NUCLEAR WASTE MANAGEMENT ORGANIZATION
SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

Community Well-Being: An Overview of the Concept

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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 Research Support Program

In 2009, the Nuclear Waste Management Organization sponsored a Learn More program which encouraged any community, interested individual or group to contribute to shaping the knowledge platform on which the Adaptive Phased Management project will proceed. This program continued in 2010 as Research Support Program - Studies in the Humanities and Social Sciences. These programs were designed to help build understanding of important issues related to the implementation of Adaptive Phased Management , including the site selection process, through inviting independent perspectives.

Community Well-Being: An Overview of the Concept

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Acronyms

Adaptive-Phased Management (APM)
Canadian Index of Wellbeing (CIW)
Community Well-Being Index (CWB)
Gross Domestic Product (GDP)
Genuine Progress Index (GPI)
Nuclear Waste Management Organization (NWMO)
Organisation for Economic Cooperation and Development (OECD)
Quality of Life (QOL)
United Nations Commission on Sustainable Development (UNCSD)
Subjective Well-Being (SWB)
Sustainable Development (SD)
World Health Organization (WHO).

1.0 Introduction

The Nuclear Waste Management Organization (NWMO) recently chose Adaptive Phased Management (APM) as its preferred approach to the long-term management of Canada's nuclear fuel waste. In May 2009, it released a document entitled *Moving Forward Together* that outlines its approach to designing a site selection process. As part of this most recent initiative the NWMO is inviting communities to learn more about the project and learn more about the concept of community well-being. The NWMO has made a commitment to helping communities understand the concept of community well-being as an integrated way of 'thinking through' their interests in a project such as a deep geologic repository.

This paper aims to contribute to the *Learn More Program* by preparing a literature overview of the community well-being concept. The objective of the paper is to provide communities who are interested in exploring community well-being with a broad overview of the concept and a set of resources from which they can develop their own approach to community well-being. The paper is structured around the following six questions:

- Where does the idea of community well-being come from?
- How can community well-being be measured?
- What are some of the key approaches used when thinking about and measuring community well-being?
- What are the similarities and differences amongst the approaches and how does this translate into measurable indicators of community well-being?
- What are considered to be 'best practices' when working with the community well-being concept and developing an approach to studying community well-being?
- Where can communities get more information?

Prior to answering these questions it is first important to offer some initial thoughts about the meaning of some of the concepts that underpin this report – community, well-being and indicators.

"Community is what people who care about each other and the place they live create as they interact on a daily basis"; in other words, community arises through social interaction.[1] Communities can either be place-based (e.g. municipality, neighbourhood), or defined by interests (e.g. bowling, facebook, religion).[2] For place-based communities, well-being is typically understood as a physical setting within which the dimensions of well-being are evident. These include the social (including psychological, cultural, spiritual), economic, and environmental dimensions. Generally speaking, the social and economic dimensions of well-being have received more attention than the environmental domain. Further, communities 'do not exist in isolation'.[3] They are always linked to other communities (e.g. church groups may also be

[1] Flint, Courtney, G., A. E. Luloff, and James C. Finley, 2008, Where is "Community" in Community-Based Forestry? *Society and natural Resources*, 21: 526-537.
[2] Murphy, Brenda. L., 2007, Locating Social Capital in Resilient Community-Level Emergency Management, *Natural Hazards* 41, 283-295.
[3] Christakopoulou, Sophia, Jon Dawson and Aikaterini Gari, 2001, The Community Well-being Questionnaire: Theoretical Context and Initial Assessment of it Reliability and Validity, *Social Indicators Research*, 56:321-351.

part of a neighbourhood or a broader inter-faith organization) and to other scales (e.g. a local church could be part of a national church organization and a city exists within a province and within a country). Communities who choose to asses their well-being may want to think about these various dimensions and connections as they think through if, and how, they will approach this interesting undertaking.

The concept of *well-being* is often used interchangeably with such concepts as quality of life, and may also be framed in terms such as welfare, health and sustainability. Although there is no one definition that everyone agrees on, a widely accepted definition suggests that well-being consists of something beyond the absence of disease. Wellbeing 'accounts for elements of life satisfaction' that cannot be defined by economic growth alone. Well-being is influenced by both personal perceptions (subjective well-being) and physical circumstances (objective well-being). It can be measured for individuals, communities, countries, etc.[4] The Institute of Wellbeing describes well-being this way:

> The presence of the highest possible quality of life in its full breadth of expression focused on but necessarily exclusive to: good living standards, robust health, a sustainable environment, vital communities, an educated populace, balanced time use, high levels of civic participation, and access to and participation in dynamic arts, culture and recreation.[5]

Indicators are manageable bits of data that provide information about the status of some aspect of well-being. For instance, smog-free days could be one of the measurements used to assess an indicator such as environmental quality. In terms of community well-being, indicators are used to assess the social, environmental and economic dimensions of well-being. The information provided by indicators allows decision-makers – individuals, governments, businesses, and so on – to make decisions and get feedback regarding progress achieved towards well-being. Indicators can present a snapshot of the current situation and measure change over time (profile indicators). They can also provide information regarding how the current well-being status developed and/or could be influenced in the future (process indicators).[6]

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[4] Camfield, Laura, Gina Crivello and Martin Woodhead, 2009, Wellbeing Research in Developing Countries: Reviewing the Role of Qualitative Methods, *Social Indicator Research*, 90:5-31.
McAllister, Fiona, 2005, *Wellbeing Concepts and Challenges*, Sustainable Development Research Network, http://www.sd-research.org.uk/wp-content/uploads/sdrnwellbeingpaper-final_000.pdf

[5] Institute of Wellbeing, *What is Wellbeing?* http://www.ciw.ca/en/WellbeingInCanada/WhatIsWellbeing.aspx

[6] Redefining Progress and Earth Day Network, 2002, *Sustainability Starts in Your Community: A Community Indicators Guide*, http://www.rprogress.org/publications/2002/ciguide.pdf

2.0 Community Well-Being - Beginnings

The paper will begin with a brief overview of the roots of the community well-being concept. The concept of healthy communities dates back to the beginnings of public health initiatives in the 19th century. The idea of measuring community well-being in a more holistic way (e.g. three dimensions-- social, economic and environmental) was developed subsequent to the Brundtland Commission in the late 1980s and early 1990s, as the idea of sustainable development was popularized. Since measuring well-being began, indicators of economic well-being have been predominant. Although providing only a limited view of well-being, measures such as Gross Domestic Product (GDP) continue to be an important way that Canadians understand development and progress.

2.1 Development of Economic, Social and Environmental Indicators

Modern ideas associated with the measurement of *social* well-being and the tracking of population statistics can be traced back to the social reform period (1830s) in both Europe and the United States. These early efforts were directed at understanding the way in which overcrowding, contaminated water, and poverty contributed to epidemics and other health problems. Continuing efforts in the area of health, combined with the growing need to manage the economy throughout the 1800s led to the development of other measurement tools including demographic data, crime rates, consumption levels, and unemployment rates. Despite the early efforts to develop social well-being indicators, the majority of these first measurement tools were primarily *economic* indicators. Thus, by the 1960s there was a call to develop social indicators; that is a set of measurement tools to study and compare the quality of life (e.g. well-being) in both urban and rural settings. Whilst economic indicators have continued to be prevalent measures of well-being (e.g. GDP), the use of social indicators waned in the 1970s and 1980s. The recent revival in research and use of social indicators, along with the emergent development of environmental indicators has been spurred by 1) the continuing dissatisfaction with economic indicators, 2) the growing international dialogue about the state of the world's environment (e.g. 1972 Stockholm conference on the environment[7] and the 1992 Rio Summit[8]), and 3) the need to understand the impact of human activities that results from the interaction between the economic, social and environmental dimensions.[9]

The Brundtland Commission report (1987)[10] is one of the key, early approaches that began to explicitly include the *environmental* dimension of well-being. It is often said to be the document that formalized the international dialogue about the inter-relationships amongst the economic, social and environmental dimensions of well-being. To articulate this concept of well-being, the Brundtland Commission outlined the idea of Sustainable Development (SD). SD is defined as

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[7] United Nations Environment Programme, *Declaration of the United nations Conference on the Human Environment*, 1972 , http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503

[8] United Nations Environment Programme, Rio *Declaration on Environment and Development*,, 1992, http://www.unep.org/Documents.Multilingual/Default.asp?documentID=78&articleID=1163

[9] Gahin, Randa and Chris Paterson, 2001, Community Indicators: Past, Present, and Future, *National Civic Review* 90(4): 347-360.

[10] Brundtland, Gro, *Report of the World Commission on Environment and Development: Our Common Future*, 1987, http://www.un-documents.net/wced-ocf.htm

development that meets the needs of current generations without compromising the needs of future generations to meet their needs.

Subsequently, as part of the outcomes from the United Nations 1992 Rio conference, Agenda 21 delineated the need for, and approach to, developing local action plans that could operationalize SD. In particular, Chapter 40 of Agenda 21 called for the development of indicators of SD to assist decision-makers in the adoption of sound SD policies.[11] Currently, the Organisation for Economic Cooperation and Development (OECD)[12] and the United Nations Commission on Sustainable Development (UNCSD)[13] have extensive information on indicators that can be used to measure various aspects of social, economic and environmental sustainability and well-being (Gahin and Paterson 2001). The connection between sustainable development and well-being is worth emphasizing. As the OECD states, "sustainable development is increasing well-being over a very long time."[14]

Important within the context of Canadian communities, the Brundtland Commission noted the connection between SD, Aboriginal peoples and traditional knowledge. For instance, in the Brundtland report it states:

> Tribal and indigenous peoples' lifestyle can offer modern society many lessons in the management of resources in complex forests, mountain and dry land ecosystems.[15]
> These communities are the repositories of vast accumulation of traditional knowledge and experience that link humanity with its origins.[16]

2.2 Development of Community Indicators of Well-Being

The idea of measuring community well-being is relatively new. It was developed during the 1980s and 1990s. It reflects the above mentioned international activities as well as grassroots efforts by business leaders, activists, local politicians and others to develop approaches that can gather information to inform local decision-making. The idea of community indicators of well-being reflects a change in focus from the 'top down' imposition of what well-being, sustainability, quality of life, etc. *should* look like to a 'bottom-up' approach that emphasizes democratic participation and empowerment in the development of locally significant understandings of well-being and its measurement.[17] The movement towards measuring community well-being also reflects several other recent trends including 1) the devolvement of control for many programs to the local scale (e.g. social programs), 2) the need to measure

[11] See http://www.un.org/esa/dsd/agenda21/
[12] See for instance, OECD, http://www.oecd.org/dataoecd/30/20/41414440.pdf
[13] See files on guidelines and methodology at http://www.un.org/esa/dsd/dsd_aofw_ind/ind_index.shtml
[14] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008, *Measuring Sustainable Development*, New York and Geneva: United Nations, http://www.oecd.org/dataoecd/30/20/41414440.pdf, p. 20
[15] Brundtland, WCED, p. 12.
[16] Brundtland, WCED, p. 114.
[17] Gahin and Paterson, 2001.

Agenda 21 achievements, and 3) the recent emphasis on the need for better performance and accountability indicators (e.g. measuring the outcome of spending on social programs).[18]

Indicators of community-well-being, sometimes called 'benchmarks' or 'vital signs', are now used extensively by nation-states, regional governments, urban and rural areas, and even neighbourhoods.[19] The Community Indicators Consortium lists and provides links to community well-being projects from around the world, including sixteen from Canada alone.[20] In the United States there are over two hundred municipalities, using some form of community well-being measurement.[21] One of the earliest and ongoing examples of efforts to track well-being is Jacksonville, Florida's, Community Council Quality of Life indicator program. The council tracks one hundred indicators of well-being covering nine themes. [22] Other well known examples include Sustainable Seattle[23] and Sustainable Calgary[24]. Thus the current state of knowledge about indicators is both in depth and extensive. What still remains challenging is how to 'more effectively translate knowledge and commitment into action' in order to achieve the desired changes to community well-being. [25]

3.0 Measuring Community Well-Being

This section defines indicators and explores a number of factors communities might want to consider when using indicators such as type of indicator and factors to consider when choosing indicators. Given the plethora of approaches to studying well-being, communities can tailor their approach to well-being according to their own needs. Communities may choose to undertake a quick or in depth analysis of one or more dimensions, a broader analysis across several dimensions, or any other combination that reflects that community's values and needs. Communities may also decide to choose amongst the various types of indicators and measurement tools available. This section is designed to provide a broad introduction to the some of the concepts that communities may encounter as they begin to explore the idea of well-being. It provides a number of examples to clarify these conceptual ideas.

Deciding how well-being will be defined and what indicators will be used to measure it are key tasks when undertaking a community well-being exercise. As Roy Romanow states, "The things

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[18] Gahin and Paterson, 2001

[19] a. Ramos, Odette, T. and Ken Jones, 2005, Comprehensive Community Indicator Systems, *National Civic Review*, Summer: 74-77; b. Institute of Wellbeing, *What Others are Doing*, http://www.ciw.ca/en/WellbeingInCanada/WhatOthersAreDoing.aspx; c. OECD, *Measuring the Progress of Societies*, http://www.oecd.org/pages/0,3417,en_40033426_40033828_1_1_1_1_1,00.html; d. Wikiprogress, http://www.oecd.org/pages/0,3417,en_40033426_40033828_1_1_1_1_1,00.html

[20] Community Indicators Consortium: A Global Community of Practice, *Indicator Efforts*, http://www.communityindicators.net/INDICATOR.EFFORTS.html

[21] Gahin and Paterson, 2001.

[22] The themes include education, economy, natural environment, social environment, arts and culture, health, government, transportation and public safety, See http://www.jcci.org/jcciwebsite/pages/indicators.html

[23] See http://www.sustainableseattle.org/Programs/RegionalIndicators/

[24] See http://www.sustainablecalgary.ca/

[25] Besleme, Kate., Elisa Maser, and Judith Silverstein, 1999, *A Community Indicators Case Study: Addressing the Quality of Life in Two Communities*, Redefining Progress, p. 2, http://www.rprogress.org/publications/1999/CI_CaseStudy1.pdf

we count and measure reflect our values as a society and determine what we see on the news, what we hear at the water cooler, and ultimately, what makes it onto the policy of agendas of governments."[26] Others use the analogy of driving with road signs – having indicators helps decision-makers decide where they want to go and the path to get there.[27]

3.1 Importance of Indicators

Community well-being is measured using indicators. Indicators are important for a variety of reasons. Indicators provide the opportunity: to encourage democratic participation in visioning a community's goals; to measure progress towards achievement of those goals; to raise awareness and focus attention on community priorities; to provide a feedback and accountability mechanism for decision-makers; and to actively choose future desired outcomes.[28] Undertaking activities towards visioning a community's future well-being and choosing indicators that can assess both the current and future states of that well-being are excellent opportunities for a community to articulate its values and goals and to foster community involvement. As outlined by Sustainable Seattle, the indicators a community chooses to report about itself reflects its collective values and informs decision-making. The idea of citizens choosing indicators that reflect these values, (rather than these indicators being imposed by an outside agency) is an intensely democratic opportunity that values grassroots public participation. [29]

As a point of clarification to some of the terminology used, this section begins by explaining how this paper has conceptualized the relationship between, and definitions of, the ideas of 'dimensions', 'indicators' and 'measures' of well-being. It is important to clarify terminology because there are wide ranging differences amongst the various approaches to well-being. At the broadest level, the idea of three dimensions – environmental, social and economic – follows international SD protocol and is relatively easy to sort out in the well-being approaches. In contrast, there is a great deal more confusion surrounding the terms indicator and measures. To avoid confusion, communities may want to be aware of these differences as they explore the various concepts of well-being.

Some approaches use the word 'indicator' to mean the measurement of some piece of information (e.g. percent population with high school education).[30] Within this approach, there may be several indicators grouped together by themes (e.g. education – see the Jacksonville, Florida model). Others use the word 'indicator' as a broader term (e.g. social potential) that is then measured using specific types of data (e.g. education levels). Within this second approach, some will subdivide indicators into sub-categories, sometimes called domains (see Table 2). The

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[26] Romanow, Roy, J., *The Canadian Index of Wellbeing: Taking Measure of the Things that Count*, p.5 http://www.anielski.com/Documents/RJRUNITED_WAY.pdf

[27] Scientific Committee on the Problems of the Environment, 2006, *Indicators of Sustainability: Reliable Tools for Decision Makers*, http://www.icsu-scope.org/unesco/060421_PolicyBriefs_No1.pdf accssed July 2009

[28] Gahin and Paterson, 2001.

[29] Sustainable Seattle, 1998, *Indicators of Sustainable Community: A status Report on Long-term Cultural, Economic and Environmental Health for Seattle/King County*, http://www.sustainableseattle.org/Programs/RegionalIndicators/1998IndicatorsRpt.pdf

[30] See for instance, Hart, Maureen, 1999, *Guide to Sustainable Community Indicators, Second Edition*, Hart Environmental Data, available through http://www.sustainablemeasures.com/

second approach, using dimensions/indicators/measures, is adopted here because it differentiates between the indicator the community is trying to measure – social potential – and the data that may be available to measure that indicator. See Table 1 for an example of these terms and relationships using the environmental dimension.

Table 1: Examples of Dimensions, Indicators, and Measures[31]

Dimension	Indicator	Measure
Environmental	Environmental Quality	• Water quality levels • Air quality levels • Forest cover • People's perception of environmental quality
	Environmental Dynamics	• Restoration of degraded land • Levels of recycling • Level of sewage treatment
	Potential for Environmental Enhancement	• Investment in environmental initiatives • Percentage of preserved land • Percentage of citizens who participate in environmental management activities

3.2 Dimensions of Well-being

The *social* dimension assesses the community's viability and its capability to solve problems.[32] The social dimension is sometimes subdivided into categories such as social capital and human capital. It may also include a process category associated with understanding how and why current well-being levels have developed, community capacity to influence well-being and what can be done to change well-being in the desired direction. The social dimension can be measured by assessing information such as education levels, strength of social networks, population change and leadership.

The *economic* dimension acknowledges the important link between the economic strength of communities and their well-being. For instance, unemployment and poverty (typical economic measurements) are often associated with poor health and neighbourhood pessimism.[33] The economic dimension may use basic indicators, such as GDP that focus on market activities, composite indicators that move beyond market activities (e.g. the Genuine Progress Indicator), or attempts to assess the economic dimension relative to a broader well-being/sustainable development framework (e.g. triple bottom line audits).

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[31] Adapted from: Wang, Rusong and Juergen Paulussen, 2007, Sustainability Assessment Indicators: Development and Practice in China, in *Sustainability Indicators: A Scientific Assessment*, Tomas Hak, Bedrich Moldan and Arthur Lyon Dahl (eds) Scope 67 – The Scientific Committee on Problems of the Environment (International Council for Science), Washington: Island Pressp. 329-342.
[32] Christakopoulou et al., 2001.
[33] Christakopoulou et al., 2001.

The *environmental* dimension acknowledges the importance of the natural world to human well-being. The natural environment provides a plethora of ecosystem services (e.g. flood water management), and is considered to contribute to economic, social and psychological/spiritual well-being (e.g. tourism, city green spaces, natural vistas – a lake at sunrise).[34] Examples of measurements for the environmental dimension include: number of days/year with air quality above an acceptable level, people's perception of the level of satisfaction with the natural environment, and number of households who participate in recycling (see Table 1).

Well-being studies might also explore the relationship between the environmental, economic and social dimensions (e.g. the impact of industrial pollution on human and ecosystem health). Or, these studies might seek to understand how community-level dimensions of well-being exist with a broader matrix of relationships and resources that can either enable or hinder efforts to enhance well-being.[35] For instance, local infrastructure is linked to regional and national systems, local environments are part of larger scale ecosystems and people have social linkages beyond their local community. Thus, in addition to assessing the three dimensions of well-being at the local level, a community may want to think about the opportunities that could be available by leveraging resources and relationships outside their jurisdictions as well as the resource and relationship challenges they might need to overcome to attain their well-being objectives. An indicator such as 'Broader Linkages', for instance, could be measured by assessing 1) the percentage of available national project funding a local community is able to access, 2) the quality of local infrastructure as compared to other communities; and 3) local views of the community's connections with the rest of the region or country. .

3.3 Well-Being Data

Well-being can be understood to consist of *objective* circumstances (e.g. pollution levels) and/or *subjective* perceptions of these conditions (e.g. views of that pollution). Well-being is also frequently thought of in terms of *process* (e.g. how/why well-being came to be the way it now is – focus on change) and *outcomes* (what well-being now looks like – focus on snap-shot). Well-being can be measured using either qualitative (e.g. interviews) or quantitative (e.g. statistics) date sources. Well-being arises from a combination of what a community has, 'what they can do with what they have, and how they think about what they have and can do'.[36] Box 1 provides a case study of a multi-layered, multi-community well-being project that has used a combination of these types of indicators (see page 17).

3.3.1 Subjective/Objective Well-Being Data

Subjective well-being (SWB) is an individual's *perception* of their quality of life. SWB is often characterized as having two components – happiness/satisfaction and self-realization/flourishing. The former aspect of SWB (called hedonic valuation) suggests that factors such as money,

[34] Newton, Julie, 2007, Wellbeing and the Natural Environment: A Brief Overview of the Evidence, http://www.surrey.ac.uk/resolve/seminars/Julie%20Newton%20Paper.pdf
[35] Christakopoulou et al., 2001.
[36] McGregor, F. Allister, 2007, Researching Wellbeing: From Concepts to Methodology in *Wellbeing in Developing Countries: From Theory to Research*, Ian Gough and J. Allister McGregor (eds), New York: Cambridge University Press, p. 316-355.

genetics and identity influence happiness (e.g. social cohesion). In contrast, the latter aspect of SWB (called eudaimonic valuation) focuses on assessing the way in which quality of life is affected by people's capacity to self-determine and realize their own goals (e.g. social empowerment).[37] Economists use subjective well-being scores from survey data about happiness and life satisfaction as a proxy for quality of life. Researchers have studied the impact of income, unemployment, and other socio-economic factors on subjective well-being. More recently they have started to assess the trade-offs between perceptions of well-being and such environmental attributes as air pollution, climate, commuting time, local amenities and environmental attitudes.[38]

Objective well-being is defined as the valuation of well-being using an external valuation technique (e.g. census data), rather than people's perceptions. It is defined as the requirement that people's basic needs are met (e.g. social-economic security) and that they have the necessary resources to meet the social requirements for citizenship (e.g. democratic participation).[39] See Table 2 for examples of measures of well-being within the social domain. If data for these measures are collected through surveys or other opportunities to understand people's perceptions, this would measure subjective well-being. On the other hand, if external data sources are used, this would measure objective well-being (e.g. census data).

Table 2: Examples of Subjective/Objective Well-being Indicators[40]

Indicator	Domain	Measure
Socio-Economic Security	Housing Security	Proportion of people who have certainty of keeping their home
	Health and Care	Proportion of people covered by health insurance
	Education	Education fees
Social Cohesion	Trust	Extent to which most people are 'trusted'
	Tolerance	Views on immigration, pluralism and multiculturalism
	Identity	Sense of national price
Social Inclusion	Citizenship Rights	Right to vote, and proportion who exercise right
	Financial Services	Access to credit
Social Empowerment	User Friendliness of Information	Information available in own language Availability of advice and guidance centres
	Openness of Economic System	Existence of consultation processes Instances of public involvement in decision-making
Personal Relationships	Personal Support Services	Availability of pre and post-school child care

[37] Phillips, David, 2006, *Quality of Life: Concept, Policy and Practice*, London: Routledge.
[38] Moro, Mirko, Finbarr Brereton, Susana Ferreira, and J. Peter Clinch, 2008, Ranking Quality of Life Using Subjective Well-being Data, *Ecological Economics*, 65:448-460.
[39] Phillips, 2006.
[40] Phillips, 2006, Appendix, p. 248-252.

3.3.2 Profile/Process Well-Being Data

Profile indicators are the most common well-being indictors. Profile indicators, measured by such data as education levels, income levels, total forested area, and so on, illustrate the way things are now and can demonstrate how things have changed over time. In other words, they involve indicators that describe the state of well-being.[41] While profile indicator information can be used in a time series to show change over time, they are less useful for understanding why/how those aspects of well-being have changed and what should be done to influence their future direction. A good example of profile indicators is a study about the relationship between levels of forest dependence in rural Canada and community well-being.[42] This study used the following measures to assess the indicator forest dependence: forest employment, population with a university degree, levels of family poverty, unemployment and median family income. Data for these measures were objective and quantitative (see below), available for all regions of Canada and relatively easily obtainable through Statistics Canada.

In contrast, *process indicators* "examine social processes, relationships between groups or individuals, people's perceptions of their own well-being, and individual and collective behavior based on these perceptions."[43] Process indicators can help measure community capacity to use, change and enhance available resources and relationships and assess local public participation and contributions to decision-making.[44] Process indicators concentrate more on causes, rather than on outcomes and deal more with what community residents do and/or are able to do, rather than with who they are. While some process indicators tend to be associated and measured with qualitative data (e.g. interviews about the meanings and importance of particular places) quantitative data sources are also useful. For instance, while interviews could be conducted about residents' opinion of the role of volunteerism (measurement of SWB with qualitative data), equally important could be a survey of resident's time commitment to volunteerism (measurement of SWB with quantitative data), or the number of volunteer organizations in the community (measurement of objective well-being with quantitative data). Table 3 outlines and describes some of the more common process indicators.

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[41] Beckley et al., 2002, 631.
[42] Stedman, Richard, John Parkins, and Thomas Beckley, 2005, Forest Dependence and Community Well-being in Rural Canada: Variation by Forest Sector and Region, *Canadian Journal of Forest Research* 31 (1): 215-220. This study notes that it is generally felt that an over-reliance on a single sector, such as forestry, negatively affects economic well-being.
[43] Beckley et al., 2002, 631.
[44] Flint et al., 2008.

Table 3: Process Indicators[45]

Process Indicator	Description
Leadership	Quality: ability to inspire, build coalitions, accomplish goals Quantity: pool of available leaders across the community and sectors
Volunteerism	Number, membership and level of activity of volunteer and other social service organizations.
Social Networks	Feelings of 'connectiveness' in the community, number and strength of ties amongst community members
Entrepreneurship	Skill, experience, motivation to create new jobs, resident and government support for existing local businesses and for new start-ups
Sense of Place	Satisfaction with, meanings of, and attachment to, the community

3.3.3 Qualitative/Quantitative Well-Being Data

A *qualitative* approach, such as ethnography or participatory research, is defined as measuring characteristics or attributes of a thing, rather than simply counting it. For instance, perhaps census data suggests that homeless levels are high in a particular area. Follow-up interviews may then explore who is part of the homeless population, how they became homeless, perceptions of homelessness or of the resources available to help homeless people, and so on. A qualitative approach is important because it can measure areas of people's lives that are influential and important to well-being but are seldom measured (e.g. sense of place); encourage participatory approaches; improve the accuracy of measurement; make indicators more understandable and relevant; and focus attention on measuring what matters (rather than what is easily measurable). Qualitative methods include interviews, story telling, life histories, participant observation, community mapping exercises, etc. [46]

A *quantitative* approach, such as statistical analysis, is defined as measurement based on a number (real estate values, population, percent satisfaction with environment). A quantitative approach is important because quantities can often be compared through time, or across communities and quantitative data is often more readily available. Further, data that is measured in the same number system (e.g. money) can be added, subtracted, etc. and so can be reported using a single number (this is often attractive to decision-makers – the best example is GDP). Quantitative methods include the analysis of census data and surveys. For instance, in an American study to evaluate forest management policy and community well-being, the researchers assessed a combined socio-economic well-being dimension using a set of six measurements derived from US census data. These measurements were: employment diversity, percent employment, percent of people living below the poverty level, household income inequality, percent of population 25 years and older with a university education, and average travel time to work.[47]

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[45] Beckley et al., 2002.
[46] Camfield et al., 2009.
[47] Charnley, S., Ellen M. Donoghue, and Cassandra Moseley, 2008, Forest Management Policy and Community Well-being in the Pacific Northwest, *Journal of Forestry*, December: 440-446.

One of the most complete sources for information on the quantitative measures of well-being are the United Nations documents *Indicators of Sustainable Development: Guidelines and Methodologies – Third Edition* and the accompanying *Methodology Sheets*. The *Guidelines* provides an overview of sustainability indicators. The first document provides the history of SD indicators, describes a number of indicator frameworks and provides specific indicators to measure SD. The *Methodology Sheets* is a four hundred page text that provides information on each indicator. The information includes background details, policy relevance, methodological description, assessment of data, and further reading for each of the indicators. Indicators are provided for the social, economic and environmental domains. Although many of the indicators use national-level data, many are adaptable to the community scale.[48]

An example of a survey is a questionnaire that assessed community well-being using six themes. These six themes were then further subdivided into indicators of well-being and measured using a variety of data sources (Table 4).[49] An example of actual survey questions that can be used to assess some dimensions of well-being can be found in the *Community Sustainability Questionnaire* from Australia. Among other things, it measures community perceptions of well-being, and captures many of the social aspects of well-being outlined in this paper (subjective/objective; profile/process).[50]

It is often the case that community well-being studies will use a 'mixed methods' approach to better understand the dimensions of well-being that are important to them. This combines both qualitative and quantitative data. For instance, in the above mentioned American forestry study that used census data, in order to better understand the nature of the observed socio-economic changes, in depth interviews were conducted with community members and forest agency employees.[51]

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[48] United Nations, 2007, *Indicators of Sustainable Development: Guidelines and Methodologies – Third Edition, and Methodology Sheets,* http://www.un.org/esa/dsd/dsd_aofw_ind/ind_index.shtml; See also Hart, 1999.
[49] Christakopoulou et al., 2001, p. 328.
[50] The Globalism Institute for the Study of Transnationalism, Nationalism and Cultural Diversity, *Community Sustainability Questionnaire*, http://www.communitysustainability.info/research/Questionnaire-Community-Sustainability.pdf
[51] Charmley et al., 2008.

Table 4: Example of a Community Well-Being Survey

Well-being Themes	Indicators	Survey Questions
1) Place to live (satisfaction with local conditions)	A) Satisfaction with living conditions B) Personal Safety	A) Quality of: housing, air, local facilities, public transport, shopping, cultural facilities B) Feelings when: walking alone, being alone at home, parking car on street
2) Social community (community networks and involvement)	A) Informal interaction B) Community spirit	A) Interaction with others: talked with others outdoors, went out, spoke on phone, visited B) Friendliness, collaboration within community
3) Economic community (income, employment, investment and spending patterns)	A) Income sufficiency	A) Income to cover expenses and large bills
4) Political community (levels of participation)	A) Decision-making process	A) Extent local council informs residents, extent local residents can become part of decision-making processes
5) Personal space (feelings about, and meanings of their locality)	A) Place attachment	A) Emotional attachment, pride, sense of belonging
6) Part of the city (transport links, mobility)	Information derived from results of other sections	E.g. transportation information gathered under 1A).

Box 1: Measuring Sustainability

Canada's Model Forest Program

After the development of national-level indicators of sustainable forest management, the Model Forest Program[52] initiated work on a set of local-level indicators. All Model Forest sites across Canada (dedicated to sustainable landscape management) undertook the development of sustainable forest management indicators. They developed a two tier approach in which some indicators are common across all model forests (to allow comparability), while other indicators reflect the unique character of the individual model forests. The model forests first adopted the sustainable forest management criteria set out by the Canadian Council of Forest Ministers and then went on to develop their own specific indicators. Some model forests chose to use nationally available quantitative data such as average income levels, education attainment, employment, real estate value, etc. Others underwent an extensive community participation process to ascertain locally relevant and appropriate community sustainability indicators. These indicators often included both qualitative and quantitative data. The following are some of the locally defined indicators developed by Montreal Lake, Saskatchewan, a First Nations Community.[53]

Indicator	Measure
Physical, mental and spiritual health	Blood pressure, underweight children, etc.
Availability of appropriate housing	Wait time for subsidized housing
Access to basic services	Availability of education, food
Access to traditional knowledge	Number of traditional ceremonies
Opportunities to retain language	Number of residents speaking Cree
Economic well-being	Prevalence of low income residents
Opportunity in resource sector	% employment in resource sector
Subsistence lifestyle	% of meat needs met through subsistence

3.4 Factors to Consider When Undertaking Well-Being Research

Regardless of what dimension, indicator, measure, or type of data preferred, there are also several overriding considerations when embarking on a well-being study. These are summarized in Table 5. Communities can decide for themselves which of these factors, if any, would be important to consider. For instance, while a community may want to include a particular indicator of well-being perhaps a valid, credible measure for that indicator cannot be found or is too expensive to obtain. In another scenario, a community may have some readily available information, but the community may decide that the information is not useful because it cannot be compared with other communities, or is not sensitive to changing circumstances.

[52] There are now 14 model forest sites, See http://www.modelforest.net/cmfn/en/
[53] Beckley et al., 2002.

Table 5: Factors to Consider When Choosing Indicators[54]

Factor	Description
Relevance	Importance of indicator to community
Validity	Extent data collected is an actual measurement of indicator
Credibility	Community belief in indicator Extent information sources are considered legitimate and trustworthy
Measurability	Availability of information sources to measure indicator
Consistency/ Reliability	Ability of indicator to produce good quality data that can be compared over time
Comparability	Extent indicator chosen can be compared with those from other communities
Directionality	Extent indicator can track change over time and across space (e.g. getting better or worse)
Sensitivity	Ability of indicator to provide advance warning about potential problems
Scalability	Capacity of indicator to provide detailed information and/or the 'overall' picture. Extent indicator can be aggregated with broader scale data from other sources
Tangibility	Extent indicator is a measurement of physical properties, rather than intangible values (e.g. barrels of oil rather than price of oil)

4.0 Key Approaches for Measuring Community Well-Being

There are dozens of assessment tools that measure community-well-being in one form or another. These can be subsumed under three general categories: 1) Sustainable development, 2) Health and quality of life and 3) Economic-centred approaches (e.g. gross domestic product and human development index). This section will explore the key ideas associated with each of these categories and discuss the situations where they would typically be used.

4.1 Sustainable Development

According to Beckley et al., "For communities, sustainability hinges on the ability to deal with change, to reconfigure available resources, and to recombine financial capital, local skills, and natural resources in ways that create sustainable livelihoods."[55] Communities seeking to use the SD approach will typically: take stock of the currently available economic, environmental and social resources; develop a shared vision regarding the use of these resources; and develop a means to evaluate progress toward identified goals.[56] Guiding principles for sustainable community development may include:

[54] Redefining Progress and Earth Day Network, 2002;
[55] Beckley et al., 2002, 634.
[56] Rogers, Maureen and Roberta Ryan, 2001, The Triple Bottom Line for Sustainable Community Development, *Local Environment*, 6 (3): 279-289.

- Utilization of nature to meet human needs without undermining nature's long-term capacities
- Demonstration of the linkages amongst the environmental, economic and social dimensions
- Address the beauty and spiritual qualities of nature
- Ensure the well-being of all members
- Consideration of the needs of future generations
- Encourage participation, creativity, and tolerance
- Empowerment of community members to contribute to effective decision-making
- Equitable access to resources, knowledge and opportunities
- Collaboration across all stakeholders in the development of approaches that are environmentally sound, financially viable and socially responsible
- No negative impacts on other communities from chosen activities[57]

Within SD, measuring economic progress focuses on developing a *better* local economy, rather than a *bigger* one. It also focuses on capitalizing on existing community strengths, including business clusters and networks, rather than relying solely on external support. The community works to understand what kind of economic activity it currently has and to envision what a sustainable economy in the future would look like. Assessment of economic sectors (e.g. tourism) is an integral part of this exercise.[58]

One way to evaluate sustainable development performance is through a 'triple bottom line' audit. This is an approach based on economic dimension insights that incorporates the social and environmental dimensions. It is an auditing and reporting framework for measuring economic, environmental and social performance. An audit is a process that assesses performance against a set of established principles and policies such as the set of principles laid out above. [59] Box 2 provides a case study using the triple bottom line approach.

Another way of measuring SD is through a focus on the environmental dimension. One approach is to assess the environmental impact of human activities through the use of an indicator called the 'Ecological footprint'[60]. The footprint can help communities evaluate their "consumption of energy, food, housing, transport and consumer goods and services in terms of the amount of land needed to sustain consumption levels."[61] The ecological footprint approach can be used to raise awareness of SD issues, and/or to calculate broader-scale environmental impacts. It can be used alone or as part of a broader set of indicators to understand community well-being. One caveat is that much of the work undertaken with this tool has been either at the household or national scale; however, these approaches could be adapted to the community scale, if that is of interest to those involved in a well-being assessment project.

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[57] Rogers and Ryan, 2001; Beckley et al., 2002).
[58] Rogers and Ryan, 2001.
[59] Rogers and Ryan, 2001.
[60] There are many ecological footprint tools available. Two examples are available at: http://www.myfootprint.org/; http://www.ecologicalfootprint.com/ and http://www.footprintnetwork.org/en/index.php/GFN/page/footprint_for_nations/
[61] Rogers and Ryan, 2001, 285.

Box 2: Triple Bottom Line Audit

Victoria, Australia: Five Rural Communities

Subsequent to securing a government grant, a team of five rural municipalities (average population 700; history of gold mining; ageing population) decided to develop a regional project for the enhancement of all towns. The team created the Centre for Sustainable Regional Communities that focused on developing funded projects, rather than data gathering; the communities decided to focus on action objectives, rather than research. The centre highlighted five key issues: 1) building community; 2) participation; 3) employment, industry, and tourism; 4) environmental sustainability; and 5) infrastructure.

Using the triple bottom line audit approach and a public consultation process, the centre first developed a set of principles. Projects were funded based on the following criteria: 1) use of local expertise; 2) improvement of community well-being; 3) wide community involvement, 4) enhancement of local knowledge; 5) improvement of local assets; 6) employment creation; 7) training opportunity; 8) linkages with regional scale plans; 9) development of sustainable economic base; and 10) enrichment of the wider regional profile.

The next stage of the project involved the stock-taking of existing assets. Although this is a rural area, the 'community surprised itself with the diversity and caliber of enterprises', most of which were located in private homes. These enterprises included artists, artisans, food producers, computer experts, etc. Other activities at this stage of the project included the development of a community bank, a registry of tourist sites, assessment of community service, and information gathering about environmental attributes such as water quality. The next stage will involve a survey of residents about their views of community well-being and an evaluation of the community's ecological footprint.

Rogers and Ryan conclude: "To survive, rural communities in Australia are having to examine more closely the skills, talents and assets (both natural and built) that are locally available to the community, which, for some, may result in a successful redefining of their future."[62]

4.2 Health and Quality of Life

Some of the health and quality of life approaches to community well-being are especially robust in providing the details of how to think about and measure the social dimensions of well-being while others adopt an approach that looks a lot like the sustainable development approach described above. For instance, the information available on the social determinants of health and the WHOQOL survey (see below) allow communities to explore multiple aspects of social well-being. Other groups who also adopt the idea of health or quality of life take a multi-dimensional approach to well-being. This includes the Jacksonville, Florida model and such groups as BC Healthy Communities.[63]

[62] Rogers and Ryan, 2001, 286-288.
[63] See http://www.bchealthycommunities.ca/content/home.asp

The social determinants of health approach is an extension of the 19th century attempts to deal with public health issues. It is often focused on social inequalities, however perceptions of happiness may also be considered.[64] Health Canada has a list of eleven social determinants. These are: income and social status; social support networks; education and literacy; employment and working conditions; physical and social environments; biology and genetic endowment; personal health practices and coping skills; healthy child development; health services; gender; and culture.[65]

The Quality of Life (QOL) approach is often focused on perceptions of happiness and human flourishing. QOL is the result of the interaction between an individual's personality and life's events and circumstances. Since communities are collections of individuals, community QOL is the sum of its members QOL. QOL studies may be undertaken to assess economic welfare, health and psychological well-being, to name but a few topics. The common denominator of QOL studies is happiness (sometimes called human flourishing).[66] "The ultimate goal of improving QOL is to maintain and enhance the scope, depth and intensity of human well-being, or "happiness"."[67]

Probably the most well-known QOL work has been undertaken by the World Health Organization (WHO). The WHO defines QOL as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectation, standards and concerns."[68] The WHOQOL has developed two instruments: the WHOQOL-100 and the WHOQOL-BREF. The WHOQOL measures 100 items, whilst the WHOQOL-BREF measures 26 items. The items are related to such areas as pain, self-esteem, security, and financial resources.[69] Both of these questionnaires are used to assess individual's perception of health-related issues.[70] Although not directly applicable to community-level well-being, communities may find some of the questions or items included in the WHOQOL worthy of further exploration.[71]

The healthy communities approach that is very much like the SD approach is exemplified by the group *BC Healthy Communities*. The following is their understanding of the determinants of health:

- **Social** determinants (e.g. public policy, education, housing, child care, transportation, air and water quality, food security, neighbourhood design, accessible services and supports)

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[64] Eckersley, Richard, jane Dixon, and Bob Douglas (eds), 2001, *The Social Origins of Health and Well-being*, Cambridge: Cambridge university Press.
[65] Peterborough County-City Health Unit, *Poverty and Health*, http://pcchu.peterborough.on.ca/PH/PH-SDH.html
[66] For an in depth discussion of the links between well-being and happiness see: Vernon, Mark, *Wellbeing*, The Art of Living Series, Stocksfield, UK: Acumen Publishing Ltd.
[67] Hajiran, Homayoun, 2006, Toward a Quality of Life Theory: Net Domestic Product of Happiness, *Social Indicators Research*, 75: 31-43.
[68] *Introducing the WHOQOL Instruments*, p. 1, http://depts.washington.edu/yqol/docs/WHOQOL_Info.pdf
[69] McGillvray, Mark, 2007, Human Well-being: Issues, Concepts and Measures, *in Human Well-Being: Concept and Measure*, Mark McGillivray (ed.), New York: Palgrave Macmillan, p. 1-22.
[70] For a copy of these instruments see: http://www.psychiatry.unimelb.edu.au/qol/whoqol/whoqol-insruments.html
[71] See Phillips, 2006.

- **Environmental** determinants (e.g. healthy ecosystems, air and water quality, green space)
- **Economic** determinants (e.g. thriving local business, economic resilience, stable employment, family-friendly workplace)
- **Physical** determinants (e.g. healthy body, physical activity, diet, substance use/abuse, safe sex)
- **Psychological** and spiritual determinants (e.g. healthy mind, healthy spirit, healthy lifestyle choices, sense of belonging, purpose, high self-esteem, self-actualization)
- **Cultural** determinants (e.g. community identity; shared vision of a healthy community; cultural values of inclusion, diversity, pride, hope, participation)[72]

4.3 Economic-Oriented Approaches

Economists typically define well-being in terms of welfare. Welfare is the 'benefit an individual derives from consuming goods and services over time'.[73] Consumption opportunities, closely related to the idea of wealth, is thus at the heart of understandings about welfare. Wealth is the total amount of resources that are available to support individuals or communities over time. Consumption can be conceptualized narrowly as being related to the enjoyment of goods and services purchased in the market. But, to be useful for measuring well-being or sustainable development, consumption 'must include the enjoyment of any good or service that contributes to well-being' including forest products, beautiful sunsets and sense of place.[74]

One of the most common approaches to measuring market aspects of the economic dimension is Gross Domestic Product (GDP). GDP is the value of all goods and services produced in a country in one year. GDP was not designed to measure quality of life, well-being or sustainability. Since most countries, including Canada, do not have other generally available measurements to track well-being GDP has been used as a surrogate. However, this can be a problem because the negative repercussions of economic activity (e.g. over-harvesting of natural resources, excessive drinking, smoking, etc.) are not subtracted from the GDP to provide citizens with a more realistic view of well-being. Also, GDP cannot incorporate unpaid, but beneficial activities that contribute to well-being (e.g. housework, volunteerism).[75]

The Genuine Progress Index (GPI) is a newer index that is gaining popularity. The GPI is an attempt to move beyond GDP by including non-market activities and deducting the value of negative side-effects such as pollution.[76] Other indexes that also move beyond the GDP include the Genuine Savings Index, Happy Planet Index, Living Planet Index, Canadian Index of Wellbeing, Human Development Index, the Environmental Sustainability Index, Environmental

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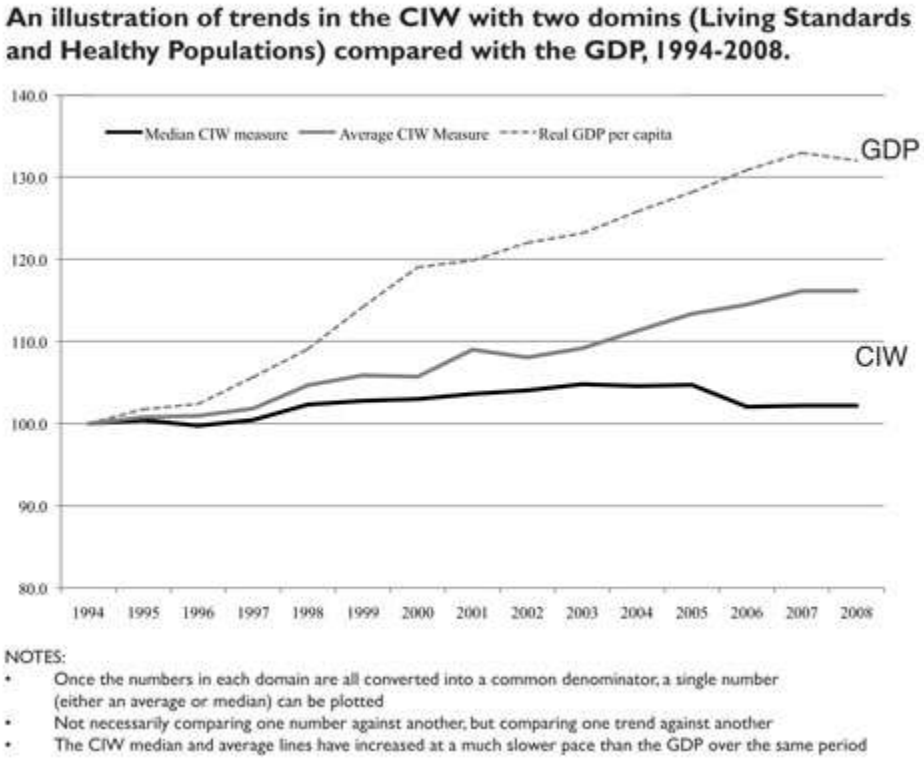
[72] BC Health Communities, *Our Approach*, http://www.bchealthycommunities.ca/Content/Our%20Approach/Determinants%20of%20Health.asp
[73] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008, p. 2.
[74] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008, p. 3
[75] Institute of Wellbeing, *Wellbeing in Canada*, http://www.ciw.ca/en/WellbeingInCanada.aspx; see also Jordan, Bill, 2008, *Welfare and Well-Being: Social Value in Public Policy*, Bristol: The Policy Press
[76] Hajiran, 2006.

Vulnerability Index and a suite of others.[77] Figure 1 demonstrates the way in which the choice of indicator influences the portrayal of well-being.[78] Box 3 provides an example of the adaptation of the Human Development Index to the Canadian Aboriginal context.

Figure 1: CIW Compared to GDP



Another example of an index that is moving beyond the GDP is the Canadian Index of Wellbeing (CIW). It provides information about the standard of living, health, quality of the environment, democratic participation, community vitality, education and skill, use of time, and the state of arts, culture and recreation.[79] The key indicators of community vitality are outlined in Figure 2.[80]

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[77] a. Wikiprogress, *Indicators*, http://www.oecd.org/document/15/0,3343,en_40033426_40037349_42607631_1_1_1_1,00.html; b. SCOPE, 2006, see 'Useful Links'.
[78] Institute of Wellbeing, *Composite Index*,
[79] Institute of Wellbeing, *The Canadian Index of Wellbeing*, http://www.ciw.ca/en/TheCanadianIndexOfWellbeing.aspx
[80] Institute of Wellbeing, *Community Vitality*, http://www.ciw.ca/en/TheCanadianIndexOfWellbeing/DomainsOfWellbeing/CommunityVitality/HeadlineIndicators.aspx

Box 3: Community Well-Being Index

Well-Being in Aboriginal Communities[81]

The Community Well-Being Index (CWB) is based on the Human Development Index. In turn, the Human Development Index is an outgrowth of dissatisfaction with GDP measurements. The Human Development Index uses life expectancy at birth, adult literacy and enrolment and GDP per capita to measure well-being. The CWB combines elements of the Human Development Index and community-level analysis, with measures of well-being chosen based on their wide availability through the Canadian census. The CWB uses the following indicators and measures of well-being:

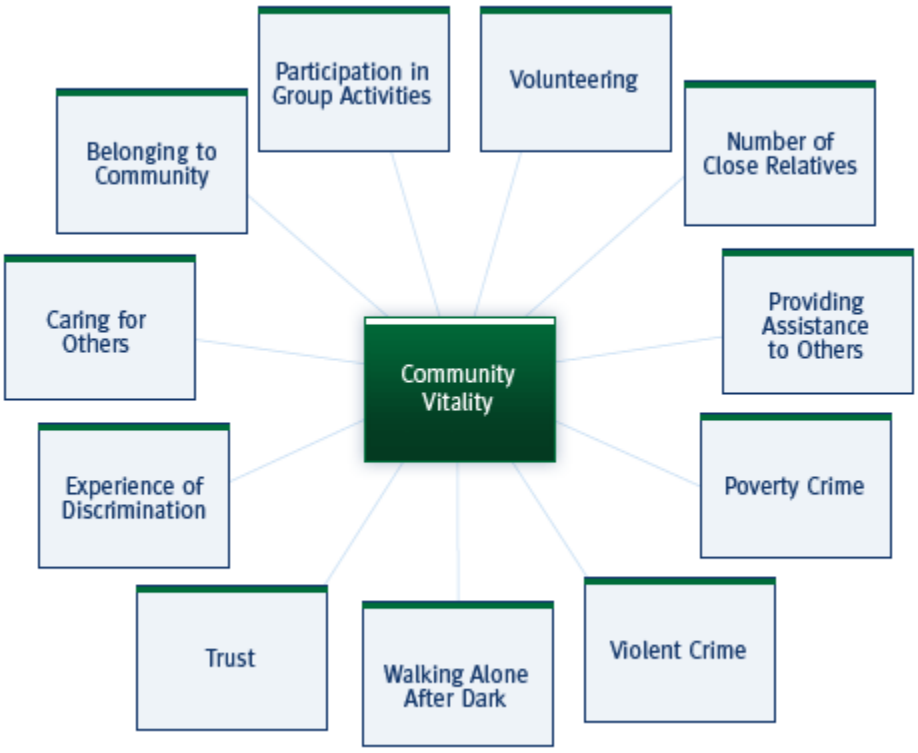
- Education
  - Proportion 15+ with grade 9 or higher
  - Proportion 20+ with high school or higher
- Labour force participation and employment
  - Labour force participation age 20 and older
  - Employment as proportion of labour force
- Income
  - Per capita total annual income
- Housing
  - Proportion of the population with no more than one person per room
  - Proportion of the population living in residences with no need of major repairs

In the language adopted in this paper, the chosen indicators reflect objective, quantitative, profile data. The choice of measures was limited by the availability in the census data (e.g. crime rate information was not easily obtainable for reserve communities). Thus, the CWB incorporates some key indicators of the social and economic dimensions, but not a comprehensive range. Another limitation is the lack of available SWB data about perceptions of quality of life or happiness (e.g. through survey work or in depth interviews). Further, although identified as key to well-being, indicators of the environmental dimension, such as water quality, were not found to be readily available and, therefore, could not be included. The authors also note that the CWB does not cover aspects of life that may be of particular importance to Aboriginal people. This includes access to traditional lands and cultural traditions.

Despite these limitations, the authors maintain that the indicators included are important to well-being – many other indexes also use these same indicators. Ultimately, although partial, the CWB provides important information about the social and economic conditions of Aboriginal peoples in Canada.

[81] White, Jerry, P. Dan Beavon, and Nicholas Spence, 2007, *Aboriginal Well-Being: Canada's Continuing Challenge*, Toronto: Thopmson Educational Publishing, Inc.

Figure 2: Community Vitality (CIW)



Economic-oriented approaches often use money as the unit of measurement. This is useful because it allows a more straightforward comparison across all goods and services. In moving towards SD, this approach considers five components of well-being: financial capital (stocks, bonds), produced capital (machinery, infrastructure), natural capital (natural resources, ecosystem services), human capital (education and health), and social capital (social networks and institutions).[82]

However, there are also limitations of this approach. *First*, 'not all forms of capital are equally understood, either conceptually or empirically', with social capital[83] remaining the most controversial of the five capitals.[84] *Second*, the use of money as a common measurement unit is problematic because the relationship between well-being and money is not always clear and some of the contributions made by money to well-being are hard to identify. For instance, studies have shown that even very poor people may feel happy and have positive well-being, and that after a certain level, income no longer contributes significantly to increasing well-being.[85] *Third*, within a strictly economic approach, as long as overall wealth is increasing, well-being is also said to be increasing, regardless of the actual impact on individual capitals. Thus, the capital approach typically does not address the destruction of natural capital in the generation of

[82] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008.
[83] For more on this theme see Phillips, 2006, especially Chapter 5.
[84] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008, p. 5.
[85] Hajiran, 2006.

that wealth or other negative effects of wealth generation. *Fourth*, some components of wealth are not substitutable; e.g. ecosystem services, such as waste absorption cannot be substituted with financial capital. Thus, aggregated, money-based measures of well-being may result in the loss of essential information.[86]

To deal with the second problem, the relationship between well-being and happiness, some studies use subjective well-being data, derived from surveys, to assess perceptions of well-being. To deal with the third and fourth problems, frameworks such as the triple bottom line audit or 'Sustainable Livelihoods' have been developed.[87] The Sustainable Livelihoods approach is a tool incorporating the five 'capitals' that was first developed by the Department for International Development in the United Kingdom. The framework is described in detail in an NWMO document prepared by Gartner Lee.[88]

4.4 Comparison of Approaches

Through comparison, this section outlines the similarities and differences amongst the three approaches, highlighting the characteristics that tend to be the most prevalent. These three approaches are sustainable development, health and quality of life and economic approaches. Within each of these approaches there is a range of opportunities for assessing community well-being – each reflects the specific needs and desires of the communities, organizations and people who are interested in the well-being question. Since there is no one-size-fits-all model for assessing community well-being, each community has the opportunity to choose the approach and assessment tool that best suits their needs. This may involve using a measurement tool that is already available (e.g. Sustainable Livelihoods, BC Healthy Communities, Community Well-being Index, etc.), or the synthesis of a well-being assessment tool that meets the needs of the community. This section will first delineate the characteristics that are most common to the broad approach and then will note some of the variations amongst the assessment tools.

Probably the most notable features of the sustainable development approach are 1) from the outset, the three dimensions, social, economic and environmental are included; 2) of the three approaches it is the only one that, by definition, includes the environmental dimension; and 3) it provides many different examples of how the environmental dimension can be assessed. Due to this more uniform starting position, there seems to be less variation of the approach across the specific well-being assessment tools; in other words, Sustainable Calgary is quite similar to Sustainable Seattle, etc. The differences amongst the specific assessment tools revolve around exactly which indicators and measurements a community decides to spotlight and to what extent all three dimensions will be represented by their final set of indicators. Some communities might put more emphasis on the social or economic dimension, others on the environmental. Some may choose to use objective, quantitative, profile data (since it is often most readily available), others may venture into other types of data collection. It is also quite common for communities to start with easily accessible information and then move on to collecting their own data through

[86] Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, 2008.
[87] See for example: http://tamarackcommunity.ca/downloads/vc/Sustainable_Livelihoods.pdf; http://www.eldis.org/go/livelihoods/.
[88] Gartner, Lee Ltd., *The Role and Application of Sustainable Livelihoods Framework for Measuring and Monitoring Community Well-Being*, NWMO SR_2007-12. December, http://www.nwmo.ca/community_wellbeing

surveys, interviews or other local data collection activities (e.g. inventory of local businesses; green space inventory). All of these opportunities exist – if the community decides the SD approach is right for them, it is the community that will tailor an assessment tool that meets their needs.

The health and quality of life approach involves quite a 'mixed bag' of opportunities to assess well-being. Nevertheless, there are a few similarities: 1) this is the approach that most highlights the social dimension; 2) the assessment tools within this approach provide a wealth of ideas regarding how to evaluate subjective well-being; and 3) health is a predominant theme across many assessment tools. Beyond these similarities, given the wide range of starting positions, the actual assessment tools vary widely. Some focus only on the social dimension, others incorporate the social and economic, while a third group brings together all three dimensions. For example, WHOQOL focuses on subjective well-being and health, Jacksonville, Florida, uses a quality of life approach that incorporates the environmental dimension and BC Healthy Communities uses the idea of 'health' in an assessment of all three dimensions. It is important to note that some of the assessment tools in this group require the collection of new data (e.g. to assess subjective well-being through a survey). So, if a community chooses such an assessment tool, they should be aware of the time and resources necessary to undertake this research. Ultimately, here again, communities can pick and choose their preferred approach given their interests, needs, the availability of suitable data or the willingness to generate new data.

The economic approaches also involve quite a range of assessment opportunities. The main similarities amongst the tools are 1) the spotlight is on the economic dimension, 2) there is a provision of a wide range of tools to examine the economic dimension; and 3) often (but not always) there is a focus on expressing well-being in terms of quantitative data (e.g. money). Some of the assessment tools within this approach, such as the CWB, can provide communities with a relatively quick and convenient measure of well-being, focusing on the socio-economic dimensions. As long as a community keeps in mind both the strengths and drawbacks of such an approach, this may be the approach that best meets the needs of that community. Others may be interested in melding the SD approach with the economic approach. In this case, something like the Sustainable Livelihoods model or the Triple Bottom Line Audit assessment tools might be appropriate.

Finally, it is important to emphasize that there is no 'right' or 'wrong' approach or assessment tool. *If*, and *when*, a community decides that they wish to explore the question of community well-being, the community should decide for themselves *how* that should be done and *what* will be included in such an exploration.

5.0 Community Well-Being 'Best Practices'

This section provides a set of guidelines that will help communities utilize the community well-being approach effectively and efficiently. The purpose here is not to provide a prescriptive 'how-to' guide, but rather to provide communities with a set of 'best practices' that others have found useful. Communities are welcome to pick and choose the guidelines that are best suited for their particular situation.

Increasingly, many communities and researchers maintain that there are benefits of undertaking the *process* of thinking about and visioning a community's well-being; this is said to be independent of the *outcomes*. Sustainable Calgary suggests that the following six benefits may result from undertaking a consultation process about sustainable development: 1) Increase public knowledge about sustainability, 2) Benchmark of current levels of sustainability, as well as develop an understanding of tools and approaches currently available, 3) Foster a community of interest centred on SD, 4) Encourage the inclusion of SD priorities in planning and policy decision-making, 5) Encourage participatory and inclusive democratic processes, and 6) Demonstrate "the power and sophistication of citizen-led initiatives to design and carry out complex public engagement processes and research and analysis on issues of public concern".[89]

5.1 Best Practices

The following is a set of 'best practices' developed from a review of the community well-being literature.[90] A community should feel free to pick and choose which of these, if any, meshes with their understanding of community well-being and its measurement.

Agree on what is important to measure – choosing indicators reflects the community's values. By necessity, not all community well-being values can be included or represented by an indicator.

Ability to disaggregate data – lumping different data together may result in a combined result that is hard to interpret. For instance, although the indicator data may suggest that no change has occurred, it may be important to understand both the positive and negative factors that have contributed to that stability (e.g. pollution levels could be influenced by multiple factors – changing government regulations, industry and population shifts, industry codes, etc.).

Measure what is important rather than what is easily measurable – make sure the indicator captures the well-being issue that is being measured. For instance, in addition to area covered by forest, it might make sense to measure size, diversity and health of trees.

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[89] Sustainable Calgary Society, 2006, *Citizens and Sustainability: Something Real and Lasting*, p.7 http://www.sustainablecalgary.ca/files/file/SC_IndicatorProjectOutcomes.pdf; See also Gahin and Paterson, 2001. See also Gahin and Paterson, 2001.

[90] See: Redefining Progress and Earth Day Network, 2002; Besleme, Maser, and Silverstein, 1999; Gahin and Paterson, 2001.

Clear thinking regarding what an indicator actually measures – Understand what is actually being measured by the indicator. For instance, the number of volunteer groups in a community does not give any indication of the vibrancy of those organizations.

Realistic evaluation of what can be measured – If there is no available data or tool to measure that component of well-being – don't measure it! Some things may simply not be measurable.

Honest reporting of results – an indicator may provide both good and bad news. However, if the community well-being reporting exercise is to contribute to decision-making and community enhancement, all generated information should be publicly reported.

Use indicators as part of the 'big picture' – Although indicators provide useful information about the community's well-being, they provide only partial information and are only a representation of what is really happening in the community. The indicator's information must make sense to the community, within the context of other available information.

Continually review the relevance of indicators – As the community changes over time, it may be necessary to develop new indicators to measure particular aspects of well-being.

Focus on participation and process – Dialogue about well-being is a key part of the process of community building and commitment to democratic participation. Focus on these processes, rather than just on end-points or outcomes. The process of undertaking a dialogue about community well-being has the potential, in and of itself, to contribute to community well-being!

Understand the level of resource commitment – Broader and longer-term projects will require a larger and on-going commitment of resources including money, time and personnel. Decide what level of commitment is right for your community.

Aim for wide community buy-in of chosen indicators – There should be wide community agreement of the need for that indicator and trust in the data that it provides. Otherwise, decision-making based on the indicator will not be seen as legitimate.

Choose indicators that can inform decision-making – Choose indicators that can support and inform the development of new policies, programs or activities. Indicators that only provide information, but no clear understanding of how to operationalize them, are not useful in moving towards sustainable outcomes.

Be prepared for a diversity of views – There may be a variety of views about what community well-being *should* look like and the dialogue may challenge some perspectives. Good dialogue facilitation and a collaborative learning process can be quite useful in developing integrated community well-being perspectives.

5.2 Undertaking a Community Well-being Process

According to the group 'Redefining Progress', developing a community well-being framework typically involves the following steps: 1) Gather interested individuals to form a working group; 2) Decide on some initial components of well-being that will probably be important; 3) Develop a short list of available indicators and data sources; 4) Facilitate community participation and visioning process; 5) Select community well-being components, indicators and data sources; 6) Collect data; 7) Publish results; 8) Promote results and encourage feedback; and 9) Move from information to action.[91] This process will clearly vary according to the needs of each community. To see how specific communities have undertaken such a process visit the websites of the various well-being projects highlighted in this paper (e.g. Sustainable Calgary).

6.0 Final Thoughts

What is very clear from this review of the well-being literature is that communities are always changing and adapting -- both to meet new challenges and to strive towards achieving their vision of what their community could/should be. Communities may decide that they wish to take a more direct role in managing that change. In this case, thinking about the community's well-being, quality of life, health, or sustainability is an opportunity to help the community manage growth and change.

Finally, it is also evident from the vast literature on well-being that communities often have the resourcefulness, resilience and capacity to manage and adjust to change and to positively influence their own well-being.[92] In such instances, thinking about community well-being provides an opportunity to focus those energies on community priorities. In situations where communities are struggling with some aspects of well-being, or want to enhance already robust levels of well-being, communities from around the world have made active decisions to think through the kind of future they want, to develop tools to help them plan and get to their goals, and to achieve success. If that is a path your community wants to take, we hope you will find the experiences of other communities helpful, illuminating and inspiring.

[91] Redefining Progress and Earth Day Network, 2002
[92] McGregor, 2007.

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7.1 Books

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7.2 Journal Articles

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7.3 Websites and Web Resources

BC Health Communities, *Our Approach*, http://www.bchealthycommunities.ca/Content/Our%20Approach/Determinants%20of%20Health.asp

Besleme, Kate., Elisa Maser, and Judith Silverstein, 1999, *A Community Indicators Case Study: Addressing the Quality of Life in Two Communities*, Redefining Progress, p. 2, http://www.rprogress.org/publications/1999/CI_CaseStudy1.pdf

Brundtland, Gro, *Report of the World Commission on Environment and Development: Our Common Future*, 1987, http://www.un-documents.net/wced-ocf.htm
http://www.un.org/esa/dsd/agenda21/

Community Indicators Consortium: A Global Community of Practice, *Indicator Efforts*, http://www.communityindicators.net/INDICATOR.EFFORTS.html

Ecological footprint tools: http://www.myfootprint.org/; http://www.ecologicalfootprint.com/ and http://www.footprintnetwork.org/en/index.php/GFN/page/footprint_for_nations/

Gartner, Lee Ltd., *The Role and Application of Sustainable Livelihoods Framework for Measuring and Monitoring Community Well-Being*, NWMO SR_2007-12. December, http://www.nwmo.ca/community_wellbeing

Globalism Institute for the Study of Transnationalism, Nationalism and Cultural Diversity, *Community Sustainability Questionnaire*, http://www.communitysustainability.info/research/Questionnaire-Community-Sustainability.pdf

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Model forest sites, See http://www.modelforest.net/cmfn/en/

Newton, Julie, 2007, *Wellbeing and the Natural Environment: A Brief Overview of the Evidence*, http://www.surrey.ac.uk/resolve/seminars/Julie%20Newton%20Paper.pdf

OECD, *Measuring the Progress of Societies*, http://www.oecd.org/pages/0,3417,en_40033426_40033828_1_1_1_1_1,00.html

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See also: http://www.sustainableseattle.org/

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United Nations Environment Programme, *Rio Declaration on Environment and Development*, 1992, http://www.unep.org/Documents.Multilingual/Default.asp?documentID=78&articleID=1163

United Nations, 2007, *Indicators of Sustainable Development: Guidelines and Methodologies – Third Edition, and Methodology Sheets*, http://www.un.org/esa/dsd/dsd_aofw_ind/ind_index.shtml

WHOQOL: For a copy of these instruments see:
http://www.psychiatry.unimelb.edu.au/qol/whoqol/whoqol-insruments.html

WHOQOL - Introducing the WHOQOL Instruments, p. 1, http://depts.washington.edu/yqol/docs/WHOQOL_Info.pdf

Wikiprogress, http://www.oecd.org/pages/0,3417,en_40033426_40033828_1_1_1_1_1,00.html

8.0 Further Information

The paper has necessarily summarized the various approaches, indicators and measurement instruments. Thus, a "Further Reading" section is provided of some of these resources. Please see the bibliography for a listing of many other resources, some of which are available on the internet.

Bowling, A. 2005. *Measuring Health: A Review of Quality of Life Measurement Scales* (3rd Edition). Berkshire, England: Open University Press, 0-335-21527-0, pp.211.

a) *Written by:*
   An academic; a social scientist with interests in health services research
b) *Written for:*
   Health services researchers, health care providers, students, or community professionals
c) Organization of book:
   Number of Chapters: 8
   Themes: Health, Well-being, Quality of life, measuring functional ability, measuring broader health status, measuring psychological well-being, measuring social networks and social support, measuring the dimensions of subjective well-being, and measures of broader quality of life
d) *Focus:*
   The focus is on quantifying health, well-being and quality of life. Each chapter contains various indices, questionnaires and/or other tools to help achieve this end. The book serves as a resource for researchers and health care providers.
e) *Key message:*
   The aim of the book is to compile and explain the many tools available for successfully and meaningfully measuring health in its broadest sense.

Cooper, C. 2008. *Community, Conflict, and the State: Rethinking Notions of 'Safety', 'Cohesion' and 'Wellbeing'*. Hampshire, England: Palgrave MacMillan, 978-1-4039-9832-3, pp. 264.

a) *Written by:*
   An academic in the field of Social Policy, whose interests extend to housing studies and urban policy.
b) *Written for:*
   Students, community professionals, academics or the educated public
c) *Organization of book:*
   Number of chapters: 5
   Themes: community and conflict historically, 'community' and 'conflict' and their meaning in different contexts, analysis of recent community-focused policies, community safety, community cohesion, community wellbeing
d) *Focus:*
   The book focuses on community wellbeing, and specifically discusses the state of community, conflict and wellbeing in modern Britain in terms of recent policy.
e) *Key message:*

Cooper argues that recent policies that were meant to 'protect' communities have actually contributed to increased marginalization of the less powerful and detracted from community safety and wellbeing. He also proposes further research for working with communities in empowering ways, and ultimately enhancing the social wellbeing of the many.

f) Other:
A highly political, well-written book. Interesting read.

Eckersley R, Dixon J, Douglas B (Ed). 2001. *The Social Origins of Health and Well-being*. Cambridge, UK: Cambridge University Press, 0-521 89021-7, pp.347.

a) Written by:
Academics in the field of epidemiology and population health

b) Written for:
Academics, professionals and students

c) Organization of book:
Number of Chapters: 5 Parts (A-E), 21 Chapters
Themes: social and economic determinants of health, health inequalities, health and the physical environment, developmental and biological determinants of health, Aboriginal issues and policy making.

d) Focus:
The focus is on social determinants of health and wellbeing, with some emphasis being put on Australian and New Zealand populations. The book discusses the health impacts of socio-economic status, family and early development, work and work conditions, health systems, physical environments, social capital, culture, and global economic and environmental changes.

e) Key message:
The main argument of the book is that health and well-being are multi-dimensional. Also, appropriate research into health inequalities will allow for the implementation of better policies.

Eid M., Larson R. J. 2008. *The Science of Subjective Wellbeing*. New York, NY, USA: The Guilford Press, 978-1-59385-581-9, pp.546.

a) Written by:
Academics; 33 contributors interested in subjective wellbeing from a psychological, social science and/or policy perspective.

b) Written for:
Scholars or researchers interested in subjective wellbeing

c) Organization of book:
Number of Chapters: 24 chapters, organized into 5 parts
Themes: subjective wellbeing, measuring subjective wellbeing, happiness/emotional wellbeing, interpersonal aspects of wellbeing, enhancement of wellbeing

d) Focus:
The book gives an overview of the science of subjective wellbeing, and attempts to touch upon several aspects of the multifaceted field.

e) Key message:
The authors hope to assist readers in gaining a deeper understanding of subjective wellbeing, including: its definition and measurement, its predictors and consequences, and the ways in which it can be enhanced

Gough I., McGregor A. 2007. *Wellbeing in Developing Countries*. Cambridge, UK: The Cambridge University Press, 978-0-521-85751-2, pp. 399.

a) Written by:
Two academics: Gough is a professor of social policy, McGregor is an economic anthropologist with interests in social policy analysis

b) Written for:
Academics interested in social policy and wellbeing, particularly with respect to developing countries and other underdeveloped regions of the world.

c) Organization of book:
Number of Chapters: 14 chapters, arranged into three main parts
Main themes: Human needs and human wellbeing; resources, agency and meaning; quality of life and subjective wellbeing

d) Focus:
This book takes a look into a new paradigm for development centred on human wellbeing. This new focus challenges the previous models for understanding development and poverty that revolved around money, commodities and economic growth.

e) Key message:
The book aims to develop a new strategy and methodology for researching wellbeing that can influence policy.

f) Other
Definitely a good resource for those interested in the area; however, it is very academically oriented.

Hak, T., B. Moldan and A. L. Dahl (Ed). 2007. *Sustainability Indicators: A Scientific Assessment.* Washington, DC: Island Press, 978-1-59726-131-9, pp.413

a) Written by:
Academics interested in sustainable development and associated indicators; the volume resulted from the contributions of many people.

b) Written for:
Academics, policy makers, activists, students, community professionals

c) Organization of book:
Organized into five parts, 23 chapters
Themes: ensuring policy relevance, indicators as key to sustainable development, methodological aspects (Qualitative System Sustainability Index), discussion of several different types of indicators.

d) Focus:
The book is part of the SCOPE (Scientific Committee On Problems of the Environment) series (SCOPE 67), and is partially based on a workshop held in Prague in May 2004.

Broadly, the book is concerned with sustainable development including its economic, social, and environmental dimensions. It also reviews the specific features of indicators.

e) *Key message:*
Progress has been made in the past two decades. Indicators have been established at the community, city, and national levels in many cases. However, the volume suggests that major conceptual challenges remain and methods warrant further development. Also suggested is a process of adaptive implementation, with indicators evolving as the science supporting them advances.

Hart, M. 1999. *Guide to Sustainable Community Indicators* (2nd Edition). North Andover, MA: Hart Environmental Data, p.202. Available through http://www.sustainablemeasures.com/

a) *Written by:*
Academic: an expert in the field of sustainability and sustainable indicators

b) *Written for:*
General audience: is meant as a guide for communities to learn about sustainability and how sustainability can be measured and implemented.

c) *Organization of book:*
Number of Chapters: 7, with 5 appendices
Themes: Sustainable communities, Sustainability, Sustainability indicators, Sustainable community projects

d) *Focus:*
The book explains sustainability and indicators, and discusses the interactions of society, economy and the environment in communities. It encourages individuals and communities to improve indicators by engaging in sustainable community projects.

e) *Key message:*
Sustainability is an important issue for communities, and can be measured using indicators. Communities can improve their sustainability indicators by engaging in sustainable community projects and continuing to monitor indicators.

Hassan R., Scholes R., Ash N. (Eds). 2005. *Ecosystems and Human Well-being: Current State and Trends,* Volume 1. Washington, DC: Island Press, 1-55963-228-3, pp. 917.

a) *Written by:*
Academics as part of the Millennium Ecosystem Assessment (Launched 2001)

b) *Written for:*
Scientists, development planners, environmentalists, agency professionals, and students

c) *Organization of book:*
Number of Chapters: 28 chapters, organized into four parts, plus 4 appendices
Themes: ecosystem condition, human wellbeing, biodiversity, ecosystem services (fresh water, food, fiber, etc), assessment of systems (coastal systems, forest and woodland systems, etc)

d) *Focus:*
The focus is on the ways in which the earth supplies distinct services essential to our human well-being (including food, fiber, fresh water, etc.).

e) *Key message:*

According to the book, the wellbeing of billions of people has been influenced through dramatic changes to our ecosystems. Unfortunately, these changes have caused a substantial and largely irreversible strain on the capacity of ecosystems to provide critical services.

f) Other:
An excellent, comprehensive, accessible resource

Haworth J., Hart G. 2007. *Well-being: Individual, Community, and Social Perspectives.* Hampshire, UK: Palgrave MacMillan, 978-0-230-00168-8, pp. 276.

a) Written by:
Academics; contributions from 29 authors in fields that range from policy studies, to sexual health, human geography, psychology, and beyond.

b) Written for:
Researchers, educators, policy makers, politicians, and anyone interested in well-being

c) Organization of book:
Number of Chapters: 14, divided into three parts
Main Themes: well-being from several perspectives, including psychological, political, individual, community and social.

d) Focus:
The focus is on well-being from several different perspectives, in an attempt to round out the definition of the term. In order to do this, the book considers the interplay between social, community, and individual well-being through the eyes of several 'invited experts'.

e) Key message:
Well-being is both a state and a process. It can also take different forms and is very complex. It is inextricably linked to the physical, cultural and technological environment and requires a global perspective. The authors believe that "interventions to enhance well-being need to recognize diversity and socio-economic inequalities in society". In other words, policy makers need to take all aspects of well-being, as well as their context, into consideration before attempting to intervene.

Jimenez, A.C. (Ed). 2008. *Culture and Well-being*. London: Pluto Press, 139780745326801, p.207.

a) Written by:
Ten contributors: all Anthropologists with various backgrounds; based on presentations at a conference on the topic of "Well-being: anthropological perspectives"

b) Written for:
Academics and professionals

c) Organization of book:
Number of Chapters: 9
Themes:
1) Distributive values: justice and equality not only as institutional allocations of values, but as social moments whose evaluation and re-distribution are responsible for the configuration of the political

2) Persons: Well-being must be carried through persons. An analysis of well-being must contribute to a more robust theory of the person
3) Proportionalities: Measurement or estimation of well-being as a 'remaindering movement of life'; that is, against some ideal that can never be achieved if the measurement is to remain valid

d) Focus:
The book discusses the theoretical implications of well-being from several vantage points. The above themes are explored by the contributors, sighting specific anthropological cases as examples.

e) Key message:
A critical look at well-being and what it means to people in different cultural contexts, the book aims to be a point of departure from past conceptions of well-being, and to open new territories in anthropological study of political and distributional systems of values and ethical imaginaries.

f) Other:
Very academically oriented. Not extremely accessible to the general population.

Jordan, B. 2008. *Welfare and Well-being: Social Value in Public Policy*. University of Bristol, UK: The Policy Press, 978-1-84742-080-0, pp.283.

a) Written by:
An academic prominent in the field of social policy as both a professor and author of several books on the subject.

b) Written for:
Academics and students of social theory, social welfare, public policy, and governance, community professionals

c) *Organization of book*:
Number of Chapters: 11, organized into four sections
Themes: Welfare, Well-being, Public policy

d) *Focus:*
The book talks about well-being, how it differs from the idea of welfare, and how these apply to the creation of effective social policy. The author writes within the context of Great Britain.

e) Key message:
The author argues that the economic model upon which many social policies are based is not the key to welfare and well-being for the individuals effected by these policies. It is suggested that a model taking social value into account, as well as personal relationships and trust, would result in better social policy. In other words "it is culture, rather than contract and consumption, which is the key to better quality of life and true well-being".

f) Other:
Well written; a very accessible and interesting read

McGillivray, M. (Ed). 2007. *Human Well-being: Concept and Measurement*. Hampshire, England: Palgrave MacMillan, 0-230-00498-9, pp. 308.

a) *Written by:*
Several (11) academic contributors (from the fields of economics, social and economic measurement, development economics, and sociology)
b) *Written for:*
Academics and professionals
c) *Organization of book:*
Number of Chapters: 10
Themes: Human well-being, income-based measures of well-being, indicators of well-being (social, economical, gender-related), sustainability of indicators, measurement of human well-being
d) *Focus:*
The focus is on human well-being, and how it can be better measured. It looks at human well-being as an issue relevant to the individual, to governments and policy makers, as well as international organizations.
e) *Key message:*
The classic indicators of well-being have been primarily interested in economic factors. The book suggests that non-economic dimensions also need to be taken into account when attempting to measure human well-being. Finally, there are recommendations for future practice and research.

Phillips, D. 2006. *Quality of Life: Concept, Policy and Practice*. New York, NY: Routledge, 0-415-32355-x, pp.276.

a) *Written by:*
An academic in the realm of Social Policy
b) *Written for:*
Students of social policy, sociology and health studies, community professionals
c) *Organization of book*:
Number of chapters: 8, each with well marked sub-sections
Themes: Quality of life and the individual, Health-related quality of life, The social context, Poverty and Wealth, Inclusion and Exclusion, Communities and Quality of life, Societal quality of life constructs, and Healthy communities
d) *Focus:*
The book explores ‘quality of life’ as a concept in several contexts. Quality of life is discussed at the individual, community, and societal level.
e) *Key message:*
Quality of life is an important issue and is central to the development of social policy. The appendix (ENIQ indicators of social quality) is discussed as a possible tool for measuring quality of life.

Prescott-Allen, R. 2001. *The Wellbeing of Nations*. Washington, DC: Island Press, 1-55963-831-1, pp.342.

a) *Written by*:
An academic looking at sustainable development and wellbeing assessment
b) *Written for*:
Students, academics, professionals involved with development and environmental policy, as well as resource management.
c) *Organization of book*:
Number of Chapters: 4, with several subheadings each; 6 appendices
Themes: human well-being, sustainability, ecosystem well-being, resource use, well-being assessment
d) *Focus:*
The focus is on development and sustainability. More specifically, it uses human and ecosystem well-being as equally important measures to determine overall positioning of nations in terms of sustainability, health, and resource use.
e) *Key message:*
The book argues that a well-being assessment is an essential part of determining sustainability. It provides the tools required to accurately assess and achieve sustainability within nations and internationally.

Sirgy, J. M., Rahtz D, Lee D-J (Ed). 2004. *Community Quality-of-Life Indicators: Best Cases.* Dordrecht, The Netherlands: Kluwer Academic Publishers, 1-4020-2201-8, pp.251.

a) *Written by:*
Academics in the following areas: quality of life indicator research, community s ustainability, and social development indices
b) *Written for:*
Community Planners, community indicators researchers, urban planning specialists
c) *Organization of book:*
Number of Chapters: Not organized into chapters as such: Ten articles by 18 academic authors in the field; compiled mainly from the 2002 Community Quality of Life Conference (Williamsburg, Virginia, USA)
Themes: Quality of life indicators, social development indices, community sustainability
d) *Focus:*
The focus of this book is to showcase the “cases of best work” in community indicators research. In particular, the focus is on communities that have launched their own community indicators programs.
e) *Key message:*
This book aims to use the best cases provided by successful communities and their indicator programs as a departure point for further research, but more importantly, as a set of guidelines by which to build the successful communities of the future.

Vernon, M. 2008. *Wellbeing*. Stocksfield, UK: Acumen Publishing Ltd, 978-1-84465-153-5, pp.144.

a) *Written by*:
A modern philosopher interested in the concepts of happiness and wellbeing
b) *Written for*:
The general public
c) Organization of book:
Number of Chapters: 5
Themes: Happiness, wellbeing, transcendence, power of love, the search for meaning
d) Focus:
A look at the philosophies of happiness and wellbeing in the context of the individual.
e) Key message:
Through cultivation of a more expansive and profound understanding of well-being, and by challenging our values and beliefs, Vernon suggests that well-being is within the grasp of all of us.
f) Other:
Very interesting read. Thought-provoking to say the least.

White, J. P., D. Beavon, and N. Spence. (Eds). 2007. *Aboriginal Well-being: Canada's Continuing Challenge*. Toronto: Thompson Educational Publishing Inc., 978-1-55077-17-0, p.234

a) Written by:
Academics; all with an interest in Aboriginal policy and well-being in Canada. Fourteen contributors in total.
b) Written for:
Academics, community professionals
c) Organization of book:
Number of Chapters: 10
Themes: Measuring Well-being, The Human Development Index (HDI), and The Community Well-being Index (CWB)
d) Focus:
The book examines the methods used to measure well-being (HDI and CWB), and applies these indices to the Aboriginal peoples of Canada. Current scores are compared to those of decades past, and regional scores are compared to scores from across the country and around the world. This information is used to determine which indicators of well-being are improving and which are lacking in an effort to more efficiently focus the country's "policy energies and resources".
e) Key message:
The contributors argue that in order to effectively measure the well-being of Indigenous peoples, those same people must be included in the development of the measuring tools used. Also, while some indicators of well-being have improved in some Native populations, the results are inconsistent and should not be taken for granted in future policy endeavours.
f) Other:
Though written for an academic audience, the book is more accessible than some texts.