>	- + - <	0
02	Hanuman DMCS	7	5	5	0
0.0	Shri Datta DMCS	1	7	7	0
05	Downsh Mills		/ 0	/ 0	0
83		0	ð 2	ð 2	0
80	Swaraj Milk		3	2	0
<u>ð/</u>		0	3	3	0
88	Divanoba PMCS	/	5	5	0

## ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

89	Laxmi PMCS	7	4	4	0
90	Shri Datta PMCS	6	5	5	0
91	Hanuman PMCS	7	6	6	0
92	Dnyanoba PMCS	7	7	7	0
93	Shri Datta PMCS	6	8	8	0
94	Govild Milk Chiling Center	7	3	3	0
95	Hanuman PMCS	6	3	3	0
96	Shri Datta PMCS	7	3	3	0
97	Swaraj Milk	7	4	4	0
98	Hanuman PMCS	6	6	6	0
99	Shri Datta PMCS	14	7	7	0
100	Hanuman PMCS	5	8	8	0
101	Shri Datta PMCS	5	3	3	0
102	Swaraj Milk	5	3	3	0
103	Heritage Milk	6	3	3	0
104	Heritage Milk	5	4	4	0
105	Heritage Milk	5	5	5	0
106	Heritage Milk	6	6	6	0
107	Heritage Milk	6	9	8	1
108	Heritage Milk	5	10	9	1
109	Heritage Milk	5	11	10	1
110	Heritage Milk	6	12	11	1
111	Dnyanoba PMCS	5	9	8	1
112	Shri Datta PMCS	12	10	9	1
113	Hanuman PMCS	5	11	10	1
114	Hanuman PMCS	5	12	11	1
115	Swaraj Milk	6	10	9	1
116	Dnyanoba PMCS	5	11	10	1
117	Shri Datta PMCS	5	12	11	1
118	Hanuman PMCS	5	12	11	1
119	Shri Datta PMCS	5	9	8	1
120	Govild Milk Chiling Center	5	10	9	1
121	Hanuman PMCS	9	11	10	1
122	Shri Datta PMCS	5	12	11	1
123	Dnyanoba PMCS	5	9	8	1
124	Swaraj Milk	9	10	9	1
125	Shri Datta PMCS	5	11	10	1
126	Laxmi PMCS	5	12	11	1
127	Shri Datta PMCS	5	9	8	1
128	Swaraj Milk	5	10	9	1
	Total	842	737	715	22

Source: Based on field work, March, April & May- 2020

#### ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020



Fig. 2: Animal Quantification of Sangavi Village

# **III) Affiliation of Milk Producer**

Above mentioned table 1 are shows the details of farmer-wise affilation of farmers to union or PMCS. There are 128 farmers are merging their daily milk to 8 milk collection centers like union or PMCS o Sangavi Village. Out of the total farmers 48 farmers are affiliated to Heritage Milk, 27 are Shri Datta Milk, 19 are Hanumal Milk, 13 are Swaraj Milk, 12 are Dnyanoba Milk, 4 are Govind Milk Chilling Center-Sangavi, 3 are Laxmi PMCS and 2 are Devansh Milk.

### IV) Rates of Milk Given By Union or PMCS

The rates of milk are given by union or PMCS to farmers with respect to Government Rule. There are the government are fixed the rate of milk on  $1^{st}$  January 2020 for the year 2020-21. It fixed the rate of cow milk is 26 for 3.0 Fat and 8.0 SNF (Lowest) and 33 for 5.0 Fat and 8.5 SNF. The Societies given the rate of milk between the 26 to 33 but some are given an extra Transportation Cost (Rs.1/ Liter) and Commission (Rs.2/ Liter). It means they given a rate between 29 to 36 Rs./ liter.

#### ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020



Fig. 3: Affiliation of Farmers in Sangavi Village

# a) Rates of Milk in Before COVID-19 Period

The before Covid-19 conditional period are marked within the  $1^{st}$  march to  $23^{rd}$  March. In this period the rate of milk and continuity of the milk collection and mode of payment is regular basis; in this period farmer getting regular rate of milk as per government rules. For the cow's milk it is getting a Rs. 26 to 35 per liter. Out of the total farmers 36 farmers are getting a milk rate between Rs. 26 to 28/ liter. Out of the total farmers 35 farmers are getting a milk rate between Rs. 28.10 to 30/ liter. Out of the total farmers 28 farmers are getting a milk rate between Rs. 30.10 to 32/ liter. Out of the total farmers 25 farmers are getting a milk rate between Rs. 34.10 to 34/ liter. Out of the total farmers 5 farmers are getting a milk rate between Rs. 34.10 to 36/ liter.

Out of the total farmers, 105 farmers are having only cow milch animals and 22 farmers are having milch cows as well as milch buffaloes. Out of those 22 buffalo holder's farmers 8 farmers are getting rate 33 Rs./ liter. 3 farmers are getting 34 Rs./ liter. 2 farmers are getting 35 Rs./ liter. 4 farmers are getting 36 Rs./ liter. 5 farmers are getting 37 Rs./ liter.

## ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

Farmer	Before COVID-19		High COVID-19		Risk COVID-19	
ID	Cow	Buffaloes	Cow	Buffaloes	Cow	Buffaloes
1	26.5	0	16.50	0.00	14.50	0.00
2	26.5	0	16.50	0.00	14.50	0.00
3	26.5	0	16.50	0.00	14.50	0.00
4	26.5	0	16.50	0.00	14.50	0.00
5	26.5	0	16.50	0.00	14.50	0.00
6	26.5	0	16.50	0.00	14.50	0.00
7	26.5	0	16.50	0.00	14.50	0.00
8	26.5	0	16.50	0.00	14.50	0.00
9	26.5	0	16.50	0.00	14.50	0.00
10	27	0	17.00	0.00	15.00	0.00
11	27	0	17.00	0.00	15.00	0.00
12	27	0	17.00	0.00	15.00	0.00
13	27	0	17.00	0.00	15.00	0.00
14	27	0	17.00	0.00	15.00	0.00
15	27	0	17.00	0.00	15.00	0.00
16	27	0	17.00	0.00	15.00	0.00
17	27.5	0	17.50	0.00	15.50	0.00
18	27.5	0	17.50	0.00	15.50	0.00
19	27.5	0	17.50	0.00	15.50	0.00
20	27.5	0	17.50	0.00	15.50	0.00
21	27.5	0	17.50	0.00	15.50	0.00
22	27.5	0	17.50	0.00	15.50	0.00
23	27.5	0	17.50	0.00	15.50	0.00
24	27.5	0	17.50	0.00	15.50	0.00
25	27.5	0	17.50	0.00	15.50	0.00
26	28	0	18.00	0.00	16.00	0.00
27	28	0	18.00	0.00	16.00	0.00
28	28	0	18.00	0.00	16.00	0.00
29	28	0	18.00	0.00	16.00	0.00
30	28	0	18.00	0.00	16.00	0.00
31	28	0	18.00	0.00	16.00	0.00
32	28	0	18.00	0.00	16.00	0.00
33	28	0	18.00	0.00	16.00	0.00
34	28	0	18.00	0.00	16.00	0.00
35	28	0	18.00	0.00	16.00	0.00
36	28	0	18.00	0.00	16.00	0.00
37	28.5	0	18.50	0.00	16.50	0.00
38	28.5	0	18.50	0.00	16.50	0.00
39	28.5	0	18.50	0.00	16.50	0.00
40	28.5	0	18.50	0.00	16.50	0.00
41	28.5	0	18.50	0.00	16.50	0.00
42	28.5	0	18.50	0.00	16.50	0.00
43	28.5	0	18.50	0.00	16.50	0.00
44	28.5	0	18.50	0.00	16.50	0.00
45	29	0	19.00	0.00	17.00	0.00
46	29	0	19.00	0.00	17.00	0.00
47	29	0	19.00	0.00	17.00	0.00
48	29	0	19.00	0.00	17.00	0.00
49	29	0	19.00	0.00	17.00	0.00
50	29	0	19.00	0.00	17.00	0.00

# Table 2: Changes of Milk Rates in COVID-19 Period

## ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

L 61	20.5	0	10.50	0.00	17.50	0.00
51	29.5	0	19.50	0.00	17.50	0.00
52	29.5	0	19.50	0.00	17.50	0.00
53	29.5	0	19.50	0.00	17.50	0.00
54	29.5	0	19.50	0.00	17.50	0.00
55	29.5	0	19.50	0.00	17.50	0.00
56	29.5	0	19.50	0.00	17.50	0.00
57	29.5	0	19.50	0.00	17.50	0.00
58	29.5	0	19.50	0.00	17.50	0.00
59	29.5	0	19.50	0.00	17.50	0.00
60	29.5	0	19.50	0.00	17.50	0.00
61	29.5	0	19.50	0.00	17.50	0.00
62	29.5	0	19.50	0.00	17.50	0.00
63	30	0	20.00	0.00	18.00	0.00
64	30	0	20.00	0.00	18.00	0.00
65	30	0	20.00	0.00	18.00	0.00
66	30	0	20.00	0.00	18.00	0.00
67	30	0	20.00	0.00	18.00	0.00
68	30	0	20.00	0.00	18.00	0.00
69	30	0	20.00	0.00	18.00	0.00
70	30	0	20.00	0.00	18.00	0.00
71	30	0	20.00	0.00	18.00	0.00
72	30.5	0	20.50	0.00	18.50	0.00
73	30.5	0	20.50	0.00	18.50	0.00
74	30.5	0	20.50	0.00	18.50	0.00
75	30.5	0	20.50	0.00	18.50	0.00
76	30.5	0	20.50	0.00	18.50	0.00
77	31	0	21.00	0.00	19.00	0.00
78	31	0	21.00	0.00	19.00	0.00
79	31	0	21.00	0.00	19.00	0.00
80	31	0	21.00	0.00	19.00	0.00
81	31	0	21.00	0.00	19.00	0.00
82	31	0	21.00	0.00	19.00	0.00
83	31	0	21.00	0.00	19.00	0.00
84	31	0	21.00	0.00	19.00	0.00
85	31.5	0	21.50	0.00	19.00	0.00
86	31.5	0	21.50	0.00	19.50	0.00
87	31.5	0	21.50	0.00	19.50	0.00
88	31.5	0	21.50	0.00	19.50	0.00
89	31.5	0	21.50	0.00	19.50	0.00
90	31.5	0	21.50	0.00	19.50	0.00
91	37	0	22.00	0.00	20.00	0.00
02	32	0	22.00	0.00	20.00	0.00
03	32	0	22.00	0.00	20.00	0.00
Q/	32	0	22.00	0.00	20.00	0.00
05	32	0	22.00	0.00	20.00	0.00
95	32	0	22.00	0.00	20.00	0.00
07	32	0	22.00	0.00	20.00	0.00
91	32	0	22.00	0.00	20.00	0.00
<del>7</del> 0 	32	0	22.00	0.00	20.00	0.00
100	33	0	23.00	0.00	21.00	0.00
100	22	0	23.00	0.00	21.00	0.00
101	33	0	23.00	0.00	21.00	0.00
102	33	0	23.00	0.00	21.00	0.00
105	225	0	23.00	0.00	21.00	0.00
104	32.3	U	22.30	0.00	20.30	0.00

## ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

105	32.5	0	22.50	0.00	20.50	0.00
106	32.5	0	22.50	0.00	20.50	0.00
107	32.5	34	22.50	24.00	20.50	22.00
108	32.5	33	22.50	23.00	20.50	21.00
109	32.5	36	22.50	26.00	20.50	24.00
110	33.5	37	23.50	27.00	21.50	25.00
111	33.5	36	23.50	26.00	21.50	24.00
112	33.5	37	23.50	27.00	21.50	25.00
113	33.5	35	23.50	25.00	21.50	23.00
114	33.5	34	23.50	24.00	21.50	22.00
115	33.5	33	23.50	23.00	21.50	21.00
116	33.5	36	23.50	26.00	21.50	24.00
117	33.5	37	23.50	27.00	21.50	25.00
118	33.5	37	23.50	27.00	21.50	25.00
119	34	36	24.00	26.00	22.00	24.00
120	34	37	24.00	27.00	22.00	25.00
121	34	35	24.00	25.00	22.00	23.00
122	34	34	24.00	24.00	22.00	22.00
123	34	33	24.00	23.00	22.00	21.00
124	35	33	25.00	23.00	23.00	21.00
125	35	33	25.00	23.00	23.00	21.00
126	35	33	25.00	23.00	23.00	21.00
127	35	33	25.00	23.00	23.00	21.00
128	35	33	25.00	23.00	23.00	21.00
Average	30.16	34.77	20.16	24.77	18.16	22.77

Source: Based on field work, March, April & May- 2020

### b) Rates of Milk in High Risk COVID-19 Period

The High Risk Covid-19 conditional period are marked within the 24<sup>th</sup> march to 30<sup>th</sup> April. In this period the rate of milk are fluctuate and discontinuity of the milk collection and mode of payment is irregular. In this period farmer getting lesser rate of milk as per government rules. For the cow's milk it gets a Rs. 16 to 25 per liter and Rs. 23 to 27/ liter for buffaloes. With respect the rate there are averagely Rs. 10/ liter is lesser than the government rate. Out of the total farmers 34 farmers are getting a milk rate between Rs. 16 to 18/ liter. Out of the total farmers 33 farmers are getting a milk rate between Rs. 18.10 to 20/ liter. Out of the total farmers 26 farmers are getting a milk rate between Rs. 20.10 to 22/ liter. Out of the total farmers 5 farmers are getting a milk rate between Rs. 22.10 to 22/ liter. Out of the total farmers 5 farmers are getting a milk rate between Rs. 24.10 to 26/ liter. In this period the rate of milk are losing Rs. 10 per liter.

In terms of buffalo milk, there is Rs.23 to 27/ liter rate are given by union or PMCS to farmer. Out of the total farmers 8 farmers are getting a milk rate between Rs. 23/ liter. Out of the total farmers 3 farmers are getting a milk rate between Rs. 24/ liter. Out of the total farmers 2

#### ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

farmers are getting a milk rate between Rs. 25/ liter. Out of the total farmers 4 farmers are getting a milk rate between Rs. 26/ liter. Out of the total farmers 5 farmers are getting a milk rate between Rs. 27/ liter.



Fig. 4: Cow Milk Rates

# c) Rates of Milk in Risk COVID-19 Period

The Risk Covid-19 conditional period are marked within the 1<sup>st</sup> May to 15<sup>th</sup> May. In this period the rate of milk are fluctuate and discontinuity of the milk collection and mode of payment is irregular; in this period farmer getting lesser rate of milk as per government rules. For the cow's milk it is getting a Rs. 14 to 23 per liter and 21 to 25/ liter for buffalo's milk. The cow milk producer are getting following rate. Out of the total farmers 36 farmers are getting a milk rate between Rs.14 to 16/ liter. Out of the total farmers 35 farmers are getting a milk rate between Rs. 16.10 to 18/ liter. Out of the total farmers 30 farmers are getting a milk rate between Rs. 18.10 to 20/ liter. Out of the total farmers 25 farmers are getting a milk rate between Rs. 20.10 to 22/ liter. Out of the total farmers 5 farmers are getting a milk rate between Rs. 22.10 to 24/ liter.

Page | 27

#### ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

The buffalo milk producers are getting rs 21 to 25/ liter. Out of the total farmers 8 farmers are getting a milk rate Rs. 21/ liter. Out of the total farmers 3 farmers are getting a milk rate Rs. 22/ liter. Out of the total farmers 2 farmers are getting a milk rate Rs. 23/ liter. Out of the total farmers 4 farmers are getting a milk rate Rs. 24/ liter. Out of the total farmers 5 farmers are getting a milk rate Rs. 25/ liter.



Fig. 5: Rates of Buffalo Milk

# 6. CONCLISION

### ISSN: 2278-4632 Vol-10 Issue-6 No. 4 June 2020

Basically in the summer season the demand of milks byproduct as well as milk demand is on higher stage and the production of milk is lesser than the demand because of the temperature, availability of green fodder and other physical condition the milch animal are produce less milk. Due to COVID-19 the daily demand of milk in market is continuously decreasing mode. In the initial stage the collection centers are collecting a regular collection of milk but in the high risk COVID-19 period the lockdown condition are started and the demand of milk are clutched and the produced milk are stayed at farmers home without selling. Within a lock down the collection centers are getting a gap of collecting milk that time milk are remain without sell at farmers home. By observing real condition there are huge economic losses of farmers within a COVID-19 period. Not only milk producers but also all agriculture people are clutched in the COVID-19. Every time only farmers are clutches.

### REFERENCE

- Alkire S., Meinzen-Dick R., Peterman A., Quisumbing A., Seymour G. & Vaz A. (2013): The women's empowerment in agriculture index, *World Development*, 52, Pp. 71-91.
- Amin R., Becker S. & Bayes A. (1998): NGO- promoted microcredit programs and women's empowerment in rural Bangladesh: quantitative and qualitative evidence; *The Journal of Developing Areas*, Pp. 221-236.
- Basu J. P. (2006): Microfinance and Women Empowerment: An Empirical Study with special reference to West Bengal; *Indira Ghandi Institute of Development and Research*, P. 14.
- Bathwala S. (1995): Defining women's empowerment: a conceptual framework, education for women's empowerment; In ASPBAE Position Paper for the Fourth World Conference on Women, Beijing, September 1995, New Delhi, Asia-South Pacific Bureau of Adult Education.
- Blattman C., Green E., Annan J. & Jamison J. (2013): Building Women's Economic and Social Empowerment through Enterprise: An Experimental Assessment of the Women's Income Generating Support Program in Uganda.
- Buvinić M. & Furst-Nichols R. (2014): Promoting women's economic empowerment: what works; *The World Bank Research Observer*.

- Sethuraman K. (2008): The role of women's empowerment and domestic violence in child growth and under nutrition in a tribal and rural community in South India (No. 2008/ 15) Research Paper; UNU-WIDER, United Nations University (UNU).
- Sharaunga S., Mudhara M. & Bogale A. (2015): The Impact of 'Women's Empowerment in Agriculture' on Household Vulnerability to Food Insecurity in the Kwa Zulu-Natal Province; In *Forum for Development Studies* (No. ahead-of-print, Pp.1-29). Routledge.
- Sharma, Miriam & Vanjani, Urmila (1993): When More Means Less: Assessing the Impact of Dairy Development on the Lives and Health of Women in Rural Rajasthan (India); *Social Science Medicine*, 37 (11), Pp. 1377-1389.
- Somjee G. & Somjee A. H. (1989): Reaching Out to the Poor: The Unfinished Rural Revolution, Macmillan.