

FARMERS PROFILE AND CORRELATES OF WAL (*DOLICHOUS LABLAB*) PRODUCTION TECHNOLOGY

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Abstract: The pulses are the integral part of the cropping systems of the farmers all over the country because these crops fit in well in the crop rotation and crop mixtures. The major pulses grown in the Raigad district are due to suitability of agro climatic condition, soil type, increase irrigation potential on account of canal irrigation, introduction of improved varieties of pulses and improved package of practices. The study was undertaken to know profile and their correlation with adoption behaviour of wal growers in Raigad district of Konkan region in Maharashtra state. Total 120 wal growers were selected through purposive sampling method from the selected district. The study revealed that variables viz. experience in farming, area under wal cultivation, mass media exposure and knowledge were found positive and significantly related with adoption behaviour of wal growers. There is scope to increase the adoption behaviour by improving the other profile characteristics of the respondents.

Keywords: profile, correlates, production technology

INTRODUCTION

Farmers of India depend on agriculture occupation as source of livelihood and economy. Introduction of new technology during the fourth plan has changed the shape of Indian agriculture. From a stagnant stage, it has picked up a speed which accelerated day by day. The large increase in production of food grains after mid-sixties commonly described as "Green Revolution". The rice and wheat have shown significant increase of production and productivity in major cereals but pulses remained completely untouched by this success story.

The pulses are the integral part of the cropping systems of the farmers all over the country because these crops fit in well in the crop rotation and crop mixtures. The major pulses cultivated during the *kharif* season are pigeon pea, green gram and black gram. The common pulses grown in *rabi* season are chickpea, lentil, field pea and rajmah. The 'Moong' and 'Urid'

both are the short duration legume crop. It is used to making idali, halwa, dosa, papad. For the milch animal it is a good nutritive fodder. It is also used as a green manuring crop and it helps to prevent the soil erosion.

In the Konkan region of Maharashtra state, out of five district Raigad district is found highest in area, production and productivity of pulses like Tur in *kharif* season and wal, Gram, Urid and Moong in *rabi* season. The major pulses grown in the Raigad district are due to suitability of agro climatic condition, soil type, increase irrigation potential on account of canal irrigation, introduction of improved varieties of pulses and improved package of practices. Therefore, a data related to the objective viz. profile of the wal growers and their correlation with the adoption behaviour is presented in this research paper.

MATERIALS AND METHODS

The present study was conducted in the Raigad district in Konkan region of Maharashtra state.

From Raigad district, Mangaon division was selected on the basis of highest area under wal crop. Out of four tahsils of this division, Roha, Mangaon and Sudhagad-Pali tehsils were selected purposively because of the technology transfer programme implemented by the Dept. of Agriculture and KrishiVigyan Kendra of the district. In consultation with Officials and extension personnel of the Mangaon division and KVK scientist, 4 villages from each tahsil and 10 farmers from each village were selected. The total sample size was 120 respondents. Data were collected by personal interview technique. The data were analysed with suitable statistical measures and result were interpreted in light of the objectives of study.

RESULT AND DISCUSSION

Profile of the respondent based on their socio-personal characteristics

Different characteristics like personal, social, psychological and economic attributes play an influential role in knowledge and adoption behaviour of any farm technology. Some important characteristics of the wal growers of the study area were selected for the study and the findings of these characteristics have been presented in Table 1.

Table 1: Profile characteristics of the wal growers

Sr. No.	Profile characteristics	Major findings	Percentage
1	Age(yrs)	Middle (42 to 62)	60.84
2	Education(std)	Secondary (8 th to 10 th)	35.00
3	Annual income(Rs.)	Medium (Rs. 59385/- to Rs. 190715/-)	66.67
4	Family size	Medium (4 to 6)	66.66
5	Experience in farming(yrs)	Medium (9 to 29)	67.5
6	Area under Wal cultivation (ha).	Medium (0.12 to 0.69)	90.00
7	Mass media exposure (score)	Medium (5 to 9)	74.16
8	Scientific orientation(score)	High (10 and above)	59.17
9	Social participation(score)	Medium (2.08 to 8.76)	65.84
10	Knowledge about wal production technology. (score)	Medium (25 to 33)	66.67

The data presented in Table 1 revealed that, 60.84 per cent of the respondents belonged to 'middle' age category with average age of 52 years. It could be observed that maximum number 35.00 per cent of the respondents had 'secondary' education with average educational level 9 standard. It was revealed that, majority (66.67 per cent) of the respondents had 'medium' annual income with average annual income of Rs. 125050/-. The majority (66.66 per cent) of the respondents had 'medium' family size with average family size 5. It was observed that 67.5 per cent respondents had 'medium' experience of farming with average 19 years' experience in farming. With regards to area under wal cultivation, it was observed that majority (90.00 per cent) of respondents had 'medium' area under wal cultivation with average 0.40 ha. Further it was found that, majority (74.16 per cent) of the respondents had 'medium' mass media exposure with average score was 7. It was seen that majority (59.17 per cent) of the respondents had 'high' scientific orientation with average score 9. Regarding social participation it was observed that 65.84 per cent of the respondents had 'medium' social participation. With respect to knowledge about wal production technology it was observed that majority (66.67 per cent) of respondents had 'medium' level of knowledge with average score 29.

Relationship between profile of respondents and their adoption behaviour

Relationship between the profile of wal growers namely, age, education, annual income, family size, experience in farming, area under wal cultivation, mass media exposure, scientific orientation, social participation, knowledge and their adoption behaviour of recommended cultivation practices of wal was tested by correlation.

Considering this, an attempt was made in this investigation to ascertain the relationship, if any, between selected all characteristics of the wal growers and their adoption behaviour by computing the correlation coefficient. The result obtained are presented in Table 2.

Table 2: Relationship between profile of respondents and their adoption behaviour

(N= 120)

Sl. No.	Independent Variables	Coefficient of Correlation ('r' values)
1	Age	0.104286 NS
2	Education	-0.22009 S*
3	Annual income	-0.19633 S*
4	Family size	0.091498 NS
5	Experience in farming	0.198508 S*
6	Area under wal cultivation	0.207182 S*
7	Mass media exposure	0.225551 S*
8	Scientific orientation	-0.20641 S*
9	Social participation	-0.21446 S*
10	Knowledge	0.533285 S**

S* = Significance at 0.05 level (0.174)

S** = Significance at 0.01 level (0.228)

NS = Non significance

1. Age and adoption behaviour: It is seen that the correlation value (0.104286) between age of wal growers and adoption behaviour was found to be 'positive and non-significant' at 0.05 level of probability. It indicates that, age of the respondents did not influence their adoption behaviour of wal growers. Thus, it could be said that youth have a desire to practise innovative things and middle age farmers had more adoption behaviour of wal production technology. The findings are similar with the findings of Aske (2008).

2. Education and adoption behaviour: The correlation value (-0.22009) between education of wal growers and adoption behaviour was found to be 'negative and significant' at 0.05 level of probability. It means that as the education of the respondents increases, their adoption behaviour decreases and vice versa. Those respondents who are highly educated they are eager to know much about the farming in general and wal cultivation in particular but found inactive in adoption. The findings are in line with the findings of Khupse and Kadam (2012).

3. Annual income and adoption behaviour: The correlation value (-0.19633) between annual income and the adoption behaviour of wal growers was found to be 'negative and significant at 0.05 level of probability. It can be concluded from the results that, as the annual income of the respondents increases, their

adoption behaviour decreases and vice versa. The reason might be respondents who have high annual income they may go for the investment in the other crops, subsidiary enterprises and for family consumption. The findings are similar with the findings of Khupse and Kadam (2012)

4. Family size and adoption behaviour: The correlation value (0.091498) between family size and the adoption behaviour of wal growers was found to be 'positive and non-significant at 0.05 level of probability. It says that the adoption behaviour of wal production technology was not dependent on family size. The wal growers having differential family size had more or less equal adoption behaviour of wal production technology. The findings are dissimilar with the findings of Chouhan (2005).

5. Experience in farming and adoption behaviour: The relationship between experience in farming and the adoption behaviour of wal growers was found to be 'positive and significant' (correlation value 0.198508). It indicates that with increase in experience in farming, the adoption behaviour increases. The experienced farmers might have followed the recommended practise of wal production technologies for getting a more income. The findings are similar with the findings of Yadav (2001).

6. Area under wal cultivation and adoption behaviour: The correlation value (0.207182) between area under wal cultivation and the adoption behaviour of wal growers was found to be 'positive and significant at 0.05 level of probability. It indicates that with increase in area under cultivation, increase in the adoption behaviour was found. The possible reason might be that the farmer of the study area invests the more land in wal production for getting a maximum income from that. The findings are similar with the findings of Aske (2008), Choudhary (2010) and Raghuwanshi (2010).

7. Mass media exposure and adoption behaviour: Regarding mass media exposure and the adoption behaviour of wal growers positive and significant relationship (correlation value 0.225551) was found. It shows that with increase in mass media exposure increases the adoption behaviour. The possible reason might be that the farmer of the study area has used mass media

as a source of information for getting new ideas regarding the wal production technologies than a media for entertainment. The findings are similar with the findings of Sharma (2007)

8. Scientific orientation and adoption behaviour: It was observed from the study that, the correlation value (-0.20641) between scientific orientation and the adoption behaviour of wal growers was found to be 'negative and significant at 0.05 level of probability. It indicates that, as increase in scientific orientation their adoption behaviour found decreases and vice versa. Scientific orientation refers to the person proclivity to use scientific methods in farming and decision making. This shows that scientific orientation in wal production technology of the wal grower's exhibit negative impact on adoption behaviour. The findings are dissimilar with the findings of Patel (2000).

9. Social participation and adoption behaviour: It was observed from the Table 1 that, the correlation value (-0.21446) between social participation and the adoption behaviour of wal growers was found to be 'negative and significant' at 0.05 level of probability. It indicates as the social participation of the respondent increases their decreases in adoption behaviour decreases and vice versa. This might be reason when respondents had more social participation, they may not give as such time to adopt a new technology in their farm. The findings are similar with the findings of Khupse and Kadam (2012).

10. Knowledge and adoption behaviour: The correlation value (0.533285) between knowledge and the adoption behaviour of wal growers was found to be 'positive and significant' at 0.01 level of probability. This confirmed that with an increase in knowledge level of the respondents, their adoption behaviour about the recommended wal production technology also increase significantly. Detailed knowledge of the practise is a pre-requisite for adoption. If the farmer does not have sufficient knowledge of recommended practise, he will not take risk to adopt it. Once he becomes fully aware of the technology and if convinced of its utility, he will not hesitate in adopting it. Obviously, the adoption behaviour of recommended technology would be more among the farmers with high

knowledge level than that with low knowledge level. The findings are similar with the findings Aske (2008).

CONCLUSION

The Relationship between profile of the farmer and their adoption behaviour of revealed that age and family size were non-significantly related with adoption behaviour of wal growers, whereas education, annual income, scientific orientation and social participation were found negative but significant related with adoption behaviour. The other variables viz. experience in farming, area under wal cultivation, mass media exposure and knowledge were found positive and significantly related with adoption behaviour of wal growers. It concludes that, there is scope to increase the adoption behaviour by improving the profile of the respondents.

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