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ENTREPRENEURSHIP & INNOVATION WITH SUSTAINABILITY: A QUEST

Shikha Nagar

B.A (Gargi College), Delhi University

M.A Economics (Department of Economics), Kurukshetra University

B.ED, Maharishi Dayanand University

UGC-Net Qualified-Economics

ABSTRACT

The purpose of this paper is to propose a framework to position sustainable entrepreneurship in relation to sustainability innovation. There is an increasing interest in how sustainable entrepreneurship can balance people development, profit generation and planet protection to create better social, economic and environmental outcomes. Firms need to develop sustainable business processes, stakeholder engagement and sustainable innovations to achieve venture success. This probe will use literature review and Primary research on textile industry and the evaluation of secondary sources to bring more depth to the cases. This framework will build sustainable entrepreneurship, develops it by including social and institutional entrepreneurship, i.e. the application of the entrepreneurial approach towards meeting societal goals and towards changing market contexts, and relates it to sustainability innovation. The framework provides a reference for managers to introduce sustainability innovation and to pursue sustainable entrepreneurship. The degree of environmental or social responsibility orientation in the company is assessed on the basis of environmental and social goals and policies, the organization of environmental and social management in the company and the communication of environmental and social issues. The paper finds conditions under which sustainable entrepreneurship and sustainability innovation emerge spontaneously. The paper makes a contribution in showing that extant research needs to be expanded with regard to motivations for innovation and that earlier models of sustainable entrepreneurship need to be refined.

KEYWORDS- Entrepreneurship, sustainability, Environmental, innovation and motivations.

INTRODUCTION

Companies are considered by many to be the main players creating environmental and social problems and thus to be the source of a lack of sustainability in society. From this perception government and non-government organizations are those have to create and control a tight regulatory framework for business. As a consequence, management is challenged to comply with regulations and requirements and to keep the unwanted, negative impacts under control. However, while this view tends to overestimate the possibilities of political programmes, legal regulations and NGOs it underestimates and distorts the role of companies in society. For many years and with increasing visibility the management of leading companies have been core drivers of sustainable development. With their innovations sustainable entrepreneurs and sustainability managers are shaping markets and society substantially. Likely, cars, computers and the internet have changed the world more fundamentally than most political programs. To be innovative means to provide organizational and technical improvements that can be sold successfully in the marketplace. In a market system, sustainable development requires sustainability innovation and entrepreneurs who can achieve environmental or social goals with superior products or processes that are successful in the marketplace of mainstream customers. Market innovations driving sustainable development do not necessarily occur by accident but can be created by leaders who put them into the core of their business activities. Actors and companies making environmental progress to their core business can be called sustainable entrepreneurs. They generate new products, services, techniques and organizational modes which substantially reduce environmental impacts and increase the quality of life.

Joseph Schumpeter (1934) referred to entrepreneurial activities as creative destruction. Sustainable entrepreneurs destroy existing conventional production methods, products, market structures and consumption patterns, and replace them with superior environmental and social products and services. They create the market dynamics of environmental and societal progress. This paper attempts to analyze which actors are most likely to bring about sustainability innovation under different conditions. This is based on a typology of sustainable entrepreneurship (Schaltegger, 2002) which distinguishes it from other forms of corporate environmental and social responsibility activities and is summarized with a positioning matrix of sustainable entrepreneurship which allows management to assess its state of environmental and economic activities in relation to others. The framework for sustainable entrepreneurship which so far has covered business approaches with a strong inclusion of sustainability issues is further developed by including social entrepreneurship, i.e. the application of the entrepreneurial approach towards the primary goal of meeting societal goals. In this context also the notion of institutional entrepreneurship, i.e. the effort to change institutions like market regulations despite pressures towards stasis plays a role and is considered.

REVIEW OF LITERATURE

Society increasingly imposes a challenge for changing the nature of economic activities in almost every sector of the economy. The dependence of current energy production, distribution and consumption systems on the extensive use of fossil fuels, brings uncertainty with regard to the security of supply and contributes heavily to environmental degradation of ecosystems due to increased carbon emissions leading to global warming and climate change (IEA, 2008). Trends emerge in society as a reaction to these threats concerning the sustainability of how current economic activities are organized. It is becoming increasingly important that economic developments are sustainable, that is that they “meet the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 8).

This societal trend for improving the sustainability of current economic systems means that economic activities in the energy sector need to change in order to create sustainable, environmentally friendly and socially accepted forms of energy production, distribution and use. This structural, long-term reorientation and transformation of economic activities is termed a transition (Kemp, 1994; Geels, 2004). The transition towards sustainability acknowledges the increasingly important societal requirement that economic, social and environmental impacts of developments in the sector need to be jointly considered. This entails far-reaching changes in the energy sector that go beyond incremental processes caused by technical change only (Hekkert et al., 2007). Walking the path towards sustainability means that the current structure and organization of the energy sector will have to change.

INNOVATION

Innovation processes are thought to be fundamental driving forces for realizing the transition in society towards sustainability (Geels, 2004; Hekkert et al., 2007). Innovation contributes to the challenges of the sustainability transition, since innovation processes lead to the development of new technologies and practices that are necessary to effectively achieve a sustainable system (Geels, 2005; Hekkert et al., 2007). These promising innovations can lead to more efficient use of resources, less stress on the environment and even cleaning of the environment (Hekkert et al., 2007). Realizing these innovations, that move the sector towards sustainability, requires a change in the nature of innovation processes. In addition to a contribution to economic objectives of innovation such as sustainable

profits, growth or revenues – which is still considered a requirement for successfully introducing new economic activity (Fagerberg & Godinho, 2005) –, firms need to incorporate in their innovation processes the social and environmental aspects of sustainability. This results in sustainable innovations: new combinations that integrate all three aspects of sustainability and that have the potential to contribute to the transition by changing the sector towards a more sustainable state (Ashford, 2001). Sustainable innovations create win-win situations in terms of the triple bottom line by integrating economic health, social equity and environmental resilience. This goes beyond the old perspective that innovations can only contribute to sustainability with an inherent trade-off to economic profitability (Cohen & Winn, 2007). Through the integration of the three aspects of sustainability, sustainable innovations will not only change the sector to become sustainable in environmental and social terms by reducing the deterioration of the human environment and of natural resources, but will also create sustainability in economic terms by creating added value and sustained economic competitiveness of the sector through improved ways of energy production, distribution and use (Gerlach, 2003).

FOLLOWING THE CHANGE

Entrepreneurs operate in this system context and are influenced by its policies, regulations, interactions, norms, societal pressures etc. (Jacobsson, 2002). Since the sustainable innovations that entrepreneurs aim to introduce create radically improved ways of organizing economic activities, a conflict arises with the current way of thinking and organizing in the sector (Hekkert et al., 2007). The current system of regulations, interactions, beliefs, behavior etc. is tuned to current products and services and not aligned with new practices, knowledge, values and interaction patterns of the sustainable innovation. Successful introduction and diffusion of a sustainable innovation thus requires profound changes in the way of thinking within organizations, in the way that organizations operate and interact and in the principles, standards, routines, norms and values of the system that influence the actions and interactions of organizations. Entrepreneurs that innovate can deploy various strategies to change the system context in which they operate, in order to foster the introduction of their sustainable innovations, such as active lobbying for changes in regulation, establishing new habits and practices, creating new partnerships, increasing societal acceptance of sustainability etc. Through these strategies, entrepreneurs are able to change the current standards, routines, norms and practices to build up a new and more sustainable system context that is aligned to the sustainable innovations and thus contribute to the transition towards sustainability in the sector. In order to successfully introduce and diffuse sustainable innovations in the system, entrepreneurs will have to take the lead and pave a new path in the system context to create space for sustainable innovations. Although much attention has been given as to how entrepreneurs innovate, it is much less known how innovating entrepreneurs create changes in the system context

PURPOSE AND RELEVANCE OF STUDY

- This study will highlight sustainable entrepreneurship in relation to sustainability innovation.
- The purpose of this study is to examine how sustainable entrepreneurs improve their social, economic and environmental outcomes.
- Study will bring in the case of an entrepreneur (textile firm) their social and environmental impact.

METHOD OF THE STUDY

1. **STUDY AREA-** India is the focus of the study. Primary Research on a textile firm for investigating sustainable entrepreneurship with innovation impacts on societal and environmental outcomes. The approach used for this research were mainly primary research, desk study, data collection from secondary sources as well as analysis of data using descriptive statistics and other qualitative methods.
2. **Data collection-** This involved primary research and desk study and/or review of relevant literature such as journals, technical documents.

DISCUSSION AND THEIR IMPACT

SUSTAINABLE DEVELOPMENT AND ENTREPRENEURSHIP

The relationship between entrepreneurship and sustainable development has been addressed by various streams of thought and literature such as: ecopreneurship, social entrepreneurship, sustainable entrepreneurship and, in an indirect way also, institutional entrepreneurship. In terms of extant literature, earlier authors addressing sustainability and entrepreneurship have dealt exclusively with environmentally orientated entrepreneurship, often called ‘ecopreneurship’.

The core motivation and main goals mentioned with ecopreneurship are to earn money through contributing to solving environmental problems (Table 1). Economic goals are the ends of the business whereas environmental goals are considered as integrated part of the economic logic of the business.

	Ecopreneurship	Social entrepreneurship	Institutional entrepreneurship	Sustainable entrepreneurship
MAIN MOTIVATION	solving environmental problem and create economic value	Contribute to solving societal problem and create value for society	Contribute to changing regulatory, societal and market institutions.	Contribute to solving societal and environmental problems through the realization of a successful
BASIC GOAL	Earn money by solving environmental problems	Achieve societal goal and secure funding to achieve this	Changing institutions as direct goal	Creating sustainable development through entrepreneurial corporate activities
Role of economic goals	Ends	Means	Ends or Means	Means and Ends
Organizational development challenge	From focus on environmental issues to integrating economic issues	From focus on societal issues to integrating economic issues	From changing institutions to integrating sustainability	From small contribution to large contribution to sustainable development

Table 1. Characterization of different kinds of sustainability oriented entrepreneurship

We synthesize these streams of literature on entrepreneurship with environmental and social objectives and will put it in perspective with regard to the conditions under which entrepreneurs pursuing sustainability innovation are likely to emerge spontaneously in a market system and which type of firms are most likely involved in it.

The joint treatment of sustainable entrepreneurship and sustainability innovation is crucial because the underlying logics differ considerably. As concerns innovation, the core dimensions are private and social benefits and these can be related to a defined sequence of product and process innovations, the existence of complementary assets and the means to protect the innovation from undesirable knowledge spillovers to third parties (Utterback and Abernathy, 1975; Teece, 1986; Utterback, 1994). Conversely, as concerns entrepreneurship, the dominant logic is that of opportunity recognition and exploitation (Shane 2000; 2003) but the aspect of innovativeness is mainly confined to the level of the individual (Kuckertz and Wagner, 2010).

EMERGENCE OF SOCIAL ENTREPRENEURS

Environmentally and socially superior products and production processes exceeding by far the strictest regulations have been created by numerous companies, for example in the textile, food, furniture and energy industries. These firms can in principle be small start-ups, but also large incumbent firms that have significant market share in their industry.. In order to analyze and better understand when sustainable entrepreneurship emerges and who will be most likely to carry out sustainability.

Conceptualizing sustainability innovation in a more general way, one can distinguish the private benefit of an innovation and the social benefit, which is defining for sustainability innovation. The higher the private benefit, the higher is the potential of an innovation to compensate for negative social effects of that innovation (e.g. because it implies a high level of resource consumption). If social benefit and private benefit of an innovation can be fully monetarised then any innovations where the private benefit cannot compensate negative social effects or where positive social effects are lower than the total private dis-benefit are not sustainable in that either they have both, negative social effects and low private benefit, or their compensation potential due to the (lacking) private or social benefit is so low that it cannot compensate fully for the increased resource use. This can be termed the “Play station World” of innovations based on the notion, that such innovations neither provide positive social effects, nor do they meet consumer demand at a cost so much lower, that the consumer could at least in principle compensate society with his consumer surplus for the negative social effect. If innovations provide -sufficient private benefits to compensate negative social effects or have a positive social effect that justifies accepting a lower level of private benefit (because the net benefit to society would still be positive) can be termed compensatory sustainability innovations.

Nature of Activity	JASSEE PRINTS	Description
Number of interviews with entrepreneur	4	Offline and online interviews lasting 2 hours each conducted by researcher
Number of other online interviews	2	Viewed by the researcher
Number of interviews with artisans	1	Conducted by the researcher

TABLE-2

This probe analyzed the sustainable entrepreneurship framework of environmental, social and economic parameters. Researcher collected data by her own and evaluation and analysis.

Founders	Age	Qualification	Description
SUNIL SOLANKI	42	Bachelor of Engineering (BE)-Textile	He is the founder of Jasse prints. He heads business development, finance and supply chain
POONAM SOLANKI	38	Bachelors in Arts and certification designing of clothes.	She is a Co-founder of Jasse prints. She heads the product design, development and retailing and marketing.

TABLE-3

Sunil Solanki, after finishing his B.tech (textile) 1996, from Haryana, India, worked in the Haryana textile manufacturing industry for 20 years, and this included an overseas stint of close to a decade. In 2016, he plunged into entrepreneurship and started the Jasse Prints in the city of Faridabad located in Haryana, a North state of India. The company promotes Indian Digital work on fabrics in the global fashion industry.

Outcome	Jasse Prints
Social	Higher living standards created for employees with digital printing, no effect on health Supporting artisanal work and artisanal techniques Gender inclusion promoted Prevention of rural-to-urban migration Freedom from local moneylenders
Economic	Provide good quality raw material at fair prices Design support and training to improve product quality Creating access to market Economic freedom created for 20 artisan families

Outcome	Jassee Prints
	Improved production efficiency through better production methods
Environmental	Use of organic cotton Solar and wind energy used Digital printing Experimenting with new-age eco-friendly fabrics

Source: The author, table-4

Jassee Prints have improved the standard of living of their key workers, employee and are working to enhance the company product portfolio by diversifying their artisan networks. By prioritizing labour participation of the rural population, impacted gender equality and have created better health and growth opportunities. In addition, they strive to use organic raw materials, up cycle and recycle waste, and reduce the environmental cost of production.

Table 5. Sustainability-Driven Business Model

Sustainability Costs	Jassee Prints
Social	Better compensation to artisans Providing advances
Economic	Manual processes may lead to product defects
Environmental	Higher cost of inputs (organic cotton) only Digital Printing
Customer value proposition	‘Sell and make’ model cuts stocking and holding costs digital printing with no harmful effect Customers (global brands) understand and appreciate the sustainability thrust of company B2B* sales lower marketing costs

Table-5 presents the sustainability costs incurred and how each company creates value for the customer so as to build profitability. The sustainability-driven cost processes are segregated based on the social, economic and environmental impacts. The customer value proposition entails creating a premium-based product, increasing production efficiencies and lowering marketing costs to generate profits

Table-6 Future Sustainability Challenges for Jassee prints

Name of Company	Manufacturing	Packaging and Distribution	Consumption and Recycling
Jassee prints	Sustainable sources of energy at location Reduce defected stock	Energy-efficient distribution methods to be considered Greater pricing transparency to be created	Sustainability processes for disposal of used garments Reduce deadstock

Table-6 outlines future challenges in sustainability implementations in venture. There is scope for improvement in production, packaging and recycling by implementing higher energy-efficient processes in production and distribution, reducing dead stock and undertaking greater end-stage recycling.

DISCUSSION

A Jasee prints premium product category Garments sampling products for brands like H&M and BIBA made with digital printing are time-consuming, expensive and, unlike machine-made products, could flaunt slight color and design discrepancies. Parikh has put them on the global fashion map by inviting top brands to go for handmade artisanal products.

Social Outcomes

Sustainable entrepreneurs develop complex social networks as they construct supply chains. Through education and training, they are supporting and promoting the digital printing thereby encouraging upward social mobility. The entrepreneurs have gone beyond their ventures and are involved deeply in helping their developed social networks thrive. Maintaining product quality and educating the customer on the impact of their purchase on artisan life concerns both these ventures.

Economic Outcomes

The firms are offering fair compensation to the artisans, thereby protecting them from exploitation and have brought in modern production techniques, which reduce manual labour and upgrades their incomes. Once their earnings started to rise, the artisans were taught financial management like savings and investment to ensure that they did not fritter away their earnings.

The word “entrepreneur” derives from French and can be taken to mean “taking the initiative to bridge”. Entrepreneurs are the catalyst who brings together money, people, ideas, etc. to establish value creating networks. Whereas all entrepreneurs deal with bridging activities between suppliers and customers to create and change markets, sustainable entrepreneurs differ from conventional entrepreneurs in that they also build bridges between environmental progress and market success.

Consequence, sustainable entrepreneurship - defined in a narrow sense - deals with a very innovative company start-up supplying environmentally and/or socially beneficial products and services with the potential to conquer a large part of the market. However, the spirit and the process of creating substantial market success with environmentally or socially beneficial products and services is not limited to start-ups, sustainable entrepreneurship can also be seen in established companies, or in the process of building up corporate ventures, spin-offs, etc.

ENVIRONMENTAL OUTCOMES

Jasee prints is a zero discharge of harmful chemical company. Jasee prints manages better water and waste management, reduced chemical usage, transparent pricing, gender equity in wages. Poonam Solanki summarizes her views on sustainable entrepreneurship ‘As an entrepreneur build value into your business through sustainable processes that benefit society’ and future generations.

CONCLUSION

In this paper, we have introduced a framework of sustainable entrepreneurship and explored its links to sustainability innovation. The business implications of our analysis especially relate to important conditions that pioneers, social and institutional entrepreneurs and other start-ups and incumbents need to consider when deciding on the type of sustainability innovation. Because of this, product and process innovation need to be understood as jointly determined.

The awareness of eco-friendly products and the need to protect the environment are growing in India, but greater effort is required, and sustainable entrepreneurs could lead the way. Adoption of slow fashion by customers, conscious consumerism and relinquishment of a use and throw economy would support more responsible production and consumption.

The most important aspect from the system context are the public awareness of sustainability and developments in technology, and the most important barriers are the lack of guidance and flawed subsidy schemes from the government, a lock-in of vested interests in the building and energy industries and the need of all actors to think differently about sustainability. System building entrepreneurs experience the lack of guidance from the government, the current regulations and the lock-in of vested interests in the sector as strong barriers for sustainable innovation, while system following entrepreneurs view the government, regulations and initiatives from current players as drivers for sustainable innovation.

This study, though limited by its sample size, has revealed the scope of sustainable entrepreneurship in emerging economies in general, and in the Indian context in particular. Entrepreneurs in developing and emerging economies may be more inclined to move ahead with sustainability as a result of the social and economic realities existing in these countries. Testing the hypothesis of higher

sustainable entrepreneurship intention in developing and emerging economies versus developed countries may be a pertinent future research direction arising out of this study.

Finally, the model outlined for sustainability innovations suggests the existence of innovations with high social benefit, but very low private benefits appropriable. For such innovation entrepreneurial activities aimed at profit generation, which are frequently linked to a mass market orientation, may be less appropriate.

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