

Enterprising a Greener Tomorrow: Role of Ecopreneurs

Abstract

Entrepreneurship is acknowledged to be the engine of economic growth. Theoretically, a Factor of Production of probably the paramount importance in establishing effective co-ordination among the other factors to achieve determined objectives. With changing times this list of objectives has shuffled in order of priority also, additions and subtractions have been made. Environmental responsibilities of entrepreneurs and sustainability have come as the most important objectives. With the finiteness of resources, increasing population, demands and criticality of ecological security it is the need of the hour to reconfigure of the existing entrepreneurial models and practices towards enterprising a greener tomorrow.

In this research paper we shall explore the different dimensions of ecopreneurship - scope and barriers. We shall look at an Ecopreneur as an individual who seeks to transform a sector towards sustainability starting in that sector with green logic, design and processes with a commitment to adhere to the same either for purely technical, commercial or social reasons. Still in its infancy, the incentive of transiting from being an entrepreneur to an Ecopreneur has needs to be encouraged by the Government. We shall also ponder over policies that could be introduced to foster ecopreneurship. The relation of man with nature has been a take-take relation. It's time for building a mutually sustainable relationship and the role of an Ecopreneur is crucial in this world where growth stands next to nothing. After all, interdependence is paramount independence!

Key words entrepreneurs and sustainability, ecological security, enterprising a greener tomorrow, ecopreneurship - rationale, scope and barriers.

Introduction

Traditionally environmental business management has focused its attention on how and why existing firms can become greener. It has spent substantial amount of time and effort examining the tools that can be used to make firms more sustainable and environmentally responsible; attempting to classify and categorize the responses of existing firms to the environmental and sustainability agendas; and in identifying the barriers and triggers that make firms "Go Green"(John Stuart) . However, the field of green management has lately begun to broaden its research and teaching agenda. In recent years, Greener Management International(Walter Wehrmeyer) has helped to lead this development, by examining such issues as the links between sustainability and innovation; the role of enterprises; the importance of sustainability in strategic procurement; environmental management in particular industries; and many other areas. What role do entrepreneurial individuals have to play in the adoption of more sustainable business practices?

It is now also time to pay more attention to the role that entrepreneurs can play in the move to a more sustainable economic and commercial system. In this special edition, we examine the nature of green entrepreneurship and associated issues.

Sustainability, Greening And Ecopreneurship

The adoption of environmentally responsible business practices can, conceivably open up an additional range of opportunities for entrepreneurs. The move to a sustainable framework provides numerous niches that enterprising individual and firms can successfully identify and service. These include, among other things, the development of new products and services, improvements to the efficiency of existing firms, new methods of marketing and the reconfiguration of existing business models and practices.

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However Green important because it provides new opportunities but also for nimble first Entrepreneurship is not only movers who identify and exploit such opportunities but also because it has the potential to be a major force in the overall transition to more sustainable business paradigm. In a market-based economy, entrepreneurs plays a very critical and important role in the eventual adoption of green business practices by the wider business community through the lead role that they provide to other firms. By demonstrating the economic benefits that come from being greener, ecopreneurs act as a 'pull' factor that entices other firms to proactively 'Go Green', in contrast to the 'push' factors of government regulation and stakeholder or lobby-group pressure.

Defining "Ecopreneurship"

The greening of management and ecopreneurship is a relatively new phenomenon. It is less well known, less researched and more poorly understood than entrepreneurship. Thus, in the beginning, it is important to define ecopreneurship. A definition may not be a complete one but it at least provides us with a starting point.

There are two questions that come up to our minds.

First, what is "Ecopreneurship"?

Second, how is it different from "Conventional Entrepreneurship"?

We shall take into consideration both these approaches in order to arrive at a conclusion.

Who is an Ecopreneur?

Different writers and researchers have variously referred to the concept of "Ecopreneurship". **Isaak**(Isaak, 1999)(Isaak, R) for instance describes "Ecopreneurship" as businesses founded on the principles of sustainability. **Schumpeter** (Schumpeter, 1980)(Schumpeter, J. A) and **Larson** (Larson, 2000)(Larson, A. L.) also used the term 'creative destruction' to refer to the act of transforming the technology, products and markets through sustainable innovations and the role such innovations play as a fundamental force for change in business and society. The individuals or group of people who serve as the agents that bring about these changes have also been referred to as Ecopreneur, Enviro-preneurs and Green entrepreneurs by researchers interested in the idea of entrepreneurship (Larson, 2000)(*ibid*). In any of the different ways that the concept has been described, a common theme that resonates is the fact that environmental entrepreneurship connotes the idea of developing a business while at the same time demonstrating a concern for ecological and social needs of present and future generations (Schaper, 2002)(Schaper, M.).

To summarize we may bring out **seven** attributes of an Ecopreneur

- a) The desire to devise better ways of carrying out business operations in the environment with high regard for sustainable resource use; and
- b) The possibility of an 'incremental entrepreneurship' which is also about innovative thinkers who aim at cost reduction as a means to bring about some sanity into business operations in the environment.
- c) Strive for sustainable development.

- d) Innovate to create marketable solutions to sometimes conflicting demands.
- e) **Healthy products**: use of natural ingredients, environmental safe sourcing and packaging.
- f) **Healthy processes**: cleaner production, eco-efficiency, environmental audits.
- g) **Healthy values**: vision, corporate culture, social responsibility agenda, involvement in community environmentalism

What makes an Ecopreneur different from Conventional Entrepreneur?

Entrepreneurs are seen as using their operations to create wastage in environmental resource exploitation, it has been recognized as a trademark of "Ecopreneurs" to rather create new and environmentally responsible communities. Even though, both entrepreneurs and "Enviropreneurs" are stimulated by the strong motivation to transform or create new products, ecopreneurs are known to adopt corrective measures to address ecological opportunities and challenges in communities geared towards sustainable development. They also receive and enjoy lot of both internal and external economies of scale from the media by way of free advertising.

Ecopreneurs have the strong ability to protect their innovations from any form of acquisition by large corporations and multinational institutions that hardly pay any form of recognition to the originators of these innovative ideas.

This was the position and intent of the "Honey Bee Philosophy" developed by Anil Gupta(Gupta,A.K.,and I. Eerola) to assist entrepreneurs in developing economies in protecting their inventions and innovative ideas from being poached by large corporations and the multinational institutions from developed economies. (Gupta et al, 1997)

The Ecopreneurial Rationale – Sustainable Development

At the Rio Earth Summit in 1992, the agenda for sustainable development as stated in Agenda 21 (1992) related two sets of issues(Agenda 21, Earth Summit '92:UNCED). On one hand, there are problems of affluence that arise from the material consumption and production processes of developed, industrialized nations. On the other hand, problems of poverty beset the people of the poorest nations. Sustainable development seeks to resolve the environmental problems of affluence and the social problems of poverty within a transformed approach to the process of development.

There is increasing evidence to suggest that major changes in the global and industrial system are needed if the world is to achieve a sustainable state. Our economic subsystem has already reached or exceeded important "source and sink limits (Contanza et al, 1997)(Constanza, R. and others)."

Finite resources: Human societies and the business which operate within them are substantial consumers of natural resources. Both organic (such as fish and flowers) and non-organic stocks (such as

minerals or gas) are limited in their capacity, and are a finite resource. Once consumed, many of them cannot be recreated. Without sufficient resources, firms cannot service consumers and so generate a profit. Therefore, organizational survival requires biological survival (Barnes, 1994)(Barnes, P.).

Growing population: The world population is poised to expand by **50 %** by **2050** and with it comes an extraordinary growth in consumption. In emerging countries this expansion of population has been doubled by fast growth in income. This has allowed people to expand their consumption of everything to meat and dairy products, computers, cars, and refrigerators. Although part of this consumption is essential to relieving poverty in many nations, the high consumption of the world's affluent consumers can have a negative impact on ecosystems disproportionate to their numbers. Industrial countries over consume per capita, consequently over pollute, and so are responsible for by far the largest share of our approach to the limits(World Business Council for Sustainable Development).

Natural resources degradation: Today's economies act as a linear system: most materials and energy are taken from the natural environment, put to a brief useful life, and then become waste in the atmosphere, on land, or in water. As a result, pollution takes a large toll on human and ecosystem health. In many cities, levels of SO₂, NO₂ and suspended particles exceed healthy limits recommended by the World Health Organization. The CO₂ released from burning coal, oil and natural gas is accumulating in the atmosphere, leading to greenhouse gas accumulation and potential climate change.

Biodiversity loss: The scale of human economy has grown so large that there is no longer room for all species in the ark. The rates of takeover of wildlife habitat and of species extinction are the fastest they have ever been in human history and are accelerating. According to, the World's Richest Species Habitat, "Tropical forest", has already been 55 % destroyed, and the current rate of loss exceeds 168000 square kilometers per year (Goodland, 1991) (Goodland, R.).

Although there is not yet a scientific consensus on the extent of the needed changes, it is clear that they will involve significant technological elements, as well as major investments.

"Ecopreneurs", as catalysts for change and innovation in society, will play a central role in the shift from a techno-economic **"trajectory"** based on exploiting natural resources – **soil, water, biodiversity, climate** – that, once lost can never be replaced, to one that could lead to a future that preserves and conserves these resources. Never has there been such an opportunity and imperative for innovation that meets the needs of consumers without damaging the planet's natural resource base. The road to long-term sustainability will require more eco-efficiency – a management strategy that promotes environmental and economic performance. The World Business Council for Sustainable Development (WBCSD), which first coined the concept of **eco-**

efficiency, defined it as "The delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life-cycle, to a level at least in line with the earth's estimating carrying capacity(World Business Council for Sustainable Development)."

Barriers to Ecopreneurship

One significant characteristic of **"Ecopreneurship"** is the fact that the very innovativeness that precedes its creation have been deemed to arise from the ability to identify what initially may seem to be a barrier, problem or difficulty, and convert them into marketable opportunities. In this sense, it becomes somewhat difficult to distinguish between what constitute barriers and problems of ecopreneurship from its opportunities, since in the end all barriers and difficulties are likely to be converted into opportunities where the necessary institutional support is available. But then, some barriers to ecopreneurship have been identified and discussed which can be put up as-

Lack of enforceable regulations(Newton, L. H. (2005)):

Activities of governments and environmentally-conscious pressure groups in most advanced societies constitute a major hindrance to ecopreneurship development. In Europe for instance, environmental consciousness has become part of the social order such that entrepreneurs are increasingly tempted to think "green" in order to survive in the market. The situation in the U.S. is such that environmentalism is purely by legislation and so are green choices by the business community. Thus regulations in these societies have become additional operating cost to businesses and entrepreneurs. But it is interesting also to find that some ecopreneurs have in most cases reacted to these regulations by creating various environmental opportunities out of the very regulations meant to sort of restrict their operations (Newton, 2005).

Finance and marketing barriers:

Ecopreneurship as a new concept also faces the economic problem of finance and marketing hostilities or competitive hostilities to stand for the unfavorable and intense competition faced by environmental businesses from both the established businesses and the financial institutions (Pastakia, 1998)(Pastakia, A. (1998)). Most ecopreneurial activities find it difficult to meet the eyes of the established financial institutions. These financial institutions adopt the "wait and see" attitude towards innovations in general and particularly, towards green businesses. Some efforts at garnering financial opportunities to assist ecopreneurial development especially when these innovations are meant to correct some 'sins of the past' have been seen in the area of venture capital as a source of start-up capital for environmental innovations.

Role of Environmental Activists:

The role of environmental activists also poses one of the greatest Barriers to Ecopreneurial development or the transition from entrepreneurship

to environmental entrepreneurship. Their actions manifest in many forms and may include the use of the media and marketing strategies to campaign for product boycotts and also through demonstrations. The extreme form of their resistance is when they use existing potential institutions such as governmental or statutory bodies and even shareholders to bring pressure to bear on particular environmental businesses.

Inadequate Protection of Property Rights(Post, J. E. and B. W. Altman (1994)).:

The problem of insecurity or inadequate protection of property rights is demonstrated in the manner in which large corporations from the developed economies lure and take advantage of innovative technologies by people from less developed economies where infrastructural development limits the carrying out of such innovations to benefit their societies. The **'big'** corporations thus take advantage of these situations without actually remunerating the innovators with the accreditation and publicity they deserve. Such practices are seen not to encourage any further innovation and hence constitute a major drawback to innovations development (Post et al, 1996).

Promoting Ecopreneurship in India- Forces and Future

International Pressures:

The impetus for this kind of change has also come, to some extent, from international donor agencies that are making funds available to less-industrialized countries to minimize waste and shift towards cleaner technology. **UNIDO/UNEP** selected the **National Productivity Council of India** as a location for the **National Cleaner Production Center (NCPC)** in India in the early 1990s. The NCPC was established to-

- (a) Demonstrate cleaner production concepts in Indian industries, particularly small scale industries;
- (b) Conduct demonstration projects;
- (c) Conduct training programmes/workshops;
- (d) Disseminate information on cleaner production; and
- (e) Make policy-level interventions(<http://www.npcindia.org/cleaner.htm/>)

India has become a signatory to several international protocols and conventions. The impact of some of these has been quite significant, as demonstrated by the case of the Montreal Protocol. The provisions of this protocol became effective in India from 17 September 1992. The Notified Ozone Depleting Substances (Regulation and Control) Rules 2000 provide the legal framework for ensuring compliance of the Montreal Protocol. An Ozone Cell was established with effect 1 April 1993 within MoEF, largely to facilitate the proper utilization of bilateral funds to modernize old plants that generated ozone-depleting gases, by adopting new technology that was free of such emissions.

The use of (ODSs) Ozone-Depleting Substances is to be phased out by 2010, as per the schedule of the protocol. The government adopted fiscal

measures such as exemption from customs and excise duty on goods required for ODS phase-out and on new investments in non-ODS technology.

The Reserve Bank of India (RBI) issued guidelines to financial institutions not to finance new projects with ODS technology. The licensing system was adjusted to regulate the expansion of ODS technology. By 2001, investments in 39 projects had helped to phase out 1,877.3 MT(Million Tonnes) of ozone depleting substances. Additional investments during the following year in 36 projects worth US\$11,135,153 were planned to phase out an additional 1,635 MT(MoEF).

Regulatory Mechanisms and Agencies:

India's active involvement in the United Nations Conference on Human Environment, held at Stockholm in 1972, marked the beginning of serious governmental efforts aimed at environmental protection. India is among the few countries in the world to have provided constitutional safeguards for protection of the environment.

- The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country(Art. 48 A).
- it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures(Art. 51 A).
- No person shall be deprived of his life or personal liberty except according to procedure established by law(Art. 21).

A Ministry of Environment and Forests (MoEF) was constituted in 1985, not only to oversee the integration of environmental dimensions into planning and development but also to administer different laws related to the environment. Over 200 statutes having a bearing on environmental protection have come into existence during the past two decades. Among the important legislation overseen by the MoEF is the Water Act, which provides for the establishment of the Central Pollution Control Board and State Pollution Control Boards (SPCBs) in the respective States. The SPCBs were given wide-ranging powers to regulate the environmental impact of industry. Some of these included the power to issue directions for closure, prohibition or regulation of any industry, operation or process, or the stoppage or regulation of supply of electricity, water or any other service to industry in the prescribed manner. SPCBs also had the right to refuse or withdraw consent for discharge of effluents.

Ironically, although extensive legislation is being enacted to protect the environment, sometimes this very legislation can serve as a Barrier to Ecopreneurship. A case in point is the pesticide industry. Entrepreneurs intending to manufacture pesticides in India must be registered with the Central Insecticides Board, Faridabad. Registration procedures require prospective entrepreneurs to clear their products through a large number of tests for bio-efficacy, toxicity and environmental effects. These tests must be carried out, at the cost of the entrepreneur, by notified or recognized research institutions in India.

Another source of change that is beginning to make an impact is ISO certification for EMSs (ISO 14001). It is estimated that about 275 Companies in India had already obtained ISO certification for environmental systems as at 31 July 2006. This has been undertaken by relatively larger, export-oriented Companies in due course of time have realized that if they have to compete in the International Market than it's inevitably important for them to comply with the International Standards of Environmental Safety and Quality.

Judicial Activism:

In the mid- 1980s and 1990s a spate of public-interest petitions spearheaded by eminent environmentalist and advocate, M.C. Mehta, succeeded in changing this scenario. Citizens' rights to a healthful environment were first explicitly recognized by the Indian Supreme Court in the 1991 case of *Subhash Kumar v. State of Bihar*. The Court declared that the right to life guaranteed by Article 21 includes the right to enjoy pollution-free water and air. In subsequent judgments such as *Bangalore Medical Trust case* (1991) and *Virendra Gaur and others v. State of Haryana*, the apex court further elaborated and clarified this right. These judgments paved the way for making *Public Interest Litigation* (PIL) for violation of fundamental rights the most preferred instrument for Judicial Activism (Rosencraze et al, 1996)(Rosencranz, A., and S. Rustomjee).

In the case of industries, the courts ruled that such industrialists could not absolve themselves from their responsibility towards society and the natural environment merely on the grounds that it was not economically feasible for them to internalize their externalities. The courts directed all SSI units located in clusters to set up Common Effluent Treatment Plants (CETPs), passing strictures on the erring regulatory authorities. The judgments brought about a significant change among small-scale entrepreneurs. Several of the industrial estates in Gujarat, for instance, established CETPs in the wake of the Kirpal-Gokhle Judgment (Kirpal et al, 1995)(Kirpal, B.N., and H.L. Gokhle).

End-of-pipe solutions, however, are not very economical in the long run for entrepreneurs, since these involve additional recurring costs that eat into profitability. This has forced many an entrepreneur to examine the business waste-stream to search for alternative solutions to reduce, minimise, recover, recycle or convert waste into useful by-products.

To summarise, In the case of India, we find three external forces strong enough to bring about change—namely, the Power of Judicial Activism and to a lesser extent, the power of enabling policies and the power of regulatory agencies. The Indian government could do much to strengthen external forces, especially with respect to establishing National Standards for the Quality of Environment and the implementation of these regulations. It could also take more proactive measures through the state-level cleaner production centres. It could tap international bilateral funding to support the phasing-out of

products and processes that are known to harm the environment.

Conclusion

The World is moving towards a situation of a major Global Crisis. We need to adopt a sustainable approach in order to strike a balance between the never ceasing demands of the humans and the degrading environment which puts the very question of survival into danger. With the advent of the 21st Century and the Economic Agendas of the people taking the centre stage the "*Role of an Ecopreneur*" is less a topic of research and more the need of the hour. It is surprising that in spite of the availability of all the resources in a developing country like India not many results are seen due to complete lack effective implementation and pre-conceived notions of our Entrepreneurs. It is high time for the Entrepreneurs to start transiting themselves into "*Ecopreneurs*" prospectively, otherwise with the current trends which are pointing towards a miserable end at one point in time the States will have to intervene restrictively which shall be difficult to comply with. There is time though not much but rather enough for the Entrepreneurs to take slow and steady steps to complete a gradual metamorphosis.

"A Stitch in time saves Nine!"

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