

## CONCENTRATION OF FRUIT FARMING IN SOLAPUR DISTRICT WITH SPECIAL REFERENCE TO GRAPEVINE CULTIVATION

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### **Abstract:**

*Solapur district is called the Granary of Jawar. But fruit farming sector of this district has witnessed significant change in the last two decades. Because the employment guarantee scheme of the state of Maharashtra was promoted fruit farming in the district. At the beginning of 1980 there was very small area (2025 hectares) which was concentrated the various fruit crops in this district. The concentration is due to the various natural factors as well as human factors also.*

*Grapevine cultivation is also on the rise in tremendously and concentrated in particular area of the district. Pandharpur, N. Solapur, Barshi etc. tahsils are well concentrated the grapevine. Recently Solapur district was sharing about 5% of the state total area of this fruits cultivation.*

*Fruit farming incidental to provision of drought prone area in Solapur district. In the present research paper the major objective is to understand the concentration of Grapevine cultivation. For this investigation (2004-05) year is selected.*

### **Key words :**

*Granary, Concentrations, EGS, Sharing, Human factors, Investigation.*

### **Introduction :**

Indian rural economy is depended upon the agriculture and related Occupation of agricultural. The horticulture is creating more share of economy in India. Fruits and vegetables play an important role in balancing human diet from nutrition point of view.

Solapur is an important fruit growing district in Maharashtra. The fruit farming sector of this district has witness at significant change in the last two decades. In this region grape, pomegranate, ber, mango etc. fruits are growing from last two decades.

Grape vine is very sensitive climatic fruit crops, hence this fruit is concentrated in particular area only.

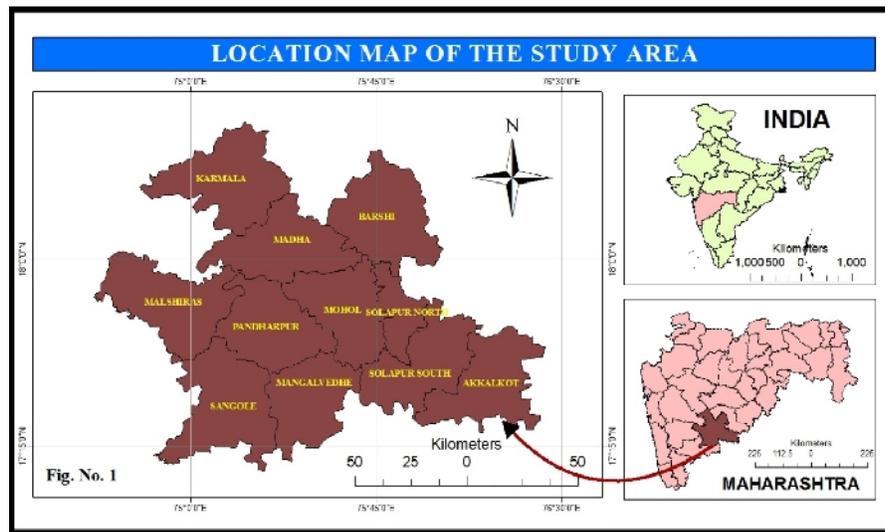
### **Objectives :**

This major object of this paper is to analyze the concentration of fruit crops. The basic objective of the present paper is to study the concentration of grapevine fruit crops. The object of the study is also to showing the changes of the major region and grape varieties.

### **Study Area :**

The present study deals with the Solapur district which is bounded by 17<sup>0</sup>5' N. Latitudes to 18<sup>0</sup>32' North Latitudes and 74<sup>0</sup>42' east to 76<sup>0</sup>15' East longitudes. The total geographical area of the district is 14878 sq.km. divided in to eleven tahsils. All over Solapur district is very flat in to shape and famous for fertile black soil.

The district of Solapur lies entirely in the Bhima-Sina-Man river basin. which is located in rain shadow area of Southern Maharashtra. It gets rainfall mostly from retreating monsoon. Climate of the district is favorable for grape cultivation. In view of this, the study of Solapur district has been undertaken for the research paper.



#### Database :

Present research paper is mostly relies on the secondary data collected through Agricultural Department and District Statistical Report of the Solapur seasonal report of Maharashtra.

#### Methodology :

For the present investigation, tahsilwise grape area is collected the Bhatia's location quotient methods has been used in the study. The various figures and maps are used for comparative study of spatial distribution. And certain cartographic techniques have been applied to represent the data as per requirements.

#### Discussion :

The social and economical status of Indian farmers increased after growing grape and other fruit crops, which is cash crop. The cropping pattern and crop concentration reveals the variation in the intensity of crop in the given region at a point of time (Jadhav 1989). Crop concentration refers to the density or

Aerial occupancy is determined largely by the terrain and climate including temperature, humidity etc. a geographical factors and also human factors. The general concentration of an enterprise can be quantified with the help of the location quotient or coefficient of location.

The concentration of grapevine cultivation in Solapur district is subject to spatial variation, temporal variation and temporal changes. The tahsil is the unit selected for analyzing spatial changes. Bhatia's location quotient method has been used in the study. So the following statistical procedures is used to compute the index of concentration for each village.

$$\text{Formula: IC} = \frac{\text{EC}}{\text{En}} \div \frac{\text{TC}}{\text{Tn}}$$

Where: IC = Index of crop concentration

EC = Area under grapevine cultivation in the tahsil.

En = Total cropped area in the tahsil.

Tc = Total area under grapevine in the district.

Tn = Total cropped area in the district.

<b>Index Value</b>	<b>Concentration</b>
0.01 - 0.1	Very very low concentration
0.1 - 0.5	Very low concentration
0.5 - 1.0	Low concentration
1 – 2	Moderate concentration
2 – 3	High concentration
3 – 4	Very high concentration

**Table No. 1**  
**Concentration Index Value of the area under grapevine cultivation in Solapur district (2004-05)**

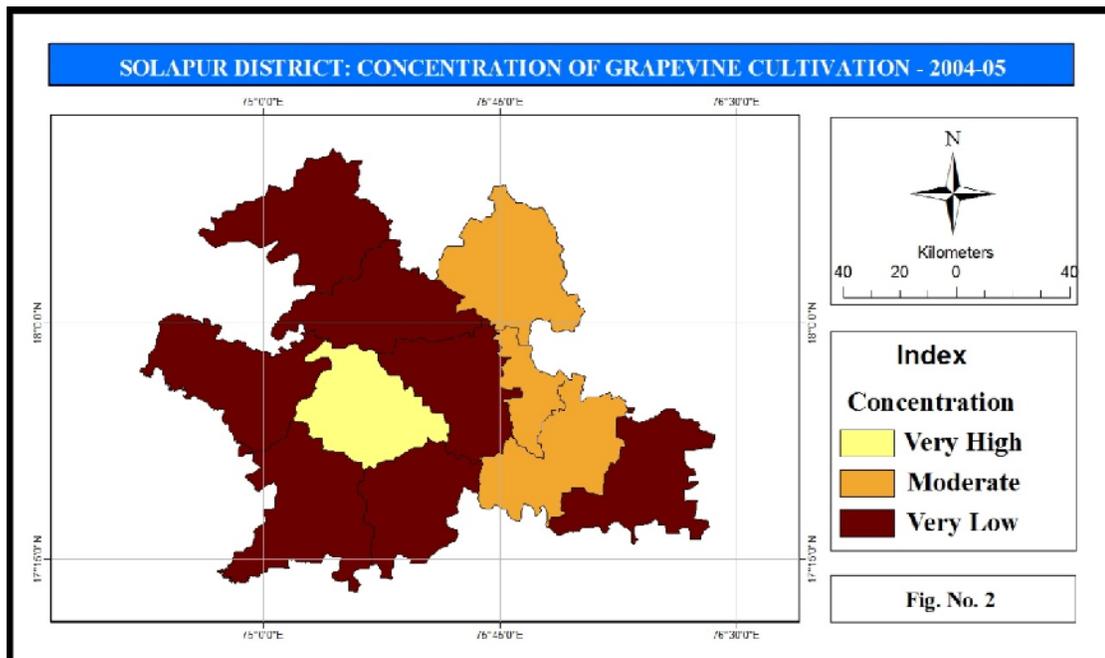
Tahsil	Index Value	Tahsil	Index Value
N. Solapur	1.95	Mangalwedha	0.28
S. Solapur	1.29	Mohol	0.23
Pandharpur	5.08	Madha	0.24
Malshiras	0.16	Akkalkot	0.16
Sangola	0.23		

*Source: Compiled by the Researcher.*

Bhatia's location quotient is in the form of concentration index (Table No.1). The index and concentration value ratio are also given to determine concentration index. By using the equation tahsilwise index values are calculated at the district level in the study region.

**a) Very high concentration:**

Pandharpur tahsil is very high in grapevine cultivation concentrated. Stable agro climatic condition is the main factor. In this tahsil all varieties of grapes are cultivated as a commercial basis. The quality of grapes in this tahsil is high and the per hectare production is also high. Raisin is the main object of this grape growing region.



**b) Moderate Concentration :**

Moderate concentration of grapevine is calculated in North Solapur, South Solapur and Barshi tahsil. Grapevine cultivation is first started in North Solapur tahsil and in this tahsil many new varieties were planted by grape growers in their own vineyards viz. Sonaka, Sharad Seedless etc.

**c) Very Low Concentration:**

Table No. 1 and Fig. No. 2 reveal that grapevine is planted with very low concentration in Sangola, Mangalwedha, Malshiras, Madha, Karmala and Akkalkot tahsils. In Sangola tahsil a pomegranate is major fruit crop concentration its outcome is higher than grape because climatic factors are make suitable for it as a result of which it is low concentrated.

**Conclusion:**

The growth rate of grape area is flexible from region to region but recently it is observed that concentration of grapevine cultivation is likely to fixed because new technology of water irrigation and so all. After the development of commercial varieties and demand from a national and also abroad. This concentration is likely to fixed in this region. But very low concentration tahsils are also changing with remarkable growth ratio in other tahsils from 2004 to 2005.

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