

RELATIONSHIP BETWEEN PROFILE OF THE GREEN GRAM GROWERS AND THEIR LEVEL OF KNOWLEDGE ABOUT RECOMMENDED GREEN GRAM PRODUCTION TECHNOLOGY

Vaibhav B. Paradva¹, Mukesh R. Patel² and Pinakin C. Patel³

¹ Agriculture Officer, Pulses Research Station, JAU, Junagadh - 362 001

² Assistant Extension Educationist, Sardar Smruti Kendra, Directorate of Extension Education, AAU, Anand - 388 110

³ Assistant Extension Educationist, Directorate of Extension Education, AAU, Anand - 388 110

Email: vaibhavparadva72@gmail.com

ABSTRACT

The present study was conducted on randomly selected 120 respondents from randomly selected 12 villages from purposively selected 3 talukas namely, Tarapur, Khambhat and Sojitra of Anand district of Gujarat state. The study discloses that out of twelve independent variables, nine variables viz. age, education, farming experience, social participation, size of landholding, extension contact, mass media exposure, scientific orientation and risk orientation of the green gram growers were positively and significantly correlated with their level of knowledge of the farmers about recommended green gram production technology. Whereas, three variables viz. size of family, annual income and economic motivation had no relationship with the level of knowledge of the farmers about recommended green gram production technology.

Keywords : relationship, green gram growers, level of knowledge, production technology

INTRODUCTION

India is predominantly an agricultural country, as more than 58.00 per cent of its population is living in villages and the majority of them are engaged in the agricultural enterprise (Anon., 2018). Besides cereals, pulses are also a wonderful gift of nature. Pulses are important food crops occupying a unique position in every known system of farming as main, catch, cover, green manure, intercrop and mix crop. Green gram (*Vigna radiata L.*) is one of the important pulse crop known as “mung” or “mungbean”. It belongs to the family Leguminosae and subfamily Papilionaceae.

The total area covered under pulses in India was 27.98 million hectares and production was 23.02 million tonnes with a productivity of 822 kg/ha of which green gram was grown on 4.58 million hectares and production was 2.50 million tonnes with a productivity of 548 kg/ha. In Gujarat, total area under pulses was 0.90 million hectares and production was 1.05 million tonnes with a productivity of 1171 kg/ha. While green gram is grown on 0.13 million hectares with the total production of 0.10 million tonnes with a productivity of 771 kg/ha (Anon., 2019-20).

Knowledge about the recommended production technology of pulses is very much important as it directly affects the adoption (Biradar *et al.*, 2013, Salunkhe *et al.*, 2020 and Ali *et al.*, 2021). The adoption of scientific and

recommended production technology of pulses is of prime importance to increase productivity and per capita availability of pulses in India.

OBJECTIVE

To explore the relationship of the selected characteristics of the farmers with their level of knowledge about recommended green gram production technology

METHODOLOGY

The study was conducted in Anand district of Gujarat state. Total 120 green gram growers were selected using multistage sampling. Tarapur, Khambhat and Sojitra talukas of Anand district were selected purposively in the first stage considering the maximum area under summer green gram. In second stage, 4 villages were selected randomly from each selected talukas. 10 farmer were selected randomly from each selected villages comprising the sample of 120 farmers. An interview schedule based on the objective of the study was developed and the respondents were personally interviewed for the collection of information. The ex-post facto research design was used for the research study (Kerlinger, 1976). Based on the correlation coefficient the relationships were assessed and analyze the data to draw a meaningful conclusion.

RESULTS AND DISCUSSION

Relationship between the profile of the green gram growers with their level of knowledge about recommended green gram production technology

The knowledge of respondents is mainly influenced by personal, social, economic, communicational and psychological characteristics of the individual and it affects the adoption. Factor influencing adoption are age, education, farming experience, social participation, size of landholding, annual income, extension contact, mass media exposure, scientific orientation and risk orientation (Paradva, 2019 & Paradva et al., 2021). So for this purpose the coefficient of correlation (r) for independent variable was worked out to study the variables influencing the knowledge.

Table 1: Relationship between the profile of the green gram growers with their level of knowledge about recommended green gram production technology (n=120)

Sr. No.	Independent Variables	Correlation Coefficient
X ₁	Age	0.241*
X ₂	Education	0.195*
X ₃	Farming experience	0.276*
X ₄	Size of family	0.118
X ₅	Social participation	0.240*
X ₆	Size of landholding	0.221*
X ₇	Annual income	0.174
X ₈	Extension contact	0.189*
X ₉	Mass media exposure	0.208*
X ₁₀	Economic motivation	0.108
X ₁₁	Scientific orientation	0.202*
X ₁₂	Risk orientation	0.189*

* = significant at 5% level of probability

Age and knowledge

It is apparent from the result presented in the Table 1 that age of the green gram growers had positive and significant correlation (r = 0.241*) with their level of knowledge about recommended green gram production technology. It indicates that the knowledge level was high among the old age farmers as compared to that of young farmers as the farming experience is more in old age farmers which is responsible for increase in the knowledge level. This finding is similar confined with the findings of Singh, (2014).

Education and knowledge

The results presented in Table 1 reflects that

level of knowledge of the green gram growers regarding recommended green gram production technology had positive and significant (r = 0.195*) correlation with their level of education. It indicates that level of knowledge is more among the green gram growers having more education level. It might be due to the fact that as increase in the education level affects the understanding level as well as knowledge of the persons. So it would create interest in them to learn new technology about green gram cultivation practices which resulted in increase in knowledge. This finding is in concurrence with the findings reported by Joshi, (2004) and Singh, (2014).

Farming experience and knowledge

The results in Table 1 clearly shows that farming experience of green gram growers had positive and significant correlation (r = 0.276*) with their level of knowledge about recommended green gram production technology. The probable reason for such situation might be a person is having more experience, he also get a chance to improve knowledge through farming experience and expertise in problem solving. In increasing farming experience also increase the knowledge about green gram production technology. So there is a saying that experience is the best teacher. This finding is agreement with the findings of Patel, (2003).

Size of family and knowledge

It is apparent from the result presented in the Table 1 that the size of family of green gram growers had positive and non significant correlation (r = 0.118) with their level of knowledge about recommended green gram production technology. It showed that the size of family had no influence on the knowledge level of the farmers. This finding is similar confined with the findings of Kumar, (2003) and Vasava, (2005).

Social participation and knowledge

The results presented in Table 1 clearly indicated that social participation of the green gram growers had positive and significant correlation (r = 0.240*) with their level of knowledge about recommended green gram production technology. The probable reason might be that the active participation in social organization provides platform to the farmers to interact with the other members as well as some of the progressive farmers of society and helped them to share their idea, information and their experience regarding the benefit obtained through adoption of green gram cultivation practices which influence to increase the knowledge level of green gram growers.

Size of land holding and knowledge

The results presented in Table 1 clearly indicated that

size of land holding of the green gram growers had positive and significant correlation ($r = 0.221^*$) with their level of knowledge about recommended green gram production technology. The reason might be due to large size of land holding farmers might have taken a more risk as compared to that of marginal and small size of land holders.

Annual income and knowledge

It is apparent from the results presented in the Table 1 that annual income of the green gram growers had positive and non significant correlation ($r = 0.174$) with their level of knowledge about recommended green gram production technology.

Extension contact and knowledge

The results in Table 1 highlighted that extension contact of the green gram growers had positive and significant correlation ($r = 0.189^*$) with their level of knowledge about recommended green gram production technology. The probable reason might be due to frequently contacts and interaction between extension personnel from KVK, SSK, SAUs and others with green gram growers regarding green gram cultivation practices and their significance have helped to open mental horizon which ultimate reflects into gain knowledge and cleared their doubts about the green gram production technology. This finding is related with the finding of Joshi, (2004).

Mass media exposure and knowledge

The results in Table 1 highlighted that mass media exposure of the green gram growers had positive and significant correlation ($r = 0.208^*$) with their level of knowledge about recommended green gram production technology. These findings support the general view that mass media exposure enhances the farmer's knowledge on several aspect of new technology. Green gram growers who keep themselves in touch with mass media were like to have better knowledge on the current green gram cultivation innovations. Thus, the significantly relation was noticed. This finding is related with the finding of Patel, (2003).

Economic motivation and knowledge

It is apparent from the results depicted in Table 1 that, economic motivation of the green gram growers had positive and non significant correlation ($r = 0.108$) with their level of knowledge about recommended green gram production technology.

Scientific orientation and knowledge

The results in Table 1 indicated that scientific orientation of the green gram growers had positive and

significant correlation ($r = 0.202^*$) with their level of knowledge about recommended green gram production technology. Thus, it can be seen that educated farmers are more active in social participation and motivated to know about the new information related to scientific technology for getting good production and higher income. Such scientific information ultimately increases their knowledge about green gram production technology. This finding is related with the finding of Prajapati, (2003).

Risk orientation and knowledge

It is apparent from the results presented in Table 1 that, risk orientation of the green gram growers had positive and significant correlation ($r = 0.189^*$) with their level of knowledge about recommended green gram production technology, which indicated that risk orientation had influence on level of knowledge of the green gram growers. From the results, it can be inferred that middle level of age and medium farming experience which attributed in building more risk taking capacity to adopt new technology about green gram cultivation. So, its increase in their knowledge about green gram production technology. This finding is in concurrence with the findings reported by Joshi, (2004) and Singh, (2014).

CONCLUSION

The result illustrated that out of twelve independent variables, nine variables *viz.* age, education, farming experience, social participation, size of landholding, extension contact, mass media exposure, scientific orientation and risk orientation of the green gram growers were positively and significantly correlated with their level of knowledge of the farmers about recommended green gram production technology. Whereas, three variables *viz.* size of family, annual income and economic motivation had no relationship with the level of knowledge of the farmers about recommended green gram production technology.

RECOMMENDATION

It is recommended that the trainings should be arranged considering the personal, social, economical, communicational and psychological variables *viz.* age, education, farming experience, social participation, size of landholding, extension contact, mass media exposure, scientific orientation and risk orientation of the green gram growers that positively affect the knowledge of the farmers about recommended green gram production technology.

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CONFLICT OF INTEREST

No conflict of interest among the researchers.

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