

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



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

The Intersection of Sustainability and Innovation: Lessons from Newfoundland and Labrador

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Outline



- Concepts in Innovation
- A Social Process
- Sustainable Development
- Understanding Trade-offs
- Integration in the Literature
- Context in Newfoundland
- Lessons from the Private Sector
- Policy Context/future

Innovation

- *“The implementation of new or significantly improved product, process, marketing or organizational method. Innovation in regional development, for example, 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. We are considering an innovation as something that is new to the region, rather than new to the world for example” (OECD, 2005:46).*
- Creative Destruction
- Marshall’s Industrial Districts; Clusters
- Triple/Quadruple Helix
- Regional Innovation Systems

Sources: Marshall, 1920 Schumpeter, 1942; Porter, 1990; Etzkowitz, 2008; Cooke, 2010; Foray et al., 2012

Open-ended Innovation Process



Source: OECD, 2009

Innovation as a Social-Technological Process



What have we done for the environment?



Image Source: Google Images

Sustainable Development



- *“Sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs” (United Nations, 1987: 15).*

Understanding Trade-offs



- *Limits must be imposed but those limitations need not compromise the adequacy of enterprise if guaranteed by public consensus (United Nations, 1987: 15).*
- What limitations must be imposed to achieve sustainable development?
- Will ecological benefits have negative social or economic impacts?

Integration in the Literature

- Social-Ecological Innovation
- Eco-Design
- Close-ended process



Sources: OECD, 2009; Westley et al., 2011; Neiva de Figueiredo et al., 2012

Context in Newfoundland



“...it’s the most poorly managed fishery on the planet, and that’s a big place.”

- 1924 Collapse of Lobster fishery
- 1992 Cod Collapse after decades of exploitation
- Continued exploitation of crab and shrimp
- High Volume-Low Value

Methodology



- Two Research Projects
 - Canadian Regional Development: A Critical Review of Theory, Practice, and Potentials
 - Advancing Innovation In Newfoundland and Labrador
- Two Study Regions
 - Kittiwake/Gander-New Wes Valley
 - Great Northern Peninsula/Port-au-Choix-St. Anothey
- Seven Case Studies
- Over 50 interviews
- Document Review and Data Analysis

Study Regions

Kittiwake/Gander-New Wes Valley



Nordic and Red Ochre/St. Anthony-Port-au Choix



Image Sources: http://nl.communityaccounts.ca/profiles.asp?_vb7En4WVgbWy0nY_
Charles Conway

Lessons from the Private Sector



- Commercialization of Waste
 - New Wood Manufacturing
 - Holson Forest Products
- Green(er) Products
 - Dark Tickle Company
- Resource Cycle Mitigation
 - Northern Lights Seafoods

Commercialization of Waste

- Holson Forest Products Ltd.
 - Pellet production in response to forestry decline
 - Reusing sawdust for energy production



- New Wood Manufacturing
 - Sale of sawdust to fish processors
 - Burning excess sawdust to reduce heating costs



Green(er) Products

The Dark Tickle Company

- Small scale, value-added berry production
- Traditional extraction methods
- Over 100 berry pickers
- No preservatives and minimal waste
- Low environmental impact



Image Source: <http://www.darktickle.com/>

Resource Cycle Mitigation

- Northern Lights Seafood
 - Eight species processed
 - Over 250 small scale suppliers
 - Small scale production (5 million pounds) in an unkind industry
- From a resource cycle to resource mitigation



Policy Context



- Innovation
 - Atlantic Canada Opportunities Agency
 - Innovation, Business, and Rural Development
 - Research Development Corporation
 - National Research Council
- Sustainable Development
 - Provincial and federal sustainable development legislation/institutes

Future Policy Directions

- CCEDNet recommends the adoption of a new sustainable development definition:

for development to be sustainable, it must not only generate wealth: it must also advance social justice, reduce and eventually eliminate poverty, and remain within the limits imposed by ecosystem and resource resilience

Moving Forward

- Celebrate successful examples of eco-innovators
- Jointly Facilitate innovation and sustainable development strategies
- Foster a culture of innovation and sustainability
- Understand the trade-offs before implementation



Image Source: Google Images

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Questions/Comments



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