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The Adaptation of Rural Communities to Socio-Economic Change: Theoretical Insights from Atlantic Canada

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Abstract

Why do certain rural communities have the capacity for renewal and innovation in the face of transformation, while others stagnate, decline, and die out? What factors are involved in the resiliency of the former communities, and what conditions cause the latter to falter in their capacity for survival? With the hope of gaining valuable insight in support of the economic development agenda of Atlantic Canada, this article reviews the definitional and theoretical literature surrounding the adaptation of rural communities to changes brought about by the transition to knowledge-based economies. The article defines and discusses the merits of community resiliency, community assets, community capitals, and social capital, placing these concepts within a larger entrepreneurial social infrastructure framework. The history and socio-economic realities of the four Atlantic Canadian Provinces are woven together in an effort to keep the literature review and arguments as relevant as possible to the current circumstances of the region.

Keywords: Rural Atlantic Canada; natural resource dependence; economic development; community resiliency; community assets; social capital; entrepreneurial social infrastructure

1.0 Introduction

Home to 3500 people and an hour's drive from the nearest city, Community A has been left reeling by the closure of the last functioning coal mine in the area. With student enrolment at an all-time low, families fear the school will soon share the fate of the hospital, bank, and grocery store, in what has been called "The Great Exodus". Several men, and a few women, have left for the Alberta oil sands, leaving behind their spouses and children. Community members are angry with the coal company for taking away their livelihood, and resentful of the provincial and federal governments for making little effort to assist with their struggle. Many residents of Community A say they find the situation degrading, but they do not know what to do in order to save the community. Community A is scenic, with panoramic views of the Atlantic Ocean, and tourism is often mentioned as a possible solution to the town's economic dilemma; however, they would need to have better sewer and water lines to support high numbers of visitors, and no one can agree on the costs and benefits of attracting tourists. Community A has the best scenery but the neighbouring community has a modern sewage and water treatment facility, as well as other services. The communities could share the services, but there is a long history of animosity between the two towns.

Community A hopes the mayor will come up with a solution soon, as more families are packing up, including what remains of last year's graduating class.

As with the case of Community A, Community B is located an hour away from the nearest urban centre and has a population of 3250 people. Community B shares a high school with a neighbouring village, as well as a diner, barbershop, and a few small retail establishments; however, the hospital and bank are now closed. Two years ago, the American-owned pulp and paper mill shut down, leaving most of the adult population unemployed. Not long after the closure, community members started a series of study circles to discuss the future of their town. Through these meetings, residents of Community B learned how to accurately state and defend opposing sides of issues, disagree constructively, critique their own positions, and consider new perspectives. They also learned first-hand the difficulties of balancing costs and benefits, making fair trade-offs, and accommodating the demands of diverse affected parties (Hamlett & Cobb, 2006). An action plan was derived from the study circles and utilized by community members to form a council, in partnership with the municipal government, the neighbouring town, business owners, former mill managers and employees, the local youth group, church committee, and concerned citizens. Proactive efforts and a partnership with the provincial government enabled Community B to accrue enough financial capital (including dipping into their own savings) to buy the mill and redevelop it into an innovative facility that turns recycled waste paper into decorative fluting for houses and furniture. Community members worked together to market their product through e-commerce and now receive orders from across North America. It will be a while before Community B can replenish the population and services it lost over the past few years, but the situation is gradually improving.

Passive Community A and resourceful Community B paint fictional portraits of how rural towns in New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador might confront the challenge of economic development. While members of Community A relied on the prospect of government support, members of Community B created and reinforced social relationships, formed partnerships, and worked collectively to embrace economic development from the bottom-up. With the goal of gaining valuable insight in support of the economic development agenda of Atlantic Canada, the purpose of this article is to review the definitional and theoretical literature concerning rural community adaptation to changes brought about by the transition to knowledge-based economies. Why do some small communities have the capacity for renewal and innovation in the face of change, while others stagnate, decline, and die out? What factors lead to a more resilient outcome in the former, and what conditions cause the latter to lose capacity for survival? The article begins with a discussion of the challenges faced by rural communities in Canada, particularly in Atlantic Canada. It then focuses on an increasingly popular concept in current academic literature: *community resiliency*. This is followed by the outlining of protective factors that are believed to lead to a resilient outcome at the community level. Protective factors relate to the capacity of residents and groups for local action, and to achieve a common goal. Following a discussion of community assets and capital, in addition to social capital, the article turns to a review of entrepreneurial social infrastructure and a discussion of why this relatively unknown theory may best explain adaptation or maladaptation of rural communities. The socio-economic realities of the four Atlantic Canadian Provinces are woven throughout,

in effort to keep the literature review and arguments as relevant as possible to current circumstances within the region.

2.0 The Rural Community

A knowledge-based economy depends upon people and their creativity in the development of new ideas, products, and processes that enable goals to be achieved better and faster (Canada, 2002). Urban literature suggests the most significant benefits of a knowledge-based economy tend to be realized in large urban centres. The creativity, diversity, and innovation celebrated by Saskia Sassen (1991) and Richard Florida (2002) are unlikely to bring prosperity to less populated regions, which are often seen to suffer from small local market size and larger distances from attractive metropolitan markets. The low population densities of small rural communities are thought to make the provision of critical infrastructure and services much more costly for businesses and local governments; moreover, they are thought to be less likely to accept newcomers, to live comfortably with ethnic and cultural differences, and to attract those talented and creative people who power innovation and growth. The widening gap between the urban, cosmopolitan, and growing parts of the nation, along with the rest of Canada, has been well documented (e.g. Bourne & Rose, 2001; Bourne & Simmons, 2003; Polèse & Shearmur, 2006). Populations in rural Canada tend to be older and less educated; a wide gap in computer usage exists between metropolitan and non-metropolitan residents; rural firms tend to be concentrated in less innovative, resource-based industries; and according to many indicators, people who live in rural communities tend to experience poorer health than that of their urban counterparts (Bollman & Beshiri, 2000; Industry Canada, 2001; Mitura & Bollman, 2003; Canada, 2006; Kulig & Williams, 2011).

Home to a high proportion of small rural communities, Atlantic Canada has not kept pace with the rest of the country with respect to employment, income, trade, and productivity. The region is experiencing the demographic reality of slowing population growth, rapid population aging, and declining labour force participation. While globalization, connectivity, lifestyle changes, and accompanied shifting income distributions have altered the character of many rural communities in North America (Flora et al., 2004), the resource-based community remains an important component of rural Atlantic Canada. In applying the proportion of all jobs in resource industries (i.e. agriculture, fishing, forestry, energy) as a measure of degree of dependence, Atlantic Canada appears more resource-reliant on average than Central Canada. Furthermore, researchers have found a strong negative relationship between income and the fishing industry, which constitutes 46% of resource-based employment in the Atlantic Region. Forestry sector dependence is also associated with negative outcomes, including low educational attainment, high rates of family poverty and unemployment, and slightly lower median family income, but less so than the fisheries sector (Stedman et al., 2004). Resource dependent communities are routinely depicted as economically unstable: caught in a constant drain of human capital and lacking diversity. These communities are particularly vulnerable to economic risks and natural disasters (Flint & Luloff, 2005).

Although the future of the oil and gas industry in Newfoundland & Labrador appears promising, Atlantic Canada can no longer rely exclusively on the extraction of natural resources. Structural changes in these traditional rural

employment sectors, coupled with increased global competition, have challenged local economies (Leach & Winson, 1995; Binkley, 1996; Binkley, 2000; Paquette & Domon, 2003; see also Rolfe, 2006); for example, the 1992 moratorium on cod fishing and stringent controls on the exploitation of other fish stocks “precipitated a crisis of titanic proportions” in the 1300 Atlantic communities that were almost entirely dependent on the fishery (Conrad & Hiller, 2006, p.216). Additionally, in 2007-2008 the Atlantic Canada forestry sector lost 5000 jobs, or nearly a quarter of its workforce, most of them in New Brunswick (Mandel, 2008). The unemployment rate in New Brunswick (as of March 2013) stood at 10.5%, while on the island of Cape Breton, Nova Scotia it hovered at a stubborn 18.6%. A decline or transformation of the economic base of affected communities has typically led to a reduction in employment opportunities; more young people and young families moving to the city in search of employment; fewer infrastructural supports such as retail services; and the loss of local health care (Gray, 1994; Cotter, 2004 as cited in Rolfe, 2006, p. 4). In all four Atlantic Provinces throughout the 1990s, population and services increasingly gravitated toward urban centres, and out-migration remained a common recourse for the unemployed, the young, and the upwardly mobile (Conrad & Hiller, 2006, p. 216). New Brunswick alone lost 10,566 residents to inter-provincial migration between 1981 and 2002: 30% of who were university graduates (Savoie, 2006, p. 237). According to Michael Corbett’s (2006) *Learning to Leave: The Irony of Schooling in a Coastal Community*, rather than building and supporting maritime communities, schools actually contributed to rural depopulation and decline through a curriculum that disconnected young people from their homes and families.

3.0 The Resilient Community

As researchers and practitioners determine how best to prepare for the expected and unexpected impacts of global climate change, there has emerged a wave of studies describing the “resilient community” (e.g. Adger, 2003, 2006; Smit & Wandel, 2006; Eakin & Luers, 2006; Cutter et al., 2008; Robards et al., 2011; Engle, 2011). The majority of this research originated within the frameworks of *vulnerability* – susceptibility to harm (Eakin & Luers, 2006), and *resilience* – achieving desirable states in the face of change (Engle, 2011). Within such contexts, community resiliency is “the existence, development, and engagement of community resources by community members to thrive in an environment characterized by change, uncertainty, unpredictability, and surprise” (Magis, 2010, p. 402). When faced with adversity, resilient communities develop material, physical, sociopolitical, sociocultural, and psychological resources to anticipate and cope with changing environments (Ahmed et al., 2004). They also partake in anticipatory learning that seeks to monitor and better understand their changing environments (Tschakert & Dietrich, 2010). “Members of resilient communities intentionally develop personal and collective capacity that they mobilize to respond to, and influence change, to sustain and renew the community, and to develop new trajectories for the communities’ future” (Magis, 2010, p. 402). A community’s resilience is dynamic: changing with internal conditions, external forces, and its ability to respond and develop (Harris et al., 2000). It is not about controlling all the conditions that affect communities; rather, it is about individual and community ability to respond to change (Healy et al., 2003; Ahmed et al., 2009).

Along with the recent literature on climate change, ecological research on resilient communities has focused on natural hazards, economic distress, and disaster

mitigation (Berkes & Jolly, 2001; Cutter et al., 2003; Fournier, 2011), as well as the experience of a sudden and devastating crisis due to natural (e.g. floods, crop failure) or human-made (e.g. a mill closure) causes (Walisser et al., 2004; Flint & Luloff, 2005; Seymoar, 2005). Community resiliency has been addressed in the Canadian academic literature by Ralph Matthews and colleagues' *Resilient Communities Project* at the University of British Columbia (UBC, 2003), which is concerned with the social factors involved in the resilience of the province's coastal communities; with respect to health promotion in remote and rural communities by Judith Kulig and colleagues at the *Regional Centre for Health Promotion and Community Studies*, University of Lethbridge (Kulig, 2000; Kulig & Williams, 2011); and Renee Lyons and colleagues at the *Atlantic Health Promotion Research Centre* (AHPRC) at Dalhousie University. A 1999 study by the AHPRC of three small coastal communities in Atlantic Canada, hit hard by the collapse of the ground fisheries industry, documents community-level resilient outcomes along with risk and protective factors in the process of community adaptation to change. An outcome was considered resilient if it indicated positive adjustment to adversity, competence, health, or functioning. The contradictory results of the study revealed that, despite considerable risk in terms of employment and the economy, these three communities displayed remarkable resilience. The study referred to a strong sense of community linked to a shared history, social traditions, religion, small community size, and communal trust, as protective factors leading to resiliency. Unfortunately, development efforts were not successful in these communities, and economic disadvantage, distress, and hardship were prevalent risk factors cited by community members. Additionally cited barriers to collective action included communal apathy and anger; expressions of powerlessness and resentment; a low level of citizen participation in community development activities; low levels of education; geographic and social isolation; a failure to rally communally in response to the current hardship; and a lack of coordination of community organizations (AHPRC, 1999). In short, a desire for change was present amongst community members, which is a protective factor, but the ability or motivation to act on that desire was apparently lacking. The authors of the study concluded that resiliency is potentially a useful concept at the community level, but the fact that resiliency is both an outcome and an explanatory factor makes it difficult to measure and describe.

Various concepts are applied in the academic literature to describe protective factors associated with community resiliency, all of which relate to the capacity of residents and groups for local action to achieve a common goal. Leonard Cottrell (1976) described *community competence* as the process through which community members' work together to identify the problems and needs of the community. Robert Sampson, Stephen Raudenbush, and Felton Earls (1997, 1999) introduced the idea of *collective efficiency*: "the conjoint capability for action to achieve an intended effect, and hence an active sense of collective engagement on the part of citizens to solve problems" (1997, p. 920). Kenneth Wilkinson (1991) referred to *community agency* as "the building of local relationships that increase the adaptive capacity of local people within a common territory, or the capacity for people to manage, utilize, and enhance those resources available to them in addressing locality-wide issues" (as cited in Brennan & Luloff, 2007, p. 53; see also Luloff & Swanson, 1995; Luloff & Bridger, 2003; Brennan, 2008). Henry Milner (2002) attributed the condition for attaining certain social outcomes at the community level to *civic literacy*. Through political participation, people ensure that their interests are taken into account in the

decision-making process. In so doing, they gain the skills and knowledge to act effectively as members of the community (Milner, 2002, p. 1-2). Finally, *community capacity* or “the collective ability of a group to combine various forms of capital within institutional and relational contexts to produce desired results or outcomes,” was used by Thomas Beckley et al. (2001, p. 7) in their discussion of forestry dependent communities in New Brunswick.

4.0 Community Assets and Community Capitals

Economic self-sufficiency through decreased dependence on federal equalization payments was the political model of the three Maritime Provinces over the past decade and, since the mid-1980s, successive Newfoundland & Labrador governments have recognized that significant structural change is required for the provincial economy and society. The construction of the Hibernia and Hebron offshore oil platforms invigorated the Newfoundland economy, resulting in enhanced production in the forestry and mining sectors, in addition to new sectors such as aquaculture, adventure tourism, innovative technologies, and manufacturing. Newfoundland & Labrador reached a milestone in 2008 when it came off equalization payments to become a Canadian “Have Province” for the first time in its history. Economic self-sufficiency is such a necessary aspect of community viability that its absence is often sufficient grounds for declaring a community non-viable or, as Oliver Moore (2007) put it, “a town on death row.”

In his discussion of the decline of Newfoundland’s out port communities and government-led community resettlement efforts, Ralph Matthews (1983) argued that an economic measurement of community success or decay is too narrow. People from the resettled communities emphasized other conditions when talking about their former homes. “They judged their communities by criteria other than economic viability”, writes Matthews. “They were strongly attached to other people in their communities, many of who were relatives or close friends. In contrast to the planners’ criteria of economic viability, the residents of such communities used criteria of social vitality in judging their quality of life” (Matthews, 1983, p. 149). In his 1976 study of three communities in rural Newfoundland that had resisted the pressure to resettle, Matthews found their resistance depended on the presence of a strong leader or group of leaders who opposed resettlement and who were recognized as valid representatives of the community: not only by those within the community but also by government agencies responsible for its fate. He describes this community leadership and control as *political viability*, and refers to it as the third dimension of community life that must be considered in any analysis of the social structure of community (Matthews, 1976 as cited in Matthews, 1983, p. 149).

The economic, social, and political dimensions of community life are also called economic, social, and political assets or capital. The *community asset development model* helps communities to mobilize and build the assets that already exist within. By focusing on assets and capacities rather than needs and deficiencies, energy is directed toward opportunities at the community level, while remaining conscious of how the policy environment could be changed to further strengthen community capacity to drive its own development (Kretzmann & McKnight, 1993). When community assets are invested to create new assets they become *capital*. Community capital is the natural, human, social, and built capital from which a community receives benefits and on which the community relies for continued

existence (Hart, 1999). The *sustainable livelihood framework* is also underpinned by an asset-vulnerability approach to understanding poverty. It points to the importance of assets as buffers and to social relations alongside non-monetary aspects of poverty, such as powerlessness and isolation (Brocklesby & Fisher, 2003, p. 186). People are seen as living within a vulnerability context and they have a number of capital assets that they can draw upon to make their livelihoods. These capital assets are used to assess a community's overall asset base. The sustainable livelihood approach typifies a shift in community development thinking from needs-based, resource-centred solutions to a focus on people and their capacity to initiate and sustain positive change (Carney, 1998; Altarelli and Carloni, 2000 as cited in Brocklesby and Fisher, 2003, p. 187).

Ellen Donoghue and Victoria Sturtevant (2007) distinguish *foundational assets* – the resources present or built in a community (physical capital, natural capital, and financial capital) – from *mobilizing assets* – the social processes and interaction that make up collective action (human capital, social capital and political or civic capital) (see also Flora et al., 2004; Boyce & Shelley, 2003; Beckley & Krogman, 2002). Mobilizing assets, such as human or social capital, if not activated to address a particular problem, remain foundational assets. Mobilizing assets can be called upon when the community needs to respond to internal and external stresses or opportunities; for instance, gated communities may have human capital assets, such as skilled workers, diverse forms of knowledge, and financial means that contribute to the foundation of assets within a community. If individual preference for isolation or independence occurs, this may mean that such assets are not mobilized for collective community benefit (Donoghue & Sturtevant, 2007, p. 907). *Social capital* is particularly important as a mobilizing asset due to its role in activating the foundational assets into productive use by a community to create desired outcomes (Donoghue & Sturtevant, 2007, p. 907). Consequently, “the ability of a community to adapt to change and take advantage of opportunities depends not just on a community's stock of assets, but also on whether or not it can activate these assets to solve a problem or achieve desired outcomes” (Donoghue & Sturtevant, 2007, p. 908).

5.0 Social Capital

“Common to all theories of social interaction is the recognition that collective action requires networks and flows of information between individuals and groups to oil the wheels of decision making. These sets of networks are usefully described as an asset of an individual or a society and are increasingly termed social capital” (Adger, 2003, p. 389). Social capital is broadly conceptualized across the social sciences as “the network of associations, activities, or relations that bind people together as a community via certain norms and psychological connections, notably trust, and which are essential for civil society and productive of future collective action or goods, in the manner of other forms of capital” (Farr, 2004, p. 9). Pierre Bourdieu (1986) and James Coleman (1957) are most commonly recognized for introducing conceptions of social capital to sociology. Bourdieu focused on the benefits accruing to individuals by virtue of participation in groups, and on the deliberate construction of social networks for the purpose of creating this resource called social capital (Portes, 1998, p. 3). Coleman described the mechanisms that generate social capital for individuals (reciprocity expectations and group enforcement of norms); the consequences of its possession (privileged access to

information and social control); and the appropriate social organization that provides the context for both sources and effects to materialize (Portes, 1998, p. 7).

Political scientists, most notably Robert Putnam (1993, 1995, 2000), equate social capital with levels of “civicness” in communities rather than individuals. In practice, this community-level social capital is associated with levels of associational involvement and participatory behaviour within a community, and is measured by such indicators as newspaper reading, membership in voluntary associations, and expression of trust in political authorities. Putnam maintained that communities with high levels of social capital are marked by extensive civic engagement and patterns of mutual support. He used the analogy of bowling to argue that social interaction increases our willingness to rely on others and to participate in collective endeavours. Connections among individuals function as “social glue” and play a critical role in people’s ability to cooperate with one another for the benefit of all (Putnam, 1995). Putnam further maintained that social capital enhances people’s investment in physical and human capital (Putnam, 1993); communities with high levels of social capital are marked by extensive civic engagement and patterns of mutual support; and, over the long haul, people are better able to avoid poverty and marginalization if they manifest a rational disposition to extend trust to strangers and a readiness to establish new social bonds (Putnam, 2000). In essence, social capital embodied in norms and networks seems to be a precondition for economic development.

Putnam’s work has been criticized for its failure to distinguish between sources of social capital and benefits derived from social capital (Woolcock, 1998). As a property of communities rather than individuals, social capital (like resilience) is simultaneously a cause and an effect. Putnam’s work has also been criticized for focusing on wealth generation rather than wealth distribution, and for having a naïve view of rural communities as places where civic harmony and inclusion triumph and there is little room for power struggles, exclusionary tactics by privileged groups, or ideological conflicts (Shortall, 2004). Regardless, the social capital debate clarifies the importance of economic goals vis-à-vis social and civic goals, as will be discussed in the remainder of this article.

6.0 Entrepreneurial Social Infrastructure

Entrepreneurial Social Infrastructure (ESI) is an adaptation of social capital theory. Jan Flora and Cornelia Butler Flora (1993) developed the ESI framework to explain how some communities are more successful at applying social interactions and social relations to bring about economic development. Flora and colleagues (1997) described ESI as a set of concepts, principles, and indicators of a community’s ability to address issues and solve problems collectively, and a particular way of using social capital in the furtherance of community economic development. The authors emphasized three types of social structures that encourage economic development in rural communities: 1) legitimacy of alternatives or symbolic diversity (acceptance of controversy, depersonalization of politics, a focus on process), 2) mobilization of resources (individual and collective), and 3) networks that are diverse and inclusive and have permeable community boundaries (Morton, 2003). These elements assist in converting social capital into organizational forms that facilitate collective action (Flora et al., 1997).

7.0 Legitimacy of Alternatives (Symbolic Diversity)

In his book *The Web of Life*, Fritjof Capra (1996, p. 303) explained: “Diversity means many different relationships, many different approaches to the same problem. A diverse community is a resilient community, capable of adapting to changing situations.” Communities that are accepting of differing citizen perspectives are more likely to have access to a broader range of choices, and be more capable of reaching consensus than do communities rife with conflict and intolerance (Coleman, 1957). Communities that value diversity ensure that individuals of all backgrounds – young and old, men and women, different racial and ethnic groups, different social classes, and newcomers and old-timers- are listened to and have the opportunity for leadership. Through the active interaction of a wide cross section of people, a more representative voice is provided that reflects the diverse needs and wants of the community (Barnett & Brennan, 2006). “Solving complex problems...requires us to talk not just with experts close to us, but also with people on the periphery...it requires us to talk not just with people who see things the same way we do, but especially with those who see things differently, even those we don’t like” (Kahane, 2004, p. 74-75). Rather than fostering perverse conflict or superficial harmony, legitimating alternatives and diversity inspires communities to engage in constructive controversy in order to arrive at workable community decisions by focusing on community processes, depersonalization of politics, and broadening of community boundaries (Flora & Flora, 1993, p. 51-52). According to Jan Flora and colleagues (1997), in communities in which alternatives are legitimated through various methods of engagement and deliberation, there is a focus on process rather than on ends only. “Successes occur, and should be celebrated, but building capacity, individual and organizational, are more important than any particular development success” (Flora et al., 1997, p. 628).

8.0 Mobilization of Resources

Resource mobilization involves risking collectively in communities, rather than forcing risk on just a few individuals. Entrepreneurial social infrastructure is facilitated when there are enough resources for the community to keep going if it loses on a particular investment. Resource mobilization further involves local investment by residents of their own private capital into self-development initiatives. This includes a willingness on the part of those privileged to have resources to invest in community projects; a willingness of citizens to commit local taxes to community betterment; and the development of innovative mechanisms for channeling resources to community endeavors (Flora, 1998, p. 492). Individuals in entrepreneurial communities are also willing to contribute non-monetary capital, in the form of physical and human resources, to enterprises that are anticipated to benefit the community (Ommer & Turner, 2004). This capital may then be used to leverage outside capital and investment, but the initial self-investment means a greater degree of local control and flexibility. Since locally generated enterprises are often risky, it is preferable that people contribute no more than they are willing to lose (Flora & Flora, 1993).

Innovation is associated with the creation of new ideas and knowledge, or the application of existing knowledge in new ways. Innovation is about implementing change. It is about invention, either commercial or social, and developing new products, processes, models, or services (Bradford, 2003). Since human capital is

regarded as the new raw material of the knowledge-based economy, innovation is about developing people and their ability to invent new ideas or applications, and apply them to current challenges in production, process, markets or policy (Torjman & Leviten-Reid, 2003; Florida, 2002 as cited in Robertson Lacroix, 2004, app. 5). Of the generally recognized strategies for innovation leading to economic development, that of the strongest potential for helping local economies is the creation of new business enterprises, or entrepreneurship (Shaffer, 1989). Entrepreneurship recirculates resources locally and multiplies benefits for the local community. Unlike businesses recruited to locate in the community, local entrepreneurs generally have a commitment to the community and are less likely to pack up and leave when the going gets tough (McNamara et al., 1995). Numerous studies have identified local ownership as a key element in a community's long-term ability to set the pace of its own development; ensure long-term social benefits from the enterprises in the community's region; and maintain resilience against economic shocks. Key benefits of local ownership highlighted in the literature, include local decision-making, greater capture of material wealth from local resources, and empowerment over resource management (Shuman, 1998 as cited in Beckley & Krogman, 2002).

9.0 Diverse Networks (Quality Linkages)

The quality of internal and extra-local linkages is a third dimension of social infrastructure, expected to enhance the flow of information, money, and support within and into the community. Multiple, diverse, and dense networks provide access to a variety of people and ideas, contributing to the overall capacity of the community. *Networking* is often regarded as a manifestation of social capital, and many of the insights of social capital theory can be found, quite independently, in the network literature (Himanen & Castells, 2002). Robert Putnam (2000) distinguished between *bonding* and *bridging* social capital: networks that help individuals to get by and those that enable individuals to get ahead in life. Bonding networks bind together family, friends, and those of similar ethnic, cultural, and socio-economic status. Bridging networks connect diverse groups within the community to each other and to groups outside the community. Flora and Flora (1993) interchange the terms bonding and bridging social capital with *horizontal* social capital (binds together individuals who occupy similar social locations) and *hierarchical* social capital (binds together individuals who occupy different social locations). Mark Granovetter (1973, p. 137) referred to the latter as “weak ties”: “Those to whom we are weakly tied are more likely to move in circles different from our own and will thus have access to information different from that which we receive.” It is the different combinations of bonding and bridging social capital that allow communities to confront poverty and vulnerability, resolve disputes, and take advantage of new opportunities (Woolcock & Narayan, 2000). Bonding and bridging networks can reinforce one another. When both are high, entrepreneurial social infrastructure is strengthened and effective community action results; when both are low, extreme individualism dominates, which is reflected at the community level in social disorganization (Flora et al., 2004).

It is bridging social capital that stands out in communities with high levels of entrepreneurial social infrastructure; for example, the climate change literature maintains that social capital relations generated and maintained across communities for non-economic purposes are often a necessary component of coping with extremes in weather, along with other hazards and their impacts (Adger, 1999).

“Resource-dependent communities have historically acted collectively to manage weather-dependent, fluctuating, and seasonal resources, such as fish, livestock, and water resources, on which their livelihoods depend” (Adger, 2003, p. 396). Communities lacking bridging social capital also lack the capacity to plan ahead and adapt to changing environments; as such, individuals in these types of communities view themselves as self-reliant or as totally adrift (Flora et al., 2004). The community may organize in opposition to the outside in a reactive solidarity, and newcomers are therefore viewed with suspicion. Alternatively, different groups or factions within the community may have varying perspectives on the kinds of change that might benefit their community, making cooperation amongst community members unlikely (Flora et al., 2004). Communities must link themselves to outside private and public resources to gather information, credit, materials, and technical assistance. Communities also tend to learn best from those most like themselves; for example, entrepreneurial communities often form study groups to visit other communities where they have heard that something important is going on that they wish to emulate (Flora & Flora, 1993).

10.0 The Merits of ESI Theory

ESI theory holds that strong and cohesive communities, whose members recognise their common identity and shared fate, and who are prepared to work together and with other communities for the good of all, are more adaptive to change. Paternalist social capital, whereby people have agency but do not use it to support the community first, is the antithesis of ESI (Schulman & Anderson, 1999). As pointed out by Bourdieu (1986), not all groups have equal access to social capital: reserves of social capital are unevenly distributed and differentially accessible depending on the social location of the groups and individuals who attempt its appropriation. Dominant classes may use their power, not for the benefit of the collective, but rather to use social capital to further solidify their class position. This circumstance may occur in an industry town where agency is primarily about the corporation from which the community derives its livelihood (Schulman & Anderson, 1999).

As a middle range sociological theory, ESI provides a way of viewing local people, culture, and way of life without discarding larger contextual pieces. It also contributes the elements of diversity and inclusion, as well as differential access to power, which are missing in much social capital literature (Shortall, 2004). Although the absence of recent literature using an ESI perspective suggests that the theory has been largely discredited in rural sociology, ESI remains an attractive approach to economic development, and especially economic self-development in rural communities. In contrast with industrial recruitment, which seeks outside investors and firms to locate in the community, self-development relies primarily on entrepreneurship, innovation, and local resources. Examples of self-development projects include business incubators, downtown revitalization programs, and business retention and expansion programs that focus on locally owned businesses. Jeff S. Sharp and Cornelia Butler Flora (1999) found self-development projects generally include a greater diversity of local leadership, such as local professionals and businesspersons, while industrial recruitment relies heavily on civil servants and economic developers. Self-development projects also more frequently engage local civic organizations and tap a diversity of local funding sources, while industrial recruitment relies more heavily on local and extra-local government resources (Sharp et al., 2002).

11.0 Conclusion

The Kent Region in New Brunswick, and Summerside, PEI, have been called “resilient” and “successful” in government reports, but the specific factors used to determine these outcomes are not evident. Any economic development model that emphasizes social capital is difficult to apply to a real setting. What is clear throughout this review of theoretical and definitional literature is that economic development is much more than *economic*. Development clearly has a social/civic side that involves social relationships, diverse partnerships, working collectively to identify needs and problems, and embracing a common solution. The social/civic side of development brings this article back to the idea of *study circles*: a highly developed form of universal adult education in Sweden. Each year, between 1.2 and 1.6 million people (or one in five adults) in Sweden participate in more than 300,000 study circles on a variety of topics (Larsson, 2001, p.199). Henry Milner’s (2002) *Civic Literacy: How Informed Citizens Make Democracy Work* draws heavily from Sweden’s experience with study circles, and elements of Paulo Freire’s (1973) model of empowerment education also resemble the study circle method. Traditional public consultation models, such as focus groups, town hall meetings, and online surveys, do not always work for many communities and individuals; in particular, the most marginalized who do not have access to technology and may face other barriers that effectively exclude them from the public debate (Brackertz, et al., 2005). Study circles comprise ten to fifteen people who represent a cross-section of the community in terms of age, profession, ethnicity, and gender. The participants meet weekly for one or two months, with the guidance of an impartial group facilitator, to address difficult and often divisive issues in their communities (Grey, 2000). They would be a natural fit in economic development models emphasizing citizen engagement and social capital.

To conclude, there are no easy or obvious answers for rural communities in Atlantic Canada looking to grow and diversify their economies, acquire new jobs, and stabilize their populations. Beyond the top down approaches of industrial recruitment and asking the federal government for financial assistance during an election year, self-development projects are really the only option for these communities. In the words of Donald J. Savoie (2000: p. 22), “how can a small community shaken by a plant closure or suffering from 40 per cent unemployment find the knowledge, energy, and self-confidence to launch new economic activities? In some instances, it may be that the community will be unable to make the transition and will eventually die. But this begs the question, should or, better yet, can governments play God and decide which communities have the capacity to launch new economic activities and which do not?”

12.0 References

- Adger, N. W. (1999). Social vulnerability to climate change and extremes in coastal Vietnam. *World Development*, 7, 249-269.
- Adger, N. W. (2003). Social capital, collective action, and adaptation to climate change. *Economic Geography*, 79(4), 387-404.
- Adger, N. W. (2006). Vulnerability. *Global Environmental Change*, 16(3), 268-281.
- Ahmed, S. A., Diffenbaugh, N. S., & Hertel, T. W. (2009). Climate volatility deepens poverty vulnerability in developing countries. *Environmental Research Letters*, 4(3), 8pp.

- Ahmed, R., Seedat, M., van Niekerk, A., & Bulbulia, S. (2004). Discerning community resilience in disadvantaged communities in the context of violence and injury prevention. *South African Journal of Psychology*, 34(3), 386-408.
- Altarelli, V., & Carloni, A. (2000). *Inter-agency experiences and lessons: DFID/FAO Forum on Operationalising Sustainable Livelihoods Approaches*. Rome: FAO.
- Atlantic Health Promotion Research Centre. (1999). *A study of resiliency in communities*. Prepared for Health Canada. Ottawa, ON: Minister of Public Works and Government Services Canada. Cat No. H39-470/1999E.
- Barnett, R., & Brennan, M. A. (2006). Integrating youth into community development: Implications for policy planning and program evaluation. *Journal of Youth Development*, 1(2), 2-16.
- Beckley, T. M., & Krogman, N. T. (2002). Social consequences of employee/management buyouts: Two Canadian examples from the forest sector. *Rural Sociology*, 67(2), 183-207
- Beckley, T. M., Nadeau, S., Wall, E., & Martz, D. (2001). *Multiple capacities, multiple outcomes: Delving deeper into the meaning of community capacity*. Fredericton, NB: Faculty of Forestry and Environment, University of New Brunswick. Unpublished Manuscript.
- Berkes, F., & Jolly, D. (2001). Adapting to climate change: Social-ecological resilience in a Canadian western Arctic community. *Conservation Ecology*, 5(2), 18.
- Binkley, M. (1996). Nova Scotian fishing families coping with the fisheries crisis. *Anthropologica*, 2, 197-218.
- Binkley, M. (2000). "Getting by" in tough times: Coping with the fisheries crisis. *Women's Studies International Forum*, 23, 323-332.
- Bollman, R. D., & Beshiri, R. (2000). *Rural and small town Canada: A demographic overview*. Presented to the Conference on the New Rural Economy.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood.
- Bourne, L. S., & Rose, D. (2001). The changing face of Canada: The uneven geographies of population and social change. *The Canadian Geographer*, 45, 105-119.
- Bourne, L. S., Simmons, J. (2003). New fault lines? Recent trends in the Canadian urban system and their implications for planning and public policy. *Canadian Journal of Urban Research*, 12, 22 - 47.
- Boyce, J. K., & Shelley, B. G. (Eds.). (2003). *Natural assets: Democratizing environmental ownership*. Washington, D.C: Island Press.
- Brackertz, N., Zwart, I., Meredyth, D., & Ralston, L. (2005). *Community consultation and the 'hard to reach': Concepts and practice in Victorian local government*. Institute for Social Research, Swinburne University of

- Technology, Hawthorn. [Online]. Available: http://www.sisr.net/cag/docs/HardtoReach_main.pdf
- Bradford, N. (2003). Cities and communities that work: Innovative practices, enabling policies. Ottawa: Canadian Policy Research Networks. [Online]. Available: http://cprn.org/documents/20506_en.pdf
- Brennan, M. A. (2008). Conceptualizing resiliency: An interactional perspective for community and youth development. *Child Care in Practice*, 14(1), 55-64.
- Brennan, M. A., & Luloff, A. E. (2007). Exploring rural community agency differences in Ireland and Pennsylvania. *Journal of Rural Studies*, 23(1), 52-61.
- Brocklesby, M. A., & Fisher, E. (2003) Community development and sustainable livelihoods – An introduction. *Community Development Journal*, 38(3), 185-198.
- Canada. Public Health Agency of Canada (2006). *How healthy are rural Canadians? An assessment of their health status and health determinants. Summary Report.* [Online]. Available: http://www.phac-aspc.gc.ca/publicat/rural06/pdf/rural_canadians_2006_report_e.pdf
- Canada. HRSDC. (2002). Knowledge matters: Skills and learning for Canadians. Canada's innovation strategy. SP-482-02-02. [Online]. Available: http://www.innovation.lv/ino2/publications/publications_kanada/knowledge.pdf
- Canada. Industry Canada. (2001). Rural Canada in the knowledge-based economy. *Industry Canada Microeconomic Monitor.* [Online]. Available: <http://dsp-psd.pwgsc.gc.ca/Collection/C2-582-2001E.pdf>
- Capra, F. (1996). *The web of life: A new scientific understanding of living systems.* New York, NY: Anchor Books.
- Carney, D. (1998). Sustainable rural livelihoods: What contribution can we make? In D. Carney (Ed.), *Department for International Development's Natural Resources Advisers' Conference.* London, UK: DFID.
- Coleman, J. S. (1957). *Community conflict.* Glencoe, ON: The Free Press.
- Conrad, M., & Hiller, J. (2006). *Atlantic Canada: A concise history.* Toronto, ON: Oxford University Press.
- Corbett, M. (2006). *Learning to leave: The irony of schooling in a coastal community.* Halifax, NS: Fernwood Publishing.
- Cotter, D. A. (2004). Communities of work: Rural restructuring in local and global contexts. *Rural Sociology*, 69, 581-584.
- Cottrell, L. S. (1976). The competent community. In B. Kaplan, R. Wilson, & A. Leighton, (Eds.), *Explorations in social psychiatry.* New York, NY: Basic Books Inc.
- Cutter, S. L., Barnes, L., Berry, M., Burton, C. G., Evans, E., Tate, E. C., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. *Global Environmental Change*, 18, 598-606.
- Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84(1), 242-261.

- Donoghue, E. M., & Sturtevant, V. E. (2007). Social science constructs in ecosystem assessments: Revisiting community capacity and community resiliency. *Society and Natural Resources*, 20, 899-912.
- Eakin, H., & Luers, A. (2006). Assessing the vulnerability of social-ecological systems. *Annual Review of Environment and Resources*, 31, 365-394.
- Engle, N. L. (2011). Adaptive capacity and its assessment. *Global Environmental Change*, 21, 647-656.
- Farr, J. (2004). Social capital: A conceptual history. *Political Theory*, 32(1), 1-37.
- Flint, C. G., & Luloff, A. E. (2005). Natural resource-based communities, risk, and disaster: An intersection of theories. *Society and Natural Resources*, 18(5), 399-412.
- Flora, J. L. (1998). Social capital and communities of place. *Rural Sociology*, 63(4), 481-506.
- Flora, C. B., & Flora, J. L. (1993). Entrepreneurial social infrastructures: A necessary ingredient. *The Annals of the American Academy of Political and Social Science*, 529, 48–58.
- Flora, C. B., Flora, J. L., & S. Fey. (2004). *Rural communities: Legacy and change*, 2nd ed. Boulder, CO: Westview Press.
- Flora, J. L., Sharp, J., Flora, C. B., & Newlon, B. (1997). Entrepreneurial social infrastructure and locally initiated economic development in the non-metropolitan United States. *The Sociological Quarterly*, 38(4), 623-645.
- Florida, R. (2002). *The rise of the creative class: and how it is transforming work, leisure, community, and everyday life*. New York: Basic Books.
- Fournier, S. (2011, August). *Beyond sandbagging: Building community resilience to the impacts of climate change*. Ottawa, ON: The Conference Board of Canada.
- Freire, P. (1973). *Education for critical consciousness*. New York: Continuum.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Gray, I. (1994). The changing structure of rural communities. *Rural Society*, 4(3), 17-21.
- Grey, M. A. (2000). *Welcoming new Iowans, a guide for citizens and communities*. University of Northern Iowa, Iowa Center for Immigrant Leadership and Integration. [Online]. Available: <http://www.bcs.uni.edu/ICILI/PDFDocument/WelcomeNewIowans.pdf>
- Hamlett, P. W., & Cobb, M. D. (2006). Potential solutions to public deliberation problems: Structured deliberations and polarization cascades. *Policy Studies Journal*, 34, 629–648.
- Harris, C. C., McLaughlin, W., Brown, G., & Becker, D. R. (2000). Rural communities in the inland northwest: An assessment of small communities in the interior and upper Columbia River basins. In T. M. Quigley (Ed.), *Interior Columbia Basin Ecosystem Management Project: Scientific Assessment*, Gen. Tech. Rep. PNW-GTR-477 (pp. 120). Portland, Oregon: Department of Agriculture, Forest Service, Pacific Northwest Research Station.

- Hart, M. (1999). *Guide to sustainable community indicators*. West Hartford, CT: Sustainable Measures.
- Healey, P., De Magalhaes, C., Madanipour, A., & Pendlebury, J. (2003). Place, identity and local politics: Analysing partnership initiatives. In M. Hajer & H. Wagenaar (Eds.), *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Himanen, P., & Castells, M. (2002). *The information society and the welfare state: The Finnish model*. Oxford: Oxford University Press.
- Kahane, A. (2004). *Solving tough problems: An open way of talking, listening, and creating new realities*. San Francisco, CA: Berrett-Koehler Publishers.
- Kretzmann, J. P., & McKnight, J. L. (1993). *Building communities from the inside out*. Evanston, Illinois: Center for Urban Affairs and Policy Research, Northwestern University.
- Kulig, J. C. (2000). Community resiliency: The potential for community health nursing theory development. *Public Health Nursing*, 17(5), 374–385.
- Kulig, J. C., & Williams, A. M. (2011). *Health in rural Canada*. Vancouver: UBC Press.
- Larsson, S. (2001). Seven aspects of democracy as related to study circles. *International Journal of Lifelong Education*, 20(3), 199-217.
- Leach, B., & Winson, A. (1995). Bringing ‘globalization’ down to earth: Restructuring and labor in rural communities. *The Canadian Review of Sociology and Anthropology*, 32, 341-364.
- Luloff, A. E., & Bridger, J. (2003). Community agency and local development. In D. Brown & L. Swanson (Eds.), *Challenges for rural America in the twenty-first century*, (pp. 203-213). University Park, PA: Pennsylvania State University Press.
- Luloff, A. E., & Swanson, L. (1995). Community agency and disaffection: Enhancing collective resources. In L. Beaulieu & D. Mulkey (Eds.), *Investing in people: The human capital needs of rural America*, (pp. 351-372). Boulder, CO: Westview Press.
- Magis, K. (2010). Community resilience: An indicator of social sustainability. *Society and Natural Resources*, 23, 401–416.
- Mandel, C. (2008). U.S. crisis brings Canada’s forestry sector to its knees. *CanWest News Service*, 5 January 2008. [Online]. Available: <http://www.canada.com/vancouvernews/business/story.html?id=7a7d6089-de94-4788-ad2c-3d1425ad97fa>
- Matthews, R. (1976). *There’s no better place than here: Social change in three Newfoundland communities*. Toronto, ON: Peter Martin Associates.
- Matthews, R. (1983). *The creation of regional dependency*. Toronto, ON: University of Toronto Press.
- McNamara, K. T., Kriesel, W., & Rainey, D. V. (1995). Manufacturing recruitment as a rural development strategy. In D. W. Sears & J. N. Reid (Eds.), *Rural development strategies*, (119-136). Chicago, IL: Nelson-Hall.

- Milner, H. (2002). *Civic literacy: How informed citizens make democracy work*. Hanover, NH: University Press of New England.
- Mitura, V., & Bollman, R. (2003). The health of rural Canadians: A rural-urban comparison of health indicators. *Rural and Small-Town Canada Analysis Bulletin*, 4(6). [Online]. Available: http://www.theruralcentre.com/doc/RST-Health_Rural_cdn.pdf
- Moore, O. (2007). A town on death row. *Globe and Mail*, 10 November 2007, F6 Focus.
- Morton, L. W. (2003). Small town services and facilities: The influence of social networks and civic structure of perceptions of quality. *City and Community*, 2(2): 101-120.
- Ommer, R. E., & Turner, N. J. (2004). Informal rural economies in history. *The Labour/ Le Travail*, 53(Spring), 127-158.
- Paquette, S., & Domon, G. (2003). Changing ruralities, changing landscapes: Exploring social recomposition using a multi-scale approach. *Journal of Rural Studies*, 19, 425-444.
- Polèse, M., & Shearmur, R. (2006). Why some regions will decline: A Canadian case study with thoughts on local development strategies. *Papers in Regional Science*, 85(1): 23-46.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.
- Putnam, R. D. (1993). The prosperous community: Social capital and community life. *The American Prospect*, 1, 35-42.
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1): 64-78.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.
- Robards, M. D., Schoon, M. L., Meek, C. L., & Engle, N. L. (2011). The importance of social drivers in the resilient provision of ecosystem services. *Global Environmental Change*, DOI:10.1016/j.gloenvcha.2010.12.004: 1-8.
- Robertson Lacroix, M. E. (2004). *Innovative rural communities: A framework for innovative rural communities year one report September 2004*. [Online]. Available: <http://www.stepstoleadership.ca/Uploads/UserFiles/file/Rural%20Connection/Innovative%20Communities%20Report.pdf>
- Rolfe, R. E. (2006). *Social cohesion and community resilience: A multi-disciplinary review of literature for rural health research*. Paper prepared for submission to the Social Cohesion and Community Resiliency Working Group of the Atlantic Canada based Rural Centre. [Online]. Available: <http://www.theruralcentre.com/SCCR%20Literature%20Review.pdf>
- Sampson, R. J., Raudenbush, S., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918-24.
- Sampson, R. J., Raudenbush, S., & Earls, F. (1999). Beyond social capital: Spatial dynamics of collective efficiency for children. *American Sociological Review*, 64(5), 633-660.

- Sassen, S. (1991). *The global city: New York, London, Tokyo*. Princeton: Princeton University Press.
- Savoie, D. J. (2006). *Visiting grandchildren: Economic development in the Maritimes*. Toronto, ON: University of Toronto Press.
- Schulman, M. D., & Anderson, C. (1999). The dark side of the force: A case study of restructuring and social capital. *Rural Sociology*, 64(3), 351-372.
- Seymoar, N-K. (2005). *Strengthening community resilience*. International Centre for Sustainable Cities. [Online]. Available: http://sustainablecities.net/docman-resources/cat_view/110-resources/99-resiliency
- Shaffer, R. (1989). *Community economics: Economic structure and change in smaller communities*. Ames, IA: Iowa State University Press.
- Sharp, J. S., Agnitsch, K., Ryan, V., & Flora, J. (2002). Social infrastructure and community economic development strategies: The case of self-development and industrial recruitment in rural Iowa. *Journal of Rural Studies*, 18, 5-17.
- Sharp, J. S., & Flora, J. L. (1999). Entrepreneurial social infrastructure and growth machine characteristics associated with industrial-recruitment and self-development strategies in nonmetropolitan communities. *Journal of the Community Development Society*, 30, 131-153.
- Shortall, S. (2004). Social or economic goals, civic inclusion or exclusion? An analysis of rural development theory and practice. *Sociologia Ruralis*, 44(1), 109-123.
- Shuman, M. (1998). *Going Local: Creating Self-Reliant Communities in a Global Age*. New York, NY: Free Press.
- Smit, B., & Wandel, J. (2006). Adaptation, adaptive capacity and vulnerability. *Global Environmental Change*, 16, 282-292.
- Stedman, R. C., Parkins, J. R., & Beckley, T. M. (2004). Resource dependence and community well-being in rural Canada. *Rural Sociology*, 29(2), 213-234.
- Torjman, S., & Leviten-Reid, E. (2003). *The social role of local government*. Ottawa: Caledon Institute of Social Policy.
- Tschakert, P., & Dietrich, K. A. (2010). Anticipatory learning for climate change adaptation and resilience. *Ecology and Society*, 15(2), 11.
- University of British Columbia. (2003, December 8). Media release: UBC sociologist receives \$1million grant for long-term community development in six BC coastal centres. [Online]. Available: <http://www.publicaffairs.ubc.ca/media/releases/2003/mr-03-114.html>
- Walisser, B., Mueller B., & McLean, C. (2004). *The resilient city: A Vancouver working group*. Discussion Paper for the World Urban Forum 2006. Vancouver, BC.
- Wilkinson, K. P. (1991). *The community in rural America*. New York, NY: Greenwood Press.
- Woolcock, S. (1998). *The place of social capital in understanding social and economic outcomes*. Paris: OECD Innovation Research Working Paper. [Online]. Available: <http://www.oecd.org/innovation/research/1824913.pdf>