



# Agripreneurial Attitude among the Farmers of National Capital Region of Delhi

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## Abstract

Agriculture is still the mainstay of livelihood for millions of farmers in India. However, farmers are getting disenchantment with the agriculture due to climatic and production risks and more importantly due to the poor returns and high cost of cultivation. As entrepreneurship has assumed greater significance in economic development across the world, it is essential to set an entrepreneurial culture in farming and the farmers need to be motivated to shift from subsistence cultivation to commercial cultivation. Various agripreneurs in the country have proved that agriculture can be economically viable if various agricultural enterprises are followed up with post-harvest processing, value addition and marketing. However, favorable attitudinal orientation is an important prerequisite before taking up agripreneurial venture. Hence, understanding agripreneurial attitude has been a subject of interest for many researchers as agripreneurs exhibit varied types of characteristics that constitute agripreneurial attitude. The study was conducted in selected villages of National Capital Region of Delhi. Total 110 farmers, consisting of eighty agripreneurs selected purposively based on predetermined criteria (e.g. self-starter of agribusiness, extent of commercialization, recognition and awards secured, adoption of innovation in production system), and 30 non-agripreneurs selected randomly comprised the sample size of the study. The agripreneurial attitude was measured using the modified version of the entrepreneurial attitude scale of Robinson et al. (1991). About 53 and 22% of agripreneurs were found to possess high and very high level of agripreneurial attitude respectively. Mann Whitney U-test revealed that agripreneurs and non-agripreneurs differed highly significantly ( $P<0.01$ ) with respect to all the four variables namely achievement motivation, innovativeness, personal control and self-esteem.

**Keywords:** Agripreneurs, Agripreneurial attitude, Achievement motivation, Innovativeness, Self-esteem, Personal control

Entrepreneurship has been recognized as an effective means for economic transformation. It is commonly acknowledged that there is a positive correlation between entrepreneurship and economic growth (European Commission, 2006). In present times, when as the viability of small and marginal scale farming is dampening due to the rising cost of cultivation, declining market returns and degradation of natural resources, entrepreneurship development in agriculture has become an important area of research investigation as well as policy and development initiative. Though

the farmers have excelled in technology adoption and in improving the farm productivity level, they have not been successful in commensurate enhancement of their profitability. Their share in consumer rupee is very low, the farmers feel that farming is no more an attractive profession. Considering the importance of agriculture in economic upliftment of poor, as it still accounts for about 54.6% of total employment (Census 2011), it is essential to devise and operationalize mechanism for enhancing profitability of farm through market linkage and entrepreneurship development in

agriculture. It calls for infusing entrepreneurial culture in farming. According to Forlej (2001), the development of entrepreneurship means to a change of quality of management in the process of farming. For enhancing the profit, the farmers need to establish linkages with different stakeholders at different stages of production chain. Such transition in practice would first require shift in attitudinal orientation from being a farmer to an agricultural entrepreneur, farm entrepreneur or agripreneur. For Duczkowska-Malysz (1993) farm entrepreneurship equates to all the activities, which help farmers to adjust to a free market economy.

According to Suarez (1972), an agricultural entrepreneur is an individual or group with the right to use or exploit the land or other related elements required to carry out agricultural, forestry or mixed activities. To become an entrepreneur, the traditional farmers will need to have entrepreneurial traits. Various agripreneurs in the country have proven that agriculture can be viable by integrating various agricultural enterprises (crops with animal husbandry, horticulture, forestry, beekeeping, etc.) including post harvest processing, value addition and marketing. Why farmers do not take up agripreneurial ventures, has been an important area of investigation. Studies have shown that socio-psychological factors like age, education (Pandya (1996), achievement motivation (Fraser 1961), risk taking ability (Cantillon 1755), innovativeness (Kilby (1971) etc. have a great bearing on agripreneurial behavior of farmers. Crant (1996) found that entrepreneurial attitude could be linked to an individual considering of owing a business. Studies have shown that entrepreneur characteristics inherent in someone may be linked with the attitude to establish a business. Stimpson *et al.* (1991) reported that entrepreneurial attitude orientation consists of 4 broad dimensions such as achievement, self-esteem, personal control and innovation. The present study made an attempt to analyze agripreneurial attitude among the agripreneurs vis-à-vis non-agripreneurial farmers.

## Methodology

The study was conducted in National Capital Territory Region of Delhi. Twenty villages were selected randomly. Eighty agripreneurs were selected purposively based on predetermined

criteria (e.g. self-starter of agribusiness, extent of commercialization, recognition and awards secured, adoption of innovation in production system), while 30 non-agripreneur farmers were selected randomly. The total sample size for the study was 110. The study was based on primary data collected by interviewing from selected respondents using pre-tested structured interview schedule.

In the present study, agripreneurial attitude was measured as the composite score of achievement motivation, innovativeness, personal control and self esteem to ascertain the differences between agripreneurs and non-agripreneurs.

The agripreneurial attitude was measured using the modified version of the entrepreneurial attitude scale of Robinson *et al.* (1991). Entrepreneurial Attitude Orientation (EAO) questionnaire helps to evaluate a subject's level of entrepreneurial attitude and its orientation.

The respondents were grouped into various categories based upon the range of scores obtained for the four components i.e. achievement motivation, innovativeness, personal control and self-esteem through response to the statements of modified EAO scale. Similarly the respondents were classified under the categories of highly favourable to highly unfavourable agripreneurial attitude.

Chi-square test and Mann Whitney U test were employed to study the association and comparison of means.

## Results and Discussion

### Demographic and agricultural profile

The agripreneurs in the area possessed land holdings in range of 2 to 26 acres of land per person, while it was 2 - 6 acres among the non-agripreneurs. The percentage of illiterates was significantly higher in case of non-agripreneur (20%) farmers in comparison to agripreneurs (2.5%). On the other hand, the percent of respondents who completed high school were significantly higher for agripreneurial farmers (37.5%) as compared to non-agripreneurs (3.3%). The nuclear family was observed in more than 70 percent of cases in both agripreneurs and conventional farmers. The agripreneurs were relatively young and had less farming experience.

The main livelihood source in the study villages was agriculture and allied enterprises. All the respondents in the study area had assured irrigation source through tube wells. The traditional cropping pattern in the study area was rice (*kharif*) followed by wheat/mustard (*rabi*). However, since last one decade, many farmers have shifted to high value vegetable crops such as tomato, onion, bhindi, leafy vegetables, brinjal and cucurbits in the *kharif* season followed by cabbage, cauliflower, raddish and carrot in the *rabi* season. Some farmers have also successfully undertaken vegetable production in the summer season to take advantage of higher prices in the off-season. Majority of the agripreneurs cultivated vegetables along with traditional crops whereas majority of the conventional farmers were practicing traditional cropping pattern. Some upcoming enterprises in the area were bee keeping, fishery, dairying and mushroom cultivation.

### *Entrepreneurial Attitude*

According to Robinson *et al.* (1991) attitude towards entrepreneurship is a function of the demographic and psychological characteristics and their interaction. Robinson *et al.* (1991) described the attitude of the entrepreneur with personality and demographic characteristics. The author developed the Entrepreneurial Attitude Orientation scale that explained the attitude prediction through four different sub scales (achievement, self-esteem, personal control, and innovation) and three types of reactions (affective, cognitive or conative).

**Achievement Motivation:** Desire for success in pursuing a higher level of goal, with risk involved, can be termed as achievement motivation. The original definition of achievement motivation was from Atkinson (1964), who defined it as the comparison of performances with others and against

certain standard activities. A comparative analysis of achievement motivation among agripreneurs and non-agripreneurs revealed that about 44% of agripreneurs had high level of achievement motivation.

A large majority of non-agripreneurs (63%) belonged to the categories of low to very low of achievement motivation. On the contrary, only 21% agripreneurs had low to very low level of achievement motivation. While 16.5% of agripreneurs had very high level of achievement motivation, none of the non-agripreneurs belonged to the category of very high level of achievement motivation. The scores were highly skewed towards very high level of achievement motivation for agripreneurs, while in case of non-agripreneurs the scores were highly skewed towards very low level of achievement motivation.

The findings amply suggest that agripreneurs and non-agripreneurs differed with respect to their level of achievement motivation. The trait of achievement motivation among the agripreneurs is reflected in their decision to go in for diversification towards vegetable cultivation, which generates higher income than cereal crops. Cultivation of off-season vegetables with protected cultivation technique (net house and polyhouse) and exotic vegetables has helped them to earn premium benefits. The integration of enterprises like apiary; mushroom cultivation; flowers and baby corn; fishery; seed production; etc has become popular among the agripreneurs.

Sinha (2011) observed from the study conducted in Atterna village of Sonepat district that 36.67% of baby corn growing farmers had an increase in annual income by Rs. 3-4 lakh. Another study conducted by Singh (2007) on commercial vegetable

**Table 1:** Distribution of respondents according to their achievement motivation

Achievement motivation	Category	Agripreneurs (n=80)		Non-agripreneurs (n=30)	
		Frequency	Percent	Frequency	Percent
5.71 – 6.02	Very low	6	7.50	8	26.67
6.03 – 6.32	Low	15	18.75	11	36.67
6.33– 6.64	Medium	24	30.00	8	26.67
6.65 – 6.94	High	22	27.50	3	10
6.95 – 7.25	Very high	13	16.25	0	0
<b>Total</b>		<b>80</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>

cultivation in Gaziabad district of U.P. revealed that 46% of vegetable growers had high income from the sale of vegetables, followed by 44% having medium income and 10% with low income.

Collins, Hanges and Locke (2004) found significant correlation of achievement motivation with choice of an entrepreneurial career and entrepreneurial performance. Johnson (1990) too concluded that there was evidence of a relation between achievement motivation and entrepreneurial activity.

**Innovativeness:** Innovativeness is another trait related to attitude towards entrepreneurship. It can be defined as the degree to which an individual does things differently and better. Agripreneurs have the tendency to adopt novel products, whether they are ideas, goods or services. With different approaches, to achieve his goals, at his disposal, he is prepared to try out various alternatives. A person with innovativeness trait is also ingenious at adapting and modifying whatever is at hand to solve the problems or to achieve the objectives.

According to Hyrsky and Tuunanan (1999), innovativeness is perhaps the most distinctive entrepreneurial trait.

In both the groups, majority of the respondents were found to have medium level of innovativeness scores. A little less than 30% of agripreneurs exhibited having high to very high level of innovativeness (Table 2), while barely 6.67% of the non-agripreneurs belonged to high innovativeness category. The scores were skewed towards higher innovativeness levels for Agripreneurs while in case of non-agripreneurs the scores were skewed towards its lower level. Agripreneurs were found to be innovative as was observed from their practices and farming viz., adoption of high yielding varieties of crops, farm machinery including tractors,

cultivators, rotavators, levelers, and tube well irrigation pumpsets, etc.

**Personal Control:** Personal control is another important trait related to entrepreneurial attitude. Personal control is defined as the degree of control that an agripreneur exerts over the entrepreneurial activities and takes control of the farm enterprise. Controlling is an important function of managing a farm enterprise and it takes care of judicious allocation of resources, managing operating cycles, controlling flow of funds and transporting and marketing agricultural produce. Entrepreneurs exhibit a great sense of internal locus of control, as they tend to exercise power and influence on their actions as well as outcomes. A locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation)." (Zimbardo, 1985).

Majority of the agripreneur respondents were found to exercise medium (40%) to high (40%) level of personal control over their farm enterprises (Table 3). While in case of non-agripreneurs majority of them were found to have low (36.67%) and very low (33.33%) level of personal control. Agripreneurs were found to be wielding adequate personal control on their farm operations, as growing vegetable crops on commercial scale demands a very high degree of personal control in utilizing farm labour, regular intercultural operations, plant protection, and regular harvesting of vegetables. Farmers were also found to take more personal control over the post-harvest operations like cleaning and grading of vegetables, and packing and transporting to regulated markets or directly to consumers. Agripreneurs were aware of the demand of personal control over grading as better grading

**Table 2:** Distribution of respondents according to their innovativeness N=110

Innovativeness	Category	Agripreneurs (n=80)		Non-agripreneurs (n=30)	
		Frequency	Percent	Frequency	Percent
4.42 – 4.87	Very low	4	5.00	6	20.0
4.88 – 5.33	Low	20	25.00	7	23.33
5.34 – 5.79	Medium	33	41.25	15	50.0
5.80 – 6.25	High	13	16.25	2	6.67
6.26 – 6.71	Very high	10	12.5	0	0
<b>Total</b>		<b>80</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>

**Table 3:** Level of personal control among agripreneurs and non-agripreneurs N=110

Personal control	Category	Agripreneurs (n=80)		Non-agripreneurs (n=30)	
		Frequency	Percent	Frequency	Percent
3.42 – 4.10	Very low	1	1.25	10	33.33
4.11 – 4.79	Low	11	13.75	11	36.67
4.80 – 5.48	Medium	32	40.00	6	20.0
5.49 – 6.17	High	32	40.00	3	10.0
6.18 – 6.86	Very high	4	5.00	0	0
<b>Total</b>		<b>80</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>

for higher quality would result in better market prices and higher profits for the farm enterprises.

**Self-Esteem:** Self esteem is the fourth major trait in entrepreneurial attitude model. Entrepreneurial attitude change can occur by influencing thoughts, feelings, and behavioral intentions towards innovations, achievements, self-esteem, and personal control (Robinson et.al. 1991). Self esteem can be defined as the degree to which an agripreneur takes pride in his farm enterprise and works so hard, to achieve success, as though all his honour, social prestige and good depend on its success. Here the self-pride that the agripreneurs possess for their caliber, talent, capabilities and self-worth play a significant role in their agripreneurial success. According to Branden (1994), self-esteem is the sum of self-confidence (a feeling of personal capacity) and self-respect (a feeling of personal worth). Shokrkon *et.al.* (2003) found that there was a multiple correlation of creativity, self-esteem and achievement motivation, and entrepreneurship.

Forty per cent of agripreneurs had high (27.50%) to very high (12.5%) level of self-esteem as against 33.33% of non-agripreneurs (Table 4). Majority of the respondents in both the groups were found to possess moderate level of self esteem over their farm enterprises. However, none of the agripreneurs were

found to have very low level of self-esteem, while 10% of non-agripreneurs were found to have the same. Agripreneurs expressed a feeling of self worth while talking about their farm enterprises. They opined that farming was their family enterprise and that provided self worth, pride and honour in the society. Indeed, they were found to enjoy a great sense of self-respect from commercial farming as it gave them not only their daily bread and butter, but also higher incomes for achieving better standard of living in the villages. In fact some agripreneurs also opined that it was the only profession they were well versed with, and drew a great sense of self-confidence and self-worth from it. It emanates that a person can succeed only if he or she enjoys a sense of self-esteem in the endeavour he or she pursues for their livelihood. For the farmers in the NCR region, the pride that they possessed for their caliber, talent and capabilities played a significant role in their agripreneurial behaviour. They seldom accepted anything less than what they deserved due to their high degree of self-esteem. Hard work and no self-doubt strengthened their self- esteem. In contrast, the non-agripreneurs suffered from self-doubt, and inferiority complex, which led to under performance.

Mann Whitney U-test revealed that agripreneurs and non-agripreneurs differed highly significantly

**Table 4:** Level of self-esteem among agripreneurs and non-agripreneurs N=110

Self-esteem	Category	Agripreneurs (n=80)		Non-agripreneurs (n=30)	
		Frequency	Percent	Frequency	Percent
3.64 – 4.03	Very low	0	0	3	10.0
4.04 – 4.43	Low	17	21.25	10	33.33
4.44 – 4.83	Medium	31	38.75	7	23.33
4.84 – 5.23	High	22	27.50	9	30.0
5.24 – 5.63	Very high	10	12.5	1	3.33
<b>Total</b>		<b>80</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>

(P<0.01) with respect to all the four variables namely achievement motivation, innovativeness, personal control and self-esteem (Table 5).

### Agripreneurial attitude of agripreneurs *vis-à-vis* non-agripreneurs

The distribution of respondents according to their agripreneurial attitude revealed that nearly two-third of the non-agripreneurs had unfavourable to highly unfavourable attitude towards enterprise uptake for income generation (Table 6). Nearly one-fourth of agripreneurs (26.25%) and non-agripreneurs (23.33%) expressed having somewhat favourable attitude. The frequencies of agripreneur farmers were highly skewed towards higher degree of favourable agripreneurial attitude while, the frequencies of non-agripreneur farmers were highly skewed towards unfavourable agripreneurial attitude.

A significant value of Chi-square test (P<.01), showed that both the samples of agripreneurs and

non-agripreneurs were significantly different across the various levels of agripreneurial attitude. Similar findings have been reported by McCline, Bhat, and Baj (2000).

### Conclusion

The study revealed that the agripreneurs and non-agripreneurs differed significantly not only with respect to agripreneurial attitude but also with respect to each of the four agripreneurial attitude variables viz., achievement motivation, innovativeness, personal control and self-esteem.

The findings suggest for inclusion of these dimensions in the curriculum of entrepreneurial education as well as entrepreneurial training and development programmes. At present, in the agricultural entrepreneurship promotion programmes technology component assumes greater significance, while the content, tools and methods for improving soft skills as well as behavioural traits essential for entrepreneurship remain a weak front. Promotion of agribusiness centres and incubation centres should be emphasized to facilitate favourable agripreneurial attitude and willingness among the

**Table 5:** Comparison of Mean Ranks obtained by Agripreneurs and Non-agripreneurs using Mann Whitney U Test (N=110)

Agripreneurial attitude Variables	Mean Rank		Mann-Whitney U	Asymptotic Significance (2-tailed)
	Agri-agripreneurs (n= 80)	Non-agripreneurs (n=30)		
Achievement Motivation	69.92	17.05	46.500	.01
Innovativeness	65.01	30.15	439.500	.01
Personal Control	60.79	41.38	776.500	.01
Self-Esteem	50.47	68.90	798.000	.01

**Table 6:** Level of agripreneurial attitude among agripreneurs and non-agripreneurs (N=110)

Agripreneurial attitude score	Category	Agripreneurs (n=80)		Non-agripreneurs (n=30)		Chi-square value
		Frequency	Percent	Frequency	Percent	
4.56 – 4.87	Highly Unfavourable	1	1.25	10	33.33	50.186**
4.88 – 5.19	Unfavourable	8	10	10	33.33	
5.20 – 5.51	Neutral	21	26.25	7	23.33	
5.52 – 5.83	Favourable	41	51.25	3	10	
5.84 – 6.14	Highly Favourable	9	11.25	0	0	
<b>Total</b>		<b>80</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>	

\*\* Significant at 0.01 level of probability (df=4)

farmers to take up entrepreneurial venture for employment and income generation as well as livelihood security.

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