

A Study to Access Entrepreneurial Drive Within Apple Growers of Kashmir Valley

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ABSTRACT

Background: Entrepreneurship requires discovering and leveraging the tools and assets available to turn concepts into concrete or immaterial goods or services. Entrepreneurship behaviour is the collection of personality and environmental variables linked to the complex agent of change in order to turn economic, natural and human capital into corresponding manufacturing possibilities.

Objective: The purpose of this study is to examine the apple growers' profile.

Data and Methodology: This analysis has been carried out in the Wagoora block of Baramulla district of Kashmir Valley. This study consists of 120 apple growers from three villages using multi-stage sampling methods and studies using statistical methods such as frequency, percentage, average, standard deviation, coefficient of correlation and multiple regressions.

Results and Conclusion: The main results of the study show that the business behaviour of the apple growers is strongly influenced by education, land tenure, family size, jobs, annual profits, growing experiences in the apple orchards, the use of mass media, social engagement, economic incentive and consumer orientation.

Keywords: Behaviour; entrepreneurship; education; experience; land holding.

1. INTRODUCTION

Historica: Apple is one of the most important horticultural products and popular for its flavor and health benefits around the world. Kullu valley (Himachal Pradesh) were the Britishers bring apple for cultivation first time in India during 1865, and later in 1917 they brought colored 'delicious' apple cultivars into Shimla mountains in the same State. The "ambri" apple cultivar is regarded as indigenous to Kashmir and was cultivated long before the introduction to western countries. In the valley of Kashmir, the culture of fruits stretches beyond the periods of King Nara, King Lalitadita and Harsha (1000 BC) (1089 AD). The apple production forms the backbone of Kashmir economy. The annual production of apples (approximately 5 per cent of GSDP) contributes Rs 4,000 crores to the Kashmir economy. This sector employs approximately 7 lakh households, including approximately 33 lakh persons directly or indirectly linked to it. In addition, there are substantial job potential for the industry's forward and backward relations including inputs, packaging, refining and transport. This sector has enormous potential for entrepreneurs to flourish their business. The business behaviour studies of farmers, notably apple growers, were not performed in a comprehensive manner. Rather none of the studies exist in the field of entrepreneurship behaviour of apple growers. In this backdrop this study has been conducted to find the existence and readiness of entrepreneurship behaviour of apple growers.

2. REVIEW OF LITERATURE

[1-2] on small farmers' entrepreneurial behaviour, inferred that it is made up of various components including the decision-making on agriculture, innovation, risk orientation, performance incentive, intelligence research, agricultural know-how, management support services, farm activities coordination, cosmopolitism and leadership skills.

[3-4] investigated the entrepreneurial behaviour of small gourd farmers and discovered that the majority (58.00 percent) of respondents had a "medium-size" entrepreneurial performance rate, while 23.00 percent and 19.00 percent of respondents were "small" and "big" entrepreneurial, respectively. Entrepreneurial conduct, according to [5-6] is a mixture of seven elements, including creativity, decision-making skills, success incentive, information-seeking capability, risk direction, teamwork ability, and leadership skills, as well as the socioeconomic characteristics of farmers in India who practice sustainable agriculture. [7-9] have mentioned that creativity, success incentive and risk orientation are most important elements in her study of the entrepreneurial actions of animal farmers. Significant factors influencing entrepreneurship behaviour are other elements such as decision making, innovatives, direction, economic incentive, sense of aspiration and risk orientation.

[10-11] indicate that 60% of respondents had a medium score of entrepreneurship, while 16% and 23,30% respectively had low and high score of entrepreneurship on Varanasi's market behaviour. [17-22]

described entrepreneurship in rural dairy women as changes in women's knowledge, capacity and attitude to dairy companies. Similarly, [12-13] has operationalized floriculture farmers' entrepreneurial behaviour in Hyderabad in terms of knowledge benefits, farms' decision-making, leadership, risk orientation, innovativeness, success incentive and business direction. Finally, [14-16] observed that 68.30 percent of respondents had medium-sized entrepreneurial operations, 17.50 percent had low-business and 14.10 percent were high-business.

While numerous studies in India have shown the differences in farmers' practices, most of these studies have sought to find the connection between awareness and adoption, attitude and personal and socio-psychological characteristics. However, only a few studies on farmers' entrepreneurial activity in India have been published. The lacuna in existing literature was filled with bringing this study into research academia by exploring the role of entrepreneurship in apple growers.

3. METHODOLOGY

Universe and Data

The current study was conducted in the Wagoora block of district of Baramulla between 2017 and 2018 using an ex-post-facto analysis design. The data was collected from three villages (Wagoora, Watergam and Shrakwara) of the block Wagoora on convenient basis. The total sample size was 120 respondents of 40 respondents from each selected village, and data was obtained using a well-structured and pre-tested interview schedule established in compliance with the study's objectives.

Tools and Techniques

Using suitable statistical instruments, the obtained data has been scored, tabulated, and evaluated. With the help of existing literature nine components have been used to understand evaluate the entrepreneurship behaviour of apple growers.

Methods

Percentages, correlation coefficient, entrepreneurship development index and regression analysis of the selected nine components of entrepreneurship behaviour have been analyzed to understand the entrepreneurship seeking behaviour of apple growers in the selected area.

4. RESULTS AND DISCUSSIONS

In this section, the outcomes from analyzing the structured questionnaire are discussed. Also, the various dimensions to entrepreneurial behaviour are enunciated.

4.1 Entrepreneurial Behaviour Components

Table 1 show the effects of the apple growers' entrepreneurial actions, which consisted of nine components. (1) innovativeness, (2) achievement incentive, (3) making decision ability, (4) risk perception, (5) coordinating capacity, (6) organizing ability, (7) knowledge seeking, (8) cosmo-politeness, and (9) self-confidence.

According to the results in Table 1, 53.3 percent of respondents have a poor degree of innovativeness. Longer years of experience in apple growing, combined with marginal and limited land holdings, as well as a lack of awareness about apple orchards, can account for respondents' lack of innovativeness.

In comparison, 59.17 percent of respondents had a low level of achievement motivation, led by 30.83 percent with a medium level of achievement motivation and 10.0 percent with a moderate level of achievement motivation, respectively. Several causes, including fluctuating apple rates, a low education level, a low annual wage, and a lack of economic incentive, may have prevented the factors from setting lofty targets, resulting in a low level of achievement motivation. In terms of decision-making ability, 65 percent of respondents have a low level of decision-making ability, while 26.6 percent and 8.3 percent, respectively, and have a medium and high level of decision-making ability. Since decision-making capacity is normally dependent on an individual's foresight and courage, the majority of the population involved in apple production is the elderly in the selected area, who have little foresight or motivation to participate in risk-taking skills. Similarly, it is clear that about 55.8 percent of respondents had a low risk orientation, led by 32.7 percent and 11 percent of a medium and high risk orientation, respectively. They may have been discouraged from adopting modern methods in the field of apple gardening due to their advanced age and poor level of education. As a consequence of the findings, it can be concluded that the majority of respondents take a low degree of risk while embarking on new projects and initiatives. In terms of coordination skill, 60% of respondents have a low level of coordination ability, 23% have a medium level of coordination ability, and 16% have a moderate level of coordination ability. For the current research finding, the low returns from apple growing can be viewed as a significant income de-escalation practice. Growers earn low returns while the cost of growing apples is high, resulting in little interest in apple growing among cultivars. Furthermore, 68 percent of respondents have a low level of planning capacity, 25 percent have a medium level of planning ability, and 5 percent have a high level of planning ability. The explanation for the low degree of planning activities may be old age, a lack of experience, or marginal land ownership. Similarly, 60.8 percent of respondents had a moderate level of information seeking behaviour, with 28.3 percent having a medium level of information seeking behaviour and 10.8 percent having a high level of information seeking behavior, respectively. Information asymmetry occurs between the horticulture department and the growers, resulting in a low information trend among the growers. In terms of mass media outlets, respondents did not regularly use television as a source of information. Despite the fact that university scientists, extension staff, newspapers, magazines, and radio are all possible sources of knowledge, farmers do not use them due to difficulties in obtaining the information. In terms of cosmopolitanism, 63.3 percent, 23.3 percent, and 13.3 percent, respectively, have low, medium, and moderate degrees of cosmopolitanism. This may be attributed to their poor economic status, personal disinterest, and passive involvement in extension programmes. Finally, when it comes to self-confidence, 67.5 percent, 21.6 percent, and 10.3 percent, respectively, have modest, medium, and moderate percentages. Lower levels of success motivation, low economic motivation, and low decision-making capacity impair an individual's trust, which may be the source of low self-confidence.

Table 1. Components of entrepreneur behaviour of apple growers

Variable	Category	Frequency	Percentage
Innovativeness	Low (<5)	64	53.33
	Medium (5 to 10)	34	28.33
	High (>10)	22	18.33
	Mean = 5.77		SD = 2.83
Achievement Incentive	Low (<2)	71	59.17
	Medium (2 to 4)	37	30.83
	High (>4)	12	10.00
	Mean = 2.87		SD = 1.43
Decision Making Ability	Low (<6)	78	65.00
	Medium (6 to 12)	32	26.67
	High (>12)	10	8.33
	Mean = 7.26		SD = 2.32
Risk Perception	Low (<4)	67	55.83
	Medium (4 to 7)	39	32.50
	High (>7)	14	11.67
	Mean = 3.34		SD = 1.09
Coordinating Capacity	Low (<5)	72	60.00
	Medium (5 to 9)	28	23.33
	High (>9)	20	16.67
	Mean = 5.42		SD = 1.12
Organizing Ability	Low (<0)	82	68.33
	Medium (0 to 4)	31	25.83
	High (>4)	7	5.83
	Mean = 1.82		SD = 2.04
Knowledge seeking Behaviour	Low (<8)	73	60.83
	Medium (8-18)	34	28.33
	High (>18)	13	10.83
	Mean = 14.74		SD = 3.28
Cosmo Politeness	Low (<1)	76	63.33
	Medium (1 to 3)	28	23.33
	High (>3)	16	13.33
	Mean = 2.02		SD = 1.47
Self confidence	Low (<2)	81	67.50
	Medium (2 to 5)	26	21.67
	High (>5)	13	10.83
	Mean = 2.67		SD = 1.24

Source: Authors' Computations

4.2 Entrepreneurial Behaviour of Apple Growers

As per Table 2, 45.8 percent of dairy farmers exhibit low levels of entrepreneurial behaviour, while 39.2 percent and 15% exhibit medium and high levels of entrepreneurial behaviour, respectively. This result is consistent with the results in Table 1, which suggest "low level" outcomes in all facets of entrepreneurial activity. This may be the result of a lack of schooling, poor experience, and a low wage, as well as a marginal or limited land ownership, low apple production, and a lack of scientific orientation and knowledge of apple farming. This can also be due to respondents' levels of major components such as innovativeness, decision making ability, risk orientation, organizing ability, and knowledge gathering behaviour, which may have led to their low degree of entrepreneurial behaviour.

4.3 Entrepreneurial Behaviour Index of Apple Growers

This study adapts and modifies the scale developed by [23-27] for the measurement of entrepreneurial behaviour of apple growers. The formula for calculation of Entrepreneurial Behaviour Index (EBI) of the respondents is given as:

$$EBI = \frac{\sum_{n=1}^9 \frac{T_n}{M_n} \times R_{cn}}{\sum_{n=1}^9 R_{cn}} \times 100$$

Where

EBI = entrepreneur behaviour index; T_n = total obtained score of n components; M_n = maximum obtained score of n components;

R_{cn} = Scale value of n components; and n = total number of components. The outcomes shown in Table 3 indicate that 63.3% of farmers are in the low level category of entrepreneurial behaviour, followed 28.3% and 8.8% with medium and high levels, respectively.

The possible factors responsible for the low entrepreneurial behaviour index are those indicated in Table 1.

4.4 Correlation and Regression Analysis

The association analysis between the entrepreneurial behaviour index and the nine explanatory variables captured in this sample is detailed in Table 4. Farming history, schooling, family size, occupation, land-holding, annual salary, social engagement, mass media consumption, economic incentive, and business orientation are the independent variables. At the 1% and 5% stages, these show statistically important correlations. The explanations for these optimistic correlations, though, are not far-fetched. For instance, more horticulture practice makes for more effective management in a number of circumstances or contexts. An improvement in an individual's expertise will aid in minimizing the cost needed to run the business, resulting in an increase in income level. Second, schooling broadens person's perspective. People who are more educated have greater access to extension agencies, news media, farm decision making, cosmopolitaness, and are more likely to use high-risk technologies. As a result, these factors assist a person in managing his company. As a result, schooling was a motivating factor in grower's entrepreneurial conduct. Similarly, family size is critical in making informed choices about creative adoptions. In the current research, it was discovered that family size has a favourable and meaningful relationship, which may be attributed to family members' increased interest in apple cultivation. Similarly, the profession of growers has a positive and important connection with their entrepreneurial behaviour. This is due to the fact that the vast majority of respondents work in horticulture. As a consequence, less overlap in their career may be the source of their intimate relationship. Furthermore, land ownership creates a financial foundation for growers to experiment with modern horticulture technology. Land ownership also provides a controlled incentive to allow the best use of farm capital through effective decision making and the application of innovative ideas. Furthermore, it supports the growers in coping with risk and confusion. Furthermore, annual income serves as the grower's economic foundation, as a result of the farmer's optimistic and strong risk-taking abilities, decision-making ability, leadership ability, and accomplishment incentive. Similarly, increased social interaction of respondents allows them to contact different sources of information in order to increase their awareness of apple increasing management. The use of mass media, economic inspiration, and business focus has a positive and extremely important association with entrepreneurial behaviour, which is not implausible. This is due to the fact that apple growers are medium cosmopolites, and as a result, they are more interested in current market knowledge, market trends, apple production, and availability. As a result, higher market orientation influenced entrepreneurial behaviour more than lower market orientation of apple growers. Table 5 provides the association coefficient of each of the business components of apple growers with their entrepreneurial behaviour. It is apparent from this that all components of entrepreneurial activity, such as innovativeness and orchard decision making, as well as achievement motivation, risk taking

ability, knowledge gathering behaviour, leadership ability, and cosmopoliteness, were positively and highly significantly linked to growers' entrepreneurial behaviour.

Table 2. Entrepreneurial behaviour

	Frequency	Percentage
Low	55	45.8
Medium	47	39.2
High	18	15.0
	120	100.0

Source: Authors' Calculations

Table 3. Distribution of respondents on Entrepreneurial behaviour index (EBI)

	Frequency	Percentage
Low	76	63.3
Medium	34	28.3
High	10	8.3
	120	100.0

Table 4 Correlation matrix of profile apple growers and entrepreneurial behaviour

Variable	Correlation <i>r</i>
Growing Experience	0.27**
Education	0.32*
Family size	0.14**
Occupation	0.21*
Land Holding	0.54*
Annual Income	0.68**
Social Participation	0.42*
Mass Media Use	0.37*
Economic Motivation	0.35*
Market Orientation	0.27**

*1 percent level of significance

** 5 percent level of significance

Source: Authors' Calculations

The results of regression analysis in Table 6 show that the independent variables' coefficient of determination (R^2) is 0.61, which means that the overall variations of apple growers' entrepreneurial behaviour are clarified by 61 percent by the chosen independent variables, respectively. While any other regressor shows a positive and statistical effect on business behaviour, occupation has a 0.43 unit's negative and statistically relevant impact.

Table 5 Correlation between components and entrepreneurial behaviour

Component	Correlation
Innovativeness	0.21**
Achievement motivation	0.28*
Decision making	0.15*
Risk Orientation	0.21**
Coordinating ability	0.33*
Planning ability	0.17**
Information seeking behaviour	0.24*
Cosmo politeness	0.18*
Self confidence	0.26**

*1 percent level of significance

** 5 percent level of significance

Source: Authors' Calculations

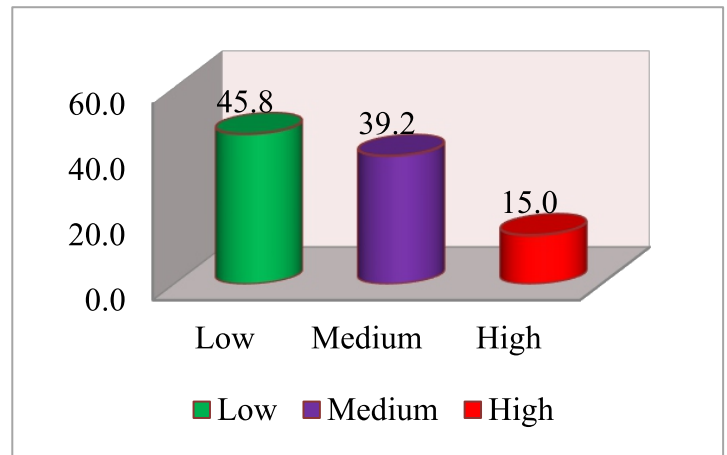


Fig. 1. Entrepreneurial behaviour

Source: Authors' Calculations

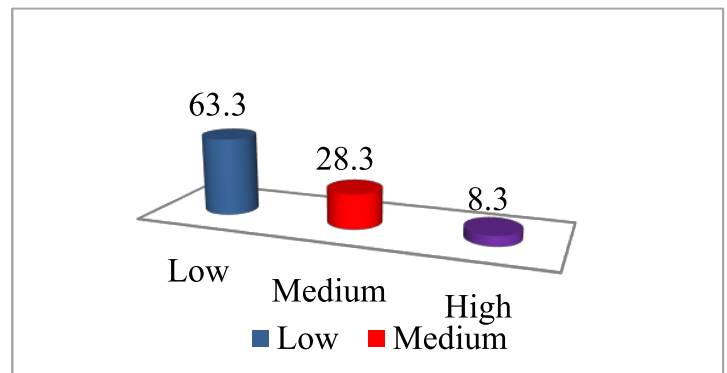


Fig. 2. Entrepreneurship development index

Source: Authors' Calculations

Table 6. Regression Results

Variable	Coefficient	SE	t-stat
Growing Experience	0.212	0.124	1.710*
Education	1.124	0.864	1.301**
Family size	3.882	1.962	1.979*
Occupation	-0.431	0.141	-3.057*
Land Holding	1.232	0.942	1.308**
Annual Income	1.181	0.812	1.454*
Social Participation	0.882	0.682	1.293**
Mass Media Use	0.551	0.316	1.744**
Economic Motivation	0.408	0.242	1.686*
Market Orientation	0.612	0.421	1.454**

$R^2 = 0.61$

Note: * and ** indicate statistical significance at the 1% and 5% levels, respectively

Source: Authors' Computations

5. CONCLUSION AND SUGGESTIONS

Entrepreneurship seeking behaviour among apple growers – including education, family size, annual wages, social engagement, mass-media consumption, economic stimulation and orientation – had strong and favourable associations. For the total sample studied, the occupational regression coefficient was found to be negative and significant.

Much of the apple growers had poor preparation capacities, because of age, low exercise exposure and low exposure to new varieties on marginal land. Therefore, knowledge of the scientific industrial apple growing and viability of highly profitable apple varieties for the younger generation needs to be informed and developed. Training and contacts with extension experts will also inspire and foster entrepreneurial qualities growth. The economic feasibility and sustainability of apple marketing need to be made clear to apple suppliers [28-30]. There is an immediate need for more sensitivity and expertise in apple processing technologies through different creative extension approaches solely tailored for the target market.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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