

Colloquium on Sustainable  
Development Reporting

November 25-26, 1993  
London, Ontario

Organized by the Westminster Institute  
for the National Round Table  
on Environment and Economy

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APPROACHES TO REPORTING ON HUMAN WELL-BEING  
by Susan Holtz

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I. Introduction

Let me start with a disclaimer: I am well aware that, from the perspective of experts in the numerous disciplines I will be dealing with, my knowledge of the relevant research in the fields that I address is superficial. In researching and writing this paper, I was constantly afraid that I was just not going to know about some obviously key piece of work, and I would thus produce a deeply flawed analysis and look like a presumptuous fool, to boot. Nevertheless, I persisted in the task. Despite my limited expertise on the topic of human well-being, I did feel reasonably confident about the amount of thought, discussion, and practical experience I had had concerning reporting related to sustainable development. And that, I would emphasize, is the focus of this article: not human well-being as a field of research for a multitude of disciplines (which it is), but rather, human well-being as one of the essential domains of information needed to report on progress on sustainable development (SD, or, in some contexts, sustainability).

What are these key domains of information? I don't want-- in this article, at any rate--to argue for the conceptual framework for reporting on SD that I (and others in this Colloquium) am using. There are other frameworks, and most are useful in the context for which they were developed. The information domains framework used here is not a dynamic model, but merely a description of the broad categories or domains of information that are common to most concepts of SD found in the literature (Hodge, 1992). These categories include information on the health or well-being of the ecosystem; information on human well-being; and information on the interactions and human activities that affect, and are affected by, the ecosystem that encompasses and supports human societies. As well, in reporting on SD, a contextual review or synthesis of all these information domains is needed in order to consider the various linkages among them.

I would note two things here. First, these domains of information are derived from the values that inform the idea of SD: specifically, a valuing of both human and ecosystem wellbeing, neither to the detriment of the other, but both together. Thus, there are value judgements built in to the very fabric of SD reporting, and these may well make cross-cultural comparisons difficult. I think this is particularly the case in reporting on human well-being.

Secondly, although human beings and the surrounding ecosystem are treated as separate domains of information, this is a practical, not a philosophical, distinction. In reality, humans are as much a part of the ecosystem as eagles or dogs or nematodes. However, the SD reporting context is one which implicitly focuses on information needed to better manage human activities, both for human well-being and for the maintenance or restoration of healthy ecosystems. Consequently, information categories are used which are relevant to decisions related to these goals. Nevertheless, as we will see, many of the approaches used in reporting on human well-being reflect the fact that individuals live in the environment, and their well-being cannot--even conceptually--be disentangled from their physical environment, nor their physical environment from the social and economic environment.

Why the phrase human well-being and not some other term, such as health, happiness, human development, or quality of life? The phrase human well-being is taken from Tony Hodge's work (Hodge, in progress). It was adopted by the Sustainable Development Reporting Committee of the National Round Table on Environment and Economy (NRTEE or the Round Table), which committee has been working over the past year and a half on a report to the Prime Minister of Canada on this country's capability to measure progress on sustainable development. The term's intended use is not as a replacement for the many other related words and phrases, but as a generic term that--in the context of SD--contains the essence of the variety of terms that have evolved in other contexts, but that clearly have a relationship to SD.

As I will discuss, many of the relevant disciplines have spent considerable effort on refining the definition of the term they use (health is one example). By contrast, I am going to spend no time at all defining human well-being. My assumption in this paper is that all of the approaches I am going to discuss have different perspectives and insights to contribute to SD reporting. What I will try to do here is, first (in the paper's next section), to identify overlaps, differences, and unique insights in these various approaches to human well-being. In the concluding section, I will consider issues that arise in using different approaches when we juxtapose the other domains of information with

human well-being in the synthesis of human and ecosystem well-being that the concept of sustainable development represents. In other words, I will look at the linkages between these approaches to reporting on human well-being and reporting on ecosystem health and human activities.

## II. Disciplines, Definitions, and Discussions

### Six Approaches to Human Well-Being

In this article, I will review six approaches to describing and reporting on human well-being. These are

- (1) economics (especially income/wealth);
- (2) health;
- (3) quality of life (QoL);
- (4) politically-developed collections of targets (called here targets, benchmarks, or societal objectives);
- (5) human (societal) development; and
- (6) happiness (or subjective well-being--SWB).

Each of these approaches developed in a distinct context. For some, such as economics and happiness, there are specific, well-established academic disciplines which surround the concept, and which tend to restrict ongoing development of the idea to those within the boundaries established by the academic discourse. For others, like human development and the targets approach, the context is the development of public policy, and so the discourse is open to any interested commentator. All these approaches are characterized by considerable overlap in substance, but little in the way of deliberate attempts by researchers to synthesize or harmonize--or even, in many cases, to recognize--different but related approaches from other contexts.

Finally, in this preliminary sketch of the field, there is the relationship of each approach to the over-arching framework of sustainable development. This varies widely. Except for the human development and the targets approaches, all of these approaches were "born" prior to the (relatively) widespread use of the SD concept (which I would date here from the World Commission on Environment and Development--the Brundtland Commission--report Our Common Future, which was published in 1987.)

Nevertheless, some of these approaches are consciously seen by their practitioners or SD researchers as being

critically related to SD reporting, possibly as being the preferred or even the exclusive approach to the human well-being dimension (health and economics, for example). Other researchers, especially in QoL, seem to be struggling to bring the concept of SD into their own discourse. In contrast, the targets approach, and probably human development as well, are seen by those involved in their development as natural relations or outgrowths of SD thinking and reporting. And happiness research, which began in the early to mid 1970s but has grown enormously since then, is done by academic researchers mainly in the field of psychology, most of whom, even very recently, appear either never to have heard of sustainable development, or else consider it professionally irrelevant (I don't, though).

### Descriptions of the Six Approaches

As a preface, I would note here that these six approaches are a somewhat arbitrary number. Some could be further subdivided into other categories, or re-combined. Above all, I don't discuss the discipline of philosophy/ethics/practical ethics, which has a great deal to say about human well-being, going back at least to the classic Greek philosophers. Nor do I consider religious and spiritual insights. Apart from their lack of universal acceptance, the main reason I ignore them here is that both religion and philosophy are more about approaches to life than about components or determinants or states of well-being that can be measured and reported. As specific approaches, they are therefore not directly useful in the context of SD reporting, although both perspectives inform and are intertwined with the foundations of all of these other approaches.

Economics, of course, needs no introduction. Traditional economic models deal with "maximizing welfare" and virtually all the literature on SD assumes the need for income in order to meet human needs, and in particular, the urgent need for increasing the incomes of the world's poorest people.

The question here is not whether economic measures, such as those of income, wealth, debt, GDP, etc., have a place in describing human well-being--of that there is no doubt--but rather, whether these measures are sufficiently powerful components, or determinants, or proxies for human well-being to be used alone.

I don't think they do. But before moving on, let's pursue this line of thought a bit.

To start with, there is the familiar observation that, in

describing national economies, standard approaches to the system of national accounts (SNA) do not incorporate losses and damage to the stock of natural resources, or to the "environmental services" provided by a healthy ecosystem. Similarly, some have argued that "defensive expenditures" for environmental security should be subtracted from income accounts to better show the significance of a healthy environment in economic terms. However, considerable work is ongoing in various organizations, such as Statistics Canada, the World Resources Institute, several OECD countries, and the United Nations, to find ways to better incorporate these factors in national accounting. If and when these efforts become standard practice, will these adjusted national accounts suffice to describe human well-being at the national level?

And in describing individual well-being, income is powerfully linked to many other aspects or approaches to well-being. A very strong positive link between health and income exists (Hancock, 1989), though we needn't here concern ourselves with the argument about which is cause and which is effect. There is a similar positive correlation between self-reported well-being or happiness, though there are many complexities, including diminishing returns in happiness for ever-higher levels of income (Myers, 1992).

There is also negative evidence, that is, evidence about issues of well-being that are related to lack of income. In a major recent study of the causes of homelessness in the United States, although there are several secondary factors (a situation of social isolation and disability in the form of chronic physical or mental problems and/or addiction for the long-term homeless), the single dominant factor is destitution--an income level greatly below the poverty line (Rossi, 1989). More negative evidence comes from another study that attempts to unravel why the increasing productivity of the American economy since the late 1940s has been translated entirely into higher incomes for workers rather than more leisure time (indeed, leisure has declined since the 1970s), when either could theoretically be equally possible. The productivity growth has been such that, used for leisure time, Americans could now be working four-hour days as full time, or taking every other year off, with pay. The author is mainly interested in structural reasons, but nevertheless notes a deep resistance on the part of workers themselves to trading current income for more free time, though the same isn't true for hypothetical future increases in income vs. time off (Schor, 1992).

It could be argued, from this diversity of evidence drawn from many disciplines, that income has such a robust relationship to well-being that, for reporting purposes, it

could effectively capture well-being. Additionally, it would be a simple, cheap, easily-comparable, and already-collected statistic. Although I think this is a credible argument, I don't agree with it; but I will lay it over until I examine some of the other approaches.

Health is another apparently obvious approach to well-being. Indeed, in its denotation in ordinary English, health perhaps comes closest to meaning "well-being." However, in the context of SD reporting, developments in the last decade in the field of health promotion have moved the definition of health away from its traditional meaning as an absence of pathology to a more contextual focus. A major conference in 1986, sponsored by the World Health Organization, Health and Welfare Canada, and the Canadian Public Health Association, resulted in the Ottawa Charter for Health Promotion. This document defines health in terms of the interaction between people and their environment, recognizing that aspects of the social environment, including peace, shelter, food, income, education, social justice, and equity are prerequisites for health (Health and Welfare Canada, 1992). Further conferences and work along these lines has expanded and refined the idea further. A widely cited definition from the 1986 Health and Welfare Canada document Health for All: A Framework for Health Promotion defines health as "a resource which gives people the ability to manage and even to change their surroundings." And in a 1990 paper, Trevor Hancock develops a model which sees health as the outcome of the elements that he considers to make up SD. These include a convivial community; an adequately prosperous and equitable economy; and an environment which, in its built form, is livable, and in its natural processes is viable and sustainable. In this model, shown as a Venn diagram of three overlapping circles, the area where all three overlap is health--the touchstone, outcome, and defining characteristic of sustainable development (Hancock, 1990). Here, health--broadly defined--not only encompasses human well-being, but actually defines the larger concept of SD.

Quality of Life--QOL--developed in the 1970s within the fields of planning, urban development, social geography, landscape and urban design, and social policy at the community service level (Murdie and Rhyne, 1992). This approach is about describing the determinants of human well-being within local communities. The original research impetus was to find ways to compare locales--communities, neighborhoods, and municipalities--for their quality of life. This research still continues and is of particular interest to agencies like Canada Mortgage and Housing Corporation (CMHC) in their response to sustainable development. As well, this research focus developed in a number of directions that either gave rise to, or influenced, the last three approaches that I identify in

this paper. In particular, an important outgrowth was the journal Social Indicators Research, which was begun in 1974. Through it, much of the work on social indicators (the intellectual focus for benchmarks and human development approaches) was published. It also fostered the more recent development of SWB or happiness research.

However, I have retained QoL as a separate approach because its focus on characteristics of locale is both distinctive and significant, particularly in considering SD reporting at the community or municipal level.

Targets or Benchmarks, as I note above, is very much an intellectual outgrowth of QoL and social indicators concerns. However, this approach developed after, and to a greater or lesser degree, as a result of, the Brundtland report and the spread of the ideas of SD. The characteristic that makes this a separate approach is not the aspects of well-being that it sets out as targets or benchmarks, but rather its explicit political- and community-based decisions about what social and physical characteristics are important as goals for that particular jurisdiction. Essentially, this approach is an exercise of community goal-setting for social, economic, and environmental policies.

A typical example is the Oregon Benchmarks Report to the 1991 Oregon Legislature, developed by the Oregon Progress Board out of a 1989 strategic planning exercise. Using three categories of targets--people, quality of life, and the economy--the Oregon Progress Board led a consultative process that developed 160 measurable targets for the state; from this full list, a short list of lead benchmarks was developed as priorities for the next five years. These included 7 benchmarks for people: teen pregnancy; kindergarten readiness; drug-free babies; drug-free teens; job skill preparation; hate crimes; and work force adaptability (i.e., re-employment of displaced workers). There were 5 lead benchmarks for quality of life, including such things as air quality, affordable housing, and health care access. And there were 5 lead benchmarks for the economy, including value-added wood products, the tax burden, and public infrastructure investment. As well as this list of immediate priorities, the project short-listed 13 key benchmarks as fundamental, enduring measures of Oregon's wellbeing; these included measures of health and literacy for people; environment, housing, health, and crime measures for quality of life; and personal income, industrial economic diversity, manufacturing exports, and job distribution in the state outside the Portland metro area as economic measures.

At this point, there are almost too many examples of this approach to keep track of. Some exercises have been led by



Round Tables, such as those provincial SD strategies which include specific goals and objectives. Municipal examples include the Sustainable Seattle's Indicators project and Life in Jacksonville: Quality Indicators for Progress, a project led by the Jacksonville (Florida) Chamber of Commerce and the Jacksonville Community Council Inc. In all cases, however, the focus is not researchers developing accurate indicators, but communities or other political jurisdictions developing their idea of appropriate measures and goals for well-being.

Human (Social) Development as an approach also has much in common with QoL and social indicators research, but where QoL is concerned with place, human development is concerned with social and economic development from the perspective of international development aid. Its implicit research question is whether things are getting better or worse in developing countries relative to each other and the developing world, and for special groups within countries, such as women or children.

The best-known and probably the most influential example of this approach is the annual Human Development Report series, which has been published since 1990. (Indeed, so comprehensive and intellectually powerful is this report that I wonder whether it will not gain currency as the accepted major international measure of human well-being). This project is organized by a team from the United Nations Development Programme. Each yearly report discusses different aspects of human development, but each one also publishes a standard set of statistical profiles and indicators for all countries, and--perhaps most importantly--a human development index listing for all countries.

The index, here referred to as the Human Development Index or HDI, consists of a weighted average of just three factors: longevity, measured as life expectancy at birth; educational attainment in terms of adult literacy rate and mean years of schooling; and income. The income measure has been revised since 1990, and in the 1993 report, the indicator used is real per capita GDP in purchasing power parity (PPP) dollars. The authors recognize that there is diminishing utility to ever-higher levels of income from a development perspective, and have tried various technical measures to make this adjustment; they are not yet entirely satisfied with their conceptual approach.

The HDI also displays country listings that have been adjusted to take gender parity into account.

Happiness or Subjective Well-Being (SWB) is my last category. As a research field, it too grew out of the QoL/social indicators interests of the 1970s, but it has developed intellectual momentum only since the 1980s.

Its researchers are mainly drawn from psychology, and its focus is based on an interest in the relationship between various factors or determinants of well-being, and the actual assessment individuals make of their own state of well-being or happiness. Health, income, relationships with others, education, and demographic factors such as age or ethnicity or gender have all been scrutinized. Distinctions between temporary moods and over-all life satisfaction or personal well-being are examined. And related questions, such as whether some factor related to happiness, such as wealth, is important in itself, or as a comparative measure with other people, are posed. Perhaps one of the most interesting of these related issues is the finding reported in a number of studies that dissatisfaction or "ill-being" is not at one end of a continuum with well-being, but is a separate dimension of experience (Headey, Holmstrom, and Wearing, 1984). But the findings and debates in much of these field are all interesting, particularly in the light that is shed on other approaches to human well-being in the context of sustainable development.

#### Some Fundamental Lines of Cleavage

The first question to which these six approaches provide different answers relates to the unit of humanity whose well-being is under discussion. In SD reporting, are we fundamentally considering the well-being of individuals? Or do we want to consider the smallest significant decision-making unit, the household? Or do we want to focus on groups or whole societies, using averaging of individual or household experience rather than categorizing different kinds of individuals?

Of course, the easy answer is that different units may be appropriate depending on the scale of the geographic region for which SD reporting is being established. But that may be too easy. There remains a real question of focus--in SD reporting, are we mainly interested in characterizing individuals, households, or the society as a whole, or in some combination?

Of these six approaches, economics is the most flexible. Economics is capable of describing individuals, households, groups, and whole societies with ease. This, of course, is because it is the only approach with a single, standardized unit of measurement--dollars--which can be applied to the income, wealth, debt, etc. of any person or group. (The trade-off, equally obviously, is that economics can only describe those things which can be measured in dollars, or for which dollars can be a proxy.)

Two of the approaches, health and happiness, are basically

about assessing the well-being of individuals. Although one can speak of a healthy or a happy society, these are really metaphors, not literal statements. It is individuals who are happy or healthy, and although it is certainly possible to add up numbers of individuals who are happy or not, or who are afflicted with some ailment or condition, the unit being described is the individual. The only exceptions that I can think of are life spans and measures such as worker-days lost; again, although related to health, these employ standardized numerical measures, and thus can be averaged to directly compare groups or whole societies.

The remaining three approaches are about describing conditions of society more than individuals, although there may be an implicit assumption that the ultimate reason to report on these things is because they affect individuals. The authors of the UNDP Human Development Report series state that "Human development is a process of enlarging people's choices." In discussing exactly what the HDI measures--quality of life, standard of living, or happiness--the authors comment, "But if human development is a process of expanding choice, there can be no limit....The index is best seen as a measure of people's ability to live a long and healthy life, to communicate and to participate in the life of the community and to have sufficient resources to obtain a decent living. It is a minimal measure. For a country that has achieved a high value of the HDI, the question then arises about other dimensions in which people can grow" (UNDP, 1993). Thus, they explicitly tie measures of averaged national achievement to the goal of expanding individual opportunity.

Another important difference among these approaches is whether they measure, in economic terms, inputs or outputs. Phrased in standard English, the question is whether to measure well-being directly, as health status and happiness/SWB research surveys do, or to take the measure of assumed determinants of local, individual, or national well-being. At the conceptual level, both have their flaws, especially in the context of SD reporting.

Measuring inputs has the advantage of objectivity, and, especially for "official" reporting, this adds to public credibility. The drawback is that it is never clear that these various factors really matter to individual happiness, life satisfaction, or well-being. Indeed, from an SD perspective, the fascinating aspect of happiness research is how often its research studies call into question the things that we assume matter immensely. Most notably, although income and health certainly do matter, their relationship to happiness is complex, with issues of adjustment to change, envy, and social status (among others) clouding the picture (Myers, 1992). Conversely, factors that are rarely considered in SD reporting, such as self-esteem, optimism, regular exercise, sociability and outgoingness, a sense of

personal control, a strong spiritual base, and supportive social networks are extremely important.

On the other hand, measuring outputs (happiness, health, life satisfaction) directly by surveying individuals has its problems, too. There is always the question of how truthful and accurate people will be; but more significantly for SD reporting, such surveys can be costly (polls asking such questions are not uncommon, but this is not information routinely collected by government statistical agencies). And conceptually, the deep problem here is that, since so many factors influence outputs, outputs alone give us no information that could help inform public policy or private decisions. It is only when the relationship of various factors to the reported levels of health or well-being are clear that the information becomes meaningful.

### III. Issues of Synthesis

The concluding question in this paper's discussion of approaches to measuring human well-being as a dimension of SD reporting is the following: what happens to human well-being as approached in these various ways when put in the larger context of SD? What linkages with ecological health and human activities stand out as interesting or needing further examination?

This topic is really too large to examine in detail here; it deserves a review of its own. Nevertheless, I will make a few preliminary observations.

First of all, the robust relationship between economic factors and human well-being still stands in stark, problematic contrast to the assumption of many environmentalists that economic activity must be slowed, stopped, or reversed, at least in the developed world, for ecological reasons. The only way to move forward on this impasse is to have a more accurate understanding of the ecological limits to human activities, and a better sense of the political, organizational, and technological changes that might be possible in order to adjust these activities both to income growth and environmental constraints.

Secondly, the happiness research suggests that the social dimensions of involvement in work, home, and community play a powerful role in contributing to well-being. Thus, while the actual activities that humans undertake interact directly with the physical environment, and are important to report on because of their contribution to environmental change, it may be that the organizations and social structure by which collective activities are carried out are equally important for human well-being. I am thinking, for example, of the finding that personal control is vital for

well-being, or that happy marriages and other social ties are critical, as well. Public and private policy related to fostering personal involvement and control, or that support families, may turn out to be as important for a nation's real well-being as its average income.

Finally--and this is not a serious conclusion--I feel bound to pass on one of the most intriguing small findings that I ran across. In his broad examination of happiness research, The Pursuit of Happiness (Myers, 1992), in a chapter on religious faith the author notes that many studies link charitable giving, of both money and self, with happiness. Then he adds, in passing, that in one study, economics professors were more than twice as likely as those in other disciplines to contribute no money to private charity. And in laboratory monetary games, students behave more selfishly after taking economics courses! Even though I am in general an advocate of more, not less, economic theory and analysis in environmental matters, perhaps there is a lesson here: the traditional models of economics may not be the best perspectives on which to structure the human well-being dimension of SD reporting.

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## REFERENCES

- Hancock, Trevor, 1989. "Sustaining Health: Achieving Health for All in a Secure Environment". (Health, Environment, Economy Conference, Toronto, 1989.)
- Hancock, Trevor, 1990. "Toward Healthy and Sustainable Communities: Health, Environment, and Economy at the Local Level". (3rd Colloquium on Environmental Health, Quebec, November 22, 1990.)
- Headey, Bruce, Elsie Holmstrom and Alexander Wearing, 1984. Social Indicators Research 14(1984) 115-139, "Well-Being and Ill-Being: Different Dimensions?"
- Health and Welfare Canada, 1992. A Vital Link: Health and the Environment in Canada, Supply & Services, Government of Canada, Ottawa.
- Hodge, R.A., in progress. Reporting on Sustainability. PhD Dissertation (interdisciplinary), School of Urban Planning, Faculty of Engineering, McGill University, Montreal.
- Hodge, R.A., 1992. Conceptual Frameworks for Sustainable Development. Internal background paper, National Round Table on Environment and Economy.
- Murdie, Robert A. and Darla Rhyne, 1992. Quality of Life Research: An Annotated Bibliography, prepared as a component of the CMHC study Modelling Quality of Life Indicators in Canada: A Feasibility Analysis. The Institute for Social Research, York University, Toronto.
- Myers, David G., 1992. The Pursuit of Happiness. Avon Books, New York.
- Rossi, Peter H., 1989. Down and Out in America: the Origins of Homelessness. The University of Chicago Press, Chicago and London.
- Schor, Juliet B., 1992. The Overworked American: The Unexpected Decline of Leisure. BasicBooks, A Division of Harper Collins, New York.
- UNDP, 1993. Human Development Report 1993. Oxford University Press, New York and Oxford.