

ADDRESSING A COUNTRY'S SUSTAINABLE DEVELOPMENT PRIORITY : ASSOCIATED INCREASES IN PROFITABILITY FOR THE BUSINESS SECTOR

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1. Introduction

The concept of sustainable development was first introduced by the International Union for Conservation of Nature and Natural Resources (IUCN) in 1980¹. A definition of sustainable development was first given by the World Commission on Environment and Development (popularly known as Brundtland Commission) in 1987 as a development process that "meets the needs of the present without compromising the ability of the future generations to meet their own needs"². The Brundtland Commission considered population control, food security and energy supply as critical components of sustainability. Since the Rio Summit in June 1992 and the adoption of Agenda 21 by the global community, many nations have set sustainability as a key goal of their development.

According to the World Resources Institute, the four dimensions of sustainable development are social, economic, environmental and technological well being. These dimensions provide a framework within which one can specify details for countries at a given stage of development.³

2. India's Sustainable Development (SD) Priorities

India's Ninth Plan recognises the integral link between rapid economic growth and the quality of life of the people and has set SD priorities. They are :

- Accelerating the growth rate of economy
- Ensuring food and nutritional security
- Providing the basic minimum services like safe drinking water, primary health care facilities, universal primary education, connectivity to all
- Containing the growth rate of population - Increasing population has led to a number of interlinked issues: inequalities of income levels, low level of literacy, unemployment and ultimately poverty.
- Ensuring environmental sustainability of the development process - Environment protection does not only involve prevention of pollution and degradation of natural resources, but it also involves integrating with the overall development process and the well-being of people.
- Empowering of women and socially disadvantaged groups
- Promoting and developing people's participatory institutions (like Panchayati Raj)
- Strengthening efforts to build self-reliance (capacity building) - Rapid urbanisation has progressively declined essential services and the quality of life in urban areas. Therefore, synergy between environment, health and development needs to be specially recognised, as no development process leading to better quality of life can be sustained in a deteriorating environmental condition.

Poverty alleviation, economic and social development and environmental protection are overriding SD goals and priorities of India.

3. Addressing Sustainable Development Goals and Practices increases profitability and builds image and leadership of the business sector

It is necessary to discuss here how addressing sustainable development goals of the country/region/local community increases the profitability and builds image and leadership of the Indian Business Sector.

3.1 Incentives for adopting sustainable practices

- Financial gain - Pollution avoidance is less costly than pollution control
 - Stronger enforcement of environmental regulations

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An Approach to Assessing Progress Towards Sustainability : Tools and Training Series, IUCN 1997.

² Our Common Future, 1987

³ World Resources Institute. 1992. World Resources Report, 1992-93. Washington, DC.

- Layering of environmental regulations
- Reduced risk of control costs from future domestic environmental requirements
- Reduced risk of control costs from meeting future international environmental standards
- Boosts profits by substituting knowledge for material inputs
 - reduces inputs to production (energy, water, materials) per unit output
 - reduced dependence on external inputs insulates against price volatility
- spill-over benefits in terms of enhanced managerial and technical capacity
- New opportunities in “green” markets
 - CERs are contingent upon the process having contributed to sustainable development
 - Final users, especially in overseas markets, are interested in sustainability
 - Potential for revenue growth in new markets for products and services
 - Gain trust/ identify emerging markets by forging connections with communities.
- Enhance profitability by generating revenues from nature’s services through ecosystem protection and restoration
 - Offset degradation from other operations.
 - Use natural systems to reduce operating costs.
- Overall benefit to the workers and other factors of production

4. Business Sector need to measure progress toward sustainable development

The World Resources Institute (WRI) acknowledges that sustainable development remains a difficult concept. It is generally easier to agree on a country’s or company’s direction of movement than on whether it has achieved sustainability. Still, without some metric, the question of whether the trend is toward or away from sustainability is open to argument.

Sustainable Development Indicators (SDIs)

To improve clarity, several organizations have established approaches to operationalize the term. One is to set goals based on realistic possibilities and then evaluate the performance of a country or community against the goal - a backcasting model. The other is to design methodologies to assess progress toward sustainability. Measuring sustainability is not an easy task. Therefore a concept of **sustainable development indicator (SDI)** has been introduced to assess, measure and monitor sustainability of a process.

For measuring sustainability of a development process, a useful way is to select and organise indicators in a pressure (cause), state (linking effects), response (policy action) framework. See Table 1 for an example of the pressure-state-response framework. Indian Business Sector may adopt the similar p-s-r framework for selecting / identifying SDIs.

Table 1: Example of Pressure-State-Response Framework

Sustainability Dimension	Goal	Driving Force/Pressure Indicators	State Indicators	Response Indicators
Economic	Poverty alleviation	Inadequate means of livelihood	Poverty index	Employment generation
Social	Access to basic services	Inadequate public infrastructure	Electricity consumption per capita	Off-grid electricity services
Environmental	Reduction in health effects from indoor air pollution	Inadequate access to clean cooking fuel	Morbidity from particulate concentrations	Provision of fuel with lower emissions and efficient chullas
Technological	Capacity to improve technological base	Inefficient production technologies	Energy use per unit of output	Training and investment to adopt improved technologies

The International Union for the Conservation of Nature (IUCN) assesses sustainability through a process of diagnosis, monitoring and evaluation to inform future actions. Diagnosis explains why the action is necessary; monitoring follows the progress of action; evaluation draws conclusions about both process and outcomes. IUCN has developed a toolkit to assess progress toward sustainability which includes methods for assessing systems and identifying community-based indicators.¹

In one report, WRI grouped a set of case studies and used the groupings to compare trends among them. The exercise adopted the pressure-state-response framework.²

Lessons from experience with adopting SDIs in the business / industry sector

At least one cross-sectoral industry group, the World Business Council for Sustainable Development (WBCSD), has developed an eco-efficiency metric and reporting initiative. In order to calculate eco-efficiency, the WBCSD has developed the following equation:

Eco-efficiency = product or service value per environmental influence

The equation is the basis for a flexible voluntary approach for reporting that includes agreed definitions, a recommended set of core indicators, a process for developing supplemental indicators relating to specific businesses, a means for quantifying the eco-efficiency indicators, and recommendations for how companies communicate measurements.³

Some specific industry and professional associations (such as the European Chemical Industry Council and the American Institute of Chemical Engineers) have developed public disclosure requirements for their members on such topics as energy and emissions intensity metrics, corporate and site environmental reports, guidelines for quantitative reporting, and emissions inventories. As a developing country example, the Colombian Business Council for Sustainable Development has tracked the eco-efficiency performance of the Colombian sugar cane industry using a comprehensive set of metrics since 1990.⁴

A set of standard indicators may be developed for the use of Indian industry. These indicators would address the four pillars of sustainability (social, technological, economic and environmental).

The experience to date in establishing and using SDIs offers some lessons. First, given that the private sector generally is not required to concern itself with sustainable development, why have many companies chosen to do so? According to one report, there are several potential benefits to the private sector from incorporating sustainability into business decisions:⁵

- Attracting and retaining customers in markets for existing products and services that reward sustainability (Although these markets are primarily in industrialized countries at present, they are expected to grow elsewhere.)
- Reducing capital and labor cost and lowering liability by making production processes cleaner, more efficient, and community-friendly
- Preserving the right to operate by anticipating societal demands, such as more stringent environmental regulation
- Growing revenue in new markets for sustainable products and services

Having positive incentives to be concerned with sustainability is, however, only part of the picture. **The World Resources Institute has identified six factors that have been positively associated with corporate adoption of sustainability as a goal.** These are depicted by the six large rectangles shown in Figure 1 (leadership, external engagement, strategic intent, measurement, shortening the value chain, and adopting an adaptive culture). The role of SDIs in this conceptual framework is shown as part of the measurement box. To implement SDIs, in turn, requires incentives, capability, and inputs.

¹ An Approach to Assessing Progress Towards Sustainability : Tools and Training Series, IUCN 1997.

² World Resources Institute. 1992. World Resources Report 1992-93 : Dimensions of Sustainable Development.

³ Further information on the WBCSD eco-efficiency initiative can be found at <<http://www.wbcsd.ch/eceffl.htm#top>>

⁴ Markus Lehni. 1998. "WBCSD Project on Eco-Efficiency Metrics and Reporting, State of Play Report.

⁵ Matthew Arnold and Robert Day. 1998. The Next Bottom Line : Making Sustainable Development Tangible. World Resources Institute, Washington, DC.

Work done in India

Although the Government of India has not adopted SDIs, several organizations in India have implemented and taken initiatives to measure progress toward sustainability. As discussed earlier India's Ninth Five Year Plan emphasizes measures to ensure sustainability along economic, social, and environmental dimensions.

In the private sector, increasing competition due to globalization and increasing awareness of environmental deterioration have stimulated interest in internationally-recognized and certified environmental management systems that include tracking progress. Several Indian firms have gone through ISO 14000 certification.

At least one **Indian company, Excel Industries, is participating in the pilot phase of the previously-referenced Global Reporting Initiative (GRI).** The

participation of this chemical firm will ensure that the GRI is applicable to developing country conditions before the GRI is implemented more broadly.

Among NGOs, Development Alternatives has conducted a **Well-Being of Nations** Assessment Study to develop and test tools and methods for assessing sustainability. The assessment examined sustainability issues that were prioritized by local stakeholders. The stakeholders identified educational facilities, vocational training facilities, and better farming practices as development priorities. The study emphasized the use of stakeholder involvement in establishing priorities for sustainable development.

Development Alternatives have recently completed three research studies on sustainable development and SDIs. They are :

1. Measuring Progress Toward Sustainable Development in Indian Climate Change Mitigation Projects¹
2. Climate Change Mitigation Projects in India : Incorporating sustainable development concerns - Policy Recommendations²
3. Three training modules³ :
 - what's in it for business
 - climate Change, SD and Business - how will it benefit business and how to measure progress in business

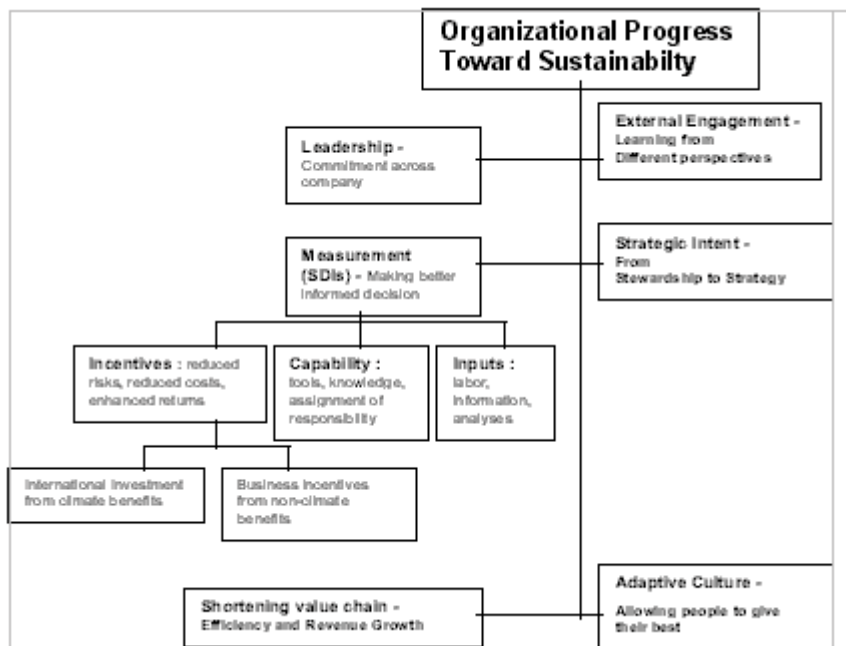
The Center for Science and Environment (CSE) has developed a **Green Rating Methodology** using life cycle analysis (in contrast to the conventional environmental impact assessment approach). CSE's approach assesses the environmental impact of a product from cradle to grave. Once the data is compiled, it is presented to a technical panel for review. The combination of all life cycle stage factors gives a comprehensive rating. The profile is then sent to the company for its feedback.

The Tata Energy Research Institute (TERI) conducts an **eco-rating program** that covers pollution and environmental impact, resource intensity, and work environmental management systems. Eco-rating is an indicator of corporate environmental performance at the unit and facility levels.

6. Conclusion

The central point of this paper has been to establish the fact that apart from environmental concerns alone, undertaking measures to carry out sustainable development can actually prove to be profitable for the business sector. Measuring sustainability, however, is not an easy task and one has to resort to a Pressure-State-Response Framework in order to take into account the various dimensions of sustainability. In the process, one has to look at indicators like poverty index and energy consumption per capita. In the Indian scenario, 4 indicators of sustainability (social, technological, economic and environmental) could be used to assess levels of development.

Figure - 1



¹ Chatterjee, Kalipada, DA and Hagler Bailly Services (Oct., 1999, New Delhi) - A research paper

² Chatterjee, Kalipada, DA : Policy Recommendations to the GoI, New Delhi, May, 2000 - A research paper

³ Chatterjee, Kalipada, DA : Three Training Modules on SD/SDI, New Delhi, May, 2000