

**Canadian Regional  
Development**  
A Critical Review of Theory,  
Practice, and Potentials



**Développement régionale  
canadienne**  
Un examen critique du théorie, de  
pratique et des potentiels

# A Primer on Innovation, Learning, and Knowledge Flows

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## **Document Reference**

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## **Introduction**

Distinguishing between Old Regionalism and New Regionalism has been a matter of great debate over the past twenty years (Lovering 1999; Wallis 2002). It is, however, largely agreed upon that Old Regionalism, under Fordist-Keynesianism, was based on corporatist structures where government, business and unions negotiated the dispersal of economic rents among key stakeholders in the economy. While this was seen as a closed hierarchical system (Wallis 2002), it was arguably successful in terms of placing equity and welfare at the forefront of concerns in managing the economy (Rainnie 2004). New Regionalism (perhaps better described as new regionalisms, as discussed by Hall 2012 and Shaw *et al.* 2011) in contrast is characterized as more open, governance versus government based, with wider networks of collaborative trust-based relationships that include civil society actors as well (Wallis 2002; Boas *et al.* 2005). Harrison (2007) argues that New Regionalism amounts to a hollowing out of the state from above by globalization, from below by the assertion of regional claims for greater authority and laterally by the advance of the market and civil society. Others characterize New Regionalism as a withdrawal of the state from regional economic development (Markey *et al.* 2012).

The New Regionalism literature suggests that knowledge flows, learning and innovation are critical to economic development outcomes (Rainnie 2004). This has led to a resurgence of the region as the appropriate loci of economic planning and development. In New Regionalism the local region emerges as the “vital relational asset for distilling learning-based competitive advantage” (Macleod 2001). Regions should, according to New Regionalism, focus on competitive advantages based on their own key assets, skills and knowledge (Morgan 2004; Markey *et al.* 2006; Halseth *et al.* 2010). This becomes critical as regions, in the face of the accelerated global market integration and the search for profitability, try to resist the ‘slippery’ spatial characteristics of capitalist investment, and build ‘sticky’ environments of development where firms are retained and grow the knowledge economy (Markusen 1996; MacKinnon *et al.* 2002).

While much of the New Regionalism literature is focused on economic dimensions of regional development<sup>1</sup>, Shaw *et al.* (2011) and others suggest that New Regionalism responds to uneven development not only in economic but also in cultural, ecological and technological terms. According to Peterson *et al.* (2007) New Regionalism has a more holistic perspective on development that takes into account social and environmental as well as economic outcomes. Knowledge flow, learning and innovation are also perceived as critical from this broader perspective. Learning and new ideas are also required for adaptation and resilience not only of economies but also broader social-ecological systems in a changing world. Parkinson and Roseland (2002) point out, for example, that sustainability will require new ways of thinking and making decisions, of using technologies and resources, financing and working together. Neumeier (2012) suggests that broader community participation is important to sustaining traditions and innovation and can lead to social, economic and cultural renewal. Difficulties of

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<sup>1</sup> New Regionalism is criticized for its productivist bias (Uyarra 2007; Moulaert and Mehmood 2010). Moulaert and Mehmood suggest that all social processes are subsumed under the market in New Regionalism.

specialization within low density, low-population regions results in a greater sensitivity to the ways in which economic sectors are interdependent, as well as how issues of health, welfare and ecological sustainability are also economic issues – and vice versa (Brett and Mackie 2012).

Markusen (1999) criticizes New Regionalism for its use of ‘fuzzy concepts’ and terms with imprecise meanings used very differently by different authors. Markusen argues that these central tenets of a theory should be defined precisely and have widespread agreement on their meaning and that with many terms in New Regionalism this is not the case. The term innovation, is one example of a key term in New Regionalism that is defined in many different ways. Dicken (2007: 76) describes innovation as the creation and diffusion of new ways of doing things. The Organization for Economic Co-operation and Development (OECD 2005: 46) defines an innovation as the implementation of a new or significantly improved product, process, or organizational method. When applying the notion of innovation within a more holistic perspective of regional development, innovation may include new ways of organizing and/or sharing information within or across organizations, new strategies for addressing local challenges and opportunities, or new forms of investment (Markey *et al.* 2012). In fact innovation in this broader sense requires new perspectives and radically new ways of looking at development issues.

### **Linking learning and innovation**

The desire to create innovation and adapt to an increasingly knowledge-intensive society has re-energized scholarship on learning and learning systems within the field of regional development. Parallel to rapid innovation in products and processes, social-ecological changes also are occurring at an increasing pace. This requires that our ability to learn, innovate and adapt also rapidly change. In short, knowledge economies and, more broadly, knowledge societies require networks or communities of learning. David and Foray (2001) suggest that these communities, which occur at multiple scales, are characterized by strong knowledge production and reproduction capabilities, requiring public learning space and are best supported through intensive use of information technologies. Longworth (2006) argues that by encouraging and providing ongoing education and training, a learning city, town or region can create an active, culturally and economically forward-thinking environment. Through the effective use of learning resources available through all sectors communities and regions are able to enhance their social, economic and environmental conditions (Janet, 2005; Faris 2008).

Recognition of the importance of learning and innovation to regional development and sustainability leads to the question “how can innovation be fostered and supported?” New approaches, or innovations, come about from the creativity of innovators but also from the innovator’s knowledge and lessons learned from past experiences. Innovation also involves an implementation stage, acting on creative inspirations, lessons learned and the acquisition of new knowledge in a way that, ideally, leads to improved processes and outcomes.

In “learning regions” networks foster the capacity to experiment, innovate and adapt to changing circumstances (Asheim 1996; Florida 1995; Morgan 1997). Hassink (2005) suggests

that learning regions can help alleviate “political lock-ins” and destructive path dependencies that, combined with political and economic motivations, often block the open flow of information, knowledge and learning and resulting in lost opportunities for building resilience and adaptive capability.

Learning regions require active knowledge management or reflecting on both what you know and what you need to know, looking for that knowledge both internally and externally. This includes monitoring and evaluation or Schon’s “reflection-in-action” (creating and paying attention to feedbacks), keeping track of and building on that knowledge, including supporting development of individual knowledge and then ensuring translation into organizational and societal knowledge. Both formal and informal evaluation processes as well as multiple sources and forms of knowledge can be drawn upon for system learning. Attention is therefore needed in regional development governance to the ways information and knowledge are managed as well as training, education and other efforts to build learning capacity and to support the translation of learning and new knowledge into adaptation and innovation.

## **Learning and innovation as social processes**

Recent literature questions the idea of innovation emerging from the lone inventor or even entirely internally within a firm or organization (Amara *et al.* 2003; Wolfe 2009; Johnson 2011). Knowledge-based transformations are no longer understood as a consequence of the characteristics and actions of entrepreneurs and creators alone, “but as a structural characteristic of knowledge-based economies” (Leydesdorff 2010: 4) and “a social process that depends on interaction and learning” (Hall 2010: 10). Thus, popular writer Stephen Johnson (2011) suggests the most effective way to increase the chances of innovation is to encourage openness and expand the possibility by exposing one’s self, organization or community to more ideas, which can in turn be combined in new ways for new purposes. Willingness to fail, and to seek the expertise or experience of others are also noted by Johnson and many entrepreneurship scholars before him as conditions that support innovation. In this context, Schumpeter’s (1950) processes of ‘*creative destruction*’, where new products or structures displace older ones as a critical component of innovation, need to be carefully thought through as they relate not only to the more familiar explanations of entrepreneurial innovation but also to other social processes.

The literature associates various ‘territorial innovation systems’ as key components or ‘spearheads’ of New Regionalism (Lagendijk 1997; Moulaert and Mehmood 2010). A typology of these models often includes industrial districts (focused on growth dynamics of small and medium sized enterprises), innovative milieu, regional innovation systems and clusters, which consist of interconnected companies, suppliers, service providers, and associated institutions (Lagendijk 1997; Porter 2001; De Propris and Crevoisier 2011).<sup>2</sup> Proulx (1992) and Coffey and

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<sup>2</sup> Others include the California School Economic Geography while some include clusters as a form of industrial district, but for our purposes we follow Lagendijk (1997) and De Propris. and Crevoisier (2011) in using these four models.

Bailly (1996) introduce the concept of '*innovative milieu*', as a 'created space' that is both a result of and a precondition for learning and innovation (Malmberg and Maskell 1997). A 'milieu' is described as a coherent territorial production system and set of linked actors, firms and institutions. Sharing of new knowledge and ideas is facilitated through communication and regular interaction between individuals and organizations. A regional innovation system is a "set of economic, political and institutional relationships occurring in a given geographic area which generates a collective learning process leading to the rapid diffusion of knowledge and best practice" (Nauwelaers and Reid in Wolfe 2005). Innovation systems encourage both private (e.g. individual workers or firms) and social learning (e.g. within groups of related firms and/or public organizations and social institutions). These systems are underpinned by an environment that encourages the flow of knowledge, ideas and learning (Florida 2002). Another formulation of this is the Triple Helix of government as providers of supportive policy and programming, firms engaged in research and development activities and research, education and training institutions (typically post-secondary) (Etzkowitz 2008).

The learning regions model is said to take many of the concepts from these territorial innovation models and pull them together into a general synthesis (Moulaert and Mehmood 2010). All of these models assert the social nature of innovation and the importance of collaboration and competition among the various economic actors involved. These patterns of interaction create a collective learning process leading to the creation and use of new knowledge, including internally by firms and networks of firms with a role for the public sector, research entities and other support organizations (Wolfe 2005).

Territorial innovation models suggest that interaction is especially important in the transfer of tacit knowledge, which in contrast to codified or explicit knowledge, cannot be stated explicitly and therefore cannot be easily communicated and transferred (Storper 1995). Storper reintroduced from Polanyi (1962) the importance of tacit knowledge or learning by doing. Tacit knowledge depends upon proximity and favours the local scale as critical to knowledge generation, suggesting that learning is 'sticky' and place specific. This leads to context-specific 'untraded dependencies' or 'soft infrastructure'. These dependencies include norms, values and inherent conventions that are vital to organizing and learning but harder to identify than 'hard infrastructures' such as roads, schools, economic development structures and strategies (Toland 2012). According to authors such as Goldstein (2005), Malmberg & Maskell (1997), Coffey and Bailly (1996) and others, encouraging this interaction and nurturing creativity and innovation are important to the economy and broader socio-ecological systems. Thus cultural norms and relationships within dense networks of economic and non-economic actors characterized by high levels of trust, reciprocity and supported by institutions.

Criticisms of New Regionalism and Territorial Innovation Systems have been extensive and varied. They include the 'localist trap' label, discussed further below, that overplays the role of the region in development and downplays both the role of the state and global forces (Coe *et al.* 2004; Uyarra 2007; Moulaert and Mehmood 2010). Many of the policy levers important to economic development outcomes exist at the provincial/state or national level and are not under regional control (Doloreux 2008; Uyarra 2007). Innovation systems are also criticised for

the suggestion that the 'usual suspects' will come together and these systems will just happen (Uyarra 2007). Related to this criticism is the problem of a lack of agency in these systems as it is often implied that development happens by just having the right organizations in place. Doloreux and Malecon (2008), however, in a study of rural Quebec and regional innovation systems, show that simply investing in knowledge infrastructure does not automatically lead to better economic development outcomes.

## **Scalar dimensions of learning and innovation**

The focus of innovation research has typically been, in the case of clusters, at the level of the firm or local industry (Porter 2001), for regional innovation systems at the level of the region (Cooke 2001; Wolfe 2005) and at the national level from the perspective of national innovation systems (Lundvall 1988; Nelson 1993). Similarly, learning systems are analyzed at multiple scales, although scale distinctions and relationships are not always carefully considered. The notion of a 'learning community', for example, is often used interchangeably with 'learning city' or 'learning region'. Morgan (2009) suggests that a learning community refers to the smallest grouping of individuals, learning cities to groupings based upon town or city boundaries, and learning regions to collectives of towns/cities, provinces, states, etc. Economic geographers introduced the learning regions concept in the 1990s to illustrate and examine the importance cooperation and collective learning in networks for fostering innovative and competitive regional development strategies in the global learning economy (Florida 1995; Asheim 2007; Morgan 1997). Again linking learning to innovation, Asheim (2007) defines a learning region as one whose economy is 'institutionally thick' and has established an 'innovative activity' that is built on localized, interactive learning. Longworth (2006) points out that these scales are not unrelated; creating learning societies depends on the learning cities, which are in turn built on learning communities and learning organizations.

The issue of appropriate scale for both learning and innovation policy and research has been heavily contested over the past 20 years and the debate continues. With respect to learning Morgan (2009) argues that while organizations or communities may seem to be the logical scale for creating learning partnerships, city and regional scales offers greater impact on sustainable development. Learning regions also enable inclusion of a wider range of administrative and political actors (Gustavsen *et al.* 2007).

It should be acknowledged that territorial innovation systems focusing on the region or local clusters are said to suffer from a 'regional-fix', or 'localist trap' mentality inherent in the claim that the local level is critical to development outcomes and learning (Lovering, 1999; Markusen, 1999; MacLeod, 2001; Moulaert & Sekia, 2003; MacKinnon *et al.*, 2002; Morgan, 2004; Uyarra 2007; Moulaert and Mehmood 2010). Part of this criticism is that policy and funding levers critical to regional development remain at the level of the nation state (Lundval 2003). However, others claim that while territorial innovation systems have neglected the national and global scales this can be remedied by paying more attention to multiple scales (Bunnell and Coe 2001; Harrison 2007). Further, institutions and inter-institutional relationships within a given

innovation process may operate at different levels simultaneously; for example, governments at a provincial or national level and corporations at a global scale (Leydesdorff 2010).

Cooke (1998) suggests that the notion of a regional innovation system is based on the assumption that location and spatial proximity matter for innovation activities. Assets, identities, relationships, and governance structures and processes in local regions are seen to provide “soft economies” of learning and collaboration (Porter, 2000). Florida (1995, p. 531) suggests that regions are “key economic units in the global economy” as a focus for knowledge creation, innovation, and decision-making (Tomblin, 2002; Welch, 2002; Harrison, 2007). Complex adaptive systems literature complements these new regionalist perspectives by suggesting that lower or more local levels within nested hierarchies of multi-level/scale social-ecological systems are where new ideas, innovations and adaptation are most often generated (Warren 2005, Holling and Gunderson 2001), aided by the ability to recover from “small cycles of failure and recovery” at this scale (Vodden 2009).

Research suggests that tacit knowledge is more readily transferred within industry clusters, communities and regions with high levels of social capital, defined by Putnam (1993 p. 167) as “features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating coordinated actions.” Social capital is based on contacts and exchanges that occur as people make and maintain relationships that enable them to work together to achieve things they could not achieve or could only achieve with greater difficulty by themselves (Barbieri 2003; Field 2008). Reimer suggests social capital reflects four fundamental types of social relations: market, bureaucratic, associative, and communal, stressing that from a developmental perspective it is important to note these differences in regional relationships and embedded social capital (Reimer 2003). New regionalist literature emphasizes the importance of these ‘relational assets’ within networks of linked actors with high levels of trust, reciprocity and norms that nurture creativity and innovation (MacLeod 2001; Cooke and Morgan 1998; Storper 1997). Authors such as Buena and Stark (2003), Baptista (2000) and Wolfe (2003) stress the importance of physical proximity and the relationships it fosters to competitive advantage, innovation and economic growth, often through face-to-face interactions. Morgan (1997) suggests that it is the regional level where regular interactions can be sustained over time and therefore where flows of knowledge and social capital are best fostered.

While these local linkages enable flow of locally available knowledge, others point to the importance of outside connections or ‘global pipelines’ within networks of actors to the production of learning and innovation (Krebs and Holley 2004; Dicken 2007). It is important to note that what is new – or innovative - for an individual, organization or a locale may not be new elsewhere. Thus learning from other regions, or other industries is one important strategy for generating knowledge, skills and ideas that are new to a given locale. This also points to the need to think of new ideas as new to the region and not necessarily radically new or new to the world (Davies 2010).



## **Innovation, learning and knowledge flows in a rural context**

Rural restructuring and change has been driven by two central factors, economic modernization and globalization (OECD 2012; Woods 2005). The process of economic modernization has seen increased efficiency, often with a productivist bias toward larger scale in resource-based industries leading to shedding labour in resource-based industries. Globalization has meant that many of the traditional resource-based commodities of rural areas are traded on global markets and more and more rural spaces have to compete in these markets (OECD 2012; Woods 2005).

For Reimer and Bollman (2010) rurality reflects the distance between places and the density of people in those places. Much of the New Regionalist canon and territorial innovation systems in particular tends to focus on agglomeration economies and knowledge spillovers due to dense local networks (Storper and Venables 2002; Wolfe and Gertler 2004) in urban settings. So where does this leave rural economies?

While innovation studies have focused primarily on urban centres and city-regions, a small but growing literature exists on innovation in context of rural areas and small towns (Polèse *et al.* 2002; Virkkala 2007; Lagendijk and Lorentzen 2007, Hall and Donald, 2009). Network interactions in rural areas are often influenced by tradition and rich in informal methods of information distribution, but limited in access to formal facilities and support services (Lindsay *et al.* 2005). While there is innovation in rural regions, it is more often focused around incremental innovation and process innovation (Doloreux, 2003). Often innovation that exists is marked by mature or outside-controlled industries (Tödtling *et al.* 2004; Woods 2005). Spencer (2009) and Carter and Creighton (2010) further observe rural and small town areas that lack diversity, openness and local 'creative advantage' and have sparse local networks, including weak collaboration and external connections. Tremblay (2005) and Gertler *et al.* (2002) further argue that rural leaders often remain unconvinced of the importance of knowledge relative to natural resources and labor as critical sources of economic growth. Yet by combining the resources of local and external, formal and informal actors and through an explicit commitment to learning and ongoing human capacity development, rural regions can increase the effectiveness of their development efforts (MacKinnon *et al.* 2002; Florida 1995; Markey *et al.* 2012; Vodden 2009).

The key arguments for why regional economies need to be more innovative, including globalization, increased competition, and the rise of the knowledge based economy, apply equally to rural and peripheral regions. Therefore the imperative to improve learning, knowledge flows and innovation are important to rural regions as well as in urban centres (Davies 2010). Nevertheless there are specific stumbling blocks in applying territorial innovation systems approaches in rural regions. According to Doloreux and Dionne (2007), for example, knowledge infrastructure is critical to new science and technology breakthroughs being transferred to the private sector. Yet significant knowledge infrastructure is often lacking in rural areas.

The lack of clusters is also purported to be an inhibitor to innovation in rural regions (Todtling and Trippel 2005). Agglomeration economies are more difficult to achieve in rural areas and are said to be critical to well-functioning clusters and these factors are not often found in rural areas (Wolfe and Gertler 2004). Typical rural economic structure in rural areas (resource-based industries, tourism, public services, etc.) means there are limited technologically centered clusters (Davies 2010), although many of these sectors have themselves become more technology intensive. Weak regional networks of firms and support organizations further hamper innovation in rural areas (Todtling and Trippel 2005). At the same time, network development is seen as a way to mimic agglomeration economies in rural areas (Murdoch 2000, Visser and Atzema, 2008).

## **Monitoring and measuring knowledge flows and innovation in rural regions**

Measuring innovation and innovation performance is seen as critical to improve decision-making, whether at the firm or policy level (OECD 2005). The Oslo Manual (OECD 2005) sets out a comprehensive and widely recognized process of measuring innovation.

A number of factors need to be taken into account in a rural context when measuring and monitoring innovation in a rural context. First, radical and incremental innovations are often viewed as ‘new to world’, however in a rural or peripheral context it often makes sense to distinguish among ‘new to the world’, ‘new to a country’ and ‘new to a region’. Viewing ‘new to a region’ innovation as a legitimate form of innovation is important in a rural context (Davies 2010). ‘New to the world’ innovation definitions exclude most regions and many creative local adaptations of solutions from elsewhere to suit local conditions. In this context upgrading and improving existing processes are also innovations (OECD 2012).

Second there is a tendency to associate innovation with high technology processes that are research focused and urban centered (OECD 2012). However innovation applies to all sectors including rural resource-based industries as well as tourism (OECD 2012).

Third, rural regions face particular challenges in developing better information gathering, analysis and benchmarking of innovation and innovation performance, including lack of disaggregated data at the regional and rural level but also limitations associated with quantitative data involving “small n” figures removed from contextual understanding (OECD 2005, Slaper *et al.* 2011, Davies 2010). Given this difficulty, a combination of statistical indicators as well as alternative ways of measuring can and, we argue, should be combined to benchmark innovation progress.

Given these difficulties with traditional measures of innovation in rural areas, this project will review traditional measurements of innovation (e.g. patents, applications for funding, etc.) as well as indicators of innovation capacity (e.g. research capacity, education and training levels etc.). The following table outlines the proposed set of innovation indicators to be used investigate rural innovation in the study areas:

**Table 1: Innovation Indicators**

| Indicator(s)   | Justification/sources   |
|--|---|
| <b>Innovation Capacity Indicators</b>                              |   |
| Availability of post-secondary institutions                        | Increased knowledge and experience generated in post-secondary institutions (Slaper <i>et al.</i> 2011; Rose <i>et al.</i> 2009; The Center for Innovation Studies 2005).   |
| Levels of post-secondary education                                 | Education influences the quality of innovation within a given region (Slaper <i>et al.</i> 2011; Rose <i>et al.</i> 2009; The Center for Innovation Studies 2005).  |
| Training   | The provision of training programs for employees may be correlated to an organization’s innovation; quantity and quality of training opportunities should be considered (OECD 2005; Rose <i>et al.</i> 2009; The Center of Innovation Studies 2005).                    |
| Access to information technology and communications infrastructure | Martinus (2012) states that maintenance of various forms infrastructure is fundamental to networking, production, and innovating. Providing technological support systems will allow actors to function more efficiently.   |
| Urban proximity  | Slaper <i>et al.</i> (2011) state that the distance an actor is from an urban area will determine its ability to innovate.  |
| Access to financing for innovation initiatives                     | The availability of programs and the ability of firms to apply for such programs is necessary supporting innovative endeavors (The Advisory Committee on Measuring Innovation in the 21 <sup>st</sup> Century 2008).  |
| Networking   | The OECD (2010) expresses the value networking has on fostering innovation.   |
| Productivity; Regional Personal Income per Capita                  | Innovation will likely increase with productivity and subsequently induce increased wealth(Advisory Committee on Measuring Innovation in the 21 <sup>st</sup> Century 2008; Andrew <i>et al.</i> 2009; Rose <i>et al.</i> 2009; the Center of Innovation Studies 2005). |
| <b>Innovation Indicators</b>                                       |   |
| Applications for innovation support                                | The Advisory Committee on Measuring Innovation in the 21 <sup>st</sup> Century (2008) asserts that measuring the amount of applications directed towards funding agencies is illustrative of innovation efforts   |
| Technology use   | The level of and use of technology can indicate the level of innovation in an area (Slaper <i>et al.</i> 2011; OECD 2010; OECD 2005; Davies 2010).  |
| Patents  | Introducing new products and services into a region complies with traditional notions of innovation (Slaper <i>et al.</i> 2011; Rose <i>et al.</i> 2009; Davies 2010; The Center for Innovation Studies 2005).  |

Separately from analysis of innovation indicators in each of the study areas, the project will explore themes related to knowledge flows, learning and innovation through semi-structured interviews. Based on the foregoing literature review, the following themes will be explored in each study region.

**Table 2: Learning, Knowledge Flows and Innovation - Themes for Rural Regions**

| <b>Topic</b>                                      | <b>Explanation</b>   |
|---|--|
| Resources for Learning                            | Places, entities, programs or types of materials where individuals and acquire knowledge.          |
| Knowledge Partners                                | Working with another actor to give and receive knowledge or experience.                            |
| Reflection and Sharing                            | Sharing/seeking ideas and reflecting on past experiences.  |
| Innovation Support                                | A project or program that explicitly addresses innovation.   |
| Examples of Innovation and Openness to Creativity | The respondent (and/or their organization) is open to new ideas or different ways of doing things. |
| Knowledge Infrastructure                          | There are structures in place that foster the acquisition or dissemination of knowledge.           |
| Challenges to Innovation                          | Anything that limits actors' innovation or innovative capacity.                                    |

## **Conclusion**

The claims of New Regionalism that knowledge flows, learning and innovation are critical to economic outcomes require unpacking. New Regionalism needs to be thought through more holistically, getting beyond strictly economic processes to underlying social and ecological processes since innovation and learning happen in social settings and the economy is embedded in the larger social-ecological system. Economic outcomes depend on social capital, local assets and on individual and collective action. Therefore, attempts to stimulate innovation require a more robust understanding of the regional setting for innovation. Relationships between processes of learning and innovation also require further investigation.

This study will use a combination of qualitative and quantitative measures to unpack New Regionalism in the rural Canadian context and explore how well the move to the 'new rural paradigm' (OECD 2006) is being implemented in four Canadian provinces and with what success. This will include a combination of interviews and measures of learning and innovation from the study regions garnered from statistics and secondary documentation to get a better sense of the current state of knowledge flows, learning and innovation in rural Canada. In doing this we hope to shed some light on whether New Regionalism offers any real hope as a model of regional development for rural Canada.

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**Canadian Regional  
Development**  
A Critical Review of Theory,  
Practice, and Potentials



**Développement régional  
canadien**  
Un examen critique des théories,  
des pratiques et des potentiels

The *Canadian Regional Development: A Critical Review of Theory, Practice and Potentials* project is a multi-year research initiative funded by the Social Sciences and Humanities Research Council of Canada. The project is investigating how Canadian regional development has evolved over the past two decades and the degree to which Canadian regional development systems have incorporated ideas, policies and practices associated with “New Regionalism” into their policy and practice.

The project is conducting an empirical assessment of Canadian regional development using a multi-level, mixed methods case study approach in four provinces: British Columbia, Newfoundland and Labrador, Ontario, and Québec. The assessment of regional development across the case studies is based on the five key themes of New Regionalism: i) collaborative, multi-level governance; ii) integrated versus sectoral and single objective approaches; iii) fostering knowledge flow, learning and innovation; iv) place-based development; and v) rural-urban interaction and interdependence.

Kelly Vodden (Environmental Policy Institute, Grenfell Campus and Department of Geography, Memorial University) is leading the project, together with co-investigators David Douglas (School of Environment Design and Rural Development, University of Guelph), Sean Markey (Geography, Simon Fraser University), and Bill Reimer (Sociology and Anthropology, Concordia University). In addition, graduate students at all four universities are engaged on the project.

Further information on the project can be obtained at <http://cdnregdev.ruralresilience.ca>. The project has been financially supported by the Social Sciences and Humanities Research Council of Canada and the Leslie Harris Centre for Regional Policy and Development.



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