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Knowledge Enhancement of Landless and Marginal Farmers through Entrepreneurship Training on Goat Farming

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ABSTRACT

The study focused on assessing the cognitive effectiveness of entrepreneurial development training on goat rearing for landless and marginal farmers in Maharashtra's Beed district carried out during 2020-21. A group of Twenty-five farmers were selected based on WhatsApp messages sent to registered KVK groups and a newspaper announcement. The training covered housing, disease management, improved goat breeding, feeding, feed preparation, and marketing intelligence. It was found that education level, socio-economic status, scientific interest, land ownership, social engagement, and marketing skills positively influenced knowledge acquisition. The trainee's knowledge gained to the tune of 172 per cent more in seven days of training compared to the benchmark. Goat production and management including wildlife corridor preservation and promoting local vegetation through controlled grazing were key aspects. The study emphasized the importance of goat-rearing training for farmers in the Beed district, showcasing substantial knowledge gains and identifying factors affecting participants' learning outcomes.

INTRODUCTION

Without a change in the people, there is nothing in extension, and without cooperation from the people, there can be no little but positive change. The primary objective of the study was to determine the impact of training on the knowledge gained on market intelligence among landless and marginal farmers following the completion of a seven days training programme. Rai et al., (2004) undertook a study on goat rearing can indeed be helpful for entrepreneurship development, particularly for small and landless farmers because of its features like low investment and quick returns, shorter reproduction cycle allowing farmers to see returns on investment relatively quickly. Goats are known for their adaptability and can thrive in harsh environments, including lands that may not be suitable for other forms of agriculture (Gaur et al., 2008). The study enables us to determine the effect of training on the knowledge gained on market intelligence among landless and marginal farmers. Goat farming provides multiple sources of income. Farmers can earn from selling goats for meat, milk, and fiber (e.g., mohair, cashmere). Additionally, they can sell breeding stock and goat manure for organic farming. Goats can offer nutritional benefits to poor.

METHODOLOGY

The study conducted was an experimental model focused on assessing the effectiveness of a seven-day training program on goat rearing among 25 landless and marginal farmers from various villages in Beed district of Maharashtra. The training program was carried out under the STRY (Strengthening Rural Youth through Enterprise) initiative in January 2021.The training program employed various teaching methods to ensure maximum engagement and learning for the participants. Initially, a lecture-based approach was used followed by interactive sessions and group discussions. Additionally, audio-visual aids, including videos showcasing

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previous success stories were employed to enhance the learning experience.

To assess the farmer's initial knowledge and understanding, a comprehensive questionnaire with 20 questions as suggested by Kumar et al., (2016) was developed by subject matter experts. Each question had a scoring system, where 1 mark was assigned for correct responses and 0 mark for incorrect one. This questionnaire was an integral part of the training program and was administered both before and after the training sessions. The pretest and post-test knowledge scores of the trainees were recorded to evaluate the impact of the training programme. The difference between these scores was calculated to measure the overall knowledge gain attributed to the training. The primary aim of the analysis was to assess the additional knowledge gain among the participants as a result of the training program. The study followed a structured experimental model that included the selection of participants, a well-structured training program, the development of a comprehensive questionnaire and the assessment of knowledge gain through pre- and post-test scores. The aim of the training programme was to determine the effectiveness of the training program in enhancing the knowledge and skills of landless and marginal farmers in the field of goat rearing. The study's findings are based on the observed changes in knowledge levels before and after the training sessions.

RESULTS AND DISCUSSION

The study provided insights into the trainee's background information and the impact of goat rearing training. Here are the salient findings:

Trainees' background information

A substantial 64 per cent of participants were in the age range of 25 to 40 years of the entire sample spanning from 25 to 49 years. In terms of education 56 per cent of participants had reached the matriculation level while 28 per cent had completed primary education. Additionally, 16 per cent of participants demonstrated basic literacy skills. There was no illiterate participant. These results align with similar findings from previous studies by (Surendar et al., 2012; Singh et al., 2020). In the realm of experience in goat rearing, the majority (40%) had an experience between 21 to 40 years followed by 32 per cent having an experience of 40 years. Only 12 per cent of participants fell into the 11 to 20 years range and 16 per cent had up to 10 years of experience. About the number of training programmes attended, 56 per cent of participants had attended 1 to 2 training programme while 24 per cent had attended 2 to 5 trainings. A smaller group (20%) had attended more than 5 training programs (Sharma et al., 2018).

As it is evident from the Table 1, the average knowledge score has jumped from 2.5 to 6.8 showing the gain in knowledge of 172 per cent. This remarkable gain can be attributed to trainee's favorable background and skillful organization of training. It also highlights the trainer's expertise and understanding trainee's need.

In Table 2, the study examined the correlation between various independent variables and the dependent variable i.e. marketing intelligence. The significant findings of the training also correlate

Table 1. Knowledge gain of trainees

Particulars	Before training	After training	Knowledge gain (%)
Knowledge score range	1-3	3-8	172
Total score	63	171	
Average score	2.5	6.8	

Table 2. Zero order correlation co-efficient with knowledge gain

S.No.	Independent variables	'r' value	p value
1.	Age	0.000	1.000
2.	Education	0.436*	0.030
3.	Experience in agriculture	0.457*	0.022
4.	Family type	-0.441*	0.028
5.	Socio-economic status	-0.433*	0.031
6.	No. of trainings attended	0.464*	0.020
7.	Land holdings	0.480*	0.015
8.	Social participation	0.395*	0.041
9.	Scientific orientation	0.371*	0.048

*Significant at 0.05 probability level

with what has been reported by Hundel at el., (2016). They had also reported that education exhibited a positive and significant correlation (r = 0.436, p = 0.030) with marketing intelligence. Higher education levels were associated with better marketing intelligence (Kadam et al., 2010). The experience in agriculture had a positive and significant correlation (r = 0.457, p = 0.022) with marketing intelligence. More experience in agriculture was linked to higher levels of marketing intelligence. Similar findings were also reported by (Kumari, 2014). The family type showed a negative and significant correlation (r = -0.441, p = 0.028) with marketing intelligence. The joint family respondents were more comfortable with starting entrepreneurial activities due to family and financial support (Rao et al., 2009). The socio-economic status had a negative and significant correlation (r = -0.433, p = 0.031) with marketing intelligence. The higher socio-economic status was associated with lower marketing intelligence (Patel et al., 2010). The number of trainings attended exhibited a positive correlation (r = 0.464, p = 0.020) with marketing intelligence. Those who participated in more agricultural trainings had higher levels of marketing intelligence (Sharma et al., 2006). The land holdings showed a positive and significant correlation (r = 0.480, p = 0.015) with marketing intelligence. The individuals with larger landholdings had better marketing intelligence, possibly due to higher levels of income and market contacts (Birgit et al., 2018). The social participation exhibited a positive and significant correlation (r = 0.395, p = 0.041) with marketing intelligence. The active participation in social activities related to agriculture was linked to higher marketing intelligence (Razzaq et al., 2011). The scientific orientation had a positive correlation (r = 0.371, p = 0.048) with marketing intelligence. The individuals with strong scientific knowledge related to agriculture had better marketing intelligence. Similar findings were also reported by (Tsiouni et al., 2022).

In gist, the study revealed that several factors significantly influenced an individual's marketing intelligence. This included education, experience in agriculture, family type, socio-economic

status, the number of trainings attended, land holdings, social participation and scientific orientation. The higher education and more experience in agriculture was associated with better marketing intelligence. The joint family respondents were more likely to engage in entrepreneurial activities. interestingly, individuals with higher socio-economic status tended to have lower marketing intelligence. The variables like attending more agricultural trainings, larger land holdings, active social participation and possessing scientific knowledge were also linked to higher marketing intelligence. The findings highlight the importance of education, practical experience and community involvement in enhancing marketing intelligence (Soodan et al., 2020).

Table 3 depicted that the regression analysis involved nine independent variables and the R-squared value of 0.6812 indicates that these variables collectively explain 68.12 per cent of the variation in marketing intelligence. Among the nine independent variables, education, type of family, number of trainings attended, social participation and scientific orientation showed significant results at the 0.05 and 0.01 per cent levels (Singh et al., 2020). Education has a positive coefficient of 0.08 indicating that higher levels of education are associated with better marketing intelligence. This highlights the importance of investing in education for improved marketing strategies in agriculture. This variable has a positive coefficient of 0.061, suggesting that attending more training sessions leads to increase in marketing intelligence. The continuous learning and skill development are crucial for better marketing practices (Nain & Bhagat, 2005; Singh et al., 2018).

Table 3. Regression co-efficient

S.No.	Variables	Coefficients	SE (b)	t value
1.	Age	-0.012	0.011	-1.091
2.	Education	0.08*	0.031	2.581
3.	Experience in agriculture	0.003	0.007	0.429
4.	Type of family	-0.047*	0.016	-2.938
5.	Socio-economic status	-0.079	0.068	-1.162
6.	Number of trainings attended	0.061*	0.022	2.773
7.	Landholding (ha)	-0.205	0.325	-0.631
8.	Social participation	0.245*	0.084	2.917
9.	Scientific orientation	0.023*	0.010	2.300

It was observed that the number of trainings attended had a coefficient of 0.061 in the regression model. This indicated that for each one-unit increase in the number of trainings attended, marketing intelligence was expected to increase by 0.061 units. These finding supported the observations made by (Subha Laxmi et al., 2022). The social participation has a positive coefficient of 0.245, indicating that actively engaging in social activities related to agriculture positively impacts marketing intelligence. Networking and collaboration within the agricultural community are beneficial for marketing knowledge. scientific orientation has a positive coefficient of 0.023, emphasizing that a stronger scientific orientation towards farming is associated with better marketing intelligence. The evidence-based practices are important in agricultural marketing strategies. The scientific orientation had a coefficient of 0.023 in the regression model. This indicated that for each one-unit increase in scientific orientation, marketing intelligence

Table 4. Analysis of variance

Source of variation	df	Sum of squares	Mean squares	F-calculated	Significance
Regression	9	5.450	0.606	3.562	0.01467
Residual	15	2.550	0.170		
Total	24	8.000			

R- square value: 0.6812, Multiple R-value: 0.8254

was expected to increase by 0.023 units. In essence, a stronger scientific orientation towards farming was associated with better marketing intelligence (Roy & Tiwari, 2016).

The study's findings were confirmed by other researchers adding credibility to the relationships identified. The results can guide policymakers, educators, and agricultural professionals in devising strategies to enhance marketing skills, knowledge dissemination and social engagement in agriculture. The text also briefly mentions the training needs of a group of trainees in goat rearing. It highlights that expertise in areas like disease management in kids, breed improvement, feeding management, and general entrepreneurial management skills is crucial for success in commercial goat rearing. Overall, the study underscores the importance of education, continuous learning, social engagement and scientific orientation in improving marketing intelligence in agriculture and provides valuable insights for stakeholders in the field.

Discovered a clear need among all trainees for comprehensive guidance in various aspects of commercial goat rearing production technology through a detailed investigation. This requirement was unanimously acknowledged by the trainees themselves. Notably, disease management in goats emerged as the top priority, ranking first in importance among the participants. This finding underscores the significance of expertise in managing goat health. The improved breeds of goats also ranked high in terms of training needs highlighting the importance of breeding practices. Additionally, feeding management and care giving were identified as crucial areas requiring attention. These results align with the notion that effective management skills are essential for success in entrepreneurship (Kumar et al., 2003; Singh et al 2014; Singh et al., 2016; Nain et al., 2019). Overall, our observations provided valuable insights into the specific training needs of the participants as summarized in Table 5.

CONCLUSION

The training impact depends on several factors. The trainees background, trainer's expertise, smooth and meticulous organization of training, trainees need and urge for knowledge gain contribute

Table 5. Training needs of participants

S.No.	Particulars	Average mean score	Rank
1.	Disease management in goat	21	I
2.	Improved breeds of goats	18	II
3.	Feed preparation	12	IV
4.	Feeding management and take care	16	III
5.	Marketing intelligence	10	V

heavily for positive impact. The scope of the enterprise, economic relevance, ease in adoptability, environmental factors also add to the necessity of training and its successful implementation. The impact assessment of any training, particularly enterprises oriented needs to be carefully arranged. This research article deals with the all the major factors that affects the success of training. It deals with all in house and on field activities that fructify in a successful training. The methodical assessment also sets the tone for advance planning of long durational, enterprise oriented, employment generative training programmes.

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