

**Sustainable NWT Communities -
On-Line Survey Summary.**

March 2015

Background

In late October 2014, Dennis Bevington, MP, Northwest Territories and Bob Bromley, MLA, Weledeh conducted an on-line survey to gathered input from organizations in the NWT with some interest in sustainable local economies. The survey was undertaken to provide background for, and determine interest in a Sustainable NWT Forum: Sustainable Local Economies.

The invitation to participate in the on-line survey was prefaced by the following statement:

“In today’s globalized world, Northerners face the same realities as people do everywhere – an uncertain global economy, rising energy prices, climate change and lack of food security. We also have unique conditions such as long distances between communities, extreme climate and a small population, all leading to challenges of scale. With the inherent ingenuity of traditional cultures and northern approaches, combined with the communications capacity we hold, Northerners also have enormous opportunities to pursue their lives in ways that meet these challenges, achieving their full potential as individuals, contributing to healthier families and vibrant communities...

We are confident that unique northern solutions, public will, and public resources exist to help us move towards this goal but we also recognize that the challenges are real. The Northwest Territories has the most disparate distribution of incomes in Canada – that is, we have the poorest 20% and the richest 20% of households in the country. Our actions towards sustainable economies could help reduce this disparity. We know that the population of the NWT is slowly declining. With healthy local economies, people would choose to stay and contribute. There are also steep infrastructure costs in the North, especially infrastructure for big projects. Are there other ways to achieve our goals to attain the same level of health and prosperity?

In preparing for the Sustainable NWT Forum: Sustainable Local Economies, we see an opportunity to strengthen our old values in new ways. How can we draw upon the sustainable traditional economies of the past but in a modern context? Many of you are well along on this path, and will have much to contribute. Your thoughts will help us shape the Forum, and ensure it will best serve everyone’s needs.”

Survey Findings

Fifty-eight (58) individuals/organizations from throughout the NWT completed the on-line survey. Forty-seven (49) individuals/organizations said they would participate in a Sustainable NWT Forum: Sustainable Local Economies in the 2015 while the remaining nine (9) were unsure or expressed a tentative interest.

The following report summarizes the main themes arising from the survey.

1. Participants

A diverse array of individuals and organizations participated in the on-line survey. They are community and business developers, planners and facilitators; entrepreneurs and small business owners; food growers; artists; researchers; and educators. They are involved personally and professionally in sustainable practices in their homes and communities and in many diverse sectors of northern society. They work with small business, government, and non-government agencies.

2. Interest in Sustainable Community Practices

Survey participants have multiple and inter-related interests in sustainable community practices. In general, their interests fall within five main areas:

1. Food

Interest in food is mainly focused on production although food processing, storage, and distribution activities are increasing. For example:

- Community gardening is one way communities are taking back power.
- Interest in food and soil production are growing as is sharing knowledge for “people to take back responsibility for feeding ourselves.”
- Opportunities for food production are increasing with climate change. “It is possible to raise not only more than we did 50 years ago in Alberta but a greater variety than one would think possible in the North.”
- In the last five years, the Yellowknife Community Garden has grown to more than 200 members growing food at five sites in the city.
- The Northern Farm Training Institute (NFTI) is dedicated to developing knowledge and skills about food production, processing, and storage.

2. Harmony with the Natural Environment

Living with the natural environment rather than plundering it for resources is a common interest of survey participants. For example, they say:

- The local economy should not be dependent on pillaging the land and water but creating a healthy society with a strong sense of community and equality.
- Economic development should create the opportunity to preserve and live with the natural environment (e.g., through cultural and eco-tourism).
- Systems should sustain traditional practices and cultures, and promote these practices for instance, through an off-grid eco-lodge for land based teaching and learning.
- First Nations want a sustainable balance between socio-economic development and conservation of traditional lands and cultural practices.
- Communities are the front-line stewards of the environment but they are struggling to fulfill this responsibility and be economically viable.
- Cultural and eco-tourism with authentic experiences can be a catalyst for other elements of a sustainable local economy.

3. Renewable Energy

Survey participants own local businesses dedicated to renewable energy (e.g., Energy North); are members of Biomass-Energy NWT or other organizations concerned with energy conservation, renewable energy and GHG reduction; and hold patents for materials that are approved for carbon credits. They are involved in or planning to pursue:

- Retail and installation of renewable energy systems including pellet boilers.
- Wood chip/pellet fuel systems.
- Advocacy of for renewable energy/fossil energy resistance and a carbon neutral north.
- An exploration of hemp, "a great under-tapped resource in NWT."
- Solar PV and solar hot water systems.
- High efficiency infrastructure and renewable energy generation.
- A local committee on biomass development.

4. Community Empowerment

Many survey participants contend that "the grassroots must be supported." Communities that have greater self-sufficiency are more productive, healthier, less dependent, and more environmentally sound. Sustainable practices that are meaningful to, and driven by the community are empowering and encourage:

- More local ownership, and more local workers and professionals earning a fair (rather than sub-poverty) wage.
- More economically viable, socially connected, and healthy communities.
- Cooperative initiatives such as community kitchens which assist students and others to eat nutritious food and participate fully in their communities; recycling and waste reduction

initiatives which engage the whole community; and artistic endeavours that cross “all generations, cultures, belief systems, and economic classes.”

- Greater attention and balance in quality of life considerations in economic and governance decisions.
- Well-being and connectedness within the whole ecosystem.

5. Education and Research

Some survey participants have a mandate for:

- Making scientific and traditional knowledge available.
- Supporting and providing scientific, engineering, and technological advice to solve social and economic problems and build sustainable communities.

Other survey respondents “know of endless opportunities to reduce (negative environmental) impacts” but they say there is little public discussion and a dearth of current research on sustainable practices and opportunities, such as cultural and eco-tourism. Many say that quality learning and personal well-being supports are needed in NWT communities so local people have opportunities for meaningful local employment.

3. Factors in High Cost of Living

Survey respondents agree that five elements - housing, food, energy, transportation, and other utilities – are the main drivers of high northern living costs that are negatively impacting efforts to evolve sustainable communities. For example, high energy costs are crippling the viability of small local businesses. Costs of transportation have “even (become) prohibitive to education in communities.”

Other elements also drive high living costs, namely:

- Childcare, family services, and other good/services needed to raise healthy children (including infant formula and nutritious foods).
- Quality education and training services.
- Information services (e.g., access to the internet).
- Non-insured health services (e.g., dental and optical).
- Quality and appropriate outdoor clothing.
- Infrastructure including accessible land and equipment for land based activities.

Some survey respondents say that small NWT communities are becoming unattractive places to live both for high living costs as well as:

- The poor state of repair and adequacy of infrastructure including housing,
- Lack of amenities,
- Poor state of social structure/fabric including mental health and addictions, and sense of community and care for each other, and
- Lack of hope and opportunity for meaningful employment or to live a fulfilled life either in the wage economy or an adapted traditional economy.

The health of communities is not improved by segments of local populations who lack skills and access to supports and investment whether it is: for education/training or programs for food preparation (so people aren't buying expensive processed foods), to manage money, or to run a local business (and charge appropriately so "costs aren't perceived as a money grab"). Further, local community economies are not improved by imposing southern models or fostering unrealistic expectations.

Northern communities are also burdened by:

- The heavy cost, inefficiencies, or policy deficits of government administration. For example, managers of the Northwest Territories Power Corp are given "a salary bonus on the dollar volume of sales rather than on savings and efficiencies."
- Policies/programs/services that continue to marginalize and work against assisting people to participate (e.g., in one community, these policies are described as a "non-functional water treatment plant, no lumber mill, a firearms licensing regime but no place to get a gun licence" and in another community, as second class services such as drivers' licences).
- Unrealistic costs for example, to start a home business (described as "ridiculous" - "\$450 just to start").

More than one survey respondent noted that the high costs of living in northern communities will become more onerous in the future with climate change. Adaptation will drive costs up for example, as governments require communities to change water treatment practices, repair/rebuild public buildings due to changing climatic conditions, and upgrade roads and airstrips to protect public safety.

Some survey respondents say that costs are only one side of the equation. Revenue and benefits are the other. People need to be earning enough money to live. Northerners need to come to terms with income equality so that "the poor aren't suffering even more." More than one survey respondent noted that addressing income equality is not about putting subsidies in place but rather balancing wages and costs so the economy is not artificially distorted.

4. Actions to Reduce High Living Costs

Survey respondents have made a variety of conscious personal and professional choices to reduce high living costs. Choices include: growing more food, harvesting meat, eating less meat, cooking smart/from scratch, not using bottled water, walking/biking, using public transit, living simply, travelling little, using less power, using a pellet stove, participating in the second-hand economy, recycling, reinsulating homes, choosing a small home, changing heating/power system, buying in bulk, being financial literate, staying fit, and using cheaper technologies such as Skype to cut meeting costs.

Survey respondents also describe efforts by their employers, organizations, or communities to reduce high living costs. For example,

- Lutsel k'e has established the first solar panel farm in the north, making the Lutsel k'e Dene First Nation the first independent power provider in NWT.
- At least two NWT communities are actively supporting the conservation of natural areas as a way to sustain the traditional indigenous economy and develop a local tourism industry.
- The Yellowknife Farmers' Market is working on a city-wide food charter and actively looking at ways to increase the number of local growers and vendors.
- Energy North is an energy innovations company that has patents certified and accepted for carbon credits.
- Recognizing that the NWT's annual food market is \$170,000,000, the Northern Farm Training Institute (NFTI) is ramping up efforts to reduce northerners' food costs by teaching communities about primary food systems – greenhouse systems, vegetable crops, animal systems, grains, berries, and various food storage practices.
- The Aurora Research Institute (ARI) is involved in a variety of research projects about sustainable food production. For example, ARI was funded by CanNor to complete a feasibility study of the economic potential of high tech food production systems.
- The Inuvik Community Garden Society offers food growing plots and workshops.
- The Arctic Energy Alliance offers energy efficiency education and rebate programs.
- The community of Fort McPherson has a successful recycling program and a very hopeful biomass project that will reduce energy costs, create local jobs, and put more money into the local economy.
- CanNor has funded a variety of practices that hold promise for the sustainability of local economies including the GNWT's Forest Industry and Biomass Initiative (FIBI) (\$4.5m 2011/12 -2015/16), and the Town of Hay River and Territorial Farmers' Association collaboration on the Northern Farm Training Institute (\$2m over two years). CanNor has also invested \$2m over two years to support northern greenhouses; provided project specific funding for renewable technologies research and implementation; and funded

the feasibility and design of the City of Yellowknife's eco-housing development and community energy plan.

Survey respondents say that actions to manage costs need to be the subject of public discussion in order to explore ideas for reducing imports (e.g., encouraging a circular economy that reduces the need to purchase externally), addressing expectations, and best using the resources that we have. Public discussions would help facilitate understanding of what fair and equitable wages are (e.g., is there a "need to pay workers \$20-25/hr?") and enable examination of whether prices are high because the market will bear it or because they are necessary to sustain businesses. Public discussion might also spur a pooling of program money to support sustainable communities.

5. Culture and Tradition as Easing Difficult Conditions and Opportunities to Enhance by Modern Technology

The survey asked whether there was agreement with the statement: "Culture and a traditional way of life are deemed by many in the North to have long term positive benefits for easing the difficult conditions of northern communities (e.g., treat the land with respect, build community relationships, coordinate the basic needs of food, housing, maintenance of health.)"

Survey respondents tend to agree that traditional ways are ultimately sustainable ways - heating with wood, eating locally, and reducing imports. In Fort McPherson, elders support the local biomass project because it uses wood, supports restoring the community social fabric, and values local skills. Still, several survey respondents have concerns about this statement. They have a particular concern about who determines community values and how these values are expressed. There is concern about the:

- disconnect between what are purported as traditional values and the way that people actually live and respect the land.
- the effects of colonization that put a dollar value on everything including traditional activities, mentoring, and sharing knowledge and impact the distribution of economic power.
- potential for local communities to be patronized if not marginalized, if the act of reaffirming values of respect, mutual cooperation, sharing, relationship with land and traditional practices is not driven by communities themselves, and local people and cultures are not truly accorded a valued place in the economy.

For some survey respondents, a traditional lifestyle is associated with living in poverty rather than living with/in richness. As an example, some survey respondents point to basic human

needs that are not being met – hungry adult students, overcrowded housing, addictions, mental health issues. Within this reality, it is difficult to “talk sustainability.” As such, quality of life, the ability to live with dignity, make culturally appropriate choices, and live a meaningful life are critical in any discussion about sustainable communities. Further, any discussion about sustainable community practices must honour cooperative and sharing traditions (e.g., through lending programs).

Survey respondents see many ways of strengthening traditional ways of life. This outcome can in part be achieved by recognizing “what we have” in terms of unique perspectives, traditions, and landscapes but also realistically considering economies of scale and thresholds for communities and resources. Economic approaches can also impact this outcome. For example, a “village system” or cottage industry view of the economy and a community development approach can for instance, focus on growing food as a way to reconnect to the land, build intergenerational connections, and reduce living costs. Survey respondents also suggest:

- Making solar and wind energy more accessible, and establishing sawmills, carpentry and ‘fix-it’ businesses in every community.
- More emphasis on solar and other environmentally sound energy systems for the longer term.
- Conversion to biomass to reduce heat and power costs (and using fire killed trees that no longer take up CO₂).
- Advocating for smaller public and private houses.
- Repositioning capital from the energy sector to other endeavours to strengthen communities and small businesses.

Modern technologies have the potential to support sustainable practices and maximize efficiencies in NWT communities. However, modern technologies need to be married with indigenous knowledge and respect traditional modes of land use and harvesting (especially of wildlife populations), be environmentally sustainable, cost effective, and serve community rather than government agendas. Use of modern technologies should not replace jobs or human interaction as has occurred in recently upgraded and not so functional water treatment plants in many NWT communities. Modern technologies whether simple or complex, must be functional. Technologies can be used to:

- Network, share knowledge, and build mutual support systems.
- Network among northern communities to develop a unified vision and coordinated plan of action.
- Build on the north’s harvesting culture to enhance local food production (e.g., through introducing new “strains of foods that would grow here (e.g. wild rice).”
- Restore value and use of cultural practices and traditions (e.g., use of languages apps).

6. Addressing Fossil Fuels

Survey respondents agree that imported fossil fuels add to high living costs and complicity in environmental degradation. But a one respondent noted: “the huge costs of developing it (renewable energy) makes short/medium term dependence on fossil fuels hard to break. No government will stand if it taxes fossil fuels to the extent needed to give renewable energy a leg up.” Divesting from fossil fuels requires several conscious actions including:

- Public education, for example by encouraging northerners “to walk though in (their) mind what it would be like without fuel for two weeks in winter then envision alternatives” or creating “awareness of the cost of a mango, the true transportation costs and ecological footprint.” “The waste in most communities is unacceptably high... there can be a significant reduction in energy costs through education.”
- Research in other circumpolar countries, especially Norway, to determine steps to renewable energy.
- Reducing fossil fuel subsidies/charging the real cost of oil.
- Investing in alternative energy pilot projects, a northern lab, and infrastructure to test and understand the real costs and possibilities of alternative energy technologies. “Ideally, (we should have) a policy shift away from fossil fuels and a shift in subsidies to renewables; charge the full economic costs of fossil fuels; apply high rates over certain thresholds of kW/hrs and rebates for conservation; local by-laws for EGH 84 construction; move to on-site wastewater recycling microsystem technology; and require implementation of community energy plans.”
- Breaking the current power generation/supply monopoly.
- Considering a carbon tax similar to British Columbia.
- A government commitment to a specific deadline for becoming ‘carbon free.’
- A public policy requiring renewable energy infrastructure (e.g., government/large developers should follow LEED guidelines).
- New approaches to forest management (e.g., similar to Finland) to support greater biomass and peat use in energy production.

Divesting from fossil fuels also requires actively pursuing alternatives. Alternatives include:

- Considering region resources and interests, to evolve a combination of small, non-invasive hydro installations along with solar and wind power sources.
- Supporting run of the river micro-hydro systems along with geothermal and air source heat capture systems.
- Developing and expanding the use of wood fibre burning technology (wood chips/fuel logs) harvested and burnt locally.
- Revisiting biomass technology in light of forest fires, “which may be cheaper than experimental wind power.”

- Consider all options natural gas, geothermal, wood, wood/oil boilers, small scale hydro, biomass, and in the longer term, nuclear power.
- Considering the potential of hempcrete.

7. Services Available for Building the Local Economy

The survey contends that a sustainable economy includes - housing, food supply, agriculture, hunting and gathering, energy, small manufacturing, tourism, visitor services, arts and crafts, health care, import replacement and transportation. Some survey respondents say that key elements are missing from this list, namely child care, quality training and education, mentoring for local entrepreneurs/small businesses, sport and recreation services, health and personal services, research, and international and national/local networking.

Many survey respondents agree that all of these sectors “create more jobs than the oil and gas industry;” that an entire economy could be made from these elements; or that “all the elements of a sustainable local economy can be found in our communities.” But “none are really sustainable at present without external inputs/subsidies” or there is “so little support for innovation in the NWT that it makes it hard to work here.” “What we have is the possibility of a renaissance in the arts but support is needed to get there.” Others say that the lack of systems integration and lack of collaboration among all service providers and other partners are barriers to evolving sustainable local economies.

Some survey respondents suggest that sustainability is not a fixed target but a path of ongoing choices, options, and local adaption that communities need/want to control in terms of pace and scale. Sustainability is a vision that requires community members who are willing to lead and motivate others. Others say that communities “can’t address sustainability when there is so much poverty, hunger, and no place (for people) to live.”

8. Reducing Living Costs and Support Sustainable Local Economies

Survey participants identify a variety of efforts being made to reduce costs and support sustainable local economies. Examples include:

- The Sahtu Renewable Resource Board’s ‘Best of Both Worlds’ research is an effort to balance a non-renewable and renewable resource based economy.
- Plans for a conservation economy are being developed in two NWT communities to bolster use of alternative energy sources and eco-tourism opportunities. While public

investments are needed for example, in improving the Liard Highway to support local tourism ventures, the GNWT is planning to invest in highways to non-renewable resources.

- Work with the Arctic Energy Alliance and National Research Council to install and test air source thermodynamic panels.
- Involvement in an AgNorth Project¹ focused on native seed reclamation for industrial sites.
- Involvement in an AgNorth project which uses LED lighting technology to grow food year-round.

Other survey respondents are involved in local food production. However, in Yellowknife the lack of “access to arable land is defeating the people involved in the Yellowknife Farmers’ Market.” Others have a ‘green’ policy and ‘shop local’ policy, or hire local facilitators and substitute teachers where possible. Still others are planning to participate in the upcoming Aurora Research Institute Food Action Roundtable to develop a research agenda for food security, or participated in the recent the GNWT community energy planning charrette.

The rationale to get behind local sustainable economies is strengthened by the knowledge that “if \$1 is spent locally, it will generate \$7 locally.”

9. Assistance

Several survey respondents have been assisted in their efforts to engage in sustainable economic ventures. Arctic Energy Alliance is a main source of rebates for energy retrofits. The GNWT Industry, Tourism and Investment (ITI) is a main source of assistance for food production. CanNor is a supporter of energy research and pilot projects as well as food systems research and technologies.

Several survey respondents say that some assistance programs are inadequate or come with too many strings. “Sometimes the strings take you far from success and into distress.” For others, it is objectionable that individuals must start a business in order to access ITI’s Growing Forward funding. Still others say that lack of government relationships with the whole community about the whole local economy harm both individual and collective efforts.

¹ <http://nwtresearch.com/projects/agriculture/agnorth>

In Conclusion

The survey shows lots of interest in a Sustainable NWT Forum. It also provides a solid basis for moving forward to plan the Forum. It is clear that there are many common interests and themes to build on. It is also clear that any forum must be shaped and driven by northern communities. There are several NWT communities who are on the path to sustainable local economies. We want to work with these communities to bolster their efforts and help them achieve their vision. By working with those communities already leading the way, all NWT communities will learn and be inspired toward a sustainable future.