Impact of Training Programme on Goat Farmers and Stakeholders: A Study of CIRG Training Programmes

A.K. Dixit¹, Braj Mohan², Khushyal Singh³ and Vijay Kumar⁴


Corresponding author e-mail: akdixit@cirg.res.in

ABSTRACT

India has the largest goat population in the world and majority of goats are reared by the marginal, small farmers and landless labourers under extensive management system. This paper highlights the impact of training programmes on the knowledge of the trainees participated under national and sponsored training programme on scientific goat farming at Central Institute for Research on Goats (CIRG). Average knowledge scores have been calculated for the participants of four national and sponsored training programme through pre and post examination. Average knowledge scores of pre and post training programmes were increased significantly in all the training programmes under study. These training programmes not only help to improve efficiency of goat farmers but also provide a roadmap to the commercial goat farmers through introducing them with improved goat technologies. The study suggests that the frequencies of such short duration training (10 and 5 days) should increase to benefit more number of goat farmers.

Key words: Goat farming; Training; Knowledge scores; Goat technologies;

Out of 138 million operational holdings, the small and marginal holdings (below 2.00 ha) together constituted 85 per cent (GoI, 2014). These land holdings are the main custodean of goats and reared them under extensive management system. Studies conducted so far reported that there is gap between the improved and existing practices of goat rearing which resulted in poor production performance of the animals (Mohan et al., 2009). Training and development leads to improved profitability and more positive attitudes towards profit orientation (Singh, 2012). Keeping in this view, the present study was undertaken to study impact of training programmes on knowledge gain of goat farmers and entrepreneurs. The results of this study will help to identify knowledge gaps in different areas of goat production and support to design the future training modules.

METHODOLOGY

Central Institute for Research on Goats (CIRG) organised four National Training Programmes (once in a quarter) for 10 days on commercial/scientific goat farming for goat farmers and other stakeholders to enable them to add their knowledge and skills they already have. Apart from National Training Programmes, institute also organise sponsored training programmes on the demand of state governors, NGOs and other organisations. These programmes are designed according to trainees’ requirement and focus on goat breeding, feeding, health, housing, reproduction, value addition, economics and marketing. After completion of this programme, trainees improve their goat rearing practices and take initiatives to start goat farming at commercial level. All the four National Training Programmes on scientific goat farming organized during 2012-13 were selected to assess the impact. However, of all the 7 sponsored training programmes, 4 trainings were randomly selected for the study.

The impact of the training programme on the knowledge of farmers and other stake holders was assessed through taking knowledge test before and after training programme. Five questions of different levels from each area viz. goat breeding, feeding, health, housing and reproduction were asked. Scores were calculated for pre and post knowledge test. To analyze overall knowledge gain of the trainees of national and sponsored training programmes, scores obtained from each area of goat rearing were summed up to obtain
the total knowledge score of the participants. The data were analyzed using mean and paired ‘t’ test.

RESULTS AND DISCUSSION

Four training programmes namely 55th, 56th and 57th national training on “Scientific Goat Farming” were conducted during 2013-14 and 58th National Training Programme was organized during 2014-15. The 55th National Training Programme was conducted during 4-13 September 2013, and about 30 entrepreneurs and other stakeholders participated in this programme from 9 states. The major focus of this training programme was to cover all the important aspects of goat production at commercial level including economics and marketing. Similarly, 56th National Training Programme was conducted during 20-29 November 2013. In this programme, 55 participants including 3 women from 13 states were participated. Further more, 58 participants from 12 states participated in 57th National Training Programme under the same objective i.e. commercial goat farming. And, 58th National Training Programme was organized during 21-30 May 2014 with 51 participants from 14 states. These all, training programmes were designed keeping in view the trainees’ demand at commercial level. In all 190 trainees participated in four National Training Programmes.

CIRG also conducted 4 sponsored training programmes (5 days each) for goat farmers from the states namely Bihar and Himachal Pradesh. The training course focused on the various aspects dealing with improvement of goat health, breed, nutrition, productivity and marketing. A sponsored training programme for 19 goat farmers from Bihar state was conducted during 11-15 March 2013. This training was sponsored by Agricultural Technology Management Agency (ATMA), Siwan district of Bihar. Similarly, 34 goat farmers (6 farm women) from Bolangeer district of Odisha participated in a training programme organized during 25-29 March 2014 at CIRG. The other training programmes for which impact assessment was worked out were: sponsored training programme for 26 goat farmers sponsored by ATMA Sitamarhi district of Bihar and for 20 goat farmers from Nauni, Solan, Himachal Pradesh sponsored by Dr.Y.S. Parmar University of Horticulture and Forestry Regional Centre, Nauni, Solan, Himachal Pradesh. In all, 97 trainees participated in the four sponsored training programme.

The impact on the knowledge level of the participants in different National Training Programme is provided in Table 1. In 55th National Training Programme on scientific goat farming, the average knowledge scores increased from 11.9 to 22.7 indicating high knowledge gain. The ‘t’ value 16.27 revealed that the gain in knowledge was highly significant.

In the 56th National Training Programme, the pre and post knowledge scores improved from 6.6 to 21.71 respectively. The ‘t’ value 26.92 indicated that there was significant gain in the knowledge of participants on scientific goat farming. The improvement was little higher than that of 55th national programme.

In the third training entitled 57th National Training Programme on “scientific goat farming”. The knowledge score before training was 7.94 and it was 21.25 after training score showing a very high gain in knowledge. Further the ‘t’ value of 20.61 indicates a highly significant gain in knowledge of the trainees in the goat rearing aspects.

Significant knowledge gain has been also observed in 58th National Training Programme where, average knowledge scores of the trainees increased from 7.06 to 22.80 with ‘t’ value of 28.13. A comparative study of these National Training Programmes indicated that the highest gain of knowledge in terms of pre and post scores was observed in 58th national training followed by 56th, 57th and 55th. Impact on the knowledge levels

<table>
<thead>
<tr>
<th>Name of the training programme</th>
<th>No. of participants</th>
<th>Average Knowledge Score Before training</th>
<th>Average Knowledge Score After training</th>
<th>t-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>55th National Training Programme on “Scientific Goat farming”</td>
<td>30</td>
<td>11.93±0.74</td>
<td>22.70±0.38</td>
<td>16.27**</td>
</tr>
<tr>
<td>56th National Training Programme on “Scientific Goat farming”</td>
<td>54</td>
<td>6.63±0.53</td>
<td>21.71±0.31</td>
<td>26.92**</td>
</tr>
<tr>
<td>57th National Training Programme on “Scientific Goat farming”</td>
<td>55</td>
<td>7.94±0.64</td>
<td>21.25±0.23</td>
<td>20.61**</td>
</tr>
<tr>
<td>58th National Training Programme on “Scientific Goat farming”</td>
<td>51</td>
<td>7.06±0.56</td>
<td>22.80±0.23</td>
<td>28.13**</td>
</tr>
</tbody>
</table>

**(P<0.01)**
of the goat farmers in sponsored training programme are provided in Table 2. A significant improvement in knowledge level of goat farmers was observed after the completion of training programme on scientific goat farming. This training was sponsored by ATMA, Siwan district of Bihar. The average knowledge scores of participants before and after training were 6.37 and 20.21 respectively. The ‘t’ value 13.15 clearly indicated that there was a significant improvement in the knowledge of goat farmers on different aspects of improved goat rearing. Similar observation was observed in the knowledge test of goat farmers from Bolangeer district of Odisha. The ‘t’ value 21.37 indicated that there was significant gain in the knowledge of goat farmers. Further, training sponsored by ATMA, Sitamarhi has shown significant increase in average knowledge scores (‘t’ 11.83). Scores increased from 5.84 to 18.74 in tests conducted before and after training programmes. Maximum gain was observed in the average knowledge scores of participants from Nauni, Solan district of Himachal Pradesh. Scores increased from 4.20 to 19.80 in pre and post knowledge test respectively. The ‘t’ value 13.86 indicated that there was significant gain in the knowledge of goat farmers.

This is worthwhile to mention here that majority of the participants in National Training Programmes were entrepreneurs with relatively better economic and educational background and little aware about goat rearing through literature or internet. However, the participants of sponsored training programmes were basically farmers from poor economic and education background. The level of initial knowledge in sponsored training programme was found to be lower than that of National Training Programmes (entrepreneurs and other stakeholders). Average knowledge scores obtained in pre training test was invariably high in national trainings than sponsored training programmes on scientific goat farming (Table 1 & 2).

CONCLUSION

The present study underlines the importance of capacity building programme to the goat farmers, entrepreneurs and other stakeholders. A significant gain in the knowledge was observed in both the training programmes. These training programmes not only help to improve efficiency of goat farmers by educating them how they can use available resources in most efficient and balanced way but also provide a roadmap to the commercial goat farmers through introducing them with latest goat technologies. This paper suggests that the frequencies of such short duration training (10 and 5 days) programmes should be increased.

REFERENCES

Govt. of India, 2014. Agriculture Census (2010-11). All India report on number and area of operational holdings. Agriculture Census Division, Department of Agriculture and Cooperation, Ministry of Agriculture.


Table 2. Impact on the knowledge level of the goat farmers participated in f ive days sponsored training programmes

<table>
<thead>
<tr>
<th>Name of the training programme</th>
<th>No. participants</th>
<th>Average Knowledge Score</th>
<th>&quot;t&quot; values</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Scientific Goat Farming&quot;</td>
<td>19</td>
<td>6.37±0.89</td>
<td>13.15**</td>
</tr>
<tr>
<td>&quot;Scientific Goat Farming&quot;</td>
<td>33</td>
<td>5.41±0.67</td>
<td>21.37**</td>
</tr>
<tr>
<td>&quot;Scientific Goat Farming&quot;</td>
<td>25</td>
<td>5.84±0.96</td>
<td>11.83**</td>
</tr>
<tr>
<td>&quot;Scientific Goat Farming&quot;</td>
<td>20</td>
<td>4.20±0.76</td>
<td>13.86**</td>
</tr>
</tbody>
</table>