

1-2 Dimensions of Sustainable Development

Basically, sustainable development has four main pillars (dimensions); social, economic, environmental and institutional. However, in recognition of the growing importance of information and communication technologies and the role they play in development, a fifth dimension on ICT is added. This integration of social, economic, environmental, institutional, and ICT is an imperative widely recognized by the community. Following are brief definitions of these dimensions.

A - Social:

Development is considered to be socially sustainable when it achieves social justice via equitable resource allocation, eradicates poverty, and provides social services, such as education, health and others to all members of the society, especially the most needy ones. The social dimension of sustainable development is, thus, based on the notion that man constitutes an important means of development and its prime target who should strive to achieve this notion for both present and future generations.

B - Economic:

Economically, sustainability means providing economic welfare at present and in the future, while paying more attention to the "natural capital", which means the natural resources of economic value, considered as the bases for the economic system, such as plants, soil, animals, fish, and bio-environmental system such as air and water purification.

C - Environmental:

An ecologically sustainable system maintains a solid base of natural resources and avoids excessive use of such resources. This involves the conservation of biodiversity, attaining atmospheric balance, productivity of soil as well as other systems of natural environment which are usually classified as noneconomic resources. In tackling sustainable development problems, environmentalists tend to focus on what is known as "environment borders". As a concept it means that each natural environment system has certain limits

that should not be exceeded by excessive consumption or else a deterioration in irrevocable natural system is inevitable. Therefore, from an environmental point of view, sustainability means setting limits for consumption, population growth and pollution, as well as the faulty ways of production; including wasting waters, cutting the forests or the soil erosion.

D - Institutional:

The institutional dimension of sustainable development is concerned with the participation of all community members in the decision making process and the acquisition of the information that affect their lives transparently and accurately. It is also concerned with the organizations, such as councils and committees, charged with the implementation of various aspects of MDGs.

E - Digital (ICT):

Information and communication technologies (ICT) are closely related to the abovementioned four dimensions of sustainable development. The millennium development goals and the recommendations of the international summit for information and communication technology held in Geneva in November 2003 provided a suitable methodological framework on how to make use of ICT in achieving sustainable development. Therefore, the digital dimension has been added as a fifth dimension of sustainable development.