

DAIRY FARMING IN SATARA DISTRICT (MAHARASHTRA): A GEOGRAPHICAL ANALYSIS

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ABSTRACT:

Dairy farming, poultry farming, sheep, goat and pig rearing etc. play a very important role in the lives of the rural households. These are not only a major source of employment and supplementary income, but also help in enhancing the intake of nutritional food by the rural poor. Historically, dairy farming has been continues to be a popular activity in rural India. Animal husbandry and dairy development is second major sector which comes after Agri business Dairy farming is a very popular activity among the farmers in Satara district. It is carried out in the co-operative as well as private sector. As per the statistical data, Satara district is rich in animal population. The district has 730573 bovines, 637270 sheep and goats. In the present paper an attempt has been made to bring out the Spatial Distribution Livestock Population in Satara district. The study is based on Primary and secondary data.

Key words: *Livestock, Animal husbandry, Dairy farming, Satara district.*

INTRODUCTION:

Dairy farming, poultry farming, sheep, goat, pig rearing etc. play a very important role in the lives of the rural households. These are not only a major source of employment and supplementary income, but also help in enhancing the intake of nutritional food by the rural poor. Historically, dairy, farming has been, continues to be a popular activity in rural India.

Animal husbandry and dairy development is second major sector which comes after Agri business Dairy farming is a very popular activity among the farmers in Satara district. It is carried out in the co-operative as well

as private sector. As per the statistical data, Satara district is rich in animal population. The district has 730573 bovines, 637270 sheep and goats. Also 3979381 poultry birds are being reared by the farmers, employment to large number of people. The milk production of the district was 482.56 thousand mt. in 2001-12. About 51.23 percent of the milk produced is obtained from cross breed cows, 37.53 percent from buffaloes and 11.24 percent from indigenous cows. The major gap in milk production is low yield per animal, miss-management of dairy animal and low productivity of animal. It will be improved by developing exotic blood better training to the farmers about dairy management and importance. Satara district is well known for remarkable fish production also. Sheep and goat rearing activity is generally popular among families living below poverty line and with small/marginal farmers. Sheep rearing activity is more popular among traditional shepherds in the eastern part of district, while the goat rearing activity is more or less evenly spread all over the district. Although, a few piggery units have come up in the district, the activity is yet to gain popularity. Besides dairy, even poultry farming plays an important role and has high potential in the district.

In the present paper an attempt has been made to bring out the Spatial Distribution Livestock Population in Satara district. The study is based on Primary and secondary data.

THE STUDY REGIONS:

Satara district is the western part of Maharashtra State. Its location lies between 17° 5' to 18° 11' North latitudes and 73° 33' to 74° 54' east longitudes occupying an area of 10,492 sq. kms. Administratively, it consists of eleven tahsils (Fig.1) and the region presents diversified physiography with hilly region dominated by leeward slopes of Western Ghats in west and alternate valleys and ridges culminating gradually into plateau in the east. The soils vary from laterite patches in the west through deep medium block alluvial of the river in the center and poor gray soils in the east. The monsoon climate dominates the region with variation in heat and cold. The region receives rainfall from south west monsoon averaging between 200 mm to 5000 mm. The eastern part, which fairly falls in the rain shadow belt experiences frequent drought conditions.

LOCATION MAP

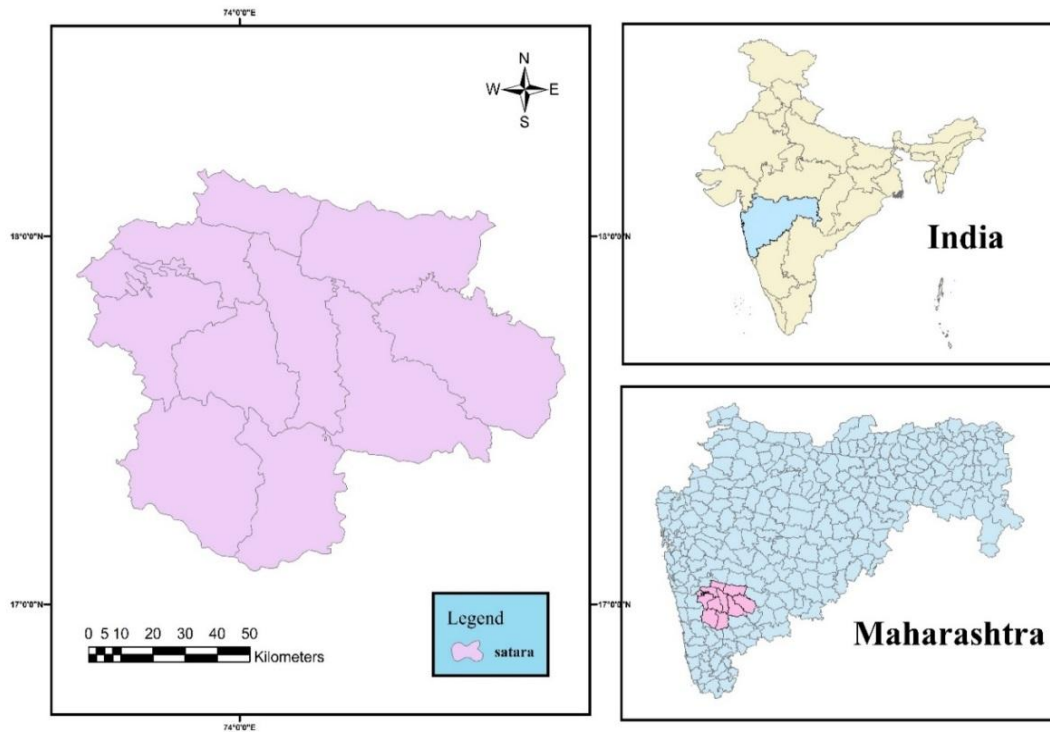


Fig.-1

OBJECTIVES:

The major objectives of this paper are as under:

- To Study the Spatial Distribution Livestock Population in Satara district.
- To study the Tahsil wise Existing of Veterinary Institutions

DATA BASE AND METHODOLOGY:

The present Study is based on Primary and secondary data. Primary data has been collected through the questionnaire and interviews of the selected Farmers. The Secondary data obtained from the records of Zilla Parishad and various records of Commissioner Animal Husbandry, Satara Agricultural Department of Maharashtra State. The values classified with the help of standard deviation Method.

Tahsil-wise Livestock Population in Satara district:

Dairy farming, Sheep, Goat, Pig rearing etc. play a very important role in the lives of the rural people. These are not only a major source of employment and supplementary income, but helps in enhancing the intake of nutritional food by the rural poor. Animal wealth in Satara has increased manifold and the animal husbandry practices have changed to a great extent following the introduction of newer technologies particularly for crossbreeding and up gradation of indigenous breeds. Animal husbandry is a one of the allied business of the agriculture in Satara and there is great potential for animal husbandry in Satara district. The Tahsil-wise livestock population is indicated in Table-1

Table 1 : Tahsil-wise Livestock Population in Satara district:

Sr. No	Tahsils	Area under fodder crops (ha)	Cattle (Nos)	Buffaloes (Nos)	Sheep (Nos)	Goats (Nos)	Total Livestock
1	Jaoli	1340	14058	11582	549	5356	31545
2	Karad	5105	44708	86674	15104	37692	184178
3	Khandala	2626	21561	8131	35422	16312	81426
4	Khatav	2363	43830	52734	25157	37714	159435
5	Koregaon	2425	38241	27669	15380	64838	146128
6	Mahablesh.r	2037	8242	4123	78	1495	13938
7	Man	3200	54508	37297	95705	79796	267306
8	Patan	12473	33644	54345	2259	26997	117245
9	Phaltan	7605	54880	23633	68935	57184	204632
10	Satara	3913	30822	39632	6134	20580	97168
11	Wai	1373	22863	17527	9579	15509	65478
	Total	44460	367357	363347	274302	363473	1368479

Source: District Dy. Commissioner Animal Husbandry, Satara.

Sheep, Goat and Piggery Development:

Sheep and Goat rearing is a traditional activity in Satara district, carried out mainly by small and marginal farmers and landless laborers. Due to semi-arid and dry climatic conditions, the activity is concentrated in Khandala, Khatav, Phaltan and Man Tahsils. There is also concentration of shepherd population in these blocks. The activity generates additional income for the farmers. The population of Sheep, Goats and Pigs in the district, as per the Livestock Census 2012 (Provisional), was 2.74 lakh, 3.63 lakh and 11,048 respectively. Total production of wool

in the district was 185.72 mt in 2005-09. The Maharashtra Sheep and Goat Development Corporation have its office at Dhivehi, which provides quality animals and technical guidance. The sheep breeding centre at Dhivehi supplies crossbred/ improved rams to the beneficiaries. There are 12 authorized slaughter 117 houses in the district. Markets dealing in livestock are organized at ten places in the district, at regular intervals, once a week on different days. The headquarters of Nimbkar Agriculture Research Institute (NARI) is also located at Phaltan. The institute is working for popularizing Sheep and Goat rearing through research and other activities.

Dairy Development:

Dairy is one of the most important allied activities carried out in Satara district. Though the activity has been spread over the entire district, it is more intensively practiced in Phaltan, Karad, Satara, Patan, Koregaon and Wai Tahsils. The milk production in the district was 442.58 thousand mt during 2011-12, working out to an estimated per capita availability of 355.80 gms/day. The per capita availability is higher than the State average of 169 gms and recommended level of 250 gms per day. CB cows, indigenous cows and buffaloes accounted for 36.63percent, 10.66percent and 48.35 percent of district milk production, respectively. Thus, the district is important from both CB cow and Buffalo milk production point of view. The district accounted for 5.91percent of total State milk production and 17percent of Pune Region milk production. Though the milk production is high from per capita availability point of view, the markets of nearby cities like Pune, Mumbai and other urban centers provide an excellent potential for milk and milk products. At present, approx. 80,000 liters of milk is sent to Mumbai and 55,000 Liters to Miraj every day. This district can develop as a 'hub' for supplying milk to nearby cities like Pune, Mumbai etc. Corporate may also be associated in development of dairy sector.

As per 2012 Livestock Census, there were 3, 67,357 cows out of which 60,376 breed able indigenous, 306981 breed able crossbred cows and 367347 buffaloes in the district. There is one milk processing and four chilling plants in the Government sector in the district, with capacity of 2.30 lakh and 1.00 lakh liters per day respectively. However, the capacity utilization has fallen due to increase in the number of private players in the market. There are 10 milk procuring and processing co-operative units in the district, and registered private milk procuring Institutes are 11 and unregistered private milk procuring Institutes are 5 of which 8 are functioning and had collected an average of 1.78 lakh **lpd** during 2009-10.

Three dairy cooperatives, viz., Koyana, Satara and Ajinkya Sahakari Doodh Utpadan and Prakriya Sangh have their own milk processing plants with a capacity of 2.20 lakh lpd. They are processing about 1.25 lakh lpd. There are ten registered and three unregistered (one not functioning) private milk plants, with the handling capacity of

5.20 lakh Ipd and 0.25 lakh Ipd respectively. The capacity presently being utilized by them is 69percent (3.668 lakh Ipd and 0.109 118 lakh Ipd) under registered and unregistered units respectively

Table 2 : Tahsil wise Existing of Veterinary Institutions:

S r. N o	Tahsil	GPs	Institutions (Nos)									No. of GPs witho ut any Vet. Insti tute
			VH	VD	MV C	PV C	AIC	KVS sub centr e	Dia gno stic Lab s	P E C	Tota l	
1	Satara	210	1	8	1	-	25	-	1	-	26	184
2	Patan	343	-	6	1	-	19	-	-	-	20	323
3	Jawali	151	-	3	-	-	15	-	-	-	15	136
4	M.shwar	111	-	2	-	-	11	-	-	-	11	100
5	Karad	220	1	10	-	-	32	-	1	-	32	188
6	Khandala	70	-	5	-	-	8	-	-	-	8	62
7	Phaltan	125	1	4	-	-	14	-	1	-	14	111
8	Koregaon	139	1	5	-	-	18	-	1	-	18	121
9	Khatav	141	1	9	-	-	19	-	1	-	19	122
10	Wai	119	1	3	-	-	17	-	1	-	17	102
11	Man	105	-	5	-	-	13	-	-	-	13	92
	Total	1734	6	60	2	-	191	-	6	-	193	1541

Source: District Dy. Commissioner Animal Husbandry, Satara.

There are 61 Veterinary Dispensaries (VDs), including two mobile VDs, at Satara and Patan, classified as Grade-I VDs, manned by degree holders, 113 Veterinary Aid Centers (V ACs) . Classified as Grade-II, manned by diploma holders or livestock supervisors, 15 AI sub centers (4 Grade-I and 11 Grade-II), one polyclinic and two mini polyclinics. All the 190 units have facilities for AI. The Animal Husbandry Department has plans to establish new VDs, to upgrade the V ACs, provide medicines, vaccination etc., for which budgetary allocations have been made to the extent of Rs 100 lakh during 2015-16. The weekly livestock markets are organized at Satara, Karad, Phaltan, Koregaon, Nagthane, Pachvad, Anevadi, Pusegaon, Aundh, Shirval, Mayani, Gondhavle and Mhasvad. There are a good number of milk routes. Adequate transport facilities in terms of all- weather roads are available. Based on the assumption of one veterinary graduate center for every 5000 adult cattle unit, the requirement works out to 167 graduate centers, against which there are only 67 graduate centers, leaving a gap of

100 centers. The gap could be bridged over a period of time, taking veterinary services available from cooperative and private milk union. Similarly, based on the assumption of one AI center for every 1,000 breed able animals (50percent of the number in case of buffaloes), the requirement works out to 269 centers based on 2003 census, as against the present number of 192, leaving a gap of 77 centers. The gap could be bridged over a period of time, after accounting for centers available in cooperative and private sectors.

Strategy to Improve the Production:

Organize the training program for farmers to educate nutritional management, quality milk production, care and management of breeding bull, milking cow etc. Encourage the farmers for organic and healthy milk production. Innovative dairy activities like establishment of breeding farms, automatic community milking centers etc. should also be encouraged and linked to bank finance. Dairy farming through tie-up with co-operative need to expand with corporate and private dairies. Organize the educational and training programmes for the farmers to identify and control of different poultry diseases. Bank can play a vital role by providing credit to the veterinary graduates for setting up of Agricultural clinic and Agricultural business centers. □ Rearing of crossbreed female calves in co-ordination with milk unions and Animal Husbandry Department may be taken up as an economic activity under various poverty alleviation programmes. The availability of veterinary centers providing health care and AI facilities is inadequate. Veterinary graduates may be encouraged to set up health care units under ACABC scheme. Encourage the farmer for preparation of own quality poultry feed to minimize the production cost. Banks should encourage disbursement of poultry loans for broiler farming through contract farming. Similarly allied activities like setting up feed plants, livestock health care services, infrastructure development, retail marketing outlet for broiler marketing etc. should also be vigorously financed. Agriculture science graduates should be encouraged to set up enterprises, especially for providing veterinary and other support services. Effort should also be made to popularize goat/sheep farming enterprise among the women self-help groups.

CONCLUSION:

Dairy is one of the most important allied activities carried out in Satara district. Though the activity has been spread over the entire district, it is more intensively practiced in Phaltan, Karad, Satara, Patan, Koregaon and Wai Tahsils. The milk production in the district was 442.58 thousand mt during 2011-12, working out to an estimated per capita availability of 355.80 gms/day. The per capita availability is higher than the State average of 169 gms and recommended level of 250 gms per day. CB cows, indigenous cows and buffaloes accounted for 36.63percent, 10.66percent and 48.35percent of district milk production, respectively. Thus, the district is

important from both CB cow and Buffalo milk production point of view. The district accounted for 5.91 percent of total State milk production and 17 percent of Pune Region milk production.

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