

RELATIONSHIP BETWEEN INDEPENDENT VARIABLES AND ADOPTION OF BACKYARD POULTRY FARMING BY THE BENEFICIARIES

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ABSTRACT

The rural backyard poultry although losing its importance under the impact of modernization and industrialization, is still prevalent in rural and tribal areas of the country. The present study was aimed to find out the relationship between selected independent variables with adoption level of Backyard poultry farming by the beneficiaries. The present investigation was conducted in SKNAU Jobner-Jaipur, Rajasthan. Out of a total 120 beneficiaries 80 beneficiaries were selected randomly for the study purpose. The data were collected with the help of a well-structured interview schedule. It was found that caste was negatively and non-significantly related with the adoption of Backyard poultry farming practices by the beneficiaries. It was also observed that occupation, education, family size, family type and land holding were positively and non-significantly related with the adoption of Backyard poultry farming practices by the beneficiaries. It was also found that age, social participation, annual income, number of poultry birds and poultry farming experience were positively and significantly related with the adoption of Backyard poultry farming practise by the beneficiaries.

Keywords: adoption, backyard poultry farming, beneficiaries, relationship, variables

INTRODUCTION

India is one of the largest producers of poultry meat and eggs in the world. As India is the 3rd largest egg producer after China and USA with annual production of 82.93 billion eggs. Further India is 7th largest chicken producer after China, USA, Indonesia, Brazil, Iran and Pakistan (Agriculture Statistics at a Glance 2017, GoI). Rajasthan ranks 14th in egg production and contributes 10 per cent of meat production in India. Rajasthan has 80.24 lakh poultry birds. There are total 20,000 poultry rearers in Rajasthan. Backyard poultry plays important role in accelerating the pace of poverty reduction, enhancing the food, nutrition security of the rural households and promotion of gender equality (Ahuja, *et al.* 2004). Backyard poultry has found special favour with the poor (landless, marginal and small farmers) and tribals, scheduled castes and other backward caste communities (Shinde and Srivastava, 2006; Mandal *et al.*, 2006). Information on the existing backyard poultry production system and tribals involved in this particular system helps in formulating the strategies for better adoption of poultry practices.

Poultry farming is possible in widely different agro climatic environment as the fowl possesses marked physiological adaptability. Requirement of small space,

low capital investment, quick return from outlay and well distributed turn over throughout the year make poultry farming remunerative in both rural and urban areas. The rearing of poultry provides an excellent opportunity for gainful employment to idle or unemployed members of rural communities. The adoption of Backyard Poultry farming as an entrepreneurial activity among resource poor tribal women traditionally, the village poultry in tribal areas is based on non-descript varieties of poultry stock and their productivity is also very low as compared to improved Backyard Poultry. Rural poultry farming with improved birds provide a solution to food security to the needy villagers paving a way for sustainable agriculture in rural areas of India. Several studies show that these poor tribal people have not been enriched by the knowledge emanating from the research institutions or extension centre. Training and development leads to improved profitability and more positive attitudes towards profit orientation (Vinaya *et al.*, 2019).

There is growing evidence to demonstrate the role of backyard poultry in sustaining and enhancing poor peoples' livelihoods (Ahuja *et al.*, 2008) enhancing the food and nutrition security of the poorest households (Ahuja *et al.* and Sen, 2007). The rural backyard poultry although losing its importance under the impact of modernization and

industrialization, is still prevalent in rural and tribal areas of the country (Ahlawat, 2013).

OBJECTIVE

To find out the relationship between selected independent variables with adoption level of Backyard Poultry beneficiaries

METHODOLOGY

The present investigation was conducted in purposively selected Sri Karan Narendra Agriculture University, Jobner-Jaipur, Rajasthan. A project under RKVY on backyard poultry is being operated since 2014. To find out the adoption level of Backyard poultry beneficiaries, Jaipur district was purposively selected for the study purpose because maximum number *i.e.* 120 beneficiaries were benefited from this district. Out of a total 120 beneficiaries, 80 beneficiaries were selected randomly for the study purpose. The selected beneficiaries belonged to six tehsils of Jaipur districts namely- Phulera, Chomu, Renwal, Amber, Dudu, & Phagi. So all the tehsils were selected for the study purpose. The data were collected with the help of personal interview technique. The relationship between adoption of beneficiaries about Backyard poultry farming and the selected independent variables *viz.*, age, education, occupation, caste, family size, family type, land holding, annual income, social participation, number of poultry birds and poultry farming experience were measured by computing “Coefficient of Correlation (r)”.

The Correlation Coefficient (‘r’ value) was used to measure the relationship between dependent and independent variables. The correlation coefficient between two groups was calculated by using the following formula.

$$r = \frac{\sum_{x_i y_i} - (\sum_{x_i})(\sum_{y_i})/n}{\sqrt{\sum_{x_i}^2 - (\sum_{x_i})^2/n} \sqrt{\sum_{y_i}^2 - (\sum_{y_i})^2/n}}$$

Where,

- r = Correlation coefficient
- n = Number of paired observations
- x_i = Value of x variable for ith pair
- y_i = Value of y variable for ith pair

RESULTS AND DISCUSSION

Relationship between selected independent variables and adoption of backyard poultry farming of the beneficiaries

The relationship between adoption of backyard poultry farming of the beneficiaries and the selected independent variables *viz.*, age, education, occupation, caste, family size, family type, land holding, annual income, social

participation, number of poultry birds and poultry farming experience were measured by computing “Coefficient of correlation (r)”.

Table 1 : Relationship between selected independent variables and adoption of backyard poultry farming of the beneficiaries (n=80)

Sr. No.	Independent variables	Correlation coefficients (‘r’ value)
X ₁	Age	0.252*
X ₂	Caste	-0.055NS
X ₃	Occupation	0.164NS
X ₄	Education	0.247*
X ₅	Family size	0.041NS
X ₆	Type of family	0.091NS
X ₇	Land holding	0.196NS
X ₈	Social participation	0.346**
X ₉	Annual income	0.450**
X ₁₀	Number of poultry birds	0.281*
X ₁₁	Poultry farming experience	0.207*

*Significant at 0.05 level of probability, NS= Non-Significant

**Significant at 0.01 level of probability

Age and level of adoption

It is apparent from the data presented in the Table 1 that the age of the backyard poultry beneficiaries had positive and significant correlation with extent of adoption of Backyard poultry farming. It might be due to the fact that younger farmers are more enthusiastic, energetic and progressive in nature as against old age people who are orthodox, conservative and traditional in nature. The findings are in accordance with the finding obtained by Babu (2013).

Caste and level of adoption

The data presented in Table 1 shows that the caste of the backyard poultry beneficiaries had negative and non-significant correlation with the adoption of Backyard poultry farming practice. This shows that caste is not an important variable which influence the adoption level of beneficiaries. The findings are supported by the finding obtained by Choudhary *et al.* (2017).

Occupation and level of adoption

The data presented in Table 1 explains that the occupation of the Backyard poultry beneficiaries had positive and non-significant correlation with the adoption of Backyard poultry farming practice. It means that occupation has not affected the adoption level of beneficiaries regarding Backyard poultry farming practice. Similar findings were

obtained by Khandait *et al.* (2011).

Education and level of adoption

The data presented in Table 1 concludes that the education of the backyard poultry beneficiaries had positive and significant correlation with the adoption of Backyard poultry farming practice. It means that education play an important role in influencing the adoption of beneficiaries regarding Backyard poultry farming practice. The findings are in accordance with the finding obtained by Kushwah *et al.* (2016).

Family size and level of adoption

It is apparent from the data presented in Table 1 that the family size of the backyard poultry beneficiaries had positive and non-significant correlation with the adoption of Backyard poultry farming practice. This shows that family size is not an important variable which influence the adoption level of beneficiaries. The findings are line with the findings of Sasidhar *et al.* (2008).

Family type and level of adoption

The data presented in Table 1 shows that the family type of the backyard poultry beneficiaries had positive and non-significant correlation with the adoption of Backyard poultry farming practice. It means that family type has no affectwed the adoption level of beneficiaries regarding Backyard poultry farming practice. The findings are in line with the findings obtained by Babu (2013).

Land holding and level of adoption

It is observed from the Table 1 that the land holding of the beneficiaries had positive and non-significant correlation with the adoption of Backyard poultry farming practice. It might be due to the fact that poultry can be easily fed, minimum space requirement, minimum input and little care. The finding in line with the finding of Choudhary *et al.* (2017).

Annual income and level of adoption

It is apparent from the data presented in Table 1 that the annual income of the beneficiaries had positive and significant correlation with the adoption of Backyard poultry farming practice. This might be due to as the income of farmers' increases he may purchase more resources & inputs for his poultry farms. The findings are similar with the finding findings obtained by Khandait *et al.* (2011).

Social participation and level of adoption

It is clear from the data presented in Table 1 that

the social participation of the beneficiaries had positive and significant correlation with the adoption of Backyard poultry farming practice. This might be due the facts that the farmers might have gained more knowledge during their participation in social activities which might have increased their competition in adoption of backyard poultry farming. The findings are in accordance with the finding obtained by Kushwah *et al.* (2016).

Number of poultry birds and level of adoption

The data presented in Table 1 shows that the number of poultry birds of the beneficiaries had positive and significant correlation with the adoption of Backyard poultry farming practice. It means that more number of poultry birds resulted in higher level of adoption of Backyard poultry farming practice. This might be due to more knowledge and training attended by beneficiaries regarding Backyard poultry

The similar findings were obtained by Sasidhar *et al.* (2008) and Bhabhor *et al.* (2021).

Poultry farming experience and level of adoption

It is apparent from the data presented in Table 1 that poultry faming experience of the beneficiaries had positive and significant correlation with the adoption of backyard poultry farming practice. It means that high poultry farming experience played an important role in influencing the adoption of backyard poultry farming practice. The findings are in accordance with the findings obtained by Kushwah *et al.* (2016).

CONCLUSION

From the above finding it is concluded that caste of the beneficiaries did not affected the adoption of Backyard poultry farming practices. Similarly the variables like occupation, education, family size, family type and land holdings did not significantly affected the adoption of Backyard poultry farming practices. But the variables like age, social participation, annual income, number of poultry birds and poultry farming experience had significantly affected the level of adoption of beneficiaries regarding backyard poultry farming.

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