# Aboriginal Capacity Building Achievements for Sustainable Natural Resource Development



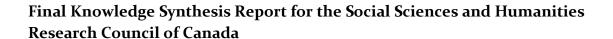
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Final Knowledge Synthesis Report for the Social Sciences and Humanities Research Council of Canada

### Acknowledgements

This report was supported by the Social Sciences and Humanities Research Council of Canada and The University of Winnipeg. We are grateful for the expressions of support offered by the Ontario Ministry of Natural Resources, Canadian Institute of Forestry (Manitoba Section), British Columbia Community Forestry Association, and Centre for Forest Interdisciplinary Research. Vital research support was provided by Morrissa Boerchers, Weldon Hiebert and Julia Lawler.

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#### Suggested citation -

Bullock, R., Kirchhoff, D. and Mauro, I. 2016. Aboriginal Capacity Building Achievements for Sustainable Natural Resource Development. Final Knowledge Synthesis Report for the Social Sciences and Humanities Research Council of Canada. Centre for Forest Interdisciplinary Research, The University of Winnipeg, Winnipeg, Manitoba, Canada. 39pp.

Cover photo credit: Construction of the Keeyask Hydro Generating Station Project, September 2016. Taken by R. Bullock.

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#### **Key Messages**

- This knowledge synthesis report provides the first bibliometric profile and systemic review of research on Aboriginal capacity building for natural resource development in Canada.
- Research on and involving Aboriginal peoples in natural resource development and capacity has steadily increased over the past decade, in terms of the number and range of papers, authors, institutions, and cases examined.
- Research output is distributed fairly evenly between male and female lead researchers
- Research output is widely distributed across the regions of southern Canada (with UBC, Simon Fraser, Manitoba and York having the highest output).
- Sites of Aboriginal natural resource development research are not currently matched with sites of
  research capacity. Researchers are based in southern and urban Canada, while sites and participants
  are located in rural, remote and northern areas.
- Current research examines common issues, projects and sites; however, significant variation in research design, data collection methods and reporting styles makes sectorial and case comparisons difficult.
- We identify nine categories of arrangements through which Aboriginal and non-Aboriginal groups collaborate for natural resource development: land use/regional planning; IBAs; MOUs; Aboriginal businesses; joint ventures; Environmental Assessments; revenue sharing agreements; advisory committees; and regional economic councils.
- Land use/regional planning (forestry) and IBAs (mining) are most prevalent arrangements discussed in this sample of research literature.
- Detailed analyses of governance arrangements provides rich context for Aboriginal natural resource development in Canada, however, current Aboriginal capacity research does not provide thorough assessments of capacity or benefits in terms of actual outcomes of collaboration.
- Social and human capitals are the most common forms of Aboriginal capacity discussed in current research. The ability to initiate cross-cultural dialogue and develop trust is a recurring theme in natural resource development project contexts.
- While nearly all papers in this systematic review gave examples of benefits, significant variation in detail and method mean that there is inconclusive evidence.
- Improved consistency of Aboriginal research data collection and reporting is needed to enhance the information base for decision making and tracking Aboriginal achievements in energy, forestry and mining.

#### **Executive Summary**

Natural resource extraction is taking place at an unprecedented rate, and this is expected to increase as many countries seek a higher standard of living in combination with rising populations. This will undoubtedly put new socio-economic incentives and pressures on communities and various industries to enhance production in resource rich areas, which often means Aboriginal lands, and in Canada, most likely in the remote and northern regions. Development that respects Aboriginal rights and is culturally appropriate, environmentally responsible, and socio-economically beneficial is a major priority being expressed and demanded by Aboriginal leaders, organizations and communities. However, recognition of rights is not enough for Aboriginal communities to reap the benefits of resource development. The types of governance systems that support sustainable development, from an Aboriginal perspective, are not well understood and are a recent area of scholarship in the Canadian context.

This report provides an analysis of current demands of new governance models associated with the quest for natural resource development, specifically, the capacities required for Aboriginal peoples to meaningfully participate in Canadian resource wealth generation. While it is widely acknowledged that capacity, control and benefits are linked, there is a need to review research evidence to verify current claims and, in turn, inform natural resource policy and practice in Canada. Therefore, the purpose of this report is to assemble existing evidence of Aboriginal capacity building connected with recent collaborative initiatives in energy, forestry and mining, in order to elaborate the forms and levels of capacity, benefits and control Aboriginal people experience. Increasing our understanding regarding the mechanisms that promote long-term, trust-based and benefit-oriented outcomes between Aboriginal and non-Aboriginal peoples, governments, and communities is a major outcome of this research and will facilitate the ongoing promotion of development models that produce sustainable benefits.

In the first part of our research, we used bibliometrics to analyze existing literature in energy, forestry, and mining in order to survey the trends within this area of research. A comprehensive investigation of research articles was undertaken using well-recognized and widely-utilized research databases (i.e., ISI Web of Science and SCOPUS). We used a combination of search terms, including the names of major sectors, 'Aboriginal' and synonyms, Canada and provinces and territories, 'control', benefits' and 'capacity', and we limited to the last decade to focus on recent initiatives. This search turned up 144 documents, and after application of inclusion/exclusion criteria further reduced our sample to 49 papers. We then gathered information based on established core metrics to produce a robust, high quality database (i.e., year of publication, authorship and gender, author affiliation, journal titles, citation counts and impacts factors, and keywords). Key findings from our bibliometric analysis include:

- Research about Indigenous peoples involved in resource development and capacity has increased steadily over the past decade, with peak output years being 2013 and 2015.
- Of 90 total authors, 56 were male and 34 were female. Male authors led approximately one half (26/49) of the papers analysed, which is consistent with other recent Canadian bibliometrics studies (Bullock and Lawler 2015).
- The top contributing universities were University of British Columbia, Simon Fraser University, University of Manitoba, and York University.
- When comparing researcher institution and research location, a clear pattern emerges: research
  capacity (and associated jobs and decisions) and output are focussed in southern and urban
  Canada, whereas the majority of projects under study are located in northern, rural and remote
  locations.

The second stage of the research included a systematic review of 24 papers in relevant journals to assess Aboriginal capacity building achievements and its relationships to control and benefits. The 24 papers selected from the original bibliometrics sample included those that reported actual findings from particular local and regional cases. Systematic reviews utilize a synthesis-based methodology for rigorously analyzing large amounts of existing research knowledge to create new information. Our approach to research synthesis used theme coding using a coding framework, which we developed to assist classification and open coding. All papers were reviewed to collect details on research methods, locations, partners and stakeholders, types of natural resource development initiatives, as well as forms of capacity, control and benefits. We examined the evidence through a capitals-based approach, considering 5 types of capitals (i.e., social, human, financial, built and natural) to structure our analysis. Key findings from our systematic review include:

- Significant variation was found in the level of detail provided in papers that describe methods (e.g., 9 of 17 papers reported the number of people engaged in interviews, focus groups, and workshops; interview numbers ranged from as many as 63 to as few as 8 participants))
- The research revealed nine categories of arrangements, including: land use/regional planning; IBAs; MOUs; Aboriginal businesses, Joint ventures; EAs; Revenue sharing; Advisory committees; and regional economic council.
- Land use strategies and regional planning processes appeared in one-third of research papers, concentrated in forestry and to a lesser degree energy; Impact and Benefit Agreements (IBAs) were discussed in one-third of papers, primarily related to mining, and were often used in combination with other arrangements, which afforded additional control or avenues to exert influence; the third most cited arrangement was Memorandum of Understanding (25%), found in all major sectors; Aboriginal businesses and Joint Ventures were used in forestry and energy to support business-to-business engagements; Environmental Assessments, revenue sharing agreements and advisory committees provided formal arrangements through which decision-making influence and resources could flow; these were often utilized alongside other arrangements.
- Ten of the 24 articles analysed directly referred to capacity building achievements including: cross-cultural dialogue/communication (top cited 40% of papers); the role of "champions"/inhouse leadership; training; self-governing and decision making capacities; and financial capacity.
- Of the 5 types of capitals, social and human capitals were the ones most often cited, with financial capital coming in third. Built capital was not discussed as a capacity item needed to attract business, but rather as a net gain of development. Natural capital was the least discussed.
- Nearly all papers (22 of 24) in the systematic review gave examples of actual benefits associated
  with Aboriginal natural resource development initiatives; however, definitions and data varied
  significantly, making it very difficult to quantify and compare benefits across cases and sectors.
- Employment (12 of 24 articles), improved decision making (11 of 24), financial support (8 of 24) were the top cited benefits.

Our knowledge synthesis approach revealed some key research gaps and needs, including:

• Without monitoring and systematically collected data on capacity and benefits it is very hard to substantiate claims made in previous research. Arguably, a targeted call for research that focuses

- on characterizing the relationship between Aboriginal peoples, natural resource development and various benefits and associated arrangements would be valuable.
- Research methods used varied substantially, making it difficult to systematically assess capacity beyond general trends. This points to the need and opportunity for research designs (and resources) that can produce broad comparisons within and across sectors and regions. This would help identify recurring needs as well as prioritize policy actions according to current experience and future scenarios.
- Aboriginal capacity and natural resource development research does not shed much light on the
  current demographic characteristics of communities linked to rapidly evolving natural resource
  development arrangements. Analysis of census data, where possible, to assess changes in socioeconomic profiles could help to indicate capacity potential and changes.
- There is a clear geographical separation of research capacity and research sites. Our research suggests that there is a need for in-depth examination of research capacity and disparities between north and south, rural and urban, and other domains, to assess implications for Aboriginal capacity development in general, but specifically in research.
- There is a need to fully examine the interplay of institutional arrangements utilized to structure Aboriginal natural resource development. Our synthesis illustrates the complexity of arrangements in some settings, which can be precipitated by the over layering of jurisdictional, sectorial and traditional institutions that shape Aboriginal-settler interactions. In instances where there is more than one arrangement at work, it would be interesting to examine whether there are patterns of conditions or events that led to collaboration over time.

Perhaps a limitation of this research, though intentional by design, is the exclusion of other primary natural resource sectors from this review (e.g., fisheries, agriculture). It could be useful to characterize the sorts of capacities required by Aboriginal peoples and their partners to sustainably manage and benefit from these other natural resources to draw comparisons with the sectors we examine here.

To overcome some of the above identified challenges, perhaps governments and industries need to have a clearing house guided by a common framework for how benefits for Aboriginal communities are assessed in order to enable systematic data collection, assessment and comparison. Addressing these gaps would help better inform decision making regarding Aboriginal capacity building achievements for sustainable natural resource development in Canada.

Effective knowledge mobilization ensures a multifaceted flow of information between researchers, research users as well as other knowledge brokers, creating synergies within and beyond academia, which ultimately leads to positive impacts for society. Results from this project will be disseminated through high impact open access peer-reviewed journals and at conferences, including an upcoming talk at the Canadian Association of Geographers conference in June 2016. Research results will be summarized through video-based interviews that will be edited into a "video abstract" that can be shared with partners. Data will be visualized through simple animations that help bring to life key points from the bibliometrics and systematic review.