

## Original Research Article

# Socio Economic Characteristics of Selected Grape Growers in Sangli District

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## ABSTRACT

Grape (*Vitis vinifera*) is one of the most commercially important fruit crop in the world. The present study was conducted to assess study of Socio Economic Characteristics of selected grape Growers in Sangli district. Multistage sampling method was adopted. Two tehsils of Sangli district namely Tasgaon and Miraj selected purposively. Primary data was collected from ninety six grape growers through pre-tested interview schedules for the year 2019-20. It was observed that average age of the grape growers was 43.56 years. All the farmers were literate whereas majority of the farmers were educated up to higher secondary and graduated level i.e. 38.54 per cent and 34.37 per cent respectively. In respect of occupational level 86.45 per cent grape growers having agriculture as a main occupation. Average size of family was 5.17 which mean family household composed of around 5 members. Out of the total family size 1.91 persons working on a farm. Average numbers of livestock was 2.81. The average land holding was 1.61 hectare whereas majority i.e. 82.29 per cent farmers have small landing up to two hectare. Average area under grape cultivation was 1.19 hectare. Average experience of grape cultivation was 12.76 years. The average gross cropped area under different crops was 2.15 hectare. Grape occupied major share in gross cropped area followed by *Kharif* crops. Groundnut was major crop in *Kharif* season and sorghum in *Rabi* season. Sugarcane was the major cash crop grown in study reason. The cropping intensity was 133.54 per cent.

### Keywords

Grape growers,  
Sangli, Socio  
economic,  
Cropping pattern

## Introduction

Grape (*Vitis vinifera*) is one of the most commercially important fruit crop in the world. It belonged to family Vitiaceae and native to America near the Capsaicin Sea. It is one of the delicious, refreshing and nourishing fruit. It is good source of minerals like calcium, phosphorus and iron, besides being rich in vitamins like B1 and B2. It is consumed as a fresh table purpose fruit and also used for manufacturing of processed food product. There are 16 by-products made from grapes like raisin, grape juice, squash,

syrup, jam, jelly, vinegar, wine, pickles, chocolates, tartaric acid, oil, cattle feed, tannin etc. China, Italy, USA, France, Spain, Turkey are major grape producing countries in the world. India ranks seventh in production and third in table grape production in the world. (Source: 2019 Statistical report on world Viticulture).

In India total area under grape cultivation was 139 thousand hectare and production was 2958.0 thousand metric tonnes during the year 2018-19. Productivity of India was 21.0 metric tonnes per hectare.(Source:

www.Indiastat.gov.in) The pioneer grape producing states are namely Maharashtra, Karnataka, Mizoram, Tamil Nadu and Andhra Pradesh which jointly contribute more than 90 per cent of the total area and production of grapes in India. In terms of area and production Maharashtra leads among states of country. During 2017-18, area under grape cultivation in Maharashtra was 105.50 thousand hectare and production was 2286.44 thousand metric tonnes. Maharashtra contributes about 78.3 per cent production of the country. Productivity of Maharashtra was 21.67 metric tonnes per hectare which was higher as compared to India. (Source: Horticultural statistics at a glance 2018) The main grape growing pockets in Maharashtra are Nashik, Sangli, Solapur, Pune, Osmanabad. In area and production Nashik ranks first with 56.27 thousand hectare area. Sangli district is having second position with respect to area and production. In Sangli district total area under grape cultivation was 26106.71 hectare in the year 2019-20. (Source: District statistical office, Sangli). India is the second largest producer of fruits and vegetables. The different types of fruits are exported to the outside world. During 2019-20 grape occupies the premier position in exports with 193.69 thousand metric tonnes of fresh grape and it gives precious foreign exchange to the country which values ₹ 217686.82 lakh. Major importing countries of grape from India are Netherland, Russia, U.K., Bangladesh, Germany, United Arab Emirates, Saudi Arab, Hong Kong etc.

### **Objective**

To study the socio-economic characteristics of grape growers

### **Materials and Methods**

In order to fulfill the objectives of the study, Multistage sampling method was adopted in the selection of district, tehsils, villages and

grape growers. In first stage, Sangli district was purposively selected as district ranks second highest in area under grape cultivation in Maharashtra. In second stage, two tehsils namely Tasgaon and Miraj were selected purposively as the tehsils have highest acreages under grape cultivation. In third stage, six villages from each tehsils were selected purposely on the basis of maximum area and production. In last stage of sampling design, eight grape growers were selected randomly from each selected villages. In all 96 grape growers were selected for the present study. The data covering complete agricultural year 2019-20 were collected through personal interviews by the survey method with the help of pretested questionnaire. The collected data were analyzed with different analytical tools. The objective, to study the socio economic characteristics of grape growers, was achieved by tabular frequency and percentage analysis.

### **Results and Discussions**

The socio-economic characteristics of respondent grape growers such as age, education level, occupation, family size etc. have a great influence on adoption of improved farm practices as well as production and are hence discussed below. Socio-economic characteristics of selected grape growers were estimated and presented in Table 1 and 2.

#### **Age**

Age is decision making factor accounted for adoption of innovation. The table reveals that average age of the respondent grape growers was 43.56 years. The young age farmers (up to 35 years) was 19.79 per cent then the middle age of farmers (36-50 years) was 54.16 per cent and old age farmers (above 50 years) was 26.04 per cent.

### **Education level**

Education is key parameter of every farm family as educated farmers are early innovators and adopter. Educational level of growers has presented in table 1 and 2.

From the table, it was observed that all the farmers were literate i.e. literacy rate was 100 per cent. 6.25 per cent of the farmers were educated up to primary level, 20.83 per cent of farmers educated up to secondary level, 38.54 per cent farmers were educated up to higher secondary and 34.37 per cent farmers were graduated and post graduate. As per quantum score analysis, farmer had 3.02 quantum score.

### **Occupational level**

In respect of occupational level of respondent grape growers, most of the farmers were engaged in agriculture as a whole occupation i.e. 86.45 per cent followed by 9.37 per cent farmers were engaged in agriculture partially with business and 4.16 per cent farmers were engaged in agriculture partially with service.

### **Family size**

Family size is the factor affecting production through supply of labour and consumption. Average size of family was 5.17 means family household composed of around 5 members.

The average number male, female and children in household were 2.03, 1.94 and 1.2 respectively. It was observed that the male contributed the largest share to the family size which was 39.26 per cent followed by 37.52 per cent female and 23.21 per cent children. Out of the total family size 1.91 persons working on a farm of which 67 per cent were male and 33 per cent were female.

### **Land holding**

The average land holding of respondent grape growers was 1.61 hectare. Whereas 82.29 per cent farmers have small land holding up to two hectare, 15.62 per cent farmers have medium land holding ranging from two to four hectare and 2.08 per cent farmers have large land holding above four hectare. Average area under grape cultivation of respondent grape growers was 1.19 hectare. Average experience of grape cultivation was 12.76 years.

### **Livestock**

It was found that almost all grape growers had livestock within their farm. Respondent grape growers had 2.81 average numbers of livestock of which 24.55, 47.68 and 27.40 per cent cow, buffalo and goat respectively.

### **Cropping pattern of selected grape growers**

Cropping pattern indicates proportion of area allocated by farmer to different crops. It is also an indicator of the economic condition of selected farm families. Table 3 represents the information on an area under different crops on the farms during reference year 2019-20 of the selected grape growers.

Table 3 reveals that the grape was major crop of selected farmers that it occupy 1.19 ha area. The percentage area under grape crop to gross cropped area was 55.34 per cent. The area under *Kharif* crop was 0.38 ha which was 17.67 per cent of gross cropped area. In *Kharif* season groundnut is major crop which occupies 6.97 per cent of gross cropped area followed by soybean, maize, green gram and vegetable which were 4.65 per cent, 2.32 per cent, 1.86 per cent and 1.86 per cent to the gross cropped area, respectively. The area under *Rabi* crop was 0.35 ha which was

16.27 per cent of gross cropped area. In *Rabi* season the sorghum was major crop followed by gram, maize, wheat and vegetable. The percentage of sorghum crop to gross cropped area was 6.51 per cent while in case of gram, maize, wheat and vegetable it was 3.72 per cent, 2.32 per cent, 1.86 per cent and 1.86 per cent respectively. Overall summer season crops covers 5.11 per cent of gross cropped area. In summer season majority of farmers grows sorghum and vegetables if they have sufficient water for irrigation. Sugarcane being the important cash crops in the study area, constituted near about 5.58 per cent of the gross cropped area.

The results revealed that, grape occupied major share in gross cropped area. The share of area under grape cultivation was 55.34 per cent followed by *Kharif* crops 17.67 per cent, *Rabi* crops 16.27 per cent, annual crop i.e. sugarcane 5.58 per cent and summer crops 5.11 per cent to the total gross cropped area which was 2.15 hectare. It was also observed that, the share of net sown area and double cropped area to the gross cropped area was 74.88 per cent and 25.12 per cent respectively. The cropping intensity was 133.54 per cent.

**Table.1** Frequency distribution of socio-economic characteristics of respondent grape grower (N=96)

Sr. No.	Particulars	Frequency	Per cent
<b>A</b>	<b>Age (years)</b>		
	Young ( Up to 35)	19	19.79
	Middle ( 36-50)	52	54.16
	Old ( Above 50)	25	26.04
<b>B</b>	<b>Education level</b>		
	Illiterate	0	0
	Primary	6	6.25
	Secondary	20	20.83
	Higher secondary	37	38.54
	College (UG/PG)	33	34.37
	Literacy rate	96	100
<b>C</b>	<b>Occupation</b>		
	Agriculture	83	86.45
	Agriculture + Business	9	9.37
	Agriculture + Services	4	4.16
<b>D</b>	<b>Land holding (ha)</b>		
	Small (Up to 2 ha)	79	82.29
	Medium (2-4 ha)	15	15.62
	Large (Above 4 ha)	2	2.08

(Figures in the parentheses are percentage to the total sample size)

**Table.2** Socio-economic status of respondent grape growers

(N=96)

Sr. No.	Particulars	Average	Per cent
1	Age (years)	43.56	–
2	Educational level in 5 quantum score (Illiterate, primary, secondary, higher secondary and college)	3.02	–
3	Occupation level in 3 quantum score (Agriculture/Business/Services)	1.17	–
4	Family Size (No.)		
	a. Male	2.03	39.26
	b. Female	1.94	37.52
	c. Children	1.2	23.21
	Subtotal (a + b + c)	5.17	100
5	Person working on farm (No.)		
	a. Male	1.28	67.01
	b. Female	0.63	32.98
	Subtotal (a + b)	1.91	100
6	Land Holding (ha.)	1.61	–
7	Area under grape (ha.)	1.19	–
8	Experience of grape cultivation (years)	12.76	–
9	Livestock (No.)		
	a. Cow	0.69	24.55
	b. Buffalo	1.34	47.68
	c. Goat	0.77	27.40
	Subtotal (a + b + c)	2.81	100

(Figures in the parentheses are percentage to the total)

**Table.3** Average cropping pattern of respondent grape growers

Sr. No.	Particulars	Area (ha)	Percent
<b>A</b>	<b><i>Kharif</i></b>		
1)	Soybean	0.1	4.65
2)	Groundnut	0.15	6.97
3)	Green gram	0.04	1.86
4)	Maize	0.05	2.32
5)	Vegetable	0.04	1.86
	Sub total	0.38	17.67
<b>B</b>	<b><i>Rabi</i></b>		
1)	Gram	0.08	3.72
2)	Sorghum	0.14	6.51
3)	Wheat	0.04	1.86
4)	Rabi Maize	0.05	2.32
5)	Vegetable	0.04	1.86
	Sub total	0.35	16.27
<b>C</b>	<b>Summer</b>		
1)	Sorghum	0.08	3.72
2)	Vegetable	0.03	1.39
	Sub total	0.11	5.11
<b>D</b>	<b>Perennials</b>		
1)	Grape	1.19	55.34
<b>E</b>	<b>Annual</b>		
1)	Sugarcane	0.12	5.58
	<b>Gross cropped area</b>	<b>2.15</b>	100
	<b>Double cropped area</b>	<b>0.54</b>	25.12
	<b>Net cultivated area</b>	<b>1.61</b>	74.88
	<b>Cropping Pattern</b>	<b>133.54</b>	

(Percentage with respect to gross cropped area)

In conclusion, the above discussion throws light on the fact that the average age of the

grape growers was 43.56 years. All the farmers were literate whereas majority of the

farmers were educated up to higher secondary and graduated level i.e. 38.54 per cent and 34.37 per cent respectively. In respect of occupational level 86.45 per cent grape growers having agriculture as a main occupation. Average size of family was 5.17 which mean family household composed of around 5 members. Out of the total family size 1.91 persons working on a farm. Average numbers of livestock was 2.81. The average land holding was 1.61 hectare whereas majority i.e. 82.29 per cent farmers have small landing up to two hectare. Average area under grape cultivation was 1.19 hectare. Average experience of grape cultivation was 12.76 years. The average gross cropped area under different crops was 2.15 hectare. Grape occupied major share in gross cropped area followed by *Kharif* crops. Groundnut was major crop in *Kharif* season and sorghum in *Rabi* season. Sugarcane was the major cash crop grown in study reason. The cropping intensity was 133.54 per cent.

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