

## **KEY PHRASE: Sustainability indicators**

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### **Definition**

Following the endorsement by national governments in the 1992 United Nations Conference in Rio de Janeiro, the international action plan 'Agenda 21' urges that *"indicators of sustainable development need to be developed to provide solid bases for decision-making at all levels"* (UNCED, 1992, Chapter 40). However, different commentators and organisations have used the terms 'sustainability' and 'indicators' in different ways. Although indicators, in a simple way, can be defined as surrogates or proxy measures of some abstract, multi-dimensional concepts, the concept of sustainability is more difficult to pin down. Its interpretation is dependent on philosophical considerations that are influenced by political, ethical, religious and cultural factors. In general, there is a consensus that sustainability should encompass social equity, economic growth and environmental protection. Some of the most widely quoted definitions include:

- *"Meeting the needs of the present without compromising the ability of future generations to meet their own needs"* (UNCED, 1987)
- *"Improving the quality of human life while living within the carrying capacity of supporting ecosystems"* (IUCN/UNEP/WWF, 1991)
- *"To equitably meet developmental and environmental needs of present and future generations"* (UNCED, 1992)

Indicators can be aggregated to produce a single index value. The United Nations has for some years published the 'Human Development Index' to measure the progress in developing countries, and the EUROSTAT is developing 'Environmental Pressure Indices' to produce a composite index for each of the ten key identified areas of concern. This type of aggregated indices, primarily used at the national level, is not so helpful at regional and local levels to inform the progress of sustainable development. Hence sustainability indicator sets, comprising a broad range of indicators, are rapidly emerging in local communities across the world.

In the United Kingdom, the national indicator set currently contains 147 sustainable development indicators and a subset of 15 key headline indicators. Information on these headline indicators is provided for the 9 English Regions and for Wales. In order to provide a framework to guide indicator development at the local level, the National Government and the Improvement and Development Agency in consultation with the Local Government Association have developed a core menu of 29 indicators (including the headline indicators) that local authorities might use.

At the European Union level, the European Commission has taken a lead towards harmonising different local indicator sets through the European Common Indicators initiative. This initiative involves a partnership of different organisations and levels to find comparable data and gain a better understanding of sustainability in local

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communities across Europe. Ten common local sustainability indicators have been identified through a bottom-up process and the first set of data become available in autumn 2001.

Sustainability indicators can be classified according to their functions and roles in the decision-making process. Some sustainability indicators aim to provide a simple description of the current state of development (*state* indicators), others are used to diagnose and gauge the process that will influence the state of progress towards sustainability (*pressure, process* or *control* indicators), or to assess the impact brought by policy changes (*target* or *performance* indicators).

### **Key issues**

The development of robust indicators is heavily reliant on the provision of a clearly defined theoretical framework of the concepts to be measured:

- The lack of a clear conceptual and theoretical framework to underpin the interrelationship between different factors to guide the selection of indicators raises the worry that indicators are developed in an ad hoc fashion without full consideration of the fundamental principles of sustainable development. Also, there is a need to clarify the roles and functions of sustainability indicators, and how they are used to influence policy making.
- The lack of appropriate data sources to operationalise the measurement of indicators has been a longstanding issue in indicators research. This tends to be more problematic when the spatial scale moves down from national to local level.
- Since there is not a single perfect measure of the complex concept of sustainability, sustainability indicator sets have been spawned at a number of different spatial levels. The concern is that these indicator sets are not necessarily compatible, and the diverse nature of these indicators makes it impossible to make meaningful benchmarking and comparison of progress across different spatial scales.
- The blossoming of sustainability indicator sets at the local level has provided flexibility for local communities to identify issues that reflect their particular concerns and circumstances. However, there is also an articulated fear that the failure of local communities to grasp the abstract concept of indicators and certain aspects of sustainability will lead to the sidelining of these components in the sustainable development agenda.

The Resources found under this Key Phrase provide materials which could be useful in constructing local indicators, as well as examples of the development and use of indicators.

### **Useful follow-up material**

Bell, S and Morse, S (1999) *Sustainability Indicators*, Earthscan, London. (see ID171)

New Economics Foundation (1995) *New Directions for Structural Funds: Indicators for Sustainable Development in Europe*, NEF, London.

DEFRA, sustainability indicators web page (<http://www.sustainable-development.gov.uk/indicators/index.htm>) and see also ID 173

European Commission's European Common Indicators web page (<http://www.sustainable-cities.org/indicators>)

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**Other relevant Topics**

750 Evaluation and Appraisal: Indicators

800 Databases

**Other relevant Key Phrases**

Statistics, Territorial Impact Assessment, and Strategic Environmental Assessment.

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