

## FRUITS CROPS CROPPING PATTERN IN NASHIK DISTRICT: SPECIAL REFERENCE MANGO AND GRAPES

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### ABSTRACT:

Nashik district is famous in whole Maharashtra for grape cultivation In this present paper an attempt has been made to analyze the General land use and fruits crops pattern in Nashik District Special reference grapes and banana. The study is based on secondary source of data obtained from the district statistical handbook. Agricultural land use pattern is always influenced by physical, weathersocio-economic and technological factors. In this paper a study has been done to find out the General land land-use pattern and grapes and banana fruit crop present scenario in Nashik District for the year 2011-12 to 2022-23 Based on the information in the research essay, the total mango area in Nashik district is 4079 in the year 2011-12. 28 hectares i.e. 5.4 percent and in the year 2022-23 the mango fruit crop area increased to 60.8 percent. Similarly, when the grape crop was studied in the year 2011-12, the total grape area in Nashik district was 55750 hectares (73.8) while the grape crop decreased to 34.2 percent in the year 2022-23.

**KEY WORDS:** General land Use, Agriculture, Pattern, Cropping Pattern.

### INTRODUCTION:

Agriculture is the backbone of Indian economy. It is the primary activity along with dairy farming, poultry has been considered as a supplementary occupation in India. The physical, socio- economic factors influence on the agriculture and agricultural production of any area of the world. Agricultural land use is the basic structural unit of natural resources. Land is an important factor in agricultural sector and the yield of agricultural crops mainly depends upon fertility of land for raising different crops. The cropping pattern is the central element of agricultural study. The appearance or pattern of crops depends on the choice of crops by the farmer. at the same time, the competition with other crops grown in that region also affects the cropping pattern. the specific purpose for which the crop is to be grown is also considered while selecting the crops. . the General land land-use pattern and grapes and banana fruit crop present scenario in Nashik District for the year 2011-12 to 2022-23 Based on the information in the research essay, the total mango area in Nashik district is 4079 in the year 2011-12. 28 hectares i.e. 5.4 percent and in the year 2022-23 the mango fruit crop area increased to 60.8 percent. Similarly, when the grape crop was studied in the year 2011-12, the total grape area in Nashik district was 55750 hectares (73.8) while the grape crop decreased to 34.2 percent in the year 2022-23. The Area of Nasik District is 15539 sq.kms. There are four subdivisions Nasik, Kalwan, Niphad and Malegaon. Total Population in Nasik is 61,07187. There are total 15 Talukas Nasik, Igatpuri, Peth, Dindori, Niphad, Devla, Trimbakeshwar, Sinner, Yeola, Malegaon, Nandgaon, Chandwad, Kalwan, Surgana, Baglan”.

### OBJECTIVES:

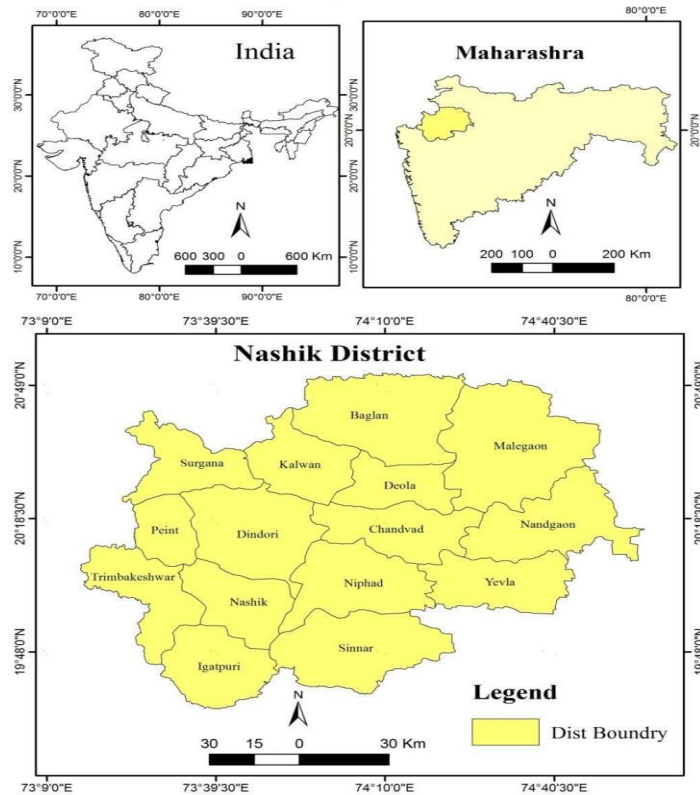
1. To Study the geographical setting of the study Region.
2. To assess the fruit cropping pattern in Nashik district.

### STUDY AREA:

The Nashik district is located North– Western part of Maharashtra state. The area is extended in between 18°33' North to 20°53' North latitude and 73° 16 'East to 75° 16' East longitude at north west part of the Maharashtra state (fig:1.1). It has total fifteen Tehsils and covers 15530 sq. km. geographical area, which is about 5.04 percent of the total area of the state. The average height of the district is 556 meters from the mean sea level.

The western part of the district is represented by hilly rugged and dissected terrain of the Western Ghats with peaks like Brahmagiri in Trimbakeshwar and Saptshrungi in Kalwan taluka. A low lying plain marks the eastern southern parts. The eastern part of the district, which lies on the Deccan plateau, is open, fertile and well cultivated. The easterly flowing Godavari and Girna rivers with their tributaries constitute the main drainage system in this district.

**Study Area**



**METHODOLOGY:**

The study is based on secondary data and field observations. The secondary data is obtained from the district socio economic review (2022-23) and district census hand books in Nashik district also referred to collected information. Topographical maps and survey of India sheets 1:50000 scales are used for physiographical inventory. For cartography Arc Gis 10.2 is used. the cropping pattern for the following formula:

$$Cp = \frac{Ca}{N} * 100$$

- Cp = Cropping Pattern
- Ca = Area under Crop ‘a’ in the component areal unit
- N = Total cropped area in the component areal unit.

**Table no: 1 Total Fruits Crops in Study Area**

Sr.no	Tehsils	G. Area (sq.km)	Total cultivation Area (h)	T.F.C.A 2011-12	T.F.C.A 2022-23
1	Surgana	827.5	30254	0.6	7.2
2	Kalvan	886.7	47917	0.2	0.2
3	Dewala	370.5	35707	0.2	1.8
4	Baglan	846.6	74801	2.5	15.9
5	Malegaon	1937.7	93191	0.3	0.4
6	Nandgaon	1091.7	13281	0.2	0.8
7	Chandwad	985	55160	5.9	12
8	Dindori	1323.2	49459	0	34.6
9	Peth	563.3	21040	2.7	5.8
10	Trambak	9087.3	27394	1.1	0

11	Nashik	921.3	38857	51.2	19.4
12	Igatpuri	1114.3	14918	9.2	2.2
13	Sinnar	983.6	74786	56.3	5.1
14	Niphad	1051	82170	19.3	27.3
15	Yewala	1060.4	85607	0.5	1.4
	District	14854.5	744542	11.6	10.1

Source: Socio-Economic survey Nashik District 2011-12 to 2022-23

According to table no: 1 when the Total fruits crop area of the study area is studied. It is observed that out of the total cultivated area in the district 744542 hecter. In 2011-12, 11.6% of the total area was under fruits crop cultivation and in 2022-23, this area is found to decrease 10.1%. tehsil wise maximum fruit cultivation area in 2011-12 was sinnar tehsil 56.3% and lowest area was respectively devala 0.2 % kalvan 0.2%,and nadgaon 0.2 %. Also the highest fruit cultivated area is found in dindori tehsil and lowest area is kalvan tehsil also 0.2 % in 2022-23 respectively.

During the observation period area from 2011-12 to 2022-23, there has been such an -1.5% in the total fruits cultivated area in study region

Graph No. 1

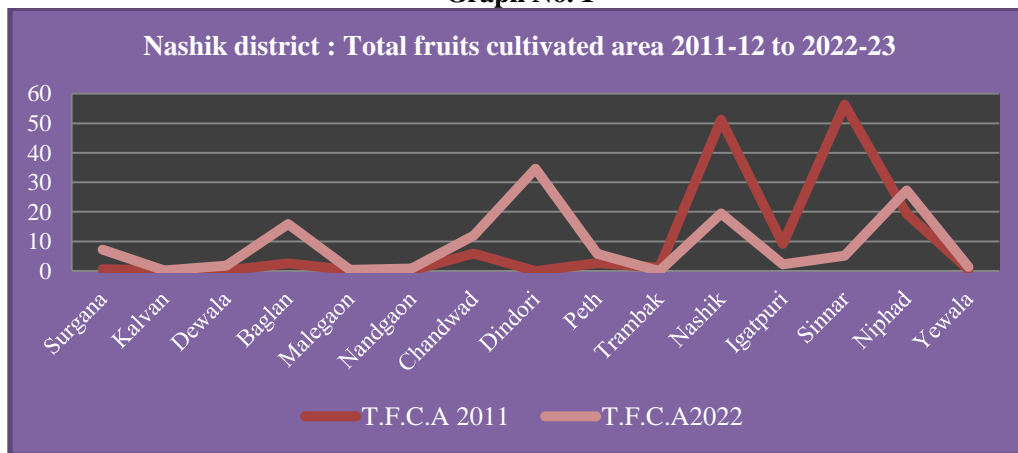


Table no: 2 Tehsil wise Mango and Grapes fruit cultivation area in Nashik district: 2011-12

Sr.no	Tehsils	Total Fruits area (h)	Mango	Grapes
1	Surgana	2173.64	90.9	0.0
2	Kalvan	106.49	85.5	6.2
3	Dewala	633.92	0.6	9.1
4	Baglan	11924.5	0.5	15.6
5	Malegaon	371.2	4.3	7.0
6	Nandgaon	112	31.3	10.7
7	Chandwad	6631.03	0.2	97.5
8	Dindori	17110	0.0	0.0
9	Peth	1221	97.9	0.0
10	Trambak	0	0.0	0.0
11	Nashik	7533	3.4	87.0
12	Igatpuri	324.81	93.0	1.2
13	Sinnar	3788.3	2.2	24.0
14	Niphad	22430.45	0.1	98.2
15	Yewala	1181.95	0.0	64.7
	District	75542.29	5.4	73.8

Source: Socio-Economic survey Nashik District 2011

In the year 2011-12, when studying mango and grape crops in Nashik district, it is found that out of the total fruit crop area of 75542.29 ha, mango crop area (4079 ha) was 5.4 percent while grape crop area was

55750 ha 73. 8 percent is observed. tehsil-wise study of grape and mango crop area shows that in the year 2011-12, the highest mango crop area is 97.9 percent in Peth taluka followed by Igatpuri 93 percent, Surgana 90.9 percent, and Kalwan taluka 85.5 percent. Also tehsil wise lowest mango crop area is 0 percent in Trambak and Yewala talukas respectively. Also, tehsil-wise maximum grape crop area is found in Niphad taluka with 98.2 percent and below that in Chandwad taluka with 97.5 percent. Whereas according to the year 2011-12 the lowest grape crop area is found in Surgana, Dindori, Peth and Trambak 0 percent.

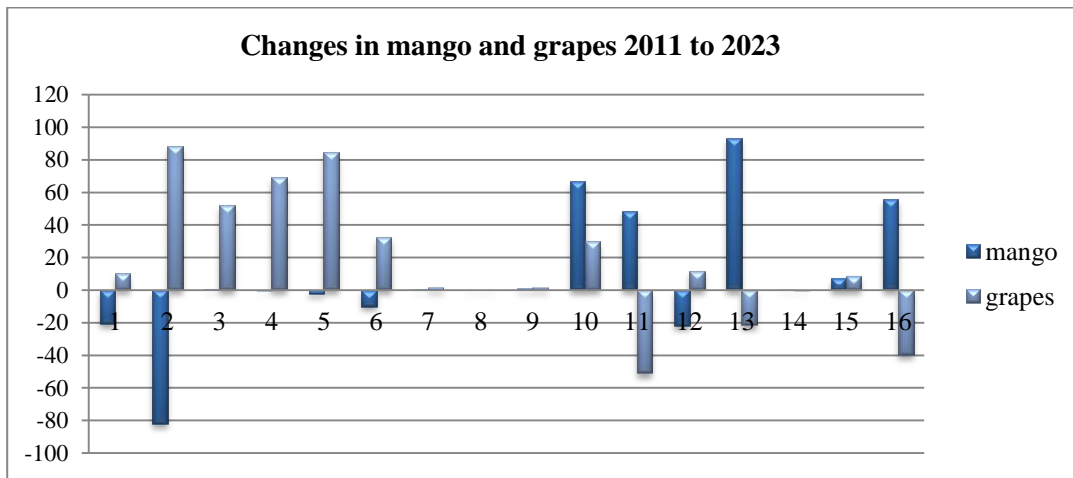
**Table No: 3 Tehsil wise fruit cultivation area in nashik district: 2022-23**

Sr. no	Tehsils	Total Fruits area (h)	Mango	Grapes
1	Surgana	169	70.4	10.1
2	Kalvan	108	3.7	94.4
3	Dewala	87	1.1	60.9
4	Baglan	1834	0.2	84.5
5	Malegaon	251	2	91.6
6	Nandgaon	28	21.4	42.9
7	Chandwad	3238	0.6	99
8	Dindori	0	0	0
9	Peth	560	98.8	1.3
10	Trambak	304	66.8	29.6
11	Nashik	19913	52	35.9
12	Igatpuri	1374	70.9	12.8
13	Sinnar	42122	95.3	2.4
14	Niphad	15891	0.2	98.1
15	Yewala	427	7.3	73.3
	District	86294	60.8	34.2

**Source: Socio-Economic servey Nashik District 23**

In the year 2022-23, when studying mango and grape crops in Nashik district, it is found that out of the total fruit crop area of 75542.29 ha, mango crop area (52466 ha) was 60.8 percent while grape crop area was 29512 ha 34.2 percent is observed. tehsil-wise study of grape and mango crop area shows that in the year 2022-23, the highest mango crop area is 98.8percent in Peth taluka followed by Igatpuri 70.9 percent, sinnar 95.3 percent,Surgana 70.4 percent. Also tehsil wise lowest mango crop area is 0 percent in Dindori respectively. Also, tehsil-wise maximum grape crop area is found in Chandwad taluka with 99 percent. Whereas according to the year 2022-23 the lowest grape crop area is found in Dindori,Trambak 0 percent.

**Graph No. 2  
Tehsil wise Changes in Mango and Grapes Fruits Crop Cultivated Area.**



While studying the mango and grape crops in the study area, the highest increase in mango crop during the period 2011-12 to 2022-23 was observed in Sinnar taluka. 1 percent and the highest decrease has been observed in Kalwan taluka -81.8 percent. While during the period 2011-12 to 2022-23, the total increase in grape crop area in the study area is 88.2 percent in Kalwan taluka and the lowest decrease in grape crop area is found in Nashik taluka.

#### CONCLUSION:

Total fruits crop area of the study area is studied. It is observed that out of the total cultivated area in the district 744542 hecter. In 2011-12, 11.6% of the total area was under fruits crop cultivation and in 2022-23, this area is found to decrease 10.1%.

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