



RESEARCH PAPER

Marketing behaviour of sugarcane nursery owners of Maharashtra

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Abstract : Sugarcane is main important cash crop. It is one of major crop of earning foreign exchange. The green tops of cane used as a fodder for cattle. Also sugarcane industry provides employment to a larger number of peoples. Now-a-days sugarcane nursery emerges as a new enterprise mainly in rural society. Nursery techniques involve raising seedlings, management and marketing for economical use. These techniques are useful in increasing success rate and reducing manual work. Also nursery seedlings increase germination percentage, useful for maintaining optimum plant population. The use of inputs like water, fertilizer etc., is also low. Hence, nursery is the starting point for successful planting. Successful nursery growing not only requires knowledge, skill and accuracy in the production but also in the marketing. Therefore, marketing of seedlings seems as a special significance in the sugarcane nursery. Marketing is one of the post production activity, which consistently influences the extent and nature of growing as well as profits to nursery owners. Under the present circumstances, there is a need for development of efficient marketing system along with efficient production management in the whole range of marketing activities including packing, transportation techniques, distribution and product standardization. Keeping the above facts in view, the present study was conducted in the year 2020 at Kolhapur district of Maharashtra State with the objectives; to study personal, socio-economic and psychological characteristics of the sugarcane nursery owners, to analyze the marketing behaviour of the sugarcane nursery owners, to find out relationship between personal, socio-economic and psychological characteristics with their marketing behaviour. The “Ex-post-facto” research design was used for the study .The study was conducted purposively in Kolhapur district of Maharashtra state. From Kolhapur district two tehsils namely Shirol and Hatkangale were selected. Seven villages from each tehsil and then ten respondents from each village were selected by nth method of random sampling to comprise a sample of 140 respondents. The data was collected and analyzed with the help of well-structured interview schedule by personal interview with the sugarcane nursery owners and suitable statistical tools. From the research study it was found that majority (65.01 %) of the sugarcane nursery owners were found to be middle age group (36 to 55 years), 52.16 per cent were educated upto secondary school, most (62.87 %) of the respondents had medium (17-30 years) farming experience, more than half (70.01 %) of respondents had fair irrigation status, half of respondents (52.87 %) had marginal size of land holding (Upto 1.00 ha), most (67.15 %) of the nursery owners had small area under nursery, more than half (57.05 %) of the respondents had medium annual income (Upto Rs.758667). The study also revealed that more than one half (67.87%) were grouped under medium level of sources of information, 60.72 per cent of nursery owners had medium level of innovativeness, 62.15 per cent of respondents were grouped under medium level of risk orientation and 72.15 per cent of respondents had medium level of marketing orientation. It was observed that more than half (57.87 %) of sugarcane nursery owners had medium marketing behaviour. Study revealed that the selected independent

variables viz., education, land holding, area under nursery, annual income, irrigation status, source of information, risk orientation and marketing orientation were in positive and strongly significant relationship with their marketing behaviour. Whereas, the variable age had negative and non-significant correlation with marketing behaviour, similarly farming experience had positive and non-significant correlation with marketing behaviour of sugarcane nursery owners.

Key Words : Marketing behaviour, Sugarcane nursery owners, Profile, Relationship, Planning, Action plan/decision making, Implementation, Review including various specific marketing activities

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INTRODUCTION

Nursery is a place where seedlings are propagated, managed and grown to usable size. Nursery techniques involve raising seedlings, management and marketing for economical use. Nursery seedlings increases germination percentage, maintain optimum plant population, increases growth rate and reduces manual work. Hence, now-a-days sugarcane nursery emerge as a new income generating enterprise in rural society. India is the second largest sugar producing country in the world. The area under sugarcane is 5.06 million ha and production is 341.20 (2017-2018). In India Maharashtra is second largest sugar producing state having area 9.02 lakh ha and production 726.37 lakh tonnes. (3rd Advance estimates for sugarcane, season 2017-2018, Vol.-49, No.-7. Issued by Department of Agriculture and Farmers Welfare). Other sugarcane growing states are Uttar Pradesh (22.34 lakh/ha), Karnataka (3.71 lakh/ha), Bihar (2.43 lakh/ha).

Successful nursery plant growing not only requires knowledge, skill and accuracy in the production but also in the marketing. Therefore, marketing of seedlings assumes a special significance in the sugarcane nursery. An efficient market system becomes the backbone of small and marginal farmers. The economic position of a farmer cant be improved by producing only more unless he gets, "fair price" for his produce. The marketing is one of the post production activities, which consistently influences the extent and nature of cultivation as well as settle on profits to nursery owners. Raising of sugarcane seedlings in nursery is a profitable venture but with the rapid increase in acreage and production several issues in marketing have emerged. Under the present circumstances, there is need for development of efficient marketing system along with efficient production management in the whole range of marketing activities including packing, transportation techniques, distribution,

product standardization etc. Keeping the above facts in view, the present study was undertaken in the year 2020 with the following specific objectives, to study the personal, socio-economic and psychological characteristics of sugarcane nursery owners, to analyze the marketing behaviour of the sugarcane nursery owners and to find out the relationship between personal, socio-economic and psychological characteristics and sugarcane nursery owners with their marketing behaviour.

MATERIAL AND METHODS

The "Ex-post-facto" research design was used for the study .The present study was conducted in the year 2020 purposively in Kolhapur district of Maharashtra State, as this districts has largest area under sugarcane. Two tehsils of Kolhapur district namely Shirol and Hatkangale were selected for the study. Seven villages from each tehsil were selected randomly thus, total fourteen villages were selected. From each village 10 sugarcane nursery owners were selected. Thus, total respondents were 140 nursery owners. Considering the objectives of the study, marketing behaviour of sugarcane nursery owners was selected as dependent variable while, age, education, farming experience, irrigation status, land holding, area under sugarcane nursery, annual income, source of information, innovativeness, risk orientation and marketing orientation were selected as independent variables. The data was collected through personal interview of the respondents. Statistical tools viz., percentage, mean, range and co-relation co-efficient were used for proper analysis and interpretation of the data.

RESULTS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been summarized

under following heads :

Personal, socio-economic and psychological characteristics of sugarcane nursery owners:

From the Table 1, it was found that majority (65.01

%) of the sugarcane nursery owners were found to be middle age group (36 to 55 years), 52.16 per cent were educated upto secondary school, most (62.87 %) of the respondents had medium (17-30 years) farming experience, more than half (70.01 %) of respondents

Table 1: Distribution of respondents according to their personal, socio-economic and psychological characteristics

Sr. No.	Characteristics	Frequency (n=140)	Percentage	
1.	Age	Young (upto 35 years)	20	14.28
		Middle (36 to 55 years)	91	65.01
		Old (56 and above)	29	20.71
2.	Education	Illiterate	04	02.85
		Primary school (1 st to 4 th standard)	12	08.57
		Secondary school (5 th to 10 th standard)	73	52.16
		Higher secondary (11 th – 12 th standard)	35	25.00
		Graduation (Above 12 th standard)	16	11.42
3.	Farming experience	Low (Upto 16 years)	22	15.71
		Medium (17 to 30 years)	88	62.87
		High (31 years and above)	30	21.42
4.	Irrigation status	Poor (Upto 6 score)	19	13.5
		Fair (7 to 9 score)	98	70.01
		Good (10 and above score)	23	16.42
5.	Land holding	Marginal (Upto 1.00 ha)	74	52.87
		Small (1.01 to 2.00 ha)	37	26.42
		Semi-medium (2.01 to 4.00 ha)	21	15.00
		Medium (4.01 to 10.00 ha)	08	05.71
		Large (10.01 and above ha)	00	00.00
6.	Area under sugarcane nursery	Small (Upto 0.28 ha)	94	67.15
		Medium (0.29 to 0.46 ha)	34	24.28
		Large (0.47 and above ha)	12	08.57
7.	Annual income	Low (Upto Rs.4,17,333/-)	46	32.85
		Medium (Rs.4,17,334/- to Rs.7,58,667/-)	80	57.15
		High (Rs.7,58,668 and above)	14	10.00
8.	Sources of information	Low (Upto 15 score)	18	12.85
		Medium (16 to 22 score)	95	67.87
		High (23 and above score)	27	19.28
9.	Innovativeness	Low (Upto 8 score)	29	20.71
		Medium (9 to 11 score)	85	60.72
		High (12 and above score)	26	18.57
10.	Risk orientation	Low (Upto 6 score)	25	1.85
		Medium (7-8 score)	87	62.15
		High (9 and above score)	28	20.00
11.	Marketing orientation	Low (Upto 13 score)	24	17.14
		Medium (14 to 17 score)	101	72.15
		High (18 and above score)	15	10.71
Total		140	100.00	

had fair irrigation status, half of respondents (52.87%) had marginal size of land holding (Upto 1.00 ha), most (67.15%) of the nursery owners had small area under nursery, more than half (57.05 %) of the respondents had medium annual income (Upto Rs.758667). The study also revealed that more than one half (67.87%) were grouped under medium level of sources of information, 60.72 per cent of nursery owners had medium level of innovativeness, 62.15 per cent of respondents were grouped under medium level of risk orientation and 72.15 per cent of respondents had medium level of marketing orientation. It was observed that more than half (57.87 %) of sugarcane nursery owners had medium marketing behaviour. The findings in line with Kashyap and Guleria (2015) and Venkatachalam and Sengottian (2016).

Marketing behaviour of sugarcane nursery owners:

Marketing behaviour of the respondents was measured with the help of scale developed by Nirban (2004). According to Nirban scale, marketing behaviour was measured against four major components *i.e.*, planning, action plan/decision making, implementation and review including various specific marketing activities. The response of the nursery owners on each of the activity was recorded on a three point namely “Always”, “Sometimes” and “Never”.

Planning component:

The planning component of marketing behaviour has been presented in Table 2a. In planning component

Table 2a : Planning component of sugarcane nursery owners

Sr. No.	Marketing activities	Respondents (n=140)		
		Always	Sometimes	Never
A	Planning	Frequency	Frequency	Frequency
		(percentage)	(percentage)	(percentage)
1.	Study available resources and facilities in the area before cultivation of sugarcane nursery seedlings.	77 (55.00)	56 (40.00)	07 (05.00)
2.	Understand consumer needs before cultivation of nursery seedlings.	54 (38.57)	64 (45.72)	22 (15.71)
3.	Understand distribution system of nursery produce.	37 (26.42)	75 (53.58)	28 (20.00)
4.	Decide the marketing channel that will give maximum profit	82 (58.58)	42 (30.00)	16 (11.42)
5.	Select institution/person giving maximum profit through sale of nursery produce.	101 (72.15)	32 (22.85)	07 (05.00)
6.	Collect required information about markets e.g. demand, quality and rates.	71 (50.72)	41 (29.28)	28 (20.00)
7.	Use various resources for collecting market information.	52 (37.14)	75 (53.58)	13 (09.28)

*Figure in parenthesis indicates percentages

Table 2b : Decision making/ action plan component of sugarcane nursery owners

Sr. No.	Marketing activities	Respondents (n=140)		
		Always	Sometimes	Never
B	Decision making/Action plan	Frequency	Frequency	Frequency
		(Percentage)	(Percentage)	(Percentage)
	Issues decided after planning			
1.	Sugarcane variety to be taken	102 (72.87)	25 (17.85)	13 (09.28)
2.	Management of markets	26 (18.57)	48 (34.28)	66 (47.15)
3.	Area allocation under nursery	73 (52.15)	57 (40.71)	10 (07.14)
4.	Increase supply as per demand	102 (72.86)	31 (22.14)	07 (05.00)
5.	Cultivation technology to be followed	103 (73.58)	29 (20.71)	08 (05.71)
6.	Sources consulted while taking decision			
7.	Progressive nursery owners	86 (61.44)	37 (26.42)	17 (12.14)
8.	Family members	32 (22.85)	62 (44.30)	46 (32.85)
9.	Extension officers	11 (07.85)	62 (44.28)	67 (47.87)

*Figure in Parenthesis indicates percentages.

Table 2c : Implementation of action plan component of sugarcane nursery owners

Sr. No.	Marketing activities	Respondents (n=140)		
		Always	Sometimes	Never
C	Implementation of action plan			
	Steps in implementing action plan			
1.	Cultivate sugarcane varieties as decided	97 (69.29)	33 (23.57)	10 (07.14)
2.	Seek advice of experienced personnel for solving problems	37 (26.42)	56 (40.01)	47 (33.57)
3.	Follow the marketing system as decided	53 (37.85)	73 (52.15)	14 (10.00)
	Marketing activities performed			
	Type of market used for selling nursery produce			
1.	Local traders	39 (27.85)	23 (16.42)	78 (55.73)
2.	Wholesalers	56 (40.01)	45 (32.14)	39 (27.85)
3.	Distant market	83 (59.29)	54 (38.57)	3 (2.14)
	Locale of market			
1.	Within village	09 (06.42)	05 (03.57)	126 (90.01)
2.	Within taluka	46 (32.85)	59 (42.15)	35 (25.00)
3.	Within district	39 (27.85)	46 (32.85)	55 (39.30)
4.	Outside district	61 (43.58)	49 (35.00)	30 (21.42)
5.	Export	00 (00.00)	00 (00.00)	140 (100.00)
	Grading of sugarcane nursery plants	140 (100.00)	00 (00.00)	00 (00.00)
	Mode of transportation Transportation of produce to market by			
1.	Tractor	19 (13.57)	03 (02.14)	118 (84.29)
2.	Jeep	107 (76.44)	11 (07.85)	22 (15.71)
	Reasons for selecting particular mode			
1.	Available at door step	115 (82.16)	23 (16.42)	02 (01.42)
2.	It is easy to load and unload	120 (85.72)	13 (09.28)	07 (05.00)
3.	No other mode	37 (26.42)	46 (32.85)	57 (40.73)
	Time for sale of produce			
1.	When prices are high	72 (51.44)	65 (46.42)	03 (02.14)
2.	When in need of money	99 (70.72)	31 (22.14)	10 (07.14)
3.	Immediately after mature	140 (100.00)	00 (00.00)	00 (00.00)
	Agency for sale of produce			
1.	Self	56 (40.01)	36 (25.71)	48 (34.28)
2.	Through sugarcane co-operatives	25 (17.85)	51 (36.42)	64 (45.73)
		(85.72)	(09.28)	(05.00)
3.	No other mode	37 (26.42)	46 (32.85)	57 (40.73)

*Figure in parenthesis indicates percentages.

Table 2d : Review component of sugarcane nursery owners

Sr. No.	Marketing activities	Respondents (n=140)		
		Always	Sometimes	Never
D	Review			
1.	Documentation of market experiences	68 (48.58)	39 (27.85)	33 (23.57)
2.	Analysis of changed market situation	62 (44.28)	31 (22.14)	47 (33.58)
3.	Preparation of new action plan	22 (16.14)	48 (34.28)	70 (49.28)

*Figure in Parenthesis indicates percentages.

different activities related to planning of nursery enterprise were presented in Table 2a and b.

It was concluded from Table 2a that majority (72.15 %) of the nursery owners “always” selected the institution/person giving maximum profit for sale of their nursery produce, (58.58%) of them “always” decided the marketing channel that will give maximum profit, (55.00 %) “always” studied available resources and facilities in the area before cultivation of sugarcane nursery seedlings and (50.72 %) of respondents “always” collected requires information about market demand, quality and rate of produce. The findings in line with Dhakad *et al.* (2018).

Decision making/ Action plan component:

The decision behaviour of sugarcane nursery owners regarding the different parameters is given in this component. From Table 2b it was revealed that majority (61.44 %) of nursery owners “always” used suggestions from progressive farmers for decision making, (72.87 %) of them “always” decided the sugarcane variety to be taken, (52.15 %) “always” decided area allocation under sugarcane nursery and (73.58 %) of them ‘always’ decided cultivation technology to be followed. The findings in line with Daya and Choudhary (2012).

Implementation of action plan component:

The implementation behaviour of sugarcane nursery owners regarding the different parameters is given in this component. From Table 2c it was observed that, (69.29%) of nursery owners “always” cultivate sugarcane varieties as decided, (59.29 %) “always sold their nursery seedlings in distant markets, cent per cent of the growers “always” used clean produce, (76.44 %) “always” used lorry/jeep as the medium of transport, (70.72 %) “always” sold their produce in the need of money and cent per cent of respondents “always” sold their produce immediately after mature in distant markets and (40.01 %) always sell their produce through itself. The findings in line with Fayaz *et al.* (2016).

Review component:

The review component of marketing behaviour has been presented in Table 2d. The review behaviour of sugarcane nursery owners regarding the different parameters is given in this component.

From Table 2d it was revealed that, majority (48.58 %) of sugarcane nursery owners “always” documented

the market experiences, (44.28 %) “always” analyzed the changes in market situation and (49.28 %) “never” prepared any new action plan. The findings in line with Nirban (2004).

Relationship between dependent and independent variable:

From above Table 3 it is concluded that the independent variables like education, irrigation status, land holding, area under nursery, annual income, source of information, innovativeness, risk orientation and marketing orientation have positive and strongly significant correlation with marketing behaviour of sugarcane nursery owners. This means, if there is increase in these variables there will be increase in the marketing behaviour of sugarcane nursery owners. Also the independent variable age has negative and non-significant correlation with marketing behaviour and farming experience has positive and non-significant correlation with marketing behaviour of sugarcane nursery owners. The findings in line with Nirban (2004); Naidu (2012) and Boruah *et al.* (2015).

Table 3: Relationship between the independent variables and their marketing behaviour

Sr. No.	Component	Correlation co-efficient (r)
1.	Age	-0.0363NS
2.	Education	0.1727*
3.	Farming experience	0.0345NS
4.	Irrigation status Land holding	0.3212**
5.	Area under nursery	0.1883*
6.	Annual income	0.1724*
7.	Land holding	0.1886*
8.	Source of information	0.2185**
9.	Innovativeness	0.2751**
10.	Risk orientation	0.3161**
11.	Marketing orientation	0.4001**

* and ** indicate significance of values at P=0.05 and 0.01, respectively
NS= Non-significant

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