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### Prajakta Telange

Ph.D. Scholar, Department of Extension Education, Dr. PDKV, Akola, Maharashtra, India

Pranali N Thakare

Ph.D. Scholar, Department of Extension Education, Dr. PDKV, Akola, Maharashtra, India

#### PA Sawant

Professor& Head, Department of Extension Education, Dr. BSKKV, Dapoli, Maharashtra, India

Correspondence Prajakta Telange Ph.D. Scholar, Department of Extension Education, Dr. PDKV, Akola, Maharashtra, India

# Personal and socio-economic profile of rice growing farmers in Konkan region

# Prajakta Telange, Pranali N Thakare and PA Sawant

#### Abstract

Rice is fundamental component of farming systems and diets in many nations including India. Rice culture system is not a purely technical decision and different factors may affect it. These factors are directly related to personal, economic and psychological characteristics of framers. Considering these factors, present study was conducted in three tahsils of Raigad district of Konkan region having sample size 135 rice growers with objective to study the personal characteristics of the farmers. From the result it was observed that 34.81 percent of respondents having secondary education completed and minimum 6.67 percent respondent completed their graduation. It was revealed that majority (51.85%) of the respondents were engaged in farming and having 70.37 percent of respondent observed in medium family size. It was seen that maximum number (48.15%) of the respondents were having medium annual income, while 36.30 and 15.55 percent of the respondents had low and high annual income, respectively. The maximum number (36.30%) of the respondents had marginal size of land holding and 68.90 percent of respondent had medium extension contact. The majority (51.11%) of the respondent get seed from Krishi Seva Kendra followed by Own seed (29.62%), Mahabeej (13.33%), Neighbours or friends (13.33%), Krishi Vigyan Kendra (11.11%), Panchayat Samiti (05.92%), Agriculture University (02.22%). 68.14 percent of rice growers had medium cosmopoliteness and majority (74.81%) of the respondents had medium rice yield.

Keywords: Rice, profile, Konkan, technical decision

#### Introduction

India is facing the challenges of food and fodder production to meet the demand of rising human and cattle population. One of the major causes of this problem is low level of adoption of improved agriculture practices by the farmers.

Rice (*Oryza sativa*. L.) commodity recognition as a supreme commodity to mankind, because rice is truly life, cultures a tradition. It has its own history and religious importance in human life. Life starts with rice peg and ends with rice offering on "Pind". India is one of the world's largest producers of white rice. For India, like many other developing countries, the issue of feeding ever increasing population is of prime importance, this problem can be solved by maximizing agricultural production through use of high yielding varieties. Rice is the foremost cereals of the world and is the staple food of over 60.00 percent of the world's population.

In India, rice is the only promising crop to acquire self-sufficiency of food grain production for the population. Rice crop occupy the largest cultivated land in the country. In Maharashtra State, rice is the main crop grown in the costal districts of the Konkan region mainly in the four districts namely Thane, Raigad, Ratnagiri and Sindhudurg district. Besides the coastal districts of the state, rice is also grown in some districts like Nashik, Pune, Kolhapur, Satara, Chandrapur and Bhandara district, where there is comparatively high rainfall. Konkan region of Maharashtra state is known for its bounteous nature, beautiful landscape and variety of fruits, especially Alphanso mango. The major food of the people in this region is rice. It occupies an area of about 0.44 million hectares with annual production of nearly 15.10 lakh tones. The area under rice in Konkan is about 30.00 percent of total area. However, productivity of Konkan region is 2.40 tons per hectare.

#### Need and importance of study

Rice scientists, extension agents as well as planners for various reasons need to know about existing rice varieties with their percentage share in area and their respective yields. Identifying the most popular rice varieties is particularly important for rice breeders who are

Trying to develop new varieties with higher yield and varieties suitable for unfavorable areas/climatic conditions. It is also important to know the diffusion process of modern varieties, identifying the traits for the popularity of some varieties and investigating the reasons for the discontinuation of growing some popular varieties as well as reasons for nonadoption of these varieties. The sources of seed supply and sources of information about new rice technology, the role of private and government organizations in supplying seed, etc. are also important aspects for enhancing rice production for food security.

The increasing pressure to produce high yields by way of high input intensive agriculture has led to widespread land degradation and non-susceptibility of eco-system. It had been globally accepted that the socio-economic characteristics of an individual play pivotal role in influencing behaviour. Since there is no literature available about the characteristics of rice growing farmers in konkan region, the present study was designed with specific objective to evaluate the sociopersonal and socio-economic characteristics of rice growing farmers in konkan region.

# Methodology

The study was conducted in Raigad district of the Konkan region. Among the four districts of Konkan region, Raigad district ranks second in rice production, but the productivity of rice per hectare is highest in Raigad district, So it was purposively selected for this study. Raigad district comprises of fifteen tahsils. From these tahsils, three tahsils namely Karjat, Mangoan and Alibag having maximum area under rice cultivation were selected. From each tahsil, three villages having maximum area under rice cultivation were selected. Thus the total numbers of selected villages were nine. From each selected village with random sampling method 15 respondents were selected. Thus, the total sample comprises of 135 respondents. Data were collected by personally interviewing with the help of presented and well-structured interview schedule and analyzed by using statistic tools like mean, standard deviation, percent frequency and correlation coefficient. In the study an ex-post facto research design of social research was used.

# **Result and Discussion**

The findings on distribution of respondents according to their selected socio personal and socio-economic characteristics is presented table 1. It could be observed from Table 1 that maximum number (34.81%) of the respondents had 'secondary' education. The respondents in the category of 'primary' education were 25.18 percent, followed by 'pre-primary' (15.56%), 'illiterate' (10.37%), 'higher secondary' (07.41%), and 'graduate' (06.67%). The average educational level of the respondents was 7<sup>th</sup> std. indicating primary education. It can be said that rice cultivation in the study area is in the hands of educated farmers. It means they are educated to a satisfactory level, which in turn, might have helped them in their information seeking behavior and adoption of improved rice varieties. This finding is in line with the findings of Balasubramani, *et al.* (2005) <sup>[1]</sup>.

Majority (51.85%) of the respondents were engaged in 'farming', followed by 'service' (22.96%), 'independent profession' (16.25%), 'business' (06.70%), 'caste occupation' (01.50%) and 'labour' (00.74%) as their major occupation. It can be discerned from these observations that farming was the major source of livelihood of the selected rice growers. Hence, they might have been making all efforts to increase the production and productivity of the crops grown by them. This finding derives support from the findings of Thakur (2011) <sup>[17]</sup> and Meena, *et al.* (2012) <sup>[6]</sup>.

It is observed from Table 1 that family size of majority (70.37%) of the respondents was 'medium', while 15.55 percent and 14.08 percent respondents had 'big' and 'small' family size, respectively. The average member of family was 6.It can be concluded that the most of farmers were having the medium to large family size, which helps them in good management in farming. Similar findings were reported by Pandey and Sarkar (2004) <sup>[8]</sup> and Rashmi (2005) <sup>[11]</sup>.

Maximum number (48.15%) of the respondents were having 'medium' annual income, while 36.30 and 15.55 percent of the respondents had 'low' and 'high' annual income, respectively. The average annual income of the respondents was Rs 131601.50/-. The findings lead to conclude that majority of the farmers belonged to medium income group. The average income of the farmers indicated their satisfactory economic status, though majority of them had marginal and small land holdings. This might be because they might have been growing high value crops or might have other supporting source of income like service, independent profession and business. These findings are in line with the findings of Sonali Ranaware (2009) <sup>[15]</sup>.

It is evident from Table 1 that maximum number (36.30%) of the respondents had 'marginal' size of land holding; while 33.33 percent of the respondents had 'small' land holding, 22.95 percent of the respondents had 'semi-medium' land holding, 05.92 percent of the respondents had 'medium' land holding and remaining 01.50 percent of the respondent had 'large' size land holding. The average size of land holding was 1.6 ha. This finding leads to conclude that nearly seven out of ten rice growers had either small or marginal land holding. The findings resemble to the overall scenario of Konkan agriculture, where in predominance of small, marginal and semi medium farmers is seen. Similar findings were reported by Sharma and Sharma (2002) <sup>[14]</sup>, Onumadu and Osahon (2014) <sup>[7]</sup>.

It is seen that majority (68.90%) of the respondents had 'medium' extension contact; while 13.33 percent of the respondents had 'low' extension contact and 17.77 percent of the respondents had 'high' extension contact. The average extension contact score of the respondents was 2.82. It could be inferred that maximum number of the respondents had 'medium' extension contact. The level of extension contact of the rice growers might have influenced their adoption behavior about improved rice varieties released by the University. The findings are in tune with the findings Ramesh and Santha (2005) <sup>[10]</sup>, Deore (2006) <sup>[4]</sup>, Tambat (2007) <sup>[16]</sup> and Thakur (2011) <sup>[17]</sup>.

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Table 1: Distribution of respondents according to their characteristics			
Sl.No.	Category	Number	Percentage
I.	Education		
1.	Illiterate (No Education)	14	10.37
2.	Pre-primary (Up to 4 <sup>th</sup> )	21	15.56
3.	Primary (5 <sup>th</sup> to 7 <sup>th</sup> )	34	25.18
4.	Secondary (8 <sup>th</sup> to 10 <sup>th</sup> )	47	34.81
5.	Higher-secondary (11 <sup>th</sup> to 12 <sup>th</sup> )	10	07.41
6.	Graduate (13 <sup>th</sup> and above)	09	06.67
II.	Major Occupation		
1.	Labour	01	00.74
2.	Caste Occupation	02	01.50
3.	Business	09	06.70
4.	Independent Profession	22	16.25
5.	Farming	70	51.85
6.	Service	31	22.96
III.	Size of Family		
1.	Small (Up to 3)	19	14.08
2.	Medium(4 to 7)	95	70.37
3.	Big (8 and above)	21	15.55
IV.	Annual Income		
1.	Low (Below 73094)	49	36.30
2.	Medium (73095 to 190108)	65	48.15
3.	High (190109 and above)	21	15.55
<b>V.</b>	Size of land Holding		
1.	Marginal (Up to 1.00)	49	36.30
2.	Small (1.01 to 2.00)	45	33.33
3.	Semi-medium (2.01 to 4.00)	31	22.95
4.	Medium (4.01 to 10.00)	08	05.92
5.	Large (10.01 and above)	02	01.50
VI.	Extension Contact	10	10.00
1	Low (Up to 1)	18	13.33
2	Medium (2 to 4)	93	68.90
3	High (5 and above)	24	17.77
VII.	Source of Information		<b>2</b> 2 <b>2</b> 1
1	Agril. Assistant (DBSKKV)	52	38.51
2	Agril. Extension Officers (Panchayat Samiti)	52	38.51
3 4	Progressive Farmers	43	31.85
-	Neighbours/Friends	39	28.88
5	Gram Krishi Vistarak	30	22.22
6	University Staff	13	09.62
7 8	Gram Sevak	12	08.88
8 9	Television Newspapers	12	08.88 08.14
10	Agricultural Magazines	09	08.14
10	Agricultural Magazines Agriculture Officers	09	05.18
11 12	Subject Matter Specialists	07	03.18
12	Others	06	
13	Radio	04	02.96 00.74
	Source of Seed Material	01	00.74
VIII.		69	51 11
1 2	Krishi Seva Kendra	40	51.11
3	Own Seed Mahabeej	18	29.62 13.33
3	Manadeeg Neighbourg/Friends	18	13.33

Neighbours/Friends

Krishi Vigyan Kendra

Panchayat Samiti

Agriculture University

Cosmopoliteness Low (Up to 1)

Medium (2 to 3)

High (4 and above) **Rice Yield** 

Low (Upto 23)

Medium (24 to 32)

High (33 and above)

18

15

08

03

21

92

22

23

101

11

13.33

11.11

05.92

02.22

15.56

68.14

16.30

17.04

74.81

08.15

It is seen that the maximum number of the respondents (38.51%) had the contact with 'Agril. Assistants' (DBSKKV) and 'Agril. Extension Officers' (Panchayat Samiti) (38.51%) for the information regarding the improved rice varieties and also rice cultivation followed by 'Progressive farmers' (31.85%), 'Neighbours or friends' (28.88%) and 'Agril. Assistants' (22.22%). The respondents get less information from 'University staff' (09.62%), 'Gram sevak' (08.88%). 'Television' (08.88%), 'Newspapers' (08.14%), 'Agricultural magazines' (06.66%), 'Agriculture Officers' (05.18%), 'Subject Matter Specialists' (04.44%), 'Others' (02.96%) and 'Radio' (0.74%).These findings are in line with the findings of Debashis and Jiban (2013) <sup>[3]</sup> and Jothi (2014) <sup>[5]</sup>.

Majority (51.11%) of the respondent get seed from 'Krishi Seva Kendra' followed by 'Own seed' (29.62%), 'Mahabeej' (13.33%), 'Neighbours or friends' (13.33%), 'Khishi Vigyan Kendra' (11.11%), 'Panchayat Samiti' (05.92%), 'Agriculture University' (02.22%). These findings are similar to the findings of Saka, *et al.* (2005) <sup>[12]</sup> and Debashis and Jiban (2013) <sup>[3]</sup>.

With regards to cosmopoliteness, it is observed that 68.14 percent of the rice growers had 'medium' cosmopoliteness, followed by 16.30 percent of them had 'high' cosmopolitans and remaining 15.56 percent had 'low' cosmopoliteness. The average cosmopoliteness score of the respondents was 2.44. It is concluded that there was medium cosmopoliteness nature occurring in the respondents. Similar findings were reported by Puri (2003) <sup>[9]</sup>.

It was observed from Table 1 that majority (74.81%) of the respondents had 'medium' rice yield, while 17.04 percent of the respondents had 'low' rice yield and 8.15 percent of the respondents had 'high' rice yield. Average yield of rice produced by the rice growers was 28.26 q/ha. These findings make it clear that the productivity of upland rice is not satisfactory. The reasons for such low productivity might be the inefficient management by the farmers due to some reasons. What so ever, might be the reason, the fact remains that all out efforts are needed to increase the productivity of rice in uplands. These findings are similar to the findings of Balasubramani, *et al.* (2005) <sup>[1]</sup>, Deore (2006) <sup>[4]</sup>, Tambat (2007) <sup>[16]</sup>.

# Conclusion

It was revealed that the farmers had secondary education, having on an average six members in their family, had farming as their major occupation, medium annual income, marginal to small size land holding, medium extension contact and cosmopoliteness. Maximum number of farmers contacted Agricultural Assistants of DBSKKV and Agricultural Extension Officer of Panchayat Samiti for getting information and contacted Krishi Seva Kendra for obtaining seed material. The extension workers should consider these facts while planning and executing the programmes for rice development in the Konkan region.

# References

- 1. Balasubramani N, Swathilekshmi PS, Chandrakandan K. A study on the Yield analysis in paddy in the Erode District of Tamil Nadu. Asian Journal of Extension Education. 2005; 24:44-52.
- 2. Borthakur S, Mishra P, Bortamuly D. Farmers preference of rice varieties based on varietal attributes recommended by Assam Agricultural University, Jorhat. Journal of Academia and Industrial Research. 2014; 2:556.

- 3. Debashis S, Jiban KG. Spread of new varieties of hybrid rice and their impact on the overall production and productivity in West Bengal. Agro-Economic Research Centre, Visva-Bharati, Santiniketan, 2013, 39-48.
- 4. Deore DP. Study on awareness of farmers regarding organic rice cultivation practices. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. (M.S.), 2006.
- Jothi KS. Spread of new varieties of hybrid rice and its impact on the overall production and productivity in Tamil Nadu. Agro Economic Research Centre, University of Madras, Chennai. AERC Research Study, 2014, 153.
- 6. Meena SL, Lakhera JP, Sharma KC. Knowledge level and adoption pattern of rice production technology among farmers. Rajashtan Journal Extension Education. 2012; 20:133-137.
- 7. Onumadu FN, Osahon EE. Socio-economic determinants of adoption of improved rice technology by farmers in Ayamelum Local Government Area of Anambra State, Nigeria. International Journal of Scientific and Technology Research. 2014; 3(1):308-314.
- Pandey PK, Sarkar JD, Sharma ML, Suryawanshi DK. Constraints in adoption of recommended rice production technology among the Farmers of Chattisgard. Journal of Extension Education. 2004; 15(2& 3):3633-3638.
- Puri MG. A study on role of agricultural consultants in agricultural development. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth Dapoli (M.S.), 2003.
- Ramesh P, Santha G. Personal and Socio- Economic Characteristics of Organic Farmers. Karnataka Journal Agricultural Science. 2005; 18(1):192-199.
- Rashmi S. A study of on aspiration of school going student farm fisherman families. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth Dapoli. (M.S.), 2005.
- Saka JO, Okaruwa VO, Lawal BO. Adoption of improved rice varieties among small-holder farmers in South-Western Nigeria. World Journal of Agricultural Sciences. 2005; 1(1):42-49.
- 13. Sangita Sonawane, Chikhalikar PJ, Nirban AJ. Utilization of communication sources by the farmers for seeking farm information. Maharashtra Journal of Extension Education. 2001; 20:61-62.
- 14. Sharma R, Sharma A. Constraints in adoption of morden technology for rice cultivation in the tribal district of Surguja, Chattisgad, Maharashtra Journal of Extension Education. 2002; 21(1):52-54.
- 15. Sonali DR. Organic Rice cultivation practices followed by the rice growers in upland. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth Dapoli, (M.S.), 2009.
- Tambat RG. A study on knowledge and adoption of recommended cultivation practices by the summer rice growers. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, 2007.
- Thakur VV. Influence of social values on adoption of the recommended rice cultivation practices. M.Sc. (Agri.) Thesis, Dr. Balasaheb Konkan Krishi Vidyapeeth, Dapoli. (M.S.), 2011.