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Perceived Entrepreneurial Training Needs of Trainees of *Krishi Vigyan Kendras* in Kerala

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ABSTRACT

The present study was conducted in the state of Kerala to analyse the training needs of 100 trainees of five Krishi Vigyan Kendras (KVK). The findings indicated that the packaging & marketing of mushroom and post harvest handling value addition were the most preferred training areas by the KVK trainees in mushroom production. In apiculture, honey extraction essential operations was perceived as the most needed area of training. In the area of value addition of fruits and vegetables, technology upgradation and packaging marketing techniques were the most preferred areas by the trainees. Relational analysis revealed that socio-economic variables like educational status and annual income, communication variables like extension contact and mass media exposure and entrepreneurial variables like entrepreneurial intention, entrepreneurial need, entrepreneurial capacity, innovativeness, achievement motivation, decision making ability, risk orientation, self confidence, cosmopoliteness and economic motivation were found positively and significantly correlated with training needs. The KVKs should take concrete efforts to organize need based entrepreneurship development training programmes to improve effectiveness.

Keywords: *Krishi Vigyan Kendra; Entrepreneurship development programme; Training need; Trainees*

INTRODUCTION

Recent years have seen the emergence of Entrepreneurship Development Programmes (EDP) as a major extension intervention for income and employment generation in agriculture and allied sectors. Entrepreneurship Development Programmes are mainly concerned with enabling a person in developing his/her entrepreneurial skills, motives and capabilities which are essential for playing his entrepreneurial role effectively. It is an effective technique for the development of human resources. It results in proper utilization of local resources, employment generation and promotion of small scale units and overall development of individuals.

Efforts have been undertaken by both government and non governmentd organizations to promote entrepreneurial development in the country through

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Entrepreneurship Development Programmes (EDP). In this regard, many agencies and institutions are working towards organizing EDP. And one such institution is the *Krishi Vigyan Kendra* (KVK), the first line transfer of technology (TOT) centre of the Indian Council of Agricultural Research (ICAR). As nodal agricultural resource centres at the district level, they have significant role in improving the farmers' income by facilitating entrepreneurship development. Therefore an analysis of perceived entrepreneurial training needs of EDP trainees of *Krishi Vigyan Kendras* (KVKs) can be of importance. The inputs from the results of the study can be used to improve the KVK trainings in entrepreneurship development and thereby improve the farmers' income and agricultural development.

METHODOLOGY

In the present research, *ex-post facto* research design was used. The state of Kerala formed the study area. Out of the 14 KVKs working under different host organizations in Kerala viz. Kerala Agricultural University (KAU), Indian Council of Agricultural Research (ICAR) and Non-governmental organizations (NGOs) a total of 5 KVKs (2 KAU KVKs, 2 ICAR KVKs and 1 NGO KVK) to represent southern, central and northern regions of the state were selected for the study. Random sampling was followed in each region to select KVK, Kasaragod (ICAR) and KVK Malappuram (KAU) from northern region, KVK, Alappuzha (ICAR) and KVK, Kottayam (KAU) from central and KVK Trivandrum (NGO) from the southern region. Using random sampling technique, selected 20 EDP trainees from each of the selected KVKs to make a sample of 100.

The perceived entrepreneurial needs of KVK trainees were quantified using Training Need Index (TNI). List of EDP trainings was used to select three major thrust areas focussed by all the five selected KVKs during the past five years. Accordingly, mushroom cultivation, apiculture and value addition were the training areas selected. The data on training needs were collected by assigning a three point scale as per the Likert technique i.e. most needed, needed and not needed with respective scores of 3, 2 and 1. Training Need Index (TNI) was used in the measurement with the following formula. (Haneef, 2015)

$$TNI = \frac{\text{Total score obtained}}{\text{Maximum score obtainable}} \times 100$$

FINDINGS AND DISCUSSION

Training Need in Mushroom Production

The training need index of respondents in the area of mushroom production is depicted in Table 1. The results in the table reveal that packaging and marketing of mushroom with TNI score 91.10 and post harvest handling & value addition with TNI score of 90 were the areas that were ranked first and second among the needed - training areas. Marketing of mushroom is one of the biggest constraint in mushroom cultivation. This was in-line with the findings of Singh (2004) who suggested that specialized training about this aspect should be provided to the mushroom growers. The other areas in the order of ranking were information on nutritive value of mushroom

Table 1.
Preferred Areas of Training in Mushroom Production based on Training Need Index *(n= 30)*

Sl. No.	Training Areas	TNI	Rank
1.	Packaging and marketing	91.10	I
2.	Post harvest handling and value addition	90.00	II
3.	Nutritive value of mushroom	86.67	III
4.	Cultivation technology of mushroom	82.00	IV
5.	Spawn production	78.00	V
6.	Substrate preparation	76.00	VI
7.	Pest and disease management	71.00	VII
8.	Infrastructure requirement	60.00	VIII
9.	Economics of mushroom	58	IX
10.	Management of spent compost	56	X

(86.67), cultivation technology (82), spawn production (78), substrate preparation (76), pest and disease management (71), infrastructure requirement (60), economics of mushroom (58) and management of spent compost (56).

Training Need in Apiculture

Preferred areas of training in apiculture based on training need index (TNI) are presented as Table 2. A perusal of results reveals that among the different aspects of beekeeping, honey extraction essential operations with TNI score of 90 was perceived as the most needed area of training in apiculture. Honey extraction requires skilled labour and therefore training should be imparted to beekeepers to handle skill fully honey extraction and essential operations of beekeeping. This was followed by marketing and business of honey bees and value addition of honey with TNI scores of 86.60 and 85.00. A large number of trainees had training needs regarding marketing and business of honey bees, value addition of honey and bee-hive products. This is due to the fact that many beekeepers wanted to adopt beekeeping as a commercialized venture in the near future due to it & high medicinal value. The other areas in the order of perceived importance based on TNI scores of the trainees were apiary management during different seasons (81.00), bee keeping aspects which includes site selection and equipment (70.00), bee biology which includes life cycle of bees, their rearing pollination etc. (69) and bee enemy & disease management (68.80). Therefore the training institutions must concentrate on these aspects to make the beekeepers, experts in this field. Export of honey (53.30) and purity testing (52.22) were least needed training areas.

Training Need in Value Addition

The data from Table 3 reveal the training need of respondents in the area

Table 2.
Preferred Areas of Training in Apiculture based on Training Need Index (TNI) *(n=30)*

Sl. No.	Training Areas	TNI	Rank
1.	Honey extraction and essential operations	90.00	I
2.	Marketing and business of honey bees	86.60	II
3.	Value addition of honey	85.00	III
4.	Apiary management during different seasons	81.00	IV
5.	Bee keeping aspects	70.00	V
6.	Bee biology	69.00	VI
7.	Bee enemy and disease management	68.80	VII
8.	Bee keeping equipments	54.40	VIII
9.	Export of honey	53.30	IX
10.	Purity testing	52.22	X

of value addition of fruits and vegetables in the following order of ranking: Technology upgradation (92.5)-first rank, Packaging and marketing techniques (88.33)- second rank, Advertising of products and brand promotion (85)- third rank, Financial management and credit support (84)- fourth rank, Production technology (83)- fifth rank, Manufacturing and preservation techniques of different products (75)-sixth rank, Procurement of raw materials (74)- seventh rank, Quality control and management (72.5)- eighth rank, Export promotion techniques (69)- ninth rank and Hygiene, pollution control and environmental management (60)- tenth rank. Technology upgradation was perceived as the most important training need by the respondents. This may be due to the fact that sophisticated technology helps the entrepreneurs in manufacturing quality products of different designs at low cost. Therefore it is necessary to update the entrepreneurs with the latest technical know-how to get higher price of the products and to survive in a competitive market as reported by Singh (2004). Therefore, entrepreneurship development programmes including different areas like technology upgradation, packaging and marketing, advertising and brand promotion should be organised for entrepreneurs so that they can gain knowledge and skills on these aspects.

Correlation between Personal Traits and Training Needs

To examine the relationship between personal traits and training needs, correlation coefficient (r) value was computed, the results of which are presented in Table 5. The data show that among the twenty one characteristics studied, socio-economic variables like educational status and annual income, communication variables like extension contact and mass media exposure and entrepreneurial variables like

Table 3.
Preferred Areas of Training in Value Addition based on Training Need (TNI) *(n=40)*

Sl. No.	Training Areas	TNI	Rank
1.	Technology upgradation	92.50	I
2.	Packaging and marketing techniques	88.33	II
3.	Advertising of products and brand promotion	85.00	III
4.	Financial management and credit support	84.00	IV
5.	Production technology	83.00	V
6.	Manufacturing and preservation techniques of different products	75.00	VI
7.	Procurement of raw materials	74.00	VII
8.	Quality control and management	72.50	VIII
9.	Export promotion techniques	69.00	IX
10.	Hygiene, pollution control and environmental management	60.00	X

entrepreneurial intention, entrepreneurial need, entrepreneurial capacity, innovativeness, achievement motivation, decision making ability, risk orientation, self confidence, cosmopoliteness and economic motivation had a positive and significant correlation with the training need. Whereas age, family size, family type and land holding were positively and non-significantly correlated to the training need. Further it was noticed that gender and marital status had negative and non significant correlation with the training need of the trainees and occupational status was negatively and significantly correlated to the training need.

The positive trend of correlation revealed that as the educational level of EDP trainees increased, their need for training also increased. Similar results were reported by Wankhar (2019) who revealed that education imparted greater knowledge, skill and desire to learn and acquire new information which is reflected in the positive and significant correlation between education and training need. The relationship between annual income and training needs of respondents was found to be positive and significant with r value of 0.63. More annual income prompted individuals to indulge in diverse activities with the purpose of earning more profit out of their enterprise. But new activities also brought with them newer challenges that necessitated them to gain more knowledge and skill through trainings. These findings are in line with that of Raghuvanshi (2017). The results revealed that with increase in extension contact and mass media exposure the respondents' need for training also increased. An individual having good contact with extension agencies will

perceive more training needs as they had the latest information from extension personnel and considered training as an important input in their enterprise. The awareness which the respondents gain through different mass media sources creates the inquisitiveness to know more about it. The respondents with higher degree of entrepreneurial intention, entrepreneurial need, entrepreneurial capacity, innovativeness, achievement motivation, decision making ability, risk orientation, self-confidence and economic motivation showed increased need for training. The people with higher entrepreneurial intention, entrepreneurial need and entrepreneurial capacity will have the desire to expand their enterprise after obtaining trainings in the respective fields. Those respondents with higher degree of innovativeness showed increased need for training to perceive new ideas and practices while respondents with higher achievement motivation needed more training for better accomplishments and income. The respondents with higher degree of decision making ability also had more need of training. This was in concurrence with the decision theories that suggest that decisions involving new activities needed clear understanding so that uncertainty and risks involved were reduced. This could be achieved through trainings and as such reduce the cognitive dissonance enabling balanced decisions. The respondents with higher risk orientation try to gain more knowledge with respect to latest technologies and innovations. As their knowledge level increased, their need for training also increased so that they could acquire the practical knowledge for implementation. A positive and highly significant relationship between respondents' cosmopoliteness and training need indicated that respondents who are not 'localite' had strong tendency for obtaining need-based EDP trainings from sources outside their immediate contacts. This is in line with the findings of Borbon (2007). The respondents with higher degree of economic motivation world want to improve their income from their enterprise. This created the need for better awareness on the latest developments in the respective fields and depended on trainings to gain this. Thus there was a positive and significant correlation between economic motivation and training needs of the respondents with r value 0.76.

Occupational status was another personal attribute that showed negative but significant correlation with the training needs of the respondents. This implied that higher the occupational status of the respondents lower the training needs. This can be mostly attributed to the indulgence in diverse tasks as part of the job which widen the knowledge and occupational skills of an individual in different areas reducing the need and time available for trainings.

Table 4.
Relationship of Selected Personal Characteristics with Training Needs of Trainees *(n=100)*

Sl. No.	Personal Attributes of Trainees	Correlation coefficient (r)
1.	Age	0.19
2.	Gender	-0.24
3.	Marital status	-0.08

Sl. No.	Personal attributes of Trainees	Correlation coefficient (r)
4.	Family type	0.003
5.	Family size	0.13
6.	Educational status	0.30**
7.	Occupational status	-0.32**
8.	Land holding	0.19
9.	Annual income	0.63**
10.	Extension contact	0.70**
11.	Mass media exposure	0.60**
12.	Entrepreneurial intention	0.72**
13.	Entrepreneurial need	0.71**
14.	Entrepreneurial capacity	0.68**
15.	Innovativeness	0.77**
16.	Achievement motivation	0.80**
17.	Decision making ability	0.62**
18.	Risk orientation	0.77**
19.	Self confidence	0.75**
20.	Cosmopoliteness	0.71**
21.	Economic motivation	0.76**

*** Correlation is significant at 0.01 level (2-tailed)*

CONCLUSION

It can be concluded from the study that the packaging & marketing of mushroom and post harvest handling & value addition were the areas that were ranked first and second among the needed training areas in mushroom production. Marketing of mushroom is the biggest constraint in mushroom cultivation in Kerala. And value added mushroom products have high demand compared to raw mushroom. Therefore specialized trainings about these aspects should be provided to mushroom growers. In apiculture, honey extraction & essential operations was perceived as the most needed area of training. Honey extraction requires skilled labour and therefore training should be imparted to beekeepers to handle honey extraction skilfully and other essential operations of beekeeping.

In the area of value addition of fruits and vegetables, technology upgradation and packaging & marketing techniques were the most preferred areas by the trainees. This could be attributed to the perception that sophisticated technology help the entrepreneurs in manufacturing quality products at low cost. Therefore entrepreneurship development programmes including different areas of technology upgradation, packaging marketing techniques should be organised for entrepreneurs so that they could gain the knowledge and skills in these areas. To improve the effectiveness of training, the KVKs must stress more on these topics. Hence, reorientation of the syllabus according to the needs expressed by the trainees would improve the effectiveness.

REFERENCES

Borbon, S. (2007). *A study on training needs as perceived by the farmers of Krishi Vigyan Kendra Betul district of Madhya Pradesh.*

Unpublished M.Sc. (Ag) thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, 151p.

Haneef, S. R. (2015). *Training needs of agricultural assistants working in the state department of agriculture.* Unpublished M. Sc. (Ag) thesis, Mahatma Phule Krishi Vidhyapeeth, Rahuri, 122p.

Raghuvanshi, M. (2017). *Training needs assessment of dairy farmers in Kolaras block of Shivpuri District, Madhya Pradesh.* Unpublished M.Sc. (Ag) thesis, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior, 79p.

Singh, J. (2004). *Training needs of entrepreneurs for modernization of small-scale oil-processing industries in Rajasthan.* Unpublished PhD. thesis, Maharana Pratap University of Agriculture, Udaipur, 124p.

Wankhar, J.B. (2019). *Identification of training needs of ninag megha farmers in East Khasi heels district of Meghalaya.* Unpublished M.V.Sc thesis, West Bengal. University of Animal and Fishery Sciences, West Bengal, 98p.