

Rural Canada and the Canadian Innovation Agenda

Katelyn Creasy

There are a unique set of economic development challenges faced by rural Canadian communities. The launch of the federal government's Canadian Innovation Agenda in 2016 provides an exciting vision for national economic growth and prosperity, but what does this mean for rural Canada? This paper examines both challenges and opportunities for rural Canada based on areas of focus in the Innovation Agenda and discussed the importance of including rural Canada in national innovation efforts.

Keywords: innovation, rural, technology, partnerships, Innovation Agenda, population

Introduction

In June 2016, the Government of Canada introduced a national Innovation Agenda. Announced by the Honourable Navdeep Bains, Minister of Innovation, Science and Economic Development, Canada's Innovation Agenda is described as a vision to make Canada a global centre of innovation, focusing on improving the lives of Canadians and strengthening the middle class by creating jobs and driving growth across all industries. The official news release from Innovation, Science and Economic Development Canada (2016a) states, "To achieve this vision, the Government of Canada will focus on six areas for action:

- Promoting an entrepreneurial and creative society
- Supporting global science excellence
- Building world-leading clusters and partnerships
- Growing companies and accelerating clean growth
- Competing in a digital world
- Improving the ease of doing business" (para. 4).

According to the agenda backgrounder, the six areas for action reflect the government's focus on people, technology and partnerships (Innovation, Science & Economic Development Canada, 2016b). While the initial publications introducing the Agenda acknowledge a broad spectrum of issues and challenges that need to be addressed, a critical component of Canada's cultural and economic identity is barely mentioned: rural Canada.

Depending on the definition of rural that is used, between 19 and 30 percent of the Canadian population live rurally in areas which comprise 95 percent of the country's land mass (Bakhtiar, 2015). But, Rural Canada is not just a place to live; it also employs 4.9 million Canadians and generates 30 percent of national gross domestic product (Federation of Canadian Municipalities, 2015a).

Issue: Rural Canada must be a part of the new Canadian Innovation Agenda

Based on its size, population, and economic impact, rural Canada must be considered and included in the national innovation agenda. The purpose of this paper is to advocate for its inclusion by exploring the challenges and opportunities for innovation in rural Canada in the context of three categories based on the government's stated focus: People, Technology and Partnerships.

People

Perhaps the most prominent challenges faced by rural Canadian communities are those related to population and the labour force. According to the Federation of Canadian Municipalities, Canada's non-metro population is growing slower than its metro population due to both non-metro residents moving to metro areas and the fact that more immigrants choose to settle in metro areas (2015b). Youth out-migration remains a serious challenge with 39 non-metro census divisions in Canada losing more than 20% of their youth between 2007 and 2012 (FCM, 2015a). It is especially important to consider these challenges in the context of the Innovation Agenda's action areas, the successful execution of which relies heavily on the successes of Canadian people.

The Agenda acknowledges the role of people in driving innovation by recognizing the need for immigration. The Agenda backgrounder states,

"Highly skilled workers, researchers and entrepreneurs should be welcomed to Canada in higher numbers and at a faster rate than other OECD countries which are competing for the same talent" (ISED, 2016b).

If the attraction of highly skilled immigrants is viewed as an advantage in spurring innovation, then rural Canada is at a disadvantage. While Canada competes internationally with other OECD countries to attract immigrants, there is similar competition between cities and regions within Canada. In Ontario, for example, although the immigrant population grew 124% from 2001-2011, only 2.8% of immigrants reside in rural regions (Bakhtiar, 2015).

Not only do rural communities face challenges in attracting new residents, but they are also challenged in retaining existing ones. Many rural communities in Canada have experienced a loss of younger members of their populations. The number of working age adults between 20 and 44 years of age living in rural Ontario declined by 26% between 2001 and 2011 and it is expected that another 24% will leave by 2025 resulting in the loss of another 65,000 working age adults (Bakhtiar, 2015). Furthermore, Ontario's rural population is rapidly aging. As of 2011, 19.3% of the population in rural Ontario was over the age of 65, a proportion that is expected to rise to 30% by the year 2025 versus an expected 17% in urban Ontario (ibid).

Difficulty attracting and retaining residents aren't the only challenges faced in rural Canada: maintaining a knowledgeable and skilled workforce is also a concern. According to a report by the Canada Council on Learning, Canada has the largest rural-urban gap with respect to educational attainment levels in the workforce (Canadian Rural Revitalization Foundation,

2015). Rural areas have higher high school dropout rates and lower average levels education levels than urban areas (Canadian Rural Revitalization Foundation, 2015).

The Government of Canada recognizes our country's skilled and highly-educated workforce and culturally diverse society as an advantage to innovation (ISED, 2016b). Because it is clear that compared to their urban counterparts rural areas are facing challenges related to attracting and retaining talent and working-age residents, rural Canada is at a disadvantage in the context then of the Innovation Agenda. In order for the policies and programs developed as a result of the Innovation Agenda to be effective, the Government of Canada must recognize, consider, and aim to address the deficit of human capital in its rural areas.

Technology

By reading the government's introductory news release and backgrounder on the Innovation Agenda, it is evident that technology plays an important role in innovation. It is also during the discussion of technology that the federal government makes its only direct reference to rural Canada in its initial publications regarding the Agenda. The Backgrounder recognizes the need for affordable access to high-speed internet for rural and low-income Canadians. It states that Canada must also do more to give rural communities and low-income Canadians affordable access to high-speed internet so that they can participate fully in a digital and global economy for a better quality of life (ISED, 2016b). This recommendation is well-informed given that as of the year 2014, only 28% of rural residents had access to internet download speeds of between 16 and 25MBPS compared to near-universal access in medium and large urban centres (FCM, 2015a).

As part of a 2014 report on broadband access in rural Canada, the Federation of Canadian Municipalities surveyed people living in rural and remote communities including a group of respondents from small to medium enterprises. The survey found that connectivity is one of the first things businesses consider when choosing their location, meaning that low connectivity or a high cost of connectivity can be prohibitive to economic development in rural areas (FCM, 2014). Respondents also indicated that low connectivity presents a challenge in attracting and retaining talent due to the detrimental impact on employee training, telecommuting, and employee quality of life (ibid).

Considering the extent of the disparity of broadband access, and the conceivable negative implications for innovation and economic development in rural Canada, the Agenda's acknowledgement of the issue is encouraging. Beyond recognition of the issue, the Innovation Agenda backgrounder poses the question: "What is the future of digital infrastructure? Do we need to transition Canada there faster? Who are the Partners?" (ISED, 2016b).

One example of a partnership model can be found in Eastern Ontario. The Eastern Ontario Regional Network (EORN) is a partnership between various levels of government and the private sector which was created by the Eastern Ontario Warden's Caucus to provide higher speeds and bandwidth to at least 95% of homes and businesses in Eastern Ontario (FCM, 2014,

p.16). A recent online article from CBC News Ottawa covered the issue of slow internet speeds in Eastern Ontario and reported the need for upgrades. According to David Fell, CEO of the Eastern Ontario Regional Network, more funding is needed to increase speeds in the existing rural broadband network and to upgrade cellular broadband service. Peter Emon, Chair of the Eastern Ontario Warden's Caucus suggested that the government's regulatory framework needs to change and broadband internet needs to be designated as an essential service in order to make rural internet service on par with urban service (Ladurantaye, 2016, April 11).

The disparities in connectivity between rural and urban areas in Canada are clear, as is the need for further action to close this gap. The success of many elements of the innovation agenda – fostering entrepreneurship, scale and start-up of SMEs, research, education, and emerging digital technologies – will be diminished or impossible without reliable high speed internet access. Resultantly, the successful execution of the innovation agenda is dependent upon this rural challenge being considered and addressed.

Partnerships

Partnerships are particularly important in the context of the Innovation Agenda and its effectiveness in rural Canada. The Organization for Economic Co-operation and Development explored rural economic development and the emerging policy framework, referred to as the New Rural Paradigm, at a 2012 Rural Policy Conference in Russia. According to the OECD, rural development policies are embracing more strategies that have a spatial context, that give priority to investment over subsidies, and that encourage a partnership-based, multi-stakeholder policy design and implementation framework. The conference document suggests that innovation in the form of new products and processes that strengthen SMEs and improve workforce skills will be the key drivers of productivity in rural regions and that while the New Rural Paradigm suggest that this process must be driven by local people, there will be a key role for national, regional and rural government in supporting bottom-up development efforts (OECD, 2014).

While deficiencies in rural Canada's innovation capacity are clearly identifiable in terms of people and technology, the state of partnerships is more promising. Recognizing the importance of partnerships under the New Rural Paradigm and their anticipated role in the innovation agenda, encouraging examples of collaboration already exist in rural Canada. One of these examples is the Community Futures program, summarized by Lori Ries, President of the Community Futures Network of Canada as "a unique community-driven, economic development initiative designed to assist communities in Canada's rural areas to develop and implement strategies for dealing with a changing economic environment" (2016, p. 1).

The Community Futures program was established in 1985 and evolved from previous government initiatives in economic development dating back to 1971. It is delivered by 269 CFDC and CBDC organizations established in rural and semi-urban communities whose services and activities focus on supporting local economic development and assisting businesses through

financing activities and advisory services (Réseau des SADC et CAE, 2015). These organizations are also involved in strategic planning processes, research and feasibility studies, and a diverse range of community economic development initiatives (Ries, 2016). The Community Futures program receives federal funding through the Government of Canada's regional development agencies which oversee the implementation of the program. Performance reports on Community Futures issued by Statistics Canada on behalf of the regional development agencies demonstrate that businesses supported by CFDCs and CBDCs have better economic performance than those that are not (Réseau des SADC et CAE, 2015).

The existing relationship between the government and these local organizations poses an opportunity in developing and delivering an innovation agenda that works for rural Canada. CFDCs are governed by boards of local volunteers. This, plus their established relationships with local entrepreneurs and businesses, means that CFDCs have unique insight into local needs and challenges. Many CFDCs work closely and maintain partnerships with their local municipalities and community organizations such as BIAs and Chambers of Commerce, but there are also examples of partnerships with the private sector on economic development projects. For example, in Prince Edward County, Ontario, The Prince Edward/Lennox & Addington CFDC partnered with First Stone Venture Partners to create the \$10 million private-public co-investment early-stage Upper Canada Equity Fund (see note in reference list).*

Partnerships are a common theme throughout the innovation agenda backgrounder, which calls for the development of world-leading clusters and partnerships. It also calls for the promotion of partnerships between business, government, and research institutions in order to attract talent, strengthen value chains, strengthen basic and applied research capabilities, and lower barriers to allow Canadian businesses to prosper (ISED, 2016b). The importance of partnerships is further recognized in the government's request for Canadians' input in identifying partners in the execution of the agenda's various action areas. The Innovation Agenda backgrounder asks the question: "What new approaches could be explored to improve government services to businesses? Who are the partners?" (ISED, 2016b)

Based on their track record of performance, experience in local economic development, and demonstrated capacity for building partnerships, CFDCs and CBDCs are positioned as logical potential partners in improving government service to business and should be consulted along with other rural stakeholders in the development of policies for the effective inclusion of rural Canada in the innovation agenda.

Policy recommendations

In creating policies and programs to advance the goals of the Innovation Agenda, the federal government must give specific consideration to the challenges faced by rural Canada. Labour force development should be supported through programs that provide better resource networks for immigrants outside of urban areas, that help rural youth develop entrepreneurial and STEM skills, and that support businesses that create rural employment opportunities in scientific and

technical fields. To expedite and ensure rural access to high speed internet, policies that establish minimum speeds and affordable prices should be implemented, and programs that provide financial assistance to improve broadband infrastructure for rural residents should be considered. Existing partnerships with organizations such as CFDCs should be leveraged to expand a more extensive network of rural partners. This network will be a valuable resource both in making informed policy decisions, and determining local program delivery partners.

By creating policies and programs that aim to improve some of the challenges facing rural Canada, the government can help remove barriers to innovation and ensure that the benefits of an innovative Canadian economy are realized nation-wide, not just in urban centres.

Conclusion

The national economic importance of rural Canada is clear, as are the challenges faced when it comes to fostering innovation in those areas. But there are also opportunities. This paper has only explored a few facets of this topic in the context of broad categories - people, technology, and partnerships. More detailed work is required to understand the true range of problems and solutions for innovation in rural Canada.

The government's vision is bold and the launch of the Innovation Agenda delivers optimism for the future growth and prosperity of our nation, but in order for the agenda to truly lead to the inclusive growth it aims to achieve, rural Canada cannot be left out of the equation.

Author biography

Katelyn Creasy graduated from the University of Waterloo in 2011 with a Bachelor of Environmental Studies in Geography and Environmental Management, Sustainable Local Economic Development Option. She has worked as Coordinator of the Eastern Ontario Development Program with the Prince Edward/Lennox & Addington Community Futures Development Corporation, and has recently joined the executive team at the Dunin-Deshpande Queen's Innovation Centre.

References

- Canadian Rural Revitalization Foundation. (2015). *State of Rural Canada Report*. Retrieved from <http://sorc.crrf.ca/wp-content/uploads/2015/10/SORC2015.pdf>
- Federation of Canadian Municipalities. (2014). *Broadband Access in Rural Canada: The role of connectivity in building vibrant communities*. Retrieved from http://www.fcm.ca/Documents/reports/FCM/Broadband_Access_in_Rural_Canada_The_role_of_connectivity_in_building_vibrant_communities_EN.pdf

- Federation of Canadian Municipalities. (2015a). *Cities and Communities: Partners in Canada's Future*. Retrieved from https://www.fcm.ca/Documents/reports/FCM/Cities_and_Communities_Partners_in_Canada_Future_EN.pdf#page=40
- Federation of Canadian Municipalities. (2015b, Dec 21). *Rural report fact sheet: Non-metro population growth*. Retrieved from <https://www.fcm.ca/home/issues/rural/rural-report-fact-sheets/non-metro-population-growth.htm>
- Innovation, Science & Economic Development Canada. (2016b). *Positioning Canada to Lead: An Inclusive Innovation Agenda* [Backgrounder]. Retrieved from <http://news.gc.ca/web/article-en.do?nid=1084739>
- Innovation, Science & Economic Development Canada. (2016a). *Building an inclusive and innovative Canada* [News release]. Retrieved from <http://news.gc.ca/web/article-en.do?nid=1084439>
- Ladurantaye, S. (Ed.). (2016, April 11). Rural eastern Ontario internet too slow, politicians say. *CBC News*. Retrieved August 14, 2016, from <http://www.cbc.ca/news/canada/ottawa/eastern-ontario-rural-internet-slow-1.3530594>
- Moazzami, Bakhtiar. (2015). Strengthening Rural Canada: Fewer & Older: Population and Demographic Challenges Across Rural Canada. *Strengthening Rural Canada*. Retrieved from <http://strengtheningruralcanada.ca/file/Fewer-Older-Population-and-Demographic-Challenges-Across-Rural-Canada.pdf>
- Organization for Economic Co-operation and Development (OECD). (2014, April 29). *Conference on Rural Development: Innovation and Modernising the Rural Economy, Krasnoyarsk, Russia, 2012*. doi 10.1787/9789264205390-en
- Réseau des SADC et CAE. (2015). *The CFDCs and CBDCs: A Winning Approach for Community Futures*. Retrieved from http://communityfuturescanada.ca/wp-content/uploads/booklet_web.pdf
- Ries, Lori with Réseau des SADC et CAE. (2016). An Entrepreneurial Approach to Job Creation in Rural Canada. *Working Paper series N° 195*. Santiago, Chile.: Rimisp. Retrieved from http://communityfuturescanada.ca/wp-content/uploads/1467380865195_Lori_Ries.pdf
- *Note: Knowledge of CFDC function and partnerships gained through 4 years of employment with the Prince Edward/Lennox & Addington Community Futures Development Corporation (PELA CFDC) <http://www.pelacfdc.ca/>