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# Sustainable Development: An Earnest Hope

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*“We do not inherit the land from our ancestors; we borrow it from our children”*

*- Native American proverb*

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## Abstract

Sustainable development is a widely used and highly debatable concept leading to board acceptance with very diverse interpretations. The ambiguity pertaining to the definition of the term and its myriad approaches makes it even more complex and multidimensional in nature. However, no matter how we define it and what approach we adopt the essence of all the efforts towards sustainability or sustainable development is to reduce and lessen the wasteful consumption and inevitable impacts that led to the demise of great generations and summoned the present and future generations. Our technologically sound and advanced super generation has the wisdom to understand, learn from the past mistakes, and create alternatives to overcome the challenges. The mantra and passport to the sustainable development lie in rooting and inculcating new set of values, principles, and ethics for a bright and sustainable future of our generations and the mother earth. This chapter discusses the conceptual framework of sustainable development and addresses why sustainable development is inevitable.

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## Keywords

Development • Environment • Growth • Intergenerational equity • Paradigm • Sustainability

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## Introduction

The above ancient proverb reverberates that whatever we are reaping today was sown in the past and what we are sowing today will

be reaped by our children. It indicates the effects of our ancestors on our current situations and warns us about the impact of our actions on the coming generations. However, in the last two decades, a profound understanding of safeguarding the dynamic surroundings has been achieved with a realization that “Environment and development are inextricably linked” (Kofi Annan, former Secretary General of the United Nations, 2002) at every level. Still the complexity and cause-effect of man-environment

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relationship is incomprehensible and calls to restore balance at all levels to avert possible unsustainable and undesirable outcomes. In this regard, utopia of sustainable development has become an incantation offering arrays of possibilities and potential challenges for a sustainable future for earth and its inhabitants. Being an extremely popular, widely used, and highly debatable concept, it has attracted many disciplines with different definitions and various interpretations. The astonishing growth of literature, discussions, approaches, and criticism makes it an everyday reality and fundamental concept of twenty-first century. This chapter discusses the conceptual framework of sustainable development and addresses why sustainable development is a necessary yardstick to assess overall development.

## **Evolving Concept of Sustainable Development**

It is imperative to know the concept of development in order to understand the necessity for sustainable development. Development is a highly dynamic and ever-changing process of socio-economic change. Some view it as a directed change, some equate it with the increase in gross national product (GNP) for economic development, and others include any number of socially desirable phenomena. Broadly, it involves purposeful changes for improving the quality of life. Some scholars claim that the end of the Second World War (1945) was a watershed in the evolution of development theory as it was realized that “development is a right of all the people.” During this era, two important models *Modernization* and *Dependency Theory* were dominant. Modernization theorist promoted the ideas of economic growth and development to be identical, advocating that development can be achieved through Western science and technology replacing consequently the traditional society by modern forms when the growth takes place. On the contrary, dependency theorist accentuated that model of modernization is an illusion. They proscribed the path of development followed by

rich countries and advised the third world countries to break their links from them. Further, dependency theorist alleged that the systematic exploitation of third world colonies made the first world develop.

From 1960 to 1980 various capitalistic models such as models of articulation, internationalization of capital, anti-moderation and grassroots development emanated. In early 1970, the *basic needs approach* paved its way to support food, housing, water supplies, health services, education, and employment. But the skyrocketed price of oil during this time stunned the world and forced attention back on to purely economic growth, resulting in the demise of the more welfare-oriented approach. Once again in the late 1970s, two schools of thought emerged: first regarded development as a multidimensional concept (*purely economic growth oriented*) and second supported purely the *human welfare approach*. The first school of thought acknowledged development as rapid gains in overall capita gross national product which would *trickle down* (Thirwall 1983) to masses in the form of jobs and other economic opportunities, or would create necessary conditions for the distribution of economic and social benefits of growth. In this regard, United Nations Development Program (UNDP) economist, Mahbub ul Haq, suggested measuring development in terms of gross domestic product (GDP), gross national income (GNP), and per capita income. This notion favored economic growth to achieve overall development. On the other hand, second school of thought linked economic development to the reduction and elimination of poverty, inequality, and unemployment within the context of a growing economy. In short, during this era, the concept of development became closely associated to the policies, strategies, and technologies formed by the government; and economists professed economic growth as a quantitative change, absolutely necessary for the development.

The late 1970s and early 1980s was a landmark era in the history of development theory, when for the first time *conservation* and

*preservation* of ecosystem and *habitat planning* were introduced under the banner of *ecodevelopment* by UNEP. The term “ecodevelopment” was coined in 1972 at the first International United Nations Conference on Human Environment in Stockholm. This conference emphasized that socioeconomic development could be achieved only by environmentally sound development (ecodevelopment). Additionally, it was realized that the poor in the society suffer the most from environmental degradation; therefore, persuasive approach of harmonic coexistence with nature would be the best option, which could be accomplished by developing resources to satisfy basic needs and satisfactory socioeconomic system for a long-term development. Based on similar notion, Redcliff (1987) believed that ecodevelopment would lead to economic *equity*, social *harmony*, and environmental *balance*. Further, former director of World Development Institute, Streeten (1992), defined development “as an attack on chief evils of the world today: malnutrition, disease, illiteracy, slums, and unemployment. Development has been a great success. But measured in terms of jobs and justice and the elimination of poverty, it has been a failure or a partial success.”

This renewed and redefined approach of development completely altered the aims and objectives in favor of *quantitative growth and qualitative improvement to measure the progress and quality of life*.

Under the purview of these objectives, many pilot studies were initiated targeting the use of alternative energy sources, development and use of eco-techniques, preparative education to create social awareness of socioeconomic values, and formation of a horizontal authority for ensuring population concern and prevention of plundering ecodevelopment results. Likewise many paradigms and new approaches of development were introduced such as *the new population paradigm*, leveling of the rates of demographic growth; *the social paradigm*, basic needs and a decent living for everyone; *the equity paradigm*, reduction of income and social differences at the international and national levels; *the clean technology paradigm*,

technology with a nonpolluting use of resources and recyclable products; *the managerial or entrepreneurial paradigm*, economic model based on fundamental market mechanism and free entrepreneurs with a social concern; *good governance paradigm*, regulatory, distributive, participatory, and activating role of the state; *the participation and human rights paradigm*, development in a democratic environment; *the cultural paradigm*, strengthening of cultural life, social ability, and *leisure* time activities; and *the sustainable development paradigm*, conservation of nonrenewable resources and prudent use of renewable resources.

The emergence of sustainable development in early and mid-1980s was an extension of the 1960s, 1970s, and early 1980s concepts in a more renewed form. But the original concept of sustainable development could be traced back to the environmental movements during the mid-1960s when two major ideas of *conservation* and *preservation* evolved. Along with this concept, the term sustainable society and sustainable future became popular. However, widespread adverse effects of anthropogenic activities on the environment led to the concept of sustainable development, but the primary intent was conservation of nonrenewable natural resources and prudent use of renewable resources to attain overall development for human beings. Brundtland Commission, through its report titled *Our Common Future* (1987), introduced sustainable development as “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs emphasizing on principle of equity contemplating two types of equity as intergenerational equity: justice to current and future generations in relation to resource and intragenerational equity: fairness in sharing of resources to the competing interests of contemporary time (Yosef, 2008).” The report emphasized fair share of natural resources and expected consensus from the present and future generations (Our common future, 1987). Sustainable development encompasses three fundamental approaches: economic, social, and environmental development, which is interrelated and complimentary to each

other. Thus, the paradigm of sustainable development emerged with three primary objectives: (1) *poverty reduction*, (2) *sustainability*, and (3) *participation*; this applies to a set of processes for improving health of not only the planet but of all the human beings across the world. Therefore, the discourse of sustainable development moved beyond the ecological/environmental concept to other issues, like food security, peace security, trade, heritage, housing shelter, and clean water. With these perceptions and analysis of various models of development, it is clear that development is no longer restricted to the question of growth but is a mega-paradigm composed of a set of sub-paradigms of a different nature that are interrelated and occasionally overlapping combining socioeconomic and environmental parameters. The quintessence of sustainable development is credited for creating consciousness and a change in people's attitude and willingness to participate in the process of making sustainable development a reality.

Currently, sustainable development is extensively used in diverse policy issues, making it an integral part of policy formulation and development not only for regional/national governments and international agencies but also for corporate and business organizations. The core values undoubtedly convey intergenerational equity by effectively integrating social, economic, and environmental aspects for a sustainable society. But many scholars perceive it as a complex conundrum and argue as to what is sustainable or unsustainable or how to evaluate what is socially sound, acceptable, and economically viable. The intricacies pertaining to definition, interpretation, and usage of term are addressed next.

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### Glitches of Sustainable Development

Sustainable development is now a widely used term but ambiguous pertaining to its definition, interpretation, and myriad approaches that make it complex, multidimensional, and debatable. From 1980 to 1994, there have been more than 80 different definitions and interpretations

fundamentally sharing the core concept of the World Commission on Environment and Development (WCED)'s definition, leading to a very broad acceptance with very diverse interpretations. Tolba (1992) argued that sustainable development is a fashionable phrase, its definition is not universally accepted, and nobody cares to define it. Many people use the phrase "sustainable development" interchangeably with "ecologically sustainable" or environmentally sound development and define it as "a process of change in which the exploitation of resources, direction of investments, orientation of technological development and institutional changes are all in harmony and enhance both current and future potential to meet human needs and aspirations." Heinen (1994) also indicated no unanimous single approach of sustainable development as different institutes, communities, and programs use variety of approaches to achieve it.

The word "needs" was criticized by Lee (2000) in the definition of sustainable development (meeting the needs of the present generation without compromising the ability of future generations to meet their own needs) as it expresses anthropocentric view. (Ciegis et al. 2009) also argued that definition by Brundtland did not provide a thorough explanation for actions and practices required to be called sustainable. The World Bank described sustainable development as a development that continues (World Development Report 1992), and the Rio declaration described it as a long-term continuous development of society to satisfy the needs of present generations via rational usage and replenishment of natural resources by preserving the earth for future generations to satisfy their needs (Rio Declaration on Environment and Development 1992). In 1991, the IUCN, UNEP, and WWF equate sustainable development, sustainable growth, and sustainable consumption as identical concepts; however, they all are essentially different in nature. Later, over a period of time, sustainable development initiated strong discussions and problems pertaining to its dual nature, casing development as well as sustainability (Ciegis et al. 2009).

As briefly mentioned, sustainability was originated in the context of renewable resources, such as forests and fisheries, but subsequently adopted as a broad slogan by the environmental movements (Lele 1991). In this regard, environmentalists suggested three types of sustainability (a) *economic sustainability*, (b) *ecological (environmental) sustainability*, and (c) *sociocultural sustainability*, which were criticized for impact analysis. The economic sustainability was accentuated to maximize income and investment for future resources, and ecological sustainability emphasized on stability of biophysical systems (Hollings 1986), and Maler (1990) stressed on the upkeep of biodiversity considering it a critical component of sustainability. The sociocultural sustainability aimed to reduce the vulnerability and maintenance of healthy sociocultural system (Chambers 1989) by resolving and sharing responsibilities of social, economic, and environmental problems (Berkes and Folke 1994). Pearce (1993) viewed sustainable development with an *ethical* component and stated that the cost of society's development should not be placed on future generations. This ethical approach created the possibility of achieving overall well-being for current and future generations within the acceptable limits of the environment. The component of ethics bequeathed one more dimension to sustainability. Later, *institutional sustainability* was added for proper function and effective execution of policies at state, regional, and municipal levels to accomplish sustainability (Helm 1998). Overall, an integrated approach became valuable along with the active participation of society for strategic planning and policy making of a region.

After citing various ways of defining and approaching sustainable development, the essence of the concept is adequately clear as we know what we are striving for and how we can to achieve it. Further, different interpretations are beneficial as they provide basis to debate the choices for people from both developed and developing countries. Besides, the spark and optimistic premises of sustainable development on one hand help to learn from past mistakes and on

the other hand ensure lives worth living even after knowing the extent of damage done to the mother earth.

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## Necessity of Sustainable Development

An earnest hope of a bright future vision reconciles the relationship of man-environment as a mobilizing force behind the concept of sustainable development. So far humans have viewed environment as a beneficial and inexhaustible resource with no long-term consequences. But over the years, growing population and unsustainable consumption of resources have mounted unprecedented stress in developed as well as in developing countries. Both have consequently compromised and threatened the actual capacity and delicate equilibrium of the earth, respectively. The environmental scientists Wackernagel and Rees (1990) quantify resource consumption using the concept of *ecological footprint*, by which all the direct and indirect impacts on productive land and resources are consumed, disposed, and recycled and the waste a person or population creates was measured. Wackernagel and his colleagues furthermore calculated the ecological footprint for whole humanity and concluded that humans have already exceeded earth's productive capacity by 30 %, ensuing a global debit, designated as an *overshoot*. WWF international (2008) stated that humans are consuming renewable resources 30 % faster than they can be replenished. The challenge before humanity is how to live within the earth's carrying capacity. History has substantial proof regarding the demise of great civilizations that crumbled due to human pressure and environmental degradation, leaving a devastating landscape behind. The realization about the wasteful consumption of resources and inevitable impacts has summoned the present generation; they do not want the same fate as our ancestors. In today's globalized world, stakes are higher than before as our actions have global impact and the societal collapse would lead to global collapse. Conversely, the technological advancement and

ability to create alternatives make us a super generation who has the wisdom to understand and learn from the past mistakes. Our transition from economic growth to sustainable development is a remarkable act which possibly would lead to a right direction.

In the words of United Nations Secretary General (1996) Maurice Strong, “the transition to sustainability means process of deep and profound change in the political, social economic, institutional and technological environment. This change requires a supportive international economic environment as a common heritage of mankind, which would integrate development and environment, together with disarmament. Government must take the lead to establish the basic policy framework, incentives and infrastructures required for sustainability.” In the recent past, new programs like Millennium Development Goal and many strategies have been developed to promote and achieve sustainable development. It is noteworthy that strategies for poverty reduction, decentralized planning, and consultation among different organizations, institutions, and governments are much sought alternative approaches for good governance at micro- and macrolevel planning.

For active participation of society, a four-level approach has been analyzed to obtain an integrated and coherent result for sustainable development of a region (Hinterberger et al. 1997). As summarized in a Johannesburg Summit in 2002 “a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development-economic development, social development and environmental protection-at the local, national, regional and global levels,” these four levels are appropriate to initiate integrated and comprehensive projects. The four-level approach identified by Hinterberger (1997) is as follows: (1) the microlevel comprised of entrepreneurs and consumers; (2) the mesolevel included institutions and their networks; (3) the macrolevel incorporates fiscal, monetary, and distribution system and conditions; and

(4) the metalevel aims at the social aims. The participatory approach fosters confidence among various stakeholders and enables policy-makers to understand appropriately the local’s social, economic, and environmental conditions. The strategies of sustainable development follow a multistep integrated and participatory process: (1) identification of an area; (2) reliable baseline information about areas socioeconomic, environmental conditions (especially major stresses, pressures, and trends); (3) identification of all the stakeholders involved in the process (local, regional, and national government and NGOs); (4) identification of rules to promote accountability; (5) preparation of an action plan; (6) monitoring system (who, how, and by whom); (7) management system (what and which system to be used); (8) disclosure (have transparency among various stakeholder); and (9) meetings (to discuss and track progress and any negative responses). The strategies promoting sustainable development are like a passport to enter a future with a new set of principles, ethics, and moral values guiding human beings through the whole process.

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## Conclusion

The mantra of sustainable development emerged due to a profound disappointment about conventional development. The growing popularity of sustainable development has changed the mindsets globally from quantitative to qualitative development leading to a healthy, better and meaningful future. Thoughtful deliberations, resolutions, new approaches, and ethical ideas have created all together a new form of value-based social learning which entails coordinate, cooperate, recycle, reduce, and renew for the well-being of man and earth. These undertakings outline the possibilities of ways to tackle the problems and preferred outcomes for a more meaningful and fruitful path for a desired progress. In conclusion, the need of the hour is to have an integrated, holistic approach which values what is eloquently urged by Maurice

Strong that “Sustainable development cannot be imposed by external pressures; it must be rooted in the culture, the values, the interests and the priorities of the people concerned.”

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