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A study on characteristics of orange growers in Vidarbha region of Maharashtra

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Abstract

The present research study focuses on the personal, situational and psychological characteristics of orange growers in Vidarbha region of Maharashtra. The study was conducted in Amravati and Nagpur district of Maharashtra with exploratory design of the social research. A sample of 240 orange orchards owner having productive orange trees were the respondents for the study. The present study revealed that majority of the orange growers belonged to middle age group (44.17%), having the agriculture as a main occupation (73.33%), small size of orchard (67.50%) and having high experience in orange cultivation. The study indicated that majority of orange growers sold their oranges to the pre-harvest contractor (87.50%).

Keywords: situational characteristics, orange growers, pre-harvest contractor

1. Introduction

Maharashtra is the one of the largest producer of orange in India. Vidarbha region is known to the entire world for its awesome quality of oranges. It is a glorious natural gift to Vidarbha region of Maharashtra covering district Amravati, Nagpur, Wardha, Yavatmal and Akola. But the Amravati and Nagpur district contributes about 84 percent of total area under orange orchards in Maharashtra state. The area, production and yield per hectare of orange in vidarbha during the year 2017-18 were 103956 hectares, 103956 tonnes and 7.80 tonnes/ha. Orange has been assessed as one of the important future commercial fruits. It provides high return per unit area: hence, it helpful to uplift socio-economic status of orange growers. Socio-personal profile determines orange grower's accessibility to the agricultural resources, resource management behaviour, livelihood security etc. Hence the present study was conducted to investigate the personal, situational, communicational and psychological characteristics of orange growers.

2. Materials and Method

The exploratory design of social research was used in present investigation. The present study was purposively carried out in Amravati and Nagpur districts which were selected on the basis of higher area under orange cultivation in Vidarbha region of Maharashtra. On the basis of maximum area under orange cultivation, two taluka namely Morshi and Warud from Amravati district and Katol and Narkhed from Nagpur district were selected purposively. Then 6 villages were selected from each taluka having larger area under orange cultivation and 10 orange growers from each selected village were selected by random sampling method. Thus 240 orange growers constituted the sample size for the present study. Data were collected by personally interviewing the respondents with help of pre-tested and structured interview schedule. The data collected were tabulated and the statistical tools namely frequency, percentage, correlation and multiple regression analysis were employed for interpretation of the findings.

3. Results and Discussion

The findings pertaining to the distribution of orange growers on personal, situational, and psychological characteristics are presented below.

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3.1 Personal characteristics

Table 1: Distribution of the orange growers according to their personal characteristics (N=240)

Sr. No.	Personal characteristics	Categories	Frequency	Percentage
1	Age	Young	29	12.08
		Middle	106	44.17
		Old	105	43.75
2	Education	Illiterate	0	00.00
		Primary school	14	05.83
		Middle school	25	10.42
		High school	54	22.50
		Higher secondary school	75	31.25
		College/University education	72	30.00
3	Occupation	Agriculture+ Labour	07	02.92
		Agriculture	176	73.33
		Agriculture + Subsidiary occupation	18	07.50
		Agriculture + Business	23	09.58
		Agriculture + Service	16	06.67
4	Land holding	Marginal	40	16.67
		Small	53	22.08
		Semi-medium	71	29.58
		Medium	61	25.42
		Large	15	06.25
5	Annual income	Low	164	68.33
		Medium	48	20.00
		High	28	11.67

3.1.1 Age

Age is normally an indicator of the maturity, experience, depth of knowledge and physical strength/fitness of the members. The frequency and percentage distribution of orange growers according to their age was presented in Table

1, it is observed that, 44.17 percent of the orange growers were of middle age group followed by 43.75 per cent orange growers were old age and remaining 12.08 per cent orange growers were of young age groups.

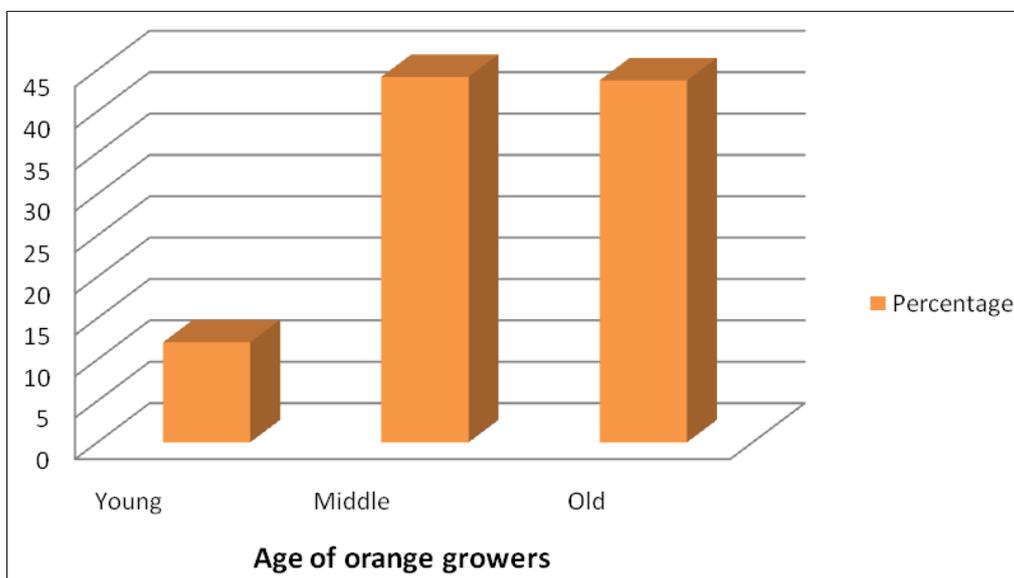


Fig 1: Distribution of orange growers according to their age.

Thus, it indicates that, majority of the orange growers (44.17%) were in middle age group that considered to be actively working age group. This brings an implication on the roles and responsibilities in the society in terms of orange production and marketing throughout the year.

Dhole (2006), Tekale and Gavit (2013) reported the identical finding as observed in the present research.

3.1.2 Education

Education is an important factor, which can positively influence the knowledge, utilization, farm skill of orange

growers and efficient management of resources. It also widens the vision and thereby the scope of thinking and practice. This literacy level of the orange growers has an influence on development of orange industry. The data in Table 1 revealed that, nearly one third (31.25%) of the orange growers were educated up to higher secondary school followed by 30.00, 22.50, 10.42 and 05.83 per cent who had passed college, high school, middle school and primary school education respectively. It is surprising to know that only 0.00 per cent orange growers were illiterate.

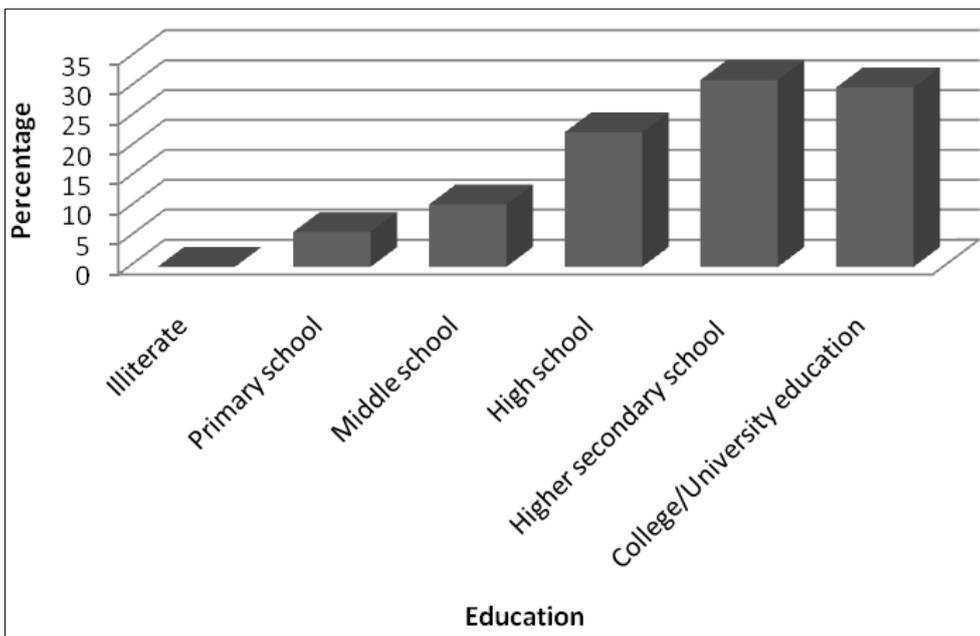


Fig 2: Distribution of orange growers according to their education.

Thus, it indicates that, most of the orange growers were educated. This education level of orange growers determines individual ability to make rational decisions which has influence in better managing their resources for production and marketing of oranges.

The above findings are in conformity with the observation of previous researchers Kadu (2016)^[8] and Dhumal (2017)^[7].

3.1.3 Occupation

Occupation is the main source of earning for their livelihood and fulfills necessary requirements. The frequency and percentage distribution of orange growers according to their occupation were presented in Table 1. It was observed that, three-fourth(73.33%) of the orange growers were having the agriculture as a main occupation followed by 09.58 per cent orange growers were having agriculture + business and 07.33 per cent orange growers were having agriculture + subsidiary occupation. Only 06.67 per cent orange growers doing agriculture as well as service and 02.92 per cent orange growers having agriculture + labour as a occupation.

The above picture concluded that, nearly three-fourth of orange growers solely depend on agriculture as their means of livelihood.

The present findings are in consonance with findings reported by Wankhede *et al.* (2017)^[15] and Aske (2010)^[2].

3.1.4 Land holding

Land holding was assumed as an important variable that influences resource management behaviour of orange growers. The frequency and percentage distribution according to their land holding for orange growers presented in Table 1, it is revealed that, 29.58 per cent of orange growers were semi-medium farmers, one fourth (25.42%) orange growers were medium farmers, 22.08 per cent orange growers were small farmers and 16.67 per cent orange growers were marginal farmers. Only few (06.25%) per cent orange growers were large farmer.

Baghel (2013)^[4], Anbhule (2016)^[1] finding are in agreements with the finding of researcher.

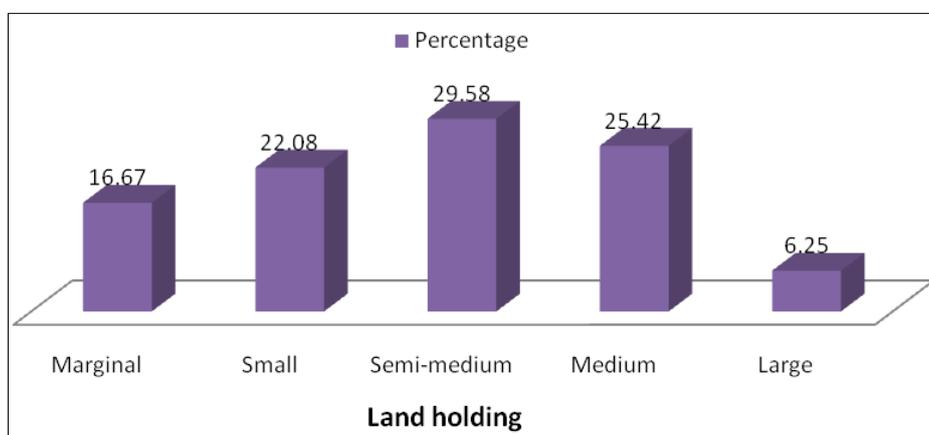


Fig 4: Distribution of orange growers according to their land holding.

3.1.5 Annual income

Annual income is an indication of the economic position of an individual. The sum of total earnings from all the sources in

particular year is termed as annual income. From the Table 1, it is revealed that, majority (68.33%) of the orange growers were having low annual income followed by followed by

20.00 per cent orange growers were having medium annual income and 11.67 per cent orange growers were having high annual income.

Majority of the orange growers (68.33%) were having low annual income. This might be due to the fact that most of them were having farming as their main source of income.

They have small land holding, whereas the productivity is not high and marketing facilities are also inadequate.

The above findings are in consonance with findings reported by Vinay Kumar (2009)^[14].

3.2 Situational characteristics

Table 2: Distribution of the orange growers according to their situational characteristics (N=240)

Sr. No.	Situational characteristics	Categories	Frequency	Percentage
1	Age of orchard	Up to 12 years	107	44.58
		13 to 19 years	123	51.25
		Above 19 years	10	04.17
2	Size of orchard	Small	162	67.50
		Medium	38	15.83
		Large	40	16.67
3	Experience in orange cultivation	Low	45	18.75
		Medium	79	32.92
		High	116	48.33
4	Method of irrigation	Flooding	03	01.25
		Double ring	54	22.50
		Furrow irrigation	47	19.58
		Drip irrigation	136	56.67
5	Mode of marketing	Sale to retailer	00	0.00
		Auction of orchard to pre-harvest contractor	210	87.50
		Sale through middle men	30	12.50
		Sale to wholesaler	00	0.00
		Sale to long distance market	00	0.00
	Sale to processing industry	00	0.00	

3.2.1 Age of orchard

The production and profitability of an orchard depends on its age. The economically production of orchard, differs as per age of orchard, hence, it was considered in the present study. Age of orchard is operationally defined as the numbers of years completed from plantation of orange orchards. Numbers of years completed since from plantation of the orange orchards was studied and result has been presented in Table 2. The data from Table 2 revealed that nearly half (51.25%) of the orange growers having orange trees between 13 to 19 years old followed by 44.58 per cent each orange growers having upto 12 years old orchards and only 4.17 per cent orange growers were having above 19 years old orchards. Hence, it is concluded that majority of the orange growers having productive orange plants in their orchards.

The finding of Kinkedikar (2001)^[10] and Wankhede (2016) are in agreements with the above findings.

3.2.2 Size of orchard

The size of orchard was assumed as an important variable that influences resource management behaviour of orange growers. The number of bearing orange plants in the orchard possessed by an individual respondent was considered as the

size of orchard. It is noticed from Table 2 that majority of orange growers (67.50%) were having small size of orchard whereas 16.67 per cent orange growers were having big size of orchard and 15.83 percent of orange growers were having medium size of orchards.

The finding of the study is nearly similar to the findings of Kadu (2016)^[8].

3.2.3 Experience in orange cultivation

Experience orange growers have the knowledge and confidence for cultivation of orange crop. Experience helps an individual to think in a better way and makes a person more mature to take right decision. Table 2 revealed that, nearly half (48.33%) of the orange growers were having high experience in orange cultivation followed by 32.92 per cent orange growers were having medium experience in orange cultivation and 18.75 per cent were having low experience in orange cultivation.

It is concluded that, nearly half of the orange growers were having high experience in orange cultivation. The finding of the study concluded that, the respondent farmers were experienced orange growers.

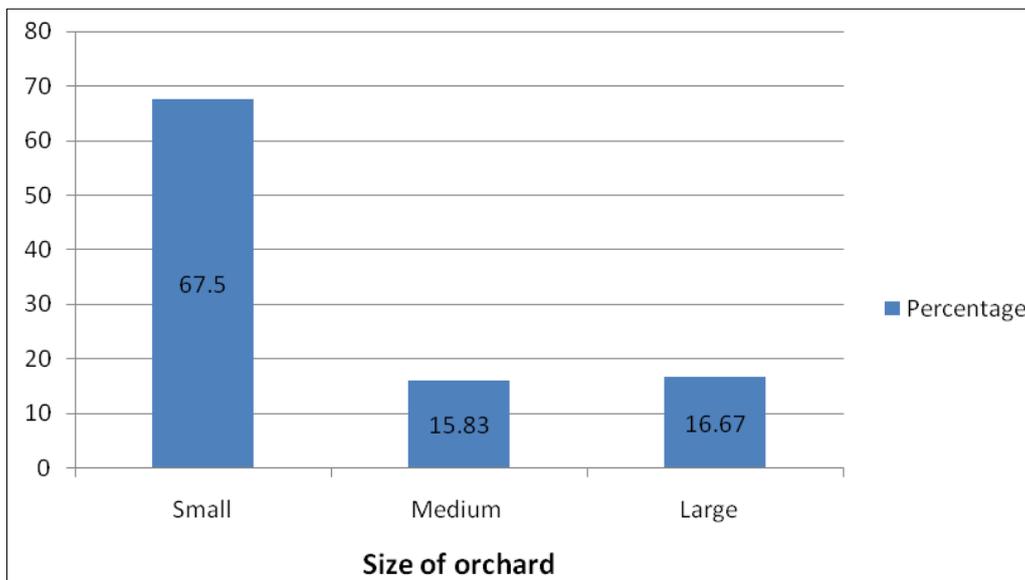


Fig 5: Distribution of orange growers according to size of orchard.

3.2.4 Method of irrigation

The method of irrigation used by orange grower to irrigate the orange orchard is critical importance to increase the water use efficiency, labour economy, etc. Hence, method of irrigation was considered in the present study. It is seen from Table 2 that maximum 56.67 per cent of orange growers have used drip as a method of irrigation followed by 22.50 per cent orange growers used double ring as a method of irrigation and 19.58 percent orange growers prefer furrow method of irrigation. Only 01.25 per cent orange growers using flooding method of irrigation.

The present findings are in consonance with findings reported by Wankhede *et al.* (2017)^[15] and Kadu (2016)^[8].

3.2.5 Mode of marketing

Mode of marketing refers to the method of sale of orange produced used by individual orange grower. The mode of marketing plays vital role for selling oranges. The fruit

marketing in India is highly competitive, but the revenue received from selling of oranges depends on the mode of marketing used by orange grower. Hence, mode of marketing was considered in the present study. Table 2 revealed that, majority (87.50%) of orange growers sold their produce to the pre-harvest contractor followed by 12.50 per cent orange growers sold the produce through middle man (in the APMC). Orange growers did not sell his produce to retailer, wholesaler, long distance market and processing industries. Thus, it indicates that, most commonly followed methods of sale of oranges in the study area were selling oranges to the pre-harvest contractor.

Hence, it is concluded that the marketing of oranges in the study area has mostly been under monopoly of the pre-harvest contractors.

3.3 Psychological characteristics

Table 3: Distribution of the orange growers according to their psychological characteristics (N=240)

Sr. No.	Psychological characteristics	Categories	Frequency	Percentage
1	Innovativeness	Low	49	20.42
		Medium	107	44.58
		High	84	35.00
		Total	240	100.00
2	Economic motivation	Low	44	18.33
		Medium	126	52.50
		High	70	29.17
		Total	240	100.00
3	Risk orientation	Low	49	20.42
		Medium	115	47.92
		High	76	31.66
		Total	240	100.00

3.3.1 Innovativeness

Innovativeness is the skill of orange growers which makes him to apply his own ideas in orange orchard management. It could be seen from the Table 3 that, higher percentage (44.58%) of orange growers belonged to medium level of

innovativeness, followed by high level of innovativeness to the extent of 35.00 per cent. The 20.42 per cent of orange growers belonged to low level of innovativeness. It could be concluded that the majority of orange growers had medium level of innovativeness.

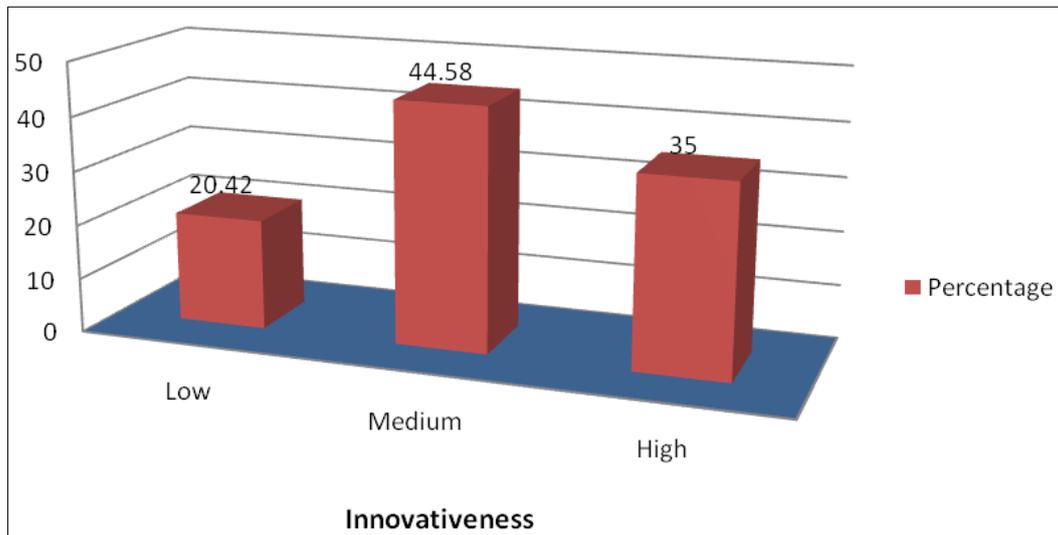


Fig 6: Distribution of orange growers according to their innovativeness.

The finding of present study is similar with findings reported by the researcher Deshmukh (2014) ^[5] and Kadu (2016) ^[8] who reported that majority of respondents had medium level of innovativeness.

3.3.2 Economic Motivation

Economic motivation refers to the extent to which individual is oriented towards achievement of maximum economic ends

such as maximization of farm profit. Economic motivation plays an important role in farming economy and the overall farming behaviour of the farmers. It could be seen from the Table 3 that, more than half i.e. 52.50 per cent of orange growers belonged to medium level of economic motivation, followed by high level of economic motivation to the extent of 29.17 per cent. The 18.33 per cent of orange growers belonged to low level of economic motivation.

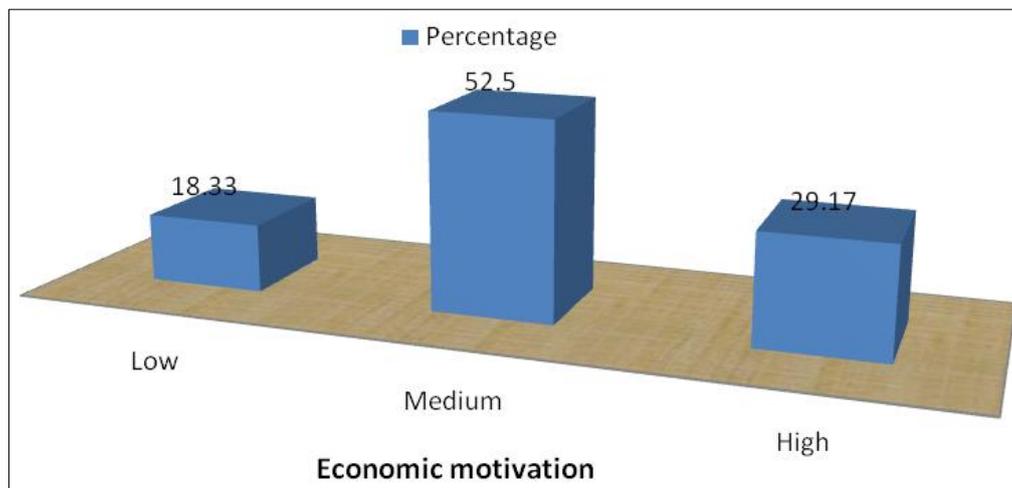


Fig 7: Distribution of orange growers according to their economic motivation

It could be concluded that the majority of orange growers had medium level of economic motivation.

The finding of present study is similar with findings of Deshmukh (2014) ^[5] who reported that majority of respondents had medium level of economic motivation.

3.3.3 Risk orientation

Risk orientation is operationalised as the degree to which the orange grower is oriented towards risk and uncertainty in adopting new ideas or technologies in farming.

The results compiled in the Table 3 clearly reveal that majority (47.92%) of the orange growers were having medium level of risk orientation, whereas, 31.66 per cent and 20.42 per cent belonged to high and low category of risk orientation.

It could be concluded that the majority of orange growers had medium level of risk orientation.

The findings are supported by the results reported by Reddy (2005) ^[11] and Kadu (2016) ^[8].

4. Conclusion

It may be concluded that, higher proportion of orange growers belong to middle age group, educated up to secondary school level, having the agriculture as a main occupation. Majority of orange growers sold their oranges to the pre-harvest contractor (87.50%) and having small size of orchard (67.50%). Nearly half of the orange growers were having high experience in orange cultivation, belonged to medium level of innovativeness, medium level of economic motivation and medium level of risk orientation. The study indicate that majority of the orange growers were in actively working age group, educated and experienced in orange cultivation ;but there exist the monopoly of pre harvest contractor in marketing of orange, hence Government should give attention

to provide strong marketing support to orange growers so as to get remunerative price for the oranges.

5. References

1. Anbhule VS. Role performance of commodity interest group (CIG) members working under ATMA. M.Sc. (Agri.) Thesis (Unpub), VNMKV, Parbhani, M.S. (INDIA), 2016.
2. Aske. A study on adoption behaviour of orange growers in Pune District. M.Sc. (Ag) Thesis (unpublished), Dr. P.D.K.V. Akola, M.S. (India), 2010.
3. Babar JS. Impact of Agricultural Technology Information Centre on beneficiaries in Akola district. M.Sc. (Agri.) Thesis (Unpub), Dr. PDKV, Akola, 2012.
4. Baghel B. A study on adoption of orange growers in relation to improved production technology in block Sausar, Chhindawada district of Madhya Pradesh, M.Sc. (Agri.), Thesis (Unpub.), JNKVV, Jabalpur, 2013.
5. Deshmukh AS. Information behaviour about production and marketing of orange growers. Ph.D. Thesis, Dr. Panjabrao Deshmukh Krishi Vidapeeth, Akola, M.S. (India), 2014.
6. Dhole MB. Adoption Behaviour of Orange Growers Under Employment Guarantee Scheme. M.Sc. Thesis (Unpub) Dr. PDKV Akola, M.S. (INDIA), 2006.
7. Dhumal PM. Constraints in production and marketing of orange M.Sc. (Agri) Thesis (Unpub) Dr. PDKV Akola, M.S. (India), 2017.
8. Kadu KS. Knowledge and adoption of improved technologies by orange growers, M.Sc (Agri.) Thesis, (Unpub.) Dr. P.D.K.V., Krishinagar, Akola, M.S. (INDIA), 2016.
9. Karale NB. Resource management by grape growers. M.Sc. (Agri.) Thesis (Unpub.) Dr. PDKV Akola, M.S. (INDIA), 2006.
10. Kinkhedkar AK. Resource management behavior of orange grower. M.Sc. (Agri.) Thesis (Unpub.), Dr. PDKV, Akola, M.S. (India), 2001.
11. Reddy N. A study on knowledge, extent of participation and benefit derived by participation farmers of the watershed development programm in Raichur district of Karnataka state. M.Sc. (Ag.) Thesis, Univ. Agri. Sci., Dharwad, Karnataka, India, 2005.
12. Sahare VB. Knowledge and adoption about DR. PDKV recommended technology for control of phytophthora in orange. M. Sc. Agri. Thesis (unpub) Dr. PDKV, Akola, M.S. (India), 2005.
13. Tekale VS, Gavit DV. Utilization of information sources by orange growers. Assian. J of Ext. Edu. 2013;31:83-85.
14. Vinay Kumar G. A study on development of women and children in rural area of Srikakulam district of Andhra Pradesh. M.Sc. (Agri.) Thesis (Unpub), Acharya N.G. Ranga Agric. Uni., Hyderabad. (A.P), 2009.
15. Wankhede Y, Kale NM, Bhople PP, Jangwad NP. Profile and constraints of orange growers in adoption of soil testing techniques in Amravati district." Agriculture Update. 2017;12(1):52-60.