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Enabling Responsible Living

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A Multi-Level Framework and Values-Based Indicators to Enable Responsible Living

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Abstract

Efforts to enable responsible living require supporting frameworks and tools to bridge science and values at all levels from local to global. At the local level, community action is most effective in a village or neighbourhood where people will invest for the common betterment of their families and neighbours. Educational activities in and outside formal education for children, preadolescents, youth and adults should encourage action for responsible living based on the community's own values and vision of human purpose and well-being. Values-based indicators can help to measure the impact of sustainability education on behaviours in communities and organizations, as demonstrated in a recent pilot project. At the national level, in addition to formal curricular change, the media and diverse organizations of civil society from businesses to faith-based organizations can lead discussions of various dimensions of responsible living. Internationally, the debate on the future of sustainability around the Rio+20 conference has stimulated a re-examination of preconceptions and certitudes about individual and collective purposes and underlining the importance of values and ethical principles to sustainability. Linking local efforts to these international debates and implementing values-based indicators of education for sustainability will help to move from words to action for responsible living.

Keywords Community - Ethics - Indicators - Sustainability - Values

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1 Introduction

1.1 Relevance and Overview

Society operates at many levels, becoming increasingly complex as it has globalized, with multiple levels of organization. As human societies evolved, new levels of social structure, including institutions of governance, were first added as the geographic range of human interaction expanded from the local community to the international level, producing multilevel governance (Karlsson 2000, 2007). Other organizations of civil society such as guilds, trade unions, business federations, and scientific, cultural and sports associations were based on professional activities and personal interests or functions in a group. With the spread of information technologies, new kinds of organization are emerging as people associate, network and share in new ways. Each of these structures and relationships is founded on and communicates information and values that condition and drive human behaviour. Moral values state what is good and of primary importance to human civilization, and are usually given expression in ethical principles which guide decision-making and action (Anello 2008). Since the institutions of governance and social organization are founded on a set of explicit or implicit common values, knowledge of these values can contribute to understanding how these structures operate. Furthermore, each individual inherits or is educated with these values and combines and integrates them into a personal lifestyle. Since sustainability is essentially an ethical concept of responsibility for all of humanity, the natural environment, and future generations, its values need to be incorporated into institutional structures at all levels. Any effort to modify human behaviour towards greater sustainability must take into account the interrelationships between these levels and identify both opportunities for and obstacles to responsible lifestyles at each level if they are to have any impact. This chapter outlines some relevant characteristics of this multilevel framework and some tools to make the values dimension more visible and to assess its contributions to more sustainable behaviour.

1.2 A Systems Approach

To achieve sustainability in complex human/natural systems, many different components need to interact in balanced ways. A systems approach can help to bring some order to our understanding of the complexity of human society, based on an analysis of the nested systems that operate at different levels. Each system will have a certain internal coherence and autonomy, while being cross-linked in various ways to systems above and below it in the hierarchy of organization (Dahl 1996). Each will have certain required enabling conditions to function effectively, and processes of information flow and signalling that determine internal system

behaviour and maintain relationships with other systems. There may also be unique features or emergent properties that only appear at higher levels of organization. A typical example is the human body, composed of cells differentiated into organs performing unique roles within functional systems (nervous, digestive, hormonal, reproductive, etc.) composing a body that is itself dependent on an external environment, with emergent properties like intelligence, and serving as a functional unit in larger social and economic systems. Similarly, human society is structured in hierarchical levels from the family, community or neighbourhood, city, region, country to the planetary level, cross-layered with cultural or tribal, ethnic, religious, linguistic, professional and associative groupings and affiliations. The forms that information flow takes within and between systems are as diverse as the kinds of systems at different levels in the hierarchy. Often information is condensed into indicators that efficiently provide signals with a wider meaning. Where Gross Domestic Product (GDP) may be taken to indicate the state of wealth a national economy, pay slips and bank account statements may provide similar information for individual consumers. Indicators for the economic dimensions of human systems are reasonably well developed, if often misused or misinterpreted as measures of well-being. Some social indicators like infant mortality, educational levels or unemployment rates also signal important social dimensions. Much effort has gone into developing indicators of sustainability, mostly at the national level (Hak et al. 2007), but apart from the ecological footprint, few indicators have found much use to assess individual lifestyles and community sustainability.

While values may be the most fundamental dimension of information in social systems at all levels (Dahl 1996), it has been difficult to develop indicators of the values or rules underlying the operation of these systems and determining their goals and purposes. This is particularly relevant at the individual and community levels where values are important determinants of lifestyle and behaviour. Making this dimension more visible would facilitate and reinforce education for sustainability. An initial attempt to do this with indicators is described below.

2 The Individual Level

The individual human being is the fundamental unit for responsible living, driven by biological needs interacting with knowledge and values to produce behaviours which may or may not be responsible in the context of the global sustainability of human society. Knowledge and values are first transmitted by the mother and in the family, then by social interaction in the community, and through institutions of religion and culture. A relatively new phenomenon is the impact of the media which increasingly reach into every home and influence children from the earliest age. Formal and informal education, role models and peer pressure add their own contributions as the individual forges an independent identity and personal lifestyle while growing through adolescence to adulthood. While lifestyles may

become more rigid with age as the individual becomes locked into an occupation and community, and takes on family responsibilities, there can be moments of fluidity and reconsolidation, particularly at times of transition such as unemployment or career change, a "midlife crisis", religious conversion, retirement, widowhood, etc.

While in the past, limited mobility and access to knowledge meant that lifestyle change was rare, or at least culturally determined at stages through life, globalization has exposed everyone to multiple alternative values and lifestyles and undermined traditional certainties, just as it has increased the choices of more or less sustainable patterns of consumption and forms of behaviour (Jackson 2009). While this complexity means that what constitutes a responsible lifestyle is very context-specific, it also provides opportunities for larger-scale interventions intended to influence lifestyle choices, which is the focus of the Partnership for Education and Research about Responsible Living (PERL).

A strategy to enable people to live more responsibly as individuals and families needs to be developed in a supporting framework of concepts, together with potentially significant institutions, at all levels from local to global. When there is a variety of impediments to sustainable living at different levels, only a concerted action to identify and address all of them will allow significant progress. Inciting people to use public transport or to buy socially-responsible products is useless if such options are not available locally. An effort to find substitutes for petroleum products may be blocked by a national government that depends on import duties on petroleum for most of its revenues. The following sections of this chapter will discuss a few examples of relevant actions and processes taking place at some of these levels. These are intended to illustrate a multi-level integrated approach. More comprehensive studies could certainly identify many other factors that will need to be addressed in various contexts.

Another point is important when considering individual choices and lifestyles. Experience has shown that scientific information by itself is necessary but rarely sufficient to change behaviour (Dahl 2004, 2006). A human being is not simply a rational actor making informed choices to maximize self-interest, despite what some economists would like to believe. Emotional, psychological and social factors can dominate decision-making processes and life-style choices, as the advertising industry knows only too well. There is even increasing evidence that evolution has selected for a human capacity for cooperative behaviour and altruism, favouring a larger social benefit over individual self-interest (e.g. Boehm 2012; Nowak 2011; Wilson 2012).

Living responsibly or being a good consumer citizen are concepts rooted in values, since values define behaviour that benefits society. An individual operates on a spectrum from egotistical to altruistic, infantile to mature, base impulses to cooperative. In society this is expressed as power-hungry, seeking status and social dominance, versus conscientious, egalitarian, communitarian (Karlberg 2004; Shetty 2009). The latter qualities generally contribute to greater social good and higher integration. Failures of implementation in actions for sustainability at all levels can often be attributed not to a lack of understanding but to a lack of

motivation to change damaging behaviours or activities. A values-based motivation will lead to commitment and ultimately to action. Examples of values relevant for responsible living are justice and equity, a sense of solidarity with every human being as a trust of the whole, and respect for nature and the environment. Any systematic strategy for responsible living needs to incorporate this dimension both in individuals and in institutions and collective action at each level.

3 Local Level

At the local level, community action is most effective in a village or neighbourhood where people will invest for the common betterment of their families and neighbours. This is the most immediate scale of human interaction, based on direct knowledge and daily encounters, where relationships are built, and prejudices most easily overcome. Individual efforts at lifestyle change can become mutually reinforcing, and their impact immediately visible. Teaching by example is particularly effective.

3.1 Community Diversity

In this community context, a new challenge to responsibility is emerging (IEF 2010). The increasing movement of people around the world, and the expected massive increase in population displacements with climate change and environmental deterioration, are producing communities in which the original culture is eroding and a heterogeneous population of multiple origins must learn to live together. Most indigenous cultures and spiritual traditions have principles of hospitality towards strangers, but these are being lost (Switzer 2008). Faced with an accelerating challenge and the lack of morally acceptable options, a common tendency towards xenophobia and prejudice against immigrants needs to be replaced by an appreciation of diversity and of the new vitality that immigrants bring to a community. This can best be built at the neighbourhood level where personal experience through direct interaction and solidarity can overcome prejudice based on stereotypes. The same process can address local issues of sustainability and encourage lifestyles that reflect responsible living.

3.2 Community Education

Educational activities in and outside formal education for children, preadolescents, youth and adults should encourage action for responsible living based on the community's own vision of human purpose and well-being. An understanding of

the global, national and local context for sustainability based on science should be combined with the spiritual and ethical principles and moral values necessary to motivate changes in consumer behaviour relevant to the local situation. For adults, these can be addressed in informal neighbourhood study circles, perhaps reinforced by devotional meetings where people of all spiritual traditions can share some time of prayer, meditation and reflection together. Local children's classes taught by parents or youth can provide a values-based content that is often lacking in formal schooling. For pre-adolescents in the process of forming their identity, action-oriented activities with environmental or responsible consumption themes can build a foundation for life-long commitment to consumer citizenship. An example of this approach is the strategy for the development of climate change education in the Bahá'í community (BIC 2009). Similar action plans on climate change with an ethical/spiritual foundation have been developed for many religious traditions (ARC 2009).

These activities should build a neighbourhood or village cooperative spirit which would naturally lead to community consultation on local problems followed by priority actions to address those that are most pressing. A community thus empowered could be better able to advance towards sustainability without depending on outside assistance. It might also be more resilient to outside shocks, whether natural disasters, economic crises, or other difficulties predicted to become more frequent as the world continues in unsustainable directions.

3.3 Values-Based Indicators at Local Level

Strong communities generally share a set of common values, which may be assimilated unconsciously by those raised in the community. Many civil society organizations (CSO) are also values-driven or work at the level of values, but they have seldom been able to demonstrate the usefulness of this work to others in any concrete way. Providing a framework of values-based indicators can reinforce efforts to build sustainability at the grass roots.

The European Union, through its FP7 research programme, funded a two year project (January 2009–April 2011) on the Development of Indicators and Assessment Tools for CSO Projects Promoting Values-based Education for Sustainable Development, or ESDinds for short (Podger et al. 2010; www.esdinds.eu). The partners in the project were the University of Brighton (UK) and Charles University (Prague) as academic partners, and Civil Society Organizations including the Alliance of Religions and Conservation (ARC, UK), the Earth Charter Initiative (Costa Rica), the European Bahá'í Business Forum (EBBF), and the People's Theatre (Germany). The International Federation of Red Cross and Red Crescent Societies did not formally join the project, but contributed a case study. The following is a summary of selected project results.

The CSOs defined what values were important to them and what they wanted to measure, i.e. implementing values or spiritual principles. This often meant

clarifying their values in a way they had not done before. They needed to be clear about what they were trying to do in a way that might make it measurable. Often the organizations discovered values that they had not realized were important. This crystallization of their values was itself an important outcome, as it added a new and valuable dimension to their work.

The researchers helped to define assessment methodologies and indicators relevant to the identified values, compiled the explicit values in each civil society organization, and looked for implicit values by interviewing staff and participants. While hundreds of terms for values were compiled, these were often found to be context-specific, and could not be used consistently across projects and organizations. The CSO partners selected six common values for initial trials, for which many possible indicators were derived:

- unity in diversity;
- trust/trustworthiness;
- justice;
- empowerment;
- integrity; and
- respect for the community of life (the environment).

The indicators were tested successfully with field projects selected to show the diversity of situations in which values can be measured at the organization and community level; including an NGO working with indigenous school children and a university applying the Earth Charter in Mexico, and a Red Cross youth project on behavioural change in Sierra Leone (see below and further case studies on the ESDinds project website). The indicators in each case were selected by and adapted to the situation: semi-quantitative or qualitative, expressed in interviews, observations, gestures or word associations, for example.

Case study: Echeri Consultores, Mexico (Earth Charter)

Echeri Consultores is a small non-governmental organization affiliated with the Earth Charter Initiative, working to increase environmental awareness and an understanding of Earth Charter values in rural indigenous communities in Mexico. One of its projects is a programme working with 9–13 year olds in 15 schools in the Purepecha indigenous communities. It includes arts workshops on environmental conservation and values; guided reflection on local ecosystems; and tree planting workshops, enabling the children to establish tree nurseries in the school grounds and to conduct reforestation activities in the wider community. For this project with school children, it decided to focus on two values: collaboration in diversity, and care and respect for the community of life. This led to the choice of 22 indicators, such as:

- we feel girls are valued:
- different points of view are listened to;
- emotional connection to community of life; and
- quality in outputs (training in tree planting).

Many different types of assessment tools were used, such as:

- use of a spiral of coloured scarves on which pupils stood (spatial/corporal method);
- hand painting (paint how you felt when we finished the last project) and word elicitation (what words go with these pictures that you painted?);
- focus groups;
- theatrical comprehension (can you "act out", as in a play, how you plant a seedling?) as a test of knowledge; and
- key informants (interviews with project leaders/teachers).

Before the project, they used to measure the number of trees planted and the number of children involved as their indicators of success. Now they can measure as well the emotional connection to nature, gender equality, equality of the indigenous members, and empowerment. They realized that these things that were important to them were also of interest to their funders, since their funding was extended at a time when many projects were cut.

A second Echeri Consultores project in Mexico was with a multi-cultural group of around 19 youth aged 12–21, called Juatarhu ("Forest" in Purepecha), meeting every week. The activities of Juatarhu are similar to those of the schools programme, but with greater scope and depth, incorporating large reforestation campaigns and municipal arts festivals (ESDinds 2010).

Case study: University of Guanajuato, Mexico (Earth Charter)

The Environmental Institutional Programme of Guanajuato University (PIMAUG) is a cross-faculty initiative structured around six strategic areas:

- (1) assisting students to develop a holistic vision of the environment;
- (2) promoting sustainable resource use and waste management;
- (3) diffusion of a culture of environmental awareness, through a variety of media;
- (4) interdisciplinary research;
- (5) training in environmental issues through diploma and masters programmes; and
- (6) social participation and inter-institutional partnership.

The programme decided to engage in the indicators project because the Earth Charter is about transforming values into action, which is the "heart" of the University mission. The University already has good environmental measures, but there was no way to know rigorously the deeper dimension of the Earth Charter vision, and the degree to which those values were present and transformative. The values-based indicators provided a way. The indicators articulated deeply-held aspirations and priorities which had not previously received systematic attention. The process of reflection and selection of the indicators, even before measurement, had a significant cultural impact on the PIMAUG unit and enthused participants, becoming a process of transformational learning.

Among the key benefits was the change of culture experienced in PIMAUG. The Earth Charter workshop leaders reported a greater sense of effectiveness as a

result of a clearer and more precise focus on values in their workshop delivery. The personal impact of the indicators affected how a manager dealt with conflict, and generated a much more participatory approach in her work with volunteers. The unit has a greater unity of vision, and participants in the focus group discussions have reported having reconnected or been re-inspired in their work. Integrating the indicators into regular evaluation has increased group insight into their own application of values and led to understanding success in terms of values in a practical way (ESDinds 2010).

Case study: Youth as Agents of Behavioural Change, Sierra Leone (Red Cross) The Principles and Values Department of the International Federation of the Red Cross and Red Crescent Societies (IFRC) has initiated and conducted a worldwide programme called "Youth as Agents of Behavioural Change" (YABC). YABC seeks to empower youth to take up a leadership role in positively influencing mindsets, attitudes and behaviours in their local communities towards a culture of peace, respect for diversity, equality and social inclusion. As part of this programme, the Sierra Leone Red Cross Society has established an agricultural project composed of four teams of 30 members each. It brings together members of different tribes and chiefdoms, even those who fought on opposite sides during the civil war, which ended ten years ago. These youth live and work together on agricultural sites and participate in YABC workshops relating to non-discrimination and respect for diversity, intercultural dialogue, social inclusion, gender, and building a culture of non-violence and peace. The indicators were trialled successfully during a weekend workshop, and provided the organizers with new insights on the effectiveness of their work and on some problems still to be addressed (ESDinds 2010).

The IFRC was sufficiently pleased with the results that they asked the researchers to participate in a regional conference in Jordan with youth leaders from 45 countries of Asia and the Middle East, to share the methodology and encourage its widespread application.

After the field testing, where some indicators were refined and others dropped, a final list of 166 indicators was produced which seemed to be broadly relevant across all case studies, often measuring more than one value. While the vocabularies for values differed greatly between cultural and institutional contexts, the behaviours described by the indicators proved to be more universal, although certainly still far from comprehensive. For rigorous measurement of the presence of a particular value, the indicators considered valid for it need to be defined clearly, and more than one indicator and measurement method should be used. If it is not necessary to be rigorous every time, a simple measurement is sufficient. Ultimately it is for each organization or user to decide what the presence of a value looks like in any particular context. It is this internal consistency that validates and makes the tool useful. The indicators list has been derived from the experience of many CSOs and has demonstrated its usefulness but each user needs to decide what would be considered a good measurement with that indicator. The results were presented at the international conference "Making the Invisible"

The results were presented at the international conference "Making the Invisible Visible: An emerging Community of Practice in Indicators, Sustainability and

Values" (University of Brighton, England, 16–18 December 2010), with conference reports, presentations and videos of the main speakers documented on the Internet (iefworld.org/conf14.html). An online platform has been created at www.WeValue.org to provide access to the indicators developed and to encourage a community of practice for values-based indicators, and a partnership of the principal organizations and researchers is carrying this work forward. In the context of community action for sustainable lifestyles, these indicators can make previously invisible dimensions of an activity such as values more visible. When something can be measured, it becomes important. Values can then be consciously encouraged or cultivated, and the community or organization becomes more values-driven. Strong values are linked to more effective outcomes. Using indicators as tools, values can be embedded more widely in many kinds of human activity that can benefit from stronger values. The measurement methodologies are sufficiently flexible to adapt to most situations and can incorporate almost any values framework. Measuring desirable behaviours and values for sustainability becomes positively reinforcing within the group.

4 National Level

Introducing concepts and values of sustainability and responsible living into the formal school curriculum usually requires intervention at the national or sometimes state level where curriculum content is determined. There is often resistance to change at this level, and progress can be slow unless there is strong political leadership on the issue. Yet community efforts will be strongly reinforced if students are receiving similar messages at school. School children frequently become educators of their parents in environmentally-responsible behaviour such as economizing energy and recycling. Since much of the effort of PERL is focused at this level, it will not be discussed here in depth.

Another important set of partners that can be addressed at the national level is the media, including the press, radio, television, cinema, the music and entertainment industry, and increasingly the Internet. Unfortunately, the media are often themselves purveyors of unsustainable lifestyles and cultivators of irresponsible consumer behaviour through advertising and the lifestyles they portray (Karlberg 2004). Their marketing to children is particularly pernicious. It is often not in their interest to encourage responsible consumer behaviour, so their capacity to educate the public is rarely used to its full advantage. A regulatory requirement for public interest programming, or for balance in the presentation of viewpoints, can provide a partial counterweight.

Many and diverse organizations of civil society from businesses to faith-based organizations are spread across the spectrum from those supporting damaging forms and levels of consumption in the name of commercial, political or cultural interests, to those that are staunch defenders of the values of responsible living. Even within the business sector, for example, some companies market products damaging to

health and the environment, while others build their reputation with products from socially and environmentally responsible sources. Given the mixed messages with which we are surrounded, consumer education must include the capacity to see behind the superficially-attractive messages of the consumer society. Where advertising plays on animal impulses and selfishness, falsehood becomes public information, and greed, lust, indolence, pride and violence have social and economic value (UHJ 2005), the antidote must be rooted in moral values and ethical principles. Educational programmes should aim to "vaccinate" children against the excesses of the consumer culture with which they are surrounded, enabling them to understand how they are manipulated by the role models and messages purveyed by the media, and teaching counterbalancing values of moderation and being content with little. Values-based indicators could support these activities, as in the Guanajuato University case study described above.

There are increasing numbers of public bodies and civil society organizations with the capacity to support national campaigns of public information on responsible consumer behaviour. While many target specific issues relevant to their mandates, there is considerable potential for more integrated campaigns involving a variety of actors, such as the national Preach-In on Global Warming organized in the United States by Interfaith Power and Light in February 2011 (IPL 2011). Such organizations could also use values-based indicators to amplify their action at the national level.

5 International Level

5.1 Global Economy and Financial Crisis

The choices for living responsibly are often conditioned or constrained by what the economy and society offer. The tendency has been for nations, businesses and communities increasingly to become integrated into the global system and dependent on its functioning correctly (MacKenzie 2008). The individual consumer cannot control the larger dimensions of the economic system, but is simply swept along in the current. Individual, local and national efforts for responsibility will not be sufficient without a transformation of the global economy and structures of governance. Fortunately that process has now started. The assumption of adversarial relationships and economic competition as fundamental norms is being challenged by more mutualistic approaches to social and economic organization (Karlberg 2004). While the future evolution of the economy is unpredictable, the evidence suggests the process will be bumpy, with alternating crises and (usually inadequate) reforms.

The financial crisis since 2007 launched a fundamental questioning of the economy and its underlying values, and an exploration of alternatives that would be more responsible (see for instance Stiglitz et al. 2009) looking for indicators

beyond GDP. It remains to be seen how the values-based approach to indicators pioneered at the community level can be transposed in some way to higher levels of social organization. Assessment of the ethical behaviour of institutions and governments would provide a counterbalance to some of the excesses of the present system. The conceptual work has begun. The growth paradigm itself is being called into question (Jackson 2009), launching a search for new values and principles for an alternative economic system. Unfortunately the financial sector has gone back to business as usual, with speculation-driven instability and a bubble of derivatives and other financial products that could easily burst again. Meanwhile the high level of government borrowing in many countries to salvage the financial sector and relaunch the economy has added a new level of instability. The increasing risks of government defaults are putting further pressure on the system. As a result, government intervention in the economy on the scale of the last few years is no longer possible, and a loss of confidence in governments' abilities to repay their debts would bring down the world economy. In a debtfinanced system, when the economy does not grow fast enough to pay back principle and interest, default and/or inflation are inevitable (Korowicz 2010). These economic failures are in part due to reliance on the wrong kinds of indicators (Jamison 2008). This vulnerability at the international level becomes an additional incentive for responsible living that is community-centred, locallysourced, values-based and moderate in its requirements.

5.2 Rio+20 and Other UN Activities

Regionally and internationally, the debate on the future of sustainability has been influenced by the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro in June 2012. The conference theme of the Green Economy is particularly relevant to responsible living, and UNEP has released a report on this topic (UNEP 2011). The topic is controversial, as it can be interpreted as simply reorienting the present economy towards environmental responsibility (seen by some as superficial "greenwashing"), or requiring a much more fundamental transition to a more socially equitable and environmentally sustainable system. In either case, the required changes in energy sources and resource supplies mean transforming many industries and fundamentally altering consumption patterns. These top-down drivers will complement and reinforce educational activities for responsible living at the local level. The international events around the conference in 2012 themselves provided a good opportunity for public education on environment and sustainability. Values-based indicators of corporate and government behaviour could be one tool to increase accountability for implementing a truly green and socially-responsible economy. Proposals on this have been submitted to the Bureau of Rio+20 (IEF 2011). The second conference theme on institutional arrangements for sustainable

development and international environmental governance should also lead to

international institutional innovations that will encourage and facilitate greater responsibility at national and local levels. Civil society input to this process from the Advisory Group on International Environmental Governance has highlighted the ethical importance of the oneness of humanity as the foundation for a more sustainable society. Since humanity is one, each person is born into the world as a trust of the whole, and each bears a responsibility for the welfare of all humanity. This collective trusteeship constitutes the moral foundation of human rights and of values for responsible living. International and national measures to reinforce these values should ultimately empower each individual and each community to contribute to the general welfare. They should recognize human diversity as a source of collective capacity, creativity, productivity, resilience and adaptation that is vital to our social and economic development, prosperity and well-being (Advisory Group 2011a).

In its submission to the Rio+20 Bureau, the Advisory Group has proposed mechanisms to bring an ethical perspective into the United Nations decisionmaking processes (Advisory Group 2011b). If such mechanisms are established, values-base indicators could be one tool used in their implementation. The discussions at the United Nations on Sustainable Consumption and Production (SCP) are also highly relevant. A 10-Year Framework of Programmes on SCP was considered and largely finalized by the UN Commission on Sustainable Development in May 2011 (UNCSD 2011), but after the failure of the Commission to adopt any decisions, it was finally adopted at Rio+20. Regardless of the weakness in international decision-making at present, the many national and regional programmes proposed within this framework will encourage economic transformation and support local initiatives for responsible living. The process has also stimulated deeper reflections on visions of development, the roots of the crisis in the present economic system, and the need for cultural transformation, as illustrated by the statement on "Rethinking Prosperity: Forging Alternatives to a Culture of Consumerism" (BIC 2010) contributed to the Commission on Sustainable Development.

6 Conclusions

Values and their expression through ethical principles are a key to individual motivation and social transformation towards sustainability. Their assessment through indicators can make them more visible and encourage educational processes that target them more directly. The success of recent experience in this at the community and project level should inspire further efforts to extend this approach to institutions and processes of governance at the national and international levels. There is also potential to develop additional tools for values assessment at the individual level.

Recognition of the multi-level framework of social organization should allow more coherent approaches to reinforcing the ethical dimension of education for

sustainability. While lifestyles are ultimately the responsibility of each individual and family on this planet, responsible living is not something that can be achieved in isolation. The major focus for empowerment and support should be at the neighbourhood and community levels where social processes operate most directly and powerfully. However, the accelerating processes of disintegration of old economic frameworks and certainties, and innovations in new approaches, are rapidly transforming the context to which individual lifestyles must respond and the values that will be relevant. Education in values for responsible living must therefore be dynamic and adaptive.

The growing awareness of the need to recognize the principle of oneness of humanity as the broadest framework for human rights and responsibilities is stimulating a re-examination of preconceptions and certitudes about individual and collective purposes. Linking the scientific arguments for sustainability and ethical perspectives on responsibility, and relating local efforts to the international debates on these issues, will help everyone to think deeply about what is meant by responsible living. Values-based indicators can help to turn this awareness into action.

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