

Impact of Extension Activities on Farmers' Awareness, Knowledge, Skills and Attitude with Reference to Scheduled Tribes and Scheduled Castes Women towards Livestock Farming

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Abstract

The investigation was carried out in randomly selected three villages of Nadia district of West Bengal by randomly selecting 103 respondents belonging to tribal (62.14%) and scheduled caste (37.86%) category. Among the total respondents, majority were women (75.73%) followed by men (24.27%). It was found that traditional livestock production system was mainly controlled by women who were chiefly responsible for production of livestock and marketing activities. So, any improvement of this traditional livestock production system will directly benefit the whole of the family. Training was imparted to the respondents about scientific animal husbandry practices utilizing indigenous breeds of cattle, goat and pig and on integrated livestock with fish and horticulture farming. The training programs were found to create awareness among the respondents about scientific application of livestock production system. Regular vaccination was carried out against black quarter (BQ) and hemorrhagic septicemia (HS) in cattle and pests des petits ruminants (PPR) in goat along with deworming, health coverage for sick animals, distribution of leaflets and mineral mixtures to the respondents for their livestock in the villages. The prevalence of major killer diseases likes BQ, HS and PPR, morbidity and mortality of livestock was reduced remarkably due to regular vaccination, health coverage, deworming programs. The negative attitude of the respondents towards vaccination and deworming before the onset of the investigation was also removed due to creation of awareness through training, integrated animal health camps and distribution of leaflets. Thus, there was an overall improvement in awareness, knowledge, skills and attitude of the respondents towards livestock farming due to various extension activities.

Key words : Livestock, Tribal, Scheduled caste, Women, Extension activities.

In India, 70 to 80% of the total livestock produced is contributed by the under privileged families (1). Livestock plays an important role in the life of tribal and scheduled caste people who cannot practice agriculture due to lack of land and other costly inputs. Livestock not only provide regular income and nutritional security but also is a valuable source of draft power and manure (2). The indigenous breeds of livestock are mainly reared by women of the tribal and ST community in traditional system without scientific knowledge. In the past, several attempts were made to introduce crossbred/hybrid livestock in the rural areas among ST and SC without considering other costly inputs such as balanced feed, high standard of management, sophisticated techniques for diagnosis and control of diseases, marketing but yielded little or no success. Hence, it is essential to evaluate and understand local livestock production

system based on indigenous breeds, their limitations and opportunities and how they can be improved gradually in the existing village situations with the help of scientific knowledge. The main problem of this traditional livestock production system is low productivity but high mortality due to disease outbreaks for lack of scientific awareness. The majority of women who were virtually controlling this traditional livestock production system were not aware of the possibility of improving their productivity and thus the family income (2). Besides, there is paucity of information about livestock farming by tribal and SC communities in the region. Hence, an attempt was made to introduce scientific intervention within this traditional livestock production system so as to improve awareness, knowledge, skills and attitude of ST and SC farming especially women through various extension activities.

Methods

An extensive survey was carried out in randomly selected three villages of Nadia district of West Bengal namely Adibasi Palli, Harijan Para and Bibadi Palli with the help of structured interview schedule. The number of households having livestock constituted as sample of the study and thus 103 respondents were selected at random from the three villages. Among the total respondents (N=103), 25 were from Adibasi Palli, 41 from Harijan Para and 37 from Bibadi Palli and belonged to ST and SC category. Based on the extensive survey conducted in randomly selected three villages of Nadia district of West Bengal, short term training was imparted to 103 selected ST (64 i.e. 62.14%) and SC (39 i.e. 37.86%) respondents. Among the respondents, the majority were women (78 i.e. 75.73%) followed by men (25 i.e. 24.27%) in the three villages namely Adibasi Palli (25), Harijan Para (41) and Bibadi Palli (37).

Training was imparted batch-wise about scientific animal husbandry practices utilizing indigenous breeds of livestock such as cattle, goat, pig and integrated livestock with fish and horticulture. In the training programs, major thrust was given on aspects like breeds and breeding, housing and management, feeding and disease control. regular vaccination was conducted against black quarter (BQ-334) and hemorrhagic septicaemia (HS-422) in cattle, peste des petits ruminants (PPR) in goat (354). Thus a total 1110 vaccines were given in the three villages namely Adibasi Palli (307), Harijan Para (382) and Bibadi Palli (421). A total 144 (cattle 67 and goat 77) fecal samples of cattle and goat were tested for parasitic infections. Deworming programs were carried out in total 994 livestock which included cattle (573), buffalo (05), goat (402), dog (7) and pig (7) in the three village i.e. Adibasi Palli (298), Harijan Para (362) and Bibadi Palli (334) with major emphasis on suspected young livestock. Health coverage was provided to total 147 livestock for various ailments such as GI disorders, fever, infertility, anaestrous, repeat breeding, anaemia, pica, reduced productivity, debility, mastitis and skin disorders. The respondents were provided with mineral mixture supplements for their livestock in the villages. Leaflets in local language about vaccination schedules for cattle, buffalo, PPR, amphotomiasis, rabies were distributed among the literate livestock respondents.

Results and Discussion

The maximum number of respondents belonged to middle age group (48 years). Among 103 respondents, majority (78) were women (75.73%) who were chiefly involved in rearing of indigenous livestock. The women were found to have direct control over the use of livestock products and income and benefited their family. Cast-wise, majority of respondents (64) were ST (62.14%) followed by SC (37.86%). All the respondents were Hindus in religion. With respect to education, majority (72) were illiterate (69.90%) and only 31 respondents were literate (30.10%). Most of the farmers were landless laborers (95.15%) and animal husbandry was one of their important occupations. Out of total herd size of livestock and poultry, the population was recorded in cattle (41.45%), goat (11.74%), pig (1.03%) and buffalo (0.3%). No cross-bred/hybrid livestock was found in these villages. In fact, the respondents were found to be not willing to keep crossbred/hybrid livestock with high productivity as they require costly inputs and considered to be risky due to proneness to many diseases. Most of the livestock were grazed and supplementary feed was given only to productive animals which was home made mixture. The animals were usually housed at night and stay either at the same house with the members of the family or at a separate kachcha animal shed. Amongst tribal and SC communities, the contribution of men folk in the livestock production system is minimal and women are chiefly responsible for production and marketing activities. Mostly, women were involved in rearing of livestock in traditional system without scientific knowledge and livestock were found to have poor production performance but high morbidity and mortality due to occurrence of diseases. These observations are in accordance with the findings of earlier workers (3—5).

The knowledge of the respondents on various aspects of livestock farming such as management, feeding, vaccination, deworming and sanitation was improved due to training. Kaur and Singla (6) also emphasized the need for organization of training programs for farm women to stimulate their higher participation in various activities of dairy farming.

It was observed that neither vaccination nor deworming for livestock was carried out in the villages before initiation of the study. The farmers were not

aware of vaccination and deworming programs. Initially, many respondents refused to get their livestock vaccinated. This negative attitude towards vaccination and deworming for livestock was removed gradually and the respondents got their livestock vaccinated and dewormed subsequently. The motivation of the respondents towards vaccination and deworming programs for livestock was due to creation of awareness for scientific farming through integrated animal health camps. Besides, the farmers were highly motivated about supplementation of mineral mixture with the feed of the livestock (7).

On completion of the study, it was noted that there was reduction in occurrence of major killer diseases such as HS and BQ in cattle and PPR in goat, and overall morbidity and mortality of livestock. It may be attributed to regular vaccination and deworming, treatment of sick animals and supplementation of mineral mixture. Apparently, various extension activities led to the improvement of awareness, knowledge, skills and attitude of the respondents regarding introduction of scientific application within the traditional livestock production system which is compatible with their socio-economic conditions.

References

1. Kurup M. P. G. 2004. Production structure and cost competitiveness of livestock production in Asia. Pages 132—154 in V. Ahuja, editor. *Livestock and livelihoods. Challenges and opportunities for Asia in the emerging market environment*. Nat. Dairy Develop., Brd, Ananda, Gujarat, India and GAOL food and Agric. Organic. of the United Nations, Rome, Italy.
2. Rangnekar D. V. 2003. Buffalo production from sustainable livelihood perspective. Proc. 6th Asian Buffalo Cong., New Delhi, India, pp. 254—249.
3. Obinne C.P.O., D. V. Uza and P. Nwachukwu. 2000. Characterizing the indigenous knowledge of rural women in livestock management in Benue State. *J. Agric., Techn. and Educ.* 5 : 39—43.
4. Rangnekar D. V. 2006. Livestock in livelihood of the under privileged communities in India: A Review. *Int. Livestock Res. Inst., Nairobi, Kenya*.
5. Sinn R., J. Ketzis, T. Chen, C. F. N. Haenlein and M. H. Fahmy. 1999. The role of women in the sheep and goat sector. *Small Rum. Res.* 34 : 259—269.
6. Kaur M. and S. Singla. 2001. Participation of rural women in diary management practices. *J. Res., Punjab Agric. Univ.* 38: 294—300.
7. Mishra A. K., C. A. R. Rao, K. V. Subrahmanyam, M. V. S. Babu, B. Shivarudrappa and Y. S. Ramakrishna. 2007. Strategies for livestock development in rainfed agro—ecosystem of India. *Livestock Res. for Rural Develop.* 19 : 20—24.