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Profile characteristics of tuber crop growers in the Konkan region of Maharashtra

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ABSTRACT

The present study was undertaken to study the profile characteristics of tuber crop growers in the Konkan region of Maharashtra. An ex-post-facto research design was employed for the investigation. Ratnagiri district was purposively selected for the study, and four tahsils, namely Khed, Chiplun, Dapoli and Mandangad, were selected. A total of 120 tuber crop growers, comprising 30 respondents from each tahsil, were selected as respondents. The data were collected through a structured interview schedule using the personal interview method and analysed using frequency, percentage, mean and standard deviation. The findings revealed that the majority of the respondents belonged to the middle-age category (64.17 per cent), had education up to the high school level (36.67 per cent), possessed medium farming experience (63.33 per cent) and belonged to medium-sized families (64.17 per cent). Agriculture was the major occupation of 46.67 per cent of the respondents, while 46.67 per cent possessed marginal landholdings. A majority of the respondents had a medium area under tuber crops (89.17 per cent), medium annual income (40.00 per cent) and medium income from tuber crops (49.17 per cent). Most of the respondents had medium mass media exposure (68.33 per cent), medium knowledge about recommended practices (80.00 per cent), medium adoption of recommended practices (75.83 per cent) and medium knowledge about value-added products (70.00 per cent). The study indicated that the tuber crop growers possessed predominantly medium levels of socio-personal, economic, communication and technological characteristics. The findings provide useful information for planning need-based extension and capacity-building programmes for improving the knowledge and adoption of recommended practices among tuber crop growers.

Keywords: Tuber crops, Characteristics, Tuber crop growers

Introduction

Root and tuber crops are important components of agricultural production systems because they can be cultivated under diverse agro-ecological conditions and can provide substantial food and energy. Tuber crops such as sweet potato, cassava, yam, elephant foot yam and other important tuber crops are valued for their food, nutritional and economic importance. These crops can also serve as raw materials for various processed and value-added products. Thus, the cultivation and utilization of tuber crops provide opportunities not only for meeting household food requirements but also for generating additional income through processing, value addition and marketing.

The profile of farmers is particularly important in agricultural extension because extension programmes are more effective when they are designed according to the existing characteristics, needs and capabilities of the target farming community.

The study of the profile characteristics of tuber crop growers can therefore provide a baseline understanding of the farming community and help identify areas where extension support is required. Such information is useful for agricultural extension personnel, researchers, development agencies and policy makers in planning appropriate interventions. Need-based training programmes, demonstrations, farm advisory services, information dissemination activities and capacity-building programmes can be designed more effectively when the socio-economic and technological background of farmers is clearly understood. The present study was undertaken to examine the profile characteristics of tuber crop growers in the Konkan region of Maharashtra. The study focused on selected socio-personal, farm, economic, communication and technological characteristics of the respondents. The information generated through the study is expected to provide a useful basis for understanding the existing status of tuber crop growers and for formulating suitable extension interventions for their development.

1. To study the profile characteristics of tuber crop growers in the Konkan region of Maharashtra.

2. Methodology

The present study was conducted by adopting an ex-post-facto research design. Ratnagiri district of Maharashtra was purposively selected as the study area. Four tahsils, namely Khed, Chiplun, Dapoli and Mandangad, were selected for the investigation. A total of 120 tuber crop growers were selected as respondents, comprising 30 respondents from each selected tahsil. The data were collected through a structured interview schedule using the personal interview method. The profile characteristics included age, education, farming experience, family size, major occupation, size of landholding, area under

tuber crops, annual income, income from tuber crops, mass media exposure, knowledge about recommended practices, adoption of recommended practices and knowledge about value-added products. The collected data were classified, tabulated and analysed using frequency, percentage, mean and standard deviation.

Results and discussion

Profile characteristics of tuber crop growers

The profile characteristics of tuber crops is presented in Table 1.

Table 1. Distribution of tuber crop growers according to their profile characteristics

Sr.no.	Characteristic	Category	Tuber farmers (n = 120)	
			Frequency	Percentage
1.	Age (years)	Young (< 42)	27	22.50
		Middle (43 - 67)	77	64.17
		Old (> 68)	16	13.33
2.	Education (Standard)	Illiterate (not educated)	9	7.50
		Primary school (1 th to 5 th std.)	23	19.16
		Middle school (6 th to 8 th std.)	29	24.16
		High school (9 th to 12 th std.)	44	36.67
		Graduation	14	11.67
3.	Farming experience (yrs)	Low (< 17)	27	22.5
		Medium (18 to 43)	76	63.33
		High (> 43)	17	14.17
4.	Family size (no.)	Low (upto 3 members)	30	25
		Medium (4 to 8 members)	77	64.17
		High (above 9 members)	13	10.83
5.	Major occupation	Agriculture + wage earning	6	5.00
		Agriculture	56	46.67
		Agriculture + allied occupation	19	15.83
		Agriculture + business	19	15.83
		Agriculture + service	20	16.67
6.	Size of landholding (ha.)	Marginal (0.01–1.00 ha)	56	46.67
		Small (1.01–2.00 ha)	35	29.16
		Semi-medium (2.01–4.00 ha)	27	22.50
		Medium (4.01–10.00 ha)	2	1.67
		Large (> 10.00 ha)	0	0.00
7.	Area under tuber crops (ha.)	Low (< 0.783)	0	0.00
		Medium (0.784 to 5.500)	107	89.17
		High (> 5.501)	13	10.83
8.	Annual income (rs.)	Low (< 42272.69)	45	37.50
		Medium (42272.70 to 152416.95)	48	40.00
		High (> 152416.96)	27	22.50
9.	Income from tuber crops (Rs.)	Low (< 5917.75/-)	38	31.67
		Medium (5917.76 to 22097.71/-)	59	49.17
		High (> 22097.72/-)	23	19.16
10.	Mass media exposure score)	Low (< 4.08)	15	12.50
		Medium (4.09 to 6.82)	82	68.33
		High (> 6.83)	23	19.17
11.	Knowledge about recommended practices (score)	Low (< 8.28)	2	1.67
		Medium (8.29 to 22.60)	96	80.00
		High (> 22.61)	22	18.33
12.	Adoption of recommended practices (score)	Low (< 16.43)	6	5.00
		Medium (16.44 to 39.83)	91	75.83
		High (> 39.84)	23	19.17

(continued on next page)

Sr.no.	Characteristic	Category	Tuber farmers (n = 120)	
			Frequency	Percentage
13.	Knowledge about value-added products (score)	Low (< 3.65)	13	10.83
		Medium (3.66 to 9.26)	84	70.00
		High (> 9.27)	23	19.17

Table 1 revealed that a majority (64.17 per cent) of the tuber crop growers belonged to the middle age category (43–67 years). This was followed by 22.50 per cent of the respondents who belonged to the young age category (below 42 years), while only 13.33 per cent were in the old age category (above 68 years). The mean age of the tuber crop growers was 54.18 years.

More than one third (36.67 per cent) of tuber crop growers were educated up to high school level, followed by 24.16, 19.16, 11.67, 07.50 and 0.84 per cent belonging to the category of middle school, primary school, graduate, post graduate and illiterate level of education, respectively.

A majority (63.33 per cent) of the tuber crop growers belonged to the medium farming experience category. This was followed by 22.50 per cent of the respondents who had low farming experience, while only 14.17 per cent possessed high farming experience. The mean farming experience of the tuber crop growers was 29.80 years.

More than three forth (64.17 per cent) of the tuber crop growers belonged to the medium family size category. This was followed by 25.00 per cent of the respondents who had small family size, while only 10.83 per cent belonged to the large family size category. The mean of family size of the tuber crop growers was 5.29 members.

Nearly half (46.67 per cent) of the tuber crop growers were engaged exclusively in agriculture (farming). This was followed by 16.67 per cent of the respondents who combined agriculture with service. Equal proportions (15.83 per cent each) of the respondents were engaged in agriculture along with allied occupations and agriculture with business. Only 5.00 per cent of the respondents combined agriculture with wage earning.

More than two fifth (46.67 per cent) of the tuber crop growers belonged to the marginal land holding category, followed by 29.16 per cent who possessed small land holdings. More than two fifth (22.50 per cent) of the respondents had semi-medium land holdings, while only 1.67 per cent belonged to the medium land holding category. None of the respondents possessed large land holdings (above 10.00 ha). An overwhelming majority (89.17 per cent) of the tuber crop growers belonged to the medium area under tuber crops category. Only 10.83 per cent of the respondents had a high area under tuber crops, while none of the respondents belonged to the low area category. The mean area under tuber crops was 3.14 R.

A majority (40.00 per cent) of the tuber crop growers belonged to the medium annual income category. This was followed by 37.50 per cent of the respondents who belonged to the low annual income category, while 22.50 per cent of the respondents fell under the high annual income category. The mean annual income of the tuber crop growers was Rs.97,345/-.

Nearly half (49.17 per cent) of the tuber crop growers belonged to the medium income from tuber crops category. This was followed by 31.67 per cent of the respondents who belonged to the low income category, while 19.16 per cent of the respondents were in the high income category. The mean income from tuber crops was ₹14,008/-.

A majority (68.33 per cent) of the tuber crop growers belonged to the medium mass media exposure category. This was followed by 19.17 per cent of the respondents who had high mass media exposure, while only 12.50 per cent belonged to the low mass media exposure category. The mean mass media exposure score of the tuber crop growers was 5.46.

A majority (80.00 per cent) of the tuber crop growers belonged to the medium knowledge category regarding the recommended practices of tuber crop cultivation. This was followed by 18.33 per cent of the respondents who possessed high knowledge, while only 1.67 per cent

belonged to the low knowledge category. The mean knowledge score of the tuber crop growers regarding recommended practices was 15.44.

A majority (75.83 per cent) of the tuber crop growers belonged to the medium adoption category. This was followed by 19.17 per cent of the respondents who exhibited high adoption of recommended practices, while only 5.00 per cent belonged to the low adoption category. A majority (70.00 per cent) of the tuber crop growers belonged to the medium knowledge category regarding value-added products. This was followed by 19.17 per cent of the respondents who possessed high knowledge, while only 10.83 per cent belonged to the low knowledge category. The mean knowledge score of the tuber crop growers regarding value-added products was 6.46.

4. Conclusion

The study revealed that tuber crop growers in the Konkan region predominantly possessed medium levels of socio-personal, economic, communication and technological characteristics. The majority were middle-aged, educated up to the high school level, had medium farming experience and belonged to medium-sized families. Agriculture was the principal occupation of the largest proportion of respondents, while marginal landholdings were predominant. Most respondents had a medium area under tuber crops, medium annual income and medium income from tuber crops. The majority also possessed medium mass media exposure, medium knowledge about recommended practices, medium adoption of recommended practices and medium knowledge about value-added products. The findings suggest the need for training programmes, demonstrations and information support to improve knowledge, adoption and awareness regarding value-added products of tuber crops.

The findings are also helpful for policy makers for finalizing the future strategies of tuber crops improvement.

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