Personal and socio-economic characteristics of farmers in peri-urban area of Raigad district, India

.

ABSTRACT

Urban and peri-urban agriculture can also be defined as practices that yield food and other outputs through agricultural production and related processes, (transformation, distribution, marketing, recycling) taking place on land and other spaces within cities and surrounding region.

The present study was conducted in Raigad district of Konkan region of Maharashtra to know profile of farmers in peri-urban area of Raigad District. The study employed an ex-post facto research design. The study was conducted by taking total sample of 100 respondents. The data was collected with the help of pre-tested interview schedule through personal interview. Study concluded that majority (62.00%) of the peri-urban farmers belonged to 40 to 58 years age group. Around (36.00%) of the respondents belonged to Secondary education status category. Majority (78.00%) of the respondent belonged to a medium family size (60.00%) of the respondents had medium level of farming experience.Majority (33.00%) of the respondents belonged to the marginal size of land holding. A majority (36.00%) of the respondents from peri-urban area were engaged in agriculture. Maximum number (70.00%) respondents had annual income.Majority (60.00%) of the respondents had fair irrigation status. Majority (41.00%) of the respondents were found “one training” category. Two-thirds (82.00%) of the respondents had medium-level “information seeking behaviour”.

Keywords: Personal and socio-economic characteristics;Peri-urban farmers;Raigad.

1. INTRODUCTION

Urban and peri-urban agriculture can also be defined as practices that yield food and other outputs through agricultural production and related processes, (transformation, distribution, marketing, recycling) taking place on land and other spaces within cities and surrounding region.Agriculture is the primary source of income for most rural people in India. It is a

significant source of income for the majority of Indians. Agriculture is not only a means of subsistence, but it also contributes significantly to the country's economic development. India's agricultural sector provides raw materials for many major industries, including the cotton and jute textile industries, the sugar industry, and others.

A peri-urban area is a space where urban and rural activities intersect and landscape features change quickly due to human activity (Douglas, 2006). Peri-urban areas are not simply a zone of direct influence suffering the immediate consequences of land demands from Urban expansion and pollution, but is also a larger market-related zone of effect that is recognized in terms of agricultural and natural resource products (Simon *et al.,* 2006).

2. METHODOLOGY

There are fifteen tehsils in Raigad district and four subdivisions of agriculture department viz. Alibag, Khalapur, Mangaon and Mahad. The Khalapur sub division of Raigad district consists of four tahsils namely, Khalapur, Panvel, Uran and Karjat. Out of these tahsils, Panvel and Karjat tahsils were purposively selected for the present study.

List of the farmers from each selected village was obtained from the local revenue record. The respondent was the farmers who regularly cultivate at least 20 R (0.20 ha) area of his owned land. This list was prepared in consultation with Agricultural Assistant of state Department of Agriculture. Ten farmers was selected from each village randomly. Thus, in all 100 respondent (50 farmers of each tahsils) from 10 villages was selected for collection of required information. The study used the personnel interview Method to gather data from respondents using a well-structured questionnaire. Frequency, percentage, mean, standard deviationwere among the appropriate statistical tools used to edit, tabulate, and analyze the data gathered from the respondents.

List 1 :List of selected Tahsils and villages

District	Tahsils	Village's	No. of respondents
Raigad	Panvel	Nitale	10
		Kanpoli	10
		Nitlas	10
		Manghar	10
		Mosare	10

	Karjat	Sapela	10
		Dahigav	10
		Vadap	10
		Gorkamat	10
		Malegaon	10
		Total	**100**

2.1 RESEARCH DESIGN

The ex-post-facto research design was adopted for this study, since the phenomenon has already started and is continuing.

Ex-post-facto research is the most systematic empirical enquiry, in which the researcher does not have direct control over the independent variables as their manifestation has already occurred or as they are inherent and not manipulatable. Thus, inferences about relations among variables were made without direct intervention from concomitant variation of independent and dependent variables.

3. RESULTS AND DISCUSSION

The findings regarding to socio-personal characteristics of the respondents were studied and data is presented in Table1.

3.1 Age

The chronological age of the respondent in years, at the time of interview was taken into consideration

In age it revealed that, majority (62.00per cent) of the respondents were in ‘middle’ age group, while 19.00 per cent of the respondents were in the ‘old’ age group a 19.00 per cent of them were in ‘young’ age group.

The average age of the respondents was 49 years.

The results indicated that most of the farmers from peri-urban area were middle age. It indicated that by and large, they were having quite satisfactory experience of life and their profession. This might have influenced their decisions in farming. Involvement of young age farmers was less may be because of their less interest or engage in other activities.

These findings were supported by Chorge (2009), Shinde-Desai (2011), Radha Jadhav (2015), Yadav (2016) and Malkar (2020).

3.2 Education status

The information regarding formal education was obtained from the respondents

In education status, it was noticed thatmaximum number (36.00 per cent) of the respondents had ‘secondary’ education, followed by ‘college’ 20.00 per cent, ‘higher secondary’ (19.00 per cent), ‘primary’ 12.00 per cent education, ‘pre-primary’ (06.00 per cent) and ‘post graduate’ (04.00 per cent). Only 03.00 per cent of the respondents were from ‘Illiterate’ category.

It is clear that, the respondents from the peri-urban area were better educated. The higher education might have helped the respondents to properly utilizing the available resources.

The findings of the study are in conformity with the findings of Kadam (2006),Chorge (2009) and Rohini Patil (2011) and not conformity with findings of Hanumanaikar (2006) and Salunke (2009).

3.3 Family Size

The total number of members in the family consisting of husband, wife, children and other dependent members

Regarding family size, it was seen thatmajority (78.00 per cent) of respondents from ‘medium’ family size, while remaining 16.00 per cent of the respondents had ‘large’ and 06.00 per cent of respondent had ‘small’ family size. The average family size of the respondents was five members. More number of family members in house helps to share news and learn the new knowledge and skills from old aged members of family.

These findings were supported by the findings of and Radha Jadhav (2015), Yadav (2016) and Malkar (2020).

3.4 Farming experiences

It is operationalized as the number of years actually spent by an individual in cultivation of crops

In farming experiences, it was observed that majority (60.00 per cent) of the respondents had ‘medium’ experience in farm cultivation, while remaining 20.00 per cent of the respondents

had ‘high’ and 20.00 per cent of respondent had ‘low’ experience in farm cultivation. The average experience of respondents was 22.83 years.

The study showed that majority of the respondents had satisfactory experience in farm cultivation. This might be due fact that maximum respondents belonged to middle age category.

These findings were supported by the findings of Chavan (2009), Pawar (2013) Radha Jadhav (2015) and Malkar (2020).

3.5 Land holding

Actual total land possessed by the respondent.

In land holding it was found that, 41.00 per cent of the respondents from peri-urban area belonged to ‘small’ category of land holding, 33.00 per cent belonged to ‘marginal’ category of land holding and 23.00 per cent belonged to ‘semi-medium’ category of land holding, while only 03.00 per cent respondents belonged to ‘medium’ category of land holding.

It can be said that the respondents from peri-urban area were having relatively small and marginal land holding. The larger land owners are usually the resourceful persons who can afford to use the various technologies on their farms, which might have helped for raising their income level.

These findings were supported by Deore (2006), Chorge (2009) and Kanwande (2009). The findings of the study found dissimilar with the finding of Yadav (2016) and Malkar (2020).

3.6 Family occupation

It considers the different sources for income generation.

In family occupation, it was revealed that 36.00 per cent of the respondents from peri-urban area were engaged in ‘Agriculture’, as their major occupation. Followed by Agri + allied occupation (27.00 per cent), Agri + service (16.00 per cent) and Agri + Business/Independent profession (15.00 per cent).

It can be discerned from these observations that agriculture + agriculture + allied occupation was the major source of livelihood of majority 63.00 per cent of the respondents.

Hence, they might have been making all possible efforts to increase the production and productivity of the crops grown by them as well as to earn income from allied enterprises.

These findings are similar with the findings of Deore (2006), Minakshi Badhe (2007), Karwande (2009), Rohini Patil (2011) and Yadav (2016). The finding of the study found dissimilar with Chorge (2009) and Wadekar (2013).

3.7 Annual income

Total earning of the family obtained from all sources in a year.

In annual income, maximum number (70.00 per cent) of the respondents had 'medium' annual income, while 15.00 per cent respondents had 'high' annual income and 15.00 per cent respondents had 'low' annual income. The average annual income of the respondents was Rs 2,95,200/-.

Being residing in peri-urban area, the respondents might have an easy access to the markets in Raigad. This in turn, might have resulted in getting better prices for their produce. The nature and number of crops preferred by the respondents for their enterprise might be the other reason for such findings.

These findings were supported by the findings of Sawant (2010), Radha Jadhav (2015), Yadav (2016) and Malkar (2020). The findings are not in line with the findings of Wadekar (2013).

3.8 Irrigation status

Regard to irrigation status of the respondent from peri-urban area it was observed from Table 1 that, majority (60.00 per cent) of the respondents had 'fair' irrigation status, whereas 21.00 per cent respondents had 'poor' irrigation status, and 19.00 per cent of the respondents had 'good' irrigation status. The average irrigation status score of the respondents from peri-urban area is 06.87.

Here, it could be explained that, majority of the respondent had major source of irrigation was canal and wells. Also, majority respondent possessed water pump for lifting water for irrigation purpose.

These findings are supported by the findings of Rohini Patil (2011), Mane (2014) and Radha Jadhav (2015). The findings found dissimilar with Karwande (2009).

3.9 Training received

In training received, it was seen thatmajority 41.00 per cent of the respondents were found in‘one training’ category. Whereas 15.00 per cent of the respondents had ‘not received any training’, However 28.00 per cent of the respondents completed ‘two training’ and 16.00 per cent of the respondents had undergone ‘three and above trainings’ regarding agriculture technology.

It means that maximum number of the respondents were received ‘one training’. Despite of this fact, majority of the respondents have preferred farming as major occupation. Number of trainings attended by the respondent is comparatively low. There is need to focus on these aspects as training allows to adopt to changes in technology and make efficient one in his role.

The findings were supported by the findings of Salunkhe (2009) and Radhika Bhongle (2014) and Radha Jadhav (2015).

In subject of training received, depicts different areas of training received by the respondents of the peri-urban area. It was found that majority of the responded recent training on improved paddy cultivation (64.00 per cent) and pest and disease control (48.00).

Further, it was found that 21.00 per cent of each respondents received training on poultry rearing and vegetable cultivation. Whereas, training on organic farming, paddy seed production, rice transplanting methods and improved dairy technology was received by 15.00 per cent, 13.00 per cent, 12.00 per cent and 11.00 per cent respondent, respectively. Training on goat farming and inland fisheries was attended by 10.00 per cent and 06.00 per cent respondents, respectively.

3.10 Information seeking behaviour

It is seen from Table 1 that, two-third (82.00 per cent) of the respondents had ‘medium’ level of information seeking behaviour while, 11.00 per cent had ‘high’ and 07.00per cent of the respondents had ‘low’ level of information seeking behaviour. The average score of information seeking behaviour of the respondents was 51.40.

This could be attributed to peri-urban area, wherein good information network is available.

This finding is similar with the findings of Dhaygude (2008), Nejkar (2008), Radha Redij (2009), Bhairamkar (2009), Pooja Chaudhari (2014) and Radhika Bhongle (2014).

Table 1: Distribution of peri-urban farmers according to their socio-economic characteristics (N=100)

Sl. No.	Profile of peri-urban farmer	Frequency	Percentage
1	**Age (years)**		
	Young (upto 39)	19	19.00
	Middle(40 to 58)	62	62.00
	old (59 and above)	19	19.00
2	**Education status**		
	Illiterate	3	03.00
	Pre-Primary (up to 4)	6	06.00
	Primary (5 to 7)	12	12.00
	Secondary (8 to 10)	36	36.00
	Higher Secondary (11 to 12)	19	19.00
	College (13 and above)	20	20.00
	Post graduate	4	04.00
3	**Family size**		
	Small (upto 3)	6	06.00
	Medium (4 to 6)	78	78.00
	Large (7 and above)	16	16.00
4	**Farming experience(years)**		
	Low (Up to 11)	20	20.00
	Medium (12 to 34)	60	60.00

	High (35 and above)	20	20.00
5	**Land holding(ha)**		
	Marginal (Up to 1.00)	33	33.00
	Small (1.01 to 2.00)	41	41.00
	Semi–medium (2.01 to 4.00)	23	23.00
	Medium (4.01 to 10.00)	3	03.00
6	**Annual income (Rs)**		
	Low (up to 1,12,077)	15	15.00
	Medium (1,12,078 to 4,78,322)	70	70.00
	High (4,78,323/- and above)	15	15.00
7	**Family occupation**		
	Agri + wage earner	5	05.00
	Agriculture	36	36.00
	Agri + Allied occupation (goat/poultry)	27	27.00
	Agri+Business/independent profession	15	15.00
	Agri + service	16	16.00
8	**Irrigation status**		
	Poor (up to 4)	21	21.00
	Fair (5 to 9)	60	60.00
	Good (10 and above)	19	19.00
9(A)	**Training received**		
	No Training	15	15.00
	One Training	41	41.00
	Two Training	28	28.00
	Three Training and above	16	16.00
9(B)	**Subject of training received**		
	Improved paddy cultivation	64	64.00
	Pest and Disease control	48	48.00
	Poultry rearing	21	21.00

	Vegetable cultivation	21	21.00
	Organic Farming	15	15.00
	Paddy Seed production	13	13.00
	Rice transplanting method	12	12.00
	Improved dairy technology	11	11.00
	Goat farming	10	10.00
	In land Fish rearing	06	06.00
10	**Information seeking behaviour**		
	Low (upto 44)	07	07.00
	Medium (45 to 57)	82	82.00
	High (58 and above)	11	11.00

3. Conclusion

The study found that in peri-urban area, the majority of respondents were from middle age and having medium family size. Findings indicated that, 36.00 per cent of total respondents were educated up to secondary class and 19.00 per cent upto higher secondary level. Majority (60.00 per cent) of respondents belongs to medium level of farming experience. Agriculture was the major occupation of 36.00 per cent respondents and agri and allied farming was the occupation of 27.00 per cent respondents. Majority (70.00 per cent) of the respondents belongs to medium level of annual income and 60.00 per cent of the respondent belongs to medium level irrigation status. Further, it was found that, out of 100 respondents, 41.00 per cent respondents were reported to have only one training attended by them. In case of mass media exposure 82.00 per cent of respondents were belongs to medium level.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

5. References

Bhairamkar M. S. (2009). 'Impact of micro finance through self help groups in Konkan region of Maharashtra'. Ph.D. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, (M.S.).

Chavan G. 0. (2009).'Adoption of contingency cropping pattern by western Vidhrbha farmers'. M.Sc.(Agri) Thesis,Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola(M.S.).

Chorge K.V. (2009). 'Marketing behaviour of cashewnut growers in Konkan region'. Ph.D.Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.).

Deore D.P. (2006). 'Study on awareness of farmers regarding organic rice cultivation practices'. M.Sc. (Agri.) Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth., Dapoli (M.S.)

Dhaygude A.D. (2008), 'A survey on present status of farm mechanization in South Konkan zone', M.Sc. (Agri.) Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.).

Douglas I. (2006). 'Peri-urban ecosystem and societies transitional zones and contrasting values'. in Peri-urban Interface: Approaches to sustainable Natural and Human Resource Use, London. *UK: Earthscan Publications Ltd.* 18-29.

Hanumanaikar R.H., Rajeshwari, N. and Nimbal, M.F. (2006). 'Socio-economic status, constraints faced and suggestions expressed by Chilli growers in optimum use of pesticide in Tunga Bhadra project area of Bellary district'. *Mysore J. of Agril. Sci.***40**(2):261-266.

Kadam J. R. (2006). 'A study on the adoption behaviour of the commertial mango growers with reference to commertial mango production technology'. Ph.D. Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. (M.S.).

Karwande M. D. (2009). 'Agriculture in peri urban and remote villages'. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, (M.S.).

Malkar T.V. (2020). 'Effect of urbanization on agriculture in Peri-urban area of Parbhani.M.Sc. (Agri) Thesis,Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani(M.S.).

Mane V. V. (2014), 'Knowledge and Adoption of Improved Sugarcane cultivation practices in Sindhudurg District', M.Sc. (Agri.) Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.).

Minakshi Badhe (2007). 'Existing cultivation practices followed by the arecanut growers in Ratnagiri district'. M.Sc. (Agri.) Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.).

Nejkar J. M. (2008) 'Post Training performance of recipients of training at KVK, Ratnagiri', M.Sc. (Agri.), Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.).

Pawar A. M. (2013) 'Knowledge and use of eco-friendly management practices by the mango growers of Konkan region', Ph. D.(Agri.), Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli(M.S.).

Pooja Chaudhari (2014). 'Attitude of Mango growers towards Pesticides in Ratnagiri district of Konkan region', M.Sc. (Agri.), Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli(M.S.).

Radha Jadhav(2015). 'Agriculture in Peri-Urban area around Mumbai'. M. Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli(M.S.).

Radha Redij (2009), 'Training need of Women members of self help group with respect to Agro-Tourism', M.Sc. (Agri.), Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth., Dapoli(M.S.).

RadhikaBhongle(2014). 'A study of selfhelp groups in Konkan and Western Maharashtra', M.Sc. (Agri.), Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth,Dapoli(M.S.).

Rohini Patil B. (2011), 'Technological change in Agriculture in Progressive and Non-progressive village', M.Sc. (Agri.), Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli(M.S.).

Salunkhe V. E. (2009), 'Training need of Tribals in relation to their occupation', M.Sc. (Agri.), Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth,Dapoli(M.S.).

Shinde-DesaiS.S, (2011).'Entrepreneurial ability and success-failure of cashewnut processors of Konkan region (India)'. Ph.D. (Agri). Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli(M.S.).

Simon D., McGregor D. and Thompson D. (2006). Contemporary perspectives on the peri-urban zones of cities in development areas, In peri-urban interface: Approaches to Sustainable Natural and Human Resource Use, London, *UK: Earthscan Publications Ltd*. 3-17.

Wadekar R. P. (2013) 'Adoption of Rice cultivation Practices by Warli Tribal farmers from Thane district of Maharashtra', M.Sc. (Agri.) Thesis, Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth,Dapoli(M.S.).

Yadav V. M. (2016) 'Effect of urbanization on agriculture in peri-urban area of Nagpur.' M.Sc. (Agri.) Thesis, Dr.PanjabraoDeshmukh Krishi Vidyapeeth, Akola(M.S.).