

The Constraints Experienced by Krishi Vigyan Kendra (KVK) Trainees in Forming Entrepreneurial Units

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Authors' contributions

This work was carried out in collaboration among all authors. Author RY designed the study, performed the statistical analysis and wrote the first draft of the manuscript. Author KM managed the literature searches of the study and checked the first draft. Author KP was the major advisor and chairperson and author HRM was one of the Research Advisory Committee members who guided in publication of this research paper. All authors read and approved the final manuscript.

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ABSTRACT

Entrepreneurship in agriculture and allied activities provide better income generating and employment opportunities among the rural households. With changes like globalization, deregulation, open competition and technological change taking place, our society is becoming an entrepreneurial society. However, in an entrepreneurial society, individuals face a tremendous challenge in running an enterprise. In this context, the study was purposively conducted in Krishi Vigyan Kendra (Farm Science Center) operating under ICAR-NDRI which imparts regular training to farmers, youth and women on major areas of agriculture such as crop production, dairy farming, dairy processing, vermiculture, beekeeping, fish farming and home science. A total of twenty respondents/entrepreneurs; who had previously attended entrepreneurship training programme were finally selected based on random sampling. Therefore, entrepreneurs from various sectors i.e. four in seed production (4), beekeeping (4), vermi-composting (3), dairy processing (4), fish farming (3) and home science (2) were finally selected. The constraints were operationalised as certain irresistible forces which are creating obstacles in establishment and running of entrepreneurial unit like constraints related to establishment of farm enterprise, production, marketing and government rules and regulation were identified. The major constraints in establishment of farm enterprise was

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lack of new idea for starting new entrepreneurial ventures, high-cost and non-availability of input was the major production related constraints. In case of marketing, operation of unorganized agricultural market was the major perceived constraints whereas lack of digital literacy such as digital mode of payment was the major constraint highlighting the inefficiency of government rules and regulations.

Keywords: Agriculture; constraints; entrepreneurship; farming; training.

1. INTRODUCTION

Entrepreneurship in the field of agriculture and allied sector plays important role in the livelihood of rural masses. It is considered to be a solution for creating wealth, generating employment and providing new and better goods and services. Entrepreneurship is simply finding new opportunity to do things better and seizing the opportunity. Entrepreneurs are the persons who initiate, organize, manage and control the affairs of a business unit that combine the factors of production to supply goods and services, whether business pertains to agriculture, industry, trade or profession [1]. An entrepreneur is a person who organizes runs and is responsible for a business enterprise to make a profit. In the process, he/she has different roles to play and differentiation to take. Entrepreneurial behavior is operationalized as the cumulative outcome of information seeking behaviour, farm decision making, leadership ability, risk taking ability, innovativeness, achievement motivation and market orientation of farmer [2]. India being an agrarian country, entrepreneurship in agriculture sector contributes significantly to the country's economy. Agriculture entrepreneurs are those who classify all activities that help farmers to adjust a free market economy as entrepreneurial [3] and who introduces changes which directly or indirectly leads to higher agricultural inputs [4]. Brown and Pierce (1954) described farming as a business and identified farmer as an entrepreneur who applies business principles to the organization and management of the farm, if he expects to utilize his resources to the best advantage [5]. Whereas, Joshi and Kapoor [6] defined farm entrepreneur as a person or group of persons who organizes and operates the business and is responsible for the results i.e. losses and gains from the business and is pioneer in organizing and developing the farmers. Entrepreneurship is increasingly being identified as a key determinant of future economic growth [7,8]. With changes like globalization, deregulation, open competition and technological change taking place, our society is becoming an entrepreneurial society. However, in an entrepreneurial society, individuals face a

tremendous challenge. Evidences from various studies have highlighted several constraints faced by different stakeholders engaged in agriculture and allied enterprise. The major problems faced in the development of rural entrepreneurship are illiteracy of people and inadequate infrastructure facilities [9]. One of the studies reported that nearly 90 per cent of the entrepreneurs expressed marketing as the major problems, followed by working capital [10]. The major constraints in poultry farming were viz. lack of veterinary services, high cost of medicine and feed price, lack of adequate long term credit facilities and fluctuated price for the poultry in the market [11]. In mushroom cultivation, the major problems observed were lack of regular market, losses due to perishability, difficult procedure of spawn production, lack of knowledge on value addition etc. [12]. Whereas in case of vegetable processing, stiff competition, no provision of vegetable crop-insurance, exploitation by middlemen, shortage of labour at the time of harvesting, inadequate extension services were the major constraints expressed by vegetable growers cum entrepreneurs [13]. Mahapatra and Shackleton [14] revealed that the major constraints faced by tribal dairy entrepreneurs were high cost of concentrate (96.67%), lack of availability of veterinary hospitals (79.67%), non-remunerative price for milk (100%), poor irrigation facilities for growing fodder crops and for livestock. Further studies revealed that non-remunerative price for milk, non-availability of good dairy animals, high cost of concentrates and dairy animals, non-availability of green fodder and irregular payment for milk were the most commonly felt problems by the dairy entrepreneurs [15]. In-case of constraints experienced by the women entrepreneurs, lack of family support, low level of education, strong fear of failure and ridicule in the society, lack of recognition, lack of property, assets or collateral and lack of access to capital were the major problems [16]. In many cases, it was observed that women were highly dependent on their male counterpart's permission to undertake entrepreneurial venture [17]. An in-depth case study on women entrepreneurs in poultry farming in Izatnagar, Uttar Pradesh indicated that non-

availability of chicks and good feed in the near vicinity were the major constraints faced by them [18]. To address these issues different institutions like Krishi Vigyan Kendras (KVKs) provide training to the farmers, farm-women, youth etc. regarding agri-entrepreneurship; however, the success rate of final conversion into an entrepreneurial unit is quite low. There are three types of fate for those trainees, viz. successfully continuing the venture, in midway stop the venture and not initiate the venture. Therefore, the study attempts to delineate some important constraints faced by entrepreneurs of Haryana State who have undergone entrepreneurial training under NDRI-KVK.

2. MATERIALS AND METHODS

The study was purposively conducted in Krishi Vigyan Kendra (KVK) at NDRI, Karnal, Haryana which has been operational since July, 1976. The Krishi Vigyan Kendra (Farm Science Center) operating under ICAR-NDRI imparts regular training to farmers, youth and women on major areas of agriculture such as crop production, dairy farming, dairy processing, vermiculture, beekeeping, fish farming and home science. Therefore, a total of twenty respondents / entrepreneurs; who had previously attended entrepreneurship training programme were finally selected, based on random sampling. Therefore, entrepreneurs from various sectors i.e. four (4) in seed production, four (4) in beekeeping, three (3) in vermi-composting, four (4) in dairy processing, three (3) in fish farming and two (2) in home science were finally selected. In this study, the constraints were operationalised as certain irresistible forces which are creating obstacles in establishment and running of entrepreneurial unit like constraints related to establishment of farm enterprise, production, marketing and government rules and regulation were identified. The semi-structured interview schedule was developed and purposively used. The raw data was analyzed by using appropriate statistical tools such as mean, standard deviation, frequency, and percentage. The Garret Ranking method was used to rank the constraints faced by the entrepreneurs in setting up and running the entrepreneurial units. The sampled respondents were asked to rank the constraints faced by them. Then, the ranks assigned to a constraint by the respondents were converted into per cent position by using the following formula:

$$\text{Percent position} = 100(R_{ij} - 0.5) / N_j$$

Where,

R_{ij} = Rank given by i^{th} factor and j^{th} individual
 N_j = Number of factor ranked by j^{th} individual

The per cent of rank for a single constraint was added for all entrepreneurs to give the overall (average) per cent position. It was calculated by dividing sum of per cent position for total sample for a constraint by the number of respondents. The average per cent position was then converted to scores by referring to the transmutation table given by Garret. The ranks were finally assigned by arranging the scores in descending order [19].

3. RESULTS AND DISCUSSION

The results of the present research work highlighted the constraints faced by entrepreneurs in setting up and running of entrepreneurial units after getting the training from NDRI-KVK. Constraints have been enlisted into two categories viz. constraints in establishment of farm enterprises and constraints while running the enterprise.

3.1 Constraints in Establishment of Farm Enterprises

In total, there were twelve constraints expressed by the entrepreneurs which they faced while establishing the enterprise. "Instantly not getting a new idea for starting the new entrepreneurial ventures (booting problem)" was perceived as the major constraint for the establishment of farm enterprise. The findings on motivational factors for establishment of enterprise also revealed that majority of entrepreneurs were using their own idea to start new entrepreneurial unit although they tried to validate the new ideas with family members and experts in the concerned field. This was followed by "non availability of credits /loan facility for starting the enterprise" as the second major constraint perceived by most of entrepreneurs and "hindrance from competitors" was perceived as third major constraints. Getting the loan for starting the new enterprise is usually associated with non-familiarity of the prospective entrepreneurs from the institutional financial sources. The competitors in general dislike the emergence of another player of the same products as they may lose their market share and eventually quality also matters for survival. Some other constraints like lack of advisory services, hurdles in registration or certification of the firm, lack of sufficient land for starting the

new enterprise, non availability of infrastructure such as building, cold storage facility, proper storage facility, non-availability of skilled staff for the firm, lack of marketing opportunity, difficulty in reasonable resource allocation were also perceived by entrepreneurs. Other constraints are at personal level and the entrepreneurs need specific training and hand holding support to address these constraints.

3.2 Constraints While Running the Enterprise

The constraints relating to running the entrepreneurial units were grouped into three categories i.e. production related constraints, marketing related constraints and constraints related to government rules and regulations.

3.2.1 Production related constraints

Production is the core part of any enterprise because whole activity is centered on production of final quality output only. Under production category, three constraints were expressed by the entrepreneurs while undergoing the production process of entrepreneurial unit. "High-cost and non-availability of input" was perceived as the major constraint in the production process followed by "seasonal availability of agricultural raw material" and "resources recycling" as second and third major constraints respectively. The input costs are also escalating and scarcity of critical inputs increase their prices which ultimately affect the production critically. For example, the prices of urea and certified seed shoot up during peak agricultural seasons which may severely impact the quality seed production. Water is another critical input and its unavailability can affect the production very badly. Since availability of raw material is essential throughout the year, seasonal nature of raw material may inhibit its availability at critical periods which may impair the profit margins. Storage of raw material with scientific protocols can address this issue substantially. The resource recycling is an area which needs extensive training for the entrepreneurs as it can help to increase the production efficiency tremendously.

3.2.2 Marketing related constraints

Nine constraints were expressed by the entrepreneurs in the marketing of their product. "Non-existence of well organized agricultural market" was one of the major constraints

perceived by most of entrepreneurs (61.95%). The markets for agricultural commodities are scattered and seasonal nature of production often results in difficulty to have well-organized market although e-NAM has been introduced by the Government. "High marketing cost/ less market margin" was perceived as second major constraint in marketing of product and "maintaining quality of product sustainability" was perceived third major constraints by entrepreneurs. The transportation of the products from production unit to marketing place itself consumes considerable cost and dwindle the profit margins. Constant efforts in maintaining the quality of the products also consume cost which cannot be avoided. In fact, this should not be considered as a constraint and rather it should be viewed as challenge. Some other important constraints include middlemen interference, lack of idea or awareness on market intelligence /market information, lack of awareness of the product among customers / clients, less demand of product, inability of small size of enterprise to compete with large firms and lack of good transportation facility were perceived during marketing of product in local as well as other marketing area. Farmer producer organizations can address these constraints to certain extent. Strong advertisement is required to create more awareness among the potential customers. If the entrepreneurs practice the electronic trading, the constraints related to interference of middlemen can be redressed to large extent.

3.2.3 Constraints related government rules and regulations

Two major constraints were felt by the entrepreneurs while running their entrepreneurial units. "Digital literacy such as digital mode of payment" was perceived as major constraint (52.60%) related to government rules and regulations. About 47.40 per cent of respondents considered "issues related to GST/ PAN No./ e-way " as major constraint. They felt that the clients for the products are not well educated to use digital payments which often create hurdles for smooth financial transactions. The entrepreneurs should educate themselves about Goods and Service Tax (GST) and e-Way for transportation of commodities as directed by government policies and therefore, these should not be viewed as constraints. KVKs should also organize capacity building programmes to sensitize these entrepreneurs as these policy decisions ultimately help to improve the efficiency of their enterprises.

Table 1. Constraints in establishment of farm enterprises

Sl. no.	Constraints	Score	Rank
1	Instantly not getting a new idea for starting the new entrepreneurial ventures (Booting problem)	73.70	1
2	Non-availability of credits /loan facility for starting the enterprise	69.65	2
3	Hindrance from competitors	60.95	3
4	Lack of advisory services	57.15	4
5	Hurdles in Registration or certification of the firm	54.40	5
6	Lack of sufficient land for starting the new enterprise	53.55	6
7	Non availability of infrastructure such as building, cold storage facility, proper storage facility	53.45	7
8	Non-availability of skilled staff for the firm	48.15	8
9	Lack of marketing opportunity	44.24	9
10	Difficulty in reasonable resource allocation	34.60	10
11	Poor transport and road facility	32.60	11
12	Difficulty in accessing electricity connection (3 phase)	18.00	12

Table 2. Constraints while running the enterprise

Sl. no.	Constraints	Score	Rank
A.	Production related constraints		
1	High cost and non availability of input	63.30	1
2	Seasonal availability of agricultural raw material	50.00	2
3	Resources recycling is also big problem	36.70	3
B.	Marketing related constraints		
1	Not well organized agricultural market	61.95	1
2	High marketing cost/ less market margin	60.25	2
3	Maintaining quality of product sustainability	60.15	3
4	Middlemen interference	57.95	4
5	Lack of idea or awareness on market intelligence /market information	51.80	5
6	Lack of awareness of the product among customers / clients	50.70	6
7	Less demand of product	44.35	7
8	Inability of small size of enterprise to compete with large firms	39.95	8
9	Lack of good transport facility	23.90	9
C.	Constraints related to government rules and regulations		
1	Digital literacy such as digital mode of payment	52.60	1
2	Issues related to GST/ PAN No./ e-way etc.	47.40	2

4. CONCLUSION

It can be concluded from the study that, the major two constraints related to establishment of farm enterprise was lack of new idea for starting new entrepreneurial ventures and non-availability of credits/loan facility for starting the enterprise. Among production related constraints, high cost and non-availability of input, seasonal availability of agricultural raw material were the major perceived constraints. In case of marketing, operation of unorganized agricultural market and high marketing cost/ less market margin were the top perceived constraints whereas lack of digital literacy such as digital mode of payment was the major constraints related to government rules and regulations. To address these issues, institutions like Krishi Vigyan Kendras (KVKs)

provide adequate training to the farmers, farm-women, rural youth etc. regarding agri-entrepreneurship; however, the success rate of final conversion into an entrepreneurial unit is quite low. The present study also suggest that there is strong need to sensitize and train the farmer and other stakeholders about the scientific methods for running enterprise through adequate extension, policy and financial support for holistic development of entrepreneurial eco-system among budding farmer-entrepreneurs.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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