

Evaluation of the Impact of Skill Development Training on Entrepreneurial Awareness of Undergraduate students in Integrated Livestock Farming

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ABSTRACT: Combining the production of agricultural crops with livestock farming practices, integrated livestock farming guarantees that animal waste can be used as a naturally occurring organic fertilizer to increase the soil's fertility. Simultaneously, agricultural production wastes from crops might be used as significant roughage feed source for dairy cattle. In terms of ruminant production, the Indian livestock farming feeding system is dependent on crop residues. In India, animal husbandry is a significant source of income for the rural populace. Therefore, it is important to incorporate as many educated young people in rural areas as possible in the adoption of scientific livestock production technology through integrated farming. Out of 124 students, 78 were selected based on their interest in acquiring knowledge on animal husbandry activities. These 78 students were given 10 days of skill development training along with one day exposure visit to livestock farms. Students are evaluated before and after the skill development training programme to assess their level of knowledge on managerial activities of dairy, goat and poultry farming. Pre and post-training evaluations revealed that skill development training improved the scientific management knowledge among the students. Consequently, 89.74% of students accepted to start up integrated livestock farming after their graduation as a self-employment venture.

Keywords: Integrated livestock farming, Students, Youth, Farming.

INTRODUCTION

Agriculture production and livestock production systems are interdependent (Kallah and Adamu 1988). Livestock feed on crop wastes (Al Hassan *et al.* 1983), however, grain occasionally serves as supplemental feed for animals that produce food. By laying dung and urine on the soil and providing animal force for farming and transportation, animals increase the fertility of the soil (Gupta *et al.*, 2012). For farm households across the country to have stable incomes and nutritional security, integrated farming techniques need to be broadly implemented. This can be accomplished by giving farm families more power through appropriate information sharing on IFS-related technology, incentives, and extension support (Pattanaik *et al.*, 2022). India is one of the most vulnerable Asian nations to natural catastrophes, with over 40 million ha of crops destroyed by landslides, cyclones, floods, and earthquakes (Silambarasan *et al.*, 2022). Livestock farming is one of the important emerging self-employment ventures among the educated youth in the present scenario especially after the impact of the COVID-19 pandemic. The educated youth are more

interested in starting commercial livestock farming as a self-employment venture and they are in contact with the outreach centers of TANUVAS after the COVID-19 pandemic. The educated youth under disguised employment and foreign returnees of rural youth are showing enormous interest in skill development training and starting new livestock farms. This revealed that the youth population was showing budding interest in the livestock farm business. Hence, impact assessment of skill development training on entrepreneurship behavior of undergraduate students in integrated livestock farming in Nagapattinam district was carried out.

MATERIALS AND METHODS

A survey with a pretested questionnaire was conducted among 124 arts and science college women students. The students of 78 out of 124 who rear one or more classes of livestock were selected for the random survey. The questionnaire survey contains six questions each on breeding, housing, feeding and health management of livestock and poultry to assess the entrepreneurship behavior on integrated livestock management. The students who answered 50 percent

and below questions were classified under the low awareness group (Group I). The students who answered above 50 percent of the questions were classified under the high awareness group (Group II). The same questionnaire was tested before and after the skill development training to assess the impact of skill development training on the potential entrepreneurship behavior of students. The students were given skill development training of ten days covering the theoretical and practical aspects of breeding, housing, feeding and health management of goats, cattle and poultry. The skill development training was concluded with an exposure visit to progressive model livestock and poultry farms in the district. The data obtained were compiled and analyzed statistically with suitable analytical tools.

RESULT AND DISCUSSION

In group I, 20.51% (16), 43.58% (34), 35.89% (28), and 66.66% (52) of students have less than 50% awareness of housing, breeding, feeding, and health management of dairy farming before skill development training, respectively. At the same time, in group II, 79.48% (62), 56.41% (44), 64.10% (50), and 33.33% (26) of students have more than 50% awareness of housing, breeding, feeding, and health management of dairy farming before skill development training, respectively. Post-training evaluation of students revealed that 97.44% (76), 94.87% (74), 98.72% (77), and 97.44% (76) of students shifted to group II (more than 50% awareness group) with respect to more than 50% awareness on housing, breeding, feeding and health management of dairy farming. Awareness of feeding

management is higher than other dairy management practices, which might be due to more focus on feeding management during the skill training programme. Awareness and skills on housing, breeding, feeding, and health management of dairy farming can be increased through skill development training among the students. The increase in awareness and skill levels through scientific training was reported in earlier research in girls than boys (Thakur *et al.*, 2022 and Zia *et al.*, 2021).

In group I, 12.82% (10), 84.62% (66), 76.92% (60), and 93.58% (73) of students have less than 50% awareness on housing, breeding, feeding, and health management of goat farming before skill development training, respectively. At the same time, in group II, 87.17% (68), 15.38% (12), 23.07% (18), and 6.41% (5) of students have more than 50% awareness on housing, breeding, feeding, and health management of dairy farming before skill development training, respectively. Post training evaluation of students revealed that 96.15% (75), 98.72% (77), 98.72% (77), and 100% (78) of students shifted to group II (more than 50% awareness group) with respect to more than 50% awareness on housing, breeding, feeding and health management of goat farming. Awareness of health management is higher than other goat management practices, which might be due to more interest and attention of students towards health coverage of goat during the skill training programme. This might be due to the higher level of kid mortality in the prevailing goat rearing practices at Nagapattinam district (Table 1, 2).

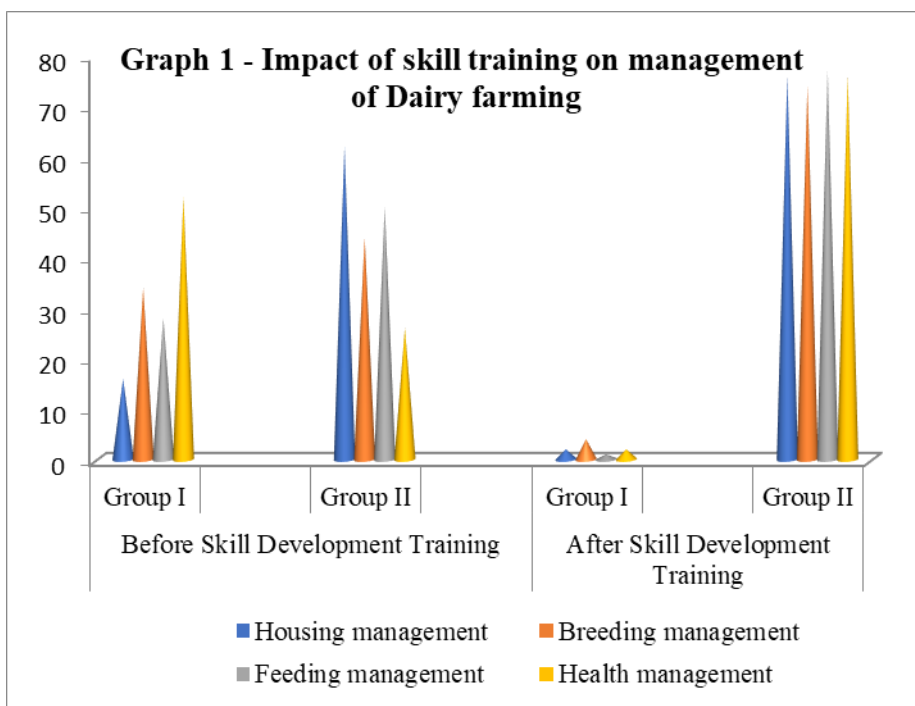
Table 1: Assessment of level of awareness on management of livestock and Poultry.

Sr. no.	Awareness on management (n=78)	Before Skill Development Training		After Skill Development Training	
		Group I	Group II	Group I	Group II
I	Dairy farming				
1.	Housing management	16	62	2	76
2.	Breeding management	34	44	4	74
3.	Feeding management	28	50	1	77
4.	Health management	52	26	2	76
II	Goat farming				
1.	Housing management	10	68	3	75
2.	Breeding management	66	12	1	77
3.	Feeding management	60	18	1	77
4.	Health management	73	5	0	78
III	Poultry Farming				
1.	Housing management	70	8	0	78
2.	Breeding management	72	6	2	76
3.	Feeding management	64	14	1	77
4.	Health management	71	7	0	78

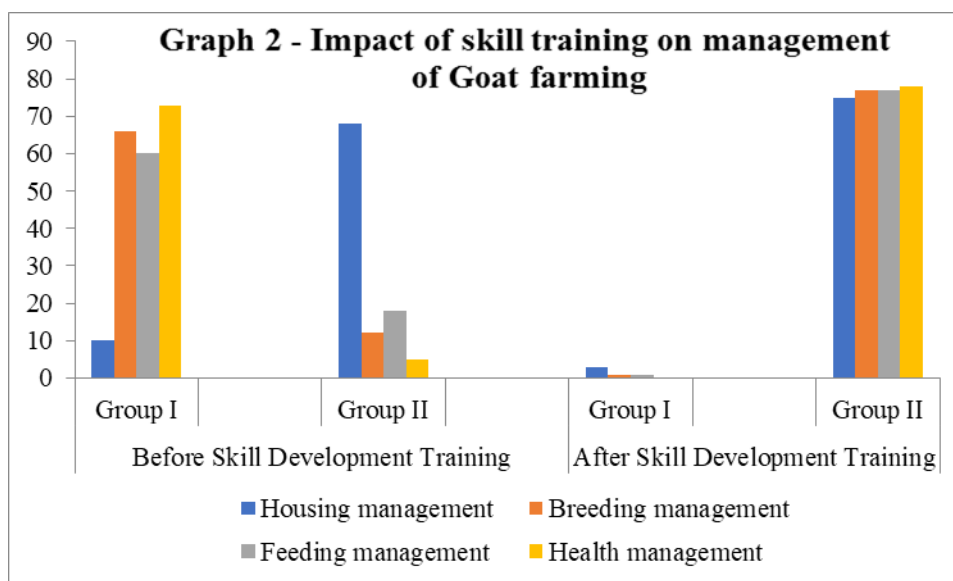
Group I - Low awareness group - Awareness \leq 50 Percent; Group II - Awareness $>$ 50 Percent

Table 2: Evaluation of entrepreneurship curiosity among undergraduate students on integrated livestock farming.

Sr. no.	Adoption of entrepreneurship after graduation	No. of students accepted before training	No. of students accepted after training
1	Dairy farming	1	20
2	Goat farming	5	22
3	Poultry farming	2	28
	Total	8 (10.26%)	70 (89.74%)



Group I - Low awareness group - Awareness \leq 50 Percent; Group II - Awareness $>$ 50 Percent



Group I - Low awareness group - Awareness \leq 50 Percent; Group II - Awareness $>$ 50 Percent

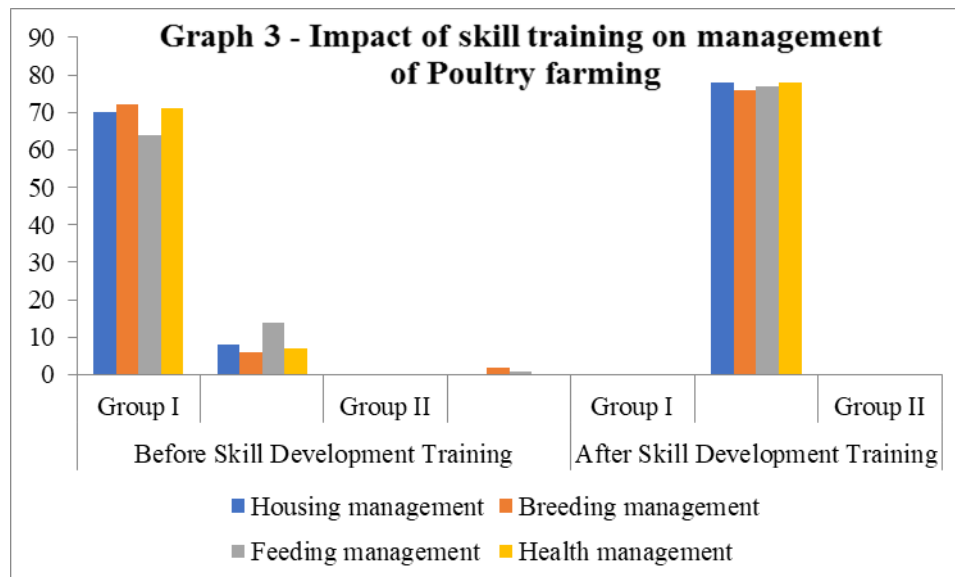
Awareness and skills on housing, breeding, feeding, and health management of goat farming can be increased through skill development training among the students. The increase in awareness and skill levels through scientific training was reported in earlier research (Sharma & Singh, 2023; Meena *et al.*, 2023). In group I, 89.74% (70), 92.30% (72), 82.05% (64), and 91.02% (71) of students have less than 50% awareness on housing, breeding, feeding, and health management of goat farming before skill development training, respectively. At the same time, in group II, 10.25% (8), 7.69% (6), 17.95% (14), and 8.97% (7) of students have more than 50% awareness on housing, breeding, feeding, and health management of poultry farming before skill development training, respectively. Post

training evaluation of students revealed that 100% (78), 97.43% (76), 98.72% (77), and 100% (78) of students shifted to group II (more than 50% awareness group) with respect to more than 50% awareness on housing, breeding, feeding and health management of poultry farming. Awareness on health and housing management is higher than other poultry management practices, which might be due to more interest and attention of students towards health coverage of poultry with comfortable housing to prevent existing economic losses in poultry farming. Awareness and skills on housing, breeding, feeding, and health management of poultry farming can be increased through skill development training among the students. The increase in awareness and skill levels through scientific training

was reported in earlier research (Kumar *et al.*, 2024; Thakur *et al.*, 2021; Patil *et al.*, 2020 and Kadagi *et al.*, 2020).

Post training evaluation of students for livestock entrepreneurship revealed that 89.74% of students showed their willingness to start up integrated livestock farming after graduation as self-employment ventures, whereas, only 10.26% of students accepted livestock entrepreneurship start-up in pre-training evaluation. This indicated that skill training of educated youth will

motivate them to enter into the livestock farming business. The farming turnover will increase considerably when educated youths carry out livestock farming. The credit facility, veterinary consultation facility, input availability, quality of inputs, farm machinery like chaff cutter, milking machine, silo, silage bag and quality veterinary services are the essential factors that favorably affect the productivity of livestock farming.



Group I - Low awareness group - Awareness \leq 50 Percent; Group II - Awareness $>$ 50 Percent

CONCLUSIONS

Skill development training on integrated livestock management has strengthened the skill and knowledge on housing, breeding, feeding and health management of livestock and poultry. Further, the skill development training on integrated livestock management enabled 89.74 percent of students to adopt integrated livestock farming as their self-employment opportunity after graduation. Skill development training on integrated livestock management to the rural youth students will motivate them to decide on themselves their own business. Providing skill training and dissemination of novel technologies in livestock farming to the youth students will enable them to adopt integrated farming at commercial scale and to evolve as a successful livestock entrepreneur.

FUTURE SCOPE

The skill development training of rural educated youth will enlighten their mind to start up their livestock farming business as self-employment opportunities.

Author contribution. Suresh C. has conducted the training and collected the data. Sujatha V. compiled and analyzed the data. Sujatha U. coordinated the students during the evaluation. Bakyaraj S. represented the result in the form of graphs and assisted in writing the article.

Conflict of Interest. No.

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