CHAPTER I
INTRODUCTION

CONCEPT OF DEVELOPMENT

Economic development has become the main concern of governments, economists, administrators and politicians. However, it has become very difficult to define the phrase "economic development" precisely. Initially, development was taken to be economic in nature and hence the word "economic" tended to focus the attention on certain material aspects of human activities, often expressed in financial terms. Further, economic development was defined as "a move towards even more efficient and differentiated methods of supplying people with requirements for survival and improvements." But this tautology has often been questioned and improvements are made from time to time resulting in the enlargement of the scope of economic development. As a result, Black (1966) visualizes the economic development to include increase in productivity, socio-economic equalization, improved institutions and attitudes, a rationally coordinated system of policy measures and removal of undesirable conditions and systems that perpetuate a state of development. Further, Myrdal (1968) opines that economic development is "an upward movement of the entire social system." Hence, in broader perspective, economic development does not merely refer to material acquisition through positive productivity changes, but it engulfs also the whole gamut of social and cultural equity and upgradation of the people and this can be achieved through planned economic development.
SIGNIFICANCE OF AGRICULTURE

In the process of achieving the planned economic development, the problem of strategy has often been unresolved, and this problem equally applies to Indian planning. The focus of attention has been on whether our economic policies should emphasize on industry or on agriculture for achieving economic development. From the end of World War II until the mid-fifties, writings on "economic development" tended to be characterised by an emphasis on industrialization; the agricultural sector was regarded rather as a residual reservoir from which to draw resources, particularly labour, to build up manufacturing and supporting services. In tune with the global trend, the strategy of Indian planning was to encourage industrial development as the mainstay of development and this strategic move of Indian planners was basically influenced by the writings of Mahalanobis (1952), Mahalanobis (1953), and Hirschman (1958).

It is true that there cannot be two opinions about the importance of industrialization in economic development. However, an undue emphasis on industrialization without developing other sectors, especially agricultural sector, leads to a lopsided development. In this regard, Kuznet (1960) observes that there are no cases of successful development of a major country in which a rise in agricultural productivity has not preceded or accompanied industrial development. Hence it is apparent that development in the long run is not likely to occur, if it is tied to either agriculture or industry. Instead, every economy has an
agricultural and non-agricultural sector, and one of the most important aspects of development is the changing complex but always the intimate relationship between the two. Further, Meier (1970) observes: "Economic Development is not to be equated simply with industrialization for several reasons. First, the concentration of a large percentage of production in the primary sector is in itself not a cause of poverty; the cause is the low productivity in agriculture. Whenever the agricultural population is poor, the non-agricultural population serving the agricultural population tends to be relatively small in size and also at low level of living. When the rural section is prosperous, the non rural sector tends to be large and also prosperous. Second, the progress in industrialization is highly dependent upon agricultural development. Without the necessary support of improvements in primary production, the policies of industrialization will be severely handicapped."

Regarding the role of agriculture and its importance in industrial development, the National Commission on Agriculture (1976) opines that there is close interdependence between agricultural and industrial sectors. This is reflected by (a) the supply of raw materials and inputs from agriculture to industry and vice versa; (b) supply of wage goods to the industrial sector, (c) the supply of materials for building up of economic and social overhead in the agricultural sector; and (d) the supply of basic consumption goods to the agricultural population. In this context, Thornton (1975) observes that the development
of agriculture itself in any economy is increasingly seen as a complex issue involving not only technical but also economic, political and social aspects, with the flows of materials and knowledge between agriculture, non-agriculture and the outside world becoming more important. It is also held that agricultural output can be raised rapidly with a little investment having low gestation period in the short run. Sometimes, it is held that agriculture forms one of the most significant infrastructural facilities to build the superstructure in the economy.

From the viewpoint of long run prospects of agriculture, Thornton (1975) observes that the agricultural sector can cope up with the increasingly obvious pressures arising from indigenous population growth, bearing in mind that it will probably remain for the foreseeable future the predominant employer and contributor to the higher standard of living in many countries. In view of this role of agriculture, Mosher (1966) outlines the strategy of agricultural development: "Agricultural development is a social product. It is not the result of the work of farmers alone. It is the result of the activities of farmers and farm families, law makers, engineers, merchants, manufacturers, research workers, teachers and every citizen, who participate in electing public officials and influencing the laws of his country." Thus, agricultural development should accompany industrial development resulting in balanced development to build the superstructure of an economy and also to form a perennial source of survival coupled with higher standard of living.
ENTREPRENEURSHIP: THE KEY ELEMENT

It is clearly discernible that the economic development takes place only through the actions of the people. The crucial action comes from entrepreneurs. As Meier and Baldwin (1967) put it, "...... development does not occur spontaneously as a natural consequence. When economic conditions in some sense are 'right,' a catalyst or agent is needed and this requires entrepreneurial activity. The development or under-development is the reflection of the abundance or scarcity of entrepreneurship in any society." Broadly speaking, entrepreneurs are persons who initiate, organise, manage and control the affairs of a business unit that combines the factors of production to produce goods and services, whether the business pertains to agriculture, industry, trade or profession. Regarding the relationship between entrepreneurship and economic development, Mydral (1968) observes that the lack of entrepreneurship and the low attitude towards work have caused underdevelopment. Hence entrepreneurship has occupied the pivotal position in economic development sidetracking the organization as the fourth factor of production. As Griffin (1949) observes, the chief claim to the pre-eminence of enterprise is simply that "It is the activating one. It is like the spark to the internal combustion engine." Further, Meier (1970) points out that "gap filling" and "input completing capacities" as the unique features of entrepreneurship. Lastly, entrepreneurship also assumes importance for three reasons: (1) Irrespective of supply of
other factors, nothing happens until such factors of production are galvanized into action by an entrepreneur; (2) Any deficiency in other factors can be made up through entrepreneurship; and (3) The rise and decline of nations is positively related to the rise and fall of entrepreneurship.

Therefore, entrepreneurship is the centrifugal force in economic development. The rise and fall in economic development of any nation is associated with the magnitude of entrepreneurial qualities of its people. The higher the level of entrepreneurial behaviour of the people, the higher is the level of development.  

This is the reason why Galbraith (1969) sarcastically observes that "the people are poor because they prefer it that way." As a result, the developing economies have become increasingly aware of the dynamic role played by entrepreneurs in developed countries and their witnessing of economic development basically through entrepreneurship development.

EMERGENCE OF AGRICULTURAL ENTREPRENEURSHIP: THE INDIAN SCENE

It is a popularly held belief that Indian agriculture is rather a way of life. But we find that the Indian agriculture has been shifting towards commercialization, which is defined by Wharton (1965) as a movement from subsistence production to commercial production and from family labour and farm produced inputs to hired labour and purchased inputs. Specifically, the degree of commercialization of Indian Agriculture can be gauged, if one looks at the trends in land utilization, area under food crops
and non-food crops, use of tractors and oil engines, number of tubewells, consumption of electric power, value of inputs, flow of institutional credit and yield per hectare - and these have been presented in Table 1.1 for the period between 1950-51 and 1990-91. If the total cropped area increased by 62.99 per cent between 1950-51 and 1990-91, the gross irrigated area increased by 62.99 per cent indicating the assured supply of water to the farmers, who could be in a position to harp into agricultural ventures. It was also interesting to note that the area irrigated by wells increased by 185.25 per cent during the period giving the hope to dry-land farmers. Another major shift in Indian agriculture has been the cropped area under food crops and non-food crops, which increased by 31.03 per cent and 90.31 per cent respectively during the period indicating positive trend in commercialization.

The most discernible evidence of commercialization of Indian agriculture may be witnessed in the adoption of agricultural technology consisting of tractors, oil engines and tubewells. The number of tractors increased from 0.09 lakh in 1950-51 to 14.68 lakhs in 1990-91 representing an increase of 163.11 times during the period and the cropped area per tractor stood at 122.69 hectares in 1990-91 as against 14,654.44 hectares in 1950-51. The number of oil engines, which stood at 0.66 lakh in 1950-51 increased to 49.00 lakhs in 1990-91 showing an increase of 74.24 times over 1950-51. One oil engine was available for 1998.33 hectares in 1950-51 as against 36.76 hectares in 1990-91.
### TABLE 1.1
COMMERCIALIZATION OF INDIAN AGRICULTURE

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<tbody>
<tr>
<td>1. Total Cropped Area (Million hectares)</td>
<td>131.89 (1.00)</td>
<td>152.77 (1.16)</td>
<td>165.79 (1.26)</td>
<td>172.63 (1.31)</td>
<td>180.11 (1.37)</td>
</tr>
<tr>
<td>2. Gross Irrigated Area (Million Hectares)</td>
<td>22.56 (1.00)</td>
<td>27.98 (1.24)</td>
<td>38.20 (1.69)</td>
<td>49.78 (2.21)</td>
<td>59.33 (2.63)</td>
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<tr>
<td>3. Irrigated by Wells (Million Hectares)</td>
<td>8.95 (1.00)</td>
<td>9.73 (1.09)</td>
<td>14.15 (1.58)</td>
<td>20.25 (2.26)</td>
<td>25.53 (2.85)</td>
</tr>
<tr>
<td>4. Area Under Food Crops (Million Hectares)</td>
<td>97.32 (1.00)</td>
<td>115.58 (1.19)</td>
<td>124.32 (1.28)</td>
<td>126.67 (1.30)</td>
<td>127.52 (1.31)</td>
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<tr>
<td>5. Area Under Non-food Crops (Million Hectares)</td>
<td>20.53 (1.00)</td>
<td>26.71 (1.30)</td>
<td>30.49 (1.49)</td>
<td>30.04 (1.46)</td>
<td>39.07 (1.90)</td>
</tr>
<tr>
<td>6. Tractors (lakhs)</td>
<td>0.09 (1.00)</td>
<td>0.31 (3.44)</td>
<td>1.43 (15.88)</td>
<td>5.20 (57.77)</td>
<td>14.68 (163.11)</td>
</tr>
<tr>
<td>7. Cropped Area per Tractor (Hectares)</td>
<td>14654.44</td>
<td>4928.06</td>
<td>1159.37</td>
<td>331.98</td>
<td>122.69</td>
</tr>
<tr>
<td>8. Oil Engines (Lakhs)</td>
<td>0.66 (1.00)</td>
<td>2.30 (3.48)</td>
<td>NA</td>
<td>28.10 (42.57)</td>
<td>49.00 (74.24)</td>
</tr>
<tr>
<td>9. Cropped Area per Oil Engine (Hectares)</td>
<td>1998.33</td>
<td>664.22</td>
<td>-</td>
<td>61.43</td>
<td>36.76</td>
</tr>
<tr>
<td>10. Tube Wells (Lakhs)</td>
<td>0.21 (1.00)</td>
<td>2.00 (9.52)</td>
<td>16.20 (77.14)</td>
<td>43.24 (205.90)</td>
<td>91.00 (433.33)</td>
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<tr>
<td>11. Cropped Area per Tube Well (Hectares)</td>
<td>6280.48</td>
<td>763.85</td>
<td>102.33</td>
<td>39.92</td>
<td>19.79</td>
</tr>
<tr>
<td>12. Consumption of Power (KWH per 1000 Hectares)</td>
<td>1.50 (1.00)</td>
<td>5.50 (3.67)</td>
<td>27.0 (18.00)</td>
<td>84.00 (56.00)</td>
<td>322.60 (215.06)</td>
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<tr>
<td>13. Consumption of Chemical Fertilizers (Lakh Tonnes)</td>
<td>0.69 (1.00)</td>
<td>2.92 (4.23)</td>
<td>21.77 (31.55)</td>
<td>55.16 (79.94)</td>
<td>125.67 (182.13)</td>
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<tr>
<td>14. Value of Inputs (Rs. Crores)</td>
<td>NA</td>
<td>1850.00 (1.00)</td>
<td>4089.00 (2.21)</td>
<td>15247.00 (8.24)</td>
<td>38713.00 (20.93)</td>
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<tr>
<td>15. Value of Inputs per Hectare of Cropped Area (Rs.)</td>
<td>-</td>
<td>121.09 (1.00)</td>
<td>246.64 (2.04)</td>
<td>883.21 (7.29)</td>
<td>1352.00 (17.75)</td>
</tr>
<tr>
<td>16. Yield Per Hectare (kgs.) a) Food Crops</td>
<td>522.00 (1.00)</td>
<td>710.00 (1.36)</td>
<td>872.00 (1.67)</td>
<td>1023.00 (1.96)</td>
<td>1382.00 (2.65)</td>
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<tr>
<td>b) Non-Food Crops</td>
<td>3552.00 (1.00)</td>
<td>4994.00 (1.41)</td>
<td>5057.00 (1.42)</td>
<td>5802.00 (1.63)</td>
<td>7399.00 (2.08)</td>
</tr>
<tr>
<td>17. Institutional Credit (Rs. Crores)</td>
<td>24.20 (1.00)</td>
<td>214.30 (8.86)</td>
<td>885.20 (36.58)</td>
<td>3389.10 (140.04)</td>
<td>8847.60 (365.60)</td>
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### 18. Index of Agricultural Production (1969.70)

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of Agricultural Production</th>
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<tbody>
<tr>
<td>1969.70</td>
<td>58.50</td>
</tr>
<tr>
<td>1970.70</td>
<td>86.70</td>
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<tr>
<td>1971.70</td>
<td>111.50</td>
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<tr>
<td>1972.70</td>
<td>135.3</td>
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<td>1973.70</td>
<td>142.47</td>
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(Base: Triennium Ending 1969.70)

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**Notes:**
1. N.A. denotes Not Available.
2. Figures in brackets indicate increase in number of times over the base year, 1950-51 excluding serial numbers 7, 9 and 11.

**Sources:**

The number of bore wells stood at 91.00 lakhs in 1990 as against 0.21 lakh in 1950-51 representing an increase of 433.33 times over 1950-51. In 1990-91 each tubewell could cater to 19.79 hectares as against 6280.48 hectares in 1950-51. Electric power forming the infrastructural facility for technology adoption in agriculture was consumed to the tune of 322.60 Kwh per 1000 hectares reflecting the energy intensity by 214.07 times over 1950-51. Another interesting feature of commercializing Indian Agriculture was the use of chemical fertilizers which increased from 0.69 lakh tonnes in 1950-51. Similarly, the value of inputs increased by 19.93 times between 1950-51 and 1990-91 and the input value per hectare increased from Rs. 121.09 to 1950-51 to
Rs. 2149.41 in 1990-91 reflecting the investment proneness by 16.75 times over 1950-51. The institutional credit, which stood at Rs. 24.20 crores in 1950-51 increased to Rs. 8847.60 crores in 1990-91 resulting in an increase of 364.60 times over 1950-51.

The impact of all these changes has been on productivity of Indian agriculture. For food crops, the yield per hectare increased from 522 Kgs in 1950-51 to 1382.00 Kgs in 1990-91 resulting in the increase of 1.65 times over 1950-51 and similarly, for non-food crops, the yield per hectare stood at 7399 Kgs in 1990-91 as against 3522 Kgs in 1950-51 showing an increase of 1.10 times over 1950-51. The main outcome of all these changes resulted in increased index of agricultural production from 58.50 in 1950.51 to 142.47 in 1990-91 reflecting an increase of 143.57 per cent over 1950-51. All these changes indicate the changing character of Indian agriculture from the status of way of living to commercialization and in this process, we witness the under-currents of agricultural entrepreneurship.

NEED FOR THE STUDY

In spite of increasing trend of commercialization in Indian agriculture along with the emerging entrepreneurial ethos, the current thinking in India is rather narrow. In the words of Nandapurkar (1982), "Although all farmers are self-employed, we have not yet recognized that the progress of farming depends on the entrepreneurship behaviour of these farmers. We have seldom thought of farmers as entrepreneurs."
In this regard Akhouri and Bhattacharjee (1979) remark: "Scholars, planners and administrators have attempted to describe the characteristics of entrepreneurs. Some of them have conducted empirical studies to establish entrepreneurial characteristics, others have used planned observation, but most of them have made casual observation." Specifically, Gaikwad (1978) observes: "In India, today, the term entrepreneurship appears to connote a much restricted meaning. It covers only a limited sphere of enterprising endeavours. Here, the thinking generally veers round efforts, which result in establishing and running factories and industrial enterprises alone. Moreover, there is a marked tendency to relate it only to operations which excell a particular size. This narrow view of the concept, perhaps, reflects the preponderance of values nurtured by urban white-collar class in this society."

It is often not adequately recognized that the process of transformation from the rural and agricultural society to industrial society, would have to cover all sizes, shapes and types of economic activities. The belief that even an illiterate and semi-literate person could also play entrepreneurial role, does not seem to have covered enough ground as yet. Perhaps because of the lingering influence or values nurtured by the urban elite. Hence, Moulik and Rao (1979) plead that in order to contribute to the development of entrepreneurs, a scientific identification of characteristics contributing to entrepreneurial personalities, devising mechanism to train such people on these
dimensions, evolving strategies to initiate and motivate them to develop entrepreneurial qualities, testing them for their entrepreneurial propensity and training them are urgently needed to promote entrepreneurship among people. However, the attention so far given to entrepreneurial development is limited only to self-employment schemes under mass-oriented poverty alleviation programmes as political gimmicks and to entrepreneurship development programmes for small scale industrialists reflecting the urban and semi-urban orientation.

The studies relating to agricultural entrepreneurship conducted so far either relate to small farmers or migrated farmers with an emphasis on their socio-economic background. In addition, a number of studies on agricultural activities revolving around adoption of farm practices, supply and production response to changes in expected prices and economic efficiency have been conducted and these studies have resulted in a piecemeal approach to the study of agricultural entrepreneurship. And most of these studies have been conducted by ignoring the different components of entrepreneurial behaviour of agricultural farmers. Especially, the entrepreneurial behaviour of farmers, who convert a dry land into irrigable land using ground water by digging the wells or using river water by installing the irrigation pump sets to grow the food crops like ragi, jowar and paddy and commercial crops like sugarcane, cotton, banana, tobacco, turmeric and taking up the allied activities like dairying, sericulture, poultry and fishery has not been studied. Hence, the present study was
designed to fill up this lacunae in the arena of agricultural entrepreneurship.

CHAPTERIZATION

The chapterization scheme of the study consists of the following:

Chapter I introduces the topic with the enlarged vision of development denoting economic, social and cultural equality. It also brings out the significance of agriculture in economic development along with the role of industry. Then, it highlights entrepreneurship as the key element in the development process. It also brings out the emergence of agricultural entrepreneurship in the Indian scene. Further, it covers the need for the study along with the scope of the study.

Chapter II envisages the concept, source and characteristics of entrepreneurship along with a brief analysis of empirical evidences on agricultural entrepreneurship.

Chapter III highlights the objectives and locale of the study. It also brings out the procedure adopted in the selection of the sample respondents. Then, it portrays the selection of variables, profile of the respondents and also the statistical tools along with the limitations of the study.

Chapter IV highlights the entrepreneurial behaviour of the respondents in the background of variables and tools used in the study.
Chapter V brings out a summary of conclusions and offers suggestions for an effective agricultural entrepreneurship development in the future.

REFERENCES


