

# Epitome : International Journal of Multidisciplinary Research

ISSN: 2395-6968

# AGRICULTURAL LAND USE AND CROP PRODUCTION IN SOEGAON TALUKA, DIST. AURANGABAD (MS), INDIA: A GEOGRAPHICAL STUDY



Dr. Bhore Chatraguna Udhav Assistant Professor & Head, Dept. of Geography Sant Dnyaneshwar Mahavidhyalaya, Soegaon Dist. Aurangabad (Maharashtra) Email : <u>bhorechatragun@gmail.com</u>

# Abstract

Soegaon is a hilly Taluka in Aurangabad district completely situated in the lap of the range of Ajintha valleys. There is no city or any industrial area in this taluka. It has hundred percent rural population. Many of the people here have Agriculture as a main occupation. The total geographical area of this taluka is 61694 hector. Out of this, the area occupied by the forest is 12511 hector whereas the area under cultivation is 44747 hector. While comparing it with the total geographical area, 20.38 percent Area comes under forest and 72.53 percept area under cultivation.

In the cultivation area, the main crops yielded are cereals crops like *wheat, jawar, bajara,* and *maize*. Among Pulses crops, *mug, udid, tur, gram* etc are yielded. In *oil seeds, Groundnut, sunflower, soybean* crops are taken. The main Cash crop in Soegaon taluka is cotton, which is

cultivated in more than half area of the total area of cultivation. The second number crop in Taluka is maize whereas the third one is Soybean.

#### **Keywords**

Land use, Agricultural production, Cereals, Pulses, Oil seeds, Cropping pattern.

### **Research Paper**

#### Introduction

Agriculture is an ancient and fundamental economic occupation of man. In the human evolution, it has its utmost significance. It is the backbone of economics of many countries in the world although the present era is industrial. The lives of 2/3 human beings of the total population of the world depends on the agricultural occupation nowadays.

India's 65-70% of the population relies on agricultural occupation. Agriculture is the main support of Indian economics. Out of the total national production of the country, approximately 25% production is yielded from agriculture. Therefore, Indian agriculture is the main economic process in the nation.

Food grains required for man and raw materials required for industry are produced from agriculture. At present, the purpose behind agricultural occupation is changing. In agricultural occupation, there is the use of modern technical resources; however, innovative facilities of irrigation in agriculture have been used. Due to this, the nature of agriculture has become mostly scientific. As a result, it affects the production of land, the method of cropping and their production. The present research paper is an attempt to study the land use, and the crop production in Soegaon taluka.

#### Area of study

For the present research paper, Soegaon taluka in Aurangabad district is selected. Due to the Ajanta caves, the recognition of Soegaon taluka is internationally known as a tourist taluka. Here, thousands of tourists from the country and abroad visit every year.

Geographical area of Soegaon taluka is located between  $20^{0} 22^{\circ}$  North to  $20^{0}$ -40' North latitude and 75° 10' east to 76° 04' East longitude. The length of the East West of taluka is 135 km. whereas its width is 10-15 km. The range of Ajanta valleys emerges from the East to the West direction of the southern region of taluka. At the summit of hills, the height from the ocean is 300-400 meter and the average height is 150 meter on the ground. The total area of the Soegaon taluka comes under Tapi River. Due to the ranges of valleys of the extreme slope

and most of the land is made up of igneous rock, all the rainwater flows away and therefore here is the scarcity of water.

Here, the temperature is heated and dry. The maximum temperature is  $40^{0}$ - $45^{0}$  c whereas the minimum temperature is up to  $9^{0}$  c. It continues to rain for 45-65 days in this taluka in the month of June and October. The total annual rain here is 813.2 mm. Soegaon taluka is a hilly taluka. The total geographical area of taluka is 61694 hector. Out of the total area, 44747 areas are completely under cultivation whereas 12511 hector areas are occupied by forest.



In this taluka, Soegaon, Banoti and Sawlatbar are the major revenue division. It has 76 villages as human habitation in totality. As per the population census 2011, the total population of taluka is 133087.

#### **Objectives of research**

In the present research paper, the following three objectives have been studied.

• To study the land use in taluka

- To study many areas under agricultural crops in taluka,
- To study the production of agricultural crops in taluka

#### Method of research

For this present research paper, the necessary information required is secondary data. It has been collected from socio-economic survey report of Aurangabad district and Aurangabad Gazetteer. On the basis of the information received, land use in Soegaon taluka, the areas under various crops and the crops production have been shown along with tables, divided circles, maps and figures.

#### **Subject explanation**

#### I. Land use in Soegaon Taluka :

• There is no industrial habitation anywhere or any city. Therefore, the most of the land used for agriculture. To study the land use in Soegaon taluka, the following details are considered in the year 2014-15

Details	Areas	Ratio of Total Geographical
	(in	Area (in %)
	Hector)	
Area under forest	12511	20.38
Area, not available for agriculture	4046	6.55
(Use of barren area and area not		
under cultivation)		
Barren land and other area	00	00
Area not under cultivation except	390	0.63
barren land		
The area under cultivation	44747	72.53
Total Geographical Area	61694	100%
	Area under forest Area, not available for agriculture (Use of barren area and area not under cultivation) Barren land and other area Area not under cultivation except barren land The area under cultivation	(in Hector)Area under forest12511Area, not available for agriculture (Use of barren area and area not under cultivation)4046Barren land and other area00Area not under cultivation except barren land390barren land44747

#### Table No. I: The Land use in Soegaon Taluka (2014-15)



According to the observations of Table No I, the total geographical area in Soegaon taluka is 61694 hector. Out of that 12511 under the area of forest, the area which is not available for agriculture, barren land without agriculture and the area which is cultivation-worthy is 4046 hector. The area, which is not under cultivation except the barren land, is 390 hector. The area for cultivation is 44747 hector. In comparison with the total geographical area of taluka, the forest occupied area is 20.38%. The area, which is not available for agriculture, is 6.55%, the area under no cultivation is except barren land is 0.63%. However, the area only under cultivation is 72.53%. It is observed from all findings that according to environmental rules of Soegaon taluka, there is no industrial habitation or cities. Due to this, most of the land use is under agriculture.

#### II. Areas under various crops in Soegaon Taluka:

As per the observation of Table No. III, the Cereals crops like *wheat, Rabbi, jawar, kharip jawar, bajara, maize* etc crops are taken in the year 2014-15 and the area under *Cereals* crops is 10972 hector. The area under *Cereals* crops is 24.57% of total area of cultivation. In *Pulses crops, tur, mug, udid, gram* is mainly taken and the area under these crops is 4080 hector.

The area under *Pulses* crops is 9.11% out of the total area of the cultivation. In oil seeds, *Groundnuts, sunflower, Soybean* crops are taken. The area under these oil crops is 2684 hector. It is 5.99 out of the total area of the cultivation. In oil seeds, *Soybean* is the most important crop. It is 5.46% out of the total area of the cultivation. Cotton is the main crop in

soegaon taluka. The area under cotton crops is 24910 Hector in the year 2014 -15. It is 55.56% out of the total area of cultivation. It clearly means that more than half of the total area under cultivation is occupied with cotton crops.

The area under bananas and other fruits crops cultivation is 747 hector whereas the area under vegetable crops cultivation is 765 hector. Their ratio of area under total cultivation each is 1.66% and 1.70%.

Sr.no	Crops group	Name of Crops
1	Cereals	Wheat, Bajra, Jowar, Maize, etc
2	Pulses	Tur, Mug, Udid, Math, Gram, etc
3	Oil seeds	Groundnuts, Sunflower, Soyabean, etc
4	Cash crops	Cotton
5	Fruit crops	Banana, mango, Papaya, Sweet lime, etc.
6	Vegetable Crops	Chilly, Brinjal, Tomato, Onion, Garlic, Cabbage, Methi,

#### Table No II : Cropping pattern in Soegaon taluka (2014-15)

Table No III : Areas under various crops in hector in Soegaon taluka (2014-15)

Name of	Area under	Percentage	Name of	Area under	Percentage
the crops	cultivation	of Area	the crops	cultivation	of Area
	(hector)	under total		(hector)	under total
		cultivation			cultivation
Wheat	1519	3.39	Tura	1035	2.31
Jowar	1671	3.73	Muga	867	1.93
Bajra	1301	2.90	Udid	826	1.84
Maize	5972	13.34	Gram	1352	3.02
Total	10971	24.51	Total	4080	9.11
Cereals			Pulses		
crops			crops		
Groundnuts	213	0.47	Cotton	24910	55.66
Sunflower	13	0.02	Banana and	747	1.66
			other fruits		
			crops		
Soybean	2447	5.46	Vegetables	765	1.70
Total oil	2684	5.99			
seeds					



Source: Socio-economic survey report of Aurangabad district 2014-15

#### **III.** The Production of Various Crops in Soegaon Taluka :

As per the observation of Table No. IV, in Soegaon Taluka the total production of Cereals crops is 8612 Metric tons during the year 2014-15. In it, the maximum production of wheat crops is 1947 metric tons. In Pulses crop production mainly like *tur*, *mug*, *udid and gram* etc are taken. In the year 2014-15, the total production of these crops has been 1114 metric tons.

Name of the	Production in metric	Name of the	Production in Metric
crops	tons	crops	tons
Wheat	1947	Tur	351
Jowar	1550	Mug	186
Bajra	532	Udid	199
Maize	4425	Gram	1114
Total Cereals	8612	Total Pulses	1850
crops		crops	
Groundnuts	56	Cotton	9741
Sunflower	04		
Soybean	1131		
Total oil seeds	1193		

Table No IV	Production of	of various	crops in Soegaor	taluka (2014-15)
-------------	---------------	------------	------------------	------------------

Source: Socio- economic scenario report of Aurangabad district(2014-16)







#### Graph No II. Production of Pulses crops in metric Metric tons in Soegaon taluka (2014-15)



#### Graph No III. Production of oil seeds in metric Metric tons in Soegaon taluka (2014-15)



#### Graph No. IV. Production of various crops in metric tons in Soegaon taluka (2014-15)

In oil crops, the cultivation of main crops like Groundnuts, sunflower, Soybean etc. was done in the year 2014-2015. The total production of these oil seed crops has been 1193 ton. In oil seed crops, the production of Soybean was 1131 metric tons at max.

In the year 2014-2015 in taluka, the cultivation of cotton was maximum on areas and its production was 9741 metric tons.

#### **Conclusions :**

- I. 20.38% Area is under forest in Soegaon Taluka out of the total geographical area which needs to be 33% as per the environmental perspectives.
- II. 72.53% Land use is under cultivation out of the total geographical area.
- III. 24.57% of Cereals crops have been cultivated on areas out of the area under cultivation. The area of maize crops is the highest one in the crops of total Cereals crops. Maize holds the position of the second number crop in Soegaon.
- IV. The area under oil seeds is 5.46% out the total cultivation worth area. The area of Soybean is the maximum one in the crops of oil seeds. It is 5.99% out of the total area. Soybean is the third one crop in taluka.
- V. Cotton is the first one cash crop in Soegaon taluka. Its cultivation is 55.66 % out of the area of total cultivation.

## **REFERENCES**

- Arjun H. Nanaware (2014) : Transformation of General Landuse in Solapur District, Maharashtra Bhugolshastra Sanshodhan Patrika. Vol. XXXI, No. 2, P.P. 31to 36.
- Dhule Zilhyatil Pik Kendrikarnachya Badaltya Swarupacha Bhaugolik Abhyas (1998) : Maharashtra Bugolshastra Sanshodhan Patrika Khanda, XII, Ank I, P. No. 27 to 35.
- Tupe Babasaheb K., Dr. Mhaske P. H. & Other Agricultural Landuse and Crop Pattern in Ranata Tahsil of Ahmednagar District in Maharashtra State (2010) : Maharashtra Bhugolshastra Sanshodhan Patrika, Vol. XXVII No. 1 P.P. 30 to 37.
- Bharat Patil & Kisan Nagare (2014) : The Study of Changing Land Use & Changing Pattern in Nashik District. Maharashtra Bhugolshastra Sanshodhan Patrika, Vol. XXXI, No. 2. P.P. 28.30.
- Jyoti Rokade & Other (2015) : Dynamics of Land Cover / Land Use Change in Salekasa Tahsil in Gondia District. The Deccan Geographer, Vol. 53, No. 2, December-2015, P.P. 31 to 40.
- Mahendra S. Korade & Rakesh Palivwal (2014) : Integrated Landuse / Landcover Analysis of Surat District Gujarat by Using Digital Classification Technique. The Deccan Geographer, Vol. 52, No. 52, No. 1, Jun. 2014, P.P. 9 to 16.