

General Land Use : A Study



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Land is the basic resource of human being. The term “land use” is employed for varied surfacial and dynamic uses of the land and soil surveys e.g. land under cultivation, posture, barren, orchard, fallow, waste, cultivated waste, settlement, forests, water bodies, etc. on varied terrain conditions and soil types. Thus, its utilization shows a reciprocal relationship between the prevailing ecological conditions of a region and man.

The study of land use is of prime importance for the economic development, resource planning and cultural advancement of people. The potentiality of a region depends upon the intensive or extensive use of the land. The intensive use of land bears population concentration economic prosperity through better agricultural production, human establishments, industrial location, communication and transportation lines, while extensive use of the land bears sparse population, dispersed settlement, solitary living, agricultural economy and poor transport network. However, it is only through the systematic utilization of the land that economic and cultural development can be made possible. Thus, one cannot think of progress without proper utilization of land. Hence, the study of land use is of immense value in any scheme of regional development and planning.

Land use is the surface utilization of all developed and vacant land on a specific point, at a given time and space. Land use is conditioned by the association of two sets of factors – first, physical factors such as geology, relief features, climate, soil and vegetation which limit the use capabilities of land and secondly, cultural factors which include both economic and institutional factors. Cultural factors represent the length of occupancy of the area, demographic and socio-economic conditions, institutional framework and the technical levels of the people which determine the extent to which the land can be utilized. Categorization or classification of land use is the systematic arrangement of various classes of land on the basis of certain similar characteristics mainly to identify and understand their fundamental utilities, intelligently and effectively in satisfying the needs of human society. Thus, land must be carefully utilized so that it may fulfil our varied needs after its proper allocation. The best use of each parcel of land requires a specific and methodically appreciable classification of the present land use. This may help us in investigating the land use problems and be the basis of planning for the best use of our land after considering the major land use categories. The land use types and its classification must be clearly

presented in comparison with other land classification according to productivity index and the yield and quality of crops grown under physically defined system of management or according to Storie index based upon soil profile, soil texture and other physical factors combined to control the use capabilities of particular soil and its productivity under favourable environmental conditions.

The purpose of land use classification is to maximize the productivity and conserve the land for posterity. A classification of land requires considerable time and expense, hence there must be a justification to classify land into different categories. Land classification is not an end in itself but a means of obtaining better land use.

Land use of Gaya district may be classified into following categories. (table.1)

TABLE 1. CLASSIFICATION OF LAND USE OF GAYA DISTRICT

Land use categories	% of the total area 1981-82	% of the total area 2011-12	Deviation recorded
1. Forest	15.87	13.51	- 2.36
2. Barren & Unclutivable wasteland	5.76	7.41	+ 1.65
3. Land put to non- agricultural uses	8.03	9.83	+ 1.80
4. Cultivable wasteland	4.05	1.63	+ 2.42
5. Permanent pasture & other grazing land	1.80	0.68	- 1.12
6. Miscellaneous trees, crops and groves	1.88	0.67	- 1.21
7. Old fallow land	16.62	3.68	- 12.94
8. Current fallow land	30.42	15.99	- 14.43
9. Net area sown	15.47	46.60	+ 31.03
Total	100%	100%	-

The above mentioned table present the details of land use statistics of Gaya district. Land use is generally conditioned by the association of two sets of factors – first, physical factors such as geology, relief, features, climate, soil and vegetation which limit the use capabilities, institutional frame work and the technological levels of the people which determine the extent to which the land can be utilized.

Thus, in general, there are three factors of land use, e.g. (i) Physical factors which include geology, relief surface, drainage, underground water, climate, soil and vegetation (ii) Economic or locational factors (iii) Institutional factors. Land utilization of Gaya district is the direct product of its geological structure and man in the main source behind moulding land use, according to their need and the geological ingredients. The formation and functioning of land in relation to man is always governed by some inherent laws and the land has the base of all human actions including shelter. The spatial differentiation of these elements affect the purpose and character of land use. The whole land of the earth and surface has, thus, potential value of some use or group of uses, although the area suited of any one use is often quite limited.

The aforesaid table (5.1) present the general land use of Gaya district in the year of 1981-82 and 2011-12 along with the deviation between both. Hectares in which the expansion of forest remained on 78210.43 hectares in 1981-82 that as 15.87 percent to the total area.

Other characteristics of land use of the region are :

1. There is dominance of cultivation over other uses of land in the region where as there had been dominance of current fallow land over other land uses in 1981-82.
2. Forest attains significance in the southern part of Gaya district.
3. Area under cultivable waste land, permanent pastures and other grazing land, miscellaneous trees, crops and groves and old fallow land hardly accounts for 7 percent of the area as a whole.
4. The regular extension of agriculture to the further limit, extensive deforestation and decrease in the area under orchard and pastures are more significant in the low land.
5. Percentage of current fallow land and land put to non agricultural uses accounted more than 98 percent in 1981-82 and 25 percent in 2011-12 respectively.
6. The percent of area sown more than once always remains the nearest followed in respect to land devoted for other purpose.

LAND USE IN 1981-82 & 2011-12

(i) FOREST :

The total forest area comprised 78210.43 and 66594.29 hectares of land in 1981-82 and 2011-12 respectively covering only 15.87 and 13.51 percent to the total area of the district. It was far below the required hectareage of land under forest. Since man has penetrated within the precincts of plain plateau, he has been clearing them of better land use. The statistics procured from the Directorate of Statistics and evaluation. The government of Bihar expresses the continuously decreasing area of forest in the

region as it comprised 15.87 per cent in 1981-82 and 13.51 percent in 2011-12. Their deforestation has reached a stage which not only required protection and preservation but afforestation is now the only remedy to protect and preserve other land ups categories.

The Statistics shows the complete disappearance of forest from the plain region of the district. No doubt some scattered trees groves are existing besides the newly planted trees under the present forest policy of the Government. The plain is almost devoid of this landuse category but such plain area where highland appears have some area under this category. Their clearance have given birth the several land uses but their extinction can not be tolerated for they are rain bringer, soil binder and pasture preserver. Forests are the storehouse of manifold resources which keep the economic man in assailable position in the field of geography.

Forests also attract hunters to hunt wild animals, gatherers and lumbers to collect fruits, leaves, pieces of wood as well as industrialists for raw materials.

The following table (5.2) shows the distribution of forests in different blocks. But of the total forest cover in the district,. The highest forest area is found in the block of Barrachatti, there is 26.48 percent forests area of the total forest cover in the district. The same position also prevailed in 1981-82 when there was 23.81 percent (Fig. 2)

TABLE 2
DISTRIBUTION OF FORESTS IN DIFFERENT BLOCKS OF GAYA DISTRICT

Blocks	Area in Hectares in 1981-82	Area in Hectare in 2011-12	Deviation in Hectare	% to the total forest area in the district 1981-82	% of the total forest area in the district (2011-12)
Gaya Town	79.72	13.91	- 65.81	0.11	0.02
Manpur	82.15	56.05	- 26.10	01.11	0.08
Bodha Gaya	12.55	56.40	+ 43.85	0.02	0.08
Atri	2947.39	443.85	-2503.54		
Wazirganj	2582.36	1377.87	- 1204.49	3.77	0.67
Khizirsarai	62.32	156.94	+94.62	3.30	2.07
Belaganj	176.04	3.43	-172.61	0.08	0.24
Fatehpur	8611.09	812.04	- 7799.05	0.23	0.01
Konch	-	-	-	11.01	-
Paraiya	200.73	170.13	-30.60	0.26	0.26

Tikari	-	-	-	-	-
Sherghati	445.16	127.57	-317.59	0.57	0.19
Aman	7565.76	6282.24	-1283.52	9.67	9.43
Gurua	164.31	126.12	-38.19	0.21	0.19
Barachatti	18387.29	17637.30	-749.99	23.51	26.48
Imamganj	9425.76	12744.94	+3319.20	12.05	19.14
Mohanpur	11571.83	10593.34	-978.49	14.80	15.91
Dumaria	15898.99	15992.16	+96.17	20.31	24.01
Total	78210.43	66594.29	-11616.14	100%	100%

Forest area in Barachatti of out the total forest cover in Gaya district. Dumaria stands second next to Barachatti. In 2011-12 24.01 percent of the total forest area of the district is found in Simaria. The area of the forest in both of the blocks increased from 1981-82 to 2011-12. In this regard Imamganj stands third where the percentage of forest cover remained 19.14 in 2011-12 but this block stood fourth in 1981-82 and here there was 12.05 percent forest of the total forest in the district existed. In 1991. Mohanpur block stood fourth where 15.91 percent forest of the district is found. Out this block stood third in 1981-82 when 14.80 percent forest of the district existed. Thus, in 2011-12, 85.54 per cent forest of the Gaya district is found in only four Panchayats – Barachatti, Dumaria, Imamganj and Mohanpur and more than 98 percent forest of the district is found only in serve Gram Panchayats – Barachatti, Dumaria, Imamganj, Mohanpur, Amas, Wazirganj and Fathehpur. There are two blocks where there is a complete lack of forests. Those two blocks are Konch and Tikari. No doubt these blocks are situated completely in plain region and maximum land has already been brought under agriculture. The blocks of Gaya town, Manpur, Bodh Gaya, Atri, Khizirasarai, Belaganj, Paraiya, Shergahati and Gurua have a little acreage of forest. Each of them has less than one per cent forest area of the district in 2011-12 and similar condition existed in 1981-82. Only Wazirganj has 3.77 percent forest area of the district in 1981-82 which decreased to 0.67 percent in 2011-12.

The highest deviation is found in Fathehpur where 7799.05 hectare of forest area decreased in 2011-12. There are four blocks where forest area increased in 2011-12. There are four blocks where forest area increased in 2011-12. Those blocks are Bodh Gaya, Khizirasarai, Imamganj and Dumaria. And in rest fourteen block forest area decreased.

2. Brren and uncultivated waste land :

Under this category only 7.41 percent of land of Gaya district comprising 36504.4 hectares of land is engaged in 2011-12 while in 1981-82, 5.71 percent area of the district comprising 28405.29 hectares of land was under this category. Barren and uncultivable waste land consists barren, rugged, hilly, rocky

highland area. Land which cannot be tilled except a prohibition cost has also been catalogued under this heading. Such land may also occur near villages or amidst the cultivating land where reclamation cost is prohibitive. Such land is expected to contrast with the erection of buildings wherever possible. The extension of such land vanishes in Gurua block.

The table (5.3) expresses the idea that there become growth in barren land between 1981-82 and 2011-12. 34099.31 hectares of land came under this category withi the given span of time. There are eight blocks in Gaya District where barren land increased. Those blocks areAtri, Wazirganj, Fathehpur, Konch, Paraiya, Tikari, Mohanpur and Dumaria. In rest of the blocks barren land decreased.

TABLE 3
DISTRIBUTION OF BAREEN AND UNCULTARABLE WASTE LAND IN GAYA DISTRICT.

Blocks	Area in Hectares in 1981-82	Area in Hectare in 2011-12	Deviation in Hectare	% to the total forest area in the district 1981-82	% of the total forest area in the district (2011-12)
Gaya Town	1948.20	1342.36	606.14	6.86	3.68
Manpur	2017.40	683.60	1333.80	7.10	1.87
Bodha Gaya	1195.47	936.15	259.32	4.21	2.56
Atri	2711.86	3565.30	+853.44	9.55	9.77
Wazirganj	2211.25	993.01	-1218.24	7.78	2.72
Khizirsarai	1160.14	2290.89	+1130.75	5.14	6.28
Belaganj	1342.78	723.11	-619.67	4.73	1.98
Fatehpur	944.96	8435.20	+7490.60	3.33	23.11
Konch	764.06	1638.20	+874.14	2.69	4.49
Paraiya	1645.89	2423.39	+778.08	5.79	8.53
Tikari	1485.83	3913.39	+2427.56	5.23	13.78
Sherghati	1867.66	242.91	-1624.75	6.58	0.86
Aman	1540.67	1601.74	-61.07	5.42	5.64
Gurua	782.68	-	-782.68	2.76	-
Barachatti	1842.78	980.99	-861.62	6.49	3.45
Imamganj	1583.64	1561.92	-20.62	5.60	5.50
Mohanpur	1387.29	3327.48	+1940.19	4.88	11.71
Dumaria	1666.53	1845.02	+178.49	5.86	6.50
Total	28405.09	36504.40	+34099.31	100%	100%

In 2011-12, it has been recorded that the highest percentage of such land is found in Fatehpur block. In this block 23.11 percent barren and uncluturable waste land of Gaya district is found. After Fatehpur, Tikari stands second where 13.78 percent barren land of the district is found. Mohanpur stands third in this regard. About 60 percent area of barren land and uncluturable waste land lies in four blocks – Fatehpur, Tikari, Mohanpur and Atri, Rest is found in other blocks.

Land put to non-gricultural uses :

Under this category of land use 8.03 percent of the total geographical area of the district belonged in 1981-82 that comprised 39599.34 hectares of land. While in 2011-12, the figure faised to 9.83 percent of the total geographical area comprising 48446.38 hectares of land. Such category of land is generally used for settlement communication and water bodies coupled with other lands given to use other than farming. This types of land is bound to increased in extent and in view of the growing industrialization and the growth of population in villages and towns alike and the gradual expansion of the cultural landscape. The greater density of population in rural homes explains considerable percentage of land given to this category. The highest hectareage under this category is 5911.16 hectare of land in 2011-12 in Fatehpur block seconded by 5243.44 in Paraiya block. Tikari and Imamganj stand third and fourth in this regard. While the lowest hectareage of land under this category is found in Belaganj block and next seconded by Atri block in 2011-12 s is expressed by the Table (4)

TABLE 4
DISTRIBUTION OF LAND TO NON-AGRICULTURAL USES IN GAYA DISTRICT

Blocks	Area in Hectares in 1981-82	Area in Hectare in 2011-12	Deviation in Hectare	% to the total forest area in the district 1981-82	% of the total forest area in the district (2011-12)
Gaya Town	2091.46	1786.21	-305.25	5.28	3.69
Manpur	854.31	896.09	+41.78	2.16	1.85
Bodha Gaya	3920.68	1106.17	-2814.51	9.90	2.28
Atri	3324.97	577.89	-2747.51	8.40	1.19
Wazirganj	1380.41	2367.18	+2986.78	3.49	9.01
Khizirsarai	1363.42	3234.67	+1871.25	3.44	6.68
Belaganj	1978.55	242.01	-1736.54	5.00	0.50
Fatehpur	4216.51	5911.16	1694.65	10.65	12.20
Konch	3439.09	1160.18	-2278.91	8.68	2.37

Paraiya	3242.01	5243.44	+2001.43	8.19	10.82
Tikari	2307.57	4978.50	+2670.93	5.83	10.28
Sherghati	1059.89	3214.42	+2154.53	2.65	6.64
Aman	2314.85	3095.70	+780.85	5.85	6.39
Gurua	895.99	2242.08	-1346.09	2.26	4.63
Barachatti	2216.1	1873.98	-342.53	5.60	3.84
Imamganj	2247.27	4632.79	+2385.52	5.68	9.56
Mohanpur	2053.42	2630.07	+576.65	5.19	5.43
Dumaria	692.43	1253.83	+561.40	1.75	3.64
Total	39599.34	48466.38	+8867.04	100%	100%

In 1981-82 THERE WAS SOMEWHAT DIFFERENT FIGURE. The highest hectareage under this category lies in Fatehpur block while the figure was 4216.51 hectare of land. Bodh Gaya stood second in this regard having 3920.68 hectare of land under this category. Konch and Atri blocks stood third and fourth respectively in this regard. While the lowest figure was found in Dumaria block seconded by Manpur.

Out of the total hectareage of land under this category in 1981-82, 10.65 percent area is found in Fathepur block seconded by Bodh Gaya block where 9.9 percent of land under this category lies. 8.68 percent of the total landin the district under this category lies in Konch block and 8.4 percent lies in Atri Block. The lowest percentage of this category in Gaya district is found in Dumaria block. In 2011-12 the highest percentage (12.2%) is found again in Fathepur block seconded by paraiya block where 10.82 per cent of total land in the district is found. Tikari stands third (10.28%) and Imamganj stands fourth (9.56%) in this regard.

So far as deviation is concerned, both positive and negative deviations hae been experienced in the district. While the total hectareage of land under this category was 39599.34 hectare in the district in 1981-82, it increased to 48466.38 hectare in 2011-12. In other words, it can be said that there became 22.39 percent increase in the total figure within seventeen years, positive deviation is experienced in eleven blocks namely Manpur, Wazirganj, Khizirsarai, Fathehpur, Paraiya, Tikari, Sherghati, Amas, Imamganj, Mohanpur and Dumaria blocks. The highest positive deviation has been experienced in Wazirganj block where 216.37 percent increase has been recorded. The second highest positive increase has been recorded in Sherghati block. In this block 203.28 percent increase has been recorded. The positive deviation has been experienced as 137.25 percent in Khizirasarai, 115.75 percent in Tikari, 106.15 percent in Imamganj block, 81.08 percent in Dumaria block, 61.73 percent in Paraiya block, 40.19 percent in Fathehpur block, 28.08 percent in Mohanpur block and 4.89 percent in Manpur block.

The negative deviation has been in seven blocks namely, Gurua, Belaganj, Atri, Bodh Gaya, Konch, Barachatti and Gaya town. The highest negative deviation is recorded in Gurua block that is 150.23 percent seconded by 87.77 percent in Belaganj block. Atri block experienced 82.62 per cent as negative deviation. 71.79 percent in Bodh Gaya, 66.26 percent in Konch, 15.45 in Barachatti and 14.06 percent in Gaya town was experienced as negative deviation.

CULTIVABLE WASTE LAND :

Cultivable waste land is that land on which we hope to push up our cultivated area. But cultivable area not cultivated for more than five years is classed under this category. These are the marginal lands and can be used for cultivation if efforts are made to improve it by manuring or irrigational facilities.

Under this category 19979.37 hectares of land was in 1981-82 which was 4.05 per cent to the total geographical area of the district, but the area decreased in 2011-12. In this year the total land under this category lies only 8021.06 hectares which is only 1.63 percent of the total geographical area, of the district. Thus there became an 59.85 per cent decrease in the area within sixteen to seventeen year.

TABLE 5
DISTRIBUTION OF LAND PUT TO CULTIVABLE WASTE LAND IN GAYA DISTRICT

Blocks	Area in Hectares in 1981-82	Area in Hectare in 2011-12	Deviation in Hectare	% to the total forest area in the district 1981-82	% of the total forest area in the district (2011-12)
Gaya Town	111.70	156.85	+45.15	0.56	1.96
Manpur	517.77	68.27	-449.50	2.59	0.85
Bodha Gaya	125.46	64.86	-60.60	0.64	0.81
Atri	1691.83	1989.62	+297.79	8.47	24.80
Wazirganj	2030.35	282.91	-1747.44	10.16	3.53
Khizirsarai	1172.40	127.01	-1045.39	5.87	1.58
Belaganj	1116.15	195.22	-920.93	5.59	2.43
Fatehpur	1217.73	1129.56	-88.17	6.09	14.08
Konch	915.78	1496.19	+580.41	4.58	18.65
Paraiya	935.61	354.75	-580.86	4.68	4.42
Tikari	1143.26	226.90	-916.36	5.72	2.83

Sherghati	1629.30	861.91	-767.39	8.15	10.75
Aman	894.97	224.96	-670.01	4.48	2.80
Gurua	968.80	102.92	-865.88	4.85	1.28
Barachatti	1129.50	158.54	-970.96	5.65	3.48
Imamganj	1310.00	277.51	-1032.49	6.56	3.46
Mohanpur	1303.52	123.67	-1179.85	6.52	1.54
Dumaria	1765.24	179.41	-1585.83	8.84	2.24
Total	19979.37	8021.06	-11958.31	100%	100%

The above mentioned table expresses that in 1981-82. The highest hectarage of land under uncluturable waste land line in the block of Wazirganj that is 2030.35 hectares i.e. 10.16 percent of the total land under this category. Dumaria stands next to Wazirganj 8.84 percent land comprising 1765.24 hectares lies under this category. Atri stands third in this regard having 8.47 per cent comprising 1691.83 hectare of land of the district. But on the other hand, there is figure in 2011-12. The district highest hectareage of this category lies in Atri block. Out of the total hectareage 24.8 percent area comprising hectares lies in Atri block. Konch stands second in this regard where 18.65 percent area of this category in the district that comprises 1496.19 hectares of land lies in this block. Fathepur stands third in this regard having 14.08 percent area of the district under this category. The least area of this category lied in Gaya town in 1981-82 while in 2011-12 the least is found in Bodh Gaya block.

So far as deviation in concerned both positive as well as negative deviation are found. Positive deviation is found in only three blocks the highest among them is found in Konch block. In Konch block there became a positive deviation of 63.38 percent over 1981-82. The second positive deviation is found in Gaya town. There became a positive deviation of 40.42 percent. The lowest positive deviationis found in Atri. Only 17.6 percent positive deviation has been recorded here.

Permanent Positures and other grazing land :

This category of land use is quite essential to boost the livestock population, yet the farmers in the plain area of north have never cared to permit a posture ground which act as the pillars of agriculture, milk, manure, hides and skin. "Riverbeds and outskirts of forest area includes this type of land.

Only 1.8 percent area comprising 8879.81 hectares of land lies under this category in the district in 1981-82 while this hectearage decreased in 2011-12. In 2011-12 0.68 percent comprising 3346.1 hectares of land lies under this category. Gurua is the only block where not hectearage of land lies under this

category. Amas had also no hectareage of land under this category in 1981-82 but in 2011-12, 45.4 hectares of land came under this category. This figure stands 1.36 per cent of the total hectareage under this category in the district. Similar case existed in Fathehpur block. No hectareage lied under this category in the block in 1981-82. But in 2011-12, 537.22 hectares of land was left that stands 16.06 percent of the total hectareage of land under this category

The highest hectareage of this category is found in Wazirganj block in 2011-12 while the highest in 1981-82 belong to Atri block. In 2011-12, the total hectareage of land under this category in Wazirganj is 840.35. Konch stands second in this regard having 578.05 hectares of land (17.28%) Fathehpur stands third in this regard having 16.06 percent comprising 537.22 hectares of the total hectareage under this category. Except Gurua block where there is no land under this category, Paraiya block has the lowest area i.e. 0.09 percent comprising 11.24 hectares of land under this category in 1981-82. In 2011-12 the highest hectareage under this category was in Atri block having 21.89 percent comprising 1944.07 hectares of land under this category in the district. Belaganj stood second in this regard having 15.33 percent of the total land of this category in the district. The total hectareage under this category was 1360.99 in 1981-82. After three blocks namely, Fathehpur, Amas and Gurua where no hectareage of this category of land existed, Tikari consisted the lowest hectareage of land under this category.

TABLE 6
DISTRIBUTION OF PERMANENT PASTURE AND OTHER GRAZING GROUND IN GAYA
DISTRICT

Blocks	Area in Hectares in 1981-82	Area in Hectare in 2011-12	Deviation in Hectare	% to the total forest area in the district 1981-82	% of the total forest area in the district (2011-12)
Gaya Town	55.85	90.78	+34.93	0.63	2.71
Manpur	100.57	16.79	-83.78	0.92	0.50
Bodha Gaya	338.32	357.86	+19.54	3.81	10.69
Atri	1944.07	140.15	1803.92	21.89	4.19
Wazirganj	1270.74	840.35	-430.39	14.31	25.11
Khizirsarai	957.47	90.02	-867.45	10.78	2.69
Belaganj	1360.99	19.25	-1341.74	15.33	0.58
Fatehpur	--	537.22	+537.22		16.06
Konch	191.21	578.05	+386.84	2.15	17.28
Paraiya	998.59	2.85	955.74	11.24	0.09

Tikari	23.88	27.85	3.97	0.27	0.83
Sherghati	171.63	409.86	+238.23	1.93	12.25
Aman	--	45.40	+45.4	-	1.36
Gurua	-	-	-	-	-
Barachatti	42.78	13.72	29.06	0.48	0.41
Imamganj	91.87	67.67	24.20	1.03	2.02
Mohanpur	75.44	92.55	+17.11	0.85	2.77
Dumaria	1261.40	15.73	-1245.67	14.38	0.47
Total	8879.81	3346.10	553.71	100%	100%

The deviation may be vividly marked between both the mentioned statistics of two different years. There became a negative deviation in the total figure of the district. The percentage of negative deviation was marked as 62.32 percent. Negative deviation may be marked among nine blocks comprising Manpur (83.75%), Atri (92.79%), Wazirganj (33.87%), Khizirsarai (90.6%), Belaganj (98.59%), Paraiya (99.72%), Barachatti (67.93%), Imamganj (26.34%), and Dumarai (98.75%) in six blocks namely Gaya town (62.54%), Bodh Gaya (5.78%), Konch (202.31%), Sherghati (138.8%) and Mohanpur (22.68%) positive deviation may be marked.

MISCELLANEOUS TREES, CROPS AND GROVES :

The scattered tree and groves although occupying a fraction of the land, play an important role in the fruit markets as they supply banana, mango, litchi, plums and other fruits to the various markets of the country. This category of land use has to be scientifically treated so that horticulture of the state may not suffer. In recent years farmers have cut down the uncared mango groves to increase farmland. New groves have to be planted for maintaining the balanced diet of the people.

The total hectareage under this category was 1.88 percent comprising 9282.76 hectares in the district of Gaya in 1981-82 while it decreased to 3297.76 hectares of land comprising 0.67 percent in 2011-12. The total figure decreased by 64.47 percent in seventeen years. (Fig. 4.7)

While more than three fourth (76.42%) area of Manpur block lies under net area sown. Only three categories i.e. net area sown, current fallow land (7.87%) and land put to non-agricultural use (7.21%) jointly share 91.5 percent of the total geographical area of Manpur block and rest 8.5 percent area is shared by other categories.

Near three fifth (59.17%) percent of the total geographical area lies under net area sown category in Bodh Gaya block. It is followed by current fallow land (25.26%). These two categories shares about eight four percent of the total geographical area and rest 15.5 percent area is shared by other categories.

In Atri block, 78.63 percent of the total geographical area is shared by net area sown (54.96%) and current fallow land (23.67%). Third important category is barren and uncultivable waste land (9%). Rest 12.63% geographical area is shared by other landuse categories.

In Wazirganj block, 43.8 percent land surface is shared by net area sown. The next largest landuse category after the net area sown is current fallow land that shares 27.52 per cent of the total area 12.15 per cent area is covered by land put to non-agricultural uses. Thus, these mentioned three cfategories jointly covers 83.47 percent.

More than fifty percent (51.48) area in Khizirsarai block is shared by net area sown seconded by land put to non-agricultural uses that shares 17.53 percent of the total area. The third biggest category is current fallow land that shares 15.8 percent and barren and uncultivable waste land shares 12.41 percent. Thus, these mentioned landuse categories combinedly shares 97.22 per cent of the total geological area.

There is some distinct characteristics of landuse in Belaganj block. In this block 64.41 percent area is covered by current fallow land seconded by net area sown that shares 22.57 percent of the total area. These two landuse categories cover 86.98 percent of the total area and rest 17.02 percentarea is shared by other categories of landuse.

38.54 percent of the totl area of Fathepur block lies under net area sown. It is next followed by barren and uncultivable waste land (21.51). 15.07 percent land lies under land put to non-agricultural uses and 13.16 percent area lies under current fallow land. Thus under these mentioned four categories of landuse 88.27 percent area of the block is included. Rest 11.72 parecent lies under different landuse categories.

More than fifty percent (56.76%) area of the konch block is under net area sown and 21.02 percent lies under current fallow land.

Nearly three fourth (73.9%) of the total area of Sherghati block lies under net area sown and 13.59 percent lies under land put to non-agricultural uses. Rest 12.51 percent area of the block is shared by other categories of landuse.

TABLE 7.
PERCENTAGE OF LAND USE CATEGORIES IN DIFFERENT BLOCKS

Land use category	Bareachati	Immaganj	Mohanpur	Dumaria
1. Forest	47.68	40.25	30.88	49.82
2. Barren and uncultivable waste land	2.65	4.93	9.70	15.75
3. Land put to non-agricultural uses	5.07	14.63	7.67	3.90
4. Cultivable waste land	0.47	0.88	0.36	0.56
5. Permanent pasture and other grazing land	0.04	02.21	0.27	0.05
6. Miscellaneous trees, crops & groves	0.01	0.06	0.04	0.54
7. Old fallow land	0.55	3.46	3.60	4.70
8. Current fallow land	7.40	7.32	13.60	17.27
9. Net area sown	36.18	28.26	33.90	17.41

Like Barchatti, the highest hectareage of the block is covered by forest area in Imamganj block. Forest area covers 40.25 (12744.94 hectares) percent of the total geographical area. It is followed by net area sown that covers 28.26 percent next followed by the land put to non-agricultural uses (14.63%). Rest land use categories cover only 16.80 percent area of the blocks.

Similar case is also found in Dumaria block where about fifty percent area is covered by forest area and 17.41 percent by net area sown and 17.27 percent is covered by current fallow land. Rest 15.5 percent of the block area is covered by other land use categories.

In Mohanpur block 33.9 percent area is covered by net area sown and 30.88 percent area by forest region. The third important category is current fallow land that covers 13.60 percent area of the block.

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