



# **An Analysis of Socio-personal Profile of ATMA Trainers in South Bihar**

**Saroj K. Rajak<sup>a\*</sup>, Pankaj Kumar<sup>at</sup>, Puspendra K. Singh<sup>a#</sup>  
and Rakhi Bharti<sup>at‡</sup>**

<sup>a</sup> *Department of Veterinary & A. H. Extension Education, Bihar Veterinary College, Patna, India.*

## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

The present study was conducted in two selected districts of South Bihar, one from each Agro-climatic zone, namely, Bhagalpur and Nalanda. Training programmes conducted by two selected district ATMAs were analyzed for period of five years. The data was collected by the researcher itself by direct interview method with help of semi-structured interview schedule. Analysis of result obtained by interview of ATMA trainers depicts that majority of ATMA trainers were of middle age group. ATMA trainers were dominated by male members. As per educational qualification is concerned majority of ATMA trainers were educated up to master's level. The major discipline of the trainers was found to be Agricultural science with slight a smaller number of Animal Science. Majority of respondents were having designation of Assistant Professor or equivalent post. There was lack of highly experienced trainers as majority of trainers were having training experience of less than five years.

**Keywords:** *ATMA; Agro-climatic Zone (ACZ); trainers; training experience; discipline; animal husbandry.*

# Assistant Professor;

† Head;

‡ Ph.D. Scholar;

\*Corresponding author: E-mail: [drpankajvet69@gmail.com](mailto:drpankajvet69@gmail.com);

## 1. INTRODUCTION

Agricultural Technology Management Agency (ATMA) is a registered society of key stakeholders involved in agricultural activities for the sustainable agricultural development in the district. ATMA is established at district level as an autonomous institution providing flexible working environment involving all the stakeholders in planning and implementation of extension activities. ATMA is a unique district level institution, which caters to activities in agriculture and allied sector adopting a farming system approach and convergence of programmes of related department.

The livestock sector plays an important role in providing livelihood support to more than 8 crore rural households engaged in dairying. Value of output of milk is more than Rs. 7.72 lakh crores during 2018-19 at current prices which is more than the value of output of wheat and paddy together [1], Contribution of livestock in GSDP of Bihar is 6.0 percent and in state Agriculture is 32 percent during 2019-20 [2].

Livestock sector is an integral part of agriculture and contributes substantially to the national economy and also plays a vital role in sustaining livelihood of the people. At present productivity of almost all animal species in India is less than world average which can be improved further by capacity building of the livestock farmers with help of suitable training programmes.

Training is one of the potent tools for bringing transformation in the working pattern of livestock farmers. Based on the principal of "Learning by doing", training provides capacity building in all aspects including animal husbandry. Training enhances the accuracy in working along with developing confidence in the people. A trainer plays a vital role in successful organization's training programme and technology

dissemination to the farmers. The study conducted by Dixit et al. [3], Pordhiya et al. [4], Singh et al. [5], Sharma et al. [6], Hundal et al. [7] and Bhise [8] clearly depicts that trainings provided by ATMA and similar agencies has significant impact on knowledge and adoption of the participants.

Since ATMA is overall performing the coordination work of all the agricultural related work in the district and improving the capacity building of the farmers by providing training in the different fields, therefore it is necessary to know the socio-personal profile of ATMA trainers, so that trainings could be improved substantially for overall improvement of the animal husbandry sector.

## 2. METHODOLOGY

The study was conducted in the state of Bihar. South Bihar has two Agro-climatic zones namely Zone-IIIA consisting of South East Alluvial Plain and Zone -III B consisting of South West Alluvial Plain (Deptt, of Agriculture, Govt. of Bihar). For the study, both Agro-climatic zones were considered for the sample. One district from each Agro-climatic zone was selected randomly. Accordingly, from Zone-III A, Bhagalpur district and from Zone- III B, Nalanda district was selected for the study purpose [9-12].

The ATMAs working in the two selected districts was analyzed for trainings conducted by them in animal husbandry sector for last 5 years. With the help of district ATMAs 25 trainers were identified and selected who had provided training to the farmers in Animal Husbandry sector in during last 5 years. The data from trainers was collected by direct interview method by the researcher itself with help of semi-structured interview schedule and simple tests like mean, median, percentage and t-test were used to analyze the data.

## 3. RESULTS AND DISCUSSION

**Table 1. Distribution of the ATMA trainers according to their age**

Variable	Bhaglpur	Nalanda	Pooled
<b>Age</b>	N=25	N=25	N=50
Young	7(28)	5(20)	12(24)
Middle	12(48)	9(36)	21(42)
Old	6(24)	11(44)	17(34)

\* Figures in parenthesis indicates percentage

It is evident from Table-1 that in Bhagalpur district majority (48%) of respondents were of middle age group followed by young (28%) and old (24%). In Nalanda district majority (44%) of the trainers were of old age followed by middle (36%) and young (20%). Pooled value of age of ATMA trainers of both districts depicts that majority (42%) of trainers were of middle age group followed by old age (34%) and young age (24%) respectively.

From Table 2 it is evident that in Bhagalpur district majority (72%) of the trainers were male and 28 percent were female. In Nalanda district the similar trend was observed where majority (80%) of trainers were male and only 20 percent trainers were female. Pooled data of both districts depicts that ATMA trainers were dominated by male members where 76 percent of the trainers were male and only 24 percent ATMA trainers were female.

Table -3 is showing distribution of respondents according to their educational qualification. Educational qualification of the trainer is very much detrimental for any short of training programme or capacity building programme. It is evident from the table that in Bhagalpur district majority (60%) of trainers had education up to master's degree followed by education up to graduation (BSc or equivalent, 20%), education up to doctoral (12%) and least 8 percent were having other qualifications like diploma etc. In Nalanda district majority (48%) of the trainers were having education up to master's degree followed by education up to graduation (36%), and equal number of trainers having qualification up to doctoral degree (8%) and other qualifications like diploma etc. Pooled value of

both the districts depicts that majority (54%) of the trainers had qualification up to master's degree followed by graduation (28%), doctoral degree (10%) and least 8 percent of the trainers had other qualifications like diploma etc.

Discipline of trainers refers to subject of basic qualification which they obtained during their career. It is expected that for training in the field of animal husbandry, an expert in the subject of animal husbandry is the best choice. From the Table-4 it is evident that in Bhagalpur district majority (44%) of the trainers were belonging to Animal Science, followed by Agricultural Science discipline (32%), and equal number of trainers from (12%) from Social Science and Home Science respectively. In Nalanda district majority (48%) of the trainers were belonging to Agricultural Science discipline followed by Animal Science discipline (32%), Social Science discipline (16%) and least (4%) from Home Science discipline. Pooled value of both districts depicts that majority (40%) of the trainers were from Agricultural Science followed by Animal Science (38%), Social Science (14%) and Home Science (8%).

It is evident from Table-5 that in Bhagalpur district majority (56%) of the respondents were of the rank of Assistant Professor or equivalent followed by rank of Associate Professor or equivalent (24%), other posts (12%) and least were at the rank of Professor or equivalent (8%). In the Nalanda district Majority (40%) of the trainers were of the rank of Assistant Professor or equivalent followed by Other posts (32%), Associate Professor or equivalent (16%), Professor & equivalent (12%).

**Table 2. Distribution of ATMA trainers according to their sex**

Variable	Bhaglpur	Nalanda	Pooled
<b>Sex</b>	N=25	N=25	N=50
Male	18(72)	20(80)	38(76)
Female	7(28)	5(20)	12(24)

\* Figures in parenthesis indicates percentage

**Table 3. Distribution of ATMA trainers according to their Educational Qualification**

Variable	Bhaglpur	Nalanda	Pooled
<b>Qualification</b>	N=25	N=25	N=50
BVSc&AH/BSc	5(20)	9(36)	14(28)
MVSc/MSc	15(60)	12(48)	27(54)
PhD / PDF	3(12)	2(8)	5(10)
Others	2(8)	2(8)	4(8)

\* Figures in parenthesis indicates percentage

**Table 4. Distribution of ATMA trainers according to their discipline**

Variable	Bhagpur	Nalanda	Pooled
<b>Discipline</b>	N=25	N=25	N=50
Animal Science	11(44)	8(32)	19(38)
Agricultural Science	8(32)	12(48)	20(40)
Social Science	3(12)	4(16)	7(14)
Home science	3(12)	1(4)	4(8)

\* Figures in parenthesis indicates percentage

**Table 5. Distribution of ATMA trainers according to their designation**

Variable	Bhagpur	Nalanda	Pooled
<b>Designation</b>	N=25	N=25	N=50
Asstt. Professor/Asstt. Director/ Scientist / Equal	14(56)	10(40)	24(48)
Associate Professor/ Senior Scientist/ Deputy director	6(24)	4(16)	10(20)
Professor/ Principal Scientist/ Director/ Equivalent	2(8)	3(12)	5(10)
Others	3(12)	8(32)	11(22)

\* Figures in parenthesis indicates percentage

**Table 6. Distribution of ATMA trainers according to their Training Experience**

Variable	Bhagpur	Nalanda	Pooled
<b>Training Experience</b>	N=25	N=25	N=50
Up to 5 Years	11(44)	8(32)	19(38)
5-10 Years	7(28)	9(36)	16(32)
10-15 Years	4(16)	5(20)	9(18)
More than 15 Years	3(12)	3(12)	6(12)

\* Figures in parenthesis indicates percentage

Pooled value of both districts clearly depicts that majority (48%) of the trainers were at the rank of Assistant Professor followed by other posts (22%), rank of Associate Professor or equivalent (20%) Professor or equivalent (10%) It is evident from figure that trainers at the rank of Assistant Professor or equivalent were more engaged in training programmes related to animal husbandry sector, the reason may be more availability of time to basic posts like Assistant Professor whereas resource persons at higher post like Professor or equivalent are having more responsibility in their organization and engaged in other activities, which result in less available time for attending training programmes for farmers, another reason may be due to more involvement of contractual persons which are mainly at the post of Assistant Professor or equivalent.

It is evident from Table-6 that in Bhagalpur district majority (44%) of ATMA trainers were having training experience up to 5 years followed by experience up to 5-10 years (28%),

experience up to 10-15 years (16%) and trainers with experience of more than 15 years was found only up to 12 percent. In Nalanda district majority (36%) of the ATMA trainers were having training experience of 5-10 years followed by experience up to 5 years (32%), experience up to 10-15 years (20%) and least only 12 percent of trainers were having experience of more than 15 years.

Pooled value of both selected districts shows that majority (38%) of the trainers were having training experience up to 5 years followed by experience up to 5-10 years (32%), experience up to 10-15 years (18%) and least 12 percent of the trainers were having training experience of more than 15 years. It is evident from the figures presented in the table -6 that majority of trainers were having training experience of less than 5 years. For quality training more experienced trainers are required. Therefore, ATMAs should try to engage more experienced trainers for their training programmers. The fact could not be denied that more experienced trainers are in

general at higher posts which in turn having more official responsibility and therefore less available to act as a resource person for farmers training.

#### 4. SUMMARY AND CONCLUSION

The result of the study depicts that in South Bihar majority of ATMA trainers were of middle age group (42%). There was dominance of male trainers (76%) in comparison to female trainers (24%). As per educational qualification is concerned majority of the trainers were having education up to master's degree (54%), majority of resource person used for training of animal husbandry to farmers were from Agricultural science discipline (40%) with slight less number (38%) in Animal Science discipline. Majority of trainers were at the post of Assistant Professor or equivalent (48%), there was lack of resource persons at higher designation like professor or equivalent (10%). Training to farmers were being imparted by mainly less experienced (38%) trainers having training experience of up to 5 years only.

From the result of the study, it may be concluded that there is need of more involvement of female trainers. To improve the quality of trainings organized by ATMA more qualified (Doctoral or equivalent) trainers should be given preference, however there was constraints faced by ATMA for availability of the trainers with doctoral degree. It was observed that training in Animal Husbandry was provided mainly by the trainers from Agriculture science discipline, there should be specialized trainers from animal husbandry discipline for training to livestock farmers. However, it was also subject to availability to resource person from Animal Husbandry sector. ATMA should try to arrange resource persons from line department of Animal Husbandry or faculty from Bihar Animal Sciences University located in Patna. The study also reveals that there was less involvement of trainers with higher designation like Professor or equivalent posts, there is need to give more preference to experienced trainers to improve the quality of trainings. ATMA should put his effort to involve a greater number of trainers with more experience so that farmers should have benefit of experience of trainers. There may be constraints of lack of experienced trainers that can be fulfilled by proving off-campus training to different institutes having faculty or scientists of Animal Science.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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