

Training Needs of Hortipreneurs in UK

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Abstract

India is the world's second largest producer of fruits and vegetables. Besides, large quantities of spices, condiments, medicinal and aromatic plant products and flowers are produced in the country. Horticulture deals with the production and processing of fruit crops, vegetables, ornamentals, medicinal, aromatic plants, mushrooms, spices, plantations and tuber crops. Uttarakhand faces numerous hurdles in agriculture sector like marginal and scattered land holdings, tough geographic and topographic conditions, rainfed agriculture, and lack of proper infrastructure and market linkages, lower level of productivity and input usage, migration and lack of entrepreneurship. Present paper aim is to discuss the training needs of hortipreneurs.

Keywords: Training needs; Hortipreneur; horticulture.

INTRODUCTION

“Agriculture was the first occupation of man, and as it embraces the whole earth, it is the foundation of all other industries”. Edward W. Stewart. The history of agriculture in India dates back to the neolithic period where new techniques were developed to improve the method of agriculture system. These improved techniques of production then transferred to the next generation

and the series continued. This transformation of knowledge was the base of further development of agriculture in India (ICAR, 2019). In India, more than half of rural households depend on agriculture as the principle means of livelihood. Indian agriculture is primarily governed by soil, water and weather conditions, and is largest private enterprise that has been and will continue to the lifeline of the country's economy and employment in the foreseen future (The Financial Express, 2018). The economic security of Indian rural households depends up on agriculture and allied activities. Many of the industries are getting their raw materials from agricultural sector. The share of this sector has gone three times since independence yet more than half of the population continues to depend over it (IBEF, 2022). A worker in the non-agricultural sector earns more than five times of the income of agriculture worker. Still in comparison to other industries, it is the only sector that has shown resilience in any economic crisis. A study shows that 70% agripreneurs are from non-agri field as they find greater opportunities of business and impact

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in agriculture and allied activities (**Agriculture Census, 2016**). These agripreneurs are coming with thorough knowledge and business acumen to deal with the challenges of agriculture to maximize the farmer impact as well as profitability.

In Uttarakhand, horticulture sector contributes to nutrition security and acts as a steady medium of income generation. In case of horticulture crops, marginal fragmented lands are utilized which otherwise cannot be used for other demanding crops. The state holds a unique advantage of producing off-season vegetables and fruits in hilly areas, which fetches a good price in the market. (**State Horticulture Mission, 2022**). The important cash crops are potato, ginger and off-season fruits and vegetables. Hence, it holds a great potential of generating employment opportunities through various profitable endeavors as well as allied horticultural processing units. Earnings from different horticulture products with their value addition, noticeably contribute to the income of farmers and budding entrepreneurs. Yet technological interventions, proper skills and knowledge sometimes fails to reach the commoners and they are unable to exploit the opportunities of sector at its fullest. Amongst the horticulture sector, enterprises are suffering from glut and the direct marketing channels are yet to be structured. Despite tremendous scope and opportunities in the field, established industries are still limited. The poor support infrastructure and lack of skilled training for budding entrepreneurs leads to underperformance and sometimes ultimate failures. These factors raise an issue of sustainability of hortipreneurs with their ventures in spite of the high demand for horticultural products. There is a need emerging to identify and understand the training needs of hortipreneurs for enhancing their skill and productivity in the region, which would further promote employment generation and development of the sector.

Scenario of Indian Horticulture

India is the world's second largest producer of fruits and vegetables. Besides, large quantities of spices, condiments, medicinal and aromatic plant products and flowers are produced in the country. However, processing of fruits and vegetables is estimated to be around 2.2% of the total production in the country (**Mohapatra, 2016**). Horticulture is an area of agriculture dealing with garden plant cultivation. It is the science and art of growing fruits, vegetables, spices, ornamental trees, bushes

and flowers. There have been some fundamental changes happening in the last few decades, which have impacted the horticultural growth and development (**APEDA, 2022**). Consumer preferences have shifted away from cereals towards high-value agricultural crops due to higher incomes and urbanization in India. With integrated global value chain and these changing lifestyles, the demand for horticultural products is expected to increase further (**Gulati, 2022**). Comprehensively, horticulture can be promoted as a means of agro diversification for the upcoming evergreen revolution to provide much needed impetus to the growth and development of agricultural sector, through increase in income, trade and employment.

Status of Horticulture in India

The practice of producing fruits and vegetables at a subsistence level is centuries old in the Indian subcontinent. However, large scale commercial production has emerged after the introduction of experimental agriculture (**APEDA, 2022**). There is a strong association between the development of agricultural information systems and the expansion of horticultural industries. The importance of horticulture in improving the land productivity, employment generation, improving economic conditions of farmers, entrepreneurs, enhancing exports and above all, providing nutritional security to the people can hardly be overemphasized. In India, horticultural crops have high export potential, with fruits and vegetables fetching 20-30 times more foreign exchange per unit area than cereals due to high value and higher prices available in the foreign market (**ICAR, 2022**). After the world wars, especially the economic depression, circumstances changed. Urbanization, industrialization, and increasing population are the factors promoting transition from pleasure gardening by the rich and subsistence production by village people on small farms to commercial fruit and vegetable production. Economic pressures are acute and farmers are very aware of the necessity for increasing production (**APEDA 2022**). Out of total cultivated area in the country, only 6 percent is under horticultural crops, which is more than 20% in the USA (**FAO, 2020**).

Rising Opportunities in Horticulture

Fruits and vegetables are an important source of foreign exchange. We have been exporting potatoes, mangoes, onions, and other vegetables for a long time with a steady increase in quantity and

value of horticultural exports (APEDA, 2022). The green revolution led the creation of surplus food economy in the initial stages, resulting in adverse consequences of unplanned growth where we did not have sufficient plans to dispose of the surplus stock in the international markets. Neither have we had plans of processing which could convert such surplus into high value products. In the present scenario of declining land and increasing unemployment, traditional farming cannot be the sole viable medium of livelihood generation. Market liberalization and entry of private sector in agriculture has made it more challenging for the farmers in the sector to survive (FAO 2022). The prevailing conditions have resulted in imperative situations for the farmers to compete in the current situation. Hence, the need of commercialization and diversification of agriculture market arises so as to achieve more gain per unit of land for income and employment generation by converting agriculture to agribusiness (Sharma & Sharma, 2011). The crop-based horticulture ventures that can be operated in the sector includes Medicinal and Aromatic Plant based enterprises, Value Added Products, Seed Producers and Commercial Nurseries, Floriculture and Landscaping, Beekeeping, Mushroom, Fruit Producers and Vegetable Growers, Cold storage, Plant protection as well as Consulting and Renting agents.

Challenges Emerging in the field of Hortipreneurs

There are, however, many constraints for development of horticulture products as succinctly recorded in the 10th Five Year Plan which are as follows:

1. Poor quality of seeds and planting materials and their weak assessment mechanism.
2. Preponderance of old and senile orchards and their poor management practices.
3. Small and uneconomic average farm size of the orchards.
4. High order of perishability of horticulture produce, leading to high degree of losses.
5. Lack of modern and efficient infrastructure facilities, poor technological support and poor post-harvest management practices.
6. Under developed and exploitative marketing structures.
7. Absence of adequate standards for quality produce.
8. Inadequate research and extension support to address specific problems of horticulture crops and their linkages with farming community and industry.
9. Large scale variations in credit support and tax structures for diverse commodities.
10. Instability of prices.
11. Poor risk management, lack of authentic up-to-date database and poor data collection and information system.

Horticulture in Uttarakhand

Being a hill state, Uttarakhand faces numerous hurdles in agriculture sector like marginal and scattered land holdings, tough geographic and topographic conditions, rainfed agriculture, and lack of proper infrastructure and market linkages, lower level of productivity and input usage, migration and lack of entrepreneurship (Qureshi & Ahmed, 2021). Out of the total area of Uttarakhand, (86.15%) of the area is under forests and wastelands, contributing a small area for agricultural practicing. The majority of Uttarakhand agriculture is rainfed and there is not much surplus for the market. As a result, most of the able-bodied men have migrated to other places in search of employment. Only women are left in the hills and they have started looking after the farms. The challenge is to change this structure and create employment through agriculture. This could be done by diversifying the agricultural pattern so as to create alternative income and better living standards (Mittal et. al, 2008). The alternative areas of diversification are towards horticulture crops, spices and condiments, tea plantations, and herbal and medicinal plants. Development of organic farming is another option for agriculture based hill regions. Horticulture is one of the prominent economic activities in rural areas of this state with a great potential to generate employment restoring the fragile ecosystem. The creditability of horticultural crops (fruits, vegetables, floriculture, mushroom, etc.) contributes towards generation of income, improving economic conditions of farmers and entrepreneurs. Marketing of the produce creates employment prospects for the urban poor which in turn ensure better livelihood security. Important cash crops of the state include potato, ginger and off-season fruits and vegetables. (State Horticulture Mission, 2022). Though there is a lot of potential in cultivating off-season, exotic and organic vegetables with their value addition

and processing, the prevailing conditions act as a hindrance for the state. As a result, majority of producers fall under medium to low socio-economic status.

Rank	Crop	Production in 000 tonnes
1.	Pear	73.78
1.	Peach	52.86
1.	Plum	34.84
1	Apricot	28.2
2.	Walnut	18.93
3.	Apple	62.00
8.	Cut Flower	14.70 Spikes (in crores)
9.	Pea	102.98
13.	Potato	367.31
19.	Tomato	110.68

Source: National Horticulture Board (NHB), 2021-22

Status of Uttarakhand in National Context

Uttarakhand ranks eighteenth in the country with reference of establishing food processing units. Along with that, the state holds highest rank in the productivity of spices (7.21MT/ha) against the National average of 1.8 MT/ha.

Agriprenurship vs Hortiprenurship

The word entrepreneur appeared for the first time in the French language 'Entrepredre' meaning 'to undertake'. According to **Schumpeter (1954)**, an entrepreneur is an innovator who works out new combinations of the factors of production and distribution. Activities like diversification, value addition, precision farming, high tech agriculture, organic farming etc. are gradually getting due attention of people involved in redefining agriculture. An agriprenur is an entrepreneur who undertakes a variety of activities in agriculture. **Nagalakshmi and Sudhakar (2013)** reported agriprenurship as generally sustainable community oriented, directly marketed agriculture. They defined an agriprenur as an entrepreneur whose main business is agriculture or agriculture related. According to **Bhattacharya and Hassan (2021)**, the concept of hortiprenur is interpreted from the word "agriprenur" which means an entrepreneur whose primary business is horticulture. Hortiprenurship is a community oriented, environmentally sustainable and market led development of horticultural business. The development of hortiprenur includes inculcation of entrepreneurial skills like technical, financial and managerial expertise in the horticultural sector to

establish an entrepreneurial approach in the sector.

Hortiprenurship: An emerging venture

Horticultural products are referred to as protective foods and assume great importance in nutritional security of people. The importance of horticulture in improving the land productivity, employment generation, improving economic conditions of farmers, entrepreneurs, enhancing exports and above all, providing nutritional security to the people can hardly be overemphasized. Horticulture deals with the production and processing of fruit crops, vegetables, ornamentals, medicinal, aromatic plants, mushrooms, spices, plantations and tuber crops (**Ravichandra, 2014**). Considering the potential for development of horticulture for generation of employment opportunities, economic development of the tribal, rural and hilly areas and to step up the availability of fruits and vegetables for nutritional requirements, increased export opportunities, the main future thrust should be in the area expansion programmes for various horticultural crops. This needs to be undertaken in two different ways- by bringing new and non-traditional areas ideally suitable for growing different crops as well as by rejuvenating old orchards, removing senile plants and replanting gaps. (**ICAR, 2022**).

The interest in horticultural crops continues to grow in view of the change in food habits owing to urbanization and their increasing importance in food, nutrition and health. It has emerged as an important sector for the diversification of agriculture, making it more profitable venture through efficient land use, optimum utilization of natural resources and employment provider for the rural mass. **Sonkar and Mishra (2015)** revealed that vegetable growers need training in cultivation of pumpkin followed by the cultivation of bottle gourd and radish. **Javed et al. (2011)** revealed that financial resources, marketing facilities, technological resources, government support, information access are the most important factor in the success of business perceived by small and medium enterprises. **Olabisi et al. (2011)** reported the main entrepreneurs factors affecting their business include: friends (70.00%), government support (80.00%), adequate training (68.00%), innovativeness (72.00%), risk taking (84.00%), retraining (60.00%) and business premises (66.00%). **Robitasorokhaibam and Nandita (2011)** revealed that the motivating factors for starting business are desire to be independent, earning more money, to prove oneself, better status in

the society, to utilize own skill, to contribute to employment and influenced by success stories. **Frank (2012)** revealed that major pull factors for women entrepreneurs are need for self-fulfillment, work flexibility and a challenge. Dissatisfaction with salaried jobs or general lack of employment opportunities and insufficient family income were among the factors that pushed them into self-employment. **Stephan et al. (2012)** stated that need for independence, self-fulfillment, work flexibility and a need for a challenge to self-employment as the pull factors while dissatisfaction with salaried jobs and insufficient family income pushed them into self-employment. **Amarendrapratap (2013)** opined factors influencing agripreneurship are mainly by right environment, economic situation, education, culture, good infrastructure, technological support and timely availability of credit. **Emanuel (2013)** concluded with the study that the need for achievement is the principal motivation of entrepreneurial behaviour of rubber growers. **Lalhunthara (2015)** reported with the study that ambition to contribute to the family, need for independent living, consciousness of their existence, rights and work situation and the desire to do something new and positive often acted as motivational factors.

Emergence of Training Needs in Hortipreneurship

In order to deliver effective training, it is necessary to understand the training needs of the community. Training is one of the important methods for developing and enhancing the individual's capacities to enhance their knowledge. There is a need to identify the points of dissatisfaction with the current situation and the desire to change. Training needs refers to the gap between 'what is' and 'what should be' in terms of trainees' knowledge, skills, attitude and behaviour in a given situation and time. It is based on adult learning principles that requires a clear analysis of situation and providing need-demand based knowledge. (**Knowles, 1950**). The green revolution led to the creation of surplus food economy in the initial stages. It has also resulted in the adverse consequence of such unplanned growth where we did not have sufficient plans either to dispose of the surplus stock in the international market or have plans of processing which could convert such surplus into high value products. Horticulture has gained late commercial importance with a very significant share in the country's economy. The importance of horticulture in improving the land productivity, generating employment, improving economic conditions of farmers and entrepreneurs, enhancing exports

and above all, providing nutritional security to the people widely acknowledged. **Sajeev and Singha (2010)** revealed that training on integrated farming was the most sought after by farmer (45 percent) in Arunachal Pradesh followed by water conventional and irrigation management (36 percent) of the field crops and training on production of organic inputs. Training on weed management in field crops, training on nursery management in field crops, integrated crop management and cropping system and agro-forestry based integrated farming system also closely followed. **Lal and Tondon (2011)** revealed that 91.78 percent respondents said that they like to be trained in vermi-composting and medicinal plants (57.07 percent), poultry farming (56.16 percent), candle making (19.63 percent) toy making (9.58 percent) and mat making. **Sajeev et al. (2012)** reported that 49 percent of respondents needed training on cultivation of off-season vegetables followed by low volume and high value crops (45 percent), plant propagation techniques (30 percent), production and management technology of tubers and spices (26 percent). The training needs on nursery raising (41.25 percent) were also required by the respondents. **Thaker and Ahlawat (2012)** concluded that training needs were expressed in accordance with the entrepreneurial interests. Among agri-based enterprises, training needs were expressed in floriculture, vermicompost and nursery raising enterprises. **Rokonuzzaman (2013)** through a study on training needs of tribal people engaged in income generating activities in Bangladesh revealed that majority of respondents (55 percent) need training on livestock and poultry rearing, 52 percent needed training on vegetable production and 49.47 percent on nursery establishment. **Kumar et. al, (2014)** concluded that flower growers needed training in plant protection measures, post-harvest processing of flowers, post-harvest storage, processing, grading, standardisation and use of byproducts.

Constraints faced by the Hortipreneurs

Unemployment is one of the basic problems the world is faced with and is the key link in the food security issues in the society these days. Unless a person is employed, he or she may not have the purchasing power to buy enough food for family though the food supplies may be abundant in society and market (**Global Development Commons, UNICEF, 2022**). Promotion of horticulture, is generally regarded as part of an employment and intensive industrialization strategy. Microenterprises based on horticulture can help in poverty reduction, employment generation,

empowerment and enterprise development regardless of stage of economic development. The small and medium enterprises are generally considered as major sources of employment generation for the developing nations (**World Bank, 2022**). Horticulture value chains in India are facing growing consumer expectations for variety, food safety, and security. The region of Uttarakhand, on the other hand, holds a good potential for budding enterprises and acts as a basket of raw materials of export quality for the country. Being a hill state, there lies immense potential to excel in production of temperate fruits and off-season vegetation, as state ranks first in the production of temperate fruits like pear, plum, apricot and peach in the country, second in walnut and third in apple production in the country (**Department of Horticulture, India, 2018**). It is blessed with a rare bio-diversity, inter-alia, 175 rare species of aromatic & medicinal plants are found in the State. It has almost all major climatic zones, making it amenable to a variety of commercial opportunities in horticulture, floriculture and agriculture (**State Profile 2023, Uttarakhand Govt.**). Despite having numerous policies and facilities for the development of hortipreneurship in the state, yet entrepreneurship fails to develop in the area. People are migrating to urban sectors for employment leaving their farm dwellings behind. The constraints on improving horticulture crops in the hills include poor orchard management practices, quality planting material, seeds and other inputs, little access to extension services and marketing. Across the Himalayan region, producers face problems in accessing market information, postharvest processing and value adding skills. Lack of regular markets and reliable marketing, hills farmers in many areas are finding it too risky to diversify into more lucrative high value crops. Number of industries in horticulture are somewhat limited and emerging ones are facing number of challenges and wide gaps in marketing, establishing, and running their enterprises. The technological interventions and market knowledge sometimes fails to reach the commoners and hence they are unable to exploit the opportunities at its fullest. The poor support infrastructure and lack of skilled training for budding entrepreneurs leads to underperformance and sometimes ultimate failures in the sector. These factors raise an issue of sustainability of hortipreneurs with their ventures in spite of the high demand for horticultural products. Therefore, a need emerges to identify and understand the training needs of hortipreneurs for enhancing their skill and productivity in the region, which would further promote employment

generation and development of the sector. **Tiwari and Pathak (2011)** reported some of the constraints experienced by farmers in availing training were lack of awareness about training programme, unavailability of travelling and dearness allowances, complicated procedure of training, unavailability of skill oriented training, understanding problem of language, inefficient trainers to solve the complicated problems, unsuitable training contents for small and marginal farmers, need less content, unavailability of training staff, inappropriate time of training, poor time management, biased selection for training and inadequate boarding and lodging facilities for beneficiaries. **Anju and Raju (2014)** observed that more than one-third (40.00 percent) of the rural women entrepreneurs are encountered with market related issues (25.00 percent) followed by lack of funds (23.00 percent) and problems related to family support (12.00 percent) during their business activities. **Gupta (2014)** reported that due to lack of resources, inputs, motivation and recognition, the farmwomen didn't participate in the effective implementation of training programmes. Lack of interpersonal relationships coupled with lack of transport and training facilities, lack of leadership and emphasis on table work led to ineffective programme implementation. **Swathy and Benazir (2014)** explained through a study on constraints faced by entrepreneurs in starting their business that the major constraints faced by entrepreneurs were financial problem, production problem, labour and government laws. Finance was significant constraint faced by entrepreneur due to lack of personal saving, & problem in getting loan from bank and government subsidies. **Mualuko et al. (2016)** found that nearly half (46.00 percent) of the members lacked relevant training followed by poor family support to the women (40.00 percent) and lack of good management (14.00 percent). **Negi and Anand (2016)** revealed that inadequate infrastructural support, lack of market information and training, involvement of large number of intermediaries, fragmented market channel, inappropriate storage and handling of the harvest were the major factors that leads to post harvest losses that ultimately was primarily borne by the respondent. In brief, the major constraints identified in the field of developing agro enterprises were based on several systems including poor market knowledge and limited finances, institutional support and subsidies. Majority of the enterprises shut due to the financial constraints and poor idea about the potential consumers. Both push and pull factors play a key role in developing these enterprises where availability of the resources is a

key area of concern. These constraints give rise to the felt needs for proper trainings in different areas related to the field that could protect the enterprises against exploitation and loss.

CONCLUSION

The horticultural sector in the country is experiencing phenomenal growth as far as increase in area, production and productivity are concerned. However, there is a lot of opportunities for enhancing productivity, post-harvest processing, value addition, hi-tech horticulture, precision farming, etc. Uttarakhand, by every means, holds great potential and capability to satisfy the rising demands and needs in the horticulture sector. Though the geographical attributes and climatic conditions of the state are ideal for production of temperate and subtropical fruit crops, yet horticulture enterprises fail to emerge in the area. Across the Himalayan region, producers face problems in accessing market information, postharvest processing and value adding skills. Lack of regular markets and reliable marketing, hills farmers in many areas are finding it too risky to diversify into more lucrative high value crops. Despite spending huge resources on farmer training, farming is increasingly turning out to be an unprofitable venture with youth quitting agriculture and migrating to urban areas since 1999. Therefore, hortipreneurship can emerge as an employment strategy that can lead to economic self-sufficiency of rural people. Its development through training could become a key element for promoting micro, small and medium enterprises, particularly the first generation agri-entrepreneurs. The identification of training needs, would result in good opportunities to develop this sector, especially among the marginal and small farmers, so that that it will help them double their income from the farming sector.

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