



**Full Length Research Article**

**STUDY ON RELATIONSHIP OF INDEPENDENT VARIABLES WITH KNOWLEDGE AND AWARENESS  
LEVEL OF LIVESTOCK FARMERS ENGAGED IN IVLP BONE CRUSHING UNITS**

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**ABSTRACT**

The present study was aimed at finding out the level of different attributes like adoption, knowledge and awareness of respondents involved in project only in relation to livestock production system as an impact of Institute Village Linkage Programme (IVLP) at Barua village of Paschim Medinipore district of West Bengal. The knowledge of deworming of livestock owners was positively and significantly correlated with the occupation, education, family educational score, family educational status, house, farm power, material possession at 1% level. Knowledge of deworming was not significantly correlated with the age, family type, family size, number of family members, land. It was found that occupation, education, family educational score, family educational status, house, farm power, material possession, economic status were positively and significantly correlated with the knowledge of Feeding of Green Fodder of the livestock owners at the 1% level. Economic motivation and innovation proneness were positively and significantly correlated at 5% level with the knowledge of feeding concentrate. Family type and land were also positively and significantly correlated with the knowledge of vaccination at the 5% level. All the Communication variables were positively and highly significantly correlated with the knowledge of cultivation of green fodder. Education of the respondent, family educational score, family educational status, house, economic status were negatively and significantly correlated with the awareness on deworming of pig at the 1% level. Regarding awareness on deworming of goat, it was also negatively and significantly correlated with the age of respondent's at 5% level and house at 1% level. Type of house was found to be positively and significantly correlated with the awareness on RD. Only land has positive and significant correlation with the awareness on DP at 5% level.

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**INTRODUCTION**

Institution Village Linkage Programme (IVLP) in coastal agro-eco system of Paschim Medinipore was launched by W. B. U. A. F. S. with the financial assistance of National Agricultural Technology Project of Indian Council of Agricultural Research, Government of India few years back. The present study was aimed at finding out the level of different attributes like adoption, knowledge and awareness of respondents involved in project only in relation to livestock production system as an impact of IVLP of the said study area. The general objective of the study was to find out the relationship of the dependent variables- knowledge level and awareness level [indicators of impact of IVLP] of the livestock

owners (only of livestock production system) with the independent variables (socio-economic, socio-psychological and communication characteristics).

**MATERIALS AND METHODS**

Barua village which is located at 5 No. Siromoni Grampanchayat under Midnapur Sadar Block. Barua village was selected purposively for this study. Correlations involving all socio-economic, socio-psychological and communication source variables with knowledge practices and awareness practices were calculated. Simple correlation between the dependent variable – knowledge of selected five animal husbandry practices (deworming, feeding of green fodder, feeding of concentrate, vaccination and cultivation of green fodder) and 24 independent variables (socio-economic, socio-psychological and communication variables) were computed. All the selected animal husbandry practices taken for this study also have been analyzed separately to find out their

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correlation with the independent variables. Coefficient of correlation between the dependant variable-awareness of selected animal husbandry practices (deworming of pig and deworming of goat, Ranikhet disease, duck plague) and 24 independent variables (socio-economic, socio-psychological and communication variables) were computed. All the selected animal husbandry practices taken for this study also have been analyzed separately to find out their correlation with the independent variables. A total of 139 of respondents were taken for this study.

## RESULTS AND DISCUSSION

### Simple correlation between the knowledge of deworming of the livestock owners and the independent variables-

#### Socio-economic variables

Table 1 indicated that the knowledge of deworming of livestock owners was positively and significantly correlated with the occupation, education, family educational score, family educational status, house, farm power, material possession at 1 percent level. Knowledge of deworming was not significantly correlated with the age, family type, family size, number of family members, land. The results were consistent with previous studies. Islam (2005) reported that the knowledge of deworming of livestock owners was positively and significantly correlated with the education and family educational status at 1 percent level. Hazarika (1983), Sayeedi (1983), Chug (1986) and Goswami (1987) had made similar observation.

#### Socio-psychological variables

Table 1 revealed that all the socio-psychological variables (Urban contact, Economic Motivation, Innovation Proneness, Attitude and Social Participation) except risk orientation were positively and highly significantly correlated with the knowledge of deworming. Meena and Chouhan (1999) revealed that economic motivation had positive and significant relationship with knowledge level of dairy farmers regarding improved dairy farming practices.

#### Communication variables

Table 1 depicted that knowledge of deworming was positively and significantly correlated with the mass media, communication source and communication skill at the 1 percent level. Personal cosmopolite had a positive and significant correlation with the knowledge of deworming at 5 percent level. These findings were in line with the Islam (2005) who stated that mass media was positively and significantly correlated with the knowledge of deworming. He also indicated that the utilization of mass media was an important variable in obtaining the knowledge about animal husbandry practices studied. Sekhon (1970), Sundaraswami et.al (1978), Chug (1986), and Goswami (1987) had made similar observations.

### Simple correlation between the knowledge of Feeding of Green Fodder of the livestock owners and the independent variables

#### Socio-economic variables

Simple correlation of the data revealed that occupation, education, family educational score, family educational status,

house, farm power, material possession, economic status were positively and significantly correlated with the knowledge of Feeding of Green Fodder of the livestock owners at the 1 percent level. There lies the positive and significant correlation between land and knowledge of Feeding of Green Fodder at 5 percent level.

#### Socio-psychological variables

Table 1 while reviewed, depicted that urban contact, economic motivation, innovation proneness, attitude were positively and highly significantly correlated with the knowledge of Feeding of Green Fodder. Social participation was also positively and significantly correlated with the knowledge of Feeding of Green Fodder.

#### Communication variables

While critically perused, table 1 explained that mass media, personal cosmopolite, communication source, communication skill were found to be positively and significantly correlated at the 1 percent level. Islam (2005) stated that personal cosmopolite was significantly correlated with the knowledge of feeding of green fodder. The knowledge of Feeding of Green Fodder was not significantly correlated with the personal localite.

### Simple correlation between the knowledge of Feeding of concentrate and the independent variables

#### Socio-economic variable

Table 1 Indicated that occupation, family educational score, material possession, economic status was positively and significantly correlated with the knowledge of Feeding concentrate at the 1 percent level. Education of the respondents, family educational status, land, farm power had positive and significant correlation with knowledge of Feeding concentrate 5 percent level.

#### Socio-psychological variables

Table - 1 manifested that economic motivation and innovation proneness were positively and significantly correlated at 5 percent level with the knowledge of feeding concentrate. Among Socio-psychological variables, only urban contact was positively and significantly correlated with the knowledge of Feeding of concentrate.

#### Communication variables

Table- 1 showed that all the Communication variables were positively and highly significantly correlated with the knowledge of feeding of concentrate. Islam (2005) stated that personal cosmopolite and personal localite were not significantly correlated with the knowledge of feeding of green fodder whereas mass media and communication sources had significant effect on knowledge level of feeding of concentrate

### Simple correlation between the knowledge of vaccination and the independent variables

#### Socio-economic variables

Table 1 indicated that education of the respondent, family size, family educational score, family educational status, house, farm power, material possession, economic status were

**Table 1. Simple Correlations involving knowledge and awareness parameters vs. independent variables**

	KL_DEW	KL_FGF	KL_FC	KL_VACC	kl cul gf		aw dew pig	aw dew goat	AW_RD	AW_DP
AGE	0.017	0.006	-0.021	0.093	0.055	AGE	-0.038	-0.169*	0.139	-0.108
OCCU	0.326**	0.283**	0.231**	0.141	0.233**	OCCU	-0.174*	-0.064	-0.035	-0.042
EDU	0.284**	0.326**	0.218*	0.345**	0.322**	EDU	-0.299**	-0.133	-0.126	-0.089
F_TYPE	-0.056	-0.073	0.127	0.178*	0.068	F_TYPE	0.142	0.108	-0.454**	-0.072
F_SIZE	0.006	0.011	0.097	0.218**	0.101	F_SIZE	-0.007	0.021	-0.336**	-0.065
NUMBER	0.024	-0.015	0.066	0.199*	0.118	NUMBER	-0.084	0.027	-0.29**	-0.051
Fedu score	0.261**	0.332**	0.232**	0.375**	0.295**	Fedu score	-0.294**	-0.107	-0.06	0.066
FEDU_STA	0.308**	0.38**	0.208*	0.29**	0.266**	FEDU_STA	-0.319**	-0.141	0.113	0.105
LAND	0.097	0.173*	0.169*	0.203*	0.21*	LAND	0.027	0.111	-0.247**	0.168*
HOUSE	0.348**	0.378**	0.246**	0.266**	0.286**	HOUSE	-0.373**	-0.225**	0.236**	-0.093
F_POWER	0.26**	0.219**	0.192*	0.278**	0.2*	F_POWER	-0.086	-0.127	-0.315**	-0.122
M_POSS	0.461**	0.486**	0.399**	0.446**	0.407**	M_POSS	-0.201*	-0.112	0.025	-0.129
ECO_STAT	0.424**	0.445**	0.353**	0.416**	0.381**	ECO_STAT	-0.237**	-0.147	-0.064	-0.096
U_CONT	0.354**	0.346**	0.198*	0.045	0.158	U_CONT	-0.33**	-0.157	0.358**	-0.117
ECO_MOTI	0.247**	0.288**	0.366**	0.279**	0.086	ECO_MOTI	-0.12	-0.015	0.007	0
inno prone	0.377**	0.497**	0.642**	0.445**	0.37**	inno prone	0.012	0.039	-0.107	-0.258**
ATTITUDE	0.235**	0.281**	0.098	0.129	0.158	ATTITUDE	-0.281**	0.041	0.178*	0.074
RISK_ORI	0.098	0.137	0.103	0.101	0.225**	RISK_ORI	-0.016	0.042	-0.105	0.198*
S_PARTI	0.279**	0.215*	0.428**	0.308**	0.163	S_PARTI	0.051	-0.026	0.003	-0.013
MASS_MED	0.317**	0.439**	0.443**	0.322**	0.649**	MASS_MED	0.034	0.096	-0.05	0.133
P_COS	0.167*	0.303**	0.35**	0.199*	0.333**	P_COS	-0.029	0.094	0.199*	0.3**
P_LOC	0.072	0.162	0.372**	0.19*	0.377**	P_LOC	0.165	0.139	-0.071	0.4**
COM_SOUR	0.218**	0.352**	0.44**	0.272**	0.519**	COM_SOUR	0.056	0.122	0.035	0.304**
com skill	0.448**	0.482**	0.557**	0.366**	0.53**	com skill	-0.057	0.069	0.036	0.084

Note: \* P<0.05 \*\* P<0.01

positively and significantly correlated with the knowledge of vaccination at the 1percent level. Family type and land were also positively and significantly correlated with the knowledge of vaccination at the 5 percent level.

#### Socio-psychological variables

Table 1 indicated that economic motivation and innovation proneness were found to be positively and significantly correlated with the knowledge of vaccination.

#### Communication variables

Table 1 depicted that personal cosmopolite and personal localite were positively and significantly correlated with the knowledge of vaccination at 5% level. Other Communication variables were found to be positively and highly significantly correlated with the knowledge of vaccination. Islam (2005) stated that communication sources and personal localite were not significantly correlated with the knowledge of vaccination against contagious diseases whereas mass media and personal cosmopolite had significant effect on knowledge level of feeding of concentrate.

#### Simple correlation between the knowledge of cultivation of Green Fodder of the livestock owners and the independent variables

#### Socio-economic variables

Table 1 revealed that occupation, education of the respondent, family educational score, , family educational status, house, material possession, economic status were positively and significantly correlated with the knowledge of cultivation of Green Fodder at 5 percent level. Other Socio-economic variables like land, farm power were also positively and significantly correlated with the knowledge of cultivation of Green Fodder at 1 percent level. Mahiapl and Kherde (1992) reported that the marginal farmers had more knowledge of feeding practices in dairy animals than the small farmers.

#### Socio-psychological variables

Table 1 indicated that innovation proneness and risk orientation were found to be positively and significantly correlated with the knowledge of vaccination at 1 percent level. *Seeralan* and *Singh* (2009) conducted study on Socio-Economic Profile of the Farm Business Operators and found that majority of the respondents had high level of risk taking ability, achievement motivation and coordinating ability

#### Communication variables

Table 1 depicted that all the Communication variables were positively and highly significantly correlated with the knowledge of cultivation of green fodder.

#### Simple correlation involving awareness parameter vs. independent variables

#### Socio-economic variables

A critical perusal of table-1 revealed that education of the respondent, family educational score, family educational status, house, economic status were negatively and significantly correlated with the awareness on deworming of pig at the 1 percent level. Occupation and material possession were also negatively and significantly correlated with the awareness on deworming of pig at 5 percent level. Regarding awareness on deworming of goat, it was also negatively and significantly correlated with the age of respondents at 5 percent level and house at 1 percent level. Significant negative correlations were found between awareness on RD and some socio-economic variables (family type, family size, number of family members, land, and farm power) at 1 percent level. Type of house was found to be positively and significantly correlated with the awareness on RD. Table 1 indicated that only land has positive and significant correlation with the awareness on DP at 5 percent level. This findings is in conformity with *Rajendran* and *Prabaharan* (1998).

### Socio-psychological variables

It is clear from table 1 that urban contact and attitude was negatively and significantly correlated with the awareness on deworming of pig at 1% level. The awareness on deworming of goat was not significantly correlated with the Socio-psychological variables. Regarding awareness on RD, It was positively and significantly correlated with the urban contact and attitude at 1 percent and 5 percent level respectively. Awareness on DP was negatively and highly significantly correlated with economic motivation of the livestock farmers. Here, risk orientation was positively and significantly correlated with awareness on DP at 5 percent level.

### Communication variables

Table 1 depicted that there were no significant correlation between awareness on deworming of pig and awareness on deworming of goat each with the independent Communication variables. Only personal cosmopolite was found to be positively and significantly correlated with the awareness on RD at 5 percent level. Personal cosmopolite, personal localite and Communication sources were found to be positively and significantly correlated with the awareness on DP at 1 percent level. This result is in line with Narwal *et. al.*, (1991) and Srivastava (1999)

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