

# The Role and Application of Sustainable Livelihoods Framework For Measuring & Monitoring Community Well-Being

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Gartner Lee Ltd.

**nwmo**

NUCLEAR WASTE  
MANAGEMENT  
ORGANIZATION

SOCIÉTÉ DE GESTION  
DES DÉCHETS  
NUCLÉAIRES



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## **Nuclear Waste Management Organization**

The Nuclear Waste Management Organization (NWMO) was established in 2002 by Ontario Power Generation Inc., Hydro- Québec and New Brunswick Power Corporation in accordance with the *Nuclear Fuel Waste Act (NFWA)* to assume responsibility for the long-term management of Canada's used nuclear fuel.

NWMO's first mandate was to study options for the long-term management of used nuclear fuel. On June 14, 2007, the Government of Canada selected the NWMO's recommendation for Adaptive Phased Management (APM). The NWMO now has the mandate to implement the Government's decision.

Technically, Adaptive Phased Management (APM) has as its end-point the isolation and containment of used nuclear fuel in a deep repository constructed in a suitable rock formation. Collaboration, continuous learning and adaptability will underpin our implementation of the plan which will unfold over many decades, subject to extensive oversight and regulatory approvals.

## **NWMO Social Research**

The objective of the social research program is to assist the NWMO, and interested citizens and organizations, in exploring and understanding the social issues and concerns associated with the implementation of Adaptive Phased Management. The program is also intended to support the adoption of appropriate processes and techniques to engage potentially affected citizens in decision-making.

The social research program is intended to be a support to NWMO's ongoing dialogue and collaboration activities, including work to engage potentially affected citizens in near term visioning of the implementation process going forward, long term visioning and the development of decision-making processes to be used into the future. The program includes work to learn from the experience of others through examination of case studies and conversation with those involved in similar processes both in Canada and abroad. NWMO's social research is expected to engage a wide variety of specialists and explore a variety of perspectives on key issues of concern. The nature and conduct of this work is expected to change over time, as best practices evolve and as interested citizens and organizations identify the issues of most interest and concern throughout the implementation of Adaptive Phased Management.

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Prepared for  
**Nuclear Waste Management Organization**

Submitted by  
**Gartner Lee Limited**

**December 2007**

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# 1. The Concept of Community Well-Being

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There is no single or best definition of *Community Well-Being*. All communities have unique strengths and weaknesses; and more importantly, various segments of society within different communities likely place different values on the same attributes. Individual and community well-being is influenced by a combination of economic, social and environmental factors. Some of these factors are tangible, such as: easy access to services like health, education, and recreational facilities; and opportunities for employment and wealth creation. Other determinants of community well-being are less tangible but equally valued, such as: family and community cohesion; and quality of the natural resources within their environment.

When referring to community well-being we recognize that communities want more of it, even though they may not have specified what exactly they are seeking. Many municipalities throughout Canada refer to *sustainable development* as the new thing that will ensure enhanced community well-being. Yet many of these same municipalities either fail to define the criteria for this objective fail to measure its progress, or simply lack the capacity and/or tools to do so.

Over the course of working with countless stakeholders and municipalities involving significant project developments, we have come to appreciate the following regarding the concept of community well-being:

- A community is not only defined by geographic space or by its municipal boundaries. A community can also be defined by its physical, sociological, economic, cultural and psychological dimensions.
- A community is only one form of societal organization. Other levels of society influence each other and play important roles in determining well-being.
- Each level of society and every community is different,
- Community well-being always refers to sustained or enhanced quality of life over time.
- Quality of life is a ubiquitous term. However, it is only best defined and measured by those people who are part of the community.
- Most communities lack the necessary experience, expertise, and tools to define, measure and monitor how their well-being (or quality of life) changes over time.

As noted above, a community (i.e., as a physical entity where people reside) is only one form of societal organization. Other levels of society play important roles in determining community well-being or quality of life. As illustrated on Figure 1, other levels of society include: individuals, families and households, various groups, organizations and institutions, communities of interest, regions and society as a whole at the national and international levels. Each of these various levels of society differ in terms of their:

- Level of participation and integration with other levels of societal organization;
- Level of organization, structure and the types of processes they use to function;
- Degree to which values and interests are shared;
- Vulnerability to changes or ‘shocks’ to society, environment and economy; and
- Capacity to cope with changes or ‘shocks’ to society, environment and economy.

Despite these differences, there is one common set of traits or characteristics that each level of society and every community shares. These are their fundamental assets (also known as “capitals”) that they use to function and achieve ‘well-being’. These fundamental assets are illustrated in Figure 2. Different communities have more or less of some assets than others.

To achieve a state of well-being, all levels of society, including communities, attempt to manage or maximize their assets over time. As illustrated in Figure 3, community well-being is achieved when all of a communities’ assets are maximized, balanced and are working towards reducing their vulnerability to external and/or internal changes or shocks to society, environment and economy. Essentially, communities strive towards increasing their capacity to cope with these changes – strive to become competent communities that can sustain them over time.

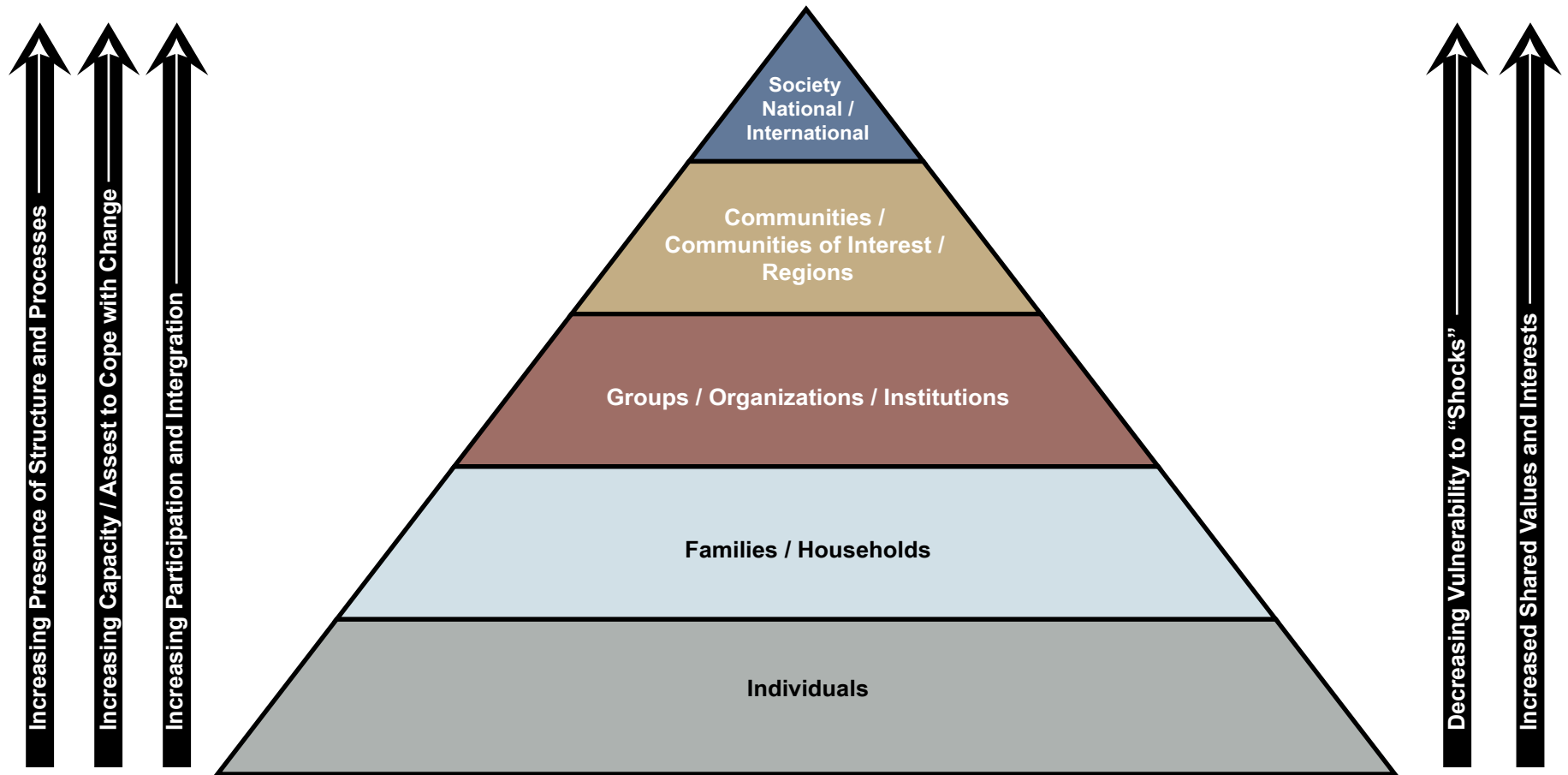
## **2. Objectives of this Paper:**

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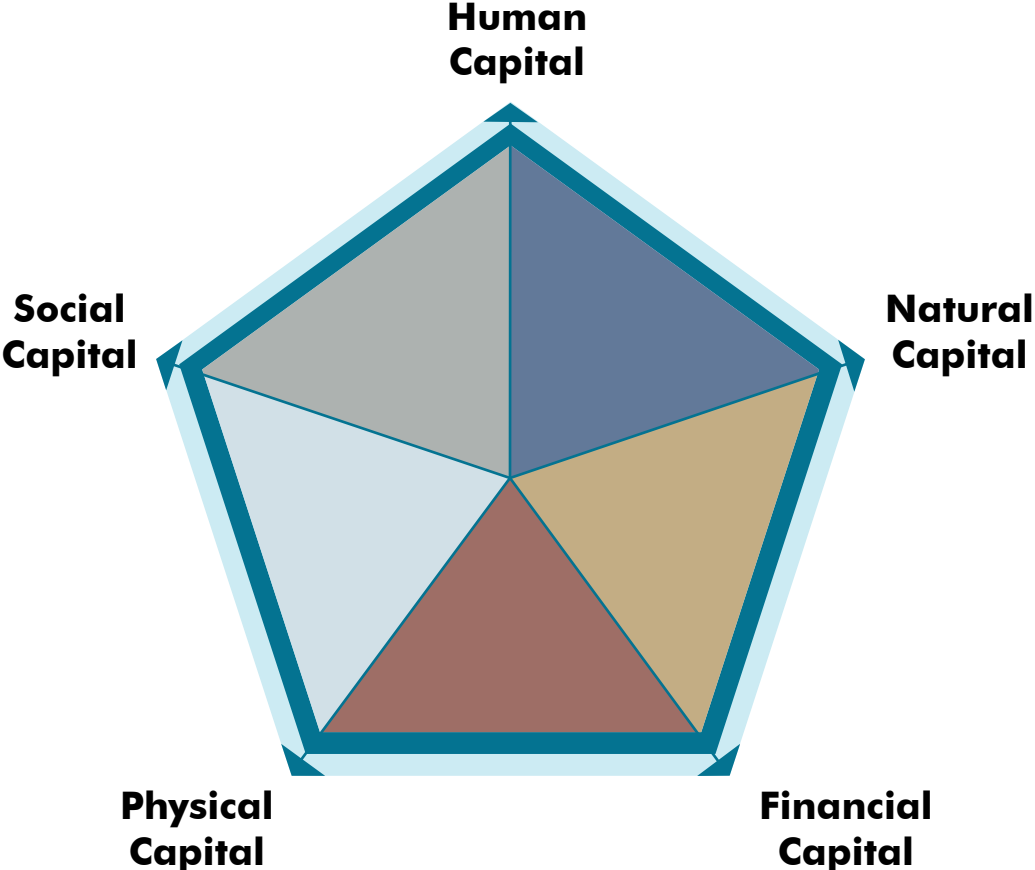
1. Describe the Sustainable Livelihoods Framework (SLF), specifically how does it understand the breadth of potential affects which a project may have on a community;
2. Provide examples of projects in which the Sustainable Livelihoods Framework has been used, including a discussion of rationale for using the approach and experience in application.



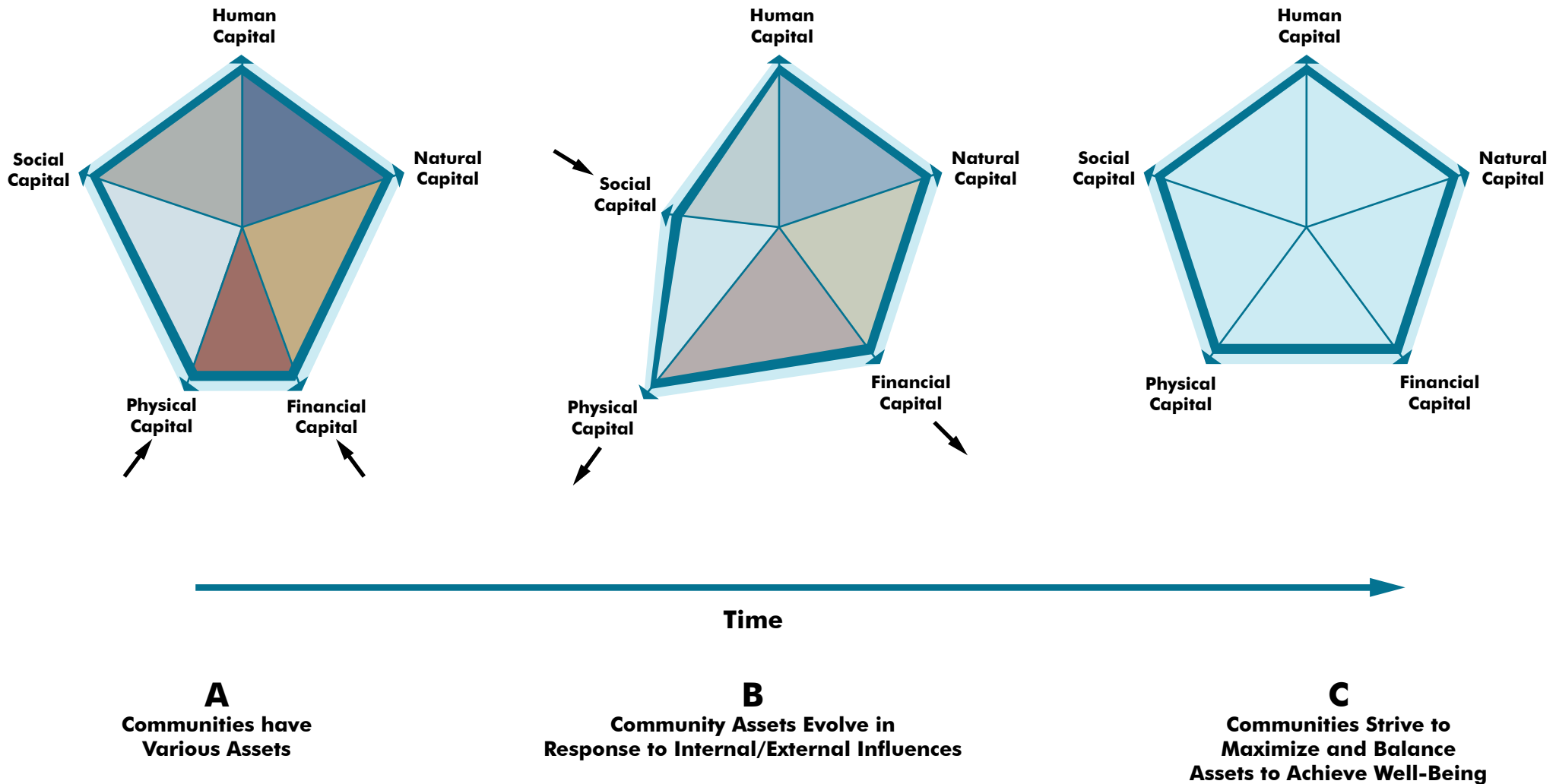
# Figure 1: Conceptual Organization of Society



**Figure 2: Societal Assets**



# Figure 3: Towards Community Well-Being Through Sustainable Livelihoods



### **3. The Sustainable Livelihoods Framework – A Path to Understanding the Breadth of Potential Affects Which a Project May Have on a Community:**

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The **Sustainable Livelihoods Framework (SLF)**<sup>1</sup> is a tool that was first developed by the Department for International Development in the UK (DFID – UK) in the early 1990's, as a means to assist communities in LDCs to eliminate their cycle of poverty. The concept recognizes that the traditional practices of aid, which for the most part either dole out cash or build specific infrastructure that can be built by donor countries, are not always effective. Rather, it became apparent that helping communities strengthen all of their core assets relating to people, infrastructure, social services and the like was a better approach to community development. The objective of the SLF is to build core community assets such that the community can sustain itself in the long-term. Although initially developed to address poverty in rural areas, it is recognized that the SLF has applicability anywhere in the world and it does not just resolve poverty-related issues. Rather it offers a holistic approach to addressing factors that affect long-term community sustainability and their ability to adapt to change.

The framework can be used in a variety of circumstances from project development through to programme and policy development. At a grass roots level it is very important that a livelihoods analysis (i.e. the analysis of cause and effect relationships that perpetuate poverty and other conditions of socio-economic malaise), be conducted in a fully participatory and collaborative mode. This framework, described in the following pages is applied in a multitude of ways in developed and developing countries.

The SLF is broad and encompassing. The overall objective of the framework is to enhance community sustainability through the promotion of the following six sub-objectives:

1. Improved access to quality education and training, information technologies, and better nutrition and health;
2. A more supportive and cohesive social environment;
3. More secure access to, and better management of the environment;
4. Improved access to basic and facilitating infrastructure services;
5. More secure access to financial resources; and
6. An institutional and policy environment that supports multiple livelihood strategies.

The SLF has been adapted by Gartner Lee to address the linkages between economic, social and cultural impacts, issues, VSECs, challenges and opportunities that affect community well-being in

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<sup>1</sup> Source: UK Department for International Development (DFID), 1998. See website: [www.dfid.gov.uk](http://www.dfid.gov.uk)

Canada. When applied to assessing the effect on community well-being in response to the introduction of a major project, it proves useful in the following ways:

- It helps to focus community dialogue on issues important to them;
- It empowers community groups to work together with others to develop sustainable livelihood strategies;
- It encourages people to engage in processes that analyze or interpret data, identify needs for further research, and set priorities for action;
- It identifies desirable outcomes for each community, such as more income, reduced vulnerability, improved security and more sustainable use of natural resources; and
- Promotes strategies that enhance choice, opportunity and diversity that are managed by the community.

### 3.1 Key Features of the SLF

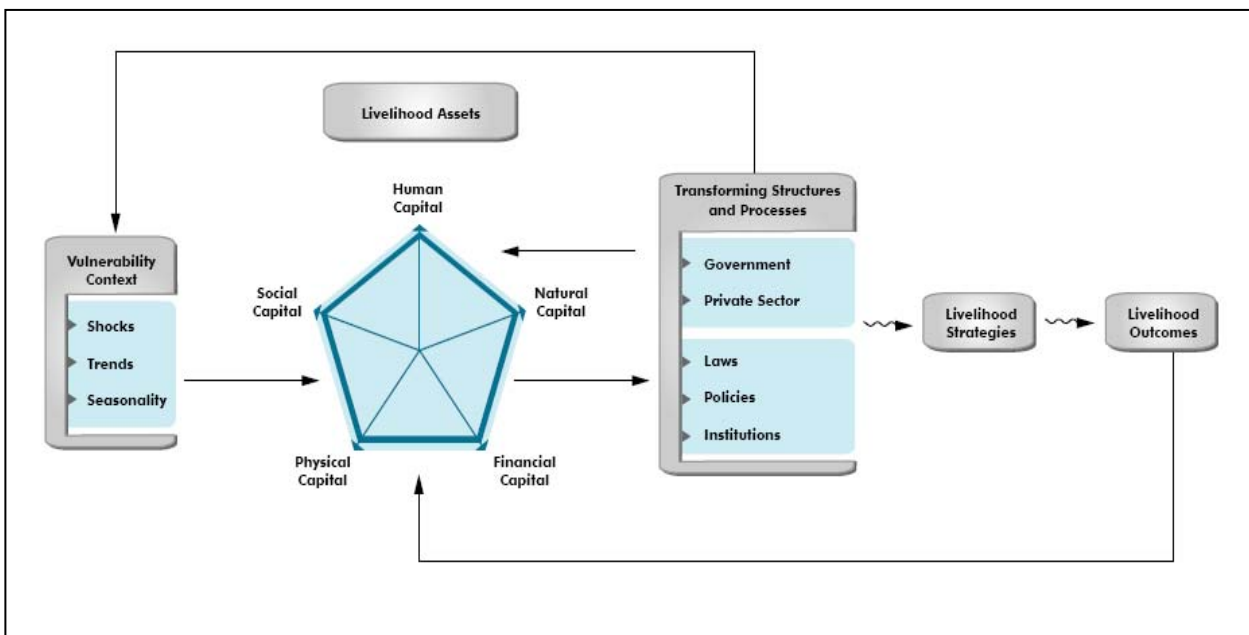
The SLF presents the main factors that affect a community's well-being and typical relationships between these factors. The framework is intended to be a versatile tool useful in planning and management. It can be used in both planning new development activities and assessing or monitoring the contribution or influence on sustainability made by existing developments or activities. The SLF offers a way of thinking about livelihoods by focusing on people and their community. Specifically, the SLF:

- Provides a checklist of important issues and sketches out how they are linked;
- Draws attention to core influences and processes that determine livelihoods or community well-being; and
- Emphasizes multiple interactions between various factors, which affect livelihoods or community well-being.

As illustrated on Figure 4, the SLF consists of three primary components:

1. **Vulnerability Context:** This component of the framework provides information on the external environment in which people and communities exist. People's and community livelihoods are fundamentally affected by critical trends, shocks and seasonality over which they have limited or no control, (e.g. climate change). Monitoring and analysis of trends provides information regarding broad issues of concern to community members or fundamental community traits that influence people's livelihoods. The monitoring and analysis of shocks provides information on events that alter trends, destroy livelihood assets and/or fundamentally alter community traits. The monitoring and analysis of seasonality identifies shifts in opportunities due to natural or biophysical changes.

**Figure 4: The Sustainable Livelihoods Framework (SLF)**



2. **Livelihood Assets:** This component of the framework provides information on people’s and community strengths (i.e., assets or endowments). The SLF is founded on the notion that people and communities require a range and combination of assets, a level of capacity, to allow them to achieve positive livelihood outcomes. Increasing access, ownership or rights to the use of these assets improves sustainable livelihoods. Five assets (labelled as capitals) are at the core of the SLF:
  - a. **Human Capital:** includes the skills and knowledge inherent in the community and the ability of the community to provide its members access to other skills, knowledge and essential services that are fundamental in maintaining quality of life or standard of living, (e.g. education, training, health care).
  - b. **Social Capital:** includes the social and community activities in which people participate and the resources that they draw upon in pursuit of their livelihood objectives (e.g. recreation teams, community events). These activities and resources create networks within the community and among communities; increase connectivity and cohesion, and generate trusting relationships and community pride. These activities and resources allow people to better cope with shocks, provide an informal safety net and may compensate for a lack of other types of capital within the community.

- c. **Physical Capital:** includes the basic infrastructure needed to support livelihoods and the tools or equipment that people use to function more productively (e.g. roads, water, sewage). Infrastructure is a public good that is used without payment or some other infrastructure that is accessed for a fee related to usage. Increased access to such infrastructure improves human health and quality of life. The opportunity costs associated with poor quality infrastructure can preclude education, access to health services and income generation.
- d. **Natural Capital:** includes the natural resource stocks from which livelihoods are derived. There is potentially a wide range in such resources, from intangible public goods (e.g., air quality and biodiversity) to resources that are used directly by people (e.g., water, trees, land, wildlife).
- e. **Financial Capital:** includes the monetary or financial related resources that people use to achieve their livelihood objectives. It includes that availability of cash or equivalents to individuals and the community as a whole gained from private or public sector sources, and the availability of financial related services that allow individuals to manage their finances.

A sample of indicators and measures that might be applied to an analysis of sustainable livelihoods in Canada is provided in Table 1.

- 3. **Transforming Structures and Processes:** This component of the SLF includes the institutions, organizations, policies and legislation that shape people and community livelihoods. A positive policy and institutional environment promotes equitable access to various types of capital and markets. Within this component, “structures” are the public and private sector organizations that operate within the community and implement policy, deliver services, operate markets and provide opportunities that affect livelihoods. An absence of appropriate structures is often a major constraint to development and sustainability of livelihoods. Within this component “processes” are the formal policies that are in place, social norms and beliefs, and the informal ways things are done within the community. Monitoring within this component of the framework provides information on changes to these processes that affect livelihoods.

A unique feature of the SLF is its ability to graphically display or visually illustrate a community’s asset status and/or changes in a community’s asset status. It is also capable of being used in a comparative sense, if used consistently across a number of communities.

**Table 1: Sample Indicators and Measures for Assessing Community Livelihoods in Canada**

<b>Human Capital</b>
<ul style="list-style-type: none"> <li>▫ Level of educational achievement (NRTEE)</li> <li>▫ Labour force activity - unemployment rate.</li> <li>▫ Labour force: educational services, health care and social services</li> <li>▫ Life stress by health region - Population aged 18 and over who reported their level of life stress</li> <li>▫ Population density (2001, 1996, 1991)</li> <li>▫ Population % change 1996-2000. An indicator of overall change.</li> <li>▫ Mobility – intra-provincial, inter-provincial and external</li> <li>▫ Labour force: professional, scientific and social services</li> <li>▫ Adult education enrollment</li> <li>▫ School drop-out rate</li> <li>▫ Family medicine practitioners per 100,000 population by health region</li> <li>▫ Self rated health - by health region</li> <li>▫ Life expectancy - by health region</li> <li>▫ Infant mortality - by health region</li> <li>▫ Asthma readmission rate - by health region</li> <li>▫ Literacy</li> <li>▫ Nutrition status by health region</li> <li>▫ Single mothers</li> </ul>
<b>Social Capital</b>
<ul style="list-style-type: none"> <li>▫ Service clubs per capita</li> <li>▫ Percentage of population who voted</li> <li>▫ Number of community support programs</li> <li>▫ Challenges to community support programs (descriptive)</li> <li>▫ Number of volunteers per community</li> <li>▫ Libraries</li> <li>▫ Community meeting place(s)</li> <li>▫ Media access – local newspapers (circulation)</li> <li>▫ Youth suicide stats</li> <li>▫ Youth studying at residential schools (descriptive)</li> <li>▫ Movie theatres per capita</li> </ul>
<b>Physical Capital</b>
<ul style="list-style-type: none"> <li>▫ Labour force by mode of transportation (Access to affordable transportation)</li> <li>▫ Restaurants per capita</li> <li>▫ Hotels, motels per capita</li> <li>▫ Home repairs</li> <li>▫ Access to quality water supply and sanitation</li> <li>▫ Access to clean, affordable energy</li> <li>▫ Access to broadband</li> <li>▫ Access to cellular telephony</li> </ul>
<b>Financial Capital</b>
<ul style="list-style-type: none"> <li>▫ Tenant households spending 30% or more on rent; tenant households spending 30-99% on rent</li> <li>▫ Owner households spending 30% or more on owner's major payments; spending 30-99% on major payments</li> <li>▫ Incidence of low income - percentage by census district/economic region Higher incidence of low income indicates lower ability to manage change</li> <li>▫ Labour force: finance and insurance (indicator of financial capital) per capita, professional, scientific and social services (social capital),</li> <li>▫ Income</li> <li>▫ New business starts</li> <li>▫ Number of business establishments</li> <li>▫ RRSP contributions</li> <li>▫ Home ownership</li> <li>▫ Housing starts</li> </ul>



## 4. Applying the Sustainable Livelihoods Framework in Canada – Four Case Examples:

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This section provides four (4) case examples of the application of the Sustainable Livelihoods Framework (SLF) in Canada:

1. K-Net case study on economic development in Northern Ontario;
2. Approval process for the Gahcho Kué diamond mine in the NWT which saw the SLF applied in a site/project specific environmental impact assessment context;
3. Poverty reduction in Waterloo Region using the Sustainable Livelihoods Approach; and
4. Post approval studies for the Attiwapiskat First Nation (AttFN) in Northern Ontario associated with the Victor Diamond mine, which saw the SLF applied in a monitoring and impact management context.

### 4.1 Applying the Sustainable Livelihoods Framework to the K-Net

While there is little doubt that infrastructure upgrades bring positive change in the form of new opportunities for remote communities in Canada, it is not easy to demonstrate how such upgrades drive economic development. The K-Net is an Aboriginal-owned and managed network that is providing internet connectivity to First Nations communities in the remote regions of northwestern Ontario. The network is formally known as the Kuh-ke-nah<sup>2</sup> Network of Smart First Nations.

The sustainable livelihoods framework was used to illustrate the benefit of the K-Net to the participating communities.<sup>3</sup> It was recognized that economic development means more than financial growth so the selection of the sustainable livelihoods framework provided an excellent means to illustrate the full impact of the Knet on the community. Within the SLF, economic development includes an analysis of financial changes within the study, but also considers the human, social, physical and natural dimensions of economic development, as well as the relationship between all five components.

Residents and leaders of the participating First Nations describe the affect of the Knet in their own words in the following excerpts:

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<sup>2</sup> *Kuh-ke-nah is an Oji-Cree expression for “everybody” and that is the goal of this network – it is for everybody.*

<sup>3</sup> *See: Ramirez, Aitken, Jamieson, and Richardson, 2004. Harnessing ICTS: A Canadian First Nations Experience – Knet Case Study on Economic Development, January 2004. [www.knet.ca](http://www.knet.ca).*

## HUMAN CAPITAL

People in KO communities are **now connected** with one another and with the outside world. This connection is two-way: they can receive information, but more importantly, they can send messages and post content that is important to them using email, chat and personal web-sites. These communication tools reduce the sense of isolation that remote residents experience, and that youth are especially concerned about. These communities are only accessible by airplane, yet people are now connected by television and Internet to the rest of the world. The emphasis that K-Net has placed on uploading content significant to the KO communities is an important component. Being able to contribute local and culturally relevant content begins to balance the overwhelming volume of information and messages from the Internet and especially from television.<sup>2</sup>

Local people know how to log-on to the videoconferencing unit, they get in touch with family, they have a sense of accomplishment, and they are using the technology to communicate and share. The **sense of satisfaction** that comes from these activities is a good sign of human capital in the making.

## SOCIAL CAPITAL

Social capital refers to people connecting to people. It recognizes the importance of networking and exchange, of creating and strengthening links of trust.

Family ties in the North are strong, as in most traditional societies. In the recent past, family members who traveled away from their community for school or medical treatment would have been limited to radio communication and, in some cases, phone calls to stay in touch with family members. Now, even when people cannot travel due to old age or high costs, they can stay in contact over great distances using the K-Net tools. Families in times of stress

can connect with loved ones. This coming together through the technology is especially important when so many families have children studying in schools far away from the community. Among the most popular K-Net sites is <http://hosting.knet.ca/~mothers/fortsevernpage.htm> where photos are uploaded of new mothers and their babies.

## NATURAL CAPITAL

*"We've always been a part of the land... Whenever you go, you want to come home. It is who we are, I guess."*

– George Kakekaspan, Special Projects Coordinator

The sustainable livelihoods framework makes reference to natural capital, and in the North, this type of asset is closely linked to culture. The Ojibway, Oji-Cree, and Cree people are very close to the land, and their relationship to natural capital is cultural.



The traditional culture is embedded in that relationship to the natural world. The K-Net website celebrates culture in many ways, for example by sharing traditional legends (<http://legends.knet.on.ca>) passed on orally by the elders which can be heard in English or in Oji-Cree.



Visitors to the K-Net website can learn more about the traditional language by downloading the fonts to write in syllabics, with three different layouts to choose from. An Oji-Cree Translation Dictionary, which is under development, is also accessible online. A prototype can be accessed at <http://www.knet.ca/webdata>.

**(Natural Capital ... continued)**

tourism. There is significant economic development potential as the global tourism market seeks new and remote destinations for travelers.

The new tools are opening up natural capital opportunities for the North:

- ▲ Resource management tools have the potential to enhance local development and employment opportunities;
- ▲ Geographic Information Systems (GIS) are being used for collecting and plotting traditional knowledge and archiving historical and local developments. One model that is being expanded upon can be seen at <http://firstnationschools.ca/index.php?module=RMO&meid=19>
- ▲ Traditional water routes are now being mapped and archived in partnership with Voyageurs North so communities can further develop their eco-tourism opportunities.

**FINANCIAL CAPITAL**

The KO communities have invested cash from their own resources into this effort. For the Smart Demonstration Project that began in 2000, each of the communities committed to contribute up to CAD\$1million. These are significant amounts of money, especially for small, remote communities facing massive social and economic challenges, including unemployment rates of over 80%.

One immediate impact has been job creation: the e-Centres have created jobs. The same is true for the telehealth program and the Keewaytinook Internet High School, KiHS. The technicians that have been trained are from the community – there is a real effort to **create job opportunities** in the community and avoid dependency on outside experts. For example, at the time of writing this case study, the website for Deer Lake First Nation announced three job opportunities:

- ▲ Medical transportation driver
- ▲ Homemakers (three)
- ▲ Half-time half-time workers for an alcohol and drug abuse programme.

It is clear that the sustainable livelihoods framework enables one to illustrate implications of a project, even if it is done after the fact. More important, the SLF has provided the community with a tool to continue to monitor its effect on the participating communities over time. Although in this example, no set of indicators and measures were identified at the outset, its application was successful in enabling dialogue and “stories” to emerge from residents about the effect of the KNet on their lives and their renewed ability to adapt to change and prosper.

## 4.2 Applying the Sustainable Livelihoods Framework to Gahcho Kué (NWT)

An environmental assessment panel review of a 4<sup>th</sup> diamond mine in the NWT (proposed by Debeer's at their Gahcho Kué site about 250 km north of Yellowknife) is currently underway. Numerous issues and concerns raised by community stakeholders during past technical workshops (conducted by Mackenzie valley Environmental Impact Review Board - MVEIRB) illustrate the need to consider impacts and implications for specific community issues that relate to how the **communities will sustain themselves over the long term in addition to how they will cope with the immediate effects of existing and further mining development in their communities.**

The final Terms of Reference states that:

*“During the environmental assessment process, concerns were raised by community members regarding a potential economic downturn after the mine closure, resource extraction at a time when many Aboriginal people cannot participate (or are already working at other mines), and lack of long-term benefit to communities as a whole.”*

*(Mackenzie Valley Environmental Impact Review Board, Gahcho Kué Panel, Terms of Reference for the Environmental Impact Statement, October 5, 2007, page 33)*

The community focus on long-term sustainability implies that an impact assessment approach must be developed that addresses the capacity of local communities to respond to both the opportunities and challenges posed by this project in the context of all other resource-based activities underway or planned to be underway in the region. It also stresses the need for greater clarity in the changes that have taken place in the past 10 years. It is important to add that this does not just refer to labour and infrastructure capacities, but the cultural and social values that might also be affected by projects of this nature and scale.

The traditional format of socio-economic impact assessment has been adapted to accommodate a more robust assessment framework that enables a more holistic view of all factors and conditions that influence the long-term sustainability of communities in the regional study area.

The Gahcho Kué project and the approach to applying the sustainable livelihoods framework (illustrated in Figure 5) seeks to:

1. Understand and explain the “vulnerability” of the regional study area (RSA) to the cumulative effect of the Gahcho Kué project. Specifically, what are the issues and challenges for the RSA in adapting to the new economic environment? What issues and VSECs must be addressed to ensure the RSAs can leverage its assets in a manner that maximizes the benefits offered by the project and indeed the economy as a whole?
2. Organize specific indicators and measures of the five livelihood capitals or assets that define the “sustainability capacity” of the RSA relative to the rest of Canada.

3. Identify:

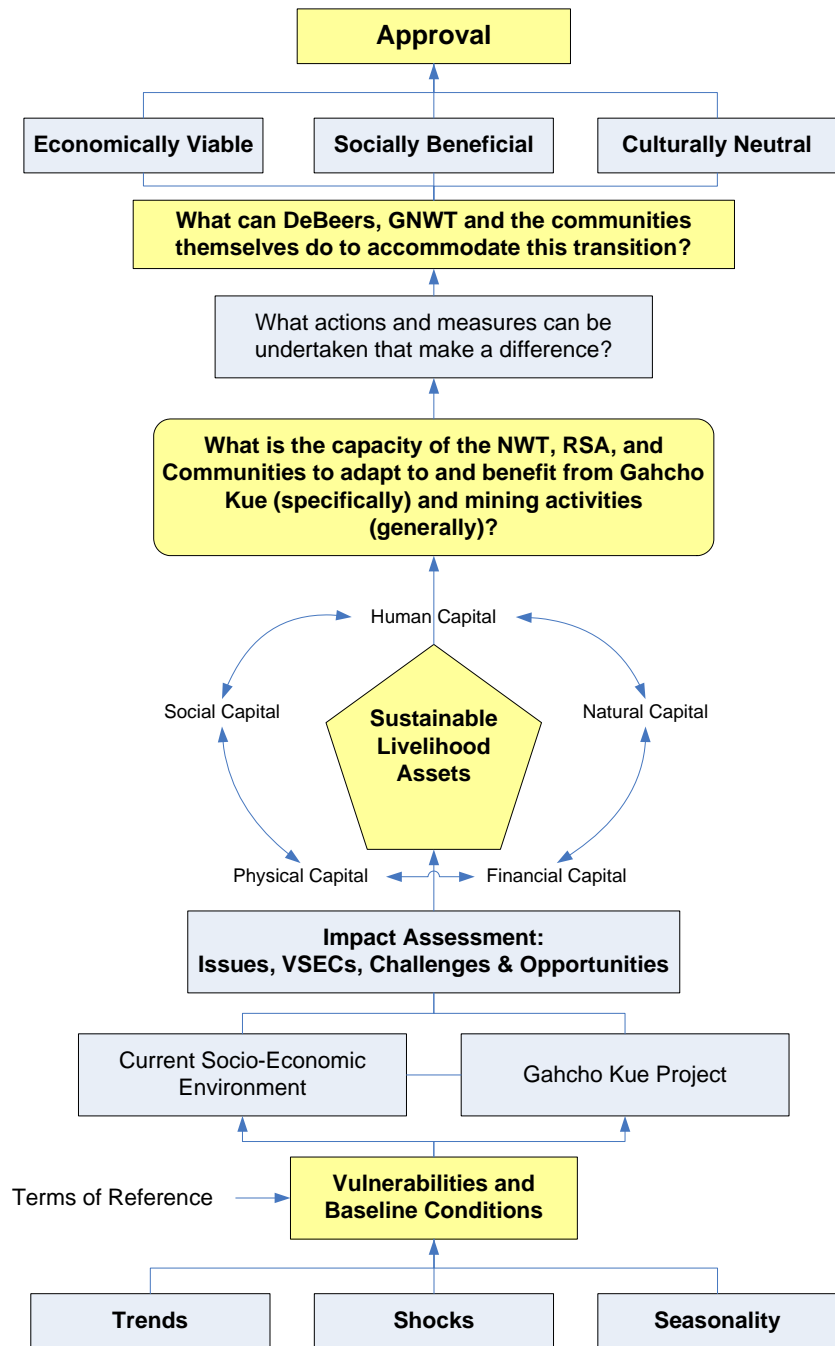
- a. What are the needed investments and action plans to enable the RSA to sustain itself over the long term, both during the project life cycles and after they are closed?
- b. What is the current capacity of the NWT to adapt to significant change (i.e. the introduction of another major mining project in the RSA), and to leverage the opportunities resulting the project such that the community is better off than before?

4. Clarify options and actions that enhance the long-term sustainability of the NWT and the RSA in particular.

The information base that will be used to assess the sustainable livelihoods in the NWT will be derived from the following:

- Business surveys
- Community Visits and round table discussions
- Review of existing documents – documentation for current mines

**Figure 5: Applying the Sustainable Livelihoods Framework to the Approval Process for Gahcho Kué**



### 4.3 Applying the Sustainable Livelihoods Framework to Poverty Reduction in the Region of Waterloo Ontario

Recognising the valuable contribution of the sustainable livelihoods approach to poverty reduction in developing economies, various social agencies in the Region of Waterloo recently teamed together to explore ways to leverage the SLF as tool to address poverty reduction for individuals and families in their jurisdiction. The objective of the pilot programme<sup>4</sup> was to develop supporting guides and tools for social agencies in Waterloo Region to better assist individuals and families to break their cycle of poverty and dependency.

Following a series of information and training sessions, participating social agencies embarked on individual and program level initiatives. At the **individual level**, the SLF offers an enhanced approach to measuring outcomes for individuals involved in programs. More important, it offers an effective tracking method that looks at the individual in holistic fashion, offering a more complete view of an individual's movement out of poverty. It provides a framework for the individual to better understand the factors affecting their situation and options for increasing their ability to adapt to new opportunities.

By examining their own "vulnerability context", individuals become more informed about the obstacles in their way of moving and staying out of poverty. "They come to realize that the condition of poverty is not their fault which in turn fosters self-confidence and sense of hope".<sup>5</sup>

With the right support and objectivity, individuals can begin to set goals and strategies that will strengthen their assets and at least minimize the vulnerable aspects that were in their way. The Waterloo SLF process provides individuals with self-empowering tools and learning experience that encourages practical application toward change.

At the **program level**, the SLF offers a tool for the design and evaluation of program effectiveness:

Practitioners can ask themselves: "In what way could an SLA contribute to this program?" "Are we viewing the people we support holistically? Does our program encompass a holistic approach? What asset areas do we need to address?" "What can we adjust based on what participants address as assets they wish to strengthen or create?" "Are we informing participants of resources that are available in the various asset areas? "Is there increased movement in the asset areas we are covering in this program for the group as a whole? Answers to these questions can lead to adjustments in program content or structure that might better support the individuals served by the program.

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<sup>4</sup> Mary MacKeigan, *Putting People First: Exploring the Sustainable Livelihoods Approach in Waterloo Region, January 2004*. YWCA of Cambridge and Cambridge Self-Help Food Bank.

<sup>5</sup> MacKeigan, page 11.



The pilot SLF program in Waterloo resulted in the following initial benefits:

1. Improved self-awareness of participating individuals;
2. A prototype computer-based data management system;
3. A list of key indicators and measures that can be determined and monitoring across all five asset classes that are tailored to youth and adults; and
4. Recognition that not all five livelihood assets need to be addressed at the same time nor in the same order for every individual.

#### **4.4 Applying the Sustainable Livelihoods Framework to the Attawapiskat First Nation (AttFN)**

De Beers Canada Inc. (De Beers) submitted a Comprehensive Study Environmental Assessment (CSEA) for the Victor Project in March 2004 in response to Guidelines issued by the Federal Government in February 2004. The project involves mining and processing of diamonds extracted from kimberlite mined from an open pit, approximately 90 km upstream of the community of Attawapiskat. Kimberlite is the rock in which diamonds can be found. In June 2005, the Responsible Authorities issued their formal Comprehensive Study Report (CSR). The Victor Project received Canadian Environmental Assessment Act (CEAA) approval in August 2005. Subsequent to that, several provincially based Environmental Assessments were completed, as well as a large number of federal and provincial environmental permits to allow the construction phase of the project to start. Site preparation and construction began in early 2006 and the mine is expected to begin operation in 2008.

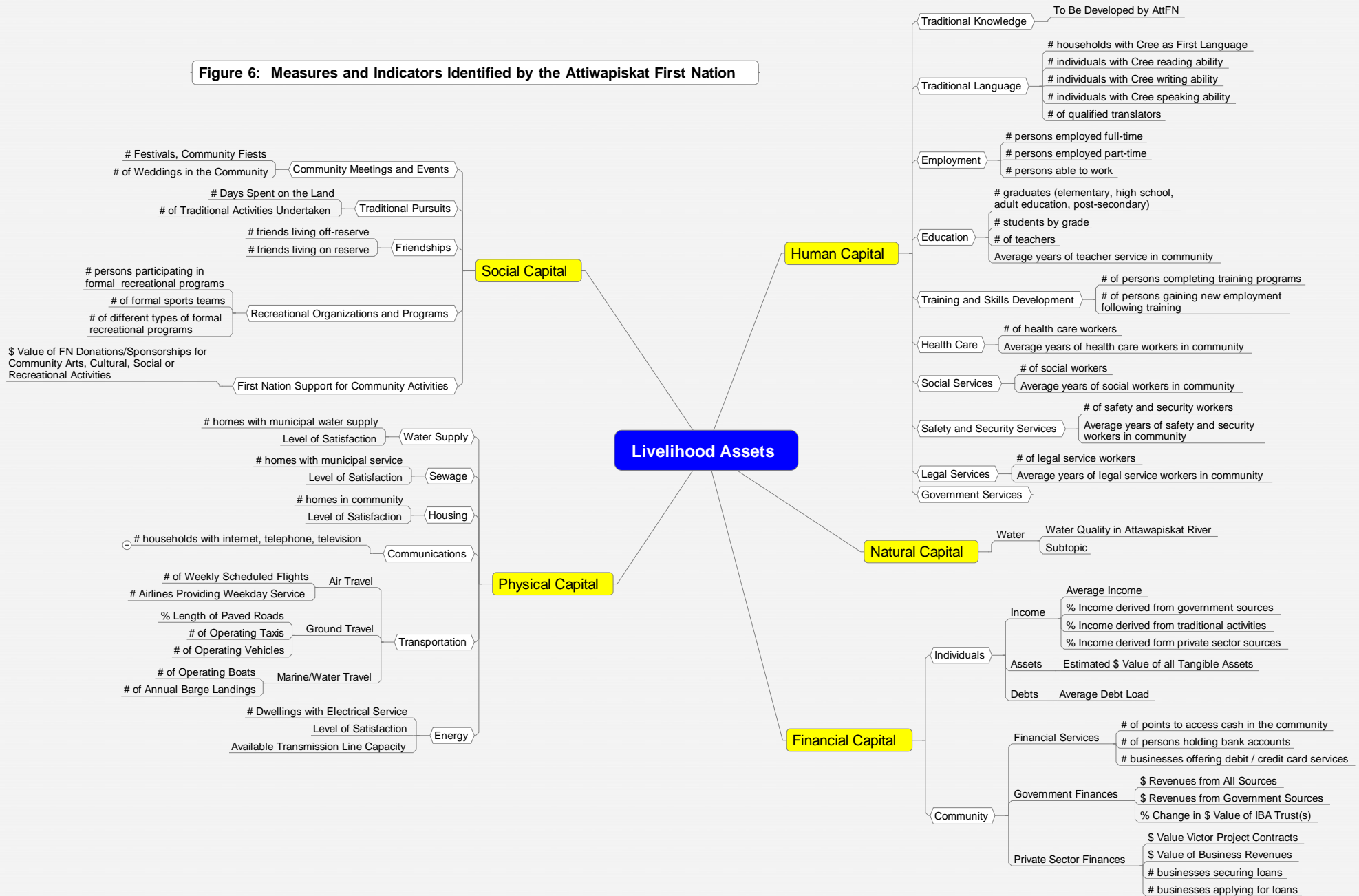
During the review process for the CSEA and CSR for the De Beers Victor Project, concerns were raised by the Attawapiskat First Nation (AttFN), Gartner Lee Limited and other reviewers, particularly Health Canada, Indian and Northern Affairs Canada, and Mushkegowuk Council that DeBeers' socio-economic studies were not sufficient for the preparation of a socio-economic monitoring program or for the development of appropriate socio-economic mitigation measures. To this end, the AttFN requested the development and implementation of a socio-economic monitoring program for verifying the predictions of the CSEA of the Victor Project for the purposes of determining the effectiveness of mitigation measures and of managing social and economic changes in Attawapiskat resulting from the Victor Project and other future developments within their traditional territory. It was the expressed desire of the AttFN that the monitoring program be sufficiently broad in scope to address social and economic changes affecting the community occurring during the life of the Victor Project.

After a review of several different frameworks for monitoring socio-economic effects on the AttFN, the framework that was preferred was the Sustainable Livelihood Framework. A monitoring program was developed (in progress) that was capable of the following:

1. Permitted verification of predictions of socio-economic effects and the effectiveness of mitigation measures that are considered as part of the CSR and those important to the AttFN and other potentially affected communities;
2. Demonstrated and/or quantified the positive socio-economic effects of the Victor Project and/or other projects;
3. Provided a database for the AttFN for their own use in future planning and development initiatives, that is collected data that may not necessarily have been required under regulation or specified in formal terms and conditions of approval but are nevertheless of importance to the AttFN;
4. Provided a basis for the establishment of thresholds or early warning signs;
5. Integrated indicators of community and traditional knowledge into the monitoring programs;
6. Provided of a common basis for and the means to deliver further impact management measures (i.e., an adaptive management component).
7. Avoided, where possible, duplication with existing monitoring or data collection program undertaken by project proponents, federal or provincial governments and the AttFN;
8. Allowed for quick and cost-effective implementation; and,
9. Minimized adverse effects of monitoring program implementation on stakeholders (i.e., the AttFN, governments, proponents and industry); while maximizing its benefits to stakeholders.

Figure 6 below, illustrates the draft indicators and measures identified for monitoring the assets of the Attiwapiskat First Nation.

**Figure 6: Measures and Indicators Identified by the Attiwapiskat First Nation**



## 5. Implication of Applying the Sustainable Livelihoods Approach to Ensure “Community Well-Being”

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The challenge facing any project proponent is to obtain an informed and voluntary acceptance from a host community (region) to undertake the project. This in our view can only be achieved by inviting affected communities of interest, into the planning and execution process of the project. This will, in part, require a flexible framework (tools) that can be used to structure participation of all interested stakeholders in a meaningful dialogue about community well-being. In particular, communities must feel comfortable with a process that enables them to:

- Define what community well-being means to them;
- Place the proposed project in their context of community well-being;
- Identify indicators and measures that they believe best represent their vulnerabilities and assets;
- Engage in dialogue about strategies and actions that might be employed to mitigate and/or compensate adverse effects to their community well-being; and
- Monitor and measure the performance of actions and commitments made to protect and/or enhance community well-being.

In applying the sustainable livelihoods framework, the one needs to understand the following:

1. The framework and application is meant to be flexible. There is no right or wrong way to use it.
2. Earning the trust of the local community(s) and other interested stakeholders is critical. The Sustainable Livelihoods Framework is an effective means to engage all communities of interest in informed dialogue often resulting in increased trust in the project-related decisions. Following this it is easier to enhance community well-being by developing strategies and action plans that address deficiencies in any of the livelihood assets.
3. Communities involved in this process, whether they ultimately host the facility or not, gain valuable benefit (assets) from the exercise: In most cases, they will be better equipped with the knowledge and strategy of how they can enhance their community well-being.