Innovation Models and Rural Regions

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Introduction

• Three models of innovation:
  o Regional Innovation Systems
  o Triple Helix
  o Social Fields

• Case study approach on the Northern Peninsula of Newfoundland
  o 22 interviews of government, industry and community representatives
  o Previous study on Social Network Analysis

• Investment Implications
New Regionalism

- Integration
- Place-based development
- Multi-level collaborative governance
- Rural-urban interdependence
- Innovation and knowledge flows
Models: Regional Innovation Systems

- Emerges out of National Innovation Systems (Lundvall)
- Importance of region based on:
  - Tacit knowledge
  - Social capital
  - Right scale for innovation policy

Source: Centre for Urban and Regional Development Studies 2012
Models: Triple Helix

- Neo-corporatist compatible with neo-liberalism
- Political, scientific and economic (power, truth and money)
- Interaction of knowledge, market forces and the state
Tri-lateral networks and hybrid organizations

Source: www.leydesdorff.net
Methodology

• 22 in-depth semi-structured interviews
• Government, College, NGO’s and businesses
• Action Research approach
Models: Social Fields

- Innovation as a relational phenomena
- Networks of actors, knowledge flows and interconnectivity
- Need for context sensitive models
- Social Fields highlights innovation in cultural, social and territorial contexts
Source: Floysand and Jakobsen 2010
<table>
<thead>
<tr>
<th>Key Criteria</th>
<th>Triple Helix</th>
<th>Social Fields</th>
<th>Regional Innovation Systems</th>
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<tr>
<td>Relationships</td>
<td>Neo-corporatist</td>
<td>Multi-field Social relations</td>
<td>Dualistic System</td>
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<tr>
<td>Key Players</td>
<td>1. Government</td>
<td>Context driven Social Field specific</td>
<td>Knowledge Support System; Production system</td>
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<tr>
<td></td>
<td>2. Industry</td>
<td></td>
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<td></td>
<td>3. University</td>
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<td>Spatial Scale</td>
<td>Non-spatial: Cluster/Sector Regional/National</td>
<td>Relational Turn local and global</td>
<td>Regional Focus Global Pipelines</td>
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<tr>
<td>Investments/ Points of Intervention</td>
<td>Knowledge generation upsets equilibrium Fix system mismatches</td>
<td>Social Field or network building focus at multiple scales</td>
<td>Invest in KP related to local production Alignment</td>
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Findings – New Ideas

• Where do ideas come from?
  o Over reliance on local ideas
  o But some connections externally

• Exposure to new ideas seen as critical
  o Connections to marketplace – (e.g. tourism operators understand world class sites through travel; fisheries connection to Japanese markets)

• Mixed in terms of connections to knowledge support infrastructure
Our Network – where we look for ideas

Legend
- Eddies Cove East to Castors River South
- Eddies Cove West to River of Ponds
- Goose Cove East to North Boat Harbour
- External
- Main Brook to Englee
- Other/No Response

Innovation network

Periphery < 3-5 times number in core
Findings: What is needed to foster innovation?

- Reach out to external knowledge support
- Attract educated young people with new ideas
- Define innovation as new to the region
- Improved regulatory environment
- Access to private capital
- Better collaboration and networking (coffee shops, meeting places)
- Stronger municipal government
- Better transportation networks
- Better alignment of programs and research to community/business needs
Findings: Collaboration

• Generally perceived as good
• However “collaboration of facilitators and not doers”
• Models: Right players not at the table together
  o Post-secondary, industry and government
Skogseid and Strand (2011)
Knowledge Flows and Learning

• Most self describe as learning organizations
• However not much in training budgets except in government
• Often informal learning from experience
• Survival mode limits formal evaluation
• Evaluation is a centralized function in governments
Findings: Investments

• Broadband and cell coverage
• Financing: private capital
• Training and skills development
• Research into new products
• Building better points of intersection and networks
Models and the Periphery (1)

• Social fields offers promise for understanding periphery
  o Takes relationships seriously (e.g. family, community and external dimensions)

• RIS and triple helix: heuristics for empirical research
  o But weaker on the social dimensions
  o Systems approach misses agency
  o Both stress that the importance of networks
Models and the Periphery (2)

- Research in the region is very limited
- Looking for more knowledge infusion
- External connections beyond the region are critical
- Leaning and knowledge flows often neglected
Some Next steps

• Incent government, industry and university/college to form trilateral networks
• Fisheries, forestry and tourism collaboratives
  o Starting point: discussion groups and events
  o Social Network Analysis and network weaving
• Reach out to knowledge support infrastructure external to the region
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