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**Impact of Environment on Agriculture, Health,  
Water Resources, Social Life & Industrial  
Development**

Chief Editor

Dr. R. V. Bhole

'Ravichandram' Survey No-101/1, Plot  
No-23, Mundada Nagar, Jalgaon

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Dr. M. N. Kolpuke  
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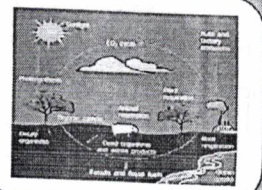
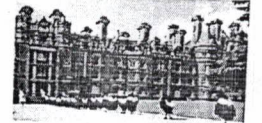
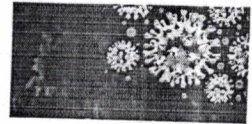
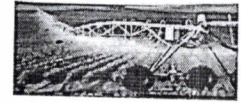
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20 July 2021 Volume-11 Issue-24

On

*Impact of Environment on Agriculture, Health, Water Resources, Social Life & Industrial Development*

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Dr. R. V. Bhole

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Mundada Nagar, Jalgaon (M.S.) 425102

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## General Landuse Pattern in Nanded Taluka : A Case Study

Dr. Sanjiv H. Kolpe

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### Abstract :

Landuse is an important aspect of geographical studies particularly relevant to Agricultural Geography. In the light of physio-socio-economic environment, man determines the uses of land. These are taken into consideration while classifying the land under different categories and subcategories. Utilization of Land is an important predicament for planning process because of the predictability of land resource. The layout or arrangement of the uses of the land is known as land use pattern. The land may be used for agriculture, forest, etc. Land use is determined by many factors like density of population, soil, climate, relief features, technical and socioeconomic factors, length of occupancy, etc which determine the extent to which the resource of the land is utilized. The present research work is an attempt to analyze the general landuse pattern in Nanded Taluka. The study region covers 15830.11 Km<sup>2</sup> and as per 2011 Census, Nanded district. For the administrative purpose, the taluka has been divided into four circles. There are 90 villages in the study region. The existing pattern of landuse is the result of land exploitation within the frame of physical and socio-economic complex and modified by the expansion of irrigation and growth of population. The aim of this paper is to study the General Landuse pattern in Nanded Taluka.

**Key Words:** Land use Pattern, Forest, agricultural and Land Utilization.

### Introduction :

It is important to study the land use pattern to make wise use of resources that are available to us. Thus, this is part of resource planning. Land is a very important natural resource. Land use is an important aspect of geographical studies particularly relevant to agricultural geography (Nagarale and Jadhav, 2012; Shinde, 2012). There is an intimate relationship between land economics and land utilization. The study of land utilization is of immense value in tracing out the past use of land and its future trends (Husain, 1979 and Mohamad, 1977). Land utilization requires proper planning for being finite resource. In this paper, Our purpose is to study the changes in landuse pattern in Nanded district from 2001. There are five main different type of land use: Residential, Agricultural, Recreation, Transportation and Commercial.

### Database and Research Methodology:

Secondary data has been used for the present research paper. It is collected for the period of 2000-2005. This data has been collected from various sources. i.e. District Census Handbook, District Gazetteers, District Socio-economic abstracts etc. Five major landuse categories have been considered for the study of the changes in general landuse pattern. In order to smooth but unusual fluctuation five yearly averages has been calculated for the year 2000-2005. The method used by Jasbir Singh (1974) has been employed for analyzing the changes in land utilization.

### Objectives :

1. To examine the general landuse pattern in Nanded Taluka.
2. To analyses the Non-agricultural landuse, agricultural landuse and ect.
3. To study the Aerial changes in general landuse pattern in Nanded Taluka.

### Study Area :

The name Nanded is derived from its Sanskrit form Nanditat, which was so called probably because it comprised the territory on both the sides of the river nandi. There are several explanations offered from the origin of the name Nanded given to headquarters of the district. Nanded is one of the historical places in Marathwada region. It is popular for sikh Gurudwaras. Nanded Taluka is part of Nanded district in Maharashtra. The present study deals with the area in and around Nanded city. It lies in the Godavari basin in the south-eastern part of the state, in the Deccan plateau. The Taluka of Nanded has between 19° 00' and 19° 18' North latitude and 77° 9' to 77° 24' East longitudes. It has a geographical area of 412.70 Sq. Km. Nanded is one of the fastest growing city of Marathwada regions of Maharashtra. The climate of this Taluka is generally dry except during the southwest monsoon season.

### General Land Utilization of Nanded Taluka:

The change of village wise landuse pattern in Nanded Taluka has been analyzed. Five major categories of land utilization have been considered for the study area.

Table No-1: General Landuse of Nanded Taluka

| Sr. No. | Landuse Types | Area (Hect.) |
|---------|---------------|--------------|
| 1       | Forest        | 4.98         |
| 2       | Irrigated     | 1550.26      |

|   |                                    |                 |
|---|------------------------------------|-----------------|
| 3 | Un-irrigated                       | 5531.03         |
| 4 | Agricultural Land                  | 7081.29         |
| 5 | Culturable Waste                   | 933.49          |
| 6 | Area not available for Cultivation | 729.06          |
| 7 | <b>Total</b>                       | <b>15830.11</b> |

(Source: Census handbook of Nanded District, 2011)

**Area under Forest :**

Area under forest is one of the basic or important land use categories. In 2011, 4.98 Hect Out of the total geographical area it covers 0.031 per cent area was found in Nanded Taluka (Table 1). Environmental studies shows that, it is very less area as per the ecological balance. Area under forest in Nanded Taluka is low. Physiographic, urbanization, and population these 3 factors are much responsible for the low area under forest.

**Area not Available for Cultivation :**

Area not available for cultivation can be divided into two sub categories i.e. the land put to Non-agricultural use, barren and uncultivable land. This shows that this area will no more be available for crop cultivation. In 2001, area under not available for cultivation in the study region was 729.06 hectares. Out of total geographical area, it covers 4.60% in study area (Table and Figure 1). Largest area under not available for cultivation was found in north-eastern site and Where as lowest area was observed in southern area in study region.

**Irrigated Area :**

In general, Nanded Taluka consist of 20% irrigated area present in the northern region of study area. While there is more than 50% irrigated area is present in three villages.

**Un-irrigated Area :**

The un-irrigated area in the study region was 5531.03 hectares. Out of total geographical area it covers, 34.93% in study region and 60% out of total are occurred in northern region of Nanded Taluka.

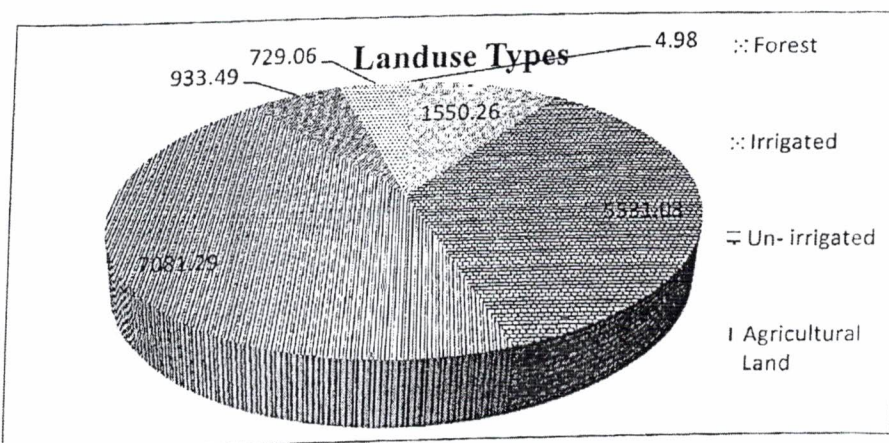
**Agricultural Area :**

In the present study region the occurrence to fertile land is 10 to 30% having maximum village area. While there are 12 villages having 75% of this area.

**Culturable Waste :**

Culturable land comprises land available for cultivation, either taken up or just not taken up once for harvesting, but not harvested over the last five years more than in sequence, including that of the current year. In present study there are maximum villages having 5 to 10% culturable waste. It includes nine villages. General Land use includes features Forest, irrigated, un-irrigated, agricultural land, culturable waste, Area not available for cultivation. The Maximum area covered by agricultural land (7081.29 Ha.) and Minimum area covered by forest (4.98 Ha.)

**Figure No-1: General Landuse of Nanded Taluka**



**Conclusion:**

The proportion of forest area is very low in Nanded Taluka, area under forest has decreased i.e. southern part in study region and it is found that area not available for cultivation is very low in northeast and southwestern part of Taluka. It is observed that with the help of the study made in this region fallow



land was increased in surrounding area of study region. It is also observed that irrigated area was very high in north site in Taluka. Agricultural land will be brought under cultivation. Per captained sown area is decreasing due to the explosion of population. It is possible through adopting new farm technology in the entire study region. To keep the environment balanced it is the need of the time to increase area under forest. It is also essential to bring more land that is fallow under cultivation within the short period and raise agricultural productivity.

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