




Measuring rural well-being to foster collaboration

A meta-analysis of sustainability indicator-based monitoring initiatives in rural regions

Artistic credit: Laura St. Pierre, Jon Bath (top centre), Doug Guildford (bottom left)

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Environmental Policy Institute

Research problem

- Need for normatively informed and locally derived approaches to understanding sustainable development
- Lack of clarity over meaning of sustainable development in rural and resource-dependent communities and regions[1]
- Need for evidence to demonstrate need and potential of collaborative approaches to rural governance in Newfoundland and Labrador, given current institutional context[2]
- Promise but mostly unconfirmed potential of sustainability indicators as a tool for more inclusive local governance[3]

Sustainability in rural Newfoundland & Labrador

- 1992 Moratorium brought (un)sustainability of ecological, social, & economic systems into international focus
- Communities large and small striving to reinvent local economies
- Challenges facing rural sustainability
  - 47% of residents in rural/small-town areas[4], but provincial policy favours urban centres
  - No regional level of government
  - Dismantling of rural development institutions[5]
  - Provincial & regional initiatives to increase public access/use of data

Research problem

Sustainability Indicators (SIs):

- Transition from technical, expert-led tools to use in participatory local planning and development[6]
- Balance of bottom-up & top-down:
  - Local aspirations vs. global sustainability priorities
  - Community perceptions of well-being vs. official (e.g. Census) data
- Contemporary frameworks:
  - Canadian Index of Well-being
  - Vital Signs
  - UN Sustainable Development Goals

Research problem

Positive outcomes in communities

- Articulating local visions[7]
- Encouraging dialogue[8]
- Trust-building[9]
- Learning and reflection[10]
- Uncovering under-utilized assets in communities[11]
  - Starting with ``what`s strong, instead of what`s wrong``[12]
  - Shift from rural communities being defined by needs and deficiencies to defining themselves based on their capacities[13]
  - Empowering change from clients of public and private service regimes to citizens capable of meeting their own needs[14]
  - Often overlooked community assets (e.g. sense of community, identity, heritage) can be harnessed in new place-based opportunities[15]

Research problem

"…millions of dollars and much time…has been wasted on preparing national, state, and local indicator reports that remain on the shelf gathering dust" (Innes & Booher, 1999: p. 2).[16]

SUSTAINABLE SEATTLE

Sustainable Seattle 2010

"Here we are, Sustainable Seattle, an organization that changed the world, and yet it hasn't created real change" (Cofounder Laura Musikanski, 2012, quoted in Holden, 2013: p. 93).[17]

Research questions

1. What roles can sustainability indicators and monitoring play in supporting more participatory governance and improving social, environmental, and economic well-being in rural, resource-based regions?

2. What factors lead to the incorporation of sustainability monitoring into governance?

3. What forms of governance emerge from the participatory monitoring of sustainability in communities and regions?

4. How can these lessons learned be applicable for rural and resource-based regions in NL seeking to enhance their well-being and long-term sustainability?

5. What factors in local and provincial governance need to be developed or enhanced to enable community-based sustainability monitoring initiatives to be a vehicle for sustainable regional development?

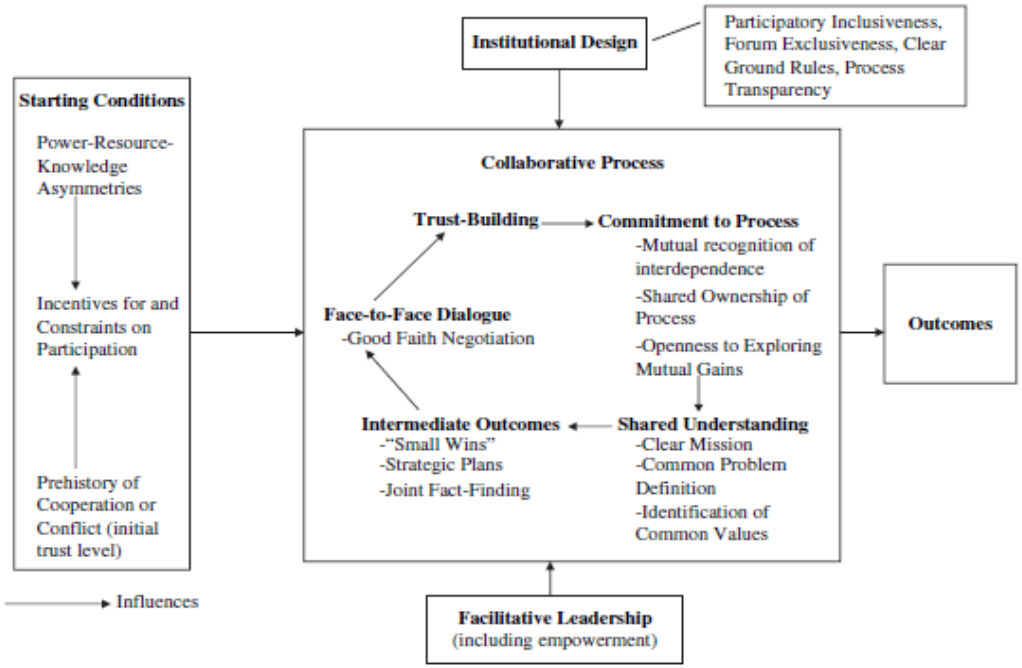
Analytical framework

- Collaborative, multi-level governance
  - Shared decision-making based on sharing of resources & responsibilities between diverse group of actors[18]
  - Need for more effective governance in complex decision environment of sustainable development[19]
  - Mutual exchange of time, trust, and turf[20]
  - Focus on underlying values, images, principles motivating governing actors and the instruments they use[21]

- Learning and adaptation
  - Need to assess learning as an outcome of CG[22]
  - Social learning as observed in CG and indicator initiatives[23]
  - Transformative learning – shift in values and beliefs[24]
  - Governance for sustainable development requires not just new knowledge, but a transformation in underlying values of governing actors[25]

Analytical framework

Figure 1
A Model of Collaborative Governance



Source: Ansell and Gash (2008)

Analytical framework

Governance Element	Criteria
Nature of the indicator system	• Scope • Timeframe • Coherence
Assigning overall responsibility	• Political commitment • Sensitivity to change • Sectoral coordination
Government coordination	• Regional coordination • Training
Stakeholder involvement	• Multi-stakeholder • Participation mechanisms • Feeling of ownership
Links with local plans or strategies	• Performance • Funding
Links with national/int'l networks	• Learning
Communication with society	• Communication

Adapted from Moreno-Pires (2011)

Analytical framework

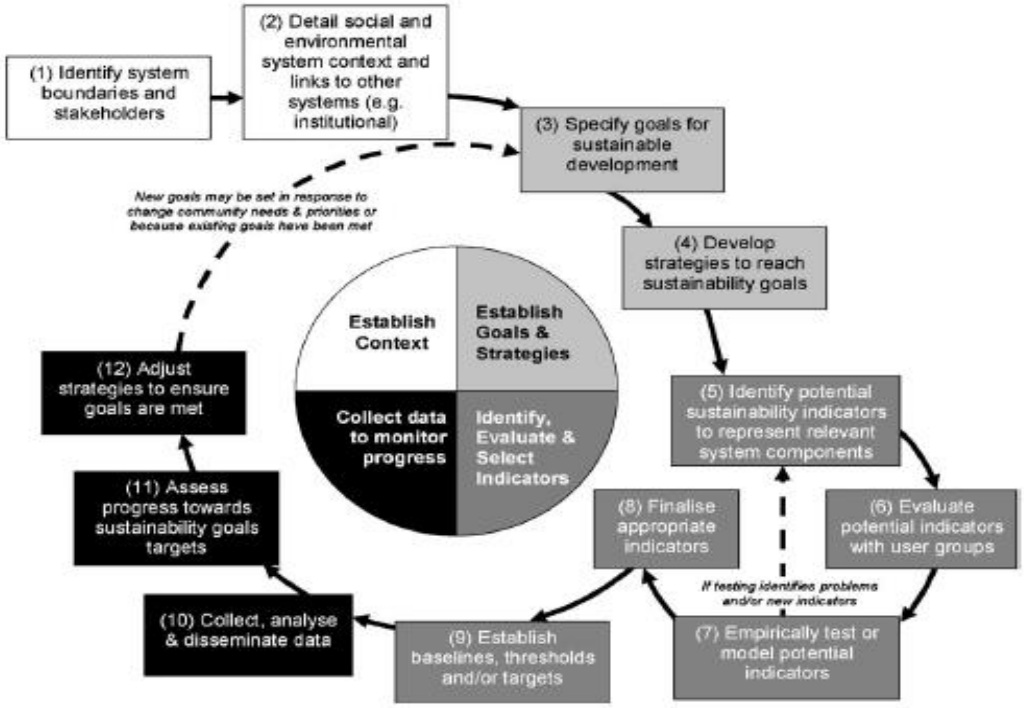


Fig. 2 – Adaptive learning process for sustainability indicator development and application.

Source: Reed et al. (2006)

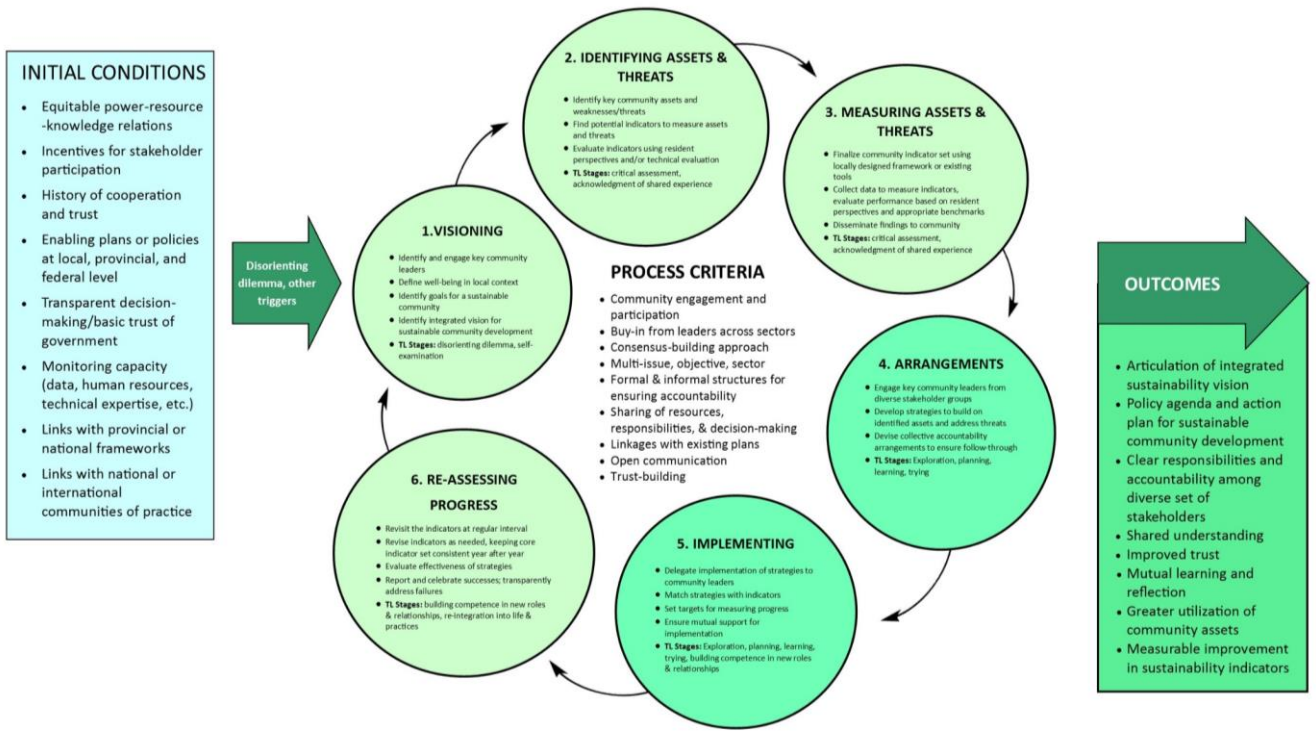
Analytical framework

Transformative learning theory

1. **Disorienting dilemma**
2. **Self-examination**
3. **Critical assessment**
4. **Recognition that one's predicament is shared with others who have experienced similar difficulties and transformations**
5. **Exploration**
6. **Planning**
7. **Learning**
8. **Trying**
9. **Gaining competence and confidence in newly acquired roles and relationships**
10. **Re-integrating into existing life and practices**

Source: Mezirow (2006)

Transformative collaborative governance



Adapted from Ansell and Gash (2008), Reed et al. (2006), Mezirow (2006), Moreno-Pires (2011)

Methods

Phase 1: Meta-analysis

- Case identification
  - Location of documents relevant to each case
    - Indicator reports, media coverage, etc. from local area
    - Database keyword search (Scopus, Web of Science, Google Scholar, etc.)
  - Systematic content analysis using analytical framework currently under development

Phase 2: Community-based action research on emergent SI initiatives in rural NL

- Participatory action-research inspired approach
- Informed by grounded theory[26] and theoretical framework
- 2-3 case study regions
  - Co-creation of SI frameworks and tools with local stakeholders
  - Integration into municipal and regional planning and development efforts

Meta-analysis

Inclusion criteria

- Canadian initiatives
- Community or regional scale (not provincial)
- Not located in CMA or large CA (>60,000) unless also primary resource-based economy
- Sector/issue-specific initiatives included for now, may be excluded later

Meta-analysis

Factors examined:

- Scale of initiative
  - Municipal
  - County
  - Multi-county
  - Intra-provincial region
  - Indigenous territory
- Distance from a major urban centre
- Duration of initiative
  - Signs of inactivity (>5 yrs. since last report, broken website link)
- Other potentially important common factors
  - Nature of local economy (e.g. resource-dependent, tourism)
  - Eco-region focus (e.g. watershed, valley, etc.)
  - Provincial framework

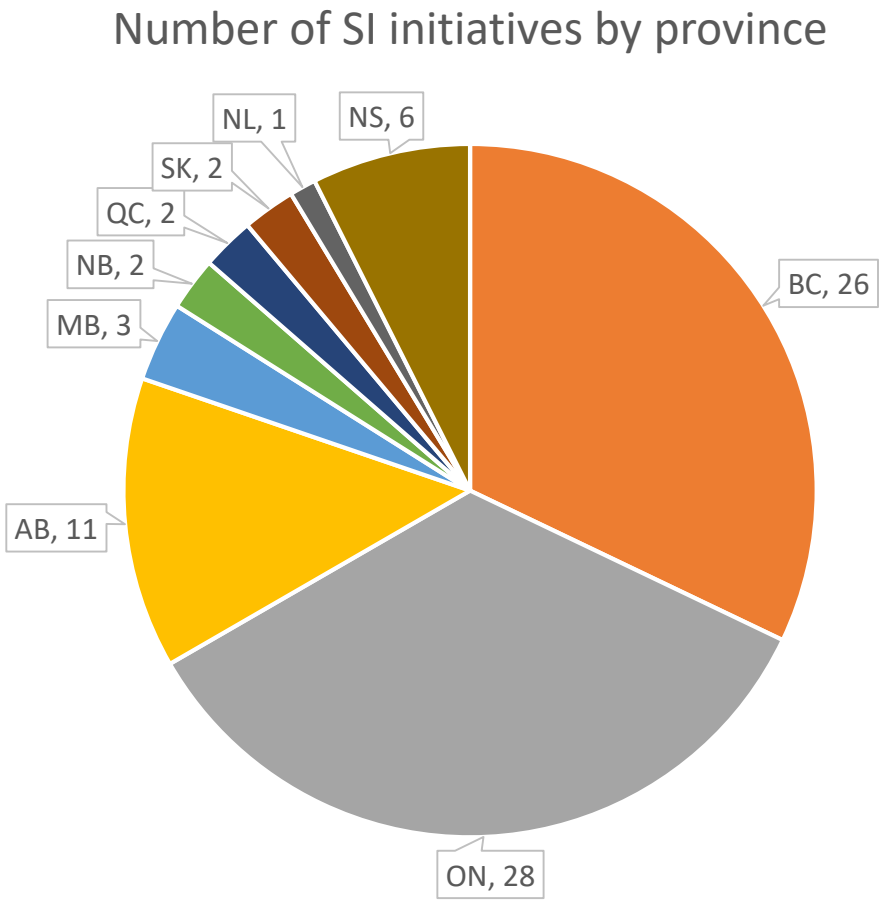
Meta-analysis

- 81 SI initiatives found to date in Canada
  - 40 urban, 41 rural/resource-based
- Average population of adopting communities/regions: 65,016
- 73 appear currently active (90%)
  - 33 urban initiatives active (82.5%)
  - 40 rural/resource-based initiatives active (97.6%)
- 2.8 years average duration of project
  - 3.5 years for urban initiatives
  - 2.1 years for rural/resource-based initiatives

Meta-analysis

- Average distance to a major urban centre: 188 km
- Smallest community: Naskapi Nation (~586)
- Largest community: Sault Ste. Marie (78,459)
- Types of initiatives:
  - Vital Signs (26)
  - Grassroots indicators (9)
  - Online data dashboard (1)
  - Public engagement/planning initiative (3)
  - CIW initiative (1)
  - Other (1)

Meta-analysis



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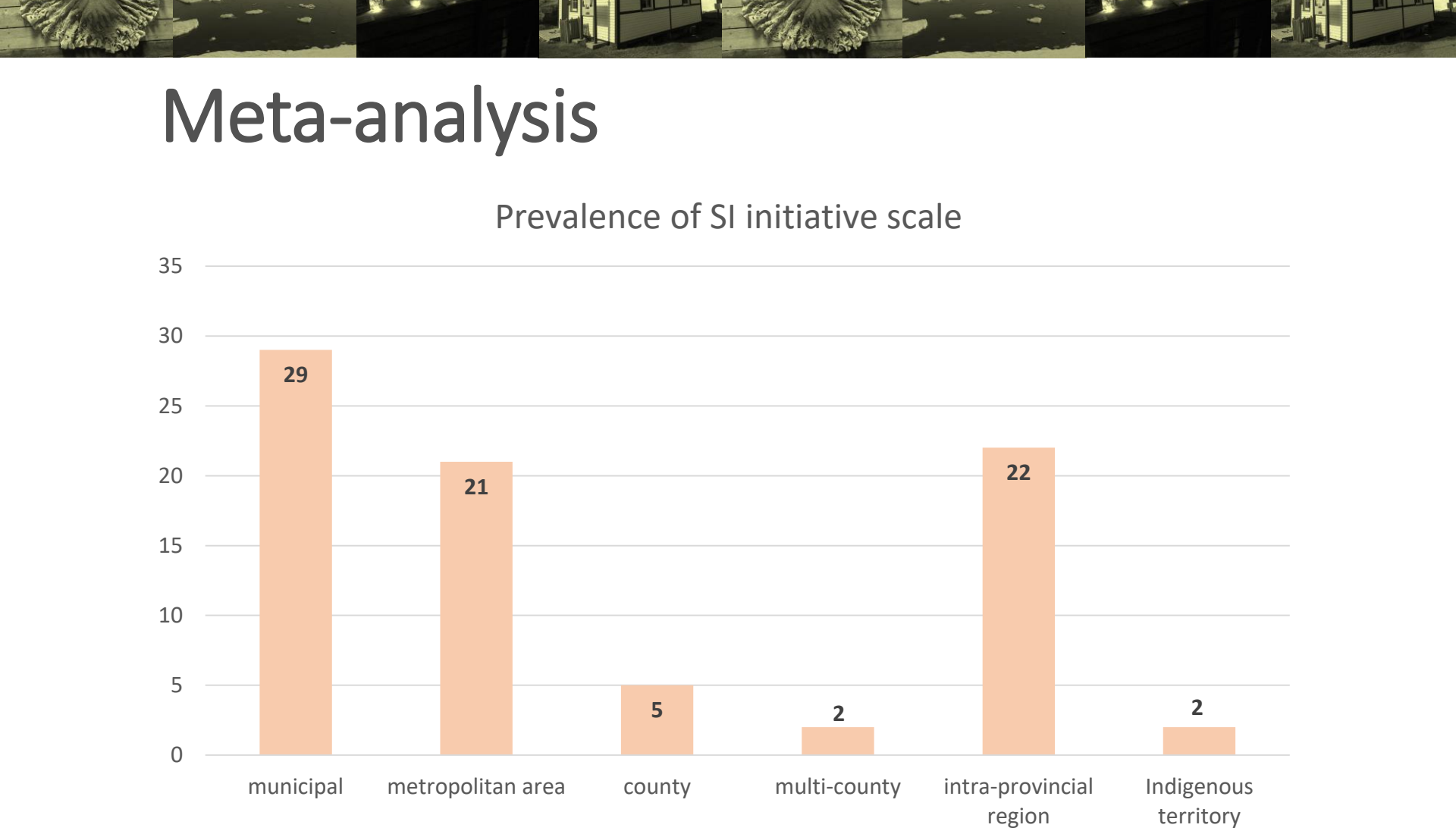
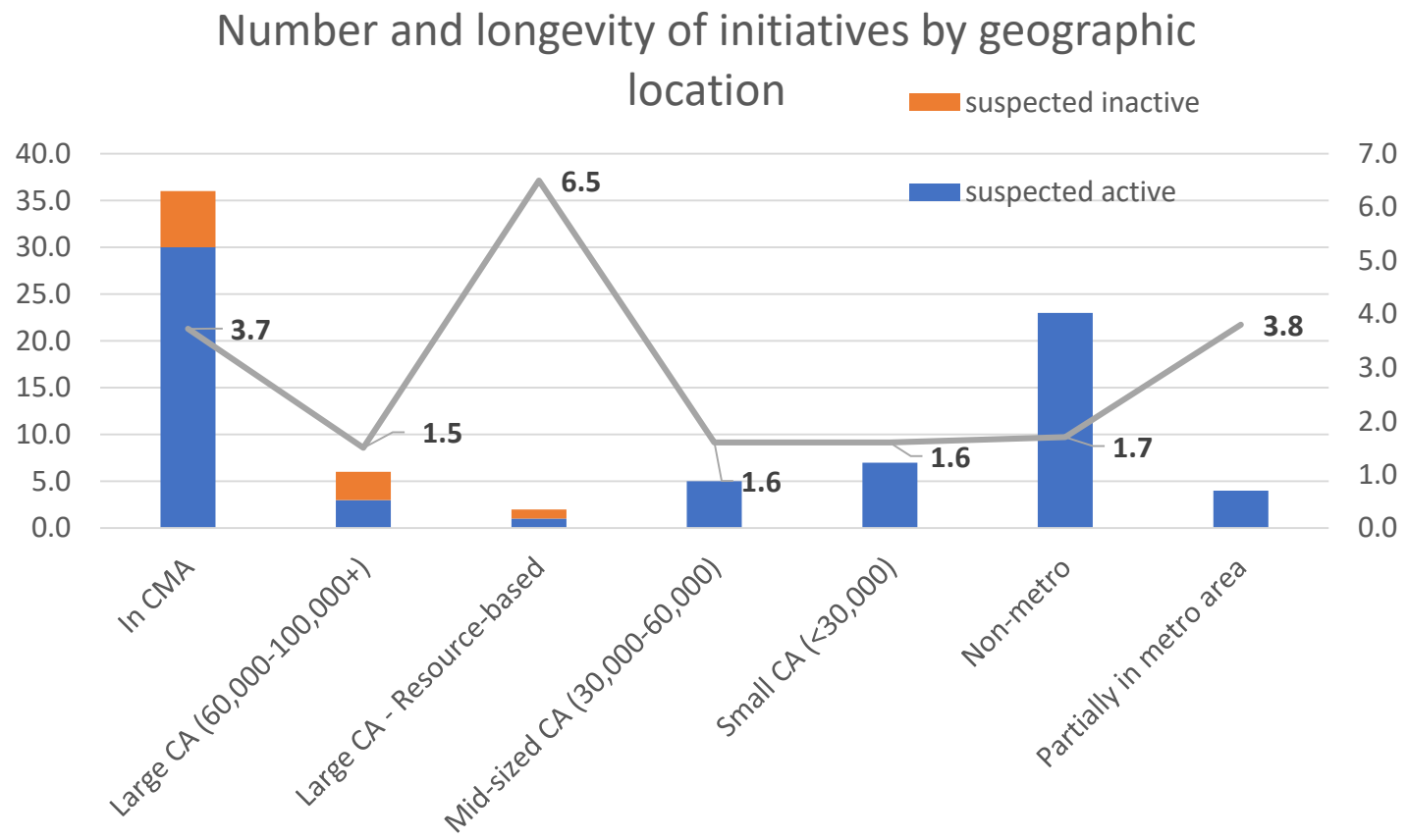
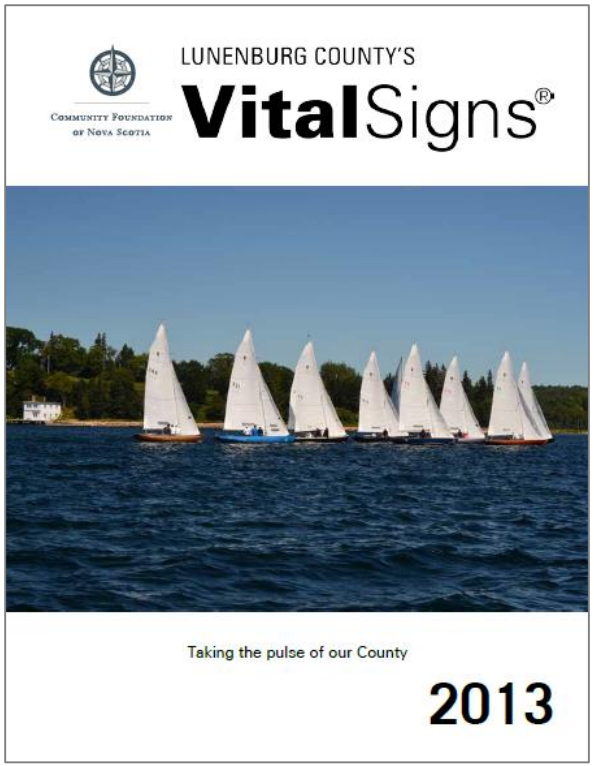


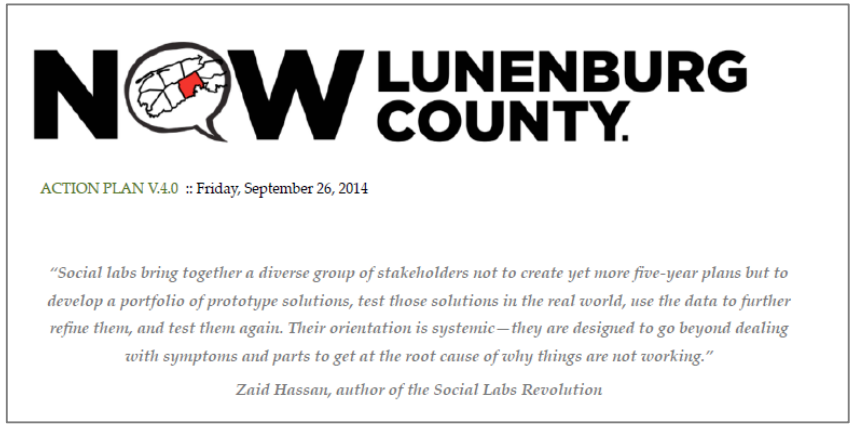
Meta-analysis



Meta-analysis

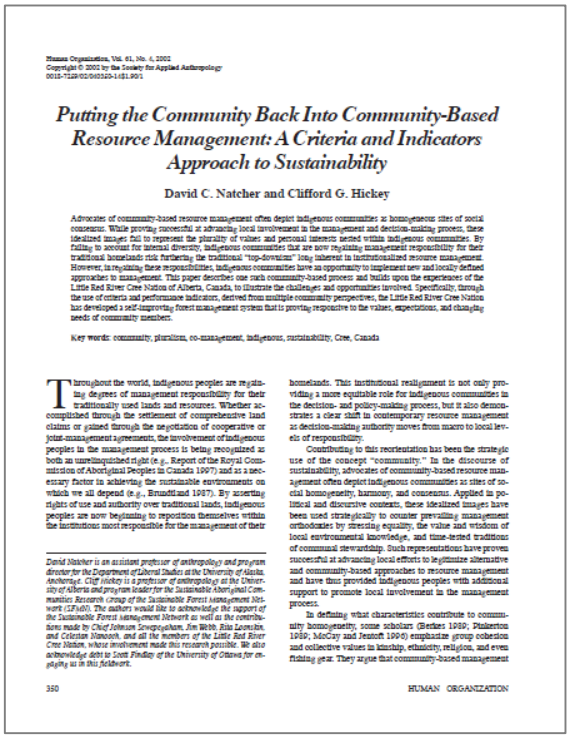
Case study snapshot: Lunenburg County, NS





Meta-analysis

Case study shapshot: Little Red River Cree Nation



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Putting the Community Back Into Community-Based Resource Management: A Criteria and Indicators Approach to Sustainability

David C. Natcher and Clifford G. Hickey

Advocates of community-based resource management often depict indigenous communities as homogeneous sites of social consensus. While proving successful at advancing local involvement in the management and decision-making process, these idealized images fail to represent the plurality of values and personal interests nested within indigenous communities. By failing to account for internal diversity, indigenous communities that are now regaining management responsibility for their traditional homelands risk furthering the traditional "top-downism" long inherent in institutionalized resource management. However, in regaining these responsibilities, indigenous communities have an opportunity to implement new and locally defined approaches to management. This paper describes one such community-based process and builds upon the experiences of the Little Red River Cree Nation of Alberta, Canada, to illustrate the challenges and opportunities involved. Specifically, through the use of criteria and performance indicators, derived from multiple community perspectives, the Little Red River Cree Nation has developed a self-improving forest management system that is proving responsive to the values, expectations, and changing needs of community members.

Key words: community, pluralism, co-management, indigenous, sustainability, Cree, Canada

Throughout the world, indigenous peoples are regaining degrees of management responsibility for their traditionally used lands and resources. Whether accomplished through the settlement of comprehensive land claims or gained through the negotiation of cooperative or joint-management agreements, the involvement of indigenous peoples in the management process is being recognized as both an unrelinquished right (e.g., Report of the Royal Commission of Aboriginal Peoples in Canada 1997) and as a necessary factor in achieving the sustainable environments on which we all depend (e.g., Brundtland 1987). By asserting rights of use and authority over traditional lands, indigenous peoples are now beginning to reposition themselves within the institutions most responsible for the management of their homelands. This institutional realignment is not only providing a more equitable role for indigenous communities in the decision- and policy-making process, but it also demonstrates a clear shift in contemporary resource management as decision-making authority moves from macro to local levels of responsibility.

Contributing to this reorientation has been the strategic use of the concept "community." In the discourse of sustainability, advocates of community-based resource management often depict indigenous communities as sites of social homogeneity, harmony, and consensus. Applied in political and discursive contexts, these idealized images have been used strategically to counter prevailing management orthodoxies by stressing equality, the value and wisdom of local environmental knowledge, and time-tested traditions of communal stewardship. Such representations have proven successful at advancing local efforts to legitimize alternative and community-based approaches to resource management and have thus provided indigenous peoples with additional support to promote local involvement in the management process.

In defining what characteristics contribute to community homogeneity, some scholars (Berkes 1989; Pinkerton 1989; McCay and Jentoft 1996) emphasize group cohesion and collective values in kinship, ethnicity, religion, and even fishing gear. They argue that community-based management

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Table 6. Criterion VI: Increase the Involvement of Community Members in Decision Making

A) Critical Element	B) Local Value	C) Goal	D) Indicator	E) Action
1. Intra- and inter-community information exchange.	1. Equitable participation of community members in policy and decision making.	1. Direct communication between industry and community members.	1. Recognized point of contact is established between industry and each of the three LRR communities.	1. Community-industry information liaison representing each of the three LRR communities should be appointed.
2. Intra- and inter-community information exchange.	2. Equitable participation of community members in policy and decision making.	2. Industry goals and management plans are communicated to each of the three LRR communities.	2. Information is disseminated in a format accessible to community members.	2. Pointers and newsletters for information dissemination.
3. Intra- and inter-community information exchange.	3. Equitable participation of community members in policy and decision making.	3. Pluralistic participation on management board.	3. Community representation on the SMA Management Board is diversified.	3. Youth (3), women (3), and elder (3) involvement on SMA Management Board (coastal involvement).
4. Intra- and inter-community information exchange.	4. Equitable participation of community members in policy and decision making.	4. SMA management objectives are made more accessible to community members.	4.Forums to facilitate community participation in the management of the SMA are created.	4. Community steering committee should be created and comprised of family representatives.
5. Intra- and inter-community information exchange.	5. Equitable participation of community members in policy and decision making.	5. Local ecological knowledge is given an equitable role in management and planning decisions.	5.Traditional ecological knowledge is used to inform management and planning objectives.	5. Implement a consultation program with community trapline holders.

Meta-analysis

Case study snapshot: Bonavista region, NL

Sense of Place, Physical and Cultural Identity		
6) Stabilizing Populations	Residual net migration, 2006-2010: +0.14% (60 people)	Community Accounts[30]
	2011 population: 27,850 (-1.4% since 2006) (Province: + 1.8%) (Clarenville: + 14.4%)	Community Accounts[31]
	Median Age (2006): 44 years (compared to 42 years of age in Province) (2001: 40 years)	Community Accounts[32]
7) Community Connectedness	Very Strong or Somewhat Strong sense of belonging to community (2011-12): 85.6% (5th of 9) (2010: 89.4% (2nd of 9))	Community Accounts[33]
	Very Satisfied or Satisfied with life in general (2011-12): 86.9% (7th of 9) (2010: 87.9% (5th of 9)	Community Accounts[34]
	Self-assessed community safety (2010): 95.6% (89.4% provincial) (2002: 100%)	Community Accounts[35]
8) Preservation of Cultural Heritage and Local History	Approximately 69,709 visitors to the region between May-Oct, 2011 (18.7% of annual visitors to	Dept. TCR Eastern region[36]

[30] Community Accounts, "Clarenville - Bonavista Rural Secretariat Region Well-Being and Indicators," accessed 24 March 2015, http://nl.communityaccounts.ca/indicators.asp?_=ib7En4WVgbWyDnc_
[31] Ibid.
[32] Ibid.
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Historical demonstrations at Trinity. Photo credit: Trinity Historical Society.

Trinity Historical Society

Trinity Historical Society Inc. was established in 1964 to preserve the unique built heritage of Trinity. With a year-round population of 137 (2011), Trinity was one of the first communities on the Bonavista Peninsula to develop its tourism sector. Today, Trinity Historical Society is a major contributor to the town's cultural and economic life. The organization manages six historic buildings, including Green Family Forge and the Trinity Museum, which attracts 6,500 visitors per year. The Society is the second largest employer in Trinity, employing upwards of 35 people seasonally. In addition, the Society is a firm believer in regional cooperation and is working with several other heritage not-for-profit organizations across the Bonavista Peninsula in collaborative partnerships. Learn about the work of the Society at http://www.trinityhistoricalsociety.com/.

Anticipated outcomes

- Contribution to research on:
  - Sustainability indicators
  - Collaborative governance
  - Rural well-being and sustainability
- Support for provincial and national efforts towards regional approaches to rural governance and development
- New tools and resources for asset-based rural development planning designed in partnership with rural NL communities and regions

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