

# Putting the Individual at the Center of Development: Indicators of Well-Being for a New Social Contract

Arthur Lyon Dahl

**Abstract** For decades, development has focused on the economy and the national scale of organization, and economic indicators such as GDP have provided measures of progress. Even UNDP's Human Development Index includes GDP/capita and is based on national averages. To show that people are at the center of the post-2015 agenda, measures of environmental, economic and social sustainability need to be balanced with indicators of the advancement and well-being of each individual human being, including material, social, cultural and spiritual dimensions of human progress. Such disaggregation would highlight disadvantaged minorities, gender and class differences, and other priority needs of specific populations. Governments, businesses and civil society organizations could identify how their policies and activities facilitate or hinder human progress at all stages of life. Every member of society and component group could see that development actions are just and equitable in objective and will be motivated to support them and to feel responsible for their implementation. The indicators would provide both measures of legitimacy and tools to evaluate the effectiveness of governance mechanisms. Development success would be measured by the extent to which society maximizes the fulfillment of each individual's human potential at each stage of life.

**Keywords** Indicators of well-being • Human development • Rio+20 summit • Value-based indicators • Millennium development goals

Development has been a subject of international debate for decades, in particular seeking to balance wealth creation and poverty reduction. It has focused on the economy and on the national scale of organization, and economic indicators such as Gross Domestic Product (GDP) have provided the principal measures of progress.

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The overwhelming weight given to economic indicators of development at the national level has frequently been criticized, and efforts to go beyond GDP are now well under way (Stiglitz et al. 2009; Ura et al. 2012a, b). However, these are still indices calculated at the national level, and they often hide significant discrepancies within a country, where a small but wealthy region, elite or economic sector can hide much larger pockets of poverty and deprivation in national statistics. Governments have now acknowledged the need to look for measures of development beyond GDP at the United Nations Conference on Sustainable Development (Rio+20) in June 2012 (UN 2012).

States assembled at the United Nations and other intergovernmental mechanisms find it much easier to adopt lofty goals and declarations for development than to implement them. After many broken promises, it is understandable that the public, and in particular that of the less affluent countries, has good reason to look upon any new commitments with skepticism. The Millennium Development Goals (MDGs) to reduce poverty in the world by 2015 were the first to be specified in numerical terms and to be accompanied by concrete indicators of their implementation (UN 2013). Their partial success, although due mostly to the rapid economic progress in China, provides some hope that the Sustainable Development Goals (SDGs) that are to succeed them might also lead to measurable progress in reducing poverty and steering the planet towards greater sustainability (UN HLP 2013). They could become the basis for a new social contract with the disadvantaged peoples of the world.

One aim of the MDGs was to increase the flow of official development assistance. However the continuing financial crisis and economic difficulties have reduced the capacities of most traditional donor countries to maintain their levels of assistance. It is therefore important that the SDGs take into consideration the efforts of the people themselves, and not just of governments. This requires a broader view of what needs to be measured.

Another problem with the national perspective is that it traps individuals within their country of origin. The present system of nation states imposes great injustices on individuals based on citizenship. An accident of birth determines each individual's nationality, and thus his or her opportunities and constraints for development. Countries generally want to reserve their support to their own citizens, or to others whom they choose to admit as advantageous to their economy and society, and may forcibly eject any others. Immigration is a particularly sensitive issue, and in times of economic difficulties produces a strong xenophobic reaction. Yet globalization has broken down barriers to capital movements, and the World Trade Organization is mandated to remove barriers to trade, while the other logical dimension of globalization, the free movement of people, is not on the political agenda. This is both due to, and helps to maintain, the extreme differences in wealth between nations. Yet in the near future, climate change and resource degradation are expected to displace hundreds of millions of people who will need to find new places to live. Measures of individual development should not be biased by citizenship or immigration status. Every human being has a right to develop her or his potential regardless of where they live.

The absolute priority given to the poor and the protection of future generations was already included in the Brundtland Commission definition of sustainable development (WCED 1987, p. 43). The High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, established by the United Nations Secretary-General after the Rio+20 UN Conference on Sustainable Development, has identified the eradication of extreme poverty and a core focus on sustainable development as the heart of what should be a new social contract (UN HLP 2013). Balancing these two goals represents a difficult challenge, since poverty eradication requires the creation and/or redistribution of wealth and resources, while sustainability requires that human society and its global economy reduce their impact to respect the planet's environmental constraints and potentials. Economy and ecology tend to lead in opposite directions (Dahl 1996). The challenges of climate change, sustainable energy and food security, to mention a few, show that development as pursued over the last several decades has taken us far beyond planetary limits (Rockstrom et al. 2009). One cause has been the very narrow view of development. There are entire areas missing, mainly because the debate has been framed largely in economic and materialistic terms, when we know that "development" to achieve "well-being" is a far more complex undertaking that has important psychological, social, cultural and spiritual dimensions.

The materialist perspective reduces human beings to competitive, insatiable consumers of goods and to objects of manipulation by the market, with an intractable conflict between endless individual consumption and humanity's collective need for equitable access to resources. We desire a world of peace and prosperity, but much of economic and psychological theory depicts human beings as slaves to self-interest. Yet it can be argued that well-being for everyone necessitates a more just and sustainable social order. This would require qualities like moderation, justice, love, reason, sacrifice and service to the common good, which must be harnessed to overcome the traits of ego, greed, apathy and violence, which are often rewarded by the market and political forces driving current patterns of unsustainable consumption and production, in which the well-being of a few is attained at the expense of the many (BIC 2010). A new social contract must have a broader view of human well-being founded on ethical principles.

## Human Well-Being

Addressing the concept of well-being requires an exploration at the deepest levels of human nature. Who are we, and what is our purpose in life? For materialists, we are simply a social animal, and our well-being can come from meeting our physical and social needs. Humanists may add an ethical dimension of responsibility for our fellow humans and the environment. For many, the human experience is essentially spiritual in nature, rooted in the inner spiritual reality that we all share in common. Each of these leads to an emphasis on different levels of prosperity and well-being. Assuming that this is an inclusive hierarchy, addressing the highest level should respond to needs at all the others as well.

The ultimate purpose of development should be to improve the prosperity and well-being of each individual on this planet. UNDP has produced the Human Development Index (UNDP 2014) to focus on this in a collective way at the national level, but this hides significant disparities within countries. What is lacking is a way to operationalize the concepts of development to achieve well-being at the level of individuals (Dahl 2012a). It is often weaknesses in individual human capacity to create wealth, innovate, collaborate, manage, and build strong families and communities that are the primary barriers to effective development. Ideally, the best measure of successful development would be that it enables every human being to fulfill his or her potential in life both in cultivating individual qualities, personality and capacities and in contributing to the advancement of society.

In addition, well-being is not a static concept, but is expressed at multiple levels and in different ways throughout a lifetime. It is also experienced as relative both in comparison with others and in relation to the individual's own previous experience. Throughout the human life cycle, individuals develop and achieve well-being in several dimensions, including physical growth and health, security and safety, education, work, financial security, justice and fairness, human rights and freedoms, a place in the community, and cultural and spiritual identity. These dimensions are discussed in more detail below.

To show that people are at the center of the post-2015 social contract, measures of environmental, economic and social sustainability need to be balanced with indicators of the advancement and well-being of each individual human being, including material, social, cultural and spiritual dimensions of human progress. Such disaggregation would highlight disadvantaged minorities, gender and class differences, and other priority needs of specific populations (UNHLP 2013). Governments, businesses and civil society organizations could identify how their policies and activities facilitate or hinder human progress at all stages of life. Every member of society and component group could see that development actions are just and equitable in objective and will be motivated to support them and to feel responsible for their implementation. Such indicators would provide both measures of legitimacy and tools to evaluate the effectiveness of governance mechanisms.

## **Ethical Basis**

People will not support development programs unless they see that they meet their needs and are just and equitable in objectives. Without the commitment of the masses of humanity, implementation is impossible (BIC 1995). Justice must therefore be the foundation of any social contract.

Justice is the first virtue of social institutions, so laws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust. The rights secured by justice cannot be subject to political bargaining or to the

calculus of social interest (Rawls 1999). The present economic system, when not controlled by government regulation, is driven by greed and by ends of profitability that often justify unethical means, resulting in growing extremes of wealth and poverty. The sole reliance on economic indicators supports this, while adding social and environmental indicators can serve as a counterbalance.

A second ethical principle for a global social contract is the oneness of humankind. Injustices in the past have often been rationalized by claiming that justice only applied to citizens or to a superior race, class or culture. This is a denial of biological reality. Once you admit that the body of humankind is one and indivisible, you must accept that each member of the human race is born into the world as a trust of the whole (BIC 1995). Each of us thus bears a responsibility for the welfare of all humanity. This collective trusteeship constitutes the moral foundation of human rights, development policy and sustainability. Furthermore, in a world that has globalized, the welfare of each country and community can only be derived from the well-being of the whole planet.

There also must be agreement on the purpose of development. Obviously basic material needs must be met. Beyond this, most people would accept that there is a higher social, even spiritual purpose to life. In general terms, we could say that the real purpose of development is to lay foundations for a new social order that can cultivate the limitless potentialities latent in human consciousness (BIC 1995). It follows that the ultimate function of economic systems should be to provide the peoples and institutions of the world with the means to do this. Wealth creation is necessary, but the goal should be to universally enrich the masses. Society therefore needs new value-based economic models to support a dynamic, just and thriving social order that is strongly altruistic and cooperative in nature, provides meaningful employment for all, and helps to eradicate poverty in the world (BIC 1998). In a world where technology has opened up vast possibilities for development to those that possess it, it is unjust to sacrifice the well-being of the generality of humankind – and even of the planet itself – to the advantages which technological breakthroughs can make available to privileged minorities (BIC 1995).

## **Dimensions of Individual Well-Being**

There are many different ways to look at human development and well-being, from the viewpoints of various academic disciplines (psychology, sociology, education, anthropology, philosophy), or as defined in the many cultures and religious/spiritual traditions of the world. There have been governmental as well as academic efforts to define and measure human development, as well as documents adopted collectively by governments at the United Nations, such as the Universal Declaration of Human Rights, and the Millennium Development Goals. The following cross-comparison of several such sources draws out some widely-accepted dimensions of individual development necessary for well-being.

## ***Human Needs***

Psychological research has long identified what Maslow (1943) termed a hierarchy of needs:

- Physiological needs (breathing, food, water, sex, sleep, homeostasis, excretion)
- Safety needs (security of: body, employment, resources, moral certainty, the family, health, property)
- Love and belonging (friendship, family, sexual intimacy)
- Esteem (self-esteem, confidence, achievement, respect of others, respect by others)
- Self-actualization (morality, creativity, spontaneity, problem-solving, lack of prejudice, acceptance of facts).

While these are not necessarily hierarchical or always pursued sequentially, a deficiency at a lower level can interfere with individual development at higher levels. Later commentators have suggested that the relative importance of social needs (esteem) and higher individual needs (self-actualization) will vary between individualistic and more collective cultures. While our understanding of human needs has evolved far beyond Maslow’s “pyramid,” all its levels need to be reflected in any definition of human development.

## ***Characteristics of Being Human***

A similar perspective comes from recognizing four fundamental characteristics of a human being. The first is as a biological organism with purely physical requirements for life. Secondly, as a social organism, a person has emotional or psychological needs that can only be met through relationships with others in a family, community and society. Thirdly, as a thinking and reasoning being, there are intellectual needs and capacities to develop; Maslow himself recognized a desire to know and to understand. Finally, all religions and many cultures would identify a spiritual dimension of life as the highest realization of human purpose, including acquiring spiritual qualities, refining one’s character, and contributing to the advancement of civilization. To be inclusive, the measures of human individual development would logically include all these levels.

## ***Millennium Development Goals***

The first six Millennium Development Goals (UN 2013) address some of the most fundamental barriers to individual development and well-being:

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education

- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases

The dimensions of basic needs, health and education must obviously be included as necessary requirements for well-being, along with special efforts to ensure the development of the half of the human population that is female. Every life lost to poverty or disease is a complete failure to achieve well-being.

### ***Human Rights***

Another way to identify the dimensions that need to be included in individual human development is through the human rights agreed internationally in such instruments as the Universal Declaration of Human Rights (UN 1948). Denial of a human right is a denial of one or more enabling conditions for, or forms of, well-being. On this basis, we should include the dimensions listed in Table 1.

### ***Life-Cycle of Needs***

Well-being is not a fixed goal to be reached by each person at some point in time, but is reflected continually in a cyclical process of individual progress or evolution, from infancy and childhood to adulthood, reproduction and finally old age and death. Throughout this process, each individual has qualities and potentials to be discovered and cultivated. The types of development and their priority change at different stages of this life cycle. Where individual progress is initially dependent on others, and the family or some substitutes for it are primordial for healthy human development and well-being, autonomy increases until the individual has almost complete responsibility for setting and achieving objectives in life. The increasing dependence in old age may reduce well-being in a material sense, but there is clear potential for continuing advancement in spiritual virtues like patience and detachment.

The quality of individual development at one stage is often an important determinant of the development possibilities and limitations at subsequent stages. A child physically and mentally stunted by malnutrition, or emotionally impacted by abuse, will have reduced potential for many kinds of future development. Well-being would therefore need to be considered at different critical stages in the human life cycle.

**Table 1** Dimensions of individual well-being in the universal declaration of human rights (Article number)

Free and equal in dignity and rights (1) without distinction (2)
Life liberty and security of person (3) no slavery (4) no torture (5) no arbitrary detention (9)
Recognition before the law (6) equal protection, no discrimination (7) effective legal remedy (8) fair and public hearing (10) presumed innocent (11)
Privacy, family, home, correspondence, honor, reputation (12)
Freedom of movement and residence within State, right to leave country and return (13)
Right to asylum from persecution (14)
Right to nationality, and to chance nationality (15)
Marriage and family, protection of family (16)
Right to own property (17)
Freedom of thought, conscience and religion, and to change religion/belief (18)
Freedom of opinion and expression, to receive and impart information and ideas through all media regardless of frontiers (19)
Peaceful assembly and association (20)
Take part in government, to vote, equal access to public services (21)
Social security (22)
Economic, social and cultural rights for dignity and free development of personality (22)
Work, employment, favorable conditions, equal pay for equal work, just and favorable remuneration, protection against unemployment, social protection, form and join trade unions (23)
Rest and leisure, reasonable working hours, holidays with pay (24)
Standard of living, food, clothing, housing, medical care, social services (25)
Security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood (25)
Special care for motherhood and childhood (25)
Education, full development of human personality, understanding and friendship among all groups (26)
Cultural life, arts, scientific advancement (27)
Author's rights to scientific, literary or artistic production (27)
Social and international order to realize these rights (28)
Duties to community for free and full development of personality, respect rights and freedoms of others (29)
Meet the just requirements of morality, public order and the general welfare in a democratic society (29)

### ***Recent Indicators of Happiness and Well-Being***

The recognition of the inadequacy of purely economic indicators has led to a number of initiatives to “measure the immeasurable” in terms of human values, well-being and happiness. These are now producing methodologies that make it possible to consider these higher dimensions of human well-being in a quantifiable way.

Bhutan was the first country to assess the purpose of development through Gross National Happiness (Ura 2012a, b; <http://www.gnhc.gov.bt/>). This is an important attempt to capture a culturally-relevant view of both material and spiritual



**Table 2** Domains of Bhutan's gross national happiness

1.	Psychological wellbeing
	Life satisfaction
	Emotional balance (positive and negative emotions)
	Spirituality
2.	Health
	Self-reported health status
	Healthy days
	Long-term disability
3.	Education
	Literacy
	Educational qualification
	Knowledge
4.	Values
	Culture
	Language
	Artisan skills
5.	Socio-cultural participation
	<i>Driglam Namzha</i> (Way of Harmony: formal etiquette)
	Time use
	Working hours
6.	Sleeping hours
	Good governance
	Political participation
	Political freedom
7.	Service delivery
	Government performance
	Community vitality
	Social support
8.	Community relationships
	Family
	Victim of crime
	Ecological diversity and resilience
9.	Pollution
	Environmental responsibility
	Wildlife
	Urban issues
9.	Living standards
	Household income
	Assets
	Housing quality

development in nine domains with 33 clustered indicators containing 124 variables (Table 2). “In the GNH Index, unlike certain concepts of happiness in current western literature, happiness is itself multidimensional – not measured only by subjective well-being, and not focused narrowly on happiness that begins and ends with

oneself and is concerned for and with oneself. The pursuit of happiness is collective, though it can be experienced deeply personally. Different people can be happy in spite of their disparate circumstances and the options for diversity must be wide” (Ura et al. 2012a, p. 1). As the Prime Minister of Bhutan put it “We have now clearly distinguished the ‘happiness’ ... in GNH from the fleeting, pleasurable ‘feel good’ moods so often associated with that term. We know that true abiding happiness cannot exist while others suffer, and comes only from serving others, living in harmony with nature, and realizing our innate wisdom and the true and brilliant nature of our own minds” (Ura et al. 2012a, p. 7).

Japan has now announced plans to measure national happiness with 132 numerical indicators covering socioeconomic conditions, physical and mental health, and social relations, as well as intergenerational and international differences, and sustainability. The OECD is also developing international standard measures of well-being, and the European Environment Agency is working on a well-being index. Other countries and international organizations are also working on indicators of well-being and happiness.

In 2012, the Earth Institute of Columbia University launched the first *World Happiness Report* at the UN (Helliwell et al. 2012). This has drawn on data from the Gallup World Poll, the World Values Survey, the European Values Survey and the European Social Survey to assess subjective well-being or happiness, both as felt at one point in time (affective) and as evaluated in a reflection on life satisfaction. It demonstrates the validity and policy relevance of such subjective measures, and encourages their widespread use in other surveys. To explain the variations in happiness, it analyzes both external factors (income, work, community, governance, values and religion) and personal factors (mental health, physical health, family, education, gender and age).

Well-being or happiness indicators would represent the summary overall impact of successful individual development. They reflect an integrated perspective that would capture dimensions not shown in the individual characteristics or levels of development.

### ***Values-Based Indicators***

A recent research project in Europe on values-based indicators of education for sustainable development (Podger et al. 2013; <http://www.esdinds.eu>) has developed a variety of indicators for individual values such as empowerment, integrity, justice, trustworthiness, unity in diversity, and respect and care for the environment, that can lead to well-being for an individual and for a group. While these indicators are tools designed for use at the project and organizational level, they also favor behaviors that can strengthen social relationships and increase well-being collectively, as well as at the individual level (Dahl 2012b).

## ***Stages of National Development***

While human needs, potentials and desires are reasonably universal; the economic development context within which an individual is born and lives will condition many aspects of both the possibilities for and results of individual development and well-being. These range along a spectrum from a country or region with indigenous populations living traditional lifestyles; to an economically-poor country with rural subsistence farmers, primary and extractive industries and urban slums; through stages of industrialization, either with large multinationals and foreign direct investment, or with many small and medium companies and a few large domestic conglomerates; to a largely tertiary and services-oriented economy. Measurements of individual development need to reflect and be responsive to the individual possibilities at each of these stages of development, and to show how increased development of individual potential helps a country to graduate from one stage to another. How well-being is achieved and perceived will also be very different at each of these stages of development.

## **Dimensions of Well-Being**

Combining all these approaches and extracting a synthesis has produced the following dimensions of human well-being in a more-or-less hierarchical arrangement from physical and environmental through economic and social to the more intangible.

### ***Physical Growth/Health***

- Access to basic foodstuffs, food security
- Access to clean water and sanitation
- Adequate standard of living
- Mental and physical health care, access to primary health care, preventive and curative medicine
- Access to energy (cooking, heating, lighting, modern appliances)
- Adequate shelter, housing
- Clean and unpolluted environment
- Possibilities for rest and recreation, physical fitness
- Special care for motherhood and childhood
- Assistance with disabilities and handicaps
- Care for the elderly

## ***Security and Safety***

- Life, liberty and security of person
- Protection from slavery, torture, arbitrary detention
- Security of home and family
- Safety from disasters, unsafe conditions, excessive risks of physical harm
- Protection from domestic violence
- Freedom from crime, corruption in everyday life
- Security from military action, violent repression, terrorism

## ***Education***

- Literacy, access to knowledge
- Formal, informal and continuing education
- Full development of human personality
- Education to understanding and friendship among all groups
- Work skills, retraining
- Ability to invest in education
- Access to and participation in scientific advancement and technology development
- Access to information and communications technologies

## ***Work***

- Right to work, employment, informal sector, subsistence, entrepreneurship opportunities for wealth creation, economic activity
- Just and favorable remuneration, equal pay for equal work
- Ability to meet own needs and provide for family
- Favorable work conditions, protection against unemployment, social protection, freedom of association, time for rest and leisure, reasonable working hours, holidays with pay
- Author's rights to scientific, literary or artistic production
- Access to extension services, technical advice, business management advice, legal advice, accounting services
- Business access to bank account, credit, microcredit, business license
- Effective process for litigation, dispute settlement, legal assistance

## ***Financial Security***

- Protection of real value of income, savings, capital and pensions from inflation
- Access to financial services: payments, savings, credit and insurance

- Reliable and adequate money supply, means of exchange, convertibility
- Protection from banking failures, fraud, undisclosed risks
- Security from theft, identity theft, unlawful dispossession, kidnapping, piracy, extortion

### ***Justice and Fairness***

- Recognition before the law, equal protection
- Effective legal remedy, fair and public hearing, presumption of innocence
- Low level of income inequality, fair distribution of wealth
- Upward mobility with effort
- Fair taxation, equitable share of responsibility

### ***Human Rights and Freedoms***

- Personal freedom and initiative, equality in dignity and rights, free development of personality
- Freedom of speech, right to hold and express opinions, to receive and impart information and ideas through all media regardless of frontiers
- Right to peaceful assembly and association
- Freedom of thought, conscience and religion, and to change religion/belief
- Right to privacy of person, family, home, correspondence
- Protection of reputation
- Right to own property
- Free movement and choice of place of residence
- Right to a nationality, and to change nationality
- Protection from all sorts of discrimination including gender, etc.
- Equal access to public services, right to social security
- Right to take part in government, to vote, to participate in political life

### ***Place in the Community***

- Personal status and dignity
- Social networks, friends to count on
- Marriage and family, procreation and raising children, united family circle, protection of family, divorce
- A community respecting public order and morality
- Community trust, reciprocity, resilience
- Participation and empowerment

- Mobility, public transport, access to markets
- Security in the event of incapacity, sickness, disability, widowhood, old age or other unavoidable lack of livelihood
- Old age security (pension etc.)

### ***Cultural and Spiritual Identity***

- Right to a cultural identity, heritage and cultural diversity, a sense of belonging (having, retaining cultural roots and knowledge)
- Having a value system, beliefs, ethics and morals
- Vision and purpose in life, hope for a better life, a better world
- Ability to develop the potential in human consciousness
- Participation in culture and the arts
- Access to beauty, to nature
- Overall evaluative well-being or life satisfaction

### **Indicators of Individual Development and Well-Being**

For each of the dimensions of individual development, fulfillment or well-being, it is possible to identify or formulate relevant indicators that assess the presence, absence or quality of each dimension at the individual level. These could show the numbers or percentage of a population with a positive value for the indicator, or could target the laws, institutions and processes designed to assist each individual to fulfill their life in that dimension. Indicators of well-being or happiness can also reflect the result of the development process for each person. Values-based indicators can also be used to assess the more intangible aspects of individual motivation and commitment to sustainable social, environmental and economic development.

Obviously it will not be possible to collect data from everyone, but statistical sampling procedures are sufficiently well developed to determine representative samples of each significant category of a population. Some data can be collected during population censuses, or with questionnaire surveys. With modern communications tools and data mining, and the reuse of data collected for other purposes, measures of many of these dimensions are within reach. After some initial intensive efforts, it is usually possible to recognize which indicators are highly correlated, and to select one that can represent a larger set.

A set of selected indicators could be compiled into an Index of Individual Development as a supporting tool for a New Social Contract. These could be measured as the percent of the population with the indicator, and/or the quality of the service or government performance in assuring that dimension for everyone in the country. Some sample indicators for each of the dimensions of individual development are shown in Table 3.

**Table 3** Sample indicators by dimensions of development

<i>Physical growth/health</i>
Healthcare provision for the birth of a child
Accessing primary health care (cost and access to primary health care facilities)
Adequate child nutrition (government programs and institutions that ensure adequate and nutritious food for the growth of every child)
Access to clean water and basic sanitation
Legal and institutional frameworks to assist the elderly
<i>Material welfare indicators</i>
Number of homeless people or families living in inadequate and unsanitary conditions
Access to on or off-grid electricity (including the time, steps and cost)
Meeting basic energy needs for cooking (access, cost, and health and environmental impacts)
Installing solar energy at home (availability, regulations, time and costs for domestic solar water heater or photovoltaic panels)
<i>Security and safety</i>
Access to insurance or other protection against disaster or theft
Availability of protection and support to women victims of domestic violence
Managing toxic chemicals (government environmental regulation in the public interest)
Legal protection (workers compensation and consumer protection legislation, and efficiency of local courts)
Causes of premature death in adults, including (a) acts of aggression, (b) work-related deaths, (c) traffic accident mortality, (d) deaths from natural hazards (drought, famine, earthquakes, storms, floods) etc.
<i>Education</i>
Access to school for every child to learn to read, write and calculate
Enrolling in school (steps, time and cost for enrolling a 7 year old girl into primary public education)
Percentage of (a) Urban boys (b) Urban girls (c) Rural boys (d) Rural girls that successfully complete primary education with basic literacy skills
Percentage of functional literacy in the country by gender, age group and class, caste or ethnic group
<i>Work</i>
Proportion of the population that works in: (a) the cash economy, (b) the subsistence economy, (c) the informal sector, (d) the illegal sector, or (e) non-waged work like housewife or raising a family
Legislation related to getting a job (worker protection measures and gender parity in employment regulations)
Government assistance to school leavers to find a job, craft or subsistence activity
<i>Financial system</i>
Buying a residence (regulatory environment for housing finance)
Opening a savings account (ease of financial transactions)
Paying taxes (measuring the payments, time and total tax rate for a typical individual)
Experience of corruption (payments to receive government services, bribes to avoid taxes or fines, receiving only partial entitlements)
Government provision of social security during unemployment, illness, or if handicapped
Government protection of the value of earnings, capital, savings and pension against inflation

(continued)

**Table 3** (continued)

<i>Justice and fairness</i>
Registering a newborn with country authorities (time, steps and cost)
Having an official household address (a key barrier to identification in many developing countries)
Getting married (capturing the bureaucratic red tape involved in complying with licensing regulations around marriage)
Getting a passport (regulations, requirements, time and cost to obtain the document necessary for international travel)
<i>Human rights and freedoms</i>
Protection of freedom of speech and right to receive and impart information
Freedom of thought, conscience and religion, and to change religion or belief
Right to privacy of person, family, home, correspondence
Right to own property
Free movement and choice of place of residence
Right to take part in government, to vote, to participate in political life
<i>Place in the community</i>
Recognition of personal status and dignity
Presence of social and family networks
Community trust, reciprocity and resilience
Registering to vote (possibility of participating in public elections)
Getting a cell phone (mobile) and regular connection (cost and procedures)
Obtaining Internet access (cost, regulations and possible censorship)
Accessing public transport (availability, time and cost)
<i>Cultural and spiritual identity</i>
Legal protection of cultural identity and heritage
Presence of a value system, beliefs, ethics and morals
Having a vision and purpose in life, hope for a better world
Opportunities for participation in culture and the arts
Access to beauty, to nature
Overall evaluative well-being or life satisfaction

## Values-Based Indicators of Individual Motivation

In addition to indicators of dimensions of human well-being, it can be useful to develop indicators of individual motivation to improve individual well-being and to contribute to the well-being and advancement of the group or community. Indicators of behaviors or attitudes can help individuals become more aware of what their values are, and where there might be inconsistencies between different values, or between their values and their behavior or lifestyle. They get closer to the root causes of an individual's unsustainable lifestyle, and can have an emotional impact with the power to motivate change. The aim is to increase self-awareness of one's positive sustainability values and to encourage their development, while signaling areas where improvement is needed.

Values-based indicators can be self-assessed through questionnaires, or measured through a variety of social science assessment techniques, such as semistructured



interviews, participant observation, focus groups, etc. The most useful indicators can measure individual behaviors and attitudes associated with these values. For example, a value statement could be assessed simply agree/do not agree, on a scale (not important-->very important) or by selection from a choice of statements expressing a range of feelings about an item: (i.e.: I hug trees for spiritual strength. Trees inspire and refresh my spirit. Trees produce the oxygen I breathe. Trees give me wood and paper. Trees are nice, but things are cleaner without them. When you have seen one tree, you have seen them all.)

The following values have been identified as relevant to motivations towards sustainable development, adapted for individual self-assessment (Podger et al. 2013; Dahl 2012b; <http://www.esdinds.eu>):

- Respect for the environment
- Empowerment
- Appreciating unity in diversity
- Trustworthiness/integrity
- Justice/solidarity
- Moderation and detachment from material things.

### ***Respect for the Environment***

These indicators assess whether the individual sees himself/herself as separate from the environment, or as part of it, dependent on it, and intimately linked to the natural processes of the biosphere and to the organisms with which we share it. Many indigenous peoples saw no separation between them and their surroundings. Many religions teach stewardship for God's creation. Science has demonstrated our environmental dependence and vulnerability in many ways. Regardless of its origin, the result is a desire not to cause environmental damage.

#### **Examples of Indicators**

- I value the natural world as a source of personal fulfillment
- I purchase environmentally sustainable products even if cheaper alternatives exist
- I try to make my recreation, social activities and celebrations environmentally friendly

### ***Empowerment***

Empowerment reflects the ability to act and to make a difference, an awareness that many drops can make an ocean. Its absence is a frequent cause of lack of motivation. In a community or educational situation, it can be the result of encouragement and accompaniment, and other positive reinforcement.

### **Examples of Indicators**

- I am encouraged to grow personally and reach my potential
- I feel that others respect me, as I respect them
- I can take risks, make mistakes and learn from my errors
- I do not have to compromise my personal beliefs or values
- I feel that I am able to effect change

### ***Appreciating Unity in Diversity***

The greater the feeling of unity between individuals or within a community, the greater their power to work together and to overcome differences. This reinforces teamwork and encourages innovation, since it includes the recognition that there can be many different solutions appropriate to different situations, and that not everyone has to do the same thing to achieve a shared goal. It inspires confidence in one's own abilities. It also overcomes prejudice and facilitates the appreciation of others.

### **Examples of Indicators**

- I listen to and respect other people's points of view
- I try to ensure that everyone is included
- I replace a negative feeling towards someone by a stronger positive feeling
- My community is richer because of its diversity

### ***Trustworthiness and Integrity***

Trust is essential to any positive group interaction. Someone who has integrity will rapidly be integrated into a group. Trustworthiness is the result of consistency between words and actions, and an inner as well as outer honesty. Cultivating these values facilitates group interactions, brings respect, and motivates consistency in sustainable behaviors.

### **Examples of Indicators**

- I am honest and meet my obligations even when there is no chance of being caught
- I follow through with my commitments
- I try to practice what I preach; my actions are consistent with my words
- I can be trusted with other peoples' money

## ***Justice and Solidarity***

Justice has already been highlighted as the essential foundation of a new social contract. It is also an important individual value, as it allows a person to see with his or her own eyes and not through the views of others. It has the power to tip the balance between self-interest and the common interest or the interests of others so necessary to achieve sustainable behaviors.

### **Examples of Indicators**

- I identify what is right for myself and do not rely on the opinions of others
- I try to help those less well-off than myself
- I take into account the needs of future generations
- I give voluntarily to support social causes
- I pay all my taxes

## ***Moderation, Detachment from Material Things***

For those tempted by the consumer society, these values can be a good guide to responsible living. Developing the capacity to distinguish needs from wants is an important step towards sustainable consumption and resistance to commercial manipulation. Again, these values are at the root of many spiritual traditions, and contribute to physical and mental health.

### **Examples of Indicators**

- I only buy what I really need
- I place no importance on status symbols
- I prefer to invest in social relationships rather than material goods
- I believe that wealth can be a barrier to spiritual development

### **Conclusions**

When sustainable development is considered in the wider context of human purpose and well-being presented here, it takes on a whole new meaning, in which its economic, social and environmental dimensions are fully integrated. At the same time, rather than seeming utopian and unattainable. It is precisely this emphasis on the social, cultural, ethical and spiritual aspects of well-being that can motivate changes in human behavior and drive a bottom-up

(continued)

transformation in human society across all its many and diverse components. This is essential to eliminating poverty through empowerment and increased capacity rather than the unsustainable charity of development assistance. The focus on the individual makes sustainable development immediately relevant. While global environmental problems and failures in economic and political systems may seem remote from individual concerns and possibilities of action, everyone can start to act to bring improvements in their relations with others within their local community and work-place, and to experience the self-reinforcing effect of visible results in improved well-being.

Creating new measures of development at the individual level will help to change the focus from creating wealth to creating well-being in a spirit of justice and equity. In addition, values-based indicators can make people conscious of their real desires and motivations, and build an emotional commitment to change. By getting the signaling right, we can measure implementation of the social contract for a just and sustainable society that enables every human being to fulfill his or her potential in life both in cultivating individual qualities, personality and capacities and in contributing to the advancement of civilization.

## References

- Baha'í International Community (2010) Rethinking prosperity: forging alternatives to a culture of consumerism, Bahá'í International Community's contribution to the 18th session of the United Nations Commission on Sustainable Development, <http://bic.org/statements-and-reports/bic-statements/10-0503.htm>
- BIC (1995) The prosperity of humankind. Office of Public Information, Haifa
- BIC (1998) Valuing spirituality in development: initial considerations regarding the creation of spiritually based indicators for development, a concept paper for the world faiths and development dialogue, Lambeth Palace, London
- Dahl AL (1996) The eco principle: ecology and economics in symbiosis. Zed Books/George Ronald, Oxford
- Dahl AL (2012a) Achievements and gaps in indicators for sustainability. *Ecol Indic* 17:14–19. doi:10.1016/j.ecolind.2011.04.032
- Dahl AL (2012b) Ethical sustainability footprint for individual motivation. Planet under pressure 2012 conference, London. <http://iefworld.org/ddahl12d>
- Helliwell J, Layard R, Sachs J (2012) World happiness report. Earth Institute, Columbia University, New York, <http://www.earth.columbia.edu/articles/view/2960>
- Maslow AH (1943) A theory of human motivation. *Psychol Rev* 50:370–396, <http://psychclassics.yorku.ca/Maslow/motivation.htm>
- Podger D, Velasco I, Luna CA, Burford G, Harder MK (2013) Can values be measured? Significant contributions from a small civil society organization through action research. *Action Res J* 11(1):8–30
- Rawls J (1999) A theory of justice, Rev edn. Harvard University Press, Cambridge
- Rockström J, Steffen W, Noone K, Persson A, Chapin FS, Lambin E III, Lenton TM, Scheffer M, Folke C, Schellnhuber H, Nykvist B, De Wit CA, Hughes T, Van der Leeuw S, Rodhe H, Sörlin S, Snyder PK, Costanza R, Svedin U, Falkenmark M, Karlberg L, Corell RW, Fabry VJ, Hansen J,

- Walker B, Liverman D, Richardson K, Crutzen P, Foley J (2009) Planetary boundaries: exploring the safe operating space for humanity. *Ecol Soc* 14(2):32, <http://www.ecologyandsociety.org/vol14/iss2/art32/>
- Stiglitz JE, Sen A, Fitoussi JP (2009) Report by the commission on the measurement of economic performance and social progress. <http://www.stiglitz-sen-fitoussi.fr>
- UN High-level Panel (2013) A new global partnership: eradicate poverty and transform economies through sustainable development, the report of the high-level panel of eminent persons on the post-2015 development agenda. United Nations, New York
- UNDP (2014) 2014 human development report: sustaining human progress: reducing vulnerabilities and building resilience. United Nations Development Programme, New York <http://hdr.undp.org/en/>
- United Nations (1948) The universal declaration of human rights. <http://www.un.org/en/documents/udhr/>
- United Nations (2012) The future we want, annex to resolution 1 in report of the United Nations Conference on Sustainable Development (A/CONF.216/16), Rio de Janeiro, Brazil
- United Nations (2013) The millennium development goals report 2013. United Nations, New York
- Ura K, Alkire S, Zangmo T, Wangdi K (2012a) A short guide to Gross National Happiness Index, Thimphu, Centre for Bhutan Studies, Bhutan. Available from Bhutan Gross National Happiness Commission. <http://www.gnhc.gov.bt/>
- Ura K, Alkire S, Zangmo T, Wangdi K (2012b) An extensive analysis of GNH index, Thimphu, Centre for Bhutan Studies, Bhutan. Available from Bhutan Gross National Happiness Commission. <http://www.gnhc.gov.bt/>
- World Commission on Environment and Development (1987) Our common future. Oxford University Press, Oxford