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ANALYSIS 0F LIVESTOCK IN UTTARAKHAND STATE

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ABSTRACT:

India has an enormous wealth in livestock especially the dairy animals. There are some 192.49 million cattle. 109.85 million Buffaloes and 223.14 million Goats & Sheep, 9.06 Pigs, 851.81 Poultry in the Country in 2019 (Livestock sen 2019). Livestock again comprise one of the most important sectors of the agrarian economy of mountain areas throughout the length and width of the mountains and high land of the world. The mountain habitats distinguishable from the mainstream plains are inhabited largely by livestock dependent farming communities.

KEYWORDS: *Hinduism and Buddhism , multi-cultural, multi-lingual.*

INTRODUCTION :

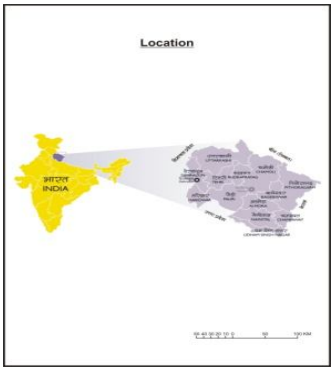
Mountain communities living in a decentralized manner, each –strived, and can boast of species of bovine and non-ruminant animals and their unique genetic resources. Mountain region in fact is a natural animal general bank cattle, buffaloes, sheep, goat, pig, poultry, birds and angora rabbits occupy a long range of environments. Livestock again are the important sector that demands well thought out and well-planned institutional intervention for the social, economic development of mountain areas.

METHODOLOGY –

This study is primarily based on secondary data. Livestock resources data has been collected from census of India 2019 and census of Uttarakhand govt.

STUDY AREA-

The Himalaya region is large complex ecosystem the temperate and sub-tropical hills and valleys in Uttarakhand have a variety of livestock resources. These resources have developed both dependent on and independent of man. The kind of animals which have been domesticated and many further to be improved by man to meet his various demands is included under livestock resources. The livestock raising system in the region is different at different altitudes because it is highly influenced by social organizations, locally available cropping pattern and land use system. It is well organized integrated social-crop – livestock system in the lower hills & valleys and in the higher areas migratory social livestock system prevails, where the people have no specified land-based location and with their livestock.



Animal husbandry is one of the important subsidiary and supporting sectors in the economy particularly in the hill areas. The main beneficiaries of its various programmes are small and marginal farmers and landless

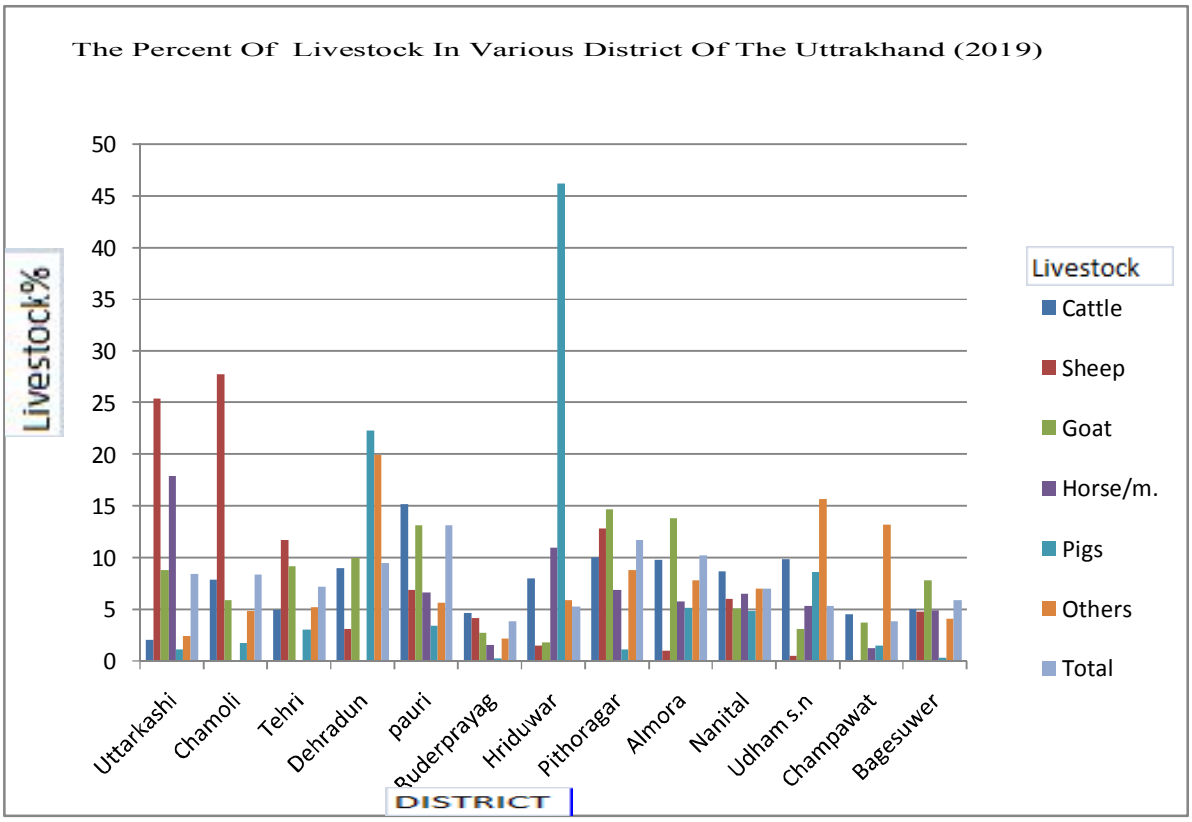
laborers. Many developmental programmes have been taken up for the establishment of different type of veterinary institutions, feed and fodder development, subsidy for rearing cross bred heifers, sheep and goat development, poultry and the like. Agriculture remains sterile without the proper assistance of livestock and therefore it holds an important key role in agricultural economy. Topography, climate, availability of the people, economic condition of the farmers etc are the main factors influencing the distribution and combination of livestock in Uttarakhand. In the interior parts of the hills livestock is supposed to be an important means of transportation we also get fiber, wool, milk, fats, hides, skins etc. From them the role of livestock mark in the state and animal husbandry is taken up as a subsidiary occupation of agriculture. Uttarakhand state is located in the Himalayas and is spanning in total area of the 5348 k.m. The Uttarakhand state lies between $28^0$7"and $31^0$4" N latitude and $77^0$7" and $81^0$1" longitude. Total Population of Uttarakhand state is 10086292(2011) and total animal population of Uttarakhand is 4034063. There is dependence per person of 40 animals in Uttarakhand.

DISTRIBUTION OF LIVESTOCK POPULATION-

Livestock rearing covers a wind range of animals. Generally cattle form the largest number among all the livestock population but in the Uttarakhand state because of its location and regional social -economic structure the population of goat and sheep also have an important place in the state livestock population pattern. Uttarakhand state has 4034063 livestock population out of which 49.73% are cattle, 9.15% sheep, 33.89% goat, 1.10% horse & other population contributes 6.13% of the total livestock combinations. Distribution of livestock population percentage in various districts of Uttarakhand is shown in Table 1.1.

Table 1.1-The Percent of Livestock in Various District of the Uttarakhand (2019)

S.n	District	Cattle	Sheep	Goat	Horse/ Mule	Pigs	Other	Total% In U.K.
1	Uttarkashi	2.10	25.45	8.83	17.94	1.19	2.42	8.45
2	Chamoli	7.89	27.75	5.96	9,27	1.75	4.83	8.36
3	Tehri	4.99	11.74	9.20	10,66	3.06	5.23	7.20
4	Dehradun	9.01	3.17	9.99	10,17	22.32	19.94	9.51
5	pauri	15.18	6.93	13.14	6.63	3.45	5.67	13.14
6	Ruderprayag	4.68	4.19	2.71	1.57	0.29	2.22	3.87
7	Hriduwar	8.03	1.52	1.78	10.98	46.24	5.89	5.30
8	Pithoragar	10.07	12.87	14.71	6.95	1.15	8.81	11.74
9	Almora	9.83	1.01	13.85	5.79	5.19	7.81	10.25
10	Nanital	8.70	6.07	5.14	6.52	4.83	7.05	7.06
11	Udham s.n	9.91	0.52	3.14	5.34	8.64	15.74	5.34
12	Champawat	4.56	.001	3.72	1.27	1.50	13.23	3.84
13	Bagesuwer	5.05	4.78	7.83	4.93	0.34	4.12	5.89
	Total .%	100	100	100	100	100	100	100



Down at district level the share of cattle to the total livestock population is highest 15.18% in Pauri Garhwal and lowest 2.10% in Uttarkashi district. Goat livestock population is highest 14.71% in Pithoragarh district and lowest 1.78% in Haridwar district. Horse and Mules livestock population is highest 17.94% in Uttarkashi district and lowest 1.27% in Pithoragarh district. Pig livestock population is highest 46.24% in Haridwar District and lowest 0.29% in Rudraprayag district. Other livestock population is highest 15.74% in Nainital district and lowest .001% in Rudraprayag district.

The distribution of livestock population per districts and livestock population percentage is shown in the table 1.2. There can also be seen a clear distinction among the district belonging to hill and plain areas as well as the ones having scheduled caste and tribe population. For example the districts which has significant population of Bhotiya tribes, who are engaged in sheep and goat rearing, has higher percentage of goats and sheep's population. As seen in the table Almora district has highest goat's percentage of 46.16 % and Chamoli district has highest sheep percentage of 28.62%. Pig's concentration is highest in Haridwar district 4.30% and second highest percentage is seen in Dehradun of 1.25% out of total livestock population percentage of Uttarakhand state. Piggery is not taken up by the people of higher cast. In the towns of hill areas pigs are also seen. Following is the percentage chart of livestock in the district of Uttarakhand state.

In the district Uttarkashi the highest amount of livestock population is of goat 35.64% and lowest of pigs 0.06%. In the district Chamoli the highest amount of livestock population is of cattle 44.28% and lowest of pigs 0.21%.In the district Tehri the highest amount of livestock population is of goat 43.93% and lowest of pigs 0.06%.In the district Dehradun the highest amount of livestock population is of cattle 47.14% and lowest of horses & mule 1.15%.In the district Pauri the highest amount of livestock population is of cattle 57.72% and lowest of pigs 0.13 %.In the district Rudraprayag the highest amount of livestock population is of cattle 61.70% and lowest of horses, mule 0.33%. In the district Haridwar the highest amount of livestock population is of cattle 72.69.15% and

lowest of horses, mule pigs 2.26%. In the district Pithoragarh the highest amount of livestock population is of cattle 42.65% and lowest of pigs 0.01%. In the district Almora the highest amount of livestock population is of cattle 48.15% and lowest of pigs 0.25 %. In the district Nainital the highest amount of livestock population is of cattle 61.44% and lowest of pigs .33%. In the district Udham singh nagar the highest amount of livestock population is of cattle 63.71% and lowest of pigs .99 %. In the district Champawat the highest amount of livestock population is of cattle 59.30% and lowest of pigs 0.19%. In the district Bageshwar the highest amount of livestock population is of Goat 42.96% and lowest of pigs 0.02%. In the district Haridwar the highest amount of livestock population is of cattle 72.69% and lowest of horses& mule 2.26 %.

Table 1.2- District wise distribution of various livestock population percentage in the state of Uttarakhand

S.n	District	Cattle	Sheep	Goat	Horse/ Mule	Pigs	Other	Total Animals%
1	Uttarkashi	32.68	27.68	35.64	2.32	0.06	1.62	100
2	Chamoli	44.28	28.62	22.82	1.16	0.09	3.08	100
3	Tehri	34.96	15.11	43.93	1.62	o.21	4.14	100
4	Dehradun	47.14	3.04	35.62	1.15	1.25	11.83	100
5	Pauri	57.72	4.85	34.15	0.69	0.13	2.44	100
6	Rudraprayag	61.70	10.15	24.41	0.33	0.03	3.32	100
7	Haridwar	72.69	2.65	11.63	2.26	4.40	6.39	100
8	Pithoragarh	42.65	9.98	42.46	0.67	0.01	4.23	100
9	Almora	48.15	0.92	46.16	0.60	0.25	3.92	100
10	Nainital	61.44	0.11	24.56	o.98	0.33	12.58	100
11	Udham s.n	63.71	0.88	19.72	1.08	0.99	13.82	100
12	Champawat	59.30	0.03	32.98	0.36	0.19	7.14	100
13	Bageshwar	42.06	7.41	45.04	1.54	0.02	3.93	100

Livestock Density- The main occupation of the people of Uttarakhand is livestock. In Uttarakhand state the forest cover is high that is why high livestock is found here.

Table 1.3- The Density of Livestock in various Districts (2019)

S.n	District	% Per km	S.n	District	% Per km
1	Uttarkashi	42.29	8	Pithoragarh	66.75
2	Chamoli	46.95	9	Almora	132.29
3	Tehri	70.23	10	Nanital	73.61
4	Dehradun	124.23	11	Udham s.n	74.87
5	Pauri	97.43	12	Champawat	86.67
6	Rudraprayag	80.84	13	Bageshwar	102.84
7	Haridwar	88.90	14	U.K state	75.42

The density of livestock in the Uttarakhand state as a whole is 75.42% per km. The livestock density varies as highest 132.29% per km in Almora district and lowest 42.29% per km in Uttarkashi district. Livestock in the district of Pithoragarh is 66.75% per km, 46.95% per km in Chamoli district, 70.23% per Km in Tehri Garhwal, 73.61% per km in Nanital district, 74.87% per km in Udham Singh Nagar district, 86.67% per km in Champawat district, and 75.42% per km in Bageshwar district. Lowest level of livestock in some districts is because of their location in the extreme north where a major part of these districts is not inhabited.

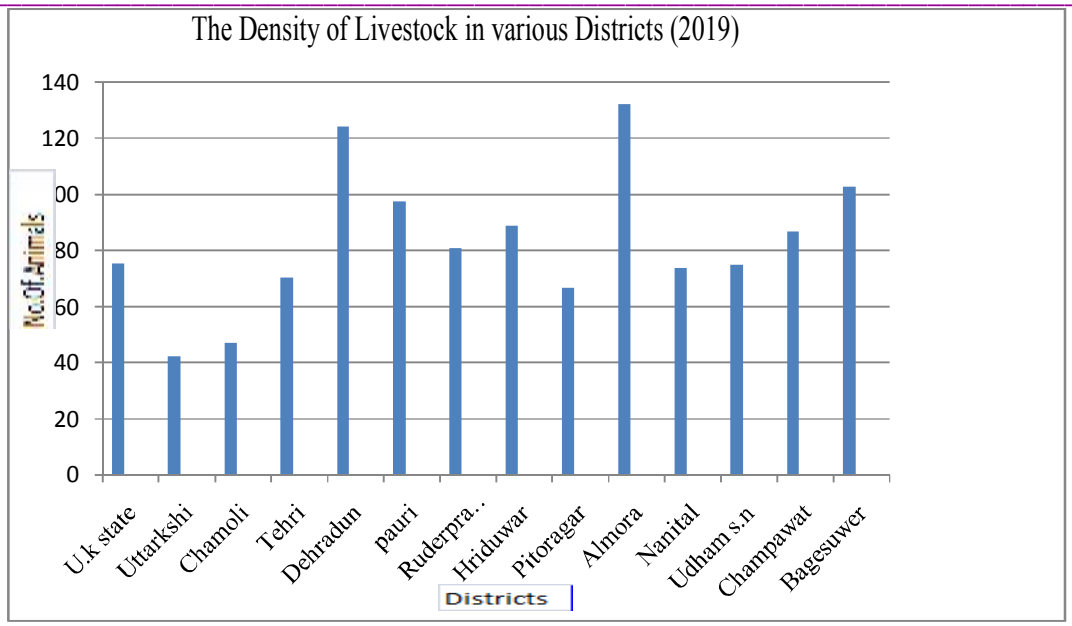


Table 1.4- Density of Livestock Uttarakhand (2019)

s.n	Density	No. of Districts	Total%	Name of Districts
1	Below-50	02	16.71	Uttarkashi, Chamoli
2	50-100	08	57.64	Tehri, Pauri, Rudraprayag, Haridwar, Pithoragarh, Nanital, Udham Singh Nagar Champawat.
3	100-above	03	25.65	Bageshwar, Almora, Dehradun

Show the Table 1.4- Livestock density in Uttarakhand state below-50 livestock per km is in Uttarkashi and Chamoli district. Livestock density from 50-100 per km is in Tehri, Pauri, Rudraprayag, Haridwar, Pithoragarh, Nainital, Udham s.nagar, and Champawat. Livestock density from 100 & above per km is in Bageshwar, Almora and Dehradun districts. In view of the above there are found different livestock combinations in the region. It denotes the priority and preference to rear one type of animal along with other animals. Livestock combination is the true index of Physical-Climate, characteristics availability and nature of fodder, socio-economic conditions, traditions and need of the people of the state on the basis of the magnitudes of combination of four classes of livestock.

CONCLUSION-

Livestock biodiversity plays a critical role in the framework of food security. Livestock meet direct nutritional requirements through milk, meat and eggs. Their role in agriculture, particularly as draught animals, is instrumental in operating farm activities for food production. The process of ensuring food security thus begins with livestock. Further, livestock maintain fertility status of the farms through nutrient transfer and recycling and thus contribute to the essential ecological integrity of a farming system and consequently to agricultural sustainability. An improvement in livestock sector through effective local level planning with focus on the conservation of biodiversity comprising unique livestock species and genetic resources would lead to an enormous improvement in the socioeconomic condition of local people. Resources, health cover, marketing facilities, etc are the most important factors on which local level livestock development planning can be based mountain areas have enormous untapped potential for sustainable development of agrarian economies natural and livestock resources are such an area that can ameliorate livelihood system. Ensure food security of the masses and revolutionize diverse economies in the region.

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