ENTREPRENEURIAL CONTRIBUTION THROUGH INNOVATION AND ECONOMIC DEVELOPMENT AND ITS ROLE IN RURAL DEVELOPMENT OF INDIA

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ABSTRACT

As we know innovation is the key of economic growth and development. In rural areas innovation for the poor is more likely to occur through small-scale and cottage industries and entrepreneurs comparatively are more prone to the same than industrial research and development. if we view the past earlier rural development policies was mainly focused on agricultural based business, in fact this is due to the most rural poor have no agricultural land and therefore unlikely to get benefit greatly from such type of business. Instead most poor are entrepreneurs, running micro ventures generally at subsistence levels in both agricultural field and non-agricultural sectors. Although most of the rural poor are entrepreneurs due to their necessity, only a few are opportunity entrepreneurs and in result they are pursuing a profitable business and innovating and looking their growth. These are the growth oriented entrepreneurs that are likely to have a greater indirect effect on the poor-population by providing them various kinds of employment opportunities as well as improved life. This paper discusses the concept of entrepreneur-based innovation in India by reviewing existing literature on rural entrepreneurship, innovation and rural economic development.

Keywords: Rural Poor, Innovation, Entrepreneurship, Rural Development, Economic Development, Sustainable Livelihood, Non-Farm Sector, Developing Countries.

I INTRODUCTION: INNOVATION AND ECONOMIC DEVELOPMENT

Rural development is more than ever before linked to entrepreneurship, Institutions and individuals promoting rural development and presently entrepreneurship as a strategic development intervention that could accelerate the rural development process. It is a vehicle to improve the quality of life for individuals, families and communities and to sustain a healthy economy and environment. Innovation and economic development (Edquist, 1997, Freeman, 1987, Hall et al., 2003, Lundvall, 1992, Spielman, 2005) have specific interest in developing countries in rural areas for most of the poor families (WB, 2008). while the previous rural development theory and innovation related policy, has focused more on agriculture, the reason for it is that the most of the rural poor are landless and they cannot earn for their families due to illiteracy, their life therefore unlikely to get benefit directly from such type of agriculture based businesses. Instead most poor are entrepreneurs, running micro ventures generally at subsistence levels in both agricultural field and non-agricultural sectors.

In a large number of rural poor are entrepreneurs out of necessity (Lingelbach et al., 2005) and therefore has very less capacity or willingness to take the risks associated with the large scale of business to make a real impact on the rural population. Only there are a few, who are relatively less poor are opportunity entrepreneurs pursuing some profitable business regarding innovation and a looking to grow than normal. These growth oriented entrepreneurs (Lazonick, 2005) are likely to have a greater indirect impact on the poor by providing them employment opportunities as well as improved life and service conditions. This paper focuses the view that these growth-oriented but socially relevant entrepreneurs who are engaged in the act of poor entrepreneur-based innovation have great significance to for the continuous development and alleviation of poverty in most backward rural areas through employment creation, increasing income level and providing improved quality of life and other services.

This paper is based on the entrepreneurial role of innovation and economic development in poor rural areas a way to more concretely focus on entrepreneurial innovation pertinent to economic development and poverty alleviation. The first part of this paper discuss about rural innovation as the historical literature whilst the other part is related to some relevant entrepreneurship theories and the finally both part are joint together to discuss the concept of rural innovation and economic development.

II RURAL INNOVATION AND ECONOMIC DEVELOPMENT: THEORETICAL PERSPECTIVE

Rural development has, for most of the time since its inception has focused almost exclusively on agriculture and how improvements in agriculture can lead to economic development. Here innovation is defined as the continuous process of upgrading using new knowledge or the new combination of existing knowledge, that is new to the local area (Hall, 2003; Spielman, 2005). The innovation process thus emerges from a system of actors whose interactions, behaviour and patterns of learning are conditioned by institutions (Freeman, 1987; Lundvall, 1992; Edquist, 1997).[2] As noted in the World Development Report (2008) which is focussed on rural and agricultural development through innovation. [3] Reynolds, 2004 in Lingelbach & de la Vina, 2005 notes that whilst necessity entrepreneurs enter into entrepreneurship because of external shocks such as unemployment, opportunity entrepreneurs make their own choice to create a venture because of an identified unexplored market nice or business opportunity.

If we differentiate the opportunity and necessity of entrepreneurship, it suggests a different set of motivation and benefit. For instance, necessity entrepreneurs may be willing to take low risk in comparison to opportunity entrepreneurs, growth, and development and decreased levels of poverty. Believed that agriculture contributes Capital, supply of labor, foreign exchange, country's structural development, food and market indigenously produced industrial goods (Johnston and Mellor, 1961). As economic growth and development of a country is due to the net flow of resources, labor from agriculture to industry (Mellor, 1966). This dual sector model (Lewis, 1955) which is large scale industrialized agriculture over subsistence agriculture was based on the assumption that larger scale farming would reap economies of scale that would enhance the productivity and efficiency. But it is also correct to say that Small-scale subsistence farming have no active role rather providing resources for the industrialized sector in economic development of the country.(Ellis and Biggs, 2001). However, by the mid 1960s it

was clear that little improvement had been made to the living conditions of the poor and the old theories had not worked for it in practice.

III INNOVATION & ECONOMIC DEVELOPMENT THROUGH TECHNOLOGY TRANSFER

Schultz (1964) has over the change in agricultural theory that subsistence farmers were already efficiently allocating resources instead perceiving them as passive providers of capital & labor. Schultz put subsistence farmer as the center of the agriculture who contributes the active role in process of economic development. He believed that small-scale agriculture improves production and speed-up the growth of labor intensive non-farm activities by rural growth oriented activities (Ellis and Biggs, 2001; Mellor, 1966). It has believed by Mellor that increases in agricultural would be magnified by various activities of the non-farm sector (Mellor, 1976; Mellor, 1966). This small but efficient paradigm shift in the 1960's was called for enhanced investment in research and development relevant to small-scale sector of agriculture so that farmers could acquire more efficient new technologies together with non-farm sector skills to use them.

Furthermore, in accordance with the Induced Innovation Hypothesis the abundant labor would be substituted for scarce land in small-scale farming. The Induced innovation Hypothesis is based on the American agricultural model regarding extension and diffusion that is related to changes in relative prices of factors of production will induce the development and adaptation of new technology to economize relatively more expensive factors of production (Ahmad, 1966; Hayami and Ruttan, 1970). It is evident that the scarcity of factors of production can induce innovation which resulting in technical change. Thus, it became generally accepted that through the use of improved technologies and enhanced practices that transferred from national and international agricultural research organizations, small-scale farmers in developing countries could improve productivity substantially by using existing resources more efficiently and effectively (Binswanger, 1978; Hayami and Ruttan, 1971). In the mean time, some new high-yielding varieties (HYV) varieties which could increase food production were developed and introduced (Binswanger and Ruttan, 1978; Hayami and Ruttan, 1971). Through using this modified seeds, farmers would be able to drastically improve the production (Lipton and Longhurst, 1989). This research was originated in international research centers like the Philippines and CIMMYT, IRRI, Mexico4, which led to a more increase in output in some selected part of South Asia such as the Punjab and Haryana in the 1960's in India. It was known the "Green Revolution", result in much of the rural development over decades. Although this was heavily criticized later on, The Green Revolution and the HYV were known to root out a severe humanitarian crisis of South Asia and still today this rural and agricultural policy in South Asian countries are often focused on supply rather than demand led innovation.

During the period of Green Revolution, a linear model of innovation and diffusion was emerged through it the international centers of the Consultative Group for International Agricultural Research (CGIAR) had developed generic technologies such as high yielding varieties of seeds that would subsequently was adapted by the national research system before national extension agencies and transferred them to farmers (Biggs, 1990) who were willing to use the new technologies. This was a hierarchical model of innovation with a linear one-way flow of information

and technology from top to bottom. Roles within the structure are clearly defined and networking and linkages outside of the hierarchical top-down path are limited (Biggs,1990).

Informal research and farmer participation and innovation by anyone other than the central scientists are of importance to central research (Biggs, 1990). Such transfer of technology models are rested on the assumption that through the time a new crop or technology reached the extreme level and it have no need to be further adapted by the farmers (Clark, 2002; Douthwaite, 2002). In parallel with the mainstream but separately, small-farm efficiency focused theories on rural development is an alternative movement called Appropriate Technology emerged, based on Schumacher's Small Is Beautiful book (Schumacher, 1973). Critics have been made by Schumacher on the general neoclassical emphasis on blueprints, transfer of technology and mass production to developing countries and the arguments have been made that such an approach never did make economies sustainable. Schumacher have also created a separate paradigm regarding stresses, need for technologies to be appropriate for local economic conditions, to be adapted to current resource conditions and to avoid environmental degradation. They further highlighted production using local resources to established local economic needs that is the most effective way for of human development.

Under this model, technologies and their use thereof are dependent on the attitudes, habits, and needs of the users and producers. Schumacher was also well known for critic of economic growth and consumption as a measure for development and well-being (Schumacher, 1973; Society, 2008). Recently, the appropriate technology debate has been re-emerging within especially, many actors in the third sector have finding Schumacher's ideas appealing and especially microfinance which focuses on self-employment which finds that it concrete with the reality of today's need for smaller scale business in context of specific solutions which provide livelihoods for the rural population. However, Schumacher's school came to emphasize re-engineering and small technological solutions ignoring the other social and policy measures. At that time farmers were considered as conservative and non-experimental which is crucial since Schumacher's ideas are intended to implying a reorganization and growth of the economy. The other alternative school of thought which also has emerged in the shadow of the mainstream linear innovation model is indigenous technology knowledge (ITK) and indigenous innovation (Chambers et al., 1989; Richards, 1985). The major part of contribution with respect to poor rural innovation that emerged from this field is that by Anil Gupta (1997) who developed the concept of grassroots innovation. His focus is on grassroots and social innovation that emerges from developing countries' entrepreneurs, small scale firms and Non-government organizations (NGO's), as an internal source of growth in poor rural areas.

Today, often 'grassroots innovation' incorrectly paired with the fashionable notion of Bottom of the Pyramid (BOP) innovation, as stated by Prahalad (2006). However, it should be noted that Prahalad's Bottom of the Pyramid innovation based on MNC, as it is transfer of technologies, Gupta's grassroots innovators are close to the PEBI concept developed in this research paper. In the notion of "grassroots innovation" given by Anil Gupta can be

considered as the endogenous and intrinsic version of Prahalad's external, the top down version of BOP innovation (Fu et al., 2010).

IV APPROACHES TO DEVELOPMENT & PARTICIPATORY MODELS

Even with the continuous domination of the small-farm first paradigm, rural economic development scholars began to heavily criticize the Transfer of Technology model for participating farmer's simply as passive technology adopters (Biggs and Clay, 1981) and for considering the exogenous technological changes only . Evidence suggested that farmers have natural experimenters and have a lot of contribution in the innovation process by re-working generic technologies to fulfill their particular needs (Biggs and Clay, 1981). It also tells that farmers are always actively involved in the process of and by implication that emerges from different sources. Biggs generates a multiple source model in which innovation has many different sources including farmers, researchers, extension agencies , NGO's, the private sector and research centers (Biggs, 1990). In addition, Biggs (Biggs, 1990) highlights the importance of institutions also. Other criticism of the transfer of technology model (TOT) model focused on how the model allow the scientists to set research priorities and the fact that it operates inherently resists change. The TOT model was arranged in a manner that underestimates farmer knowledge and also the fact that farmers are risk prone, heterogeneous, face complex issues, innovation (Biggs, 1990, Chambers et al., 1989). According to Shultz,s without challenging the centrality of the farmer-first approach the continuous criticism in a paradigm shift in rural development taking from the top-down research and intervention approach which transferred generic technologies to Exogenous technology in case being the transfer of technology from international and national researcher centers. The technical change, innovation & rural developments from a linear, to a participatory result finally systemic approach taken the move from the linear model of innovation (Schumpeter, 1939) through the chain-link model (Kline and Rosenberg, 1986, to systemic perspectives of today's (Freeman, 1987; Lundvall, 1992; Nelson, 1993) farmers, to a bottom-up approach where the farmers are not only end-users contributors in the innovation process. The change was very clearly noticeable in the various participatory approaches in the field of agricultural development that appeared. What is common with these methods and effort to increase the suitability of technologies through involving farmers in the R&D process directly (Mosse et al., 1998)? As we know that practically, the result of the actual participation varied between projects, managers and agencies. These methods were most often dependent as the success of a particular approach and appeared more dependent on specific local history and institutions than they actually, or the theoretically. (Biggs and Smith,1998).

The transfer and diffusion of participatory research methods was not more successful on result than the innovation model of leaner technology transfer. Participatory models were also more criticized for being at some level to put on a wide range of activities with no clear conceptual background (Biggs and Smith, 1998). This notable model research ephasizing among increased grass-root participation is Farming System Research (FSR). This model also introduced a systems perspective to agricultural research with an objective to improve its importance to farmers (Chambers et al., 1989; Norman, 1989; Norman and Collinson, 1986). This model uses a, participatory, holistic and interdisciplinary approach (FAO, 2001). As per Farming System Research (FSR), the important Farmer First model

of Chambers (1989) focuses the ability of farmers to learn, analyze, adapt and improve on their own *with* the help of outside than outsiders. This Farmer First is a set of principles which should be adapted to fulfill specific local needs with the help of decentralized research model (Chambers et al., 1989:182-183). As the 1990s approached, these above models emphasizing both participation of end users and to look over at issues from a systems point of view and recognizing that innovation from several sources, start to significantly influence rural economic development. A further result of the shift to bottom-up development and participatory methods was result in rise of non-governmental organizations (NGO) as a source of rural development (Ellis and Biggs, 2001). Today, NGOs were continuously taking on more responsibility on this ground and as well as gaining much importance in the field of rural economic development and appropriate interventions.

V RURAL POOR: LIVELIHOOD PERSPECTIVES

Farming System Research describes in two directions relevant for this research. Firstly, research continued taking on a sector systems dimension of farming systems research inresult of Agricultural Knowledge and Information Systems (AKIS) and later agricultural innovation systems (AIS). Secondly, the farming systems research have intended towards an integrated on and off-farm view of rural economic activities, resulting in the (Rural) Sustainable Livelihoods. Other off-farm activities of rural livelihoods, especially through Rural Non Farm Sector (RNFS) research took on more significance as On-Farm Research (OFR), Participatory Technology Development (PTD), Participatory Action Research (PAR), Participatory Rural Appraisal (PRA) and various other approaches. On response of the shortcomings of previous participatory models, authors like Röling (1986; 1988) and Biggs (1990) began to work on systemic approaches to agricultural development by analyzing the significance and nature of institutions for innovation and also the relationships between innovation and the institutional environment.

This set researchers argued that in absence of the institutional environment, participatory approaches would fail. Early systemic model is the Agricultural Knowledge and Information Systems (AKIS) incorporates ideas from the study of knowledge economics (Röling, 1986; Rolling and Engel, 1992) emphasizes that knowledge processes are social which seeks to influence the each other through interaction. So, knowledge and sharing thereof is closely linked with communication and information (Engel and Salomon, 1997). AKIS has been criticized for not considering historical and cultural contexts in which the innovation process takes and also lacking in understanding of the different kinds of actors involved (Engel and Salomon, 1997; Hall and et al., 2001). Engel (1997) developed a methodology based on AKIS called Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) as a tool for considering the social organization as innovation and capacity building.

Recent development in the area of rural economic development has been to conceptualize as rural innovation within the umbrella of of Innovation Systems theory. Through the Schumpeterian perspective of innovation and technological change and creative destruction (Schumpeter, 1934) as well as evolutionary economics and theories of systems, an innovation systems framework was formed (Dosi et al., 1988; Freeman, 1987; Metcalfe, 1988; Nelson,

1993; Nelson and Winter, 1982). The Innovation Systems researchers would study National System of Innovation (NSI) (Freeman, 1987; Lundvall, 1992; Nelson, 1993) to know how the difference at national level impacts innovation. As under this NSI, innovation is a ongoing process where institutions (habits and practices), learning and networks play a critical role in creating innovation& technological change (Edquist, 1997; Freeman, 1987; Kline and Rosenberg, 1986; Lundvall, 1992). Subsequently these similar ideas of a systems perspective of innovation & technological change have applied to developing countries (OECD, 1997). *Agricultural Innovation System (AIS concept given by Clark, 2002; Hall et al., 2004;2003;2002;2001 builds on the NSI to focus specifically on this.*

In many developing countries the researcher pursued mainly empirical work on innovation has been summed up by Derayangala, 2006 and include: We know that technologies are not easily transferable and also technological knowledge is often imparted, with institutions and internal capability (Oyelaran- Oyeyinka, 2003; Mytelka; 1999). There were a lot of technological change occur below international innovation frontier in developing countries and also adaption and modification of diverse technologies and innovation takes place (Bell & Pavitt, 1992; Katz, 1987; Lall, 1987). These technological activities take place due to a variety of factors such as the ability to learn and obtain relevant knowledge, skills and the capability to use the (Bell 1984; Bell & Pavitt 1992; Lall, 2000) need for innovation and speed up development in agriculture from a systems perspective, energizing political, social and economic dimensions of knowledge enhancement and innovation (Hall et al., 2003). It widens the analysis of that creates innovation from a top down linear model to a complex system through which agents and their interactions are influenced by institutions which result in a significant effect on the innovation process.

Studies on AIS in rural areas in India (Clark et al., 2003; Hall et al., 2004) focused on the roles of actors and their relationships over time. It states that the system requires enough flexibility to grow with the changing requirements and needs of these new relationship and partnerships. An individual plays very important role within partnerships and networks rather than organizations often play an important role. Further, partnerships evolve with shared values and trust which have built up over a long time. Personal and professional networks are therefore are vital. This type of partnerships should be made up of actors with variety of knowledge and capabilities so that each can contribute something new to others within the network. Knowledge and learning are important so that actors can adjust to new challenges or improve the way they are working with existing ones.

From the point of view of the current study, as a framework for rural poor innovation, AIS suffers two shortcomings. Firstly, it is highly focus on the agriculture sector. However, it has long been most recognized that the rural non farm sector (RNFS) is a important pillar of the rural economy and is also expected that most of the poverty alleviating actions are to come from this comparatively than the agriculture sector (Start, 2001). Secondly, AIS is not explicitly centered on direct solutions e.g., goods, services or income, for the rural poor and nor does it focus on whether an innovation, or an establishing of an innovation system for poor rural as (Spielman, 2005) notes: “a few research studies in the emerging literature on innovation systems in developing agricultural economies ask the fundamental question: whether the said innovation is welfare increasing, meaning there wise whether an

innovation increases efficiency in production or enhance knowledge directly applicable to those goods and services which is used by the poor…, or whether an innovation improves the social surplus in a manner that is beneficial to the poor". ..". Ultimately, by placing innovation rather than poverty at the centre of developing-country agriculture, the innovation framework is limiting its importance and value to developing-country agriculture" (Spielman, 2005:41-42). Berdegue, 2005 describes poor innovation systems as "a multi-stakeholder social learning process that provides and puts to application of new knowledge and expands the capabilities and opportunities of the rural poor. Taking these some shortcomings in attention, the following section goes expands the understanding of poor rural occupational activities by using the perspective of Sustainable Rural Livelihoods.

VI SUSTAINABLE LIVELIHOODS AND NON-AGRICULTURAL SECTOR

There are several principal which does not have similarity in common with sustainable livelihood (SL) approach with innovation systems models, including the focus on multi-level targeting, partnerships to eradicate interventions and the dynamic nature of rural poor livelihoods. In addition, sustainable livelihood provides a people-centered approach which focuses on participation and responsiveness of users whilst more emphasizing on economic, social, institutional and environmental stability (Carney, 1998). SL defines 'livelihood' as the capabilities, assets and activities to make a living (Chambers and Conway, 1992) and place the household at the centre of this analysis to empower the rural poor (Ellis and Biggs, 2001). SL consists of a range of together farm and non-farm activities which provide different types of income strategies (Chambers et al., 1989). This approach also brings together earlier theories based on farming system research (Chambers, 1983; Chambers et al., 1989) relating to food security and famine analysis school (Sen, 1981) as well as the participatory approaches and poverty alleviation (Haug, 1999).

The SL approach does not exclusively focus on farming activities but it also include those of the rural non-farm sector (RNFS), that works for total activities of rural household (Ellis and Biggs, 2001). The RNFS, that is related to rural activities except agriculture it includes all economic activities in rural areas, livestock, fishing and hunting (Lanjouw and Lanjouw, 2000:3), is important because it has the potential to enhance rural surplus labor and help diversify risks and enhance employment opportunities within these rural households (Davis and Bezemer, 2004). In fact, these opportunities for growth and employment creation have much importance among the SME's of rural areas (Start, 2001:501). The RNFS is characterized by great diversification and varying degrees of production which have greatly influenced by the access to capital, poverty alleviation, inequality, poverty education, gender, caste, ethnicity, infrastructure and access to markets (Lanjouw and Lanjouw, 2000; Davis, 2004).

As the innovation system approaches focus on innovation, but it still tends to be agriculture and in particular small-farm focused. The rural sustainable livelihood approach more focuses on a holistic view of the rural sector including the (rural non-farm sector) RNSF, but not focus on innovation. These two approaches are important and ideas from both will be used in this research. The literature review is related to rural non-farm sector has provided that poverty alleviation and growth is likely to generate in the RNFS on account of entrepreneurs and small scale industries. However, neither innovation systems nor sustainable livelihood approaches focus on entrepreneurship as a way to

empower the rural poor or as rural innovation. Innovation system theories more emphasize on innovation at the firm or agriculture-related innovation, sustainable livelihoods. The study of RNFS has failed to explicitly emphasize on the importance of entrepreneurs and entrepreneurship.

VII ENTREPRENEURSHIP THEORIES AND RURAL ECONOMIC DEVELOPMENT

As the previous rural development policies have more focused on small-holder agriculture, but in fact that most rural poor are landless poor and therefore unable to generate benefit from agriculture based policies. Instead many poor are entrepreneurs; they are running small ventures, often at subsistence levels in both agriculture related and non-farm sectors. Evident that a huge number of rural poor are entrepreneurs out of which many of them have socially relevant innovation, whether they are in a commercial, financial or NGO sector. The scale of business operation run by the poor are normally operate at a very small scale with little resources (Banerjee et al., 2006). Banerjee and Duflo in a research study on the economic lives of the poor states that "all over the world a substantial fraction of the poor act as entrepreneurs in the sense of enhancing the capital, carrying out the investment, and being the full residual claimants for the earnings" (Banerjee et al., 2006).

VIII THE ENTREPRENEUR: FROM THE CLASSICAL POINT OF VIEW

As per Shumpeter, entrepreneurship shares with innovation systems theory both a common origin (Schumpeter, 1944; Schumpeter, 1934; Schumpeter and Opie, 1961) and a lack of de clarity on underlying terms and characteristics. Early work of Schumpeter's have seen the entrepreneur as an individual disrupting existing equilibrium by creating new combinations of existing resources through innovation. Later it was suggested by Schumpeter later that it was not the lone entrepreneur that was the innovator but the firm itself (Schumpeter 1943, 1950 in Lazonick, 2008) where the entrepreneur acts as the leader for the whole business. Recently Wennekers and Thurik (1999) explain that "entrepreneurship is the manifest ability and willingness of individuals by their own, in teams, within and outside existing organizations to perceive and create new economic opportunities in terms of new products, production methods, product-market, organizational schemes and to introduce their related ideas in the market to remove uncertainty and other obstacles, by making location economic, creating and the application of resources and institutions".

The entrepreneur is the person who have capacity in taking responsibility for making decisions that affect the locations, resources, forms and the use of goods and institutions" (Herbert and Link, 1989:31). In other way, the entrepreneur is an agent for change and growth (Wennekers and Thurik, 1999). The factors that relate entrepreneurship to Non-Schumpeterian schools on entrepreneurship have the neo-classical school, represented by Marshall and Knight, that entrepreneur as leader the market to equilibrium through his activities. Meanwhile, the Austrian tradition under Kirzner has stated on the entrepreneur's ability to perceive new and untapped opportunities and bring these opportunities together to meet such needs (Kizner, 1985, Marshall, 1961). Therefore, entrepreneurship defines as both the creation of new opportunities and to cope with existing challenges and the

entrepreneur is the person who prepared to face risks uncertainty (Henrekson, 2007). Using evolutionary theory, the authors focuses on the importance of innovation and also transformation of information into knowledge while the technical change is the driving force in the economy supported by underlying institutions (Wennekers and Thurik, 1999:43-44).

IX DEVELOPING ECONOMIES & ENTREPRENEURSHIP

Entrepreneurship is divided between the west and developing countries most of the entrepreneurs are opportunity in developed countries, reflecting many of the traits of the classical entrepreneur noted by the success of Silicon Valley. In developing countries, due to high necessity entrepreneurs hold the great promise for employment, economic growth & development while only fewer entrepreneurs that could act upon perceived opportunities. Therefore, this difference between opportunity entrepreneurs and necessity entrepreneurs suggests a different set of drivers and incentives. The necessity entrepreneurs may be willing to take less risk in compared to opportunity entrepreneurs. Nadue (2008) examine this into an evident lack of interest or poor in seeking out entrepreneurial opportunities, although he explore that this would be due to the assumption of high risk in trying to exploit growth opportunities subject to uncertainty may be unacceptable as the potential losses and it may outweigh the potential gains. Thus family businesses, households and manager-owners enterprises often experience difficulty in innovation and adopting new technology (Naudé, 2008).

Further, it is become difficult to set-up a business due to high entry costs, high corruption, severe regulations and bureaucracy costs. However, the opportunity entrepreneurs are more likely to be prepared to undertake a business opportunity as well as they have capacity to take risks and likely to grow as growth entrepreneurs. It is obvious that entrepreneurship flourish with growth and innovation potential in most of the small business. (UNDP, 2004), growth oriented entrepreneurs have much importance in developing countries and due to market conditions, these growth oriented entrepreneurs differ from those in developed countries.(Lingelbach et al., 2005). Now, the challenge for new firms in developing countries is rather providing innovation, to climb the value added ladder in order to enhance economic level of the country (Lazonick, 2008). Necessities entrepreneurs enter into entrepreneurship due to some reasons such as unemployment, poverty etc., these opportunity entrepreneurs create a venture because of an identified unexplored market niche or other business opportunity (Reynolds, 2004 in Lingelbach & de la Vina, 2005. See Banerjee & Duflo, 2007). Necessity entrepreneurs are based on micro credit or micro finance that is often not sustainable for long term or leads to growth in business and income opportunities of the rural poor in the long term. Furthermore, the productivity of entrepreneurs in a country varies than the actual of entrepreneurs, this is due to the major differences between the allocations of productive activities results in innovation and growth and unproductive activities such as tax evasion, slows down or eradicate competition (Baumol, 1990).

It is evident from the analysis that the opportunity entrepreneurs pursue a profitable business, innovate and look to grow in future. These growth oriented entrepreneurs (Lazonick, 2005) are likely to a large and have indirect effect on the poor by providing them various employment opportunities as well as improved good and service for their

livelihood. Therefore poor entrepreneur-based innovation is essential in especially in developing countries for the continuous development and poverty alleviation in rural areas by providing them employment and improved goods and services for their livelihood.

X ENTREPRENEUR-BASED INNOVATION FOR RURAL POOR

The above review arrives at is an emphasis on innovation through entrepreneurship that in some way is beneficial to the poor focused toward an adjusted view of rural development which moves away from small-holder agriculture and farms as the main beneficiaries of anti-poverty fighting measures and towards the fact that many poor are not farmers and do not even necessarily wish to become an micro-entrepreneur. The other view that the entrepreneurs have much potential for poverty alleviation are those who innovate, seek out new opportunities, have new ideas would support innovation in manufacturing or other activities at the micro level must provide them instance microfinance.

Finally, poor entrepreneur-based innovation moves beyond the common focus on agriculture support to instead look at the broader rural idea of entrepreneur-based innovation. It avoids innovative activities by considering the entrepreneur at the centre into agriculture and non-agriculture based opportunities.

XI CONCLUSION

Through the perspective of developing countries particular emphasis on India, the above literature review, it has discussed that such entrepreneur-based innovative activities are most essential for the continuous development as well as poverty alleviation in rural areas particularly of the developing economies by creating employment opportunities, and proving them improved goods and services. In the first section of the research that found historically the rural innovation has been possible mostly with agricultural innovation as this was particularly the success case during the Green Revolution and associated technology transfer programs. Such supply-led theories were later criticized for emphasizing only on exogenous technical change in a linear manner, leaving farmers as passive end-users. Instead there was a paradigm shift to participatory approaches and theory using systemic and holistic views. Two strands here which is systems theory that was viewed agricultural innovation, and the other one sustainable rural livelihoods theory which discussed beyond the agriculture relating to both on and off the farm.

As agricultural innovation theories centre around agriculture and the livelihood approach on the rural household, this paper discusses that the rural entrepreneurs and small firms are essential to innovation and development of the country. The above and exiting entrepreneurship literature makes a distinction between necessity and opportunity entrepreneurs by focusing on that the opportunity entrepreneurs are more likely to be active in the innovation process. Finally, the paper argued that a different approach to rural development is needed which shifts emphasis away from agricultural small-holders on the one-side and industrialization on the other-side, to instead focusing on rural entrepreneurs, whether agriculture or non-farm entrepreneur.

Furthermore for future research, there is a need to change the support mechanisms financially or non-financially as well government policy that better suit to opportunity entrepreneurs and provide them something for future research and policy debates need to explore the opportunity.

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