Resources and Sustainable Development in the Arctic: Research in the NWT

Aurora Research Institute Brown Bag, Nov. 25 2016

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Lakehead University/Yukon College
Principal Investigator, ReSDA
Are resources an answer to Northern challenges?

“...there is some indication that the worst aspects of the resource dependence can be countered through the introduction of new policies and models of development that increase local control of development and ensure a higher share of resource rents are passed on to northern communities...”

“Resource development has often been linked to an increase in the disruption of these communities leading to a variety of social and health challenges...”
ReSDA wants to find out if this is true

“The potential exists for finding new ways of developing resources that will ensure greater benefits for and build capacity in these northern communities. Rather than being something that threatens their vitality, the development of natural resources can be done in a way that will ensure their long-term sustainability…”

What is different?
- New land claim and self government agreements
- New co-management arrangements
- Better social, economic, and environmental impact assessments (both science and rules)
- World respect for Indigenous rights
ReSDA?

- Currently involves 54 researchers at 29 universities in 9 countries.
- Core funding from the Social Sciences and Humanities Research Council of Canada – 2011 to 2018.
- The main focus of ReSDA’s research is on finding ways to ensure that a larger share of the benefits of resource development stay in the region with fewer costs to communities.
- Main coordination office at Yukon College with regional coordinators in Labrador, Nunavut, and NWT.
Where is ReSDA?
## ReSDA First Projects – Gap Analyses

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<td>Peter Schweitzer, University of Vienna; Thierry Rodon, Université Laval</td>
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<td>Lee Huskey, University of Alaska Anchorage</td>
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<td>Regional Economic Development</td>
<td>Frances Abele, Carleton University</td>
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<td>Social Dimensions of Resource Development</td>
<td>Brenda Parlee, University of Alberta</td>
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<td>Impact Benefit Agreements</td>
<td>Ben Bradshaw, University of Guelph</td>
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<td>Resources and the Subsistence Economy</td>
<td>David Natcher, University of Saskatchewan</td>
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<td>Resources and Environmental Issues</td>
<td>Arn Keeling, Memorial University</td>
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<td>Climate Change</td>
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<td>Cross Cutting Theme research: Gender and Resource Development</td>
<td>Suzanne Mills, McMaster University; Martha Dowsley, Lakehead University</td>
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• **Project 1: Resource Development Impacts Indicators (Andrey Petrov)**
  
  How can we develop better, community controlled, indicators of change linked to resource development?

• **Project 2: Measuring the fiscal linkages (Lee Huskey)**
  
  How can we maximize the amount of money that stays in a region?

• **Project 3: Distribution of financial benefits within communities (Thierry Rodon)**
  
  What are the various ways that funding is distributed within communities and what are the impacts of these?

• **Project 4: Boom and bust Impacts and mitigation in northern communities**
  
  What are the best ways to mitigate the main social impacts of resource development on communities?

• **Project 5: Long distance commuting and Arctic communities (Gerti Elmsteiner-Saxinger)**
  
  What are the best options for Arctic communities in dealing with long distance commuting?

• **Project 6: Impact Benefit Agreements and Beyond (Ben Bradshaw)**
  
  What are the best ways to deal with negative impacts arising from current Impact Benefit Agreements?

• **Project 7: Resource Development and Subsistence Activities (David Natcher)**
  
  How can resource development enhances impact the subsistence economy of northern communities?

• **Project 8: Community Wealth Funds and Resource Development (Greg Poelzer)**
  
  Which forms of community wealth funds are communities most comfortable with?

• **Project 9: Educational and Training Benefits (Andrew Hodgkins)**
  
  What are the best examples of resource-related employment, training, and education programs?

• **Project 10: Community Well-being and Resource Development (Brenda Parlee)**
  
  What are the best measures of well-being for northern communities impacted by resource development?

• **Project 11: Traditional Knowledge and Resource Development**
  
  What are the best examples of the use of traditional knowledge in resource development?

• **Project 12: Best practices in Industry/Government/Community relationships (Frances Abele)**
  
  What are the best practices in developing relationships and how do these relationships influence success?

• **Project 13: Gender and Resource Development in the North (Emilie Cameron and Suzanne Mills)**
  
  How can resource development enhance gender equality?

• **Project 14: Environmental Impacts of Resource Development (John Sandlos and Arn Keeling)**
  
  How can environmental impacts be best mitigated to the benefit of communities?

• **Project 15: Housing and Resource Development (Julia Christensen and Lisa Freeman)**
  
  How can resource development improve housing in northern communities?
New Possibilities (and new dangers)

- Social impacts – better understanding of social impacts over the past 30 years – new possibilities of mitigation (and we now know how severe some of these impacts are)
- Indicators – new realization of the importance of measuring change – new relevant indicators - need for community-based monitoring of social and economic change (and knowledge that community monitoring often benefits outside researchers more than communities)
- Resource revenues - new mechanisms exist to slow leakages and increase linkages – royalties now recognized as belonging to regions – new sovereign wealth funds etc. (resource curse – corruption)
- IBAs (confidentiality is a problem)
- New corporate-community relations – corporate social responsibility (possibility of CSR green wash and only to assure community agreement)
- How can we use the short-term benefits of extractive industries to help long-term renewable development?
Dangers remain

- If communities can’t control the situation social suffering will increase
  - Communities need to be able to say ‘no’
- Capacity continues to be an issue in northern communities
  - Difference between having a right to control the situation and being able to control the situation
- Culturally appropriate institutions still need to be developed
  - Conflict within communities and perceptions of corruption can cause problems within regions
- Dependence on a non-renewable resource
  - How can the benefits of non-renewable resource development be used to enhance renewable resource development?
Gender relations and gender-based analysis at the resource development/traditional economy interface

Sahtú Settlement Area (Kuokkanen & Simmons):
- In conjunction with SSHRC-funded research project on gendered dimensions of Indigenous self-governance.
- Focus group with women in Tulit’a in June, 2014
- Women from the community of Deline as well as Tulit’a
- 22 interviews, 13 with women including leaders, elders, youth
- Collection of documents pertaining to gender and governance
- Analysis ongoing

Lutsel K’e Dene First Nation
Wildlife, Lands and Environment Department
Community Knowledge about the Impacts of Mining
Traditional Knowledge Archive Project
Jeanette Lockhart, Laura Jane Michel and Brenda Parlee
RESDA, Ottawa (Oct. 26-27. 2016)

The Inuvialuit Indicators Project: Monitoring change in northern communities (Andrey Petrov, UNI)

- Objective was to help provide the IRC with an initial set of reliable indicators to measure socio-economic change in their region
Indicators as a Building Tool for Understanding Community Wellbeing

Bruno Wichmann and Todd Godfrey
Agricultural and Resource Economics, University of Alberta

Analytical Framework (Two-stage approach)

- i) Estimate a system of equations for our three components of wellbeing.
  
  \[
  \text{Health} = f(X, Z_1) + \text{error}
  \]
  
  \[
  \text{Income} = f(X, Z_2) + \text{error}
  \]
  
  \[
  \text{Education} = f(X, Z_3) + \text{error}
  \]

  Equations use socioeconomic indicators that affect all aspects of wellbeing (X) and those that are specific to each component of wellbeing (Zs).

- ii) Estimate a life satisfaction model to balance the effects of X and Zs on general wellbeing.

  \[
  \text{Life Satisfaction} = \beta_0 + \beta_1 \hat{X} + \beta_2 \hat{Z} + \beta_3 \hat{E} + \text{error}
  \]

  The RHS variables of this model are predicted values that incorporate information from all socioeconomic variables in step i).
**ORDERED RECLAMATION: REDEFINING MINE RECLAMATION IN NORTHERN CANADA**

Resources and Sustainable Development in the Arctic  
Ottawa, ON  
October 2016

Dr. Anne Dance  
Visiting Researcher  
University of Ottawa

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**Augmenting the utility of IBAs for Northern Indigenous Communities**

Ben Bradshaw and Emily Martin,  
University of Guelph

Acknowledgements: NNK, NG, TRTFN, LSCFN, SSHRC, Mitacs, and Polar Knowledge Canada

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### Subsistence Harvesting and Resource Development (David Natcher, U. of Saskatchewan)

- Main barriers to subsistence harvesting
- Community-based survey in four regions (N= 1119)
- Results vary by region but overall barrier #1 is employment schedules followed closely by cost
- Next is lack of knowledge or interest followed by poor health
Labour Mobility and Community Participation (Gerti Saxinger, University of Vienna)

- Need to find out the best ways for Yukon communities to take advantage of labour mobility
- Things can be done to negotiate best conditions for labour mobility
- Guidebook to better prepare communities to take advantage of commuting jobs

Resource Royalties Distribution and Community Development: case studies from Nunavik, northern Ontario and Alaska

ReSDA workshop, Ottawa
October 26-28 2016

Thierry Rodon, Project leader, Northern Sustainable Research Chair, Laval University
Isabel Lemus-Lauzon, Northern Sustainable Research Chair, Laval University
Jean-Marc Séguin, Mining coordinator, Makivik Corporation

Project overviews:
Toxic Legacies and Northern Exposures

Arn Keeling, Department of Geography
John Sandlos, Department of History
Memorial University, St. John’s, NL
Future directions?

- How do we use the short-term benefits of extractive resource development but avoid dependency?
### Social Innovation for Sustainability in Arctic Resource Development (SISARD)

**Social Innovation**

...developing new social practices that can better meet human needs that are currently being unmet with an emphasis on empowering communities.

- It is an extension of terms such as social economy and social enterprise.

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Managing Impacts on Northern Communities

1. What are the major problems communities and organizations in the north currently face regarding the assessment of social impacts? How do communities feel about their current role? What are the best cases?
2. What are the impacts of extractives on health and what are the best examples of mitigating negative impacts and accentuating positive impacts?
3. How can we improve the indicators we use to monitor well-being and resource development impacts? How can communities collect, control and use this information?
4. How can we better integrate concerns shared by women into assessments and understanding impacts and resource decision-making? These include impacts on poverty, sharing, and food security.
5. How can new governance structures provide greater control / ownership in the resource sector? What are examples of effective negotiations and models for managing developments?
**Food security, Subsistence Activities, and Culture**

1. How can we best monitor the barriers to subsistence activities and use this monitoring to determine the best examples of resource extractive developments being used to enhance subsistence activities?
2. What are the best examples of food security and food distribution being enhanced by extractive resource development and what are the best ways for subsistence foods to be distributed to communities experiencing extractive development?
3. How can we use the short-term benefits of extractive resource development to enhance the development of more culturally appropriate and more sustainable economic activities?
Enhancing community well-being

1. What are best methods of integrating Indigenous world views into decision-making about resource development?
2. What are the best ways for communities to distribute revenues from resource development?
3. What are the best models of community sovereign wealth funds for communities to use?
4. How can we use social innovation when facing the boom and bust cycles of resource developments.
Building capacity and diversifying the economy

1. What are the best examples of training programs for long-term sustainability?
2. What are the best arrangements for work/life balance in FIFO arrangements for northern workers?
3. What are the impacts of extractive development on mobility of northern communities? Do they increase or decrease mobility?
4. How can extractives support business development that can then be used for renewable development?
5. What are the best examples of communities dealing with resource bust periods and the closure of extractive activities?
6. What are the best employment arrangements?
7. Are IBAs working? Do they improve the situation or perpetuate past problems? How can you ensure communities can contribute adequately to the negotiation of IBAs?
8. How can remediation activities be best used to support the long-term sustainability of northern communities?
9. How can existing and future infrastructure relating to resource development be best used to support the long-term sustainability of northern communities?
10. How can we improve models, such as the staple model, to better understand where resource development leakages are occurring and where linkages could occur?
Knowledge Sharing: ReSDA Atlas
Thank you

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