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Entrepreneurial behaviour of farmers: A review in Indian perspective

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Abstract

Entrepreneurship, acknowledged as a vital force for economic development, employment generation and growth worldwide, has garnered significant attention from researchers, educators and policymakers. This review paper delves into the entrepreneurial behaviour exhibited by Indian Farmers, exploring key components that contribute to their development as entrepreneurs and influence their profit-making endeavours. The study identifies a comprehensive array of entrepreneurial behaviour components among farmers, encompassing Innovativeness, Farm decision-making pattern, Scientific orientation, Achievement motivation, Risk taking ability, Self-confidence, Persistency, Feed-back usage, Persuasion ability, Manageability, Economic motivation, Market orientation, Ability to coordinate available resources, Planning ability and Opportunity detector. Research output reveal that farmers show varying levels of these components, categorized as low, medium, and high. A predominant number of farmers fall within the medium-level category, with attributions to various factors such as age, education, household income, land holdings, farming experience, training exposure, and participation in extension and social activities. This aids in understanding of the entrepreneurial behaviour of farmers and also provides valuable insights for researchers, educators and policymakers seeking to foster a suitable environment for entrepreneurial development in Indian agricultural sector.

Keywords: Entrepreneurial behaviour, Indian farmer, components, factors

1. Introduction

The entrepreneur is essentially an economic man, who strives to maximize his profits by adoption of innovators. However, entrepreneurs are not simply innovators, they are men with a will act to resume risk and to bring about changes through organization of human efforts. progress of farming profession in the country depends mainly on the entrepreneurial behaviour of farmers [1]. Entrepreneurship is defined as the process of identifying opportunities in the market place, committing actions and necessary resources to exploit the opportunities for long term personal gain [2 &10]. Entrepreneurship has been accepted globally as affective tool for widening the entrepreneurial base for those who have poor financial resources or managerial back ground [3]. Farmers deciding to take particular crop or use scientific methods to grow crops also exhibit entrepreneurial behaviour [30].

There are different literature review regarding entrepreneurial behaviour that attributes to Indian farmers. Researchers have agreed that entrepreneurial behaviour is the aggregate of set of components. However non of the literature has clearly defined regarding these set of components. This study describes a array of comprehensive components of entrepreneurial behaviour such as innovativeness, Farm decision-making pattern, scientific orientation, achievement motivation, risk taking ability, self-confidence, persistency, Feed-back usage, Persuasion ability, Manageability, economic motivation, market orientation, ability to coordinate available resources, planning ability and Opportunity detector that attributes to Indian farmers through different reviews. However research on entrepreneurial behaviour are confined to few sectors like diary, vegetables, fruits, Floriculture and bee keeping in India.

2. Research Methodology

This paper is based on 112 review of literatures on the subject of Entrepreneurship. Its mainly confined to the common components of Entrepreneurial behaviour that attributes to the Indian Farmers. Most of the review belongs to Journal, scholarly articles, M.Sc. and Ph.D thesis.

3. Definition of entrepreneurship and entrepreneurial behaviour

Entrepreneurship can be defined as a field of study that "seeks to understand how opportunities to bring into existence "future" goods and services are discovered, created, and exploited, by whom, and with what consequences" [7 & 33]. Entrepreneurship is the driving force for the economic growth of a country. By definition entrepreneurship is discovering, evaluating and exploring opportunities and process of pursuing those opportunities by the individuals without regard to resources currently under control [12]. Entrepreneurship is the ability to co-ordinate and organize, manage and maintain, and reap the best out of even the worst situations [40]. Entrepreneurial behaviour as

the degree to which a farmer strives to maximize his profits by making a creative and innovative response to the environment through diversification of enterprises [41]. Entrepreneurial behaviour is "the study of human behaviour involved in identifying and exploiting opportunities through creating and developing new ventures as well as exploring and creating opportunities while in the process of emerging organizations" [13 & 36]. The entrepreneurial behaviour is not necessarily doing new things but also doing things in a different way that already have been done [1]. The entrepreneurs are key persons of any country for promoting economic growth and technological change. The appearance of their activities i.e. development of entrepreneurship is directly related to the socio-economic development of the society [4]. Entrepreneurship is "the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risk, and receiving the resulting rewards" [4 & 31]. Entrepreneurial behavior can be highlighted as a major contributing factor to the development of entrepreneurs and has an impact on an individual's profit making [5, 6 &32]. Entrepreneurship contributes to multidimensional development in several ways, *viz*., assembling and harnessing various inputs, bearing the risks, innovating and imitating the techniques of production to reduce the cost and increase its quality and quantity, expanding the horizons of the market, and coordinating and managing the manufacturing unit at various levels [6]. The development of entrepreneurship is directly related to the socio-economic development of the society [8]. There are several definition of entrepreneurship and Entrepreneurial behaviour according to different review of literature. However this study mainly focus on major entrepreneurial behaviour that are shown in Indian farmers in varying level.

4. Components of entrepreneurial behaviour

Entrepreneurial behaviour is constituted of different components. This can be attributed to the level of major components like innovativeness, achievement motivation, decision making ability, risk orientation, coordinating ability, planning ability, cosmopolite outlook and self-confidence of respondents [8]. Chaudhari *et al*. [4] added 'Information seeking behaviour' as a component to [8] and identified total 9 components of entrepreneurial behaviour *viz*., innovativeness, achievement motivation, decision making ability, risk orientation, coordinating ability, planning ability, information seeking behaviour, cosmopoliteness and self-confidence which are similar to the 9 components of entrepreneurial behaviour as described by [6]. Vishal *et al*., [3] disagreed 'Innovativeness' as components and added another 4 components i.e communication skills, adoption prosperity, profit orientation & Locus of control to [8] as components of entrepreneurial behaviour. So as a total of 11 components of entrepreneurial behaviour were identified by [3] *viz*, achievement motivation, risk orientation, planning ability, decision-making ability, communication skills, self confidence, adoption prosperity, profit orientation, coordinating ability, cosmopoliteness and Locus of control. Kumar et al. 2013 [17] identified 9 components of entrepreneurial behaviour *viz*., Management orientation, Farm decision making, Leadership ability, Risk taking ability, Knowledge of vegetable farming, Achievement motivation, Innovativeness, Utilization of available assistance & Self-confidence. Porchezhain. M.R *et al*., revealed that entrepreneurial skill is to be regarded as the needed component for the development [9 & 34]. According to Balasaravanan and Vijayadurai Entrepreneurial behaviour of farmers is operationally defined as cumulative outcome of six components namely, innovativeness, economic motivation, decision making ability, risk orientation, information seeking behaviour and Leadership [9] out of which three components (i.e innovativeness, decision making ability, risk orientation) are similar as described in [8]. Bushetti and Krishnamurty, 2022 identified 8 components of entrepreneurial behaviour *viz*. Innovativeness, Scientific orientation, Risk orientation, Achievement motivation, Decision making ability, Coordinating ability, Economic motivation & Management orientation [19], which is similar to majority of the components (innovativeness, economic motivation, decision making ability & risk orientation) of [9]. Solanki and Soni [35] identified 15 indicators of entrepreneurial behaviour *viz*., decision making ability, economic motivation, knowledge of improved technology, ability to coordinate available resources, risk taking ability, ability to solve problems, credit orientation, self-confidence, scientific orientation, communication skills, experiences, market orientation, achievement motivation, perceiving opportunities, and perceiving management [5]. With slight modification to [35], Mehta and Sonawane identified 10 indicators of entrepreneurial behaviour *viz*., Risk taking ability, Self-confidence, Decision making ability, Knowledge of improved mango technology, Economic motivation, Scientific orientation, Experience of mango cultivation, Market orientation, Ability to co-ordinate available resources and Achievement motivation [11]. Entrepreneurial behaviour is the cumulative outcomes of 10 components *viz*., Risk taking ability, Hope of Success, Persistence, Feedback Usage, Self-confidence, Knowledge ability, Manageability, Persuasiveness, Innovativeness & Achievement motivation [12, 14] which are similar to some components as described by [35, 5, 11, 8, 9]. 7 components of Enterpreneurial behaviour *viz*. Self-Effectiveness, Opportunity detector, Social involvement, Planning ability, Risk bearing ability, Leadership ability and Creativity were analysed by [15] by using the scale developed by [37]. Narmatha *et al.*, 2002 [39] stated that innovativeness, achievement motivation and risk orientation were the most important components. And further, decision-making, innovativeness, management orientation, economic motivation, level of aspiration and risk orientation were found to be crucial in influencing the entrepreneurial behaviour.

There are different components of Entrepreneurial Behaviour given and analysed by different Researcher as described above. The common components of Entrepreneurial behaviour that found in Indian Farmers are Innovativeness, Farm decision-making pattern, Scientific orientation, Achievement motivation, Risk taking ability, Self-confidence, Persistency, Feed-back usage, Persuasion ability, Manageability, Economic motivation, Market orientation, Ability to coordinate available resources, Planning ability and Opportunity detector which are given below.

5. Common components of entrepreneurial behaviour

This study mainly focus on common components of Entrepreneurial Behaviour of Indian farmers through different Literature review. The common components of Entrepreneurial behaviour are Innovativeness, Farm decision-making pattern, Scientific orientation, Achievement motivation, Risk taking ability, Self-confidence, Persistency, Feed-back usage, Persuasion ability, Manageability, Economic motivation, Market orientation, Ability to coordinate available resources, Planning ability and Opportunity detector (Figure 1) that are attributed to different characteristics like age, education, income, farm experience, land holding, participate in social and extension activities etc. These entrepreneurial behaviour were classified into low, medium and high category. Most of the entrepreneurial behaviour predominantly fall under medium level category. These common components of entrepreneurial behaviour are discussed below.

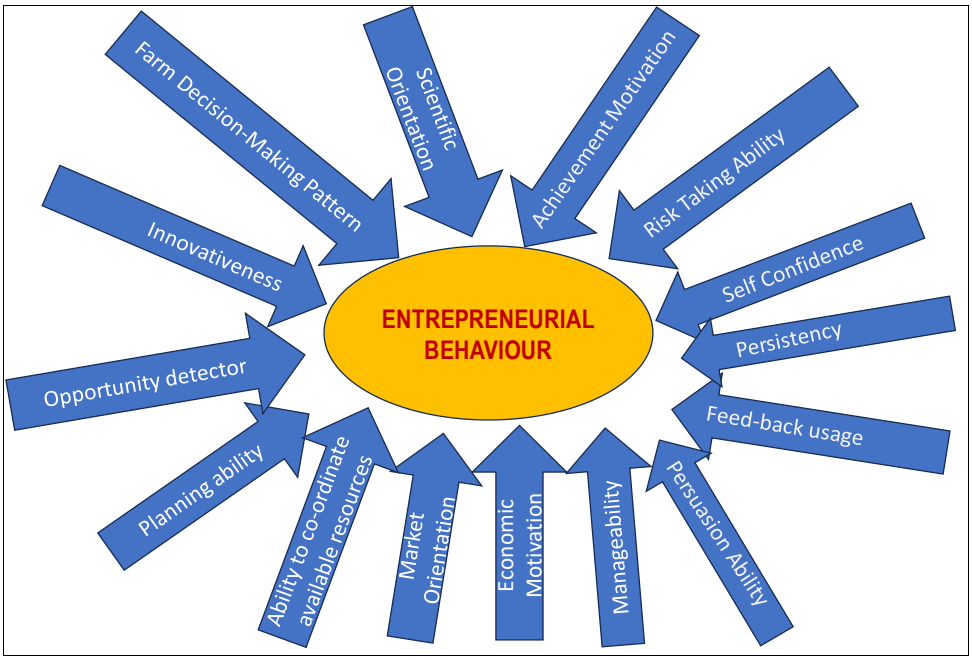

Fig 1: Common Components of Entrepreneurial behaviour)

5.1. Innovativeness

Innovativeness is the degree to which an individual adopts new ideas relatively earlier than others in his social system. It is operationally defined as the degree to which a farmer adopts new ideas relatively earlier than other farmers in his social system [46]. Majority (40.7%) of farmers belonged to medium category of 'innovativeness' followed by semi-medium (31.00%) level of innovativeness [16].

Innovativeness as an important entrepreneurial attributes [38]. Majority (91.00%) of the respondents had medium to high level of innovativeness which might be due to mass media exposure and high literacy rate [14]. Majority (62.00%) of the entrepreneurs had medium innovativeness, whereas 20 per cent of them had high, followed by low innovativeness (18%) [42] which is similar to the findings reported by [17, 18]. The majority of the respondents were within the middle and young age group, and as the age increased farmers were found to become more innovative. increased rate of social participation and cosmopoliteness resulted in to higher level of innovativeness. Again innovativeness is reflected in higher farm return. The result so obtained were in conformity of many of the past researches [16]. Majority of farmers belonged to medium level of innovativeness followed by high and low level of innovativeness which may be due to medium education level & medium to big land holding [6, 47]. majority (66.67%) of the respondents had medium level of innovativeness followed by low (17.5%) and high (15.83%) level of innovativeness respectively which are in accordance with the findings of [6, 49, 50, 51, 52] who reported that majority of the respondents had medium level of innovativeness.

5.2. Farm Decision-Making Pattern (Decision Making Ability)

Decision making ability is operationally defined as the ability of farmers to select the most efficient means from among the available alternatives on the basis of scientific criteria for achieving maximum economic profit [16]. Decision making ability of farmers is the degree of weighing the available alternatives in terms of their desirability and their likelihood and choosing the most appropriate one for achieving maximum profit on his farming [43]. Majority of the farmers [45%] had semi medium level of decision making ability followed by 30% had medium level decision making ability, where as 15% belonged to low decision making ability and only 10% had high decision making ability [16]. Majority (46.66%) of the entrepreneurs had medium decision-making, followed by low (27.50%) and high (25.84%) decision making categories, respectively [44] which are in accordance with the findings of [3, 8, 49-56] who reported that majority of the respondents fell into medium category of decision making ability. Increase in age; higher self and family education; proper and higher land use pattern and higher material possession lead to higher and better level of decision making pattern of the respondents. Family size, family type

and secondary occupation showed negative and significant relationship either at 1% 0r 5% level of significance [16]. Majority of the farmers had medium (76%) level decision making ability followed by high(29%) and low(15%) level decision making ability [1], which is in accordance to the finding of [3, 11] who reported majority of the farmers had medium level of decision making ability. Half (52.00%) of the respondents had medium decision making ability, whereas, 27.50 per cent of respondents had high decision making ability which may be due to majority of the respondents were had moderate education level and limited cosmopoliteness exposure, even some times the decisions has to take collectively in the family in consultation with the elders [17] whose findings are in agreement with the studies conducted by [45] & [11]. Majority of the farmers had medium decision making ability (82%) followed by low (12%) and high (6%) decision making ability due to their medium annual income and medium size of land holding [6] which is similar to the findings reported by [48].

5.3. Scientific orientation

Scientific orientation describes the use of scientific approaches in the study of individuals and society. The concept of a scientific orientation in sociological studies can be defined as theoretical viewpoints that emphasise the value of empirical study and scientific procedures in comprehending social processes. Majority (68.00%) of mango grower had medium level of scientific orientation (92.00%). This might be due to higher mass media exposure and social participation [11]. Majority of the respondents had medium (42.22%) level of Scientific orientation followed by low (37.22%) and high I (20.56%) level of scientific orientation [19] which are in accordance with the findings of [21, 22, 57-61]. More than half (53.75%) of the farmers had high level of scientific orientation, followed by 22.50%, 17.50% and 6.25% of them were with very high, medium and low degree of Scientific orientation respectively [20]. Nearly two-third (65%) of the nursery owner had medium level of scientific orientation [23] which was in agreement with finding of [62, 63].

5.4. Achievement Motivation

Achievement motivation as a spontaneous expressed desire to do something well for its own sake rather than to gain power or love or recognition [46]. It is operationally defined as the desire for excellence to attain a sense of his personal accomplishment. Almost half (49%) of the farmers were belonged to semi medium level of achievement motivation followed by low (44.7%) and (6.5%) medium level of achievement motivation respectively. There were no respondents having high achievement motivation index. Higher educational status, higher land holding, higher and better land use pattern, higher cosmopoliteness and higher level of material possession are expected to be resulted into or resulted into or results of higher level achievement motivation for the farmers [16]. Majority (44.16%) of respondents had medium achievement motivation, followed by 28.34 and 27.50 per cent of entrepreneurs in low and high achievement motivation, respectively [44], which is in line with the findings of [96, 21, 97, 75, 20, 49, 50, 92, 8, 17, 14, 24, 98, 51, 99, 23, 52, 54, 12, 11] who reported majority of farmers had medium level of Achievement motivation. Motivation is inner will, impulse of intention that causes a person to do something [8]. Majority of farmers had medium achievement motivation level, apparent from among farmers might be due to their enthusiasm and zeal to become economically sound [6, 24]. Medium herd size and annual income of majority of the respondents might be the reason why they had medium level of achievement motivation [51]. More than half of dairy farmers (55.00%)had high achievement motivation, followed by medium (35.00%) & low (9.00%) achievement motivation [29]. Less than half (46.11%), 34.45 and less than two fifth (19.44%) of the farmers belonged to low, medium and high category of achievement motivation category [19]. Medium to high level of achievement motivation were found among the farmers [22].

5.5. Risk taking ability or Risk Orientation

Risk orientation was operationalised as the degree to which farmer is oriented towards risk and uncertainty in facing problems in farming. Majority of farmers (61.7%) had medium risk orientation followed by high (18%), semi-medium (13.00%) and low (7.3%) level of risk orientation**.** Educational status, land holding and family income showed positive and significant relationship with risk orientation of farmers at 1% level of significance, whereas secondary occupation showed negative relationship at 5% level of significance [16]. Majority of the farmers (70.83%) belonged to medium level of risk orientation, followed by low (15.00%) and high (19.17%) level of risk orientation [100], which is line with the findings of [3, 21, 102-106, 8, 49-51, 92, 93, 17, 14, 6, 24, 51, 23, 29, 19, 22, 52, 54, 12, 11] who reported majority of farmers had medium level of risk orientation. Majority of Sample respondents had high risk bearing ability [15] which is in line with the findings of [28, 20, 26]. High risk bearing ability among farmers may be explained in terms of their economic status where majority belonged to low income group [28]. People who are poor have very little to lose when they try out something new. Since the farmers are not very well of at present, taking risk can only better their condition whereas failure of the same will not lead to any significant deterioration in the condition [101]. The farmers with more experience had medium risk orientation [21]. The level of risk taking ability among the marginal farmers was very low whereas among the small and big farmers it was moderate. [9].

5.6. Self confidence

Self confidence is operationally defined as the degree of belief in one's own abilities in achieving the things one wishes [11, 28]. It also defined as the degree to which an individual conveys confidence in his own capability to complete a task or meet a challenge [52, 3]. Majority (34.3%) of the farmers belonged to semi medium level of self confidence followed by low (33.3%), medium (24.7%) and high (7.7%) level of self-confidence, which was because of their lower education status, social participation and cosmopoliteness. Secondary occupation of the respondents showed positive and significant relationship at 1% level of significance, whereas land holding showed negative and significant relationship at 1% level of significance with self confidence [16]. Majority of respondents belonged to medium level of self confidence, which was due to the impact of training programme [28], Which is in line with the findings

reported by [107, 11, 12, 21, 26, 22, 24, 17, 8, 3, 108, 109, 110, 52, 111, 51, 49, 50, 112] who reported majority of the respondents had medium level of self confidence. Majority of the respondents had primary and high school level of education along with medium level of farming experience might be the probable reason for medium level of self confidence among majority of farmers [21]. Overall 39.38% of farmers(majority) were having low level of self confidence [54]. Lawrence and Ganguli (2012) who found that 57% of the respondents had high level of self confidence [93]. More than one-third (35.00%) of the respondents had high level of self confidence followed by medium (31.25%), low(30.00%) and very high(3.75%) level of self confidence [20], which is in accordance with the findings of [6].

5.7. Persistency

Persistency is defined as the determination needed to keep working on a project and reaching its objectives, even under critical circumstances and adversity [37]. This persistency is viewed as a lack of intimidation when faced with difficult situations [67] or the self-motivation necessary to endure work problems. It includes the ability to deal with defying circumstances when a new business is started, combined with the idea of intensive working to overpass them [66]. Entrepreneur is even capable of subjecting himself to social privacy in order to work in risky projects to achieve the desired success [37, 65]. "Persistence" was not an observed variable, but it tapped whether an individual has a personal/psychological tendency to persist [68]. Majority (72.00%) of respondents had medium level of persistence followed by 16.00 per cent of respondents had low level, 12.00 per cent had high level of persistence. Past studies suggests that entrepreneur tend to persist in the face of difficulties or obstacles. Failure does not easily discourage them [14]. Entrepreneurs have medium to high level of persistence [64, 18, 70, 71, 12]. The ability of farmers to sustain efforts and adapt to changing circumstances contributed to their overall progress and success in the agricultural domain [69]. Enhancing persistence traits leads to increased productivity, improved outcomes, and sustainable growth in Agricultural sector [18].

5.8. Feed-back usage

Majority of farmers had medium (63.33%) level of feedback usage which might be due to their experience [12], which supports similar entrepreneurial behaviour reported by [72, 73]. The ability to seek and use feedback on one's performance and decisions is an important quality of entrepreneurs. Medium level of feedback usage was found among majority (75.00%) of respondents followed by high (14.00%) and low (11.00%) levels of feedback usage [14], which is line with the findings of [74] who clearly indicated that entrepreneurs have medium to high level of Feed-back usage.

5.9. Persuasion ability/Leadership ability/Persuasiveness

As an entrepreneur one should gain leadership skill because enterprise management necessitates coordination among different subsystems which require different skills. Among them leadership skill should be developed as every entrepreneur is expected to interact with various types of people. They also can influence, help, guide and support the fellow farmers in solving their problems [21]. The level of leadership ability among the marginal farmers was low whereas among the small and big farmers it was moderate [9] which is in line with the findings of [15] who described respondents had low level of leadership ability as compare to other Entrepreneurial behaviour components. Respondents possess a medium level of persuasiveness or leadership ability [12] which is in line with the findings of [21, 75, 17]. Overall entrepreneurial behaviour of potato growers is found to have resulted from 'medium to high' level of leadership ability [22]. More than half (57.50%) of the nursery owners had medium level of leadership ability [23] which is similar to the above described findings of [12, 21, 75, 17]. Majority of the respondents scored medium (54%), whereas low and high level of persuasibility scored by 29.00 and 17.00 per cent of respondents respectively. As the entrepreneur could not express themselves very convincingly to others, resulting in gaining less profit after marketing products [14]. More than half of the respondents (57.50%) had medium category of leadership ability. It indicated that their ability to anticipate a situation in advance and guide, direct or influence the thought, feeling or behaviour of others. The experienced one used to guide the new comers for growing new kind of vegetables [17].

5.10. Manageability (Management orientation or perceiving Management)

Manageability is operationally defined as the degree to which a farmer is oriented towards scientific farm management comprising planning, production and marketing function. Majority of the farmers (58.50%) had medium level of management orientation, followed by 26.00 per cent of them had low level and 15.50 per cent of them had high level of management orientation, which might be due to their medium experience in cultivation and medium extension contact [21]. Respondents were required to learn to delegate some responsibilities to others is a very important attribute of successful entrepreneur. Majority (62.00%) of respondents had medium level of manageability [14]. As a good manager, the nursery owners might be properly applying the different principles of management so as to reach their destination [23]. Majority of the respondents were found in medium category of Management orientation [17, 14, 21, 23, 62, 19] which is agreed with the findings of [76] who emphasized the management skill of entrepreneurs and stressed that training on management skills must be imparted in entrepreneurship training programme. Majority of the respondents (75%) had low category of manageability, revealing that the respondents lack the basic managerial skills of delegating responsibilities and duties [12], which is in accordance with the findings of [72, 24, 77]. The probable reason for low management orientation might be due to their varied education levels, small & marginal land holding and low income [24].

5.11. Economic Motivation

Economic motivation is defined the occupational success in terms of profit maximization and the relative value placed by a farmer on economic ends. It refers to the values or attitudes which attach greater importance to profit maximisation as the ends and means. Economic motivation is important in prompting a person to perform more

effectively so as to improve his or her economic status. Majority of farmers belong to low income group(annual income upto 50, 000/-) and they want to better their living conditions. This explains high economic motivation among majority of respondents [28]. Majority (61%) of the respondents had high level of economic motivation followed by 39% of the respondence belonged to medium level of economic motivation. Family size, family educational status, land holding, primary occupation and cosmopoliteness showed positive and significant relationship at 1% level of significance with Economic motivation [16]. One of the characteristics of entrepreneur is an economic agent, who is busy in financial transactions in terms of buying and selling activities. They should strive hard to reduce the cost of production and marketing and aims for achieving high returns per unit of good. This trait makes an entrepreneur a brilliant visionary when it comes to predicting economic potential. As a result medium to low level of Economic motivation were found among the respondents [21]. The findings of [16] are in line with the findings of [78, 24, 28, 39, 84, 80, 81, 83]. Majority (43.75%) of the respondents had medium level of economic motivation, while 34.17 and 22.08 per cent of the respondents belongs to high and low economic motivation category, respectively [79], which is in line with the findings of [80-83, 22, 21, 85, 11, 20] who described majority of respondents had medium level of economic motivation. Majority of the respondents had medium to high level of Economic motivation [19]. More than half (56.39%) of the dairy farmers had high level of economic motivation, followed by low (30.82%) and medium (12.79%) level of economic motivation [84]. The important level of economic motivation among the marginal farmers was low whereas among small and big farmers, it was high [9]. Majority (68.00%) of mango grower had medium level of economic motivation. This might be due to higher mass media exposure and social participation [11].

5.12. Market orientation

Market orientation refers to a culture that stress the importance of creating value to buyer by speedy response to market information and bearing in mid the interest of the other stakeholders [86]. Market orientation influence only financial performance [87]. significant positive relationship between market orientation and firm profitability was affirmed by [88]. A modest effect of market orientation on relative productivity and no effect on return on assets was reported by [25, 89]. Majority (71.50%) of the vegetable growers had medium level of marketing orientation, followed by those with low (17.50%) marketing orientation and with high (11.00%) marketing orientation [21]. Medium to high level of market orientation was found among the respondents [22]. 72.00% of Mango growers had medium level of market orientation. The probable reason might be that the mango growers produced mango in plenty in the season and due to the improper marketing facility, they have to sale it immediately, as mango is a perishable fruit [11].

5.13. Ability to co-ordinate available resources (Ability to co-ordinate activities or co-ordinating ability)

Equal number (42.22%) of the farmers was in medium and low category of coordinating ability and only 15.56 percent of them belong to high category [19]. Majority of the respondents (57.00%) had high level co-ordination ability [26]. Majority (86 per cent) of the respondents fell in the category of moderate co-ordinating ability followed by 8 per cent of the respondents had high and rest 6 per cent had poor coordinating ability. Most of the respondents were educated up to secondary level, possessed medium herd size and had medium level of experience in dairy farming, which might have restricted their co-ordinating ability to a medium level [51]. The findings of [51] is in concurrence with the findings reported by [6, 52, 54, 11, 8, 49, 50, 53, 90, 91, 20] who described majority of the respondents fall under medium category of co-ordinating ability. 73.00% of mango growers were found in medium level category of ability to co-ordinate available resources. This might be due to the reason that the marketing period of mango is very short and during these short span they have to sale their produce immediately. Therefore, good ability to co-ordinate available resources is very necessary [11]. More than half (58.30%) of the farmers had high level of co-ordination ability followed by medium (31.70%) and low (10.00%) level co-ordination ability which might be due to good social participation and better education [3].

5.14. Planning ability (or Planning Orientation)

Planning ability is the degree to which, a farmer is capable of starting the activities that he or she intends to do by certain ways in farm enterprise. Majority (40.00%) of the farmers had semi medium level of planning ability followed by medium (35%) level planning ability, 21.7% having low level of planning ability and high (6.00%)level planning ability. age, land holding, land use and social participation showed positively significant association with planning ability whereas family size showed an inversely significant relation with planning ability [16]. A considerable percentage of both trained (59.00%) and un tained (61.00%) farmers had poor planning ability [85]. Majority (45%) of farmers were found to have high level of planning ability [54] which is almost similar to the findings reported by [90, 92, 20], who reported that majority of farmers had high level planning ability. Majority (48.00%) of the respondents had medium planning ability [26], which is line with the results reported by [21, 8, 3, 50, 93, 56, 51, 52] who concluded that a majority of the entrepreneurs had medium level of planning orientation. Majority (66%) of the farmers did not give much importance to future activities and future planning due to which they had poor planning ability [6].

5.15. Opportunity detector

The notion of entrepreneurs recognizing opportunities has led to a threefold categorization of how this occurs: (i) opportunity recognition refers to connecting known products with existing demand to exploit a previously recognized opportunity; (ii) opportunity discovery starts with a known supply and proceeds in search of an unknown demand, or from a known demand that motivates search for an unknown supply; and (iii) with opportunity creation, neither the supply nor demand exists prior to entrepreneurial action—the entrepreneur participates in creating both [94, 95, 27]. Majority of the sample farmers were categorized under medium Opportunity detector [15].

6. Conclusion

From the above description it was found that the 15 common components of entrepreneurial behaviour are Innovativeness, Farm decision-making pattern, Scientific orientation, Achievement motivation, Risk taking ability, Self-confidence, Persistency, Feed-back usage, Persuasion ability, Manageability, Economic motivation, Market orientation, Ability to coordinate available resources, Planning ability and Opportunity detector. Majority numbers of farmers are fallen under the medium category of entrepreneurial behaviour components, which are attributed to age, education, land holdings, annual income, farming experience, cosmopoliteness and training etc. [1, 3, 6, 8, 12, 14-19, 22, 23, 26].

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