

Information Technology in Support of Sustainable Development: Prospects and Constrains

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I. Abstract

Sustainable development represents a paradigm shift in the way we think of development. Engaging interested parties in the decision-making and implementation process is the hub of managing environmental resources and initiatives for sustainable development. This paper argues that advances in information technology could help ordinary citizen groups to generate information without requiring the sophisticated capacities required for generating, analyzing and utilizing these data in form of information and knowledge required for decision-making. This means the possibility of expanding citizen participation in policies and plans that aim to localize the concept and values of sustainable development through digital forum of discussion that cyber space provides.

However, there are challenges and constraints for completely utilizing the advances in information technology to support initiatives for sustainable development in developing countries. Among these impediments is data validity and reliability. They also include operational planning models, which support decision-making, assumed to be value-free. Furthermore, the capacities of the beneficiaries to analyze the data to enable them to actively participate in the debate on public policies those shapes their future are not well developed to fully utilize these technological advances.