

## TRAINING NEEDS PERCEIVED BY TRIBAL FARMERS IN BACKYARD PIGGERY FARMING IN ASSAM

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### ABSTRACT

An ex-post facto study was conducted in Dhemaji and Karbi Anglong districts of Assam state with the objective to understand the extent of training needs perceived by tribal farmers in backyard piggery farming. Data were collected personally from 200 tribal families practising backyard piggery from twenty different villages through interview schedule. The study revealed that selection of animals (88.00 %), feeding schedule of pregnant animals (83.50 %), knowledge about common diseases (78.50 %), care of pregnant animals (81.00 %), and knowledge about credit facilities (65.50 %) were the most important areas for training needs perceived by the farmers. The average total weighted mean score of the different sub areas of training needs depicted that breeding and feeding were the most important areas of training needs perceived by the respondents followed by health care, marketing and management. About 60.00 per cent of the tribal respondents had medium level of overall training needs in backyard piggery farming. Positive and significant correlation was found between age, education, land holding, experience in pig rearing, herd size and annual income with their training needs.

**Key words** : Training needs, tribal farmers, backyard piggery farming.

Pig production in Assam is invariably a small-scale, backyard, market oriented enterprise which may be attributed to various factors like low productivity of the indigenous pigs, poor managerial practices, acute shortage of nutritive feeds, lack of subsidies etc. It is practised mainly by Scheduled Tribes (ST) and some other backward classes (OBC) to generate income accumulated capital and fulfil socio-cultural

obligations<sup>1</sup>. Hence, the studies on assessing training needs of pig farmers are of paramount importance for the extension agencies involved in rural development. Thus, effective training will provide a systematic improvement of knowledge and skills, which in turn will help the farmers to function effectively and efficiently in their given task on completion of the training. So, an effort was made to ascertain the perceived training needs of tribal farmers practising backyard piggery farming in Dhemaji and Karbi Anglong districts of Assam in order to see its relation if any with the socio economic and personal traits of the respondents.

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## MATERIAL AND METHODS

The present study was conducted in Dhemaji and Karbi Anglong districts of Assam, selected purposively due to high tribal population. From each selected districts, two blocks and from each block five villages were chosen randomly, making a total of twenty villages. From each village, ten families practising backyard piggery were selected constituting a total sample size of 200 for the study. The training needs were measured in three point continuum quantified by assigning the score of 3, 2 and 1 for 'most needed', needed and least needed, category of training needs in five selected areas viz., breeding, feeding, health care, management and marketing practices. The summation of scores achieved by the respondents constituted the level of perceived training needs within each sub-area. The assessed training needs in sub-areas were ranked based on the total weighted mean score.

$$\text{Total score obtained by each respondent} = \frac{\text{Total weighted mean score}}{\text{Total number of respondents}}$$

## RESULTS AND DISCUSSION

### Training needs in different sub-areas as perceived by farmers.

The figures presented in Table 1 revealed that in breeding practices, selection of animals was considered as most needed training need with mean score 2.82 and was ranked first in breeding followed by knowledge about different breeds with a mean score 2.42. To increase the productivity of livestock, selection of animals and knowledge about different breeds is the first step. So the farmers perceived training needs on these sub areas of breeding as most important. Identification of infertility problems and identification of heat symptoms with a mean score of 2.03 and 1.92

were ranked third and fourth respectively. Pregnancy diagnosis with a mean score of 1.91 was ranked fifth followed by knowledge about artificial insemination with a mean score of 1.35. These findings are in line with <sup>2, 4, 5 & 8</sup>. The data depicted in Table 1 also revealed that in feeding practices, the highest mean score 2.79 for training need as perceived by the respondents was feeding of pregnant animal, ranked first followed by preparation of balanced ration with mean score 2.5 and feeding schedule of sick animals with mean score 2.1. The mean score for feeding of newly born piglets and preparation of mineral mixture was 1.72 and 1.69, respectively. Importance of clean feed and water for drinking was ranked sixth with a mean score of 1.31. Similar results were reported by other workers <sup>4, 7</sup>. Animal health care practice plays a vital role in livestock farming. The data depicted in Table 1 indicated that according to need hierarchy, among the various sub-items of health care, knowledge about common diseases was assigned first rank with a mean score of 2.17 followed by vaccination and treatment of sick animals with mean score of 2.12 and 2.1, respectively. First aid treatment for simple ailments with a mean score of 2.06 was assigned fourth rank followed by deworming and deficiency diseases of animals and its symptoms which were ranked fifth and sixth with a mean score of 1.9 and 1.54 respectively. Similar findings were also reported by <sup>3, 4, & 7</sup>. Management practice is one of the important aspects livestock farming. The data presented in Table 1 revealed that, among the various sub-items of management practices, care of pregnant animals was the most important areas ranked first by the respondents for the purpose of training. The mean score for the item was 2.07. The second rank was assigned to the sub-area, care of newly born piglets with a mean score of 1.9. The third and fourth ranked items were

castration and weaning of piglets with a mean score of 1.69 and 1.68, respectively. Housing plan for animals was assigned fifth rank with a mean score of 1.36. Data pertaining to training need of the farmers with respect to marketing practices revealed that knowledge about credit facilities was the most important training need perceived by the respondents and was placed in first rank with a mean score of 2.18. Maintenance of records was ranked second with a mean score of 1.89 followed by purchasing of feeds and selling of pork and pork products which were ranked third and fourth with a mean score of 1.63 and 1.33 respectively. The average total weighted mean score of the different sub areas of training needs depicted that breeding and feeding were the most important areas of training needs perceived by the respondents followed by health care, marketing and management.

#### **Extent of training needs perceived by the respondents in different sub areas**

The data depicted in Table 2 revealed that majority of the respondents had medium level of training needs in case of breeding, 70.00 per cent, feeding 71.00 per cent, health care 77.50 per cent, management 60.50 per cent and marketing 51.50 per cent. 22.00 per cent in breeding, followed by 22.00 per cent in feeding, 11.00 per cent in health care, 12.50 per cent in management and 21.50 per cent of the respondents had high level of training needs in piggery farming. Low level of training needs was shown by 8.00 per cent in breeding, 7.00 per cent in feeding, 6.50 per cent in health care followed by equal 27.00 per cent in management and health care respectively. Overall, majority of the respondents 59.50 per cent perceived medium level of training needs, while 27.00 per cent and 13.50 per cent respondents perceived low and high level of training needs, respectively <sup>6, 10</sup>.

#### **Relationship between personal and socio-economic characteristics with training needs**

Correlation coefficient was determined to know the relationship between personal and socio-economic characteristic with the training needs of the farmers. Table 3 depicted that age had positive relationship with training needs of the farmers which might be due to the fact that, as age of farmers increased, they realized the importance of training in piggery farming. Education was positively and significantly associated with training needs which might be due to increased awareness about the piggery enterprise after education. Land holding had positive and highly significant relationship with training needs in piggery farming. This might be due to the fact that they could increase the size of their enterprise if the land holding was more leading to higher returns from piggery farming. Experience in pig rearing had positive and significant relationship with training needs. The possible reason for this might be that, with increased numbers of years in piggery farming, the farmers of the study area might have identified the areas where training needs are required in order to increase the productivity of their animals. The study also depicted that herd size and training needs of the farmers showed positive and highly significant relationship which may be due to the fact that increase in herd size made the farmers to develop alternatives to manage their animals which might have resulted in the increase in training needs. Annual income had positive and significant relationship with training needs of piggery farmers which may be due to the fact that increased income might have influenced the farmers to go for training in piggery farming. Similar findings were also reported by <sup>9, 10</sup>.

## Backyard piggery farming in Assam

**Table 1. Training needs perceived by the respondents in different sub areas (N=200)**

1. Breeding Practices	MN	N	LN	TS	TMWS	RANK
Selection of animals	176 (88.00)	13 (6.50)	11 (5.50)	565	2.82	I
Knowledge about different breeds	95 (47.50)	96 (48.00)	9 (4.50)	485	2.42	II
Identification of heat symptoms	26 (13.00)	132 (66.00)	42 (21.00)	384	1.92	IV
Knowledge about artificial insemination	25 (12.50)	20 (10.00)	155 (77.50)	270	1.35	VI
Pregnancy diagnosis	33 (16.50)	117 (58.50)	50 (25.00)	383	1.91	V
Identification of infertility problems	36 (18.00)	135 (67.50)	29 (14.50)	407	2.03	III
<b>Average Total Mean weighted score =2.07</b>						
<b>2. Feeding Practices</b>						
Preparation of balanced ration	107 (53.50)	86 (43.00)	7 (3.50)	500	2.5	II
Feeding of newly born piglets	37 (18.50)	95 (47.50)	68 (34.00)	369	1.85	IV
Feeding of pregnant animals	167 (83.50)	24 (12.00)	9 (4.50)	558	2.79	I
Feeding of sick animals	26 (13.00)	167 (83.50)	7 (3.50)	419	2.1	III
Preparation of mineral mixture	22 (11.00)	101 (50.50)	77 (38.50)	345	1.73	V
Importance of clean feed and water for drinking	8 (4.00)	45 (22.50)	147 (73.50)	261	1.31	VI
<b>Average Total Mean weighted score = 2.04</b>						
<b>3. Health care Practices</b>						
Knowledge about common diseases	39 (19.50)	157 (78.50)	4(2.00)	435	2.17	I
Deworming	20 (10.00)	141 (70.50)	39 (19.50)	381	1.9	V
Treatment of sick animals	32 (16.00)	156 (78.00)	12 (6.00)	420	2.1	III
Vaccination	31 (15.50)	163 (81.50)	6 (3.00)	425	2.12	II
First aid treatment for simple ailments	26 (13.00)	160 (80.00)	14 (7.00)	412	2.06	IV
Deficiency diseases of animals and its symptoms	16 (8.00)	76 (38.00)	108 (54.00)	308	1.54	VI
<b>Average Total Mean weighted score = 1.99</b>						
<b>4. Management Practices</b>						
Care of newly born piglets	26 (13.00)	129 (64.50)	45 (22.50)	381	1.9	II
Weaning of piglets	15 (7.50)	106 (53.00)	79 (39.50)	336	1.68	1V
Care of pregnant animals	26 (13.00)	162 (81.00)	12 (6.00)	414	2.07	I
Castration of piglets	18 (9.00)	102 (50.00)	80 (41.00)	338	1.69	III
Housing plan for animals	23 (11.50)	26 (13.00)	151 (75.50)	272	1.36	V
<b>Average Total Mean weighted score = 1.74</b>						
<b>5. Marketing</b>						
Knowledge about credit facilities	53 (26.50)	131 (65.50)	16 (8.00)	437	2.18	I
Maintenance of records	31 (15.50)	108 (54.00)	69 (34.50)	378	1.89	II
Selling of pork and pork products	4 (2.00)	59 (29.50)	137 (68.50)	267	1.33	IV
Purchasing of feed	8 (4.00)	100 (50.00)	102 (51.00)	326	1.63	III
<b>Average Total Mean weighted score = 1.75</b>						

Note: Figures in parentheses indicated percentage  
 MN-Most Needed, N-Needed, LS-Least Needed, TS-Total Score, TMWS-Total Mean Weighted Score

Table 2. Extent of training needs perceived by the respondents in different sub areas (N=200)

Sub Areas	Category	Frequency	Percentage
Breeding	Low(6-10)	16	8.00
	Medium(10-14)	140	70.00
	High(14-18)	44	22.00
Feeding	Low(6-10)	14	7.00
	Medium(10-14)	142	71.00
	High(14-18)	44	22.00
Health care	Low(6-10)	13	6.50
	Medium(10-14)	155	77.50
	High(14-18)	22	11.00
Management	Low(5-8)	54	27.00
	Medium(8-11)	121	60.50
	High(11-14)	25	12.50
Marketing	Low(4-6.67)	54	23.00
	Medium(6.67-9.34)	103	51.50
	High(9.34-12)	43	21.50
Overall	Low (33-48)	54	27.00
	Medium (48-63)	119	59.50
	High (63-78)	27	13.50

Table 3. Relationship between personal and socio-economic characteristics with training needs

Sl. No	Independent variables	Correlation coefficients 'r' value
1	Age	0.399**
2	Education	0.468**
3	Land holding	0.155*
4	Experience in pig rearing	0.397**
5	Herd size	0.219**
6	Annual income	0.198**

\* Significant at 0.05 level of probability

\*\* Significant at 0.01 level of probability

### CONCLUSION

The study concluded that, the farmers needed training on breeding and feeding practices to a greater extent to improve the productive potential of pigs followed by health care, marketing and management. So, the extension agencies should disseminate information pertaining to the

training needs perceived by the respondents at the field level in order to bridge the gap between management practices followed by the farmers and the available scientific technologies by using effective extension tools and techniques for livelihood security of the farmers.

### REFERENCES

1. ASRLMS report (2012). A study on contributing and limiting factors relating to pig rearing as a source of income in Assam. pp 1-19. <http://www.asrlms.in>.
2. Balaraju, B.L. (2013). Assessment of Training needs of livestock owners: An exploratory study in Davangere district of Karnataka. MVSc Thesis, Indian Veterinary Research Institute, Izatnagar.
3. Das, L. and Mishra, S. K. (2002). Training needs of tribal women in farm and home activities. *Agricultural Ext. Rev.*, 14(2): 3-6.
4. Durga Rani V. and Subhadra M.R. (2009) Training needs of farm women in dairy farming, *Veterinary World*, 2 (6): 221-223
5. Fulzele, R. M. and Meena, B. L. (1995). Training needs of dairy tribal women. *Indian J. Dairy Sci.*, 48(19): 551-553.
6. Gaikwad, S.P. (2003). Training needs of goat keepers. M.Sc. (Agri.) Thesis, MAU, Parbhani.
7. Patel, R. N.\*, Patel, V. T. and Prajapati, M. M. (2012). Training need of dairy farm women in dairy farming practices. *AGRES – An International e-Journal* 4(1): 463-468.
8. Raju, L. D., Nataraju, M. S. and Niranjana, M. (1999). Women in animal production an ex-post-facto analysis. *Agricultural Ext. Rev.*, 11(3): 3-8
9. Payeng, S. (2011). "Economics of Pig Farming in Organized and Unorganized Systems in Kamrup District of Assam". MVSc Thesis, Assam Agricultural University, College of Veterinary Science, Khanapara, Guwahati-22.
10. Tekale, M., Deshmukh, D.S., Rathod, P and Sawant, M. (2013). Training Needs of Goat Keepers in Maharashtra. *Indian Res. J. Ext. Edu.* 13(2): 67-71.

