

General Landuse Pattern and its Ranking of Tahsil Nandurbar Dist. Nandurbar

N.S. Pawar

Head, Dept. of Geography, G.T. Patil A.S.C. College, Nandurbar Dist. Nandurbar, MS, India

Abstract

The layout of arrangement of the uses of the land is known as 'landuse pattern'. The land may be used for Agriculture, forest, pasture etc. Landuse is determined by many factors like relief features, climate, soil, density of population, technical and socio-economic factor. Landuse categories include recreational, agriculture, residential, commercial or transport may be road, railway, subway, airway etc. It is affected by soil fertility, drainage slope angle, aspect scenery, mineral potential etc. The present paper focuses on the general landuse and its category, the land is occupied by these categories and according to it the ranking is worked for the study. Nandurbar is an important tahsil of District Nandurbar where variations in general landuse reveals the changes and therefore the present study becomes an important part.

KEYWORDS - Landuse, Categories, Ranking, General Landuse

Introduction -

When natural form of land is lost and the contribution of the human activities become more important, this can be called as landuse. The concept of landuse is related to use to which land is put in a certain region at a given period of time. The competition between various types of uses results from scarcity of land. Some land is better than other land for a specific use depending on physical characteristics of land of which its suitability for a particular use is related (Vink, 1975). Land is used by man for the cultivation of various crops, settlements, building, construction of roads and dams, canals, wells etc. are categorised under the use of land for non agricultural purposes.

Here, general land utilization of Nandurbar tahsil is studied. Village level data is obtained from the revenue department for the year 2005-06 and 2015-16 respectively. These data are analysed to understand the general landuse and its ranking. The general landuse categories are

- i) NSA (Net Sown Area)
- ii) NAC (Not Available for Cultivation)
- iii) Forest
- iv) Fallow
- v) Other land

Objective of the study -

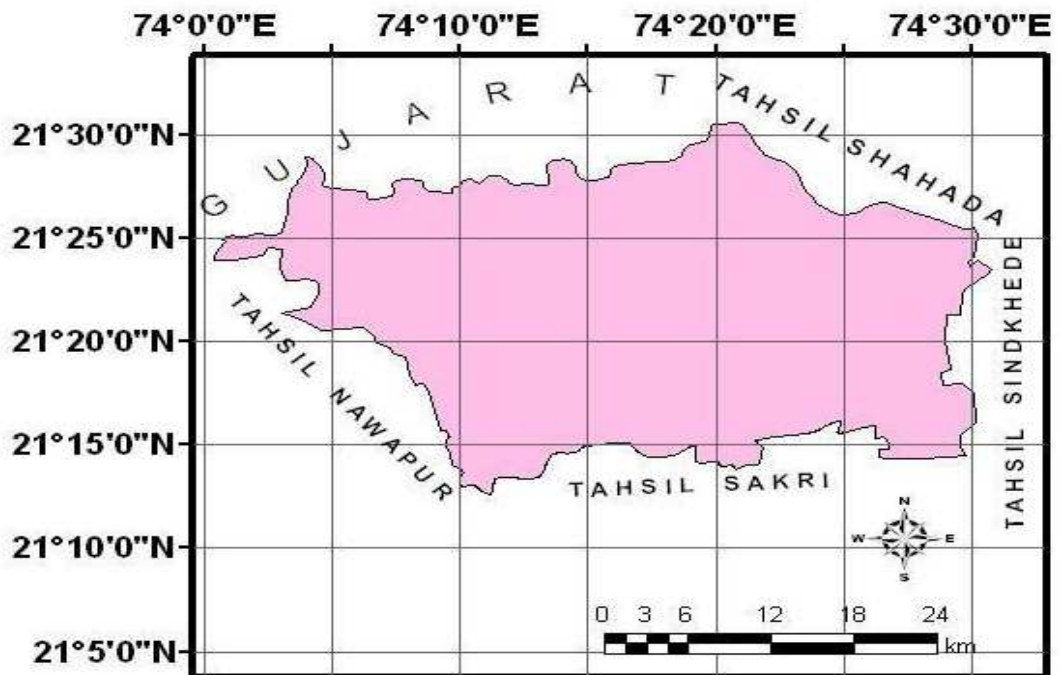
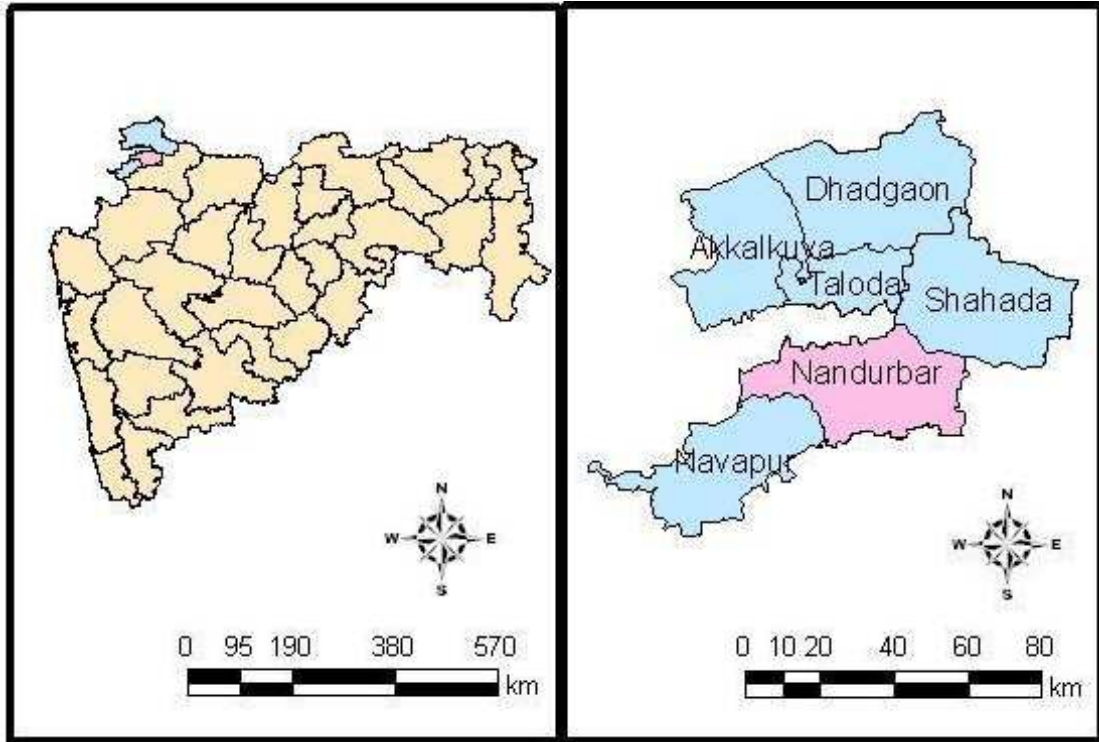
To find out general landuse at Tahsil as well as village level. The landuse changes every year and may be to find out the change within the period of ten years i.e. 2005-06 and 2015-16. The study reveals the general landuse from villages having a certain ranking.

Study area -

Nandurbar is southernmost tahsil of district Nandurbar. The tahsil lies between 21°12'N to 21°31'N latitude and 74°1'E to 74°31'E longitude. The geographical area of

the tahsil is 1082.24 sq.km. The tahsil has 152 villages. It is bordered by Gujrat in the North-West tahsil Sindakheda in the East, tahsil Sakri of District Dhule in the South and tahsil Navapur in the South-West. The total population of the tahsil is 294084 (2001 census) and in 2011 it is 367446 of which 186672 are males and 180774 are females. The total population of the tahsil has increased by about 73000 from 2001 to 2011.

Location Map of Nandurbar Tahsil



General Landuse : Tahsil - Nandurbar

Table - 1

Type	TVA 2005-06	TVA 2015-16
NSA (Net Sown Area)	69	72
Forest	9	5
Fallow	4	2
NAC (Not available for cultivation)	2	5
Other	16	16
Total	100	100

Net Sown Area - It includes the area sown with crops excluding the area sown more than ones. This area has increased by Three per cent within the period of ten years.

Forest - Area under forest has declined by four per cent within the period of ten years due to cutting of forest.

Fallow - Fallow land is declined due to the area mostly occupied by agriculture and for other purposes by two per cent from 2005-06 to 2015-16.

NAC (Not Available for Cultivation) - NAC has increased by Three per cent may be due to the land kept barren and used for settlements and roads etc. This is the land which can not be brought under cultivation.

Other lands - includes various other crops which occupy small area of the farm or used for mixed crops like Nagli, Barti, Bhadale, Shopa, Fruits etc. It remain constant i.e. sixteen per-cent withing the period of ten years i.e. from 2005-06 to 2015-16. (Table - 1)

Changes in the landuse categories from 2005-06 to 2015-16 can be analysed as under.

NSA - In 2005-06, 7.89 per cent i.e. 12 villages are at first rank having above 90 per cent area is net sown. While 19.73 per cent i.e. 30 villages are at first rank which is increased considerable above 90 per cent net sown area in 2015-16. The number of villages are declined by ten i.e. from 72 to 62 during the period of ten year and are at second rank which occupied total village area of 80-90 per cent (i.e. from 47.36 per cent to 40.78 per cent). The villages which occupied 70 to 80 per cent TVA having third rank are increased from 32 to 34 from 2005-06 to 2015-16 i.e. from 21.05 to 22.36 per cent. The fourth & fifth rank villages are 18 that covers 60 to 70 per cent and below 60 per cent in 2005-06 and are declined by six and four villages in 2015-16 i.e. 11.85 to 7.89 and 9.24 per cent respectively. (Table - 2, fig. 1)

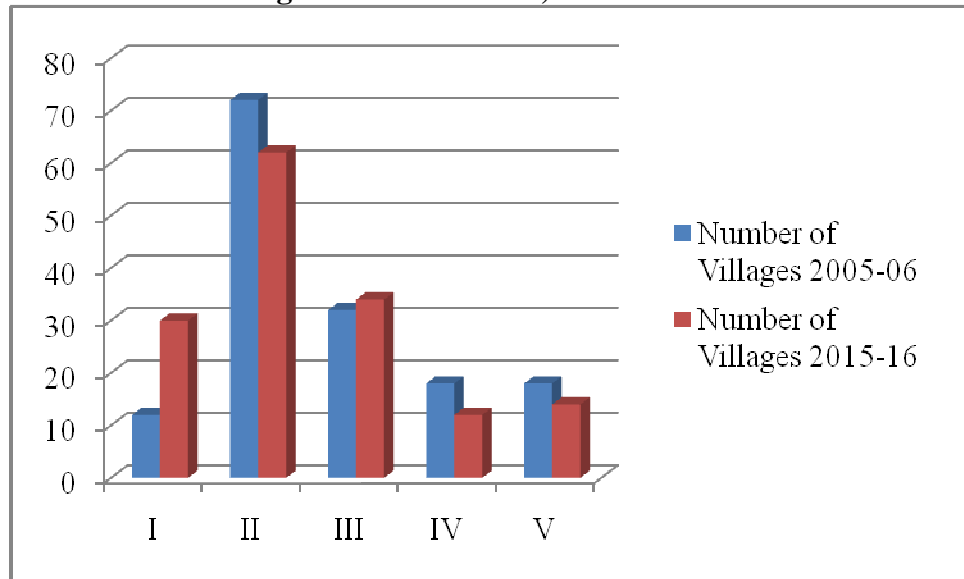
General Landuse and its ranking Tahsil - Nandurbar

Table - 2

Category	Rank	Percentage to total village area	Number of Villages		Percentage of total villages	
			2005-06	2015-16	2005-06	2015-16
Net Sown Area	I	Above 90	12	30	7.89	19.73
	II	80-90	72	62	47.36	40.78
	III	70-80	32	34	21.05	22.36
	IV	60-70	18	12	11.85	7.89
	V	below 60	18	14	11.85	9.24

	Total		152	152		
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Fig. 1
Ranking of Net Sown Area, Tahsil Nandurbar

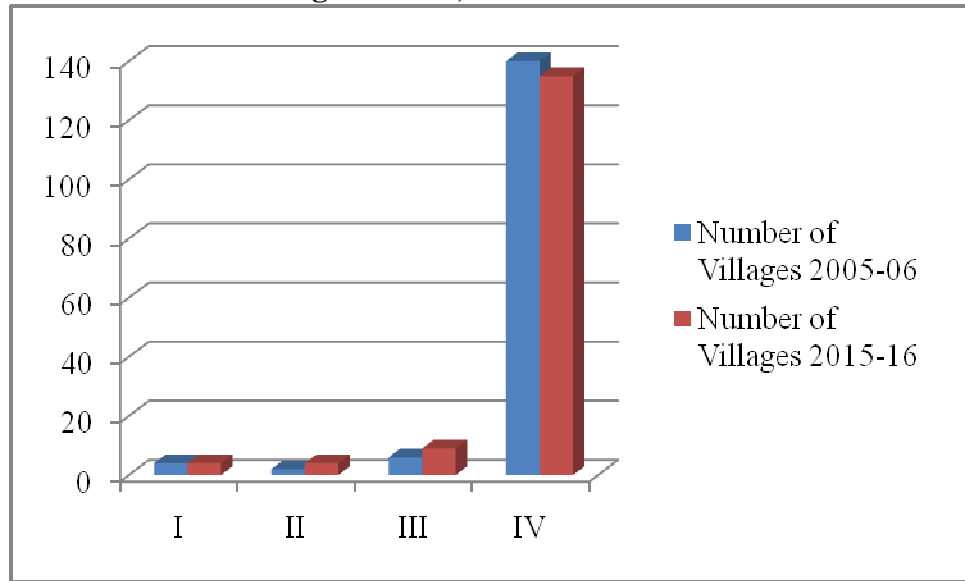


Forest - Area under forest remain constant i.e. above 15 per cent of TVA (four villages) in 2005-06 and 2015-16. They are at first rank. At the second rank number of villages declined by two in 2005-06 and have occupied 10 to 15 per cent of TVA. But in 2015-16 it has increased upto four villages (2.63 per cent). The area under forest i.e. 5 to 10 per cent has increased from six villages in 2005-06 to nine villages in 2015-16 (3.95 to 5.92 per cent of total villages). Fourth rank where below five per cent of TVA is in 140 villages (92.10 per cent) in 2005-06 and 135 villages (88.82 per cent) in 2015-16. It is quite considerable that during the period of ten years second and third rank villages are increased. (Table 3, fig. 2).

Table - 3

Category	Rank	Percentage to total village area	Number of Villages		Percentage of total villages	
			2005-06	2015-16	2005-06	2015-16
Forest	I	Above 15	4	4	2.63	2.63
	II	10-15	2	4	1.32	2.63
	III	5-10	6	9	3.95	5.92
	IV	below 5	140	135	92.10	88.82
Total			152	152	100.00	100.00

Fig. 2
Ranking of Forest, Tahsil Nandurbar

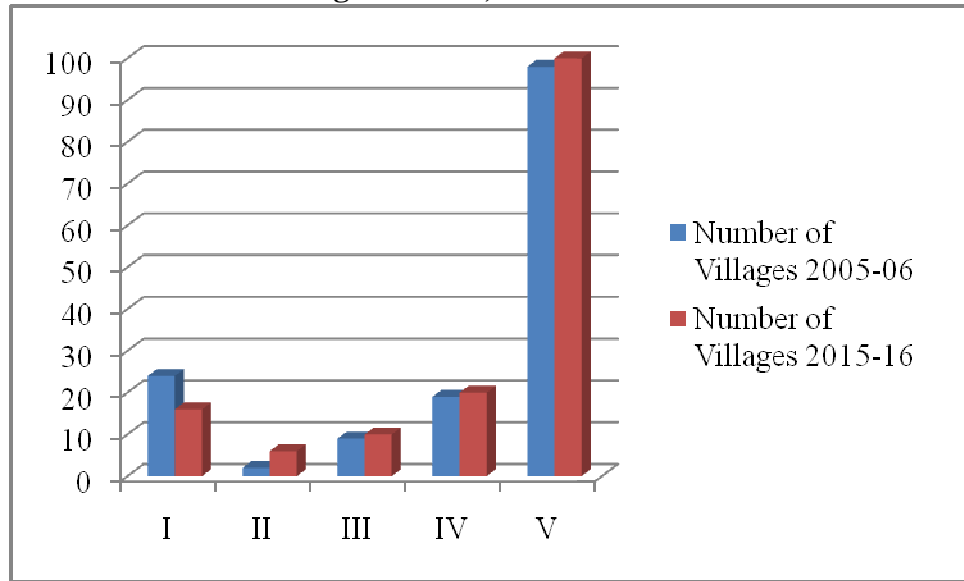


Fallow - These lands may be used for commercial or government purpose. Here, in 2005-06, above eight per cent area of TVA, the number of villages are 24 (15.79 per cent of total villages) and having first rank, and has declined in 2015-16, that there are sixteen villages (10.52 per cent of total villages). There is rise in number of villages from two to six during the period of ten years where villages occupy six to eight per cent of TVA and stood at second rank i.e. in 2005, 1.32 per cent and in 2015-16 (3.94 per cent). There is not much more difference at third and fourth rank from 2005-06 to 2015-16. They are categorised four to six per cent and two to four per cent of TVA. At third rank the number of villages has increased from nine to ten in 2005-06 and nineteen to twenty in 2015-16. The fifth rank where below two per cent land is under fallow, where the villages are 98 in 2005-06 and has increased by two i.e. 100 in 2015-16 i.e. from 64.47 to 65.82 per cent of total villages. (Table 4, fig. 3).

Table - 4

Category	Rank	Percentage to total village area	Number of Villages		Percentage of total villages	
			2005-06	2015-16	2005-06	2015-16
Fallow	I	Above 8	24	16	15.79	10.52
	II	6 - 8	2	6	1.32	3.94
	III	4 - 6	9	10	5.92	6.57
	IV	2 - 4	19	20	12.50	13.15
	V	below 2	98	100	64.47	65.82
	Total		152	152	100.00	100.00

Fig. 3
Ranking of Fallow, Tahsil Nandurbar

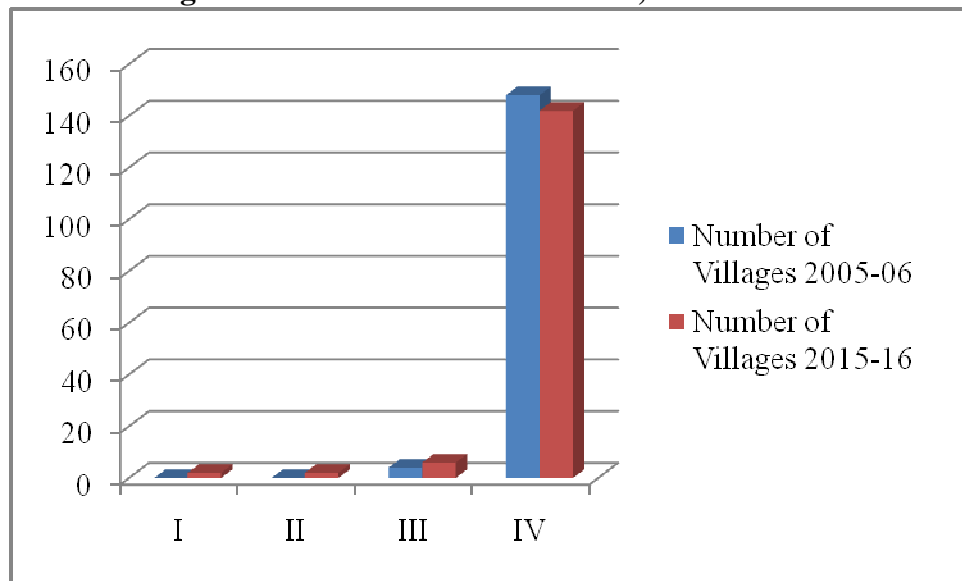


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Table - 5

Category	Rank	Percentage to total village area	Number of Villages		Percentage of total villages	
			2005-06	2015-16	2005-06	2015-16
Not Available for Cultivation	I	Above 6	0	2	0	1.32
	II	4 - 6	0	2	0	1.32
	III	2 - 4	4	6	2.63	3.94
	IV	below 2	148	142	97.37	93.42
	Total		152	152	100.00	100.00

Fig. 4
Ranking of Not Available for Cultivation, Tahsil Nandurbar



Not Available for Cultivation (NAC) - This type of category includes barren lands, uncultivable land and land put to non agricultural use. Such land can not be brought under cultivation because of its hilly and rocky nature. In 2005-06, there are no villages that occupy above four per cent of total village area and having first and second rank. But in 2015-16, there are two villages each at first and second rank those have occupied above six and four to six per cent of total village area respectively (1.32 per cent of total villages). At the rank third, there are four villages in 2005-06 those occupy two to four per cent of TVA and has increased in 2015-16 by two villages i.e. six (3.94 per cent of total villages). While comparing to 2005-06, land occupied below two per cent of total village area are i.e. fourth rank are 148 in 2005-06 and is decreased by six i.e. 142 villages in 2015-16 i.e. 97.37 per cent to 93.42 per cent of total villages respectively. (Table 5, fig. 4).

Conclusion -

The net sown area of the tahsil has increased by three per cent while area under forest and fallow has decreased. The ranking reveals the number of villages has increased that occupy above eighty per cent of total village area. Similarly, second and third rank villages of forest has increased. This may be due to the awareness among people about plantation and forest development. The fallow lands at first rank, villages are declined while second rank has increased by four villages. The people have tried to use the land not available for cultivation for various purpose may change the fallow lands. First, second and third rank villages are increased by two villages and fourth rank that occupied below two per cent are declined from 2005-06 to 2015-16.

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