

# **BEYOND DELUSION: A SCIENCE AND POLICY DIALOGUE ON DESIGNING EFFECTIVE INDICATORS FOR SUSTAINABLE DEVELOPMENT**

## ***WORKSHOP REPORT***

### **1. Background**

From May 7th to 9th, 1999, 38 scientists, policy specialists from public and private sectors, researchers, and measurement experts came together in an innovative, multidisciplinary workshop held in San Rafael de Heredia, Costa Rica. Seventeen countries were represented from five continents. A listing of participants is provided in Appendix 1.

In general terms, the workshop's purpose was to examine the challenge of assessing progress toward sustainability. More specifically, discussions focused on two topics: 1. On indicators for sustainable development and the feasibility of generating a short list of highly aggregated national-level indicators that would effectively supplement current reporting practice. 2. On the process of channeling measurement results into decision-making and communicating sustainability indicators effectively.

The workshop was organized and convened by the Measurement and Indicators Program, International Institute for Sustainable Development (IISD) by the initiative of the Bellagio Forum for Sustainable Development (BFSD). Three members of the BFSD (MISTRA of Sweden, the German federal Environment Fund and Deutsche Bank/YEER), the Wallace Global Fund and the International Development and Research Centre of Canada provided funding for the workshop.

In May 1998, the BFSD initiated a four-staged project to promote the development of highly aggregated, national-level indices to measure progress

toward sustainable development. In November 1998, support was committed to IISD to initiate the Costa Rica Workshop as a first phase of activities.

For its part, IISD's Measurement and Indicator Program has been active in this field since 1994 and has served an important role in linking a large number of individuals and organizations worldwide. In 1996, with the support of the Rockefeller Foundation, an international meeting was held in the Foundation's Bellagio Study and Conference Centre, Bellagio, Italy that led to the articulation of the Bellagio Principles for Assessing Progress Toward Sustainable Development. Subsequently and with the support of the Wallace Global Fund, IISD has been facilitating ongoing discussions of the Consultative Group on Indicators of Sustainable Development, an Internet-based group of indicator experts. Both of these streams of activity provided a strong foundation for deliberations at the Costa Rica workshop.

The purposes of this short report are (1) to briefly describe the process followed in the lead-up to and during the workshop; and (2) to document the main outcomes. A detailed chronological report is available through IISD's publication *Sustainable Developments*, at <http://www.iisd.ca/linkages/sd/scipol/>.

## **2. Summary of Results**

The workshop provided recommendations for further indicator development and indicator clustering. It also discussed the process of channeling measurement indicators to the decision-making process and to the general public through the help of the media. Participants identified areas of collaboration and made commitments to work jointly on developing a set of prototype indices.

A remarkable feature of the workshop was the high, although not fully unanimous, level of consensus achieved regarding the desirability of a small cluster of national-level indicators of sustainable development, the feasibility of

developing such a cluster in practice, the content of what these indicators should address, and the form in which they might be communicated.

A strong message was articulated reflecting a need for much effort to broaden the constituency of discussion in order to develop the foundation of support that would be required for success in the years to come.

In addition, the workshop was unanimous in its conclusion that the sooner that an approach was tested with real data and broadly disseminated for discussion the better. Without such a concrete test, progress would continue to lag.

The meeting ended on a spirited note and with a sense that the commitment to proceed had been greatly strengthened.

### **3. Process**

Communication before and since the workshop has been facilitated by a dedicated web site moderated by IISD. A background paper that summarized the "state-of-the-art" was circulated and discussed in advance (Appendix 2). Responses were summarized for use in modifying the background paper and clarifying the focus of the workshop (Appendix 3).

In addition, four "case studies" were prepared and distributed: (1) The European Environmental Pressure Indices Project (Appendix 4); (2) Canada's Commissioner of the Environment and Sustainable Development (Appendix 5); (3) Community Level Sustainability Assessment, Dasudi, India (Appendix 6); and Assessing Progress Toward Sustainability: The Placer Dome Group (Appendix 7). Each of the four "case studies" provided a point of departure for four breakout groups that were formed during the workshop to provide opportunity for detailed discussion in between full plenary sessions.

## 4. Principal Observations and Conclusions

**4.1 New Challenges.** A number of factors combine to make assessing progress toward sustainability and the choice of relevant indicator sets a greater task than has been faced previously in attempts to track change. These include:

- ❑ The concept of sustainability is one of both substance (expanded time horizon, broadened scale, more complex system) and process (enhanced transparency, collaborative, consensus seeking). Thus, to assess progress toward sustainability, indicators of both substance and process are required. Doing so is a much greater challenge than say tracking changes in the economy or variations in environmental conditions.
- ❑ The concept of sustainability is value based, values that can vary between cultures and change over time. Thus, the nature of what is considered needed or desirable can also shift. For those seeking a crisp, unchanging definition, there will be frustration.
- ❑ There are many different scales of analysis, from local to global, that are important. In the ideal, each should be used to inform the others.
- ❑ In tracking change we may be able to identify a trend but we may not be able to identify if we are close to a critical breaking point. There is much in the complex system that we are dealing with that is not well understood.
- ❑ There is a tension between setting up a system to compare countries and developing a system that meets the specific needs of a given country.

**4.2 Using a Cluster of Indicators.** A high degree of consensus, although not entirely unanimous, was achieved on the desirability, effectiveness, and practicality of developing a small cluster of national-level indicators of sustainable development. The use of clusters can facilitate a breaking away from the entrenched "old" ways of tracking change and a broadening of the focus of measurement beyond economic factors to include a balance of signals that effectively track both human and ecological wellbeing.

**4.3 Capturing Success As Well as Negative Signs.** The workshop echoed the call for recognizing success as a means of re-enforcing work well done.

**4.4 Content and Form.** The workshop was unanimous in recognizing a need to consider not only the "substance" of what is ultimately proposed in any indicator, but also a form that would ensure effective communication. Both are essential.

**4.5 Linking to Decision-Making.** The workshop was unanimous in calling for the need to embed indicators in decision/policy-making processes. Key aspects of ensuring that this is done include:

- ❑ Engaging decision/policy-makers in the process of indicator development;
- ❑ Implementing a long-term, transparent process for assessing and reporting that includes a significant degree of stakeholder involvement;
- ❑ Implementing a communication strategy using new technology and visualization to engage the media and the general public.

**4.6 Organizing Framework.** Independently, three of the breakout groups developed frameworks for organizing a small number of highly aggregated national-level indicators of sustainable development. These are shown below in Figures 1, 2, and 3.

Figure 1. Breakout Group 1 (three intersecting circles)

Figure 2. Breakout Group 3 (dashboard)

Figure 3. Breakout Group 4 (puzzle)

The workshop came to the conclusion that these three approaches were highly complementary with the questions of Figure 3 offering a conceptual framework to serve as a foundation, Figure 1 providing a catalogue of the key issues to be address and Figure 2 giving a presentational strategy.

**4.7 Reporting Process.** The fourth breakout group addressed the issue of the full reporting system required. Figure 4 shows their proposed approach.

Figure 4. Breakout Group 2 (Reporting Process)

**4.8 The Need to Move Quickly to Testing with Real Data.** The workshop was unanimous in its conclusion that the sooner that an approach was tested with real data and broadly disseminated for discussion the better. Without such a concrete test, progress would continue to lag. Some danger exists that trying to achieve perfection at this stage would impede progress.

**4.9. Recognizing Cultural Differences.** The workshop was unanimous in voicing a concern that major differences in values and means of communicating existed across cultures and countries. These differences had to be recognized and it was essential that any approach to assessing progress toward sustainability be broadly tested in different cultures and countries. While principles might be *adopted* across cultures, practices had to be *adapted* to local conditions.

**4.10 One Focus Should Be the Individual.** A very useful exercise would be to develop say, an "Earth Index" that would allow individuals to evaluate their personal effects on the environment.

**4.11 The Need for Simplicity.** Throughout the workshop, participants emphasized the need for any clustering of indicators to be simple. Without such simplicity effective communication to the media, decision-makers, and the general public would not be possible.

**4.12 Understanding the Role of Indicators in Decision-Making.** Several participants noted the limited understanding that existed of the role that indicators actually play in decision-making. This topic should be noted as a high priority for research.

**4.13 Commitment to a Process of Continuous Learning.** The challenge of developing a practical and effective cluster of national-level indicators of sustainable development will only be met through trial, no doubt some error, but through out with a commitment to continuous learning. Such a *license to learn* needs to be linked to a *freedom to fail*.

## 5. Next Steps

**5.1 *Bellagio Forum.*** The Workshop results will be communicated to the Bellagio Forum for Sustainable Development as input to their four-phase project.

**5.2 *Consultative Group.*** The Consultative Group on Indicators of Sustainable Development will use the workshop results to further their work on developing a cluster of highly aggregated, national-level indicators of sustainable development.

**5.3 *Ongoing Communication.*** Communication between workshop participants will be maintained through the IISD moderated web site. A firm proposal on core indicators will be developed by the Consultative Group on Indicators of Sustainable Development and forwarded to workshop participants for their input. A major presentation to the Rio + 10 Summit to be held in 2002 will be considered necessitating a complete proposal by early- to mid- 2001.

**5.4 *Media Link.*** A workshop involving media people will be considered as a test of any system that is developed.

**5.5 *Strategy for Long Term Change.*** A long-term strategy for broadly introducing the proposed system is needed as part of the ongoing work. Success here will mean effecting a significant cultural change. How to build international collaboration is a critical element.

**5.6 *Tracking Progress.*** A system of performance measurement for this project is needed and will be developed in order to track our own progress.

## APPENDICES

See all appended materials on the workshop's web-site:

<http://iisd.ca/measure/scipol/>

- Appendix 1. List of Participants
- Appendix 2. Background Paper: Seeing Change through the Lens of Sustainability.
- Appendix 3. Background Paper and Interview Response Summary
- Appendix 4. Case Study 1: The European Environmental Pressure Indices Project
- Appendix 5. Case Study 2: Canada's Commissioner of the Environment and Sustainable Development
- Appendix 6. Case Study 3: Community Level Sustainability Assessment: Dasudi, India
- Appendix 7. Case Study 4: Assessing Progress Toward Sustainability: The Placer Dome Group