OPPORTUNITY RECOGNITION IN RURAL ENTREPRENEURSHIP IN DEVELOPING COUNTRIE

Ozgen, Eren; Minsky, Barbara D
International Journal of Entrepreneurship; 2007; 11, ABI/INFORM Complete pg. 49

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Eren Ozgen, Troy University, Dothan Campus Barbara D. Minsky, Troy University, Dothan Campus

ABSTRACT

The Rural Poverty Report 2001 stressed the need to develop poverty-reduction policies and programs with a primary emphasize on rural areas. This paper promotes rural entrepreneurship development as an effective strategy in alleviating rural poverty in developing countries and summarizes some policy options that would be helpful in implementing rural entrepreneurship. We focus specifically on opportunity recognition, a key element in the entrepreneurial process, and introduce a model that emphasizes intellectual, human, environmental and socio-cultural resources and the mediating effect of national framework conditions. Since the concepts behind the model tend to be applicable across all settings, it is important to study this model at the general level and then draw implications for the other countries. By studying what influences recognizing opportunities in rural areas, it may be easier to offer assistance to developing countries.

INTRODUCTION

According to the 2001 Rural Poverty Report (RPV), 75% of the world's poor live and work in rural areas, and the majority will remain so for several decades (IFAD Rural Poverty Report, 2001; IFAD 2002). The International Fund for Agricultural Development (IFAD) stressed the need for developing poverty-reduction policies and programs with a primary emphasize on rural areas (IFAD Rural Poverty Report, 2001). Rural areas in developing countries are experiencing poverty and depopulation, are geographically more isolated, require infrastructure and subsidies, and have a lack of structural and institutional factors (IFAD Rural Poverty Report, 2001). Various social, economic, political and ecological problems

in rural areas in developing countries create challenges in employment and cause increasing migration towards cities, decreasing agricultural production and increasing food shortage. A sustainable reduction in rural poverty necessitates the adaptation of further research and programs that help promote economic growth and development. Prior research indicates positive strong relationships among entrepreneurial activity, economic growth and poverty reduction (UN ICD Task Force, 2002).

Entrepreneurship is a vital component of productivity and growth (Baumol, 1993). The Organization for Economic Cooperation and Development (OECD) defines entrepreneurs as "essential agents of change who accelerate the generation, application and spread of innovative ideas and in doing so . . . not only ensure efficient use of resources, but also expand the boundaries of economic activities" (Reynolds, Hay & Camp, 1999, p.10). The Global Entrepreneurship Monitor (GEM) reported a strong positive correlation between the level of economic activity and overall economic performance (Zacharakis, Reynolds & Bygrave, 1999). GEM reported that as firm startup rates increased, growth in national GDP and the employment rate increased (Zacharakis, et al, 1999). Therefore, acting as market innovators, entrepreneurs play critical roles in economic development (Schumpeter, 1934).

To date there are some high-level initiatives and projects underway in supporting entrepreneurial activity in developing countries (IFAD Rural Poverty Report, 2001; UN ICD Task Force, 2002). Although these efforts to foster entrepreneurial development were recorded effective in creating employment, many developing countries are still unable to provide an environment conducion entrepreneurship (UN ICD Task Force, 2002). This is due to a number of barriers (e.g., the lack of economic, social and community development) that hinder entrepreneurial talent in rural areas (Petrin, 1994).

Rural entrepreneurship occurs in economically and socially depressed areas with inadequate infrastructure, economic stagnation, low levels of education, low skilled workers, low income, and a culture not supportive of entrepreneurship (Kulawczuk, 1998). Fostering entrepreneurship is a crucial factor in energizing the rural economy (Petrin & Gannon, 1997) in impoverished rural regions because entrepreneurship creates wealth and employment and has a profound impact on the quality of livelihood of rural populations (FAO Corporate Document Repository). If entrepreneurship is an important factor in reducing rural poverty, then it is rational to focus on the essential elements of entrepreneurship.

Opportunity recognition is a critical issue and a key element in entrepreneurship (Shane & Venkatraman, 2000). Yet a review of the prior research indicates that to date, opportunity recognition in rural entrepreneurship in developing countries is the most understudied topic in entrepreneurship research. Therefore it seems useful and timely to further study opportunity recognition in rural entrepreneurship in developing countries.

Based on prior empirical research and theories on opportunity recognition, we introduce a conceptual model that relates certain resources to opportunity recognition in rural areas: intellectual and human resources such as education, knowledge and training; environmental resources such as developing partnerships and access to cooperative rural development centers; and socio-cultural dimensions such as socio-cultural infrastructure. The model also suggests that effects of these variables on opportunity recognition in rural areas will be partially mediated by the national entrepreneurial framework conditions (the availability of financial resources, and the legal and regulatory infrastructure). Since the concepts behind the framework tend to be applicable across all settings it is important to study this model at the general level, and then we are able to draw implications for other countries. Empirical tests are necessary in order to fully support the theoretical underpinnings in this paper; however, we think that by studying what influences individuals' abilities to recognize opportunities in rural areas, this paper may provide helpful insights into future entrepreneurship research and programs on the development of effective strategies in the improvement of self-sustained rural communities in developing countries.

THEORETICAL AND EMPIRICAL BACKGROUND

Opportunity recognition is one of the most fundamental issues in entrepreneurship research (Kirzner, 1979; Venkatraman, 1997; Shane & Venkatraman, 2000). Most prior empirical research stems from evolutionary economics and takes two differing perspectives. One focuses on an active search for information in the external environment and the other emphasizes the role of individual alertness in discovering opportunities. Search for information view stresses that opportunities are not an accidental event, but an active search for information leading to the discovery of opportunities (Schumpeter, 1942). In other words, opportunities exist out there in the environment (Stevenson & Gumpert, 1985) and scanning the external environment for information leads to entrepreneurial opportunities (Kaish & Gilad, 1991). An entrepreneur focuses on the

environment and develops an innovative process and brings innovations to the market through new products, production or organizational methods, markets, sources of input or market structures (Schumpeter, 1942). Therefore, an entrepreneurial opportunity is determined by the environment (McMullan & Long, 1990) and entrepreneurs identify opportunities by using different types of information about the environment where available (Busenitz & Barney, 1996).

The other theory, the Austrian School of thought, regards opportunity recognition as the essence of entrepreneurial activity and suggests that in a competitive market knowledge is unevenly dispersed and only the individuals who possess specific information can judge its importance (Hayek, 1945; Kirzner, 1973). Therefore, certain individuals who are good at searching for resources are better at recognizing opportunities for viable new ventures (Timmons, 1999).

Prior studies suggested that opportunity recognition is a joint function of an individual and the external environment (Singh, 2000). Entrepreneurs' interactions with the environment shape the evolution of ideas (Vesper, 1990; De Koning, 1999; Shane & Ventakaraman; 2000; Baron, 2003). Therefore opportunity recognition is a process influenced by many contextual factors in the external environment (Gaglio & Taub, 1992; Singh, 1998), changes in the industry structure (Kuratko & Welsch, 2001), most importantly the availability of resources (Timmons, 1994) and the creative attributes of an individual (Hills et al., 1999), such as cognitive skills (Baron, 1998; De Koning, 1999); and prior knowledge of a particular field (Shane, 2000).

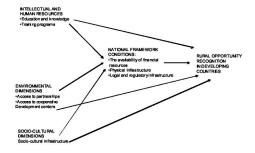
Based on prior empirical research and theories, combining the role of an individual and the external environment in the recognition of opportunities, we propose a conceptual model for opportunity recognition in rural entrepreneurship in developing countries. The model suggests that intellectual and human capital (education and knowledge and training programs) and environmental conditions (access to partnerships and cooperative rural development centers) play a key role in recognizing opportunities for viable new ventures in rural regions. We propose that the extent to which the entrepreneur is exposed to these variables is positively related to the likelihood of discovering entrepreneurial opportunities in rural regions. The model also suggests that effects of these variables on opportunity recognition in rural areas will be partially mediated by the national entrepreneurial framework

conditions (i.e., the availability of financial resources for new firms in rural areas and physical, legal and regulatory infrastructure development).

INTELLECTUAL AND HUMAN CAPITAL

Intellectual and human capital involves the knowledge, education and training of the entrepreneur.

FIGURE 1
THE MODEL OF RURAL OPPORTUNITY RECOGNITION IN
DEVELOPING COUNTRIES



EDUCATION AND KNOWLEDGE

The role of education is central in identifying, assimilating and absorbing new knowledge (Knudsen, Dalum, & Villumsen, 2001). Formal education may provide prior mental programming which is positively correlated with venture start-up success (Vesper, 1990). Knowledge and experience play an important role in identifying opportunities. (Cohen & Levinthal, 1990; Shepherd & DeTienne, 2001). To identify an idea and recognize an opportunity in a specific field, one must be knowledgeable about the domain and have a solid understanding of the knowledge base.

Improving education is a critical issue in achieving sustainable rural development. The quality of education and access to education are much lower in the rural regions. For instance, FAO/UNESCO (2002) reported that education and training is the most critical factor in the rural development strategies in developing countries in Asia. Promoting education is essential in the development of human capacity and improving community building in rural areas. Education improves not only individual incomes and wages but also participation in the labor market and economy (Sphor, 2002). The low educational rural profile is one of the main contributors to the growing rate of economic and social differences and the disparity of income between urban and rural regions. Education helps increase the quality of human capital that is an essential part of an entrepreneurial society (Florida, 2002). Investment in skilled people and human capital development (Malecki, 1997) and training the local community to participate in entrepreneurial activities are a crucial part of rural development (Petrin & Gannon, 1997). Empowering and informing people through education increases the level and quality of human capital and also increases the quality of workforce development (Petrin & Gannon, 1997). Educating rural residents who catalyze local resources to establish ventures in the rural areas improves the livelihood of the rural poor.

Since education is important in rural development and entrepreneurship, we suggest that educating the rural community about basics of entrepreneurship and guiding them through providing their own sources of revenue can help increase opportunity recognition in rural areas. This leads to Proposition #1: The greater the extent to which rural entrepreneurs are educated in the entrepreneurial process, the more likely they will be to discover opportunities for new ventures in rural areas in developing countries.

TRAINING PROGRAMS

Training programs and previous learning create knowledge and shape individuals' mental frameworks, which then influence their perceptions of the external world (Baron, 2003). Prior knowledge plays an important role in recognizing opportunities (Shane, 2000), and individuals with a background in a certain industry may recognize more

entrepreneurial opportunities in that industry than those who have less background in the industry. Knowledge, information, and skills obtained from prior training in a certain industry could create a knowledge corridor and help individuals identify opportunities relevant to their knowledge (Hayek, 1945; Shane, 2000).

The availability of training programs that support aspiring and practicing entrepreneurs not only provides skills and knowledge, but also encouragement towards creating new ventures (Zacharakis, et. al, 1999). In low income countries access to such training programs are more limited and volatile than that of the developed economies because of the lack of considerable on-going investment. In fact, increasing government initiatives on such training programs in rural areas will play an important role in increasing the prevalence rates of entrepreneurial activity. Entrepreneurial programs are a source of creativity, innovation and new knowledge (Zacharakis, et. al, 1999) that are closely linked to the entrepreneurial opportunity recognition process. Entrepreneurial education programs stimulate entrepreneurial activities (Hatten & Ruhland, 1995) and encourage the development of entrepreneurial ideas and mind set.

Training programs that involve rural entrepreneurship development may target either agricultural or nonagricultural sectors in the rural areas. Agriculture is the largest segment of the private sector and the major source of livelihood in most developing countries (CIDA). For instance, 43% of the total population of Romania lives in rural areas, and 40% of the total population are employed in the agricultural sector (Aligicia, Leeson, & Coyne, 2003). To understand the importance of these percentages, one must remember that the agricultural sector accounts for 27.3% of the foreign exchange of a developing country, and 34% of the least developed country (Priyadarshi, 2002). Furthermore, the variety of developmental problems in rural areas creates low efficiency, unemployment and decreases in agricultural production (UNDP, 2003). For instance, in Bulgaria the agricultural output from rural areas diminished from 18.8% in 1998 to 12.5% in 2002 (UNDP, 2003). The continued increase in population will also increase the need for food in developing countries. Therefore, even an incremental improvement in agricultural employment and agricultural productivity

will raise the socio-economic conditions of the rural residents in a developing country (Priyadarshi, 2002).

The training in agricultural sectors may target the application of suitable agricultural technologies and methods (Lohmoller, 1990). Hence, training farmers on various production strategies and agricultural techniques promotes the development of agricultural products and their processing and may lead more entrepreneurs to recognize opportunities in rural regions (Lohmoller, 1990). Rejuvenating rural regions through agricultural enterprises plays a crucial role in the growth of rural economies.

Training in non-agricultural sectors will also teach rural residents various ways to diversify and develop other business areas and help them to increase their options in entrepreneurship (Petrin, 1997). The availability of technical knowledge or training is an integral part of rural development. Assisting rural people needing training and offering advice to start or develop small businesses will stimulate rural development (Petrin, 1997) and encourage recognizing opportunities for viable new ventures.

Training programs dealing with both the agricultural and non-agricultural sectors will help support the development and sustainability of business ideas and fuel entrepreneurial aspirations. This leads directly to Proposition #2: The greater the extent to which rural entrepreneurs receive training related to agricultural and/or non-agricultural sectors, the more likely they will discover opportunities for new ventures in rural areas in developing countries.

ENVIRONMENTAL DIMENSIONS

Scanning the external environment for information leads to entrepreneurial opportunities (Kaish & Gilad, 1991; Busenitz & Barney, 1996). As entrepreneurs analyze the environment they may identify innovative services, products or processes to meet the needs of the rural community and identify useful information that leads to recognition of opportunities for viable new ventures in rural areas. In our model, environmental dimensions involve developing partnerships and access to cooperative rural development centers.

ACCESS TO PARTNERSHIPS

Social networking plays an important role in opportunity recognition (Singh, 2000). According to social network theory, entrepreneurs' social ties influence their recognition of entrepreneurial opportunities and entrepreneurial pursuits. Hills et al. (1997) found that entrepreneurs who used social network sources to get information on new venture ideas identified significantly more opportunities than those who did not use social network sources. Social network contacts allow individuals to gather information from a wide range of individuals, leading them to gather and evaluate many new ideas (Hills et al., 1997). Networks play a key role in linking entrepreneurs with resources and recognition of opportunities (Sexton & Bowman-Upton, 1991). Social networking provides potential entrepreneurs access to critical resources by enlarging the knowledge base that leads them to pursue a set of ideas (Sapienza, Manigart, & Vermeir, 1996; Floyd & Woolridge, 1999).

The development of a rural entrepreneurial support system necessitates creating a supportive environment, or social networking, to flourish in an entrepreneurial climate through building partnerships (RUPRI). Developing partnerships includes the coordinated efforts of central government, local governments, municipalities, academies and non-governmental organizations to help spur the entrepreneurial activity of that region (Kulawczuk, 1998). For instance, the United Nations Development Programme (UNDP, 2005) for Turkey's poverty eradication and rural development projects during 2000-2004 included building and sustaining innovative partnerships of the government, civil society, multinational corporations and multilateral organizations. Partnership with institutions, academies and various organizations encourage rural community development and strengthen institutional support structures and well-built relations between the government and the private sector in new enterprise development in rural provinces. Facilitating the growth of strategic development alliances, community partnerships and networking build entrepreneurial capacity in a particular rural area more quickly. For instance, partnerships initiate various projects emphasizing development of businesses and rural communities. These projects help to identify the intrinsic characteristics of the area, and to assess local inefficiencies, capacity building

capabilities, potential and possibilities for the region to install the entrepreneurial vision. Developing partnerships increase outreach and economic development and are beneficial to rural communities in adopting new business methods in rural areas and increase the likelihood of recognizing opportunities. This leads to the next proposition, Proposition 3: The extent to which entrepreneurs have access to partnerships, the more likely they are to discover opportunities in rural regions in developing countries.

COOPERATIVE RURAL DEVELOPMENT CENTERS

Rural entrepreneurial development requires improvement of support structures (Petrin &Gannon, 1997) to provide business counseling, assistance, a healthy entrepreneurial environment, and the establishment of an entrepreneurial culture within the community (CRE, 2002). Cooperative rural development centers mentor and assist in the development of new venture concepts; advise on the assessment of new ventures; and provide technical assistance and counseling for small businesses in rural areas. These centers form a mentoring program with other successful entrepreneurs and provide forums for rural entrepreneurs to work with other entrepreneurs to explore new opportunities.

Mentoring relationships play a significant role in entrepreneurial pursuits (Bruyat & Julien, 2001). Mentors provide perspectives that broaden potential entrepreneurs' perception of opportunities (Kuratko & Welsch, 2001). They also provide advice, guidance, knowledge and coaching in managerial and industry specific areas of the business (Boyd & Vozikis, 1994). Therefore, as entrepreneurs receive advice, knowledge and guidance from the cooperative rural development centers and engage in mentoring program through these centers, the likelihood of recognizing opportunities increase. This leads to Proposition 4: The extent to which entrepreneurs receive advice, knowledge and guidance from the cooperative rural development centers is positively related to their discoveries of opportunities in rural regions in developing countries.

SOCIO-CULTURAL INFRASTRUCTURE

Redding (1980) pointed out that while the global entrepreneurial profile shares some universal traits, other traits might be more culture specific. Cultural values may play a role in the extent of entrepreneurial activity in a country (Bygrave & Minniti, 2000). For instance, the strength of the support infrastructure in developed economies may positively impact the public attitude toward entrepreneurship, whereas intractable infrastructure problems and the lack of institutions that support a market economy may negatively impact the public attitude toward entrepreneurship in developing economies. For instance low certainty avoidance and individualistic cultures appear to be more supportive of entrepreneurs than other type of cultures (Mueller & Thomas, 2001). Cultural traits influence the structure of the society (Abetti, 1999) and influence business development. Societies that value entrepreneurship and innovativeness instill effective societal systems promoting opportunity driven entrepreneurship (Vesper, 1983). For example, local banks will develop expertise for entrepreneurial loan applications (Kuratko & Hodgetts, 1992) and be more receptive to risktaking attitudes and providing credits. In other words, the strength of the socio-cultural infrastructure of the area plays a crucial role in encouraging entrepreneurship, celebrating innovation and facilitating opportunity recognition for new ventures. Innovation is the driving factor of opportunity recognition in entrepreneurship (Drucker, 1985). Some rural areas in developing countries face socio-cultural obstacles, such as fear of failure, negative public attitude toward creativity and innovation, a sense of isolation, resistance to change in a society or a lack of feedback. This poses unique challenges in recognition of opportunities in rural areas and discourages individuals from starting new ventures. This leads to Proposition 5: The strength of the sociocultural infrastructure is positively related to the discovery of opportunities in rural regions in developing countries.

THE MEDIATING EFFECT OF THE NATIONAL ENTREPRENEURIAL FRAMEWORK CONDITIONS

The Global Entrepreneurship Monitor Report (1999) revealed that national entrepreneurial framework conditions support entrepreneurial activity in the United States (Zacharakis et al., 1999). The availability of financial resources for new firms and the strength of infrastructure were found to be highly correlated with the level of entrepreneurial activity across countries (Zacharakis et. al., 1999). Including these variables in the model allows us to draw implications for other developing countries since the concepts underlying the model tend to be applicable across all settings.

AVAILABILITY OF FINANCIAL RESOURCES

Promoting rural entrepreneurship requires financial resources such as funds for loans, sizeable investment and technical assistance for micro enterprises (Kulawczuk, 1998). For instance, the credit unions, service cooperatives and communal enterprises all played a major role in improving the access to credit and financing the creation of the support infrastructure for rural entrepreneurial development in the Ukraine between 2001-2005 (ISMEE, 2005). In this paper, the availability of financial resources specifically refers to low interest government loans, credit counseling and technical assistance to rural entrepreneurs in starting new ventures. GEM (1999) stated that financial support may play a role in observing opportunities and creating motivation for individuals to exploit opportunities. Therefore, it is rational to assume that increasing funds and loans for rural regions enables the continuation of production and helps rural residents start and grow their businesses. Business financing encourages and supports rural entrepreneurs and micro-business development, and is valuable in attracting skilled labor in rural areas. This leads to the next proposition, Proposition 6: The greater the extent to which rural entrepreneurs have access to business financing, the more likely they will discover opportunities for new ventures in rural areas in developing countries.

PHYSICAL INFRASTRUCTURE

The strength of infrastructure development plays a crucial role in rural entrepreneurship development (FAO documents, 1997). Commercial and professional infrastructure development is highly correlated with the level of entrepreneurial activity across different countries (Zacharakis et al., 1999). In this paper, infrastructure development refers specifically to developing and sustaining appropriate infrastructures in rural areas. Previous research found that if there was a specific need in the community, spending on infrastructure improvements were beneficial in encouraging entrepreneurship (Bruinsma, Nijkamp, & Rietwald, 1992; Van de Ven, 1993). Basic infrastructure development is necessary for any entrepreneurial venture.

Rural regions of developing countries need construction and maintenance of rural infrastructure such as land improvement, improving irrigated areas and the water supply (IFAD Rural Poverty Report, 2001). Low levels of social and physical infrastructure in rural areas (IFAD Rural Poverty Report, 2001) hinder access to credit, input and technology and information about markets, and thereby constrain entrepreneurial development. The World Bank has found that underinvestment in infrastructure created challenges in rural development in Asia (World Bank, 1999). It is not surprising then that in India, investment in rural infrastructure is a priority due to the increasing economic development gap between rural and urban areas (World Bank Group, 2006).

The strength of infrastructure in an area affects capacity building capabilities, reduces socio-economic barriers and increases potential and possibilities for the region (Zacharakis et al., 1999). Therefore, spending on infrastructure development in rural regions leads to a change in the industry structure thus creating a new demand and supply curve for new ideas and resources, which in turn impacts the availability of opportunities. This leads to the next proposition. Proposition 7: The extent to which entrepreneurs have access to rural infrastructure development, the more likely they are to discover opportunities in rural regions in developing countries.

LEGAL AND REGULATORY INFRASTRUCTURE

Government policies and programs may play a role in the success rate of new ventures (Zacharakis et al., 1999). Government policies and programs impact the legal and regulatory infrastructure of rural areas and thereby contribute to the prevalence rate of rural entrepreneurial activity. Insufficient funding for the legal and regulatory infrastructure in rural areas may mitigate access to subsidies, initiatives and legal services, and thereby creates barriers in starting new ventures and hinders seizing opportunities in rural regions. In this case, the legal and regulatory infrastructure of a country plays a role in allowing the vicious cycle of poverty to continue. It is this cycle characterized by low levels of income, savings, investment, productivity and capital that elongate the low income nations' state of underdevelopment. Heavy regulations may also distort market information on supply and demand conditions and inhibit entrepreneurial behavior. In some countries obtaining a business license may involve strict regulations and heavy bureaucratic rules. As a result, heavy regulations, such as government bureaucracy, and corporate governance requirements may create confusion and uncertainty and may fail to promote and/or discourage certain individuals from starting a business. A heavy regulated banking sector may hinder access to credit for new venture start-ups or for the seed funding necessary to start a business or for raising investment capital. Therefore, numerous regulations may discourage access to markets, capacity building and decrease the potential of the region, which in turn impacts the availability of opportunities for new ventures in rural areas. Baumol (1993, p.2) argued that "the speed of dissemination of new ideas is not a matter of happenstance, but is heavily influenced by market forces acting through the agency of entrepreneur". We assume that the legal and regulatory infrastructure play an important role in seizing opportunities and the prevalence rate of entrepreneurial activity in rural areas. Therefore Proposition 8: The legal and regulatory infrastructure development impacts the rural entrepreneurial opportunity recognition.

As noted above, GEM (1999) stated that certain dimensions of the national framework have an impact on the level of entrepreneurial activity in a country (Zacharakis et al., 1999). In other words, the level of national framework conditions can facilitate the growth of an entrepreneurial sector in a country. Since basic infrastructure development (Fox, 1999,) availability of financing (Kulawczuk, 1998) and legal infrastructure development all play an important role in starting up an entrepreneurial venture, it is assumed that a country's rate of the development of the national framework conditions may be a dominant link between a variety of other social, intellectual and environmental dimensions and rural opportunity recognition in a country. As each developing country has a different level of national entrepreneurial framework conditions, it is suggested that the impact of intellectual, human, environmental and socio-cultural resources of opportunity recognition is partially mediated by the national entrepreneurial framework conditions. Hence, the following three propositions:

Proposition 9: The effects of intellectual, human, environmental and socio-cultural resources on opportunity recognition in rural areas are partially mediated by the availability of financial resources in a particular country.

Proposition 10: The effects of intellectual, human, environmental and socio-cultural resources on opportunity recognition in rural areas are partially mediated by the physical infrastructure development of a particular country.

Proposition 11: The effects of intellectual, human, environmental and socio-cultural resources on opportunity recognition in rural areas are partially mediated by the legal and regulatory infrastructure development of a particular country.

INSIGHTS FOR FUTURE RESEARCH AND SUGGESTIONS FOR POLICY OPTIONS CONDUCIVE FOR RURAL ENTREPRENEURSHIP DEVELOPMENT

Initiating rural entrepreneurship is a multidimensional strategy that involves education, training, business/support networks and building strong infrastructures to assist rural entrepreneurs in identifying rural business opportunities and develop new businesses. Strengthening the rural entrepreneurial system will speed up the establishment of self-sustained rural communities, increase sources of

income, support development of infrastructure, build capacity, revitalize the rural community, and make a significant impact in alleviating poverty. Therefore, what is needed is further entrepreneurship research in developing countries that help to create policies conducive for rural entrepreneurship development.

The ideas presented in this paper are a step towards future entrepreneurship research in rural areas. We propose further empirical investigation of the conceptual model presented in this paper. Overall, opportunity recognition in rural entrepreneurship is a complex issue and requires more future entrepreneurship research and the development of policy initiatives.

Below we suggest specific key public policy initiatives supporting entrepreneurship and small business development in rural regions. These policies address issues that respond to lack of education and training, increasing subsidies to maintain services, improving community business climates, increasing business support services, creating networking opportunities, providing technical assistance and building adequate infrastructures. These policy options that stimulate and support rural entrepreneurship can be summarized as:

- Promote rural entrepreneurial structuring mechanisms and an entrepreneurial culture to attract resources for the development of entrepreneurship in rural areas.
- Create a collaborative approach and integrate partnerships among universities, governmental and nongovernmental organizations to enhance rural entrepreneurial mechanisms.
- Implement special legislation for local governments to develop entrepreneurship in rural areas.
- Support education and business training, technical assistance, and strategic planning strategies to

increase the level and growth of human capital in the rural regions.

- 5. Promote the formation of small business development centers to support entrepreneurship in rural areas and lead to rural revitalization.
- Invest in the construction and renewal of infrastructure systems and provide social amenities to facilitate rural entrepreneurship development.
- Encourage the development of venture capital investments in rural enterprises to allow venture capital investment companies to leverage private capital funds with government financial assistance and to obtain both government and private grant resources.
- 8. Form strategic development alliances.
- 9 Encourage research and increased collaborations between rural and urban areas.
- 10. Facilitate the identification and dissemination of rural community capacity building resources to speed up implementing cost efficient programs appropriate for that rural region and increase the quality of work to reduce poverty.
- Develop social investment funds by financing and supporting small business development.

Further, when considering the possible mediating effect of the national entrepreneurial framework conditions between intellectual and human resources and environmental dimensions and opportunity recognition, it maybe helpful to consider business financing issues for the public policy initiatives. Some examples are:

- 1. Offer incentives to attract initiatives to rural areas
- Improve tax structures and incentive packages, address tax concessions in certain areas and tax relief for small business owners
- 3. Address capital financing, access to venture capital, access to debt and equity capital

CONCLUSION

Prior research on opportunity recognition focused on ventures in urban areas in developed and industrialized countries. The environment of rural regions in developing countries is much different (IFAD Report, p.29) than that of the developed and industrialized countries where infrastructure and skilled workforce are available and the culture is more supportive. Therefore further opportunity recognition studies on rural entrepreneurship in developing countries will be both timely and worthwhile.

Overall, strengthening the rural entrepreneurial system will speed up the establishment of self-sustained rural communities (ARC, 2001) and sustainable livelihoods in poor regions. Investing in the establishment of an entrepreneurial economy and the development of an entrepreneurial culture in rural areas will play a key factor in improving rural regions and alleviating rural poverty in developing countries. The conceptual model presented here is only a step towards understanding opportunity recognition in rural regions. We hope that the ideas suggested here may provide insights for the future entrepreneurship research in promoting rural entrepreneurship and development of public policy initiatives.

REFERENCES

- Abetti, P.A., Hirvensalo, I., & Kapij, M.I. (2001): Multi-cultural Entrepreneurial Ventures in the former Soviet Union: Case Studies of Finnish and US Approaches in Russia, Ukraine and the Baltics. International Journal of Entrepreneurship and Innovation Management. 1(1), 53-72.
- Aligicia, P.D., Leeson, P., & Coyne, C. (2003). Extending the Analysis-Romania—Lessons from the investors roadmap: Implementation challenges and an exploratory assessment of the Major Barriers to rural entrepreneurship from a new institutional economic perspective. Forum Series on the role of Institutions in promoting economic growth. Retrieved January 5, 2006, from http://mercatus.org/pdf/materials/433.pdf
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other people. *Journal of Business* Venturing, 13(4), 275-294.
- Baumol, W. (1993). Entrepreneurship, Management and the structure of Payoffs. Cambridge, Massachusetts: The MIT Press.
- Boyd, N.G., &Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. Entrepreneurship Theory and Practice, 18(4), 63-77.
- Bruinsma, F., Nijkamp, P., & Rietwald, P. (1992). Regional economic transformation & social overhead investments. *Tijdschrift voor Economische en Sociale Geografie*. 83, 3-12.
- Bruyat, C., & Julien, P.A. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165-180.
- Busenitz, L.W., & Barney, J.B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12, 9-30.
- Bygrave, W., & Minniti, M. (2000). The social dynamics of entrepreneurship. Entrepreneurship Theory and Practice, 24(3), 25-36.

- CIDA. Canadian International Development Agency. Promoting sustainable rural development through agriculture. Retrieved April, 1, 2005, from www.acdi-cida.gc.ca/cida_ind.nsf
- Cohen, W.M., & Levinthal, D.A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. Administrative Science Quarterly, 35(1), 128-152
 - QDe Koning, A.J. (1999). Opportunity Formation From A Socio-Cognitive Perspective. Frontiers of Entrepreneurship Research, 258.
- Drucker, P.F. (1985). Innovation and Entrepreneurship: Practices and Principles. Oxford, Butterworth: Heinemann.
- FAO/UNESCO Seminar. (2002). Education for rural development in Asia:
 Experiences and policy lessons" was held 5-7 November 2002 in
 Bangkok, Thailand. Retrieved December 20, 2005, from
 ftp://ftp.fao.org/sd/SDR/SDRE/Mep seminar bangkog%20vFAO.PDF
- Florida, R. (2002). The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. Jackson, TN: Perseus Books Group.
- Floyd, S.W., & Woolridge, B. (1999). Knowledge creation and social networks in corporate entrepreneurship: The renewal of organizational capability. Entrepreneurship Theory and Practice, 21(3), 123-143.
- Food and Agriculture Organization of the United Nations (FAO) Document Repository (FAO) Documents. (1997). Retrieved January 6, 2006, from http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/W6 882e/w6882e.htm
- Gaglio, C.M., & Taub, P. (1992). Entrepreneurs and Opportunity Recognition. Frontiers of Entrepreneurship Research, 136-147.
- Hatten, T.S. & Ruhland, S.K. (1995). Student attitude toward entrepreneurship as affected by participation in an SBI program. *Journal of Education* for Business, 70(4), 224-228.
- Hayek, F. (1945). The use of knowledge in society. American Economic Review, 35(4), 519-530.

- Hills, G.E., Shrader, R.C., & Lumpkin, G.T. (1999). Opportunity recognition as a creative process. Frontiers of Entrepreneurship Research, 216-27.
- IFAD. (2001). International Fund for Agricultural Development, Rural Poverty
 Report: The challenge of ending rural poverty. Retrieved December
 11, 2005, from http://www.ifad.org/poverty/chapter2.pdf
- IFAD (2002). Enabling the rural poor to overcome their poverty. Retrieved December 11, 2005, from http://www.gm-unccd.org/FIELD/Multi/ IFAD/IFAD1.pdf
- ISMEE (2005). Improving of SME environment- UKRAINE- Support of rural entrepreneurship development. Retrieved December 13, 2005, from www.ismee.com.ua/english/?go=calendar&doc=100023&part=7-21k
- Kaisch, S., & Gilad, B. (1991). Characteristics of opportunities search of entrepreneurs vs. executives: sources, interest, and general alertness. *Journal of Business Venturing*, 6, 45-61.
- Khan, H.H. (2001). Rural Poverty in Developing Countries Implications for Public Policy. International Monetary Fund. Retrieved December, 21, 2005, from http://www.internationalmonetaryfund.com/external/ pubs/ft/issues/issues26/index.htm#1
- Kirzner, I. (1979). Perception, Opportunity and Profit. Chicago, IL: University of Chicago Press.
- Kirzner, I.M. (1973). Competition and Entrepreneurship. Chicago, IL: University of Chicago Press.
- Knudsen, M.P., Dalum, B., & Villumsen, G. (2001). Two Faces of Absorptive Capacity Creation: Access and Utilisation of Knowledge. Paper Presented at Nelson and Winter Conference, Aalborg.
- Kulawczuk, P. (1998). The development of entrepreneurship in rural areas. In J.D. Kimball (Eds.), The Transfer of Power: Decentralization in Central and Eastern Europe (97-109). Budapest, Hungary: The Local Government and Service Form Initiative.
- Kuratko, D. F., & Hodgetts, R. M. (1992). Entrepreneurship: A Contemporary Approach (Second Edition). Fort Worth, Texas: Dryden Press.

- Kuratko, D., & Welsch, H.P. (2001). Strategic Entrepreneurial Growth. Orlando, Florida: Harcourt Inc.
- Lohmoller, G. (October, 1990). Concept for the development of entrepreneurial activities in the rural area for farmers and managers of small- and medium-sized enterprises. Presented at the Fifth Session of the FAO/ECA Working Party on Women and the Agricultural Family in Rural Development, Prague, Czechoslovakia.
- Malecki, E, J. (1997). Technology and Economic Development: the Dynamics of Local, Regional, and National Competitiveness, Longman, Essex: England
- McMullan, W.E., & Long, W.A. (1990). Developing new ventures. The entrepreneurial option. Orlando, Florida: Harcourt Brace Jovanovich, Inc.
- Mueller, S., & Thomas, A. 2000. Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness. *Journal of Business Venturing*, 16, 51-75.
- Mundhra, J. (2006). India needs entrepreneurs. Retrieved January 5, 2005, from www.iifm.org/alumni.html
- Petrin, T. (1997). Entrepreneurial development process; a training approach. In Food and Agriculture Organization of the United Nations (FAO) Document Repository. REU Technical Series. 41. Retrieved December 22, 2005, from http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/W6882e/w6882e.htm
- Petrin, T., & Gannon, A. (1997). Rural development through entrepreneurship.

 FAO, Rome (Italy). Regional Office for Europe. Retrieved December
 15, 2005, fromhttp://www.fao.org/documents/show_cdr.asp?url_file=/
 DOCREP/W6882e/W6882e00.htm
- Priyadarshi, S. (2002). Reforming global trade in agriculture: a developing country perspective. Trade, Environment and development. Retrieved December 15, 2005, from www.ceip.org/files/pdf/TED_2.pdf

- Redding, S.G. (1980). Cognition as an aspect of culture and its relation to management processes: An exploratory review of the Chinese case. *Journal of Management Studies*, 17(2):127-148.
- Sapienza, H.J., Manigart, S., & Vermeir, W. (1996). Venture capitalist governance and value-added in four countries. *Journal of Business* Venturing, 11(6), 436-469.
- Schumpeter, J.A. (1942). Capitalism, Socialism and Democracy (Fifth Edition).
 London: Allen & Unwin.
- Sexton, D.L., & Bowman-Upton, N.B. (1991). Entrepreneurship. Creativity and Growth. New York: MacMillan Publishing Company.
- Shane, S.A. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. Organization Science, 11(4), 448-469.
- Shane, S., & Venkatraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217-226.
- Shepherd, D., and DeTienne, D. (2001). Discovery of Opportunities: Anomalies, Accumulation and Alertness. Frontiers of Entrepreneurship Research, 138-148.
- Singh, R. (1998). Entrepreneurial Opportunity Recognition through Social Networks. Unpublished doctoral dissertation, University of Illinois at Chicago.
- Spohr, C. A. (2002). Former schooling and workforce participation in a rapidly developing economy: evidence from "compulsory junior high school in Taiwan. Journal of Development Economics.
- Stevenson, H., & Gumpert, D. (1985). The Heart of entrepreneurship. Harvard Business Review, 63, 85-94.
- Timmons, J.A. (1994). New Venture Creation: Entrepreneurship For The 21st Century (Forth Edition). Homewood, IL: Irwin.
- UNDP. (2003). Bulgaria. National human development report. Rural Regions: Overcoming development disparities. Retrieved January 20, 2006, from www.undp.bg/en/publications.php?content=yes&ID=18 - 19k

- UNDP (2005). United Nations Development Program. Government of Turkey. Retrieved June 23, 2005, from Nwww.un.org.tr/undp/UNDP-TUR-L01-04.asp - 31K.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (2006). Rural ICT services. Retrieved June 23, 2005, from www.unescap.org/icstd/applications/ruralICT
- UN ICD Task Force (2002). Supporting entrepreneurship in developing countries: Survey of the field and inventory of initiatives. Retrieved June 20, 2005, from www.bridges.org/entrepreneurship/entrepreneurship inventory.pdf
- Venkatraman, S. (1997). The distinctive domain of entrepreneurship research. In J. Katz (Ed.), Advances in Entrepreneurship: Firm Emergence and Growth, 3, 119-138.
- Vesper, K.H. (1983). Entrepreneurship and National Policy. Chicago, IL: Walter E. Heller International Corporation Institute for Small Business.
- Vesper, K.H. (1990). New venture strategies. Englewood Cliffs. NJ: Prentice Hall. World Bank Report. Enhancing Rural Poverty Focus in National and World Bank Processes. A summary of key findings. Retrieved April 30, 2005, from http://72.14.207.104/search?q=cache:_eVrZrGgOOgJ: www.passlivelihoods.org.uk/site_files%255Cfiles%255Creports%25 5Cproject_id_205%255CBriefing%2520Note_WB0081.pdf+%22rural +poverty%22,+turkey&hl=en
- World Bank (1999). Financial woes threaten infrastructure investment in APEC region. Retrieved April 30, 2005, from www.ers.usda.gov/publications/ agoutlook/oct1999/ao265i.pdf
- World Bank. (2003). Rural poverty in Europe. Retrieved June 30, 2005, from http://www.ruralpovertyportal.org/english/regions/europe/index.htm
- World Bank Group. (2006). Rural Women in India to Welcome Wolfowitz.

 Retrieved June 30, 2005, from web.worldbank.org/WBSITE/
 EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:20617
 437~menuPK:158937~pagePK:1467.

Zacharakis, A., Reynolds, P.D., & Bygrave, W.D. (1999). Global Entrepreneurship Monitor: National Entrepreneurship Assessment: United States of America Executive. Retrieved June 5, 2005, from http://216.239.39.100/Rsearch?Q=cache:NMeAfnmeesC:www.ncoe.org/research/RE-018.pd