

Animal Husbandary of Arwal District : Bihar

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ABSTRACT

The importance of livestock in the agriculture in Arwal district is of great significance. Cultivation of arable land and domestication of animals go side by side in agrarian economy. Animal husbandry is done for two purposes for help in agriculture and dairy aids. "In some ways, dairying is the most advanced type of farming Milch cows, dairy products, soils and crops receive painstaking attention. Today, dairy farming is highly mechanised."

Keywords :- Live Stock, Cultivation, Arable, Husbandary, Milch, Painstaking.

Agriculture as well as animal husbandary are closely related. The entire field preparation from ploughing the fields to harvesting the crops is carried out by the draught animals mainly bullocks and buffaloes. They are the keystone in farming, Besides the raising and cultivation of different crops, draught animals and milch stock are Kept and maintained by the individual farmer. They are his constant companion in the field by day, and live beside his house or even under the same roof by night. The maintenance of livestock and their proper care and treatment closely affect the prosperity of farmers.

Cow: The Study of livestock forms an integral part of agricultural geography. From the above table it is clear that out of the total livestock, cows constitute 28.20% in Arwal district as a whole; where as buffaloes 25.06% of the total of the district. In spite of the large number of these breed of cattle, the average per capita daily consumption of milk in the study area is only 75 grams as against 125 grams in India. It is also considerably little due to the very low milk yielding capacity of cattle in the district. The table also shows the percentage of cows and buffaloes in different anchals of the district.

Table No. 1

Sl. no.	Bread of	Name of the Blocks		
		Kurtha	Karpi	Arwal
1	2	3	4	5
1.	Cow	19847 (23.46) (14.35)	23938 (32.97) (17.31)	29537 32.68 (21.36)
2.	Buffalo	19512 (23.06) (15.88)	13392 (18.45) 10.90)	17077 (18.89) (13.90)
3.	Sheep	45 (0.05) (0.61)	2641 (3.64) (35.52)	2689 (2.75) (36.17)
4.	Goat	26653 (31.50) (21.95)	21413 (29.49) (17.64)	22250 (24.62) (18.33)
5.	Horse	0	0	0
6.	Pig	2365 (2.79) 14.65)	1316 (1.81) (8.15)	842 (1.093) (5.21)
7.	Others	0	0	0
8.	Kukkut and others	16168 (19.11)	9900 (13.64)	17994 (19.90)
	Birds	(19.19)	(11.75)	(21.36)
	Total	84590	72600	90389

Source : District Statistical Handbook, 2012, Progress Appraisal of the District, Jehanabad and Arwal, 2012-13, P. 33.

Note : Figures in bracket are percentage of the total livestock of a block and also total of a particular bread of cattle.

Table No. 2

Percentage distribution of Cows and Buffaloes in different anchal : categorywise : 2012-13

Category	Percentage	Anchals
High	50% to 59.99%	Arwal (51.57%), Karpi (51.42%)
Low	Below 50%	Kurtha (46.52%)

Source : Self Calculation.

The percentage share of cows and buffaloes to the total livestock of the district is highest in Arwal and Karpi (51.57 and 51.42%), whereas one in 'Low Category', having below 50% of the total of the district figure.

Sheep, Goats And Others

The number of Sheep, Goats and Kukuts (fawls, hens, pigs) etc. occupy 46.75% of the total livestock of the study area. Their percentage distribution in Arwal district has been worked out and grouped into three different categories namely, high, and low and shown in the following table no. 1.2.

Table No. 1.2

Percentage distribution of Sheep, Goats and others (2012-13)

Sl. No.	Category	Anchals	% of total livestock
1.	High above 50%	Kurtha	53.45
2.	Low 40% to 49.99%	Karpi Arwal	48.58 48.20

Source : Self Calculation.

It is revealed from the above table that Kurtha anchal has the high percentage 53.45 of Sheep, goats and other variety of livestock including Kukuts. Among this category of livestock goats and Kukuts are used primarily for meat hides and skins are the secondary product. Low percentage (48.20) of these was found in Karpi, Arwal. Sheep also provide wool which is largely used for some rug making. Though Sheep are used for meat, milk, hides and skins, yet it is extensively reared in the rugged terrain of the upland section of South-eastern part of the district during rainy season and as in the fertile alluvial tract of the study area after the Rabi harvest is over. Goats are found in the whole of the district. Poor farmers who cannot afford cow or she-buffaloes keep goats for milk and meat. From the food-consuming point of view the she-goat is the most economic of all the milch animals.

Poultry and piggery are intensive farms of agricultural production in which the nature of the land play a little part. Piggery provides valuable source of rich animals protein in low caste. Pig rearing has been a subsidiary occupation of the depressed (specially SC population) classes. With the recent introduction of pure-bread stock and improved method of breeding feeding and meat handling, the pig industry is expected to play an important role in the economy and nutrition of people of the district. Similarly, poultry farm is a very good and effective fertilizers and contribute to crop production considerably.

Density Of Livestock

The average density in the district is 1.26 livestock per acre. The highest density of livestock (1.60/Km sq.) in Karpi Son-bhadra followed by Kurtha and Ratni-Faridpur (1.40/km. sq.). Intermediate anchal are Arwal and Kaler (1.39 Km²). The high density of livestock indicates intensive agricultural activity.

Table No. 1.3
Density of Livestocks In Different Blocks of The District Of Arwal : 2012-13

Sl. No.	Name of the block	Total are in acres	Total livestock	Density per Km. Sq.
1.	Arwal and Kaler	65010.22	90389	1.39
2.	Karpi and Bansi Sonbhadra	62680.70	72600	1.60
3.	Kurtha and Ratni Faridpur	60354.80	84590	1.40

Source : District Census Handbook, 2012-13 and Self Calculation.

Plough Cattle

The working cattle of the study area are oxen, bullocks, and buffaloes. These Cattles are the backbone of the agrarian society of the area. They are extensively used as draught animals. They are source of power for driving ploughs, threshing crops and drawing bullock carts and pulling out water from wells by RAHAT to irrigate fields.

The role played by livestock in the realms of landuse and agriculture is very dominant. It constitutes the hub of the agro-economy of the area under study. They are primarily kept as draught animals for the plough or for the Cart as oxen, he-buffaloes, horses, donkeys etc., without them no cultivation work would be possible and without them no production can be transported.

Cattle are, thus, overwhelmingly the most significant in the district. The importance of cattle is due primarily to the vital role which the draught force plays on farms in the district. There are few farms which can run without cattle. Cattle provide us with milk and milk products. The animals are kept for breeding bullocks and buffaloes that are needed for agricultural operations. Their main purpose, therefore, is not milk production but to help in agricultural operations. Other products such as hides and skins are the important source of income from Cattle. Cattle are used for several functions e.g. ploughing, harrowing, threshing, harvesting, lifting water and transporting the products to the consuming centres or markets. Besides, they replenish the fields with organic manure and yield hides and skins which earn a good amount of foreign exchange.

Cattle are, therefore, regarded as the communication of Indian agriculture.

But the cattle are not of excellent breed in the district. Paucity of good pasture land good fodders have further deteriorated their Quality. The farming has always been encroaching upon the narrow fields of pasture land. The remaining waste lands hold poor pasture for only a few months. The large number of cattle has to be fed on the little available pasture land after harvesting, they are grazed on the farm land. Paddy, straw and chaffs of rabi crops are stocked for the period of scarcity. The Sugarcane leaves and the stalks of rabi are used to produce seasonal fodder for the cattle.

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Urban Sparwl and Changes of Land-values Along the By-Pass Roads of Magadh Division : Bihar

Rani An Vijay Lakshmi.

ABSTRACT

Urbanization, its rapidity leads to the lying of by-pass roads. Urban community have developed as a part of our social and economic system. The amount of land utilized by specific activities and their spatial distribution reflect the requirements of this system. Cities are the focal points in the occupation and utilization of the earth by man. Both a product of and an influence on surrounding regions, they develop in definite patterns in response to economic and social needs.

Keywords :- Urbanization, Economic, Utilized, Earth, Regions.

The centripetal forces in urban development focus on the Central zone of the city. In this zone the number and complexity of urban functions increases greatly. Functional congestion necessitates Complex functional forms and frequent adjustments in the zonal pattern. Land values in such areas are high, in harmony with the intensive use of the land. Such intensive use indicates that the central zone possesses assets or qualities which mane it highly attractive to many functions. The attractive factors include-site attraction, functional convenience, functional magnetism, functional prestige and the human equation. These five groups comprise the gravitative attributes of the Central zone.

Decentralization : There are certain kinds of qualitative decentralization which has concern to some. For the reasons the upper income groups and the persons who are the most promising potential community leaders are moving to the suburbs.

Large cities/towns areas also enable those living outside of the central city to enjoy

the benefits of city life without paying for them. The fringe dweller came to the country-side to avoid the confusion and noise of the city. Pleasant surroundings, low taxes and moderate land values were attractive to him. The coming of the automobile gave him ready access to his job in the city and provided him with ease and mobility while at home.

Industry, too, tends to move outside of the Central city because of lower taxes and less congestion. Its use of motor trucks and the highway networks surroundings the central city give it easy access to the markets without again bearing any of the share of central city government cost.

Movement of people in large numbers to the along the by-pass roads (suburbs) meant the transformation almost over night of a rural into an urban area. Closeness of living required city services similar to those which existed in the core city, for the suburbanite soon found that he could not exist upon his own resources. Fire and police protection, schools, sanitation water supply,

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garbage and refuse disposal and a host of other functions became necessities. Besides, the migration to the suburbs areas of the by-pass roads frequently was so rapid that suddenly urbanised areas found themselves without facilities to meet the influx of people.

The prime characteristics of such growth is the spread or sprawl of people beyond the legal limits of the city/town. At the same time people in the outlying areas (along the by-pass roads) remained attached to the Central city in both economic and the cultural sense. Because of the particular manner in which such areas have developed, they have become important foci of economic and political activity.

Modern urban highway and by-pass road construction and overcrowding have an impact upon the current supply of housing. Aggravating these pressure upon housing supply is the phenomenon of migration and mobility. In recent years a considerable part of the population movement has been to urban

communities. It is estimated that net migration will cause a 10 to 25 percent increase in our present new housing construction. But measured by population and income distribution they are inadequate. Low income groups, the bulk of our population, cannot afford adequate housing, Greater production rates and lower housing costs seem to be the only answers, but whether they can be achieved is another matter.

In fine, the city is the product of many forces. Transportation, agriculture, location, manufacturing and energy resources, all play an important role in the growth of the city/town. Improvements in agricultural production freed large numbers of people from the soil. The factory provided employment opportunities, and transportation bridged distance in bringing people and markets together. Urbanization leads to upsurge the prices of land-value along the by-pass roads.

The following table shows the rising land-value near the by-pass roads of the study region.

Table No. 1

Land-Value (1960-2017)

Sl. no	Name of the by-pass roads	Land-value per Kattha in 1960 before the construction of by-pass roads	Estimated land-value if the by-pass roads were not laid in 2017	Present land value after the construction of by-pass roads (within 500 meters from by-pass roads)
1.	Gaya by-pass road	300/-	30,000/- 25,00,000/-	(233.33%)
2.	Nawada by-pass road	200/-	22,000/- 2,00,000/-	(354.54%)
3.	Aurangabad by-pass road	220/-	25,000/- 1,90,000/-	(260.00%)
4.	Bodh Gaya by-pass road	220/-	25,000/- 1,50,000/-	(140.00%)

Source : Field-work.

From the above table it is clear that the highest percentage increase of land-value is at Gaya (566.67%) followed by Nawaeda (354.54%). The lowest increase is in Bodh Gaya (125.00%). In general larger is the urban centre, greater is the increase in land-value, which is mainly due to the "push" and "pull" factors. In recent years there has been an apparent trends of metropolitanisation where large cities are becoming larger. Towns of small size fail to general sufficiently strong growth impulse.

Nawada is the new district headquarters, and the by-pass road is quite adjacent to the busy market of Nawada east-west road. This is why the percentage increase of land-value is only next to Gaya. Aurangabad by-pass is situated in the south of the main settlement which is quite good for the settlements. Gaya is a divisional headquarters and a renowned Hindu-religious centre of international fame. Hence the value of the land has increased to 233.33% over the general increment of value during the same period. Bodh Gaya is the tourist centres. Bodh Gaya by-pass is in the process of making, still

the prices has shot-up by 140.00%.

In fine, we observe remarkable changes along the by-pass roads as regards their land-use pattern and land-prices.

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