

## Banana Cultivation in Jalgaon District: A Geographical Study

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### Abstract

Banana is one of the important crops in tropical countries like India. It is because of the suitable geographical conditions, the district of Jalgaon, in north Maharashtra is emerged as one of the leading producer of this crop. With this view, based on both primary and secondary data, the present study is focused on the understanding of geographical conditions in the district. Considering the constraints in banana cultivation, some suggestions are also given in view of strengthening the activity of cultivating this crop.

**KEYWORDS:** District, Banana, Cultivation, Geography.

### Introduction

India is the leading producer of Banana. This crop is an important fruit crop of many tropical and subtropical regions of India. The suitability of geographical conditions for cultivating this crop is the main reason behind this. Jalgaon district of Maharashtra is one of the major banana growing districts of the country. Banana, with its excellent properties, the plants of it are used for decoration, leaves are useful for packaging of food stuff. Bananas have universal appeal as a fresh food while plantains for wholesome food to millions of people in the countries like Puerto Rico and Tanzania (Valsalkumari, 2005). The area under Banana cultivation in Jalgaon district is 51,004 hectare (DESPD, Govt. MS, 2012). With this background, an attempt has been made in this paper to understand the geographical determinants of Jalgaon district for Banana cultivation.

### Objectives

The paper attempts to understand the existing geographical conditions of Jalgaon district for banana cultivation.

### Data base and Methodology

The present study is based on the primary data obtained through questionnaires and interviews of farmers while, the secondary data is collected from various departments of the government of Maharashtra.

### Study Area

Jalgaon district is located in north Maharashtra (Fig. 1). It extends from 20<sup>0</sup> 15' N to 21<sup>0</sup> 15' N latitudes and 74<sup>0</sup> 55' E to 76<sup>0</sup> 28' E longitudes. It covers an area of 11,765 Sq. Kms. which consisting of 3.82% of the total geographical area of the state. Administratively it has 15 Tahsils, viz., Chopda, Yawal, Raver, Muktainagar, Bodvad, Bhusawal, Jalgaon, Erandol, Dharangaon, Amalner, Parola, Bhadgaon, Chalisgaon, Pachora and Jamner. The city of Jalgaon is the headquarter of the district.



## **Geographical conditions**

### **Relief**

There are three major physiographic divisions of the district. In the north, there is a Satpuda mountain range stretching east-west on the northern boundary of the district. To the south of this is the Tapi river valley. The Ajanta range is located in the southern part of the district.

### **Drainage**

The area of the district is drained by river Tapi and its tributaries. Tapi flows from west to east. Purna and Girna from south while, Bhokar, Suki, Morna, Harki, Manki and Gul are its tributaries in the north. Most of the northern tributaries originate in the Satpuda range.

### **Climate**

The district experiences hot summers and general dryness throughout the year, except during the period of southwest monsoon season. The mean minimum and maximum temperature of the district is 10.8<sup>0</sup> C and 42.2<sup>0</sup> C respectively. Temperature rises steadily from the month of March. May is the hottest month of the year. Rainfall in the district ranges between 600 and 800 cm. The district receives about 90% of its rainfall during the period of southwest monsoon season.

### **Soils**

The northern part of the district, particularly the foot hill area of the Satpuda is rich in soils derived from basaltic rock. They are classified into deep black, medium black, loamy and sandy soils. In northern part of the district i.e. in Satpuda ranges there are some forest and mountain type of soils. Forest soils are dark brown in color. In Tapi valley, the soils are of alluvial type.

### **Irrigation**

The sources of Irrigation in Jalgaon district are mainly influenced by physiographic and climatic conditions. Both surface and ground water irrigation facilities are available here. Irrigation systems are of three types. These are well, canal and lift irrigation. Dug and Bore-wells are the major source of irrigation. Distribution, depth and capacity of wells to irrigate the fields vary from region to region. It is surprising to note that, in Raver tehsil the depth of wells is more than 600 feet, while in Chalisgaon and Bhadgaon tehsils it is found less than 150 feet. Capacity of wells to irrigate the fields is also vary from place to place. Hatnoor, Suki, Whagur, Anjani, Bori, Agnawati and Jamda canals play an important role in irrigating the crops. Lift is the putting of pumps at a height close to the river bank that taps water from the river. Lift irrigation system is mainly found in Raver and Bhusawal tehsils where there is a backwater of Hatnoor dam.

### **Transportation**

The transportation network in Jalgaon district is well developed. Both national and state highways and railway pass through the district. The east- west running Surat-Nagpur national highway number 6 has its 140 km of the part in this district. Bhusawal is a major railway junction connected to the major cities of the country viz. Mumbai, Delhi, Kolkata, Nagpur, Allahabad, Chennai etc. Thus, there is a strong connectivity of this area with different parts of the country.

### **Constraints in Banana production**

The major constraints pertaining to banana cultivation in Jalgaon district are found as:

1. It is because of the increase in area under irrigation, growing population and expansion of industrial zones, there is a heavy stress on water resources in the region. Thus, the ground water levels are declining consistently.
2. Farmers those who are growing banana are belong to middle income group.
3. Potential of post harvesting banana processing for value addition is not fully utilized.
4. Cost of banana transportation to various parts of the country and abroad is fluctuating.
5. Adequate storage facilities for banana are not available in the study area
6. An insufficient electricity supply and frequent power cuts leads to irregular schedule of irrigation
7. Railway wagons made available for banana transportation are not air conditioned.
8. The mode of air ways is not available for banana transportation in the study area.
9. Demand for banana changes from time to time.
10. Advanced irrigational techniques like drip irrigation are not accepted widely.

### **Conclusion**

It may be noted that, the geographical conditions are suitable for banana cultivation in the study area and the district has a good position in the field of banana cultivation. However, the potential of banana cultivation of the district has not utilized fully. There are certain constraints in this regard. It demands a vital planning strategy.

### **Suggestions**

1. Research must be directed towards the development of low water demanding, short duration and high yielding varieties of banana.
2. Use of drip irrigation must be made compulsory.
3. There should be a continuous power supply to the agricultural sector.
4. Rates of transportation must be stabilized.
5. Storehouses for banana should be made available
6. A practice for ground water recharge must be adopted to improve upon the ground water levels.
7. Food processing industries, particularly using banana as a raw material must be established.
8. The minimum support price for banana must be declared in advance and followed strictly

### **References**

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