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# Analysis of tehsil wise agriculture land distribution in Kolhapur District

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**Abstract**---Agriculture is the main primary activity of human being. In Kolhapur district is known as agricultural district, presented most of the agricultural production by cash crop like sugar cane. With cash crop there is most of the food crops also cultivated like jawar, rice, ground nut, soya bean etc. Agricultural land highlighted with variable tehsil to tehsil due to the physiographic condition and water availability. Most of the area under agriculture having in Chandgad tehsil, its need to proper cropping management. At least area under agriculture presented in Gaganbawada tehsil due to the unfavourable physical condition and heavy rainfall.

**Keywords--**-agriculture land, distribution, agricultural production, analysis.

## Introduction

Agriculture is one of the oldest economy activities of man demand for food for the increase in the 21st century which can only be made through increase in production area or in the amount of production per unit land area and crop productivity how your limited available and expansion of other land use type. In India about 70% of the total population is directly or indirectly engaged in agriculture sector. As per population is increasing the pressure of agriculture is also increasing eventually human is taking step towards increasing the crop production. The attempt is made to increase agricultural production as well as the improving the traditional method and using HIV, chemical fertilizer and advance method of irrigation. The land use is also changing from single crop to multi crops in Kolhapur district. It is not only having close relation with physioagro- climatic conditions but also social-economic condition. Attempt is made to understand the condition of agriculture land use of Kolhapur district.

Agriculture is considered as the most important of the all economic activities of man agriculture is related to domesticated plants and animal as activity to satisfy man's need. Nowadays agriculture has become the world's most important industry agriculture means response to it have become cardinal points of research.

## **Study Area**

The Kolhapur district is a part of Deccan plateau, western Maharashtra and extremely southern part of Maharashtra state is Kolhapur district lies between 15 43' north to 17 17' north latitude and 72 40' east to 74 42' east longitude. The Kolhapur district comprises 7620 sq. km area which is 2.5 % of the state. The general height of the district is 1000 mtrs and administratively divided into 12 tahsils supports 38,76,001 population (2011). In general, the physiographic arrangement of the district has Sahyadri hills in a north-south direction, plateau area situated to the east of the Sahvadri hills and eastern plain area and Belgum district of Karnataka state in the south. The climate of Kolhapur is generally temperate. Minimum temperature of the district is 14° c and maximum is 36.9° c. The average annual rainfall is 2063.67 mm. The decadal growth rate (1991-2001) of population is 17.85 per cent. From the Kolhapur district around 70% of total population lives in rural area. The middle rivers and tributariesi. e. Warna, Panchganga, Kumbhi, Kasari, Bhogavati, Tulasi, Dhamani, Hiranyakeshi, Dudhganga, Vedhganga and Ghatprabha all these river flows from the west to east towards the Bay of Bengal. In the study area also found variety of utilization of land due to the physical setting of the district and socio-economic aspects also.

## Aims and Objectives

The objective of this study is to analyse tehsil wise agricultural land use pattern in study area.

## **Data Base**

For the study both primary and secondary data are used. Kolhapur gazetteer, toposheet, satellite images, GPS readings are used for the base mapping of the study region. The agricultural land-use study of Kolhapur district has conducted with the help of secondary data which is satellite imageries of 2018. Along with this, some primary data are used for analysis.

## Methodology

A detailed study of agricultural land-use is conducted to understand the transformations in surface area in the study region. The collected tehsil wise agricultural data is tabulated, arranged in proper format and statistical methods, map are applied to obtain the specific results.

#### Discussion

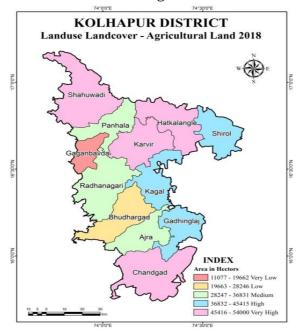
Table ·	Kolhanur	District:	Tehsil	wise	Agricultural	Land	Distribution-	2018
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Rank	Tehsil	Total Area	Percentage
1	Chandgad	53999.84	11.97
2	Hatkanangle	49917.95	11.06
3	Shahuwadi	48941.59	10.85
4	Karvir	46260.76	10.25
5	Kagal	44249.13	9.81
6	Gadhinglaj	39674.57	8.79
7	Shirol	39208.08	8.69
8	Radhanagri	32931.51	7.3
9	Ajara	31092.36	6.89
10	Panhala	28520.51	6.32
11	Bhudargad	25177.59	5.58
12	Gaganbawada	11077.33	2.45
	Total Area	451051.22	100%

Source- Satellite Image 2018

For agricultural land distribution we have created five categories for understanding the real condition and status of Agricultural land cover in tehsils.

- 1. Very Low proportional region (11077-19662 sq. hector): In this category included the very lowest proportions tehsils. In this region included only one tehsil i.e. Gaganbawada tehsil (9552 hect.) due to hilly and forested land the formation of drainage is very low.
- 2. Low proportion region (19662-28246 sq. hector):
  In this category included the lowest proportions tehsils. In this region included only one tehsil i.e. Bhudargad (20822.60 hect.) tehsil due to hilly and forested land.
- 3. Medium Proportion Region (28246-36831 sq. hector): In this category there is high proportion is included. Ajara, Radhanagri and Shahuwadi tehsil are included in this region. There are medium type of Agricultural land is found. In this region there are agricultural region is between 45 % to 55 %.
- 4. High proportion region (36831-44415 sq. hector):
  In this category there is high proportion of agricultural land is included.
  Gadhinglaj, Kagal and Shirol tehsil are included in this region. There are medium type of agricultural land is found. There are region under agricultural land is above 80 percent.



Map: Kolhapur District: Tehsil wise Agricultural Land Distribution-2018

Source- Satellite Image 2018

5. Very high proportion region (45415-54000 sq. hector):
In this category there is very high proportion of agricultural land is included. Chandgad, Karvir, Hatkanagle and Shahuwadi tehsil are included in this region. There are very high region under agricultural land is found due to fertile soil, flat terrain, heavy rainfall and water availability.

### Conclusion

It can be observed that there is agricultural area is maximum found in Shahuwadi, Chandgad, Karvir and Hatkanagle tehsils. Highest proportion of agricultural land presented in these tehsils due to suitable physiographic condition and sufficient rain fall. Gadhinglaj, Kagal and Shirol tehsils highlighted with high proportion of agricultural land due to plain region and water availability for over year. Gaganbawada and Bhudargad tehsils presented with very less area of agricultural land due to the unfavourable physiographic condition (Most of the area covered by hills), heavy rainfall. There is need of proper utilization, management for agricultural land resources. There is a need of super facility market for agricultural production in the high and very high proportional region. For the food security, it will be need protect agricultural land from settlements area and road network development in this area.

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