Impact in knowledge gain of rural women through dairy trainings

Sunita Ahuja, Vandna Bhanot and Balwan Singh Mandal

Abstract

Women empowerment has become a significant topic of discussion in development and economics. Women in India play an important role in agricultural development and allied activities including livestock, horticulture, post-harvest operations, fisheries etc. Training has been recognized as potent tool to equip a person enabling one to deliver the goods in better way. Dairy in India is female dominated enterprise. Women spend more time in dairy production activities than men in rural areas. In the present study 30 women engaged in dairy activities from villages of Ambala district, Haryana were selected. They were imparted one day training every month for year during year 2015-16 on different aspects of dairy farming viz. Feeding, Breeding, Health and production, Vaccination, Clean milk production etc. Data was collected after imparting trainings to study impact in knowledge gain regarding dairy farming activities.

Keywords: women, vaccination, training, empowerment

Introduction

In India dairying is a female dominated enterprise. Women are the backbone of agriculture and comprising the majority of agricultural labourers. They play a significant and vital role for boosting the development in the field of agriculture and animal husbandry. In India, all the works are being done by the women in the field of animal production but in spite of that their hard work remains invisible, mostly. This may be carried out within the confines of homesteads. The dairying has been considered as a potential means of alleviating large scale unemployment, especially in rural areas. Successful dairy husbandry enterprise not only improves the socio-economic status of rural the women, but also assures a sustained and assured means of income to supplement their income from the main enterprise. The prosperity and growth of nation depends on the status and developments of its women as we know that educating a woman means educating a family.

Rural women are involved in many cattle rearing operations. Women in villages of district Ambala also contribute in dairy farming work in addition to their household activities. They have two to three animals at their home. The production of these animals contributes to family economy. Dairy farming in rural areas is not practiced scientifically but according to their knowledge. They don’t adopt the dairy practices as desired. Training has been recognized as potent tool to equip a person enabling one to deliver the goods in better way. Women from villages used to visit Krishi Vigyan Kendra, Ambala for their queries or problem related to household activities like cooking, stitching, fruit and vegetable preservation etc. Study was conducted by Krishi Vigyan Kendra Ambala regarding training needs of farm women of improved dairying practices. Data was collected from 180 farm women from villages related to dairy from six blocks of district Ambala (Bhatia et al., 2010) [1]. Keeping in view the results of the training needs, the present study was conducted to study the impact in knowledge gain of farm women through dairy trainings. The working competencies of the rural women can be strengthened and upgraded by providing training on livestock rearing practices (Iftikhar et al., 2007) [2]. As need based training programme act as catalyst for increasing the motivational level of trainees and who in turn, try to put their sincere efforts to learn and gain the maximum from the training program (Yadav et al., 2007) [3].

Methodology

The present study was conducted in Ambala district of Haryana (India) and 30 women engaged in dairy activities from villages of Ambala district, Haryana were selected. They were imparted one day training every month for year during year 2015-16 on different aspects of
dairy farming viz. Feeding, Breeding, Health, and production, Vaccination, Clean milk production etc. To assess the impact in knowledge gain of farm women through these trainings data was collected using a structured questionnaire from 30 women before training and after training.

**Results and Discussion**

Data was collected using a structured questionnaire to study the present knowledge of farm women regarding various aspects of dairy farming before training. Majority of the respondents belong to middle age group and having low a level of education. They are rearing the animals as a source of additional income to the family, to provide nutrition security to household, and also to provide the dung cake and farm yard manure for their use as fuel as well as manures in the farm. The results obtained revealed that 70 percent of women are independently doing dairy related work. Remaining 30 percent are associated with their male partner’s in livestock work.

**Breed of animals**

Only 5 percent female were aware of different breeds of animals. Farm women were provided training on different breeds of cow and buffaloes of milch animals. Important characters of different were told to keep in mind while selecting an animal. Selection of animal plays an important role in production. The selection of breeds takes into account market requirements, feed availability, and resistance to diseases and environmental conditions. They were advised to keep less animal but should be of good breed and high milk yielding. Forty percent of farm women were able to recognize different breeds of milch animal after providing training. Involvement of farm women while purchasing of animals was increased.

**Animal housing**

Farm women were not aware of basics of animal housing. An efficient management of dairy animal will be incomplete without a well-planned and adequate housing. During erection of a house for dairy animal, care should be taken to provide comfortable’ accommodation for an individual animal. It should be clean and have a maximum exposure to sunlight and protection from wind also. There should be an adequate supply of water and electricity. Only 13 percent of farmwomen used the principles of housing in their animal shed.

**Vaccination**

Farm-women had no knowledge regarding vaccination schedule to be followed for dairy animals. They were told about the vaccination schedule for dairy animals. Advised to get animals vaccinate regularly for FMD (Foot and Mouth Disease) and HS (Haemorrhagic septicaemia) under vaccination program run by state government. They have a myth of decrease in milk production after vaccination and reluctant for vaccination sometimes.

**Balanced Diet**

A balanced ration containing protein, energy, minerals, and vitamins from dry fodders, green fodders, concentrates, mineral supplements etc., should be provided in appropriate quantities to enable the animal to perform optimally and remain healthy. An imbalanced feeding results in low milk production, poor growth, and reproduction. Only 13 percent farm-women were aware regarding the role of nutrients in animal feed. Performance of livestock is mainly governed by the quality and quantity of nutrition, and feed given to dairy animal. In rural areas, the animals are mainly fed on agriculture crop residues like wheat straw and kaddhis which are mostly low in nutrients. The deficiency of the nutrients and trace elements leads to low productive and reproductive efficiency. Prasad et al. (2007) [3] in his findings clearly showed that in cattle 80 percent of reproductive problems can be overcome by supplementary feeding with mineral salts. Farm-women were told about formulation of ration. 43 percent women got response in terms of increase in milk production after mineral mixture feeding. 36 percent farm women started adding calcium in diet of pregnant animals.

**Care and management of new borne calves**

Only twenty six percent of women followed aseptic conditions in management of new borne calves. When baby cows (calves) are born, they are separated from their mothers to prevent the spreading of diseases from cow to calf. Disinfect the navel cord with tincture of iodine as soon as it is cut with a sharp knife. They are fed colostrum from their mom as quickly as possible. Colostrum is the first milk from the cow, which has special antibodies to protect the calf from diseases. Assist the calf to suckle if it is too weak to suckle on its own within 30 minutes of calving. Calves are then fed milk replacer for six weeks in order to preserve their mother’s milk for human consumption. Dehorn the calves around 4 to 5 days of age for easy management when they grow. New borne calves should be dewormed. There was almost fifty percent increase in knowledge regarding care of new borne calves after training.

**Clean milk production**

Women were not aware of clean milking techniques. A few used to wash hands with soap before milking. Full hand and knuckling method of milking was followed. Majority of farm women followed knuckling method which contributes to mastitis and fibrosis of udder. They were advised to milk the animal in a clean place and wash the udder and teat with antiseptic lotion or Luke-warm water and dry before milking. Milker should be free from any contagious diseases and should wash his hands with antiseptic lotion before each milking. Milking should be done with full hands, quickly and completely followed by stripping. Sick animals should be milked at the end to prevent spread of infection. They were also advised to get the milk of animal tested for mastitis and antibiotic sensitivity if they observe any abnormality in milk or udder. 33 percent increase in knowledge gain regarding clean milk production procedures was reported after training farm-women.

**Artificial insemination**

Nineteen percent of farm women were aware of importance of artificial insemination (AI). AI has become one of the most imperative techniques for the genetic improvement of farm animals since preferably the semen from genetically superior sires/males are used to inseminate the female animals artificially. This technique is one of the most efficient tools accessible to dairy farmers to improve productivity and profitability of dairy enterprise. In artificial insemination, the bulls of superior quality can be efficiently exploited with the least concern for their location in faraway places.
Awareness of lab testing

It was very surprising for them that the lab testing of blood, faecal, milk and urine etc. samples of animals is done for diagnosis of various animal diseases. They were made aware of the testing of samples at DI lab LUVAS, Ambala under KVK premises. It lead to proper diagnosis and reduced the treatment cost. There was significant increase in number of samples tested after the awareness of lab testing.

Table 1: Assessment of knowledge gain of rural women

<table>
<thead>
<tr>
<th>Sr. no</th>
<th>Parameter</th>
<th>Gain in knowledge (%)</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Breed of animal</td>
<td></td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Animal housing</td>
<td></td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Vaccination</td>
<td></td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Balanced diet</td>
<td></td>
<td>13</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>Care of new born calf</td>
<td></td>
<td>26</td>
<td>55</td>
</tr>
<tr>
<td>6</td>
<td>Clean milk production</td>
<td></td>
<td>34</td>
<td>67</td>
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<tr>
<td>7</td>
<td>Artificial Insemination</td>
<td></td>
<td>19</td>
<td>44</td>
</tr>
<tr>
<td>8</td>
<td>Awareness of lab testing</td>
<td></td>
<td>27</td>
<td>69</td>
</tr>
</tbody>
</table>

Trained rural women possessed high knowledge on all the individual practices, whereas, colostrum feeding, deworming of calves, vaccination, feeding pregnant and milking cows, clean milk production and awareness of lab testing. It is revealed from the present study that a large percentage of women from rural areas are involved in dairy farming thus rural women should be scientifically trained in every aspect. Furthermore, if training are conducted frequently then there would be increase in the level of knowledge, which in turn reflects the better livestock farming, management and ultimately increases livestock production (Yasothai et al., 2009) [4]. Training in technologies, relevant to livestock management enhances knowledge and skills in animal rearing practices, disease management and feed management which eventually improve the income to the household (Nirmala et al., 2012) [5]. The results of present study emphasized that in order to increase the dairy farm productivity, strong extension program needs to be implemented for transfer adoptable technologies and to enhance the knowledge and skill of women in all aspects of livestock management practices.

References