

AECC-Environmental Science

Sustainable Development

Nature provides human societies and economies with a complex life support system, air, water, food and a suitable climate for survival. It also provides the physical resources that are necessary for the sustenance of economies. Nature has supported and maintained life on earth since time immemorial and should continue to do so in future. This is known as the sustainability of nature or ecosystem or environment. However, human beings have been interfering with the sustainability of the natural systems through their activities and if it continues at the same rate then not only the other life forms but also human beings will be under threat. Nature has a limited capacity to absorb the changes. The idea of sustainable development was conceived in early 1970's, when the need was felt to preserve our natural resources as they were depleting at a very faster rate. Prior to that, the developments were unsustainable.

The term, sustainable development, was popularized in *Our Common Future*, a report published by the World Commission on Environment and Development in 1987. Also known as the Brundtland report, *Our Common Future* included the "classic" definition of sustainable development: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." Acceptance of the report by the United Nations General Assembly gave the term political salience; and in 1992 leaders set out the principles of sustainable development at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil.

Sustainable and unsustainable activities:

The very concept of sustainable development encompasses not solely the environment but also the economy and our society as well. Sustainability is a broad concept which deals with mankind's impact, through development, on the environment, on the environment.

There are certain activities which give the signs of unsustainability like

- Overuse of natural resources
- When the consumption of the resources is faster than the renewal
- Overkilling life forms leading to the extinction of species
- Cumulative degradation of the environment

Activities which can be considered as sustainable are

- Use materials in continuous cycles
- Use reliable source of energy continuously
- Want growth to last longer without being slower

Objective of sustainable development:

It is generally accepted that sustainable development calls for a convergence between the three pillars of economic development, social equity, and environmental protection. Sustainable development is a visionary development paradigm; and over the past 20 years governments, businesses, and civil society have accepted sustainable development as a guiding principle, made progress on sustainable development metrics, and improved business and NGO participation in the sustainable development process. Yet the concept remains elusive and implementation has proven difficult.

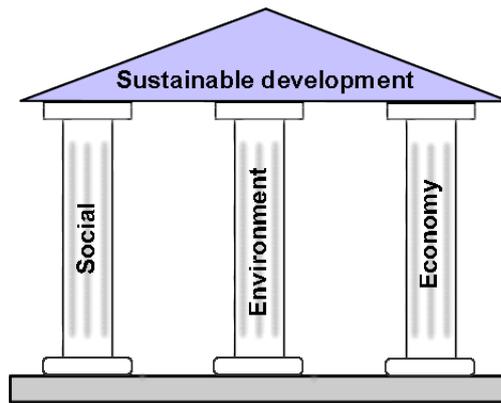


Fig: The three pillars of sustainable development

Sustainable development has been widely promoted as a holistic concept which aims to integrate social, economic and cultural policies to ensure high quality growth; however there are barriers combating the implementation of sustainable development such as economic, financial, innovation, social, political and poor monitoring and evaluation systems. In addition, there are challenges to achieve sustainable development such as ensuring universal access to electricity, maintaining air quality, and limiting global average temperature increases. Responding to the above-mentioned challenges requires large-scale investments.

THE EARTH SUMMIT

The direct consequence of the Brundtland Commission's Report was the UNCED held in Rio de Janeiro, popularly known as 'The Earth Summit'. It was declared in this conference that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. It emphasised on economic growth and poverty alleviation for sustainable development. The basic prerequisite of sustainable development is the evolution of a development process with focus on the enhancement of the living conditions of population as a whole with emphasis on raising the standard of living of the poor.

The outcomes of the conference were the following documents:

1. The Framework Convention on Climate Change
2. The Convention on Biological Diversity
3. The Statement on Forest Principles
4. The Rio Declaration
5. Agenda 21

The Framework Convention on Climate Change (FCCC): The framework dealt with the limits on the use of fossil fuel which was dominating the energy sector. It was deliberated on the issue of global warming. The framework accepted that climate change was a serious problem. It said that industrialised countries should take the lead to reduce the CO₂ emissions to 1990s levels by 2000, while there was no target for the developing and developed countries.

The Convention on Biological Diversity: It affirmed that countries have 'sovereign rights' over biological resources in the territory which should be shared internationally on mutually agreed terms. There are 153 signatory nations to this Convention. The members agreed to develop national strategies for conservation, spread awareness among people through media and educational programmes and conserve threatened species and protected areas.

The Rio declaration: It had 27 principles. They emphasized global partnership involving government and common people to protect the environment. It drew the relationship between economic progress and protection of environment.

Agenda 21: It is a document consisting of 500 pages. It has a bottom up approach and emphasis the role and participation of citizens, especially women and communities and NGOs instead of large state and governmental institutions and projects

Agenda 21 focuses on reducing land, water and air deterioration and conserving habitats and their diversity, deals with related issues of overconsumption, poverty, health, education etc.

World Summit on Sustainable Development Johannesburg, 2002: After ten years of The United Nations Conference on Environment and Development (**UNCED**), the World Summit on Sustainable took place in Johannesburg in 2002. This summit is also called Rio+10. This conference recognised that implementation of the Rio agreements had been poor. This Summit marked a shift from agreements in principle to more modest but concrete plans of action.

The Millennium Development Goals (MDGs): The people of world have seen progress in many areas. Between 1990 and 2002, the average overall incomes of people increased by approximately 21%.

At the Millennium Summit in September 2000, the largest gathering of world leaders in history adopted the UN Millennium Declaration, committing their nation to a new global partnership to reduce extreme poverty and setting time bound targets. That vision, which was translated into eight Millennium Development Goals (MDGs), had remained the overarching development framework for the world for the past 15 years. The internationally agreed framework of eight goals with 18 targets is complemented by 48 technical indicators to measure the progress towards this.

The following were the inspiring eight goals on which frameworks were laid to improve the lives and their future prospects of the people across these assigned nations.

- Goal I: Eradicate extreme poverty and Hunger
- Goal II: Achieve Universal Primary Education
- Goal III: Promote Gender equality and empower women
- Goal IV: Reduce child mortality
- Goal V: Improve maternal health
- Goal VI: Combat HIV/AIDS, malaria and other diseases
- Goal VII: Ensure environmental sustainability
- Goal VIII: Develop a global partnership for development

MDGs were set for a target of 2015. The UN has reported the outcome of the MDGs in its July 2015 report stating that the MDGs helped the world to reduce the number of people living in abject poverty . It has stated that there has been a decline of more than half of the world population living in extreme poverty since 1990.

Although significant achievements have been made on many of the MDG targets worldwide, progress has been uneven across regions and countries, leaving significant gaps. Millions of people are being left behind, especially the poorest and those disadvantaged because of their sex, age, disability, ethnicity or geographic location.

Targeted efforts will be needed to reach the most vulnerable people.

- Gender inequality persists
- Big gaps exist between the poorest and richest households, and between rural and urban areas
- Climate change and environmental degradation undermine progress achieved, and poor people suffer the most
- Conflicts remain the biggest threat to human development
- Millions of poor people still live in poverty and hunger, without access to basic services

Sustainable Development Goals:

The probable shortfall in achievement of the MDGs is indeed serious, regrettable, and deeply painful for people with low income. The shortfall represents a set of operational failures that implicate many stakeholders, in both poor and rich countries. Promises of official development assistance by rich countries, for example, have not been kept. Nonetheless, there is widespread feeling among policy makers and civil society that progress against poverty, hunger, and disease is notable; that the MDGs have played an important part in securing that progress; and that globally agreed goals to fight poverty should continue beyond 2015. In a world already undergoing dangerous climate change and other serious environmental ills, there is also widespread understanding that worldwide environmental objectives need a higher profile alongside the poverty-reduction objectives. For these reasons, the world's governments seem poised to adopt a new round of global goals to follow the 15 year MDG period. UN Secretary-General Ban Ki-Moon's high-level global sustainability panel, appointed in the lead-up to the Rio+20 summit in June, 2012, has issued a report recommending that the world adopt a set of Sustainable Development Goals (SDGs).

So keeping all these in view a new global Sustainable Development Goals (SDGs) have been adopted in September 2015. These new global Sustainable Development Goals (SDGs) will guide policy and funding for the next 15 years,

The new Goals and targets came into effect from 1 January 2016 .The SDGs and targets are defined as aspirational and global, with each government setting its own national targets guided by the global level of ambition but taking into account national circumstances. Each government will also decide how these aspirational and global targets should be incorporated in national planning processes, policies and strategies. It is important to recognize the link between sustainable development and other relevant ongoing processes in the economic, social and environmental fields.

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

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