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A study on the general behaviour and attitude of the garlic growers of Malwa Plateau in Madhya Pradesh

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ABSTRACT

The traits like age, education level, exposure to mass media, contact with agricultural scientists, risk taking behavior and innovation proneness of the garlic growers of three villages of Ujjain block, Malwa plateau viz Jalalkhedi, Dewrakhedi and Akasoda with sample size of 36, 32 and 57, respectively, (total 125) were studied during 2007-08. More than half (54.4%) of the respondents were young followed by middle aged (29.6%) and old (16.0%), showing, thereby, that most of the garlic grower were young. Most of the growers in the sample were educated. Their main contact with the scientists was during their visit to the villages (50.4%), radio was still the main source of information of them as 61.6 per cent farmers listened to radio for information. Majority of the farmers (63.2%) showed high risk taking ability, whereas, 22.4 and 14.4 per cent showed medium and low risk taking ability, respectively, and the garlic growers were highly prone to innovations which denoted that they were quite advanced farmers and could turn better if subjected to new technologies and developments.

Keywords: Respondents, garlic growers, education, age, mass media, risk, innovation

INTRODUCTION

Garlic (*Allium sativum* L) is one of the important bulb crops grown and used as a spice or condiment and foreign exchange earner for India. It is consumed by almost all people who take onion. Garlic has higher nutritive value than other bulb crops. It is rich in proteins, phosphorous, potassium, calcium, magnesium and carbohydrates. Ascorbic acid content is very high in green garlic. The production of fruits and vegetables has a comparative advantage particularly under conditions where arable land is scarce, labour is abundant and markets are accessible (Lumpkin et al 2005). In Malwa region of Madhya Pradesh garlic is cultivated on commercial scale. Ujjain district also grows garlic on a large scale, but for the last three years, the yield was not satisfactory. The average annual rainfall of the area is between 840 to 950 mm with erratic rainfall that sometimes caused water logging in the area.

The temperature of the area ranged between minimum 6^0C to maximum 43^0C. The present study was undertaken to investigate the socio-economic characteristics of the garlic growers, their exposure to mass media and their interest and attitude towards garlic growing.

METHODOLOGY

The study was conducted on 125 respondents in three villages of Ujjain block viz Jalalkhedi, Dewrakhedi and Akasoda with sample size of 36, 32 and 57, respectively. The respondents were selected through PRA exercise in the year 2007-08 who had been growing garlic continuously for two years. The data were collected on pre-tested proformae wrt variables such as age, education level of the respondents, their contact with the farm scientists/experts and exposure to mass media. Psychological variables such as their proneness to innovations and their risk taking quality were also studied. It was presumed that all these factors directly or indirectly influenced the garlic growing in the region. The data collected were subjected to statistical analysis.

RESULTS AND DISCUSSION

Age: The respondents were put in three categories on the basis of age viz young (15-29 years), middle aged (30-44 years) and old (45-59 years). It was found that more than half (54.4%) of the respondents were young followed by middle aged (29.6%) and old (16.0%), showing , thereby, that most of the garlic growers were young (Table 1).

Education level: The data given in Table 2 show the education level of the garlic growers. It can be seen that most of the growers were secondary pass (36.5%) followed by middle pass (28.0%). Considerable number of growers (18.5%) were also graduates. This shows that most of the growers in the sample were educated.

Table 1. Distribution of the respondents on the basis of age

Age (years)	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Young 15-29	21(58.34)*	12 (37.50)	35 (61.40)	68 (54.4)
Middle aged 30-44	09 (25.00)	12 (37.50)	16 (28.07)	37 (29.6)
Old 45-59	06 (16.66)	08 (25.00)	06 (10.53)	20 (16.00)

*Figures in parentheses are per cent values

Contact with agricultural scientists: To update the knowledge of production technology, it is desired from the farmers to remain in touch with the scientists or experts. The data on frequency of garlic growers meeting with the scientists (Krishi Vigyan Kendra, Ujjain are given in Table 3. The data reveal that majority of the growers had multiple mode of contact with the scientists. Main contact with the scientists was during their visit to the villages (50.4%), followed by regular contact (48.88%), telephonically (40.0%) and minimum (32.0%) at the time of rising of a problem. This multiple contact might have contributed to the keen interest of the farmers in garlic cultivation.

Exposure to mass media for agricultural information

The mass media are the most important tools to upgrade the knowledge of any community. It was worth finding the extent of exposure of the respondents to mass media and the data are given in Table 4. It

Table 2: Distribution of respondents on the basis of education.

Education level	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Graduates	06 (16.66)*	06 (18.75)	11 (19.29)	23 (18.50)
Secondary pass	16 (44.44)	14 (43.75)	16 (28.07)	46 (36.5)
Middle pass	09 (25.00)	05 (15.62)	21 (36.84)	35 (28.00)
Primary pass	05 (13.9)	07 (21.88)	09 (15.80)	21 (16.8)

*Figures in parentheses are per cent values

Table 3. Frequency of contact of the respondents agricultural scientists (Multiple responses)

Frequency	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Regular	21 (58.33)*	29 (90.62)	19 (33.33)	61 (48.88)
Only to solve the problems	08 (22.22)	11 (30.55)	13(22.80)	32 (25.60)
During scientists visit to the village	23 (63.88)	19 (59.37)	23(40.35)	63 (50.40)
Telephonic contact	21 (58.33)	16 (50.00)	13(22.80)	50 (40.00)

*Figures in parentheses are per cent values

Table 4. Distribution of respondents according to exposure to mass media (multiple response)

Frequency of exposure	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Radio	22 (61.11)*	21 (65.62)	34 (59.64)	77 (61.60)
Television	07 (19.44)	07 (21.87)	10 (17.54)	24 (19.20)
Newspapers	04 (11.11)	03 (9.37)	08 (25.00)	15 (12.00)
Agricultural magazines	03 (8.330	01 (3.125)	05 (8.77)	09 (07.2)

*Figures in parentheses are per cent values

Table 5. Distribution of the respondents according to their risk taking behaviour

Level of exposure	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Low	5 (13.8)*	2 (8.4)	11 (19.2)	18 (14.4)
Medium	6 (16.6)	6 (18.7)	16 (28.0)	28 (22.4)
High	25 (69.4)	24 (75.0)	30 (52.6)	79 (63.2)
Mean	34.4	36.3	34.2	34.83
SD				6.83
't' value				1.98

*Figures in parentheses are per cent values

was found that radio was still the main source of information of the garlic growers as 61.6 per cent farmers listened to radio for information. 19.2, 12.0 and 7.2 per cent people got information from television, newspapers and farm magazines, respectively, showing, thereby, that these three media were not preferred sources of information for them. Almost all the respondents (98.0%) had cell phones through which they contacted the experts/ scientists for information (data not presented).

Risk taking behaviour

In genrral, farmers do not take risk to adopt new technologies, innovations etc due to fear of failure. However, no

enterprise can flourish without taking risk. Taking into consideration this factor, the risk taking behaviour of garlic growers was also studied that was measured using scale developed by Supe (1969). The statements recorded were scored as strongly agree- 7, moderately agree- 6, agree- 5, undecided- 4, disagree- 3, moderately disagree- 2 and strongly disagree- 1. Table 5 represents the distribution of respondents according to their risk taking behaviour which reveals that majority of the farmers (63.2%) showed high risk taking ability, whereas, 22.4 and 14.4 per cent showed medium and low risk taking ability, respectively. This shows that the farmers had higher level of risk taking ability which was a positive factor on their part.

Innovation proneness

Innovation proneness is the degree to which an individual adopts technologies relatively earlier than others in his social system. The differences in the diffusion rates of innovations in a community can be largely explained by the differences in the traits of innovation, as perceived by potential adopters such as: relative advantage, compatibility, complexity, trial ability and observing ability (Dasgupta 1989).

It was measured with the help of self rating scale developed by Pathak (1993) and the data are represented in Table 6. It is evident from the data that majority (56.8%) of the respondents had high level of innovation proneness while, 22.4 per cent had medium and 20.80 per cent had low level of innovation proneness. The data depict that mainly the garlic growers were highly prone to innovations which denoted that they were quite advanced farmers and could turn better if subjected to new technologies and developments.

Table 6. Distribution of the respondents according to innovation proneness

Level of proneness	Jalalkhedi (n=36)	Dewrakhedi (n=32)	Akasoda (n=57)	Total (n=125)
Low	11 (80.55)*	06 (18.75)	09 (15.79)	26 (20.8)
Medium	06 (16.69)	02 (6.25)	20 (35.09)	28 (22.40)
High	19 (52.78)	24 (75.00)	28 (49.12)	71 (56.8)
Mean	27.6	29.6	28.4	28.50
SD				4.98
't' value				1.98

*Figures in parentheses are per cent values

In conclusion it can be inferred that the majority of the growers of these villages of Ujjain block were young, well educated, were in regular touch with experts, had strong exposure to mass media mainly radio and thus possessed high risk taking ability and were prone to innovations. If new technologies were introduced in the area these could be adopted easily and change the overall standard of living of the growers.

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