CHAPTER 1
INTRODUCTION

1.1 Entrepreneurship Ecosystem – A review

Over the years, there have been several attempts to define entrepreneurship. The more common descriptions of entrepreneurship often relate to the functional role of entrepreneurs and include coordination, innovation, uncertainty bearing, capital supply, decision making, ownership and resource allocation (Friijjs et al. 2002) [1].

From the perspective of functional aspects a more precise definition was provided by Wennekers and Thurik (1999) [2]:

"...the manifest ability and willingness of individuals, on their own, in teams within and outside existing organizations, to perceive and create new economic opportunities (new products, new production methods, new organizational schemes and new product-market combinations) and to introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form and the use of resources and institutions."

Entrepreneurship is, hence, a behavioral expression of a person and entrepreneurs typically exhibit it only during a certain phase of their career (Carree and Thurik, 2002) [3].

Entrepreneurship is observed to be a function of knowledge and flexibility, two factors that have clear competitive advantage in an increasingly globalized economy. The radical shift in industry structure towards more decentralization that OECD countries underwent in the mid-1970s and the early 1990s is one indicator of this development. Rapid technological innovation and the intense global competition resulting from globalization and economic
liberalization have validated the assumption that fostering entrepreneurship means fostering a country's competitiveness.

The Entrepreneurship Ecosystem refers to the elements – individuals, organizations or institutions – outside the individual entrepreneur that are conducive to, or inhibitive of, the choice of a person to become an entrepreneur, or the probabilities of his or her success following launch. Organizations and individuals representing these elements are referred to as entrepreneurship stakeholders. Stakeholders comprise entities that have an interest, actually or potentially, in there being more entrepreneurship in the region. Entrepreneurship stakeholders may include government, schools, universities, private sector, family businesses, investors, banks, entrepreneurs, social leaders, research centers, military, labor representatives, students, lawyers, cooperatives, communes, multinationals, private foundations, international aid agencies, and the like.

In order to explain or create sustainable entrepreneurship, one isolated element in the ecosystem is rarely sufficient. In regions which have extensive amounts of entrepreneurship (e.g., Ireland, Israel, Silicon Valley, Route 128, Iceland, etc.) many of the ecosystem elements are strong and typically have evolved more or less simultaneously. Similarly, the formation of these ecosystems suggests that governments or societal leaders who want to foster more entrepreneurship as part of economic policy must strengthen several such elements simultaneously.

Isenberg (2010) [4] describes the environment in which entrepreneurship tends to thrive. Drawing from examples from around the world, the article proposes that entrepreneurs are most successful when they have access to the human, financial and professional resources they need, and operate in an environment in which government policies encourage and safeguard entrepreneurs. This network is described as the entrepreneurship ecosystem. There are several key conditions that typically define a healthy ecosystem. The ecosystem:

- is tailored around its own unique environment
- operates in an environment with reduced bureaucratic obstacles in which government policies support the unique needs of entrepreneurs and tolerate failed ventures
actively encourages and invites financers to participate in new ventures, but access to money isn’t without barriers for those planning new business ventures

- is reinforced, not created from scratch, by government, academic or commercial organizations

- is relatively free from, or is able to change, cultural biases against failure or operating a business

- promotes successes, which in turn attract new ventures

- often is supported by dialogue among various of the entrepreneurship stakeholders

### 1.2 Relationship between Entrepreneurship and Economic Growth

#### 1.2.1 Theoretical Evidence

The entrepreneur has been a key factor in almost all production, distribution and growth theories. The role of entrepreneurship as the principle driving force of economic growth is explicit in Joseph Schumpeter's theory. According to Schumpeter, "Everyone is an entrepreneur when he actually carries out new combinations”. Finding these new combinations is a process of entrepreneurial innovation that will drive economic development. These activities of creating new combination is nothing but devising better ways to meet existing demand or create new products, in the process making current products obsolete. The venture of the innovative entrepreneur will, consequently, grow through the dual process of taking market share from existing players and increasing overall demand for the products offered in the entire market. Thus, the process of creative destruction is driven by conscious entrepreneurial efforts to change market dynamics and can be crucial for additional innovations and profit possibilities. Based on this concept of creative destruction, Schumpeter formulated his well-known theory of long waves of business cycles and economic growth. Business cycles are observed as the result of innovation, which consists of the generation of a new concept and its implementation in a new product, process or service, leading to the positive growth of the national economy, the increase of employment rates, and creation of profit for the innovative venture (Schumpeter and others 1911) [5].
It is accepted widely that developing economies grow through the accumulation of human and physical capital and growth in specialization. Once an economy has entered the industrialized phase, a qualitative shift in the key drivers of economic growth occurs. In advanced industrial economies, the process of technological innovation and collective knowledge based foundation brought about by R & D efforts of firms seems to be the key (Peretto 1999) [6].

Schmitz (1989) [7] presents a different model in which entrepreneurial actions are a key determinant of productivity and growth. In Schmitz model the focus is on the particular role of imitative activities of entrepreneurs. This focus is derived from the growth experience of several economies, indicating that it is less the innovating entrepreneur as suggested by Schumpeter than the imitating entrepreneur who contributes to economic growth. Imitating entrepreneurs are entrepreneurs who observe and imitate existing activities and processes and thereafter put them into practice. In this process creating knowledge based foundation that Schmitz characterizes as learning by implementing.

1.2.2 Evidence of empirical works on entrepreneurship

There are various approaches in the empirical literature on entrepreneurship using different measures of entrepreneurial activity. For instance, while one approach measures entrepreneurship in terms of the share of economic activity accounted by SME; other studies use data on self-employment, the number of competitors for a market or new start-ups as an indicator of entrepreneurial activities in a region (Carree & Thurik 2002 [3]; OECD 1998 [8]).

Together with recent studies on OECD countries, the various observations of the Global Entrepreneurship Monitor (GEM), 2012 [9] present one of the most important sources of links between entrepreneurial activity and consequent economic growth. The GEM is a research program launched in 1999 that aims at providing annual assessments of entrepreneurship at the national level. GEM represents one of the best possible sources of data on entrepreneurship suitable for cross-country comparison. The GEM formula for measuring national entrepreneurial activity is based the percentage of people among a country's work force who are either actively involved in starting a new company and/or manage a business venture less than 42 months old.
Caree and Thurik (1998) [10], who examine how the participation of small firms affects industry output growth, have also established positive correlation between this measure of entrepreneurship and growth. Basing their study on a sample of fourteen manufacturing companies in thirteen European nations, the authors enquired if a higher share of small business in the early 1990s led to higher output growth in subsequent years particularly in the area of European manufacturing. The results of the study show that industries with a high share of smaller enterprises compared to the same industries in other countries had better output growth during the subsequent years.

This evidence clearly indicates an increase in the importance of entrepreneurship as core driver of the economy, frequently referred to as the transformation from a “managed” to an “entrepreneurial" economy (Thurik and Wennekers 2001 [10]; Frijs et al. 2002 [1]).

The paradigm shift to an “entrepreneurial economy” occurred in the period between 1970s and early 1990s. This phenomenon becomes quite evident from the fact that industries began shifting activity, primarily economic, from large enterprises to smaller companies, in particular to small and medium-sized enterprises (SMEs).

The recent trend witnessed is that the numbers of SMEs are increasing and larger firms are outsourcing to them in greater numbers. This is nothing but direct evidence that flexibility and knowledge are the dominant factors impacting production. This is because of a paradigm shift brought about by technology and the intense global competition.

SMEs seem to be better equipped to the demands of globalization, since they seem to possess higher flexibility and are motivated to innovate. Furthermore, they are the perfect channel of new venture creation for aspiring individuals with entrepreneurial ambitions (Audretsch and Thurik 2001 [11], Carree and Thurik 2002 [3]).

In addition to this, the strategies adopted by large established firms in outsourcing seem to favor the novel concept of “intrapreneurship” (entrepreneurial activity within an existing organization). “Intrapreneurship” is considered vital to competitive success (OECD 1998).
The increasing relevance of entrepreneurship derived from these developments is best expressed by Michael Porter: "Invention and entrepreneurship are at the heart of national advantage" (Porter, 1990) [12].

1.2.3 McClelland’s studies on entrepreneurship

Individuals are the primary actors of entrepreneurial activity. The starting point of any start-up or entrepreneurial venture originates from a single person. Globally, a lot of importance is given to motivate individual individuals and kindle their entrepreneurial aspirations. One of the widely recognized theoretical foundations for the so called traits approach is the studies done by the Harvard psychologist McClelland David (1961) [13].

McClelland is among the widely read academicians who have studied the idea of entrepreneurship from a psychological point of view. This approach to entrepreneurship focuses upon the personality traits of an entrepreneur. McClelland highlights the importance of the motivational drive of the entrepreneur. He shows that entrepreneurial aspirations are driven by the need for personal achievement. He also points out that, irrespective of variations in economic climate, entrepreneurs with sufficient motivation almost always find ways to achieve maximum economic output. He outlines ten traits or entrepreneurial strengths, for identifying and further strengthening of entrepreneurial potential. These are observed to be consistent across geographical boundaries:

1. opportunity seeking and initiative;
2. risk taking;
3. demand for efficiency and quality;
4. persistence;
5. commitment to the work contract;
6. information seeking;
7. goal setting;
8. systematic planning and monitoring;
9. persuasion and networking and

10. independence and selfconfidence

McClelland's research has inspired a plethora of studies along similar vein until now. Some studies, though have contested his ideas and recent studies have laid more emphasis on cultural ecosystems and their influence on entrepreneurship development.

Still, McClelland ideas remain as the baseline reference for the traits approach. For example, Muller and Thomas (2001) [14] in their study on culture and entrepreneurial potential suggest that some cultures are more conducive to entrepreneurial traits than others, but they do not question the basic assumption that entrepreneurial qualities are similar even among different cultures.

1.2.4 The Global Entrepreneurship Monitor

Global Entrepreneurship Monitor (GEM) studies by the Kauffman Center for Entrepreneurial Leadership, Babson College and London Business School present several factors affecting different levels of entrepreneurship. They are, identifying opportunity, respect for entrepreneurs as a part of culture, sound policies and robust business infrastructures, focus on educational development, and demographics, particularly people between the ages of 25 to 45, who are most likely to start a venture.

Although venture capital is seen as growing source of capital, the financial support provided by other local sources is often several times that number. National, socio-political and economic forces and entrepreneurial support structures form the core foundation upon which many edifices of ventures are continuously being built.

The Total Entrepreneurial Activity Index combines two factors. They are, the proportion of population currently attempting at creating a new venture and the proportion of new ventures that have survived the initial start-up phase. In most countries, especially developing nations, entrepreneurs have to survive extreme financial, cultural and bureaucratic constraints. When these groups of people migrate to a developed country, the strong infrastructure, cultural and non-bureaucratic climate give them a definitive advantage. This is quite evident by the fact
that there are several successful Indian and Chinese entrepreneurs in Silicon Valley, California (United States).

The GEM 2002 study estimates that more than 400 million adults around the world are engaged in new venture creation. Based on a survey of 37 countries, which contribute to more than 60 per cent of the world’s population, GEM has several important insights. Close to seventy percent of the entrepreneurs are ‘opportunity-based’ and the rest are ‘necessity-based’–that is, are trying to start businesses because are either out of jobs or foresee no job opportunities. The most interesting observation is that most of the new ventures are typically replication of existing business ideas, not original innovations. The regions with such heightened entrepreneurial activity exist in India, China and Korea, followed by Australia, Canada, New Zealand, Israel and some European countries. The developed Asian countries of Japan, Taiwan and Singapore are at the bottom of the rankings. The demographic profile points to about two-thirds of men and rest are women. The predominant age group is 25-44.

1.2.5 Developmental initiatives in developing countries

One of the most important programs established to promote entrepreneurship in developing countries is EMPRETEC. It was founded in 1988. It is program by United Nation that helps build entrepreneurial capabilities and promote the growth of SMEs who could compete internationally. This program was developed as a result of research that highlighted the importance of the individual entrepreneur, especially his behaviour (EMPRETEC 2004 [15]; EDECU 2002 [16]). In simple terms, the program identifies a set of promising entrepreneurs, provides them with training that results in enhanced entrepreneurial behavior and business skills; assist them in locating and using business services and capital for their new ventures; help develop a network of beneficial links with bigger national and foreign companies; and also establish support structures that help in the growth of their ventures, nationally and globally. This program lays strong emphasis on building active networking among public/government institutions, private business groups as well as between national EMPRETEC programs and other program aimed at developing entrepreneurship at the national/regional level. Since EMPRETEC’s inception, programs have been started in more than 25 countries not including the 26 National Centers operating in Brazil, assisting several thousand entrepreneurs through local support centers.
The ETW (Entrepreneurship Training Workshop) focuses on motivating the entrepreneur and strengthening his talents and not providing traditional business oriented skills. After a focused selection process involving interviews, the selected candidates undergo a workshop in which identifies their strengths and weaknesses. This workshop typically lasts for two weeks. The success of the program is very clear and evident, as shown by direct feedback and written evaluations. As a result of the workshop, more than 85 per cent of the candidates experience a significant change in personal and business attitudes. Another vital result of this training is that it creates bonds that are helpful in business growth and in builds a base of skilled, committed entrepreneurs, who make sure subsequent stages are successfully implemented. Further support to EMPRETEC workshops participants (called empretecos) is provided through workshops on managing change, marketing, quality management, productivity, accounting, and financial management.

EMPRETEC offers a serious commitment to the cause of strengthening SMEs in developing countries. The EMPRETEC has produced substantial results throughout its several years of operation. This has been made possible due to adherence to a tried and tested model. In developing countries, an increase in the number of entrepreneurs provides the stimulus for an invigorated developmental process. This generates a robust business climate assuring lasting sources of new employment. A number of markers benchmarking the performance of SMEs run by empretecos, such as the creation of new SMEs, their survival rate, and sales indicate the effectiveness of the EMPRETEC approach.

A recent study of the impact of EMPRETEC Brazil provides a compelling example indicating the success of this particular ‘traits’ approach. The actual impact of the EMPRETEC program in Brazil, which has been operating for more than 10 years, was evaluated in 2002. The results showed that the level of entrepreneurship among Brazilian participants in the EMPRETEC program is more than that of the overall population. The actual figures being 40.4 per cent compared to 14.2 per cent. It also became clear that ventures led by ‘empretecos’ survive and achieve better economic performance.
1.2.6 Entrepreneurship - Indian scenario

The global entrepreneurial organization TiE, and KPMG, 2007 [17] in India, conducted a study measuring the ‘Entrepreneurial Confidence Index’ in 10 states of India (2007). Based purely on the perceptions of the entrepreneurs, rather than any factual analysis of the factors, the study aimed to identify the elements involved and benchmark the development of a conducive entrepreneurial ecosystem across India. The conclusions have thrown up the general confidence in the Indian economy and the belief that ‘things are moving in the right direction’. Entrepreneurs are bullish about the ecosystem. Expectations of entrepreneurs from the states, generally considered to be leaders in entrepreneurship, expected more from their ecosystem and thereby held the state to a higher standard. The study reinforced the widely held assumptions that Risk Capital is still not available in the desired amounts; and governance issues and local environment in the ecosystem get failing grades.

The changed business climate of India can be judged from the fact that the country is considered to be amongst the three top investment destinations. According to a recent report by Evalueserve research, over 44 U.S. based VC firms are now seeking to invest heavily in startups and early-stage companies in India.

The various elements of the ecosystem for commercialization are beginning to come together, from venture capitalists, government schemes and incubators, academia industry linkages, and emerging clusters and support to rural economy. Society for Innovation and Entrepreneurship by IIT Bombay, Foundation for Innovation and Technology Transfer by IIT Delhi, Indian Institute of Sciences’ Society for Innovation and Development, and Technology Development Board of DST are examples of fund sources that aim to fuel innovation, RandD, and hopefully trigger entrepreneurship. The Stanford India Biodesign Programme signifies a government-to-government level collaboration between the U.S. Science and Technology Ministry and the Ministry of Science in India to boost medical technology innovation in India. An ecosystem is a system of interconnected stakeholders - institutions and individuals - whose close linkages enable efficient production, diffusion, and use of new and economically useful knowledge.
Study by National Knowledge Commission

The National Knowledge Commission (NKC) [18] has conducted a detailed study on Entrepreneurship in India in the year 2008. According to this report, a successful entrepreneurship ecosystem is the function of a number of factors working in tandem. Key ‘Entrepreneurial Triggers’ are: Individual Motivations, Socio-cultural Factors, Access to arly-Stage Finance Education and Business Environment.

The prominent motivation triggers are independence, market opportunity, family background, new idea, challenge and dream. Motivation Triggers vary according to parameters such as region, gender, age, family background, and work experience. The study has found that challenge is the principal Motivation Driver. One of the key findings is that 99.4% of the entrepreneurs interviewed did not want to be in a routine job, which propelled them towards starting a venture. Family support is of crucial significance, with 74% of the entrepreneurs admitting to receiving it.

63% of the entrepreneurs interviewed were self-financed, while other sources included banks, venture capital (VC), angel investors and state finance corporations. Among those financed by banks, a majority who approached banks (61%) did receive bank finance. Yet there is a widely held perception among entrepreneurs that it is very difficult to get bankloans at the start-up stage while becoming comparatively easier at the growth stage.

Education is believed to be a key success driver with over 95% of entrepreneurs believing that education is a key trigger to evoke entrepreneurial inclinations. 98% of the entrepreneurs are graduates. However, only 16% chose a specific sector as a result of their educational background.

Employee hiring and retention was felt as one of the major challenges. More than a third of the entrepreneurs faced problems in accessing as well as retaining employees generally.

50% of the entrepreneurs experienced difficulties while seeking statutory clearances and licences. Another hurdle was in accessing reliable information on registration procedures, finance and other schemes. 56% claimed that the paucity of quality infrastructure – especially transport, power, and telecommunications – was a critical barrier.
1.3 Rationale of Present Research

Consistent growth in entrepreneurial activity is one of the key objectives of any government. Given the current challenges faced by most countries to ensure growth in jobs, increase in entrepreneurship activity leads to wealth creation and economic growth. Further, more businesses mean a higher level of job creation, which is of interest to policy makers. The decision to become an entrepreneur is driven by both intrinsic and extrinsic factors. It is relatively easier to understand the impact of factors intrinsic to the business like demand and supply, competition, availability and cost of raw materials, manpower, cost of finance etc. If many of these factors are favourable, the chances of people venturing into business are high. However, the impact of environmental factors is not a well understood area. Documented research acknowledges the role of external factors, often referred to as the Ecosystem, but does not provide deep reflections on the influence of such factors.

It is evident that there is a wide scope to study the impact of Ecosystem factors on the decision to take up entrepreneurship.

1.4 Motivation and Problem Statement

India in general and Tamil Nadu in particular is blessed with abundant natural resources, geographical advantages and intellectual capital, some of the key factors that can favourably impact entrepreneurship. Over the years, these resources have been creatively utilized by countless entrepreneurs to form new ventures that changed the socio-economic landscape of the region.

Across the world, there is a need to improve the ecosystem to foster greater entrepreneurship success. For instance, in the United States of America, the Silicon Valley success story in terms of promoting new business ventures has been attributed to the conducive set of environmental factors. India is yet to become a developed country, but is moving ahead towards attaining the status of an economic superpower. The contribution of entrepreneurship has been a key element of India’s growth story and it is expected to be so in the coming years.

There is a paucity of research in understanding regional ecosystem factors influence entrepreneurship success, especially with reference to India and Tamil Nadu.
The researcher is a serial entrepreneur with several years of experience in overseeing startup ventures right from the incubation stage, supporting such ventures in terms of funding and providing advisory support and monitoring their performance at various stages. Further, the researcher also had the opportunity to work with startup ventures in various countries, thus having a deep insight into the factors that drive entrepreneurial success. Backed by his experience, the researcher is of the view that ecosystem factors play a significant role in promoting entrepreneurial activity.

The researcher is of the strong belief that research work with the objective to understand the influence of ecosystem factors on entrepreneurial success would benefit various stakeholders – government, sellers, buyers, banks and financial institutions, the general public and the future entrepreneurs.

The above factors inspired the author to undertake this research work.

This research work has identified the following problems:

1. What are the critical factors that form the support for an entrepreneur?

2. What are the support factors required by a potential entrepreneur to become an entrepreneur?

3. What are the support systems required by young potential entrepreneurs and mature entrepreneurs?

4. What are the differences between potential and existing entrepreneurs in terms of support system factors?

1.5 Objectives of the study

The following objectives are identified with respect to Entrepreneurship Ecosystems.

1. To identify the critical factors that forms the support for an entrepreneur.

2. To analyze the support required by the potential entrepreneur to become an entrepreneur.
3. To examine the support systems required by young potential entrepreneurs and Startup entrepreneurs.

4. To examine the differences between potential and existing entrepreneurs in terms of support system factors.

1.6 Limitations of the study

The primary research data was collected from potential and successful entrepreneurs. While due care was taken to obtain accurate responses, the subjective element in responses could not be fully eliminated.

In an ecosystem, several stakeholders contribute to the success or failure of the ecosystem. They include family of entrepreneurs, angel investors, venture capitalists, government bureaucrats etc. The study did not cover all the stakeholders.

1.7 Organization of the thesis

The first chapter deals with the introduction, rationale of the study, scope of the study, objectives of the study, hypotheses and limitations of the study.

The review of literature is presented in the second chapter.

The third chapter deals with the conceptual framework of entrepreneurial ecosystem.

The fourth chapter deals with sampling procedure, sample size and statistical techniques.

The influence of the ecosystem variables and their interdependence are presented in the fifth chapter.

The sixth chapter comprises of summary, discussions, conclusion, usefulness of study and further research.