



## Original Research Article

# Demographic profile and distribution of livestock farmers according to knowledge and awareness level in Institute Village Linkage Programme

Amitendu De\*, A.Goswami and D.Mazumder

Department of Veterinary and Animal Husbandry Extension Education,  
West Bengal University of Animal & Fishery Sciences, Kolkata-700 037, India

*\*Corresponding author*

## ABSTRACT

### Keywords

Demographic profile, knowledge level, awareness level

The study was carried out in the Barua village of Midnapore sadar block of West Bengal. The sample size comprised of 139 livestock farmers in the IVLP project area. The collected data from the respondents were analysed using simple statistical tool. The greater number of respondents belonged to 'Landless' category. Most of the respondents belonged to the age group '35-50' years. Most of the respondents were labour by occupation. Majority of the respondents had medium level of family education status. The study clearly showed that 44.60 percent of the farmers belonged to both 'Low' and 'Medium' economic status category each. Majority of the respondents belonged to 'Nuclear' family. Regarding Farm Power, most of the farmers had 'No draught animal'. Majority of the livestock farmers were having medium level of knowledge on deworming practices. Most of the farmers were having low level of knowledge about feeding of green fodder. Almost all the farmers were found having low level of knowledge on feeding of concentrate. Majority of the respondents were having low overall knowledge level about animal husbandry practices. Overwhelming majority of the respondents was having 'Low' level of awareness about deworming of pig. Most of the respondents were having 'High' level of awareness about deworming of goat. Most of the respondents were having 'Low' level of awareness regarding overall awareness score of animal husbandry practices.

## Introduction

Institution Village Linkage Programme (IVLP) in coastal agro-eco system of Paschim Medinipore was launched by West Bengal University of Animal and Fishery sciences (W. B. U. A. F. S.) with the financial assistance of National Agricultural Technology Project of Indian Council of Agricultural Research, Government of India about five years back.

The scientists of different discipline engaged in the project worked with various technical interventions of livestock, agriculture and fishery production system for 765 farmers of Barua village following the guidelines or mandate of the project. Providing inputs, imparting training etc. were the basic considerations for technology assessment and ultimately refinement so that the

stakeholders can accept and implement the refined technology in their local situation.

Therefore, the present study was aimed at finding out the distribution of some demographic and socio-personal characteristics, distribution according to knowledge level and distribution according to awareness level of livestock owners involved in project only in relation to livestock production system as an impact of IVLP of the said study area.

## **Materials and Methods**

Barua village of 5 No. Siromoni Grampanchayat under Midnapur Sadar Block was selected purposively to fulfill the objectives of the researcher's study. The present study was confined to only 8 interventions related to livestock. 20% of the IVLP beneficiaries covered under each intervention and thus 139 of respondents were taken as respondents for this study.

In the present study livestock owners' knowledge and awareness about selected animal husbandry practices were the dependent variables. The selected independent variables were - Category of livestock owners according to their Land holding, Age, Occupation, Education of respondent, Family education status, Economic status, Family type, Family size, House type, Farm Power and Social Participation.

In the present study the knowledge was measured with the help of the knowledge test developed by Goswami and Sagar (1987). The respondents were asked to answer the items in dichotomized form. Some questions were of multiple choice types. For each correct answer 1 score and for each incorrect answer 0 score have been given. Once score was given for each correct reply the summation of the scores for correct

answer over all the items of a particular respondent indicated his level of knowledge.

On the basis of these score, 'Low', 'Medium' and 'High' knowledge level was confined. The five improved animal husbandry practices [deworming of cattle, feeding of green fodder in cattle, feeding of concentrate in cattle, vaccination against contagious diseases (F. M. D., H. S. and R. P.) in cattle, cultivation of green fodder] had been selected and considered for the present study.

Awareness level about selected animal husbandry practices were considered as dependent variable. A schedule was developed to measure them accordingly. The extent of awareness the respondents possessed at the time of interview as evident from his/her response to a set of questions scientifically prepared for this. The respondents were asked to answer the items in dichotomized form. For each correct answer 1 score and for each incorrect answer 0 score have been given.

The data were collected with the help of the schedule constructed for the study. The statistical method used in the study includes percentage analysis.

## **Results and Discussion**

### **Distribution of some Demographic and Socio-personal characteristics of the respondents in percentage**

It was evident from table no.-1 that the greater number of respondents belonged to 'Landless' category (62.59 %). Most of the respondents (46.04 %) belonged to the age group of '35-50' years, followed by 29.50 percent to the '51 and above' and 24.46 percent to the age group of 'below 35' years. Most of the respondents (48.20 %) were labour by occupation. The next highest

percentage of farmers (24.46 %) had cultivation as their occupation followed by service holder (10.79 %), caste occupation, and business (7.19 %). Among the respondents 21.58 percent, 20.86 percent, 17.99 percent, 16.55 percent, 15.83 percent, 4.32 percent, and 2.88 percent animal husbandry farmers were having educational level 'Primary', 'Middle', 'Can read and write', 'Illiterate', 'High School', 'Graduate' and 'Read only' respectively. Majority of the respondents (46.76 %) had medium level of family education status.

The study clearly showed that 44.60 percent of the farmers belonged to both 'Low' and 'Medium' economic status category each and rest (10.79 %) were having 'High' economic status. It was found that 53.95 percent respondents belonged to 'Nuclear' family whereas rests (46.04 %) were from 'Joint' family. Ghosh (2004) also observed that more of the livestock farmers lived in nuclear type family. Again it was observed that 56.11 percent respondents had family size 'Up to five member' and rest (43.88 %) were from 'Above five member' family size. According to the 'House type' the respondents had 'Kutcha' house (44.60 %), 'Hut' (24.46 %), 'Mixed' house (17.27 %) and 'Pucca' house (13.67 %).

Regarding Farm Power, the table no.-1 clearly depicted that 75.53 percent had 'No draught animal' whereas 21.58 percent had 'One to Two draught animals', 1.44 percent had 'Three to Four draught animals' and rest 1.44 percent had 'Five to Six draught animals'. As far as 'Social participation' was concerned 78.41 percent of the farmers had 'Membership of one organization'. The table also showed that 19.42 percent were member of 'More than one organization'. 1.44 percent were 'Office holder of any organization' and rest 0.72 percent were 'Wider public leader' in terms of 'Social participation'.

## **Distribution of Livestock Owner According to Knowledge Level**

### **Deworming of Cattle**

The table – 2 clearly depicted that majority of the respondents 61.87 percent had 'Medium' level of Knowledge whereas 12.94 percent and 25.17 percent respondents had 'High' and 'Low' knowledge level about deworming of cattle respectively.

### **Feeding of Green Fodder**

The results indicated that 76.26 percent 20.86 percent and 2.88 percent respondents were having 'Low', 'Medium' and 'High' knowledge level about feeding of green fodder, respectively.

### **Feeding of Concentrate**

The results vividly showed that 94.24 percent of the respondents had 'Low' level of knowledge regarding feeding of concentrate. Nobody among the respondents had 'High' knowledge level about feeding of concentrate.

### **Vaccination against Contagious Diseases (Cattle)**

No farmers among the respondents in the study area had 'High' knowledge level on vaccination against contagious diseases (Cattle). Very few respondents (1.44%) were having 'Medium' knowledge level.

### **Cultivation of Green Fodder**

The study showed that no respondents were having 'Medium' and 'High' level of knowledge about cultivation of green fodder. All the respondents were categorized into 'Low' level criteria.

**Table.1** Distribution of some demographic and socio-personal characteristics of the respondents In percentage

Sl.	Variables	Category	Livestock owners (N=139)	
			Number	Percentage
1.	<b>Category of livestock owners according to their land holding</b>	a) Landless (No Land)	87	62.59
		b) Marginal (Upto one hec.)	48	34.53
		c) Small (Upto two hectare)	04	2.88
2.	<b>Age</b>	a) Below 35 years	34	24.46
		b) 35-50 years	64	46.04
		c) 51 & above	41	29.50
3.	<b>Occupation</b>	a) Labour	67	48.20
		b) Caste occupation	10	07.19
		c) Business	10	07.19
		d) Independent	02	01.44
		e) Cultivation	34	24.46
		f) Service	15	10.79
4	<b>Education Of respondent</b>	a) Illiterate	23	16.55
		b) Can read & write	04	02.88
		c) Can read and write	25	17.99
		d) Primary	30	21.58
		e) Middle	29	20.86
		f) High School	22	15.83
		g) Graduate	06	04.32
5.	<b>Family education status</b>	a) Low	56	40.28
		b) Medium	65	46.76
		c) High	18	12.94
6.	<b>Economic status</b>	a) Low	62	44.60
		b) Medium	62	44.60
		c) High	15	10.79
7	<b>Family type</b>	a) Nuclear	75	53.95
		b) Joint	64	46.04
8	<b>Family size</b>	a) Upto 5 member	78	56.11
		b) Above 5 member	61	43.88
9.	<b>House type</b>	a) Kutcha house	62	44.60
		b) Hut	34	24.46
		c) Mixed house	24	17.27
		d) Pucca house	19	13.67
10.	<b>Farm Power</b>	a) No Draught animal	105	75.53
		b) 1-2 Draught animals	30	21.58
		c) 3-4 draught animals	02	01.44
		5-6 draught animals	02	01.44
11.	<b>Social Participation</b>	a) Member of one organization	109	78.41
		b) Member of more than one organization	27	19.42
		c) Office holder of any organization	02	01.44
		d) Wider public leader	01	0.72

**Table.2** Distribution of livestock owners according to knowledge level (N=139)

Sl. No.	Dependent variable	Low level		Medium level		High level	
		Number	Percentage	Number	Percentage	Number	Percentage
1.	Deworming	35	25.17	86	61.87	18	12.94
2.	Feeding of Green fodder	106	76.26	29	20.86	04	02.88
3.	Feeding of concentrates	131	94.24	08	05.75	00	0.00
4.	Vaccination against contagious diseases (Cattle)	137	98.56	02	01.44	00	0.00
5.	Cultivation of Green fodder	139	100.00	00	0.00	00	0.00
6.	Overall knowledge score of A.H. practices	136	97.84	03	2.16	0	0.00

**Table.3** Distribution of livestock owners according to awareness level (N=139)

Sl. No.	Dependent variable	Low level		High level	
		Number	Percentage	Number	Percentage
1.	Deworming of Pig	125	89.92	14	10.08
2.	Deworming of Goat	115	82.73	24	17.27
3.	R.D. vaccination of Poultry	67	48.20	72	51.80
4.	D.P. vaccination of Duck	116	83.45	23	16.55
5.	Overall awareness score of A.H. practices	88	63.30	51	36.70

**Overall Knowledge Score of Animal Husbandry Practices**

It was clear from the table no.2 that most of the respondents (97.84%) were having ‘Low’ level of knowledge regarding overall knowledge score of animal

husbandry practices. Very few (2.16%) belonged to ‘Medium’ knowledge level group and none were found having high level of knowledge about overall knowledge score of animal husbandry practices. Similar findings were supported by Bharat Bhushan et al (2008) and Patil

et al (2009). Rath(1977), Gill and Singh(1977), Nataraju and Channegowda(1985), Goswami(1987), Ghosh(2004), Islam(2005) and Lawrence(2011) pointed out the different knowledge level of animal husbandry practices among the livestock owners in their studies which are more or less similar to these findings.

### **Distribution of Livestock Owner According to Awareness Level**

#### **Deworming of Pig**

The study vividly showed that overwhelming majority of the respondents (89.92 %) was having 'Low' level of awareness about deworming of pig. Rest of the respondents (10.08%) was categorized into 'High' level criteria.

#### **Deworming of Goat**

The table- 3clearly depicted that 65.47 percent respondents were having 'High' level of awareness about deworming of goat. 34.53 percent were categorized into 'Low' level criteria.

#### **R.D. Vaccination of Poultry**

Regarding R.D. vaccination of poultry, majority of the respondents (51.80%) had 'High' level of awareness while rest 48.20 percent were having 'Low' level of awareness.

#### **D.P. Vaccination of Duck**

It can be observed from table-3 that most of the respondents (83.45%) of the research study area had 'Low' level of awareness on D.P. Vaccination of Duck.Only16.55 percent farmers had 'High' level of awareness.

### **Overall Awareness Score of Animal Husbandry Practices**

Inspection of the result of table no.3 showed that most of the respondents (63.30%) were having 'Low' level of awareness regarding overall awareness score of animal husbandry practices. Only (36.70%) belonged to 'High' awareness level group about overall knowledge score of animal husbandry practices.

### **References**

- Gill, S. S. and Singh , P. (1977). Professional knowledge of dairy farmers of Ludhiana District. *Indian Journal of Extension Education*, 13(3-4): 77-79.
- Goswami, A. (1987) A study of the knowledge level of the livestock owners about selected animal husbandry practices. M.V.Sc thesis submitted to the Indian Veterinary Research Institute, Bareilly, UP
- Goswami, A. (2000). The Impact of Extension Education on the Social, Psychological and administrative behaviour of the livestock owners of the Sundarbans, West Bengal. Ph.D. thesis submitted to the University of Kalyani, West Bengal.
- Ghosh, R.K. (2004) Adoption behaviour along with marketing orientation of the dairy farmers in co-operative farming system, M.V.Sc. Thesis submitted to, WBUAFS, Belgachia, Kolkata
- Islam, S. (2005) Study on Milk Economics vis a vis knowledge level of dairy farmers in Tehatta-II Block of Nadia district of West Bengal, M.V.Sc. Thesis, WBUAFS, Belgachia, Kolkata
- Lawrence,C. (2011) Study on Milk Economics vis a vis knowledge level

of dairy farmers in Tehatta-II Block of Nadia district of West Bengal, M.V.Sc. Thesis, WBUAFS, Belgachia, Kolkata

Nataraju, M. S. and Channegowda, M. B. (1985). Sources of information utilized for adoption of improved dairy management practices by small, marginal farmers and agricultural labourers. *Indian Journal of Extension Education*, **21**(3&4): 99-100.

Patil, A P, Gawande S H , Nande M P and Gobade M R (2009). Assessment of knowledge level of dairy farmers in Nagpur district and the co-relation between socio economic variables with their training needs. *Veterinary World*, Vol.2(5): 199-201.

Rath, B. B. (1977). Referred by Dubey V. K. (1977) in the proceedings- Sixth Dairy Husbandry Officers' Workshop, National Dairy Research Institute, Karnal: 65

Singh Bharat Bhushan, Umang S K, Agarwal Nidhi, Dutt Triveni, Kumar Pushpendra, Sharma Arjava and Ahlawat S P S (2008). Role of land holding patterns for adoption of dairy husbandry practices in rural areas of Bareilly district in India. *Journal of Applied Animal Research*, 34: 185-188.