

## **Correlates of Selected Independent Variables and Attitude of Rural Women towards Homestead Technologies of Rajendra Agricultural University (RAU) Bihar**

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### **ABSTRACT**

Attitude is the degree of favourable or unfavourable feelings towards a psychological object. In the present context, it shows the degree of positive or negative attitude rural women of Bihar have towards the selected homestead technologies of RAU. The type of attitude they have is influenced by many socio-personal, economic, communicational, psychological, situational variables. Hence an attempt was made to find out the factors which affect knowledge level of rural women about homestead technologies of RAU. The study was conducted on 225 rural women who were exposed to the nine selected homestead technologies from three districts of Bihar viz. Samastipur, Muzaffarpur and Vaishali. The independent variables education, family support, information source utilization, scientific orientation, innovativeness, perceived attributes of homestead technologies and input availability were positively and significantly associated with attitude of the respondents towards homestead technologies of RAU. The variables information source utilization, scientific orientation and input availability were positively and significantly contributing to attitude of rural women towards homestead technologies of RAU.

**Keywords:** Attitude, Homestead technologies, Rural women, Bihar

### **INTRODUCTION**

Attitude is the degree of positive or negative effect associated with a psychological object. Home Science is a field of knowledge and service primarily concerned with strengthening family life and enhancing potentials of the individuals for meaningful life. Homestead technologies are those technologies that are related to farm and home activities of rural women.. A number of homestead technologies has been developed by the scientists throughout agricultural universities for rural/ farm women. Rajendra Agricultural University (RAU) has developed a variety of value added food products from Quality Protein Maize (QPM), roots & tubers, minor millets, mushroom, vermicompost, apiculture to list a few of them. As scientists continuously develop and refine technologies, the feasibility and practicability of these technologies must be assessed. One of the major approaches to determine the effectiveness of a

technology is to begin with the farm women's attitude towards such technologies. The attitude of an individual is the result of a no. of factors to which the individual is exposed. Several personal, socio-economic, communicational, psychological and situational variables directly or indirectly affect it.

Several studies and researches have been carried out on the attitude of farm women to agricultural technologies but very few in contexts to homestead technologies. Hence it becomes imperative to unearth the facts so that the results of the research would serve as a guideline for the researchers to work on it and make these technologies more feasible, women-friendly and beneficial for them. Keeping these facts in mind, the study was conducted to find out the correlates of selected independent variables and attitude of rural women towards homestead technologies of Rajendra Agricultural University (RAU) Bihar.

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## MATERIALS AND METHODS

The study was conducted on a sample of 225 rural women from three randomly selected districts of Bihar viz. Samastipur, Muzaffarpur and Vaishali. One block was randomly selected from each of the districts and three villages were randomly selected from each of the block. Twenty five rural women from each of the nine selected villages were selected as respondents for study. Thus 225 respondents who were exposed to all the nine selected homestead technologies of RAU viz. fruit and vegetable preservation, stitching and embroidery, value addition to garments, arts and craft making, value added products from cereals and pulses, mushroom production, value added mushroom products, vermicompost technology and apiculture constituted the sample for study. Attitude was the dependent variable represented by  $Y_1$ . Age ( $X_1$ ), Education ( $X_2$ ), Family size ( $X_3$ ), Occupation ( $X_4$ ), Family income ( $X_5$ ), Family support ( $X_6$ ), Information source utilization ( $X_7$ ), Economic motivation ( $X_8$ ), Scientific orientation ( $X_9$ ), Innovativeness ( $X_{10}$ ), Perceived attributes of homestead technologies ( $X_{11}$ ), Value orientation ( $X_{12}$ ), Risk orientation ( $X_{13}$ ), Input availability ( $X_{14}$ ), Rural customs ( $X_{15}$ ), Market intelligence ( $X_{16}$ ), Institutional support ( $X_{17}$ ) and Socio-capital aspects ( $X_{18}$ ) were the independent variables.

In order to assess the extent of relationship between the selected dependent variable and the independent variables, the data was put to correlation analysis. The values of correlation coefficient ( $r$ ) were computed and tested for their statistical significance.

Multiple linear regression was carried out to find out the contribution of independent variables in predicting the attitude of the respondents towards homestead technologies of RAU. The eighteen independent variables were fitted in the regression equation to predict their potency towards the selected dependent variable along with coefficient of determination ( $R^2$ ) and F-value.

## RESULTS AND DISCUSSION

From the data of Table 1 it was found that family support and innovativeness were positively and significantly related to the attitude of the respondents at 5 per cent level of significance, whereas the variables education, information source utilization, scientific

**Table 1: Relationship of independents variables with the dependent variable**

Independents variables	Coefficient of correlation ( $r$ )
	Dependent variable attitude ( $Y_1$ )
Age ( $X_1$ )	0.10208NS
Education ( $X_2$ )	0.19252**
Family size ( $X_3$ )	-0.12187 NS
Occupation ( $X_4$ )	0.09338NS
Family income ( $X_5$ )	0.10327NS
Family support ( $X_6$ )	0.13165*
Information source utilization ( $X_7$ )	0.30023**
Economic motivation ( $X_8$ )	0.08543NS
Scientific orientation ( $X_9$ )	0.19807**
Innovativeness ( $X_{10}$ )	0.13089*
Perceived attributes of homestead technologies ( $X_{11}$ )	0.23447**
Value orientation ( $X_{12}$ )	0.08975NS
Risk orientation ( $X_{13}$ )	0.06222NS
Input availability ( $X_{14}$ )	0.26459**
Rural customs ( $X_{15}$ )	0.06800NS
Market intelligence ( $X_{16}$ )	0.05238NS
Institutional support ( $X_{17}$ )	0.02154NS
Socio-capital aspects ( $X_{18}$ )	0.12362NS

\*Significant at 5% level of significance; \*\*Significant at 1% level of significance; NS = Non-significant

orientation, perceived attributes of Homestead technologies and input availability were positively and highly significant at 1 per cent level of significance. Rest of the eleven independent variables viz. age, occupation, family income, family size, economic motivation, value orientation, risk orientation, rural customs, market intelligence, institutional support and socio-capital aspects did not had significant relation with the dependent variable.

The result of Table 1 highlighted that with increased family support and more innovativeness of the respondents, their attitude towards homestead technologies of RAU had also increased. Because of increased family support the respondents got an opportunity to attend various training programs conducted by the institutions and hence could develop favourable attitude towards them. Regarding innovativeness, it is quite logical that innovativeness and attitude are directly proportional to each other. Increase in the educational level of the respondents had developed favourable attitude towards the technologies



of RAU as is evident from the positive association and the correlation coefficient values.

Respondents who utilized more information sources had more positive attitude than the respondents whose information source utilization was less. Scientific orientation of the respondents was also positively correlated with attitude towards homestead technologies which signifies that respondents who were more scientifically oriented had favourable attitude towards homestead technologies than respondents who were less scientifically oriented. Perceived attributes of homestead technologies and input availability were also positively correlated with the attitude of the respondents which connotes that respondents whose perception about the attributes of homestead technologies was high and had better and easy accessibility to inputs had more favourable attitude than its contrary.

This is supported by the study of (Sreenivasulu, 2011) who found that education, information source utilization and innovativeness had positive and significant relationship with the attitude of the FFS farmers. (Isreal, 2003) reported that scientific orientation of the respondents exhibited positive and significant

relationship with attitude at 1 per cent level of significance.

**Relative contribution of independent variables towards attitude of the respondents about homestead technologies of RAU:** The relative contribution of independent variables towards attitude of the respondents towards homestead technologies of RAU is presented in Table 2.

The t-values of the independent variables highlighted the fact that scientific orientation was positively significant at 5 per cent level of significance, whereas information source utilization and input availability were highly and positively significant at 1 per cent level of significance. The remaining fifteen variables under study could not emerge as significant contributors towards attitude of the respondents.

All the variables together explained 51.75 per cent variability which is obvious from the coefficient of determination  $R^2$  value. The F-calculated value (7.532) also stood out to be significant which supports that  $R^2$  is significant. It can be inferred from this result of Table 2 that out of the eighteen selected independent variables, only three of them were significantly

**Table 2: Relative contribution of independent variables towards attitude of the respondents about Homestead technologies of RAU**

Independent variables	b-values	Standard error	t-value
Age	0.0093	0.8131	0.122NS
Education	0.0716	0.2712	0.802 NS
Family size	-0.1021	0.5330	1.533 NS
Occupation	-0.0665	0.3859	0.894 NS
Family income	0.0865	0.8281	1.134 NS
Family support	0.0620	0.1037	0.782 NS
Information source utilization	0.3015	0.0344	2.702**
Economic motivation	-0.0016	0.2826	0.023NS
Scientific orientation	0.2405	0.2519	2.358*
Innovativeness	-0.1810	0.1801	1.763NS
Perceived attributes of Homestead technologies	-0.1630	0.1084	1.953NS
Value orientation	0.1007	0.2431	1.126NS
Risk orientation	-0.0960	0.1251	1.025NS
Input availability	0.2026	0.1V204	2.759**
Rural customs	-0.0593	0.1108	0.758NS
Market intelligence	-0.0231	0.1815	0.277NS
Institutional support	-0.0022	0.2281	0.033NS
Socio-capital aspects	0.0494	0.1456	0.673NS

$R^2 = 0.5175$ ; F calculated Value = 7.532

\*Significant at 5% level of significance; \*\*Significant at 1% level of significance; NS = Non-significant

contributing towards attitude level of rural women towards homestead technologies of RAU. It means that extraneous variables were contributing upto 48.25 per cent towards attitude level of rural women and these variables should be taken into account to study their attitude towards any phenomenon and while formulating any programs that involves their attitude also as one of the variable.

This is supported by the studies of (Sreenivasulu, 2011) who found that information source utilization had significant relationship with the attitude of the FFS farmers and (Isreal, 2003) who reported that scientific orientation of the respondents had significant relationship with attitude.

### CONCLUSION

It can be concluded from this study that the variables education, family support, information source utilization, scientific orientation, innovativeness, perceived attributes about homestead technologies and input availability are significantly correlated with the

attitude of rural women towards homestead technologies of RAU. The scientists and extension personnel should take these factors into account when they develop a technology and disseminate it among them so that they develop favourable attitude towards those technologies. Only when they have positive attitude towards such technologies, can their knowledge level about them be improved, leading ultimately to higher rate of adoption and its sustained acceptance among rural women.

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