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International Approaches to Measuring Well-Being:

An Empirical and Theoretical Overview

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Contents

1. Introduction

Reliable tools for the measurement of the essential characteristics of fragile communities are in short supply. Existing indices on well-being operate mostly on national or international levels. Local indices are mostly tailored to the needs of communities in western countries. Indices that are applicable to developing countries often focus on single issues only, such as health or security.[1]

The Flourishing Community Index (FCI) is supposed to fill this gap. Thus, it must be able to detect major problems inherent to the initial situation, and then capture the development from a state of fragility towards a state of flourishing in communities in developing countries worldwide.

This community-level measurement is supposed to contribute to three major purposes:

- **To inform and coordinate the work of development aid organizations on local and regional levels.**
  Rather than being used by Cordaid alone, the FCI is meant to enable consortia of NGOs, aid organizations, local governments and other relevant stakeholders to base their activities on the results of a shared measurement system. The idea is to collectively measure current well-being in a particular geographic area and to keep monitoring the collective impact (Kania & Kramer 2011) (or its absence) of all relevant stakeholders over time in order to provide evidence-based guidance to enable coordination of their future activities. The FCI will thus become a tool that allows addressing local/regional problems in participative and coordinated ways.

- **To deepen the understanding of 'flourishing communities'.**
  Developing a measurement tool will help to better understand and further develop the determinants and crucial factors of well-being on local and regional levels. The approach is supposed to link theoretical considerations with empirical measurement techniques and test their applicability in a participatory process with the relevant communities.

- **To increase practicability of impact measurement approaches.**
  The FCI is supposed to provide an alternative to conventional evaluations of single programmes, for instance by means of RCTs, that is more practical to handle and easier to implement. However, since the suggested approach does not allow for drawing causal inferences regarding the effectiveness of single activities, it does not oppose but rather complements those kinds of evaluations.

[1] The only exception to this rule we found is the Quality of Life Assessment Programme of the Aga Khan Development Network.

Against this backdrop we screened the field for relevant available indices to learn basic lessons for the creation of the FCI. For this report, we first selected a meaningful sample of the indices we found, in order to capture a broad range of existing approaches and methodologies. We then compared important dimensions of the indices under review to find relevant common themes, but also to identify important individual strengths and weaknesses. Based on this review, that also draws on work of CSI from related fields, we formulate a number of conclusions and open questions. They are intended to provide guidance to further the process towards the development of a blueprint for a Flourishing Community Index.

The report proceeds as follows. In the next part (2), we give a short introduction into the theoretical and practical foundations for measuring quality of life. In the following section (3), we provide a review of different indices that are related to the purpose of the FCI. The indices are presented as 'vignettes', i.e., short abstracts that cover the most relevant characteristics. Finally (4), we summarize the findings that are most relevant for the development of the FCI.

2. Theoretical and practical foundations for measuring quality of life

Two broad distinctions can be made when it comes to assessing the well-being of individual persons and judgments about the level of development of communities or nations. In a perspective oriented toward *means*, we ask for different approaches towards measurement, in general, and for the tools and methods needed to carry out measurement, in particular. Looking at *ends*, we ask for the values and states of affairs that are supposed to come about through the application of these instruments. Obviously, both perspectives are closely related to each other: Depending on the valued states of affairs that underlie a given approach, the measurement instruments will vary. And depending on the available instruments and data, certain valued states of affairs come into view, or not. Hence, the following synopsis is organized along this fundamental distinction for analytical purposes only. We thus seek to provide an overview on major theories and approaches in this field, in order to enable a better understanding of the list of indices which follows in part three.

2.1. The means of assessment: monitoring well-being vs. poverty

To begin with the means of measuring the quality of life, two main strands can be distinguished in the academic as well as the practitioner discussion: More generic attempts to monitor well-being, on the one hand, and more focused approaches, often in the context of poverty alleviation, on the other. These are interrelated in many ways and have recently been converging to a certain extent.

Driven by the motivation to develop an alternative to the GDP as a generic estimation of societal welfare and prosperity, researchers in the last decades have been increasingly searching for non-economic determinants of individual well-being. Accounting for phenomena such as the decoupling of personal well-being from income after a certain threshold is reached, demands for a better work-life balance, as well as environmental degradation, different alternative indices have been developed. Most of them focus on the macro level (OECD Better Life Index, Social Progress Index, Gross National Happiness Index of Bhutan), but some work on regional or community levels, as well, particularly in Western countries (Canadian Index of Well-Being; QUARS, Genuine Well Being Index). The majority choose a comprehensive, multidimensional approach; they are structured along a larger number of different domains, such as education, health or housing. These indices are strongly influenced by and frequently rely on empirical and conceptual work on well-being (e.g., Kahneman et al. 2004; Layard 2005) and happiness (e.g., Veenhoven 2009), as well as the capabilities approach (e.g. Sen 1980, 1985, 1993, 2001, for a more detailed discussion see next section). The macro indicators are designed to cover both prospering nations and developing countries, and they rely largely on secondary data from UN institutions and national sources.

Secondly, there are a number of more focused approaches that have been developed in the context of fighting poverty. The attempt to formulate indicators that commit actors to a common agenda and allow estimating the success of interventions has found its most prominent exemplification in the Millennium Development Goals. A wide range of further indices and measurement approaches have been developed on local level (e.g., the Quality of Life Assessment Program of the Aga Khan Development Network, the Alkire-Foster method to capture multidimensional poverty; Community Scorecards). They often focus on a rather specific topic, such as security (Addressing Conflict and Violence from 2015 framework) or gender equality (Women Empowerment in Agriculture Index[2]). These indices were designed with a view towards applicability and they are supposed to inform interventions in the community. The lack of reliable quantitative secondary data and the emphasis on applicability lead to a more prominent role of primary data and qualitative data collection methods. Participatory methods or Community Based Performance Monitoring (CBPM) approaches that involve the community in the development of the measurement framework and strengthen a sense of ownership of residents are regarded as being particularly adequate for these purposes (Thindwa et al. 2005).

2.2. The ends of assessment: Translating normative theory into survey structure

Due to the infinite diversity of human needs, preferences and values, a measurement approach aimed at capturing those societal conditions that are supposed to be relevant for human welfare might take into

[2] This index is not analysed in this report, see http://www.ifpri.org/publication/womens-empowerment-agriculture-index

account an almost unlimited multitude of goods. Hence, any index needs to make a choice in order to arrive at a limited number of the goods and values it regards as relevant. If this choice is not supposed to be simply random, indices must provide a systematic account that specifies why the variables it takes into account can be regarded as morally good and societally desirable. In other words, they need to put forward "a broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about societal change" (Robeyns 2007: 352). This framework, in turn, must rely on a convincing account of what aspects of an individual state of affairs should count as ultimately and fundamentally important for humans and human well-being (Cohen 1993: 9). Three such theories are of particular relevance for the development of an FCI.

Theories in a utilitarian tradition take as a point of departure the greatest happiness of the greatest number of persons as the ultimate goal of moral action. However, the criterion of happiness alone suffers from a number of shortcomings. For instance, due to their emotional dispositions, some people will be (un-)happy regardless of external circumstances. Again, others will adapt their level of happiness to extremely unjust social structures, knowing that they lack the opportunity to strive for more (Sen 1980; Cohen 1993).

For these reasons, *resource-oriented theories* argue that what matters is an equal endowment with 'primary' goods needed to sustain basic functions of life (Rawls 1971). However, the emphasis on the equal distribution of primary resources has important weaknesses, too. For instance, persons with severe disabilities need a higher share of goods to live a decent life. Moreover, it has been argued that resources as such have no relevance for human well-being whatsoever, as their value depends entirely on the use individuals make of them (Sen 1980).

The latter argument has been put forward in the context of the *capabilities approach* developed by Amartya Sen (e.g., Sen 1980; 1985; 1993). Sen based his approach on the critical reflection on the above-mentioned two major rival strands of thinking on justice and equality. He argued that "what is missing in all this framework is some notion of 'basic capabilities': a person being able to do certain basic things" (Sen 1980: 218). According to his position, neither the equipment with (material) resources nor the assessment of actual well-being (i.e., the mental state a person is in) can determine the well-being and quality of life of a person. Rather, he argued, "in the enterprise of assessing a person's well-being, […] [w]e must look […] at his nutrition level, and not just […] at his food supply, or, as welfarists do, at the utility he derives from eating food" (Cohen 1989: 943). In sum, the capabilities approach claims that in assessing the well-being of persons, we should focus on the opportunities they actually have to lead the lives they value and have reason to value (Robeyns 2006: 351).

In the context of the FCI, it should be emphasized that Sen assigns theoretical priority to advantageous individual (rather than collective) states of affairs. To be sure, this is not to deny the relevance of societal context factors such as "economic growth […] technical progress, or social modernization" (Drèze and Sen 2002: 3). However, while policies, social structures and social change matter, they have no intrinsic value.

Rather, they must be evaluated in terms of their contribution to the widening or restricting of the societal level of individual capacities.

The capabilities approach has been particularly influential for many of the indices under review, and it is important to incorporate this line of thinking into the development of an FCI. On closer inspection, however, it turns out that distinctions between the three different positions are not as straightforward as they might seem. For the present purposes, it is neither necessary nor desirable to subscribe to only one of them. On the one hand, the criterion of happiness understood as a mental state of well-being can be seen as an important touchstone that allows assessing whether the endowment with particular resources or the opening up of opportunities has any significant effect on individual well-being. The distribution of material resources, on the other hand, can often serve as an effective proxy for well-being. Moreover, resources are an important input factor; hence, it will often be important to know which resources are available in a local situation, if residents can make use of them, and if supply and quality are regarded as sufficient.

3. Review and classification of existing measurement approaches

The selection of indices was based on their potential relevance for the FCI, their public recognition, and methodological complementary in order to gain a comprehensive picture of existing approaches. Hence, the sample comprises indices operating on national, regional and local levels supposed to be used by a wide range of different audiences. Most of them are based on secondary, quantitative data; again, others rely exclusively on primary data (e.g., Gross National Happiness Index). Many of them were designed for use in western countries (e.g., the QUARS); others focus on issues that are relevant in a development context (e.g., the Quality of Life Assessment Programme). The majority cover multiple dimensions of human well-being, but a single-issue index has been reviewed as well (Addressing Conflict and Violence). For an overview of the different dimensions that are covered, see Table 1 below.

Table 1: Relevant benchmark indices for the FCI

	Scope of analysis		Level of data[1]			Basic Approach		Source of data		Initiation and Usage	
	local / regional	national	micro	Meso	macro	well-being in general	specific issue (Safety etc.)	primary data	secondary data	local communities	international organizations

OECD Better Life Index		x	x	(x)		x			x		x
Social Progress Index		x	x	x	x	x			x		x
Gross National Happiness Index	x	x	x			x		x		x	
Action Agenda for Sustainable Development (Post 15)		x			x	x			x		x
Quars - Regional Quality of Development	x		x		x	x			x		
Genuine Well-Being Report (Leduc)	x		x	x		x		x	x	x	
Canadian Index of Well Being (Community Vitality)	x				x		x		x	x	
Addressing conflict and violence	x	x	x	x	x		x		x		x
Quality of Life Assessment Programme	x		x			x		x		x	x

[1] Indicators can target different levels in terms of data collection and provision of information. Some indicators measure information on the *macro level* of nation states (legal framework, public budget, etc.), on the *meso level,* such as organizations, families (performance indicators, family shelter, etc.), while others focus on the *micro level* of individual actors (health conditions, personal income). This level of analysis is different from the scope of analysis, since, for example, the micro-level data as level of analysis can be aggregated to a national level index. The distinction also works the other way around, as national level data, such as legal frameworks, can be included in indices on regional or local levels.

The structure of the vignettes is organized along the following aspects:

- **Abstract** (a short description plus sources and the issuing organization)
- **Background and theoretical foundation** (initiators, history, theoretical influences, etc.)
- **Measurement framework and indicators** (the 'measurement concept', categories, etc.)
- **Operationalization and data** (data sources and organization of data collection, etc.)
- **Further relevant observations** (highlights findings that are crucial for the FCI development)

3.1. OECD Better Life Index

Source:	OECD, (2011) *How's Life? Measuring Well-Being*, OECD Publishing
Abstract:	The OECD Better Life index was developed by some of the most profiled thinkers on new welfare concepts and provides a detailed discussion of its indicators. Although allowing for comparison, it puts strong emphasis on a participatory approach by allowing users to decide which indicators are most important from their perspective.

Responsible Institution:	OECD
Access Index / Data:	http://www.oecd-ilibrary.org/economics/how-s-life_9789264121164-en http://www.oecdbetterlifeindex.org/about/better-life-initiative/ http://stats.oecd.org/Index.aspx?DataSetCode=BLI

3.1.1. ***Background and theoretical foundations***

The OECD Better Life Index derives from the OECDs' Better Life Initiative. It is an attempt to go beyond the conceptual stage and offer internationally comparable data based on a set of indicators representing citizens' well-being. The indicators have been developed mainly within the French-initiated *Commission on the Measurement of Economic Performance and Social Progress,* with contributions from the OECD. The index is mainly focused on OECD states. However, the existing indicator set is considered as exploratory, experimental and evolutionary.

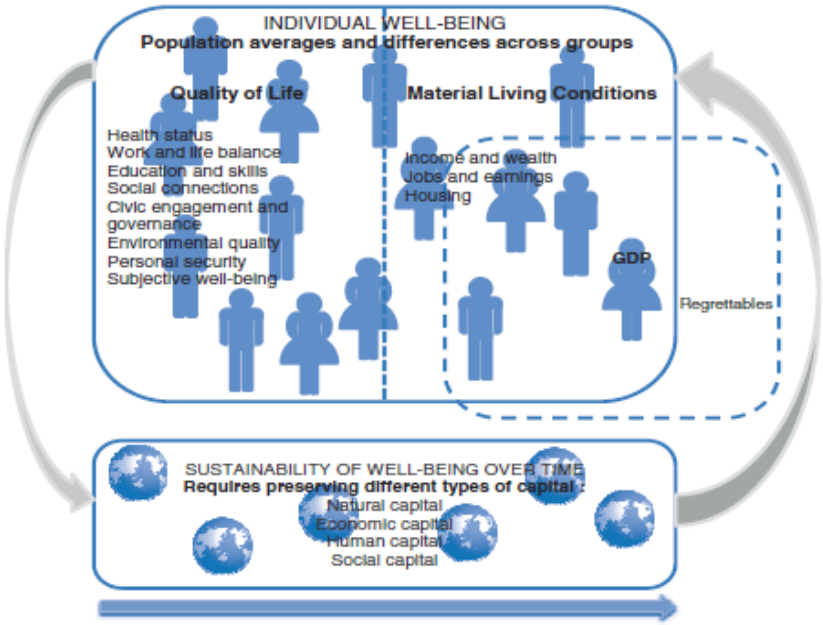
The index is not conceptualized to develop a ranking based on a single factor across countries, although it allows comparison. Rather, it has a participatory character and invites users and policymakers to weigh different indicators of life quality according to their preferences in a publicly-available database (http://stats.oecd.org/Index.aspx?DataSetCode=BLI).

The conceptual framework does not build upon a single theory, as "(…) there is no single definition of well-being (…)"; rather, it uses previous OECD work, for example the work by Stieglitz et al. (2009), which suggests that well-being can be determined by three pillars: "i) material living conditions; ii) quality of life; iii) and sustainability […]" (see Figure 1). However, the report is strongly influenced by the concept of *individual capabilities* (Sen 2001) and focusses on the improvement of conditions under which choices are made, and people's abilities to transform resources into given ends, such as health.

3.1.2. ***Measurement framework and indicators***

The Index has identified 11 dimensions as being essential to well-being, derived from the three pillars, as described above, which lead to an inclusion of the dimensions as shown in figure 1. *Income and wealth*, *jobs and earnings* and *housing* are summarized under 'Material Living Conditions', the other topics are included in the category of 'Quality of Life' indicators.

Figure 1: The "How's Life?" framework for measuring well-being and progress



Further, the index concentrates on *well-being outcomes*, as opposed to well-being drivers measured by input or output indicators, and it looks at the *distribution of well-being* across individuals, particularly at disparities across age groups, gender, income and socioeconomic background. The question of adaptation is not addressed in the framework.

3.1.3. Operationalization and data

The indicators used for the suite are divided into the categories *headline indicators* and *secondary indicators.* In particular, the former ones must have a sufficient data quality to allow international comparison, as well as comparisons over time. The latter are used to draw complementary evidence. They cover more specific aspects and have limited country coverage or sources that were deemed less robust.

Concerning *data sources,* the indicators recur mostly on official data, such as from national statistical accounts or official OECD surveys. However, if there are no adequate official data available, for a pragmatic solution, non-official data is used as 'place holder', such as from the Gallup World Poll[3]. Furthermore, the OECD Better Life Initiative is trying to improve the official data collection relevant for the different categories across countries by convincing them to become more active, as well as by developing further indicators themselves.

[3] The Gallup World Poll is conducted in approx. 140 countries around the world and is based on a common questionnaire translated into the predominant language of each country. With few exceptions, all samples are nationally representative of the population aged 15-and-over in the entire community, including rural areas. Problems relate to sample sizes of max. 1000 in many countries

An overview of the headline indicators, their content and underlying data sources is given in Table 1, while an overview on the quality judgements is given in Table 2.

Table 2: Structure of the OECD Better Life Index

Pillar	Topic	Headline indicator	Target concept
Material Living Conditions	Income and Wealth	Household net adjusted disposable income per person	Current and future consumption possibilities
		Household financial net wealth per person	Current and future consumption possibilities
	Jobs and Earnings	Employment rate	Quantity of jobs
		Long-term unemployment rate	Quantity of jobs
		Average gross annual earnings per employee	Quality of jobs
	Housing	Number of rooms per person	Quality of housing
		Dwelling without basic facilities	Quality of housing
Quality of Life	Health Status	Life expectancy at birth	Length of life
		Self-reported health status	Morbidity in different dimension
	Work and Life	Employees working very long hours	Work-life time balance
		Time devoted to leisure and personal care	Work-life time balance
		Employment rate of women with children of compulsory school age	Ability to reconcile family and work
	Education and Skills	Educational attainment	Quantity of education
		Students' cognitive skills	Quality of education
	Social Connections	Social network support	Personal relationships
	Civic Engagement and Governance	Voter turn-out	Civic Engagement
		Consultation on rule-making	Quality of governance
	Environmental Quality	Air quality	Quality of environment
	Personal Security	Intentional homicides	Opportunity to live in a safe environment
		Self-reported victimisation	Opportunity to live in a safe environment
	Subjective Well-being	Life satisfaction	Evaluation of life
		Affect balance	Positive and negative feeling

3.1.4. Further relevant observations

- The measurement framework and composition of indicators are based on a very detailed understanding of the well-being concept and its measurement approaches. It meets quality criteria, such as including a long-term perspective, combining different forms of well-being measures, and accounting for distributional effects. It refers to work on alternative measurement

approaches of subjective well-being that either focuses on a more cognitively *evaluated* life satisfaction (Layard 2005) and happiness (Veenhoven 2009) or a perspective that emphasizes the affective or *experienced* life satisfaction (Kahneman et. al. 2004: 429–434)

- Methodological rigour (quality criteria for indicators, etc.) can help define quality standards for the FCI. However, the usage of official data from a national level seems not entirely appropriate for a community-focused index.
- Due to a focus on secondary data, there is limited information available on issues regarding data collection processes. However, some interesting methodological perspective is given to follow, such as the Cantril ladder for the monitoring of subjective well-being[4].
- The OECD Better Life Index includes a long-term perspective based on the concept of economic, social, human or natural capital stocks. In particular , there have been studies on the manner in which decisions are made that affect these stocks, such as excessive consumption of today's resources and inadequate investments in future capital stocks, or, as well, the imbalance between the different stocks (cf. operationalization). However, due to methodological problems, the focus in this version is on environmental and, to a lesser extent, human capital issues.

3.2. Social Progress Index

Source:	Porter, M. E., Stern, S., & Loria, R. A. (2013). *Social Progress Index 2013*. Washington, D.C.
Abstract:	This index aims at providing an integrated framework that covers all NON-economic aspects of welfare, while other new welfare measurement approaches mostly combine both perspectives. The index has been developed by several prominent researchers with a business and foundation background. It strongly emphasizes a network approach in the creation of social progress, for which the index is proposed to serve as joint orientation.
Responsible Institution:	Social Progress Imperative
Access Index / Data:	http://www.socialprogressimperative.org/data/spi

3.2.1. ***Background and theoretical foundations***

The indicator was developed by the organizations *Social Progress Imperative,* with the involvement of Harvard Professor Michael E. Porter. It fully concentrates on non-economic indicators, which allows for the examination of the relation between social progress and economic development. Addressed are governments, non-profits and private businesses, and collaboration is emphasized.

[4] http://www.gallup.com/poll/122453/understanding-gallup-uses-cantril-scale.aspx

The indicator allows and reports rankings on each level: total index, main topics and singular items. It takes a holistic approach and claims that due to the breadth of indicators, the framework is relevant for all countries, ranging from very poor nations that have not yet met the essential needs of many citizens to advanced nations enjoying high levels of well-being and well-functioning communities. However, it is still in a beta status, and the authors plan to expand the items as well as the sample size of countries from 50 to 120.

Theoretically, the model draws heavily on the capability approach pioneered by Amartya Sen, which emphasizes the multidimensional nature of well-being and the importance of freedom of choice.

3.2.2. ***Measurement framework and indicators***

The index disaggregated social progress into three dimensions:

1. *Basic Human Needs*: Does a country provide for its people's most essential needs?
2. *Foundations of Well-being*: Are the building blocks in place for individuals and communities to enhance and sustain well-being?
3. *Opportunity*: Is there opportunity for all individuals to reach their full potential?

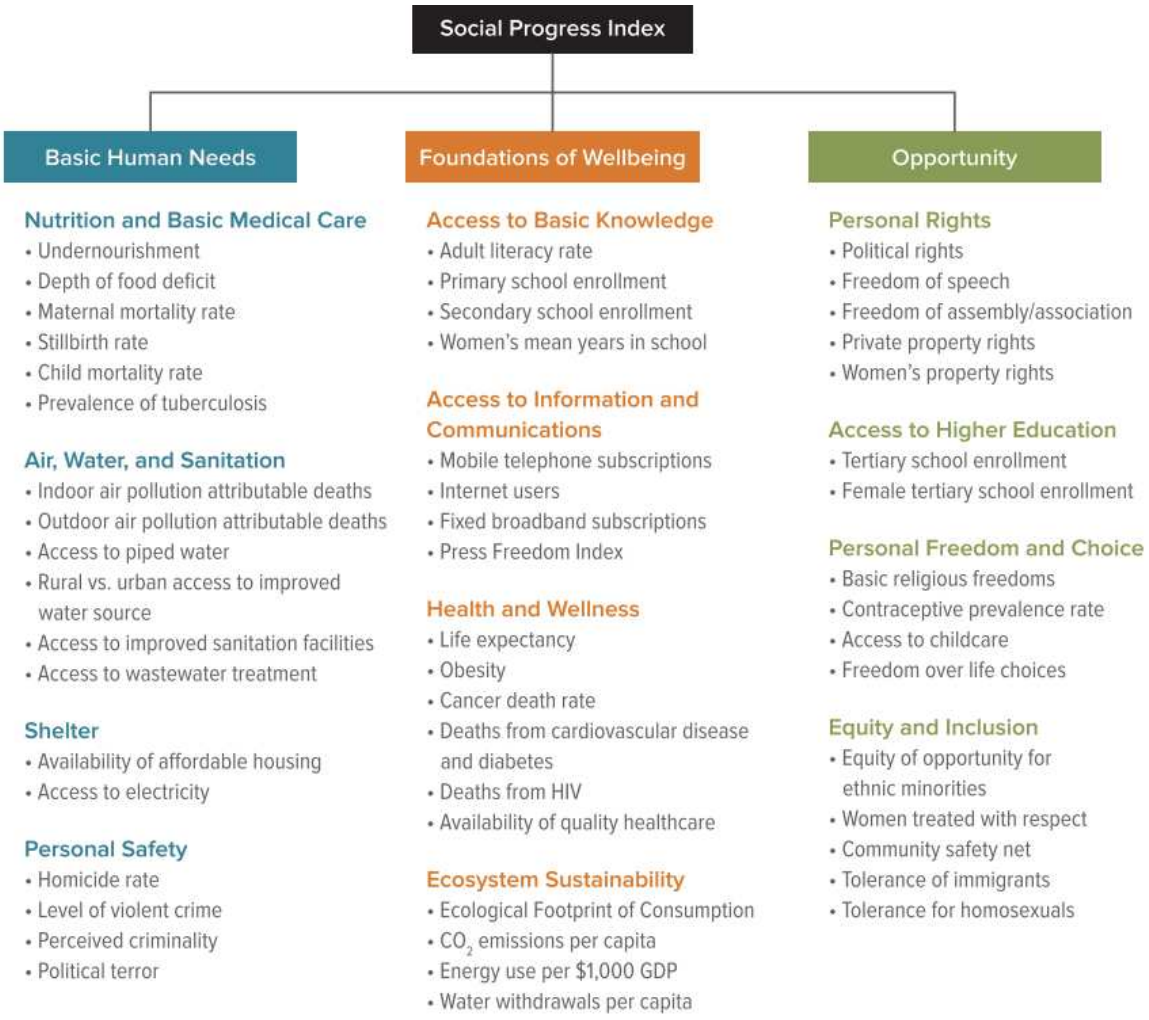
The three dimensions roughly mirror the progression that many individuals, families, communities, and societies go through in achieving higher and higher levels of social progress. Each dimension is comprised of four indicators with a varying numbers of sub-items (see Table 2). It is based exclusively on indicators of social outcomes.

The Index does not take a longitudinal or sustainability perspective, but posits to be able to do that in the future, at a time when data has been collected over several years. However, ecosystem sustainability is considered as a topic. The questions of *distribution of well-being,* as well as adaptation, are not addressed in the framework.

3.2.3. ***Operationalization and data***

All three dimensions are weighted equally in the overall index; each of these dimensions is calculated as the sum of four components, each of which is equally weighted. Each component is composed of differing numbers of indicators which measure as many valid aspects of the component as possible. These indicators are aggregated using a weighted average, where the weights are determined by factor analysis (*principal component factor analysis*).

Figure 2: The *Social Progress Index* framework



All data are secondary data, and most indicators either range from scores of 1–5 or from 0–100, which means they are constructed to have clear upper and lower bounds. They were all transformed that higher values meant more social progress, and by a linear transformation they were all shifted into values between 0 and 100 to allow comparison. The overall index is calculated as the unweighted sum of the three dimensions. As such, the overall index is calculated as:

$$Social\ Progress\ Index = \frac{1}{3} \sum_{Dimensions} \left(\frac{1}{4_k} \sum_{\epsilon Dim.} Component_k \right)$$

The Social Progress Index has the potential to range between zero and 100. In our initial sample of 50 countries, the lowest observed score was 32.13 and the highest 64.81.

*3.2.4. **Further relevant observations***

- Different dimensions with increasing level of wealth contribution (basic needs, foundations of well-being, opportunity) provide interesting insights into country specifics, i.e., Costa Rica performs extraordinarily well in terms of opportunity and foundation of well-being, but is weak in the fulfilment of basic human needs due to strong social differences along globalization.
- Relying on the concept of *Collective Impact* (Kania & Kramer 2011), which emphasizes collaboration that is guided by a common agenda, a shared measurement system, mutually reinforcing activities and joint backbone support organizations, the index will be further developed by a network of for-profit, non-profit and academic institutions/think tanks in an open process.
- Choice of indicators was affected by the quality and quantity of data available on social progress (see quality criteria).

3.3. Gross National Happiness Index

Sources:	Ura, K.; Alkire, S.; Zangmo, T. and Wangdi, K. (2012): A Short Guide to Gross National Happiness Index. Thimpu: The Centre for Bhutan Studies. Fioramonti, L. (2013): Gross Domestic Problem. The Politics Behind the World's Most Powerful Number. London and New York: Zed Books.
Abstract:	The GNHI is supposed to provide policymakers and public authorities of Bhutan with detailed information on the level of happiness in the country in order to guide public policy towards improving the conditions of not-yet-happy people. Overall, the GNHI aims at orienting the people of Bhutan towards happiness as a national aim. Happiness is understood in a multidimensional way, based on Buddhist thought and strongly related to national traditions and culture. Methodically, the index is based on the Alkire-Foster method, a complex approach towards measuring, weighing and analyzing multidimensional phenomena.
Responsible Institution:	The Centre for Bhutan Studies, Thimpu, Bhutan.
Access Index / Data:	http://www.grossnationalhappiness.com/wp-content/uploads/2012/04/Short-GNH-Index-edited.pdf www.grossnationalhappiness.com

3.3.1. ***Background and theoretical foundations***

The GNHI originated in 1972 when the "King declared Gross National Happiness to be more important than GNP, and from this time onward, the country oriented its national policy and development plans towards Gross National Happiness (or GNH)" (Ura et al. 2012: 6). It is explicitly mentioned in the constitution as the aim of national policymaking. GNH relies on a multidimensional understanding of happiness, influenced by national culture and Buddhist thought. Thus, it includes commonsense indicators such as living conditions, but also pays attention to issues such as the use of time, spirituality and cultural diversity, containing variables such as Driglam Namzha (formal Bhutanese etiquette).

3.3.2. ***Measurement framework and indicators***

The GNHI of 2010 is structured along 9 domains of equal weight, composed out of 33 slightly-weighed indicators (see Figure 1). Unpacked, indicators are based on 124 variables. Weights of variables differ according to their level of subjectivity. A threshold level of sufficiency is set for each variable.

3.3.3. ***Operationalization and data***

The GNHI is based on primary data only and no use of secondary data such as national statistics is made. In the 2010 survey, interviews were conducted with 7142 people in all 20 districts of Bhutan. The survey is representative regarding district and area level, gender and age, and thus decomposable for analytical purposes. The present approach is based on a 2006 pre-pilot and a 2008 survey and has constantly evolved since then.

Figure 3: The nine domains and 33 indicators of the GNH index (Ura et al. 2012: 13)

*3.3.4. **Further relevant observations***

- The index is linked with a set of tailor-made policy and screening tools to enable application by the relevant authorities. In addition, measurement methodology is supposed to be simple enough to be communicated to and understandable by general public, illustrated by case studies.
- Due to its origin in royal decree and its orientation towards public authorities, the Index is highly political in nature and seems to be characterized by a considerable degree of paternalism rather than participation.
- The GNH goes to great length to ensure representativeness on different levels of the country.
- In the framework of the GNH, a cut-off point is defined for each indicator: achievements are not counted if they exceed a pre-defined level of sufficiency. This way, incentives are set towards *decreasing* the share of the population with the lowest levels rather than increasing top levels of happiness.

3.4. An Action Agenda for Sustainable Development (Post 15)

Source:	Leadership Council of the SDSN (2013): *An Action Agenda for Sustainable Development. Report for the UN Secretary-General*.
Abstract:	The Action Agenda is a sequel to the Millennium Development Goals which aspired to end extreme poverty by 2015. It is supposed to further pursue this goal, if in the framework of a somewhat more encompassing agenda, for the next 15 years from 2015 to 2013. It aims at mobilizing "the world around a limited number of priorities and associated goals" (Leadership Council 2013: viii). For these purposes, the Agenda identifies the 10 most important global challenges and formulates goals accordingly.
Responsible Institution:	United Nations Sustainable Development Solutions Network, Paris and New York.
Access index / Data:	http://www.un.org/millenniumgoals/bkgd.shtml http://unsdsn.org/files/2013/06/130613-SDSN-An-Action-Agenda-for-Sustainable-Development-FINAL.pdf

3.4.1. Background and theoretical foundations

The Solutions Network has been set up by the UN Secretary-General in the context of the Post-2015 Development Agenda. This agenda is an UN-led process that aims at defining the future global development framework that succeeds the UN Millennium Development Goals[5], a set of eight global development targets to be reached by the end of 2015. The Agenda is supposed to "mobilize scientific and technical expertise from academia, civil society, and the private sector in support of sustainable-development problem-solving at local, national, and global scales" (SDSN website). It is organized around 12 thematic groups staffed with experts who try to identify common problems, potential solutions as well as to share best practices (http://unsdsn.org/).

3.4.2. Measurement framework and indicators

The Action Agenda does not formulate indicators in the strict sense of the word, rather, 10 major problems and according goals of equal weight, intended to initiate and enable collective global action. It

[5] The Millennium Goals are:

1. Eradicating extreme poverty and hunger,
2. Achieving universal primary education,
3. Promoting gender equality and empowering women,
4. Reducing child mortality rates,
5. Improving maternal health,
6. Combating HIV/AIDS, malaria, and other diseases,
7. Ensuring environmental sustainability, and
8. Developing a global partnership for development.

(Millennium goals website: http://www.un.org/millenniumgoals/bkgd.shtml)

thus aims at initiating a deviation from the global Business-as-Usual (BAU) path to a Sustainable Development path (Leadership Council 2013: 4). The report identifies vulnerable regions that are likely to suffer particularly high costs under the BAU scenario, namely the Sahel, the Horn of Africa region, plus Yemen, the Central African Great Lakes region, and parts of South and Central Asia (Leadership Council 2013: 4; 6-7).

3.4.3. Operationalization and data

The 10 major goals are broken down and operationalized into 30 more detailed Targets.

3.4.4. Further relevant observations

- Similar to the open method of coordination used by the EU, the post-2015 Agenda serves the political purpose of setting a common agenda for a multitude of different stakeholders who may pursue these goals in different, not necessarily connected, ways.
- On the one hand, the post-2015 process is a hyper-technocratic exercise that is far removed from the level on which the FCI is supposed to work. On the other hand, the collection of development goals, while providing a very high level of aggregation, presents an important inventory of the major challenges to be addressed by the FCI.

3.5. QUARS (Qualità Regionale dello Sviluppo – Regional Quality of Development)

Source:	Sbilanciamoci (ed.) (nd): The QUARS. *Assessing the Quality of Development in Italian Regions*.
Abstract:	The QUARS index has been developed in explicit opposition to the GDP. It is "based on the conviction that what is really important is not economic growth but a form of development that is as fair, sustainable and inclusive as possible" (Sbilanciamoci nd.: 21). It thus takes into account dimensions such as environmental sustainability, political and cultural participation, or the availability of social and medical services. The 20 regions of Italy are the units of analysis. Overall results are presented in a commented report that has been issued annually from 2004 – 2010.
Responsible Institution:	Sbilanciamoci!, Rome.
Access Index / Data:	http://www.sbilanciamoci.org/docs/misc/eng/quars.pdf

3.5.1. ***Background and theoretical foundations***

The QUARS has been developed and issued by Sbilanciamoci! – a network of 51 associations, NGOs and other actors of civil society working on issues such as globalization, peace, environment, and ethical finance. It was set up to propose policy alternatives with a focus on social and environmental priorities (Sbilanciamoci website) and thus to reorient national policy making. The composition of the index is based on numerous existing attempts to formulate alternatives to the GDP.

3.5.2. ***Measurement framework and indicators***

The QUARS of 2013 is structured along 7 dimensions of equal weight, composed out of 42 separate indicators. The different variables are aggregated into a single overall value for each region. Values are ranked according to their difference to the median value (mean is set as zero). Thus, rankings can be made across each of the seven dimensions, and for the aggregate of all dimensions. The seven dimensions are:

1. Environment: evaluation of the environmental impact deriving from the forms of production, distribution and consumption and proper steps taken to mitigate the relative effects.
2. Economy and labor: working conditions and income guaranteed by the economic system and redistribution policies eventually adopted.
3. Rights and citizenship: social inclusion of young people, the elderly, underprivileged people and immigrants.
4. Equal opportunities: absence of barriers, based on sex, against taking part in economic, political and social life.
5. Education and culture: participation in the school system, quality of the service, education of the population, cultural demand and offers.
6. Health: quality and efficiency of the service, proximity, general health of the population.
7. Participation: political and social participation of citizens. (Sbilanciamoci nd: 23).

3.5.3. ***Operationalization and data***

The QUARS is based on secondary data only. It makes use of a wide range of sources, from regional or national to EU statistics, opinion polls and indices of civil society organizations.

3.5.4. ***Further relevant observations***

- The QUARS methodology aims at making regional information comparable. As a result, an overall ranking becomes possible, which is a major asset in terms of communication and outreach. Since

the QUARS is mainly a political tool, it is not supposed to have immediate application (at least not initially).

- However, the possible learnings for the FCI are probably limited. The explicit orientation towards comparability does not seem to make much sense for an index that needs to be highly sensitive to local/regional circumstances.

3.6. Genuine Wealth Values Assessment / Genuine Well-Being Indicator (City of Leduc)

Source:	Anielski, M., & Wilson, J. (2006). *City of Leduc 2005 Genuine Well-being Report*.
Abstract:	The index examines well-being in the Canadian town of Leduc, drawing on a basic method that had been used in similar context before. This method strongly emphasizes a participatory design by conducting qualitative interviews, both for identifying relevant welfare indicators as well as for balancing quantitative results (with benchmark rather than a ranking perspective) with qualitative results.
Responsible Institution:	City of Leduc, Anielski Management Inc. and others
Access Index / Data:	http://www.city.leduc.ab.ca

*3.6.1. **Background and theoretical foundations***

The index was specifically developed for the town Leduc in the Canadian province of Alberta, which was formerly strongly focused on agriculture, but which is now very active in the business sector and oil industry. However, the index draws on a basic methodology (Genuine Wealth model) that has been applied in other communities in Northern America as well, and which illustrates a more comprehensive notion of wealth defined as the many conditions of life that contribute to individual and collective well-being, such as economic, social and environmental conditions.

However, unlike other national indicators, it does not allow building rankings across different regions, but is calculated with reference to different benchmarks (other towns in the region of Alberta, in general, historic data). For doing so, it visualizes results in a balanced scorecard (the community well-being flower). Also, the index is designed to be further enriched in the future with indicators relying on data currently not available.

Theoretically, the index draws on capital theory as well as well-being literature.

3.6.2. ***Measurement framework and indicators***

The assessment of well-being relies on several steps. Crucial is the ***Genuine Wealth Values Survey,*** which draws on qualitative interviews and an online survey with inhabitants (very low response rates!) among adults, students and seniors as individuals, families and as a community. It helps to assess the crucial indicators for the quantitative well-being assessment. As second crucial element, the *Leduc's* ***Genuine Well-being Index*** uses 117 economic, environmental, social, health, cultural, and infrastructure indicators organized according to 22 well-being themes, and further organized according to the 5 capital accounts of the Genuine Wealth accounting model: human, social, natural, built and economic/financial capital.

The long-term perspective is included in the sense that it could be said that to live sustainably requires a community maintain the overall integrity of its key five capital accounts (human, social, economic/financial, built and natural capital) living in such a way that it can "live off the interest" of these capital assets, as well as in some sustainability indicators.

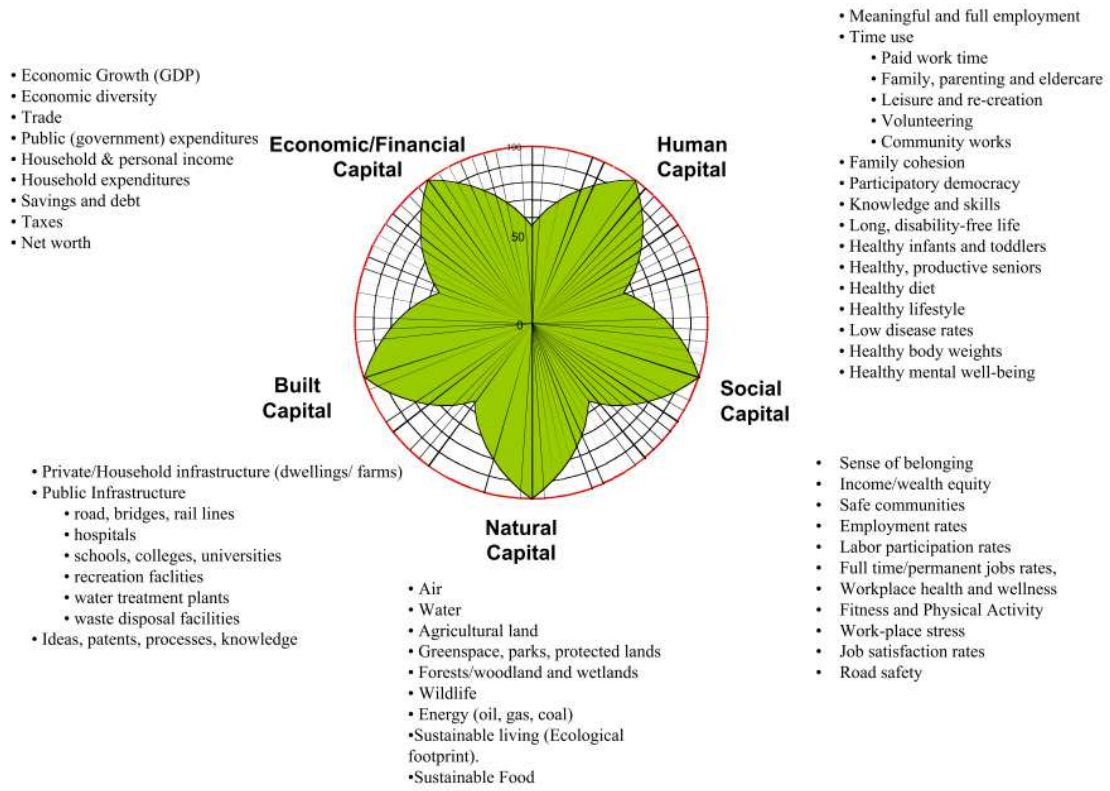
The distributional aspect is included in the qualitative interviews as well as in some indicator topics, such as equity and fairness.

3.6.3. ***Operationalization and data***

The Genuine Wealth model combines both quantitative and statistical indicators to provide an objective measure, as well as qualitative or perceptive subjective measures, of well-being. The interviews provided insights on which indicator to include in the index, perception data for the index, as well as results for itself, such as long lists of mentioned preconditions for well-beings. Interview data also include suggestions for improvement of well-being-relevant framework conditions.

The actual index composites gained several separately calculated well-being indices organized according to the five "capitals" accounts (human, social, economic/financial, built and natural capital), as well as ratings with relation to a benchmark and standardized (100 equals the average result of the benchmark; higher means better situation; lower means worse situation).

Figure 4: The *Community Genuine Wealth index* framework



The majority of the data used to derive each indicator came from Statistics Canada (e.g., Census and Community Profiles 2001) or local sources, such as health indicators from the Capital Health Authority, local municipal governments, and other surveys.

The authors consider their sample as balanced for the purposes of qualitative research; however, there was no explicit balancing process, meaning that a large share of the respondents had a higher income, no unemployed people were included in the sample, and two-thirds of respondents were women.

3.6.4. Further relevant observations

- The index provides a benchmark option (data of other towns, provinces, etc.) rather than rankings.
- The measurement framework built on different capital blocks could be an alternative for the framework of the FCI.
- The index includes a strong qualitative perspective that is used for the selection of the final items, as well as to collect data for the item itself. Illustrating personal stories and simple list of answers complement statistical data. Contrasting statistical data with perception data can reveal interesting discontinuities between what people feel and actually experience in terms of their conditions of life and statistical proxies.

- According to the authors, “The benefit of consulting directly with citizens in such exercises, although time-consuming, cannot be over-estimated.”
- Regarding the very low response rate to both the Internet, web-based survey and to hard-copy, paper surveys, the authors suggest that incentives (e.g., prizes) may be necessary in future to coax people to complete such surveys.

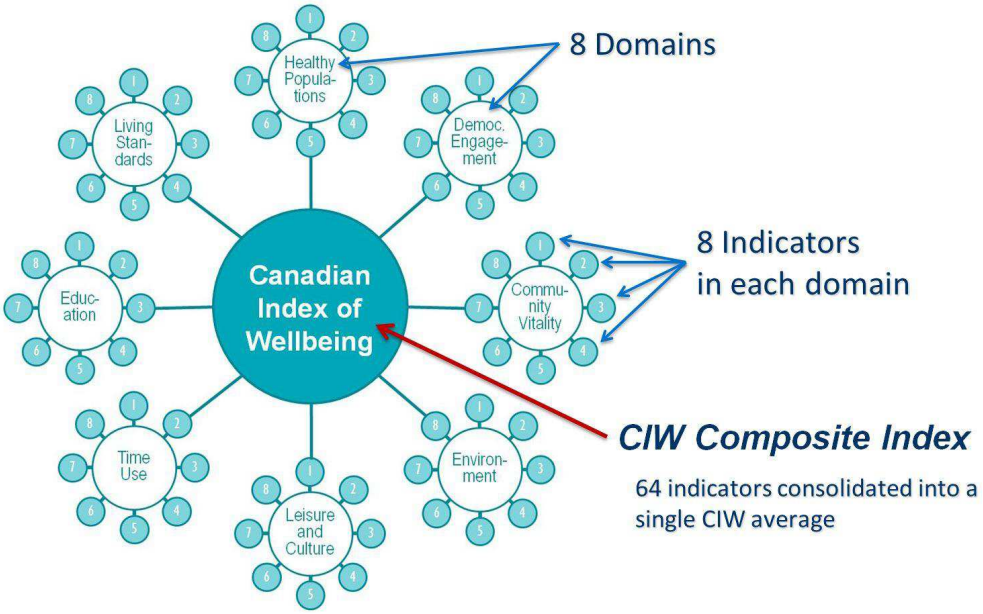
3.7. Canadian Index of Wellbeing (Focus on Community Vitality)

Sources:	Canadian Index of Wellbeing (2012). *How are Canadians really doing? The 2012 CIW report.* Waterloo, ON: Canadian Index of Wellbeing and University of Waterloo. Scott, K. (2010): Community Vitality. *A Report of the Canadian Index of Wellbeing.*
Abstract:	The Canadian Index of Wellbeing (CIW) is the attempt to orient a wide variety of possible stakeholders towards an alternative conception of welfare and enable evidence-based initiatives for change. Community Vitality (CV) is one of 8 domains of the Canadian Index of Wellbeing. CV is seen as a major factor in individual wellbeing. The concept of CV, as such very vague, is based on extensive scientific research.
Responsible Institution:	Canadian Council on Social Development for The Canadian Index of Wellbeing Network, based at the University of Waterloo.
Access Index / Data:	http://uwaterloo.ca/canadian-index-wellbeing/our-products/domains/community-vitality https://uwaterloo.ca/canadian-index-wellbeing/sites/ca.canadian-index-wellbeing/files/uploads/files/CommunityVitality_DomainReport.sflb_.pdf

3.7.1. ***Background and theoretical foundations***

The CIW was initiated by the Atkinson Charitable Foundation in 1999 to measure societal well-being beyond the GDP. The Index was created in a patient, evolutionary and quite participatory process, including ongoing and repeated consultations of Canadian citizens, indicator experts and practitioners, as well as potential users from politics, academia and civil society. This ongoing cycle of public engagement, consultation, and refinement seems to be one of the key characteristics of the CIW. It is supposed to ensure that the CIW is rooted in Canadian citizens’ values, grounded in community experience, shaped by technical expertise, and responsive to emerging knowledge (CIW website). Hence, the CIW is not a static tool but changing over time. Beginning in 2004, the index has been tracking change by means of an evolving set of indicators until today.

Figure 5: Composition of the CIW (CIW 2012: 13)



*3.7.2. **Measurement framework and indicators***

The CIW comprises eight domains supposed to be critical to individual well-being. Each of them is broken down into eight headline indicators, all equal in weight (see Figure 6).

Community Vitality is one of these eight domains. Its eight indicators focus on the quality of community *relationships*. They are supposed to measure "the strength, activity and inclusiveness of relationships between residents, private sector, public sector and civil society organizations that fosters individual and collective well-being" (CIW website). In practice, CV is composed out of security and social ties indicators (see Figure 3).

Figure 7: Indicators in the domain of community vitality (CIW website)

3.7.3. Operationalization and data

The CIW is a composite index, resulting in a single overall value. It can be broken down in values for each domain. It is based on quantitative secondary data "by credible public sources" (CIW 2012: 67), mostly on a national level. Remarkably, due to the unavailability of community level data, community vitality is measured based on national level data, too. Baseline values for each indicator have been set at the value of 100 for the first round in 2004, and percentage deviations have been tracked since then. In the future, the index is supposed to be complemented by qualitative primary data. The latter are gathered by means of a survey that is organized along the standard CIW dimensions and used in selected communities.

3.7.4. Further relevant observations

- The length of the process leading to the development of the CIW and the intensity of public, expert and user participation in this process seem remarkable.
- However, the difficulties inherent in defining the vague notion of community vitality pose the question of whether similar notions like 'flourishing communities' fare much better when it comes to guiding index development.

3.8. Addressing Conflict and Violence from 2015 (suggestion of indicator suite)

Source:	Saferworld. (2013). *Addressing conflict and violence from 2015. A vision of goals, targets and indicators*. London.
Abstract:	This index focuses on targets to achieve sustainable peace security and justice with a particular focus on the post-15 era (follow up of Millennium goals). It provides a detailed indicator set that does not only include outcomes, but also enabling conditions or input factors (capacities), and suggests a wide range of items that rely largely on secondary data.
Responsible Institution:	Saferworld, London
Access Index /Data:	http://www.saferworld.org.uk/resources/post-20152015-issue-papers-

3.8.1. Background and theoretical foundations

The proposed indicator suite is not part of a yet-realized index, but the suggestion of a future index. It is based on a goal oriented-perspective (sustainable peace, security and justice), rather than a well-being perspective. The proposed course of action relies on the post-2015 discussion in the UN Millennium Goals discourse. It is not founded on a specific theoretical concept; however, the paper provides a profound discussion on whether to choose globally-adjusted goals, targets and indictors (the position of the authors) mainly in favour of comparability, joint efforts and simplicity, or to make local adaptations and variations, which in some circumstances could be more precise.

3.8.2. Measurement framework and indicators

The paper suggests *not* taking *sustainable peace, security and justice* as single, holistic goal, but, rather, to integrate it with other goals that have been shown to be closely related, such as per capita income that is related to the global peace index.

In contrast to most of the other indices provided here, the suggested indices take a perspective on input factors or enabling conditions as well, and do not only focus on outcome. Therefore, "3-sided indicator baskets" are necessary, according to the authors:

- **Capacity Indicators** – is capacity developing to address the key issue?
- '**Objective' Situation Indicators** – do statistical measures of actual societal situations show that improvements are being achieved?
- **Public Perceptions Indicators** – does the public feel that an improvement is occurring?

Capacity indicators can be seen as mostly objective data as well.

3.8.3. ***Operationalization and data***

The framework distinguished between 13 targets that are all suggested to be measured with a wide range of indicators. For illustration purposes, we put one example in Figure 8. The targets are:

- All social groups have fair access to social services and resources
- Violence against women and girls is eliminated
- Women's economic empowerment
- Women's political empowerment
- All social groups have opportunities for decent livelihoods and a share in economic growth
- Least-developed countries are protected against scarcity of vital resources and destabilizing price shocks
- All social groups can express political opinions without fear and participate in the decisions that affect society
- All states manage revenue effectively and corruption is eradicated
- All social groups are free from violence and insecurity
- End impunity and ensure access to justice for all social groups
- Divisions within society are constructively resolved
- Eradicate transnational crime and stop the flow of illicit drugs, arms and war commodities

The suggested indicators mostly rely on secondary data or there is no data available so far, since the indicator had not been applied in practice before.

Figure 9: Indicators for the target "End impunity and Ensure Access to Justice for All Social Groups"

3.8.4. Further relevant observations

- The index includes a capacity dimension as an input or enabling condition (however, in the sense of Sen, capacities for personal freedom can be seen as an outcome as well).
- The index shows that even indicators with specific topics (such as peace and security) can include other factors, such as economic and social preconditions, since there is a high interrelation among different factors

3.9. Quality of Life Assessment Programme of the Aga Khan Development Network

Source:	AKDN (2013): Quality of Life Assessment Programme. Geneva.
Abstract:	The Quality of Life Assessment Programme (QLAP) is intended to provide guidance in areas in which the AKDN is particularly active. It measures the developments in domains that are of crucial relevance for individual quality of life. The QLAP combines quantitative surveys and qualitative studies, mostly primary data.
Responsible Institution:	Aga Khan Development Network, Geneva.
Access Index /Data:	http://www.akdn.org/quality_of_life/AKDN_QoL_brochure.pdf

3.9.1. Background and theoretical foundations

The QLAP originated in 2007. It is based on research on the quality of life in general and Amartya Sen's capabilities approach in particular. Indicators on Millennium Development Goals were also taken into account. Accordingly, quality of life is regarded as a multidimensional phenomenon that goes well beyond material welfare. Emphasis is on tracking change in a certain area and not on comparing data across areas. "The main aim is to analyze and adjust AKDN's interventions in the light of the findings" (AKDN 2013: 2).

The development was structured in three phases: A literature review as a first step was followed by exploratory studies to understand residents' own understanding of what constitutes a 'good life.' In the last step, the existing framework was finalized.

3.9.2. Measurement framework and indicators

The domains covered in the survey include the household economy, health, education, the natural and built environment, some aspects of associational life, voice and representation, as well as overall quality of life. The qualitative research focusses on changes in livelihoods, access to and quality of health and education services, aspects of social relations and associational life, issues of voice and representation, and concerns and aspirations among different population groups such as youth.

3.9.3. Operationalization and data

The approach to measuring reflects the insight that well-being results out of an interplay of subjective and objective material and social elements. It thus makes use of mixed methods, combining a quantitative household survey, to gather representative data which can be tracked over

time, and qualitative on-site research (group discussions and interviews). The intent is to gain in-depth background knowledge that is helpful in interpreting the results of the quantitative study, in capturing variation and in elucidating more complex phenomena and processes. Assessments based on the framework are carried out every three-to-five years.

3.9.4. ***Further relevant observations***

The approach is of particularly high interest to the FCI. It is recommended that options for collaboration with the AKDN be explored to profit from their experience.

4. Discussion

In this section we will review some crucial issues and key findings for the creation of a measurement approach based on the introduced indices and their different backgrounds and specifics.

4.1. Selection of categories, topics and items

Most indices follow a two or three-level structure that distinguishes between concrete ***indicators*** (also *items*), *topics* (also *themes*, *domains*), and – in some cases – *categories* that group different topics on the highest level (also *pillars*, *dimensions* or *capital accounts*).

On the level of *categories*, we found the following different distinction logics:

- Some indices distinguish between *material and more social/immaterial living conditions* (i.e. OECD Better Life Index).
- Others are organized in an *ascending order with regard to human needs*. They start with a category of *basic human needs*, go on to *foundations of well-being* and then up to issues of *opportunities and personal freedom* (Social Progress index).
- Another interesting approach is the distinction of different types of capital (economic, social, human etc...) in order to provide a consistent theoretic frame (Genuine Well Being indicator)
- Some approaches follow a more normative perspective and formulate their categories and topics in terms of *goals* and *targets* (An Action Agenda for Sustainable Development; Addressing Conflict and Violence from 2015).

On the level of *topics,* we made the following observations:

- There is a rather standardized repertoire of topics that can be found in almost all indices, namely *economic situation, physical living conditions (e.g. housing), education, social relations/social*

capital, safety and *health*. *Subjective well-being* as a single category is included in most of the indicators as well.

- This is true for indices that focus on a specific topic, too. For example, security issues are related to economic situation or social relation as well.
- Only the Social Progress Index explicitly excludes economic data in order to enable comparison between its results and economic data.
- Beyond that, *civic engagement, governance* or *personal freedoms* are included as additional topics in some of the indices

On the level of concrete *indicators*, there is a wide variety of indicators:

- For each single topic a wide range of quite diverse indicators can be found. Hence, there is no way to determine which indicators are mostly used for which topic.
- Often the availability of secondary data seems to be crucial here (see section on Data collection methods below).
- Although the general topics might be identical, indicators can vary substantially depending on context. For example, in Canada, *physical living conditions* will include indicators such as *affordable housing*, while in developing countries it may refer to, *sanitation issues* or the *numbers of persons per room*.
- However, other indicators fit both contexts, such as *Income per capita*.

4.2. Composition of indicators

4.2.1. **Measurement framework**

Indices differ in the number of categories (between 2 and 6), topics (roughly between 10 and 20) and indicators or variables (up to 120). The numbers of single indicators/items within one topic vary, too (approx. between 1 and 10). Guiding factors for the selection are:

- Conceptual/theoretic framework (see the discussion above)
- Availability of data (criteria of rigour, especially in international indices; data collection problems)
- Complementarity of single items (i.e., different kinds of birth rates can be tested with statistical methods)
- Level of precision

4.2.2. **Objective and subjective data appearance and balancing**

The vast majority of indicators are objective; however, subjective data are often used as well. *Objective data* cover *structural* aspects such as available infrastructure, educational attainments, employment rates, birth and mortality rates, etc. However, they can also examine *institutional* aspects, such as

governance structures or legal frameworks, or the *normative* values within a society (i.e., regarding issues such as racism). In the literature, they are often referred to as objective well-being criteria. *Subjective data* is mainly (but not exclusively) used to explore *perceptions* of security, health status or the like. For the purposes of the FCI, it is important to note that there is a vivid discussion in literature which is related to self-reported subjective well-being. Some authors emphasize *evaluated* well-being or life satisfaction and happiness. This covers a more cognitive perspective (e.g. Layard 2005; Veenhoven 2009: 221–246) and asks for a general reflected estimation of well-being. *Experienced* well-being or life satisfaction, on the other hand, asks for positive and negative moods in a specific situation and covers a more affective perspective (Kahneman et al. 2004: 429–434). Both are considered as relevant. The latter is supposed to be less biased by memories or cultural differences, while the former is more practicable. Indicators such as the OECD Better Life index include both perspectives. Concerning the precise balancing process of subjective and objective data, we did not find many explicit statements within the indices methodology sections. Sometimes, it is simply regarded as important to include both, or no further explication is given.

Closely related to the question of objective and subjective data is the question of whether only *quantitative results* (surveys results, statistics etc.) are included, or whether additional *qualitative* results matter as well, for example to allow a better interpretation of the quantitative results or to derive implications for possible ways towards improvement (Genuine Well-Being Index Leduc). Again, there is hardly any discussion of these issues. Only the *AKDN Quality of Life Assessment Programme* argues for the relevance of particular types of data and methods to cover specific aspects of the theoretical framework. For instance, it assumes that a somewhat vague and complex issue such as voice and representation can better be catched by means of qualitative methods.

4.2.3. **Comparability**

Some of the items have a general character, while others are more context specific, particularly in terms of affluent vs. poverty context. If complete indices are context-specific, they often exclude comparisons with other indices. To address this problem in the poverty alleviation context, the *headcount ratio* (also Alkire-Foster method) has been developed. Using a standardized methodology that identifies the relative share of target groups that remain under different poverty thresholds, comparison can be facilitated (Oxford Poverty & Human Development Initiative 2013).

However, indices such as the OECD Better Life Index or the Social Progress Index claim to cover all kinds of countries and *topics* and *indicators* were chosen accordingly. They are designed for comparison since they allow building *rankings* across countries for each level of topics as well as for single indicators.

Other indices chose a different approach and developed a framework to enable *benchmarking* by comparing their own results with the average of comparable towns or regions. In this relative perspective, a community in Malawi could perform better than one in the Netherlands.

4.2.4. **Long-term perspective and distribution of well-being across individuals**

Two issues emerged that are relevant for the composition of indicators from a quality perspective. First, a cross-section perspective on well-being indicators might not be a good predictor of well-being in the future, or even in the case of the latter. Therefore, indicators such as the OECD Better Life Index or the Genuine-Well Being Index try to incorporate a sustainability perspective by conceptualizing capital stocks. For example, some indicators gather to which degree non-renewable resources are declining and, therefore, becoming unavailable for future generations.

Secondly, especially when gathering individual data for aggregation, it is important to examine the distribution of the results across different population groups, since there can be great disparities. Wealth can be concentrated in a small part of the population, or the subjective well-being of women can be substantially lower than that of men. Often, these disparities are correlated across dimension as well (e.g., low earnings increase the likelihood for lower educational achievement, poor health status, poor housing, etc.). Therefore, differentiated results across age groups, gender, income and socioeconomic background bring more precise results, particularly as a detection mechanism for interventions with a strong impact (cf. for example OECD Better Life Index).

4.2.5. **Calculation and weighting of different aspects**

As a second step, it has to be made clear how, precisely, the indicator has to be calculated. This is also important for questions of comparison, although the examined indices chose different approaches here. Summing up, the following questions emerge:

- Should all indicators be weighted equally within a topic?
- Should all topics be weighted equally within the categories?
- Should all categories be weighted equally in the general index (if there is one)?
- Are the results added up; will there be an average value?
- How can indicators be standardized, for instance by setting a benchmark level of 100?

4.3. Data collection[6]

4.3.1. **Data collection methods**

Most indices rely on secondary data. Primary data are collected by the *Gross National Happiness Index* in Bhutan, the *Genuine Well Being Index* in the Canadian City of Leduc and the *AKDN Quality of Life Assessment Programme* for a development context. With regards to data gathering, the latter two apply mixed methods.

[6] Research papers on the topic are still to be reviewed.

- The *Genuine Well-being Index* uses qualitative interviews as well as more quantitative questionnaires that are disseminated both online and in paper-and-pencil style. They emphasize the positive insights from the interviews (see also participation methods), while the response rate (under 2 %) for the questionnaire was very low both online and with paper-and-pencil. Therefore, the authors suggest the usage of incentives to increase participation.
- The *AKDN Quality of Life Assessment Programme* uses questionnaire-based surveys, as well as semi-structured interviews with individuals and small groups (group discussions). No information on response rates is available.

The motivation for primary data collection in the development context might, of course, be that reliable sources of secondary data are unavailable.

4.3.2. **Sampling process**

Information on sampling processes within the indices is limited as well. The *Gross National Happiness Index* as well as the *Quality of Life Assessment Programme* claim representativeness (the latter at least for their quantitative survey that addressed household heads and spouses). Qualitative data collection, on the other hand, has a more exploratory character; accordingly, the sample in *The Genuine Well-Being Index,* for example, is dominated by women and does not include unemployed persons. Again, further insights into these issues might be gained from primary data sources.

4.3.3. **Timing and frequency**

In the timing of data collection, different approaches are chosen.

- Some indices are updated in a continuous way (for example the OECD Better Life Index): secondary data are updated when available.
- For primary data collectors, we found little information. Depending on index, data are collected every 2 to 5 years.

4.3.4. **Participation**

With regards to the issue of participation in the data collection process and the design of the index in general, we found three interesting approaches.

- Drawing on Sen's argument that participation is an important capability, the OECD Better Life Index allows users to decide which topics they want to include in the analysis instead of providing a fixed menu.

- The Canadian Index of Well-Being, as well as the Genuine Index of Well-Being (Leduc), made use of interviews and stakeholder dialogues (including research institutions, local leaders, etc.) to identify the relevant topics before setting up their index.
- The Social Progress Index follows a network approach to further develop and adapt its indicators, and serves as a coordination tool for joint activities as well.

4.4. Major Implications for the FCI

4.4.1. ***Rationale***

The development of an index presupposes an explicit rationale: The ultimate purpose (e.g., remedying fragile states vs. aiming at flourishing communities) needs to be spelled out very clearly, and the same demand applies to the definition of fundamental concepts (e.g., 'flourishing'; 'community', etc.), the unit of analysis (e.g., individuals vs. communities), and similar essential features (e.g., context-specific and non-comparable vs. generic and comparable). Only under these conditions does it make sense to discuss categories and indicators. For instance, if one decides to focus more on remedying fundamental evils (because it may be easier to obtain broad consensus among stakeholders, users and local residents), it makes sense to define cut-off points for each index, determining a threshold at which additional increase and, hence, more efforts to enhance the situation become irrelevant. If, on the other hand, we aim at maximizing satisfaction, this is not a feasible option (or else the cut-off point has to be set at a wholly different level).

We recommend adopting an explicit remedial perspective focussing on the most universal grievances, rather than an ideal of community life. As a corollary to this suggestion, the individual and his or her wellbeing (determined and measured from a subjective as well as an objective perspective) should be regarded as the ultimate unit of analysis. This is not so say that the FCI should disregard the question for (dys-) functional social structures. Social capital, for example, can be seen as an asset of an individual person as well. However, a judgement of the value of any social arrangement should ultimately be based on its impact on the well-being of individuals.

When it comes to the question of how to relate to the theoretical discussions on the ultimate ends of remedial action, we suggest making systematic use of all the key determinants of human welfare introduced and discussed above, turning them into building blocks of the FCI structure. To be more precise, some categories should include questions for the availability of resources, asking, for example, for the existence of schools or medical infrastructure. Knowing that the existence of resources alone might be meaningless, we further suggest incorporating questions for the quality and accessibility of resources, in order to control for the capability (i.e., opportunity) criterion. Complementary to this, personal satisfaction with the situation in the specific contexts of the categories should be requested to check if availability of resources translates into personal well-being after all. Finally, as an overall category, we

suggest including quality of life in general (according to literature considering a more cognitively evaluated life satisfaction (Layard 2005) and happiness (Veenhoven 2009), as opposed to a perspective that emphasizes the affective or experienced life satisfaction (Kahneman et al. 2004), to find out whether or not the personal assessments of single dimensions translate into similar overall assessments.

Finally, when it comes to the issue of comparability vs. specificity, in the context of fragile communities it seems to be more important to design a highly context-sensitive framework. On the other hand, comparing the present situation with past and future situations, i.e., the capacity to measure developments over time, is certainly of crucial importance to the FCI.

*4.4.2. **Further recommendations***

Scope and development

The range of indicators shows that, in principle, hundreds of indicators and variables are available. However, as soon as the ultimate purpose is defined, we suggest starting with a rather self-evident, limited set of the most important topics and indicators. At least in the beginning, robustness may be more important than completeness. The development of the FCI should be designed as an evolutionary process, allowing for expansion and modification.

Selection of indicators and data collection

As discussed above, the selection of the indicators must reflect the ultimate purpose of the FCI. However, additional criteria must be considered. Data quality and availability over time are important aspects. Similarly, subjective vs. objective indicators[7] provide complementary perspectives. Initially, primary vs. secondary data sources do not seem to be a key issue for any of the indices under review. They largely seem to follow the above-mentioned considerations of rationale, standardization and availability/quality first. However, for reasons that are easy to see, most indices have a strong preference for secondary data. The authors emphasize ideal *quality criteria* for the indicators and select and discuss their own indicators according to them. They refer to *international quality standards of measurement* considering the relevance and statistical quality of the data used.

According to our analysis, the FCI should prefer primary data collection methods and put emphasis on opportunities for participation of the community. Instead of working with an extensive set of objective indicators (or a rather arbitrary collection of these), as the first type of macro-level approaches does, it should focus more on subjective perception data to serve as a generic 'problem detector'. However, at the same time, it might include a comprehensive perspective if it covers the main dimensions of the most important macro-level indices by means of a standardized set of questions organized along these domains. The results of this survey could then serve as a point of departure and as guiding material for a

[7] Instead of talking about capacities, perception and objective, for reasons of coherence we suggest distinguishing between subjective and objective situations as most indicators do (OECD, Social progress index, OECD Better Life, Leduc).

next round of qualitative interviews intended to gather explanatory, in-depth background information to enable researchers to better understand the nature of the detected problems and to help design interventions accordingly

Participation

Available indices range from completely top-down (Gross National Happiness Index of Bhutan) to very participatory approaches. The Canadian Index of Wellbeing or the Social Progress Index might serve as an interesting example of how to combine a very long-term, evolutionary perspective with the integration of a multitude of different voices of different societal origins.

Cooperation

Many indices seem to have been developed without referencing each other, at least in terms of methodology, and, therefore, often remain somehow isolated. It has to be considered whether cooperation with already-existing indices, such as the *AKDN Quality of Life Assessment Programme,* can be realized. At least on the community level, this could help to develop the dominating approach in the long run, and might open access and resources that can be used for the improvement of the index.

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