

Livestock Husbandry in Devi Patan Plain, Uttar Pradesh: A Geographical Study

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Abstract: Livestock husbandry is an important agriculture sub-sector of Indian economy. It significantly contributes to the agricultural GDP in India. Livestock farming, however, has been appearing one of the most important value added farming system adopted in the country. Livestock products also play a main role in export earnings. After cultivation of crops, livestock is the second largest productive asset in rural India. India's livestock sector is one of the largest in the world. In 2010-11, livestock generated outputs worth Rs 2075 billion (at 2004-05 prices) which comprised 4 per cent of the GDP and 26 per cent of the agricultural GDP. Livestock husbandry is well developed in Western Trans-Ghaghara (Devi Patan) plain, Uttar Pradesh. The plain of Devi Patan includes the districts of Bahraich, Gonda, Balrampur, And Shrawasti districts. In Devi Patan plain, more than 70 per cent of rural household are directly or indirectly engaged with livestock husbandry. The result obtained with the application of statistical technique shows that in all the 44 blocks of Devi Patan plain, there is a huge spatial variation of animals like buffalo, cattle, sheep and goat in all the blocks.

Keywords: dairy products, farming system, livestock, productivity, technological development.

I. Introduction

Livestock husbandry is an important agriculture sub-sector of Indian economy. It significantly contributes to the agricultural GDP in India. (Iqbal, A., 2013). It is the most important source of food security as it provides meat and milk and other dairy products, which enrich the nutrition intake. (Khan, N., Khan, M. M. and Rehman, A., 2009). Livestock constituted the oldest wealth resource of mankind and was taken as symbol of economic status in the society. (Khan, N., & Iqbal, M.A., 2011). In the absence of fertile lands and assured irrigation which are controlled by a small population of rich farmers and lack of employment in the industrial and service sectors, most of the rural families belonging to socio- economically weaker sections of the society maintain different species of livestock to supplement their income. (Hegde, N.G., 2006). When abundant feed is available, livestock can be considered a form of wealth, power and security, a perception based on the conversion of solar energy captured in biomass into products valuable for human society (Schiere, J.B., 2002). Livestock sector is expected to emerge as an engine of agricultural growth in the 12th plan and beyond in view of rapid growth in demand for animal food products. Achieving growth rate of 5-6%, however, would require addressing challenges of shortage of feed and fodder and frequent occurrence of some deadly diseases.

Livestock is an important source of income and employment in rural areas. It provides balanced nutrition in the form of milk, egg and meat besides farm power. Animal husbandry plays a major role in providing employment especially self employment with high participation of women. The increase in the demand and supply of livestock and livestock products rose up exorbitantly at global level as a sequel to increasing urbanization, burgeoning population growth as also improved income levels, changing lifestyles and consumption of high calorie food. Various kinds of livestock species like cattle, buffalo, goat, sheep, hen and pig etc. were reared as domestic and subsistence animals. (Khan, N., 2012). There are various ways in which livestock husbandry is being practiced viz; mixed farming, nomadic herding, and commercial grazing and so on. Livestock rearing incorporates not only keeping the animals and feeding them, but it also includes the marketing of animals, animal rearing and collecting and processing milk or milk products for marketing them to get maximum remunerations. (Khan, N., Rehman, A. and Salman, M.S., 2013). India has huge population of different species of livestock. In 2007 there were 199 million cattle, 105 million buffaloes, 72 million sheep, 141 million goats, 11 million pigs and 649 million poultry birds. The cattle population after reaching a peak of 204.6 million in 1992 declined until 2003, but again showed an increasing trend in 2007. The decline in cattle number was largely confined to the male cattle – an important source of draught power in Indian agriculture. Their number declined from 101 million in 1992 to around 83 million in 2007. This was due to declining size of land holding and increasing mechanization of agricultural operations.

Livestock husbandry is well developed in Western Trans-Ghaghara (Devi Patan) plain, Uttar Pradesh. The plain of Devi Patan includes the districts of Bahraich, Gonda, Balrampur, And Shrawasti districts. In Devi Patan plain, more than 70 per cent of rural household are directly or indirectly engaged with livestock husbandry. The result obtained with the application of statistical technique shows that in all the 44 blocks of Devi Patan plain, there is a huge spatial variation of animals like buffalo, cattle, sheep and goat in all the blocks.

II. Objectives

The present paper attempts to analyze the distribution and growth of livestock husbandry at the block level in Western Trans-Ghaghara (Devi Patan) Plain. In the study area the spatial distribution of livestock not only includes the total livestock at different blocks but also the distribution of different species i.e. Cattle, Buffalo, Sheep and Goat among different blocks of Devi Patan Plain, Uttar Pradesh.

III. Database And Methodology

The present study is based on the secondary sources of data. Broadly, four species namely, Cattle, Buffalo, Sheep and Goat have been taken into consideration as livestock species in the study area. The data of total livestock population, species wise livestock population in the study area to calculate the total block wise distribution of total livestock, species wise percentage of livestock, and decadal growth have been obtained from the Statistical bulletin and Statistical offices of the districts of Bahraich, Balrampur, Gonda and Shrawasti of the year 1997 and 2007.

IV. The Study Area

In 2011 India has 121, 01, 93,422 people, out of which Uttar Pradesh has 19, 95, 81,477 people living in 71 districts. The sex-ratio of Devi Patan plain is about 902. The average literacy rate of Devi Patan plain is 53.28%, which is much below than the average literacy rate of Uttar Pradesh which is 67.68%. In terms of male and female literacy rates of Devi Patan Plain it is 63.41% and 41.97% respectively. In terms of district wise sex-ratio of Devi Patan plain, it is 922 in both Gonda and Balrampur, 891 in Bahraich, and 875 in Shrawasti. The district wise literacy rate of Devi Patan plain is 61.16% in Gonda, 51.76% in Balrampur, 51.10% in Bahraich, and 49.13% in Shrawasti. Shrawasti is the most backward district of Devi Patan plain in terms of sex-ratio, literacy, male-female literacy differentials, and so on. Devi Patan plain is the most backward region of Uttar Pradesh, which lies at the foothills of the Shiwalik range. Its international boundary touches with Nepal. Its latitudinal extent is 26° 40' 30" to 28° 24' 30" North and 81° 03' to 82° 49' E longitude. Its northern boundary touches with Nepal. In the east it touches with Ayodhya city of Faizabad division, and Siddharthnagar, and in the south Barabanki, and Sitapur districts lies. The total geographical area of Devi Patan is 14229 sq.km.

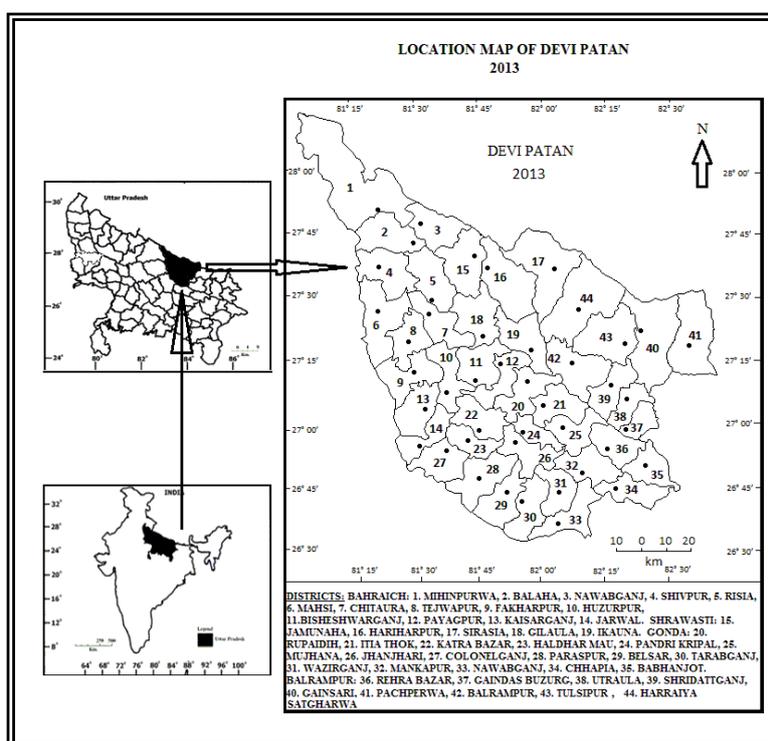


Fig. 1

V. Results And Discussion

The result obtained from the various studies and methods reveals that Devi-Patan has a large livestock population. The total number of livestock in the region as calculated during 2007-08 was 3268419 heads. In terms of block wise number of livestock it is highest in Chhapiya block, where it is 98567 heads, and lowest in Gaindas Buzurg block where it is 35529 heads. There is a great variation among the livestock species i.e.

Buffalo, Cattle, Sheep and Goat in the study area in terms of their share in total livestock. Buffalo contributes 28.48 percent of the total livestock share, Cattle is at the top, where it contributes 40.79 percent of the total livestock species, Goat share is 29.71 percent, where as sheep are in meagre number where it contributes only 1.02 percent of the total livestock in Devi-Patan plain. The largest share of livestock in the region was found in Chhapia block, where it is 3.02 percent and lowest in Gaindas Buzurg where it is 1.09 percent.

In terms of block-wise distribution of species in Devi-Patan plain, the share of buffalo is highest in Chhapia block where it is 3.61 percent followed by Huzurpur 3.40 percent, and Mankapur 3.39 percent. In terms of lowest share of buffalo in the region, it is lowest in Gaindas Buzurg block where it accounts for only 1.10 percent of the total share of buffalo population. The other blocks of low buffalo population are Shridattganj 1.44 percent, Utraula 1.52 percent and Tulsipur 1.62 percent. In Cattle share, Chhapia block contributes highest of 3.07 percent of total cattle population followed by Balrampur 2.89 percent, and Mankapur 2.86 percent. The blocks which contribute the lowest share of cattle population are Gaindas Buzurg 1.12 percent, Tarabganj 1.44 percent and Belsar 1.53 percent. Sheep contributes a meagre population among all the four livestock species, the share of sheep in the region is highest in Huzurpur where it is 4.60 percent followed by Jarwal and Fakharpur where it is 4.11 and 3.84 percent respectively. In terms of share of goat in the region, it is highest in Mahsi block where it is 3.27 percent followed by Jarwal 3.24 percent and 3.22 percent in Kaisarganj and Nawabganj blocks. The lowest share is recorded in Gaindas Buzurg 1.04 percent, Belsar 1.14 percent and 1.18 percent in Mujhana and Pandri Kripal blocks.

Table 1: Total Livestock in Blocks of Devi-Patan Plain (2007-08)

Blocks	Total Livestock				
	Number	Percent	Blocks	Number	Percent
Mihinpurwa	87584	2.68	Haldhar Mau	55225	1.69
Balaha	85931	2.63	Pandri Kripal	50855	1.56
Nawabganj	87782	2.69	Mujhana	51602	1.58
Shivpur	83956	2.57	Jhanjhari	80897	2.48
Risia	85788	2.62	Colonelganj	64428	1.97
Mahsi	83045	2.54	Paraspur	55619	1.70
Chitaura	90461	2.77	Belsar	49488	1.51
Tejwapur	83408	2.55	Tarabganj	48729	1.49
Fakharpur	83076	2.54	Wazirganj	58107	1.78
Huzurpur	95031	2.91	Mankapur	92048	2.82
Bisheshwarganj	85583	2.62	Nawabganj	63015	1.93
Payagpur	82434	2.52	Chhapia	98567	3.02
Kaisarganj	90435	2.77	Babhanjot	82443	2.52
Jarwal	86580	2.65	Rehra Bazar	63154	1.93
Jamunaha	82344	2.52	Gaindas Buzurg	35529	1.09
Hariharpur	82274	2.52	Utraula	59787	1.83
Sirasia	78155	2.39	Shridattganj	55475	1.70
Gilaula	82304	2.52	Gainsari	73719	2.26
Ikauna	82344	2.52	Pachperwa	74199	2.27
Rupaidih	87819	2.69	Balrampur	80951	2.48
Itia thok	76808	2.35	Tulsipur	57274	1.75
Katra Bazar	59327	1.82	Harraiya Satgharwa	74839	2.29
Total				3268419	100

Source: Statistical Bulletin and District Handbook of the year 2007.

Table 2: Number of Livestock Species of Various Categories in Devi-Patan Plain (2007-08)

Development Blocks	Number of Livestock Species (2007)				
	Buffalo	Cattle	Sheep	Goat	Total
Mihinpurwa	23790 (2.56)	32669 (2.45)	715 (2.14)	30410 (3.13)	87584 (2.68)
Balaha	20455 (2.20)	35146 (2.64)	905 (2.71)	29425 (3.03)	85931 (2.63)
Nawabganj	23096 (2.48)	32586 (2.44)	850 (2.55)	31250 (3.22)	87782 (2.69)
Shivpur	19055 (2.05)	33181 (2.49)	995 (2.98)	30725 (3.16)	83956 (2.57)
Risia	20293 (2.18)	33875 (2.54)	705 (2.11)	30915 (3.18)	85788 (2.62)
Mahsi	16440 (1.77)	33773 (2.53)	1060 (3.18)	31772 (3.27)	83045 (2.54)
Chitaura	26172 (2.81)	32419 (2.43)	820 (2.46)	31050 (3.20)	90461 (2.77)

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Tejwapur	18090 (1.94)	33831 (2.54)	960 (2.88)	30527 (3.14)	83408 (2.55)
Fakharpur	18980 (2.04)	32898 (2.47)	1281 (3.84)	29917 (3.08)	83076 (2.54)
Huzurpur	31678 (3.40)	33068 (2.48)	1535 (4.60)	28750 (2.96)	95031 (2.91)
Bisheshwarganj	20539 (2.21)	34659 (2.60)	605 (1.81)	29780 (3.07)	85583 (2.62)
Payagpur	20015 (2.15)	31696 (2.38)	735 (2.20)	29988 (3.09)	82434 (2.52)
Kaisarganj	23337 (2.51)	34590 (2.60)	1220 (3.66)	31288 (3.22)	90435 (2.77)
Jarwal	19859 (2.13)	33887 (2.54)	1370 (4.11)	31464 (3.24)	86580 (2.65)
Jamunaha	22682 (2.44)	33006 (2.48)	909 (2.73)	25747 (2.65)	82344 (2.52)
Hariharpur	22612 (2.43)	33006 (2.48)	909 (2.73)	25747 (2.65)	82274 (2.52)
Sirasia	21022 (2.26)	31333 (2.35)	800 (2.40)	25000 (2.57)	78155 (2.39)
Gilaula	22642 (2.43)	33006 (2.48)	909 (2.73)	25747 (2.65)	82304 (2.52)
Ikauna	22682 (2.44)	33006 (2.48)	909 (2.73)	25747 (2.65)	82344 (2.52)
Rupaidih	29994 (3.22)	36477 (2.74)	639 (1.92)	20709 (2.13)	87819 (2.69)
Itia thok	26608 (2.86)	31894 (2.39)	584 (1.75)	17722 (1.82)	76808 (2.35)
Katra Bazar	20911 (2.25)	24409 (1.83)	571 (1.71)	13436 (1.38)	59327 (1.82)
Haldhar Mau	19578 (2.10)	22687 (1.70)	563 (1.69)	12397 (1.28)	55225 (1.69)
Pandri Kripal	18061 (1.94)	20806 (1.56)	525 (1.57)	11463 (1.18)	50855 (1.56)
Mujhana	18129 (1.95)	21460 (1.61)	511 (1.53)	11502 (1.18)	51602 (1.58)
Jhanjhari	28313 (3.04)	33042 (2.48)	651 (1.95)	18891 (1.95)	80897 (2.48)
Colonelganj	22822 (2.45)	26187 (1.96)	684 (2.05)	14735 (1.52)	64428 (1.97)
Parasapur	19573 (2.10)	22950 (1.72)	569 (1.71)	12527 (1.29)	55619 (1.70)
Belsar	17511 (1.88)	20384 (1.53)	495 (1.48)	11098 (1.14)	49488 (1.51)
Tarabganj	16368 (1.76)	19242 (1.44)	508 (1.52)	12611 (1.30)	48729 (1.49)
Wazirganj	20759 (2.23)	23432 (1.76)	610 (1.83)	13306 (1.37)	58107 (1.78)
Mankapur	31540 (3.39)	38065 (2.86)	695 (2.08)	21748 (2.24)	92048 (2.82)
Nawabganj	22089 (2.37)	25911 (1.94)	663 (1.99)	14352 (1.48)	63015 (1.93)
Chhapia	33644 (3.61)	40982 (3.07)	768 (2.30)	23173 (2.39)	98567 (3.02)
Babhanjot	28716 (3.08)	33917 (2.54)	659 (1.98)	19151 (1.97)	82443 (2.52)
Rehra Bazar	15691 (1.69)	28929 (2.17)	425 (1.27)	18109 (1.86)	63154 (1.93)
Gaindas Buzurg	10207 (1.10)	14906 (1.12)	301 (0.90)	10115 (1.04)	35529 (1.09)
Utraula	14123 (1.52)	27639 (2.07)	415 (1.24)	17610 (1.81)	59787 (1.83)
Shridattganj	13425 (1.44)	24531 (1.84)	410 (1.23)	17109 (1.76)	55475 (1.70)
Gainsari	18157 (1.95)	32504 (2.44)	829 (2.49)	22229 (2.29)	73719 (2.26)
Pachperwa	18285 (1.96)	32729 (2.46)	821 (2.46)	22364 (2.30)	74199 (2.27)
Balrampur	19376 (2.08)	38456 (2.89)	920 (2.76)	22199 (2.29)	80951 (2.48)
Tulsipur	15115 (1.62)	22444 (1.68)	514 (1.54)	19201 (1.98)	57274 (1.75)
Harraiya Satgharwa	18551 (1.99)	37308 (2.80)	827 (2.48)	18153 (1.87)	74839 (2.29)
Total	930985 (100.00)	1332926 (100.00)	33349 (100.00)	971159 (100.00)	3268419 (100.00)

Source: Statistical Bulletin and District Handbook of the year 2007.

5.1 Growth Of Livestock Husbandry

The result obtained from the calculations reveals that there is an increase in livestock husbandry from 3105581 heads in 1997-98 to 3268419 heads in 2007-08, a total increase of 162838 heads in Devi-Patan plain. There are both positive and negative growth in the livestock between 1997-08 and 2007-08. In terms of block wise change in the number of livestock, there is a great variation among the blocks. The highest change in the number of livestock is found in Ikauna block where it is 62637 heads of livestock. The lowest decadal change is found in Mihinpurwa block where growth is negative at -54624 heads. The total growth of livestock is 5.24 percent. In terms of block wise growth of livestock there is a huge variation among the blocks. The highest growth is found in Ikauna where it is 317.84 percent followed by Nawabganj 179.07 percent, Mahsi 130.98 percent and 85.63 percent in Tejwapur block. Majority of the blocks have experienced negative growth. The

highest negative growth was found in Mihinpurwa where it is -38.41 percent. The other negative growth blocks are Gaindas Buzurg -32.64 percent, Chhapia -17.35 percent, Shridattganj -16.55 percent and -16.17 percent in Jamunaha.

Table 3: Block Wise Change in Number of Livestock in Devi-Patan Plain (1997-98 to 2007-08)

Development Blocks	Total Livestock		Decadal Change	
	1997-98	2007-08	Number	Percentage
Mihinpurwa	142208	87584	-54624	-38.41
Balaha	75504	85931	10427	13.81
Nawabganj	31455	87782	56327	179.07
Shivpur	87172	83956	-3216	-3.69
Risia	69124	85788	16664	24.11
Mahsi	35954	83045	47091	130.98
Chitaura	68035	90461	22426	32.96
Tejwapur	44933	83408	38475	85.63
Fakharpur	84447	83076	-1371	-1.62
Huzurpur	89191	95031	5840	6.55
Bisheshwarganj	62860	85583	22723	36.15
Payagpur	56018	82434	26416	47.16
Kaisarganj	84547	90435	5888	6.96
Jarwal	98063	86580	-11483	-11.71
Jamunaha	98233	82344	-15889	-16.17
Hariharpur	62846	82274	19428	30.91
Sirasia	86904	78155	-8749	-10.07
Gilaula	54848	82304	27456	50.06
Ikauna	19707	82344	62637	317.84
Rupaidih	102416	87819	-14597	-14.25
Itia thok	87187	76808	-10379	-11.90
Katra Bazar	65220	59327	-5893	-9.04
Haldhar Mau	59905	55225	-4680	-7.81
Pandri Kripal	55338	50855	-4483	-8.10
Mujhana	55353	51602	-3751	-6.78
Jhanjhari	93128	80897	-12231	-13.13
Colonelganj	71872	64428	-7444	-10.36
Paraspur	60548	55619	-4929	-8.14
Belsar	53206	49488	-3718	-6.99
Tarabganj	49167	48729	-438	-0.89
Wazirganj	64446	58107	-6339	-9.84
Mankapur	107714	92048	-15666	-14.54
Nawabganj	69762	63015	-6747	-9.67
Chhapia	119264	98567	-20697	-17.35
Babhanjot	94483	82443	-12040	-12.74
Rehra Bazar	49620	63154	13534	27.28
Gaindas Buzurg	52746	35529	-17217	-32.64
Utraula	63943	59787	-4156	-6.50
Shridattganj	66475	55475	-11000	-16.55
Gainsari	49124	73719	24595	50.07
Pachperwa	64506	74199	9693	15.03
Balrampur	65082	80951	15869	24.38
Tulsipur	64582	57274	-7308	-11.32
Harraiya Satgharwa	68445	74839	6394	9.34
Total	3105581	3268419	162838	5.24

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

Table 4: Species Wise Growth of Livestock in Devi-Patan Plain (1997-98 to 2007-08)

Livestock Species	Number of Livestock Species		Difference	Growth (%)
	1997-98	2007-08		
Buffalo	834033	930985	96952	11.62
Cattle	1490666	1332926	-157740	-10.58
Sheep	49270	33349	-15921	-32.31
Goat	731612	971159	239547	32.74
Total	3105581	3268419	162838	5.24

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

5.2 Growth Of Livestock Species

The result obtained from the study shows that cattle and sheep are the two species in Devi-Patan plain which shows negative growth during the last decade between 1997-08 and 2007-08, whereas buffalo and goat shows positive growth. The highest growth is found among goat which is 32.74 percent and 11.62 percent in buffalo. On the contrary, sheep experienced the lowest growth of -32.31 percent followed by cattle -10.58 percent. The total growth of livestock during the last decade is 5.24 percent.

The population of buffalo in 1997-08 was 834033 heads which increased to 930985 heads in 2007-08, an increase of 96952 heads during these two points of time. The total growth of buffalo during the last decade was 11.62 percent. There is a huge variation in the growth of buffalo between the blocks. The highest growth of buffalo is recorded in Ikauna block at 336.19 percent, followed by Nawabganj block 190.48 percent, Huzurpur 134.48 percent and Bisheshwarganj 74.25 percent. The lowest growth was recorded in Jamunaha block which is -58.38 percent. The other blocks of low growth are Fakharpur -39.93 percent, Mihinpurwa -36.54 percent, Sirasia -31.92 percent and Shivpur -27.43 percent.

Table 5: Block Wise Growth of Buffalo in Devi-Patan Plain (1997-08 to 2007-08)

Development Block	Number of Buffalo		Difference	Growth (in percent)
	1997-98	2007-08		
Mihinpurwa	37488	23790	-13698	-36.54
Balaha	28086	20455	-7631	-27.17
Nawabganj	7951	23096	15145	190.48
Shivpur	26257	19055	-7202	-27.43
Risia	16737	20293	3556	21.25
Mahsi	15643	16440	797	5.09
Chitaura	15419	26172	10753	69.74
Tejwapur	16352	18090	1738	10.63
Fakharpur	31594	18980	-12614	-39.93
Huzurpur	13510	31678	18168	134.48
Bisheshwarganj	11787	20539	8752	74.25
Payagpur	11969	20015	8046	67.22
Kaisarganj	14497	23337	8840	60.98
Jarwal	15655	19859	4204	26.85
Jamunaha	54501	22682	-31819	-58.38
Hariharpur	20676	22612	1936	9.36
Sirasia	30879	21022	-9857	-31.92
Gilaula	13213	22642	9429	71.36
Ikauna	5200	22682	17482	336.19
Rupaidih	27285	29994	2709	9.93
Itia thok	23276	26608	3332	14.32
Katra Bazar	17407	20911	3504	20.13
Haldhar Mau	15998	19578	3580	22.38
Pandri Kripal	14855	18061	3206	21.58
Mujhana	14849	18129	3280	22.09
Jhanjhari	24829	28313	3484	14.03
Colonelganj	19182	22822	3640	18.98
Paraspur	16154	19573	3419	21.17
Belsar	14178	17511	3333	23.51
Tarabganj	13072	16368	3296	25.21
Wazirganj	17132	20759	3627	21.17
Mankapur	28692	31540	2848	9.93
Nawabganj	18546	22089	3543	19.10
Chhapi	30736	33644	2908	9.46
Babhanjot	25201	28716	3515	13.95
Rehra Bazar	12955	15691	2736	21.12
Gaindas Buzurg	11727	10207	-1520	-12.96
Utraula	14750	14123	-627	-4.25

Shridattganj	14312	13425	-887	-6.20
Gainsari	14296	18157	3861	27.01
Pachperwa	14030	18285	4255	30.33
Balrampur	15473	19376	3903	25.22
Tulsipur	12845	15115	2270	17.67
Harraya Satgharwa	14839	18551	3712	25.02
Total	834033	930985	96952	11.62

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

The population of cattle increased from 1490666 heads in 1997-08 to 1332926 heads in 2007-08. The difference in the cattle distribution among the various blocks is more than the difference of buffalo population in Devi-Patan plain. The total growth of cattle during the last decade is -10.58 percent. In terms of block wise growth of cattle in Devi-Patan plain, it is highest in Mahsi which is 904.85 percent followed by Tejwapur 443.47 percent, Nawabganj 236.67 percent and Balaha 63.3 percent. Majority of the blocks have experienced negative growth. The blocks which contribute the lowest growth are Gaindas Buzurg -45.85 percent, Sirasia -41.33 percent, Tulsipur -38.55 percent, Mihinpurwa -38.17 percent and Chhapia -34.13 percent.

In Devi-Patan plain the population of sheep are very less in number as compared to the other three species like buffalo, cattle and goat. Their total number increased from 49270 heads in 1997-08 to 33349 heads in 2007-08. The total growth of sheep during the last decade is -32.31. Except few blocks the majority of the blocks have experienced the negative growth. In terms of block wise growth in Devi Patan plain, the highest growth of sheep is found in Jamunaha block which is 1718 percent followed by Sirasia 459.44 percent, Nawabganj 249.79 percent, Ikauna 234.19 percent and Huzurpur 229.4 percent. The blocks which recorded the low growth of sheep are Mihinpurwa -82.91 percent which is the lowest growth of sheep. Other blocks of low growth of sheep are Gaindas Buzurg -73.83 percent, Chhapia -69.94 percent, Utraula -63.05 percent and Shridattganj -63.62 percent.

Table 6: Block Wise Growth of Cattle in Devi-Patan Plain (1997-98 to 2007-08)

Development Block	Number of Cattle		Difference	Growth (in percent)
	1997-98	2007-08		
Mihinpurwa	52836	32669	-20167	-38.17
Balaha	21522	35146	13624	63.30
Nawabganj	9679	32586	22907	236.67
Shivpur	33068	33181	113	0.34
Risia	28683	33875	5192	18.10
Mahsi	3361	33773	30412	904.85
Chitaura	30952	32419	1467	4.74
Tejwapur	6225	33831	27606	443.47
Fakharpur	19293	32898	13605	70.52
Huzurpur	42835	33068	-9767	-22.80
Bisheshwarganj	36798	34659	-2139	-5.81
Payagpur	33870	31696	-2174	-6.42
Kaisarganj	40202	34590	-5612	-13.96
Jarwal	47524	33887	-13637	-28.69
Jamunaha	41372	33006	-8366	-20.22
Hariharpur	30879	33006	2127	6.89
Sirasia	53410	31333	-22077	-41.33
Gilaula	38536	33006	-5530	-14.35
Ikauna	11128	33006	21878	196.60
Rupaidih	52299	36477	-15822	-30.25
Itia thok	44489	31894	-12595	-28.31
Katra Bazar	33283	24409	-8874	-26.66
Haldhar Mau	30563	22687	-7876	-25.77
Pandri Kripal	28179	20806	-7373	-26.16
Mujhana	28193	21460	-6733	-23.88
Jhanjhari	47543	33042	-14501	-30.50
Colonelganj	36678	26187	-10491	-28.60
Paraspur	30902	22950	-7952	-25.73
Belsar	27167	20384	-6783	-24.97
Tarabganj	25124	19242	-5882	-23.41
Wazirganj	32933	23432	-9501	-28.85
Mankapur	55004	38065	-16939	-30.80
Nawabganj	35649	25911	-9738	-27.32
Chhapia	62221	40982	-21239	-34.13
Babhanjot	48229	33917	-14312	-29.68
Rehra Bazar	19208	28929	9721	50.61
Gaindas Buzurg	27527	14906	-12621	-45.85
Utraula	34213	27639	-6574	-19.21
Shridattganj	36997	24531	-12466	-33.69

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Gainsari	32526	32504	-22	-0.07
Pachperwa	33148	32729	-419	-1.26
Balrampur	32437	38456	6019	18.56
Tulsipur	36523	22444	-14079	-38.55
Harraiya Satgharwa	37458	37308	-150	-0.40
Total	1490666	1332926	-157740	-10.58

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

Table 7: Block Wise Growth of Sheep in Devi-Patan Plain (1997-98 to 2007-08)

Development Block	Number of Sheep		Difference	Growth (in percent)
	1997-98	2007-08		
Mihinpurwa	4184	715	-3469	-82.91
Balaha	1708	905	-803	-47.01
Nawabganj	243	850	607	249.79
Shivpur	2114	995	-1119	-52.93
Risia	556	705	149	26.80
Mahsi	1380	1060	-320	-23.19
Chitaura	1185	820	-365	-30.80
Tejwapur	1127	960	-167	-14.82
Fakharpur	1176	1281	105	8.93
Huzurpur	466	1535	1069	229.40
Bisheshwarganj	1372	605	-767	-55.90
Payagpur	438	735	297	67.81
Kaisarganj	466	1220	754	161.80
Jarwal	503	1370	867	172.37
Jamunaha	50	909	859	1718.00
Hariharpur	764	909	145	18.98
Sirasia	143	800	657	459.44
Gilaula	377	909	532	141.11
Ikauna	272	909	637	234.19
Rupaidih	1694	639	-1055	-62.28
Itia thok	1441	584	-857	-59.47
Katra Bazar	1078	571	-507	-47.03
Haldhar Mau	990	563	-427	-43.13
Pandri Kripal	913	525	-388	-42.50
Mujhana	913	511	-402	-44.03
Jhanjhari	1540	651	-889	-57.73
Colonelganj	1188	684	-504	-42.42
Paraspur	1001	569	-432	-43.16
Belsar	880	495	-385	-43.75
Tarabganj	814	508	-306	-37.59
Wazirganj	1067	610	-457	-42.83
Mankapur	1782	695	-1087	-61.00
Nawabganj	1155	663	-492	-42.60
Chhapia	2555	768	-1787	-69.94
Babhanjot	1562	659	-903	-57.81
Rehra Bazar	1111	425	-686	-61.75
Gaindas Buzurg	1150	301	-849	-73.83
Utraula	1123	415	-708	-63.05
Shridattganj	1127	410	-717	-63.62
Gainsari	1168	829	-339	-29.02
Pachperwa	1090	821	-269	-24.68
Balrampur	1149	920	-229	-19.93
Tulsipur	1135	514	-621	-54.71
Harraiya Satgharwa	1120	827	-293	-26.16
Total	49270	33349	-15921	-32.31

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

The total increase in goat during 1997-08 and 2007-08 was 239547 heads. The total growth in Devi Patan plain is 32.74 percent. In terms of block wise variation there is a huge difference between the blocks. The highest growth of goat during the period was found in Gainsari which is at 1860.23 percent. In Jamunaha it is 1014.59 percent, 845.89 percent in Gilaula, 728.68 percent in Ikauna and 911.33 percent growth is found in Sirasia block. The lowest growth was recorded at -36.25 percent in Mihinpurwa block. The other blocks of low growth of goat are Gaindas Buzurg -18.04 percent, Jarwal -8.48 percent, Huzurpur -11.21 percent and -7.62 percent in Fakharpur block.

Table 8: Block Wise Growth of Goat in Devi-Patan Plain (1997-98 to 2007-08)

Development Block	Number of Goat		Difference	Growth (in percent)
	1997-98	2007-08		
Mihinpurwa	47700	30410	-17290	-36.25
Balaha	24188	29425	5237	21.65
Nawabganj	13582	31250	17668	130.08
Shivpur	25733	30725	4992	19.40
Risia	23148	30915	7767	33.55
Mahsi	15570	31772	16202	104.06
Chिताura	20479	31050	10571	51.62
Tejwapur	21229	30527	9298	43.80
Fakharpur	32384	29917	-2467	-7.62
Huzurpur	32380	28750	-3630	-11.21
Bisheshwarganj	12903	29780	16877	130.80
Payagpur	9741	29988	20247	207.85
Kaisarganj	29382	31288	1906	6.49
Jarwal	34381	31464	-2917	-8.48
Jamunaha	2310	25747	23437	1014.59
Hariharpur	10527	25747	15220	144.58
Sirasia	2472	25000	22528	911.33
Gilaula	2722	25747	23025	845.89
Ikauna	3107	25747	22640	728.68
Rupaidih	21138	20709	-429	-2.03
Itia thok	17981	17722	-259	-1.44
Katra Bazar	13452	13436	-16	-0.12
Haldhar Mau	12354	12397	43	0.35
Pandri Kripal	11391	11463	72	0.63
Mujhana	11398	11502	104	0.91
Jhanjhari	19216	18891	-325	-1.69
Colonelganj	14824	14735	-89	-0.60
Paraspur	12491	12527	36	0.29
Belsar	10981	11098	117	1.07
Tarabganj	10157	12611	2454	24.16
Wazirganj	13314	13306	-8	-0.06
Mankapur	22236	21748	-488	-2.19
Nawabganj	14412	14352	-60	-0.42
Chhapia	23752	23173	-579	-2.44
Babhanjot	19491	19151	-340	-1.74
Rehra Bazar	16346	18109	1763	10.79
Gaindas Buzurg	12342	10115	-2227	-18.04
Utraula	13857	17610	3753	27.08
Shridattganj	14039	17109	3070	21.87
Gainsari	1134	22229	21095	1860.23
Pachperwa	16238	22364	6126	37.73
Balrampur	16023	22199	6176	38.54
Tulsipur	14079	19201	5122	36.38

Harraiya Satgharwa	15028	18153	3125	20.79
Total	731612	971159	239547	32.74

Source: Statistical Bulletin and District Handbook of the year 1997 and 2007.

VI. 6. Conclusion

India is one of the largest producers of livestock in the world. Its share in species like buffalo is highest in the world. Livestock is generally reared in those areas, regions and by those farmers who do not have sufficient land, resources to grow crops, and livestock can easily be reared without much effort.

In the study area, the share of buffalo has increased much as compared to other species like goat, sheep and cattle owing to its more demand in the market or household either for milk consumption or meat consumption. In terms of nutrition, quantity and calorie buffalo milk have more nutrition and give more quantity of milk as compared to cattle milk. Due to the opening of several milk industries, dairy industry the demand and production of buffalo has increased. In Devi Patan plain, the share of buffalo has increased in almost all the blocks during the last decade. As far as the population of cattle in the study area is concerned, there is a sharp decline in cattle population during the last decade. The study reveals that there are various reasons which are responsible for the decline of cattle population. Due to the mechanization of agriculture in the study area, the demand of cattle (Male Oxen) has reduced which were used to plough the land, and to transport the grains to the market. With the advent of good transportation facilities the demand of cattle has reduced to a considerable extent. In some cases the Hindus reared cow due to religious practices. Sheep requires a different atmosphere to grow in, it is difficult for the shepherds to go to distant places in pasture land along with their sheep and return back to their home. The production and productivity of wool is also very low and do not give much profit as compared to those who are rearing other livestock species. The population of goat in the blocks of Devi Patan plain have showed that there is an increase in the number of goat in every block of the region. On the occasion of Eid-Ul-Azha every year the demand of goat rises to a considerable extent among the Muslims. During the last decade the growth of goat was about 32 percent.

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