



SUSTAINABLE DEVELOPMENT IN CONTEXT OF INDIA FOR A SECURE AND STABLE FUTURE

Shaweta Chandel, Assistant Professor, Department of Chemistry, Govt. Degree College, Kullu.
Himachal Pradesh.

Abstract : Sustainable development is a necessity in contemporary era for a secure and a stable future. Brundtland Report aptly defines sustainable development. This pattern of progress is important especially for developing countries like India, where due to over escalating population, the natural resources are depleting rapidly. It is a set of 17 Goals called as Sustainable Development Goals (SDGs), which were adopted by United Nations member states to address world's most pressing socio-economic and environmental issues. Indian Government has also taken various steps to achieve Global Goals or Sustainable Development Goals (SDGs). Carbon Credits, Clean development mechanism, Coal Cess and National Green energy are some of the formidable steps in this direction. Society, Economy and Environment are the three pillars of every Country. Sustainability in these three aspects act as base for this pattern of progress. India aims to achieve a target of generating electricity from non-fossil fuels by the year 2030. Since last two decades due to strong government intervention and favorable economic opportunities, India is becoming one of the top contenders in renewable energy markets. In case of countries like India which are developing, economic sustainability can be achieved by recycling and efficient use of resources.

KEY WORDS: Brundtland Report, Carbon Credits, Clean Development Mechanism, Sustainable Development Goals.

I. INTRODUCTION

Sustainable development, as quoted from Our common future, also known as the Brundtland Report is the development that meets the needs of present without compromising the ability of future generations to meet their own needs.

The main aim of sustainable development is to achieve Sustainable Development Goals (SDGs), more commonly known as Global Goals. They are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. It is also called as Agenda 21 as it is an action agenda for the United Nations, other multilateral organizations and individual governments around the world that can be executed at local, national and global levels. The "21" in said Agenda refers to the 21st century.

The ambitious agenda of Sustainable Development Goals (SDGs) has been agreed upon by 193 countries on 25th September, 2015 at the United Nations. India has made significant progress towards the achievement of Sustainable Development Goals.

II. SUSTAINABLE DEVELOPMENT IN INDIAN CONTEXT

As per United Nations SDG index India ranks 112th out of 166 countries, with an index score of 63.5 percent and spill-over score of 99.4 %.

There is a dire need to follow the pattern of sustainable development in India. All available indicators point to the ecological conditions being nothing short of disastrous in India. Natural ecosystems are under stress and are declining across the country; almost 10% of the country's wildlife is threatened with the fear of extinction and agricultural biodiversity has declined over 90% in many regions. Over half of the water bodies are polluted and the water there from cannot be used even for agricultural purposes. Two third of the land is degraded to various levels of sub optimal productivity; air pollution in several cities is almost world's worst; "modern" wastes, including electronic and chemical, are being produced far beyond our capacity to recycle or manage. A 2008 Report by the Global Footprint Network and Confederation of Indian Industries suggests that India has the world's third biggest ecological footprint, that its resource use is already twice of its bio capacity, and that this bio capacity itself has declined by half in the last few decades.

III. STEPS TAKEN BY THE INDIAN GOVERNMENT

1. *Ratifying the Paris Agreement:* India has ratified the Paris Agreement and this agreement succeeds the Kyoto Protocol. It provides a framework for all the countries to take action against climate change. One of the main focus of the agreement is to hold the increase in global average temperature to well below 2°C above preindustrial level and on driving efforts to limit it even further 1.5°C.
2. *Clean Development Mechanism Projects (CDM) in India:* As on 04th January, 2016, India has 1393 projects registered by the CDM, which is second highest after China which has 3764 projects registered.
3. *State Action Plans on climate change:* The State Action Plan on climate change aims to create institutional capacities and implement sectoral activities to address climate change.
4. *Coal Cess and the National Clean Energy Fund:* India is one of the few countries in the world which has Carbon Tax in the form of Cess on coal. The National Clean Energy Fund, which is supported by the Cess on coal, was created for the purposes of financing and promoting clean energy initiatives, funding research in the area of clean energy and for any other related activities.
5. *National Adaptation Fund for climate change:* A National Adaptation Fund has been established which is meant to assist in meeting the cost of national and state-level adaptation measures in the areas that are particularly vulnerable to adverse effects of climate change.

IV. INDIA'S PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT

1. *Life expectancy general well being:* Life expectancy has achieved a decade's gain. Maternal health has significantly improved, with a rate of 254 per 100,000 live births in 2004-2006 to 113 in 2016-18. Under five mortality rate in 2019 was 34 per 1000 lives, while it was 89 per 1000 lives in 1990.
2. *Forest cover:* There has also been a rise in forest cover despite the pressures on land use, which is a measure of environmental sustainability.
3. *Literacy, a third summary indicator:* There is gain in literacy among younger women, an indicator of future generation's well-being. The primary school enrolment rate was 98.3% in 2018.
4. *The Constitution of India:* The Constitution of India and the relevant amendments that have been incorporated therein over the years, reinforce the policy and legal basis of sustainable development in India. The pillars of sustainable development are embedded in the Fundamental Rights guaranteed by the Constitution, which lay down the framework for social justice.
5. *Right to life:* Article 21 of the Constitution of India conferring the right to life has been assigned the broadest interpretations by the judiciary to encompass the right to a clean environment, right to livelihood,

right to live with dignity, and a number of other associated rights.

6.. *The National Environment Policy, 2006*: The National Environment Policy, 2006 has attempted to mainstream environmental concerns in all developmental activities.

7. *Gender Equality*: The female participation as work force has increased from 22.5% in 2005 to 23.3% in 2019. Child marriage has declined significantly only 30% cases were reported in 2015-16 while a decade ago it was about 47%.

8.. *Clean potable water and Sanitation*: Access to sanitation facilities has risen to 71% in 2017 while it was only 21% in 1990.

9. *Nutrition and economic sustainability*: The poverty rate was 21% in 2011 significantly reducing from 45% in 1993. Undernourishment has reduced to 14.5% in 2018, while it was 18.2% in 2004-2006.

The Government of India, through its various policies, has been factoring ecological concerns into the development process so that economic development can be achieved without permanently damaging the environment.

V. CARBON CREDITS AND SUSTAINABLE DEVELOPMENT

Carbon Credits are certificates issued to the countries that reduce their emission of Green House Gases (GHGs) responsible for global warming. Each Certified Emission Reduction (CER) is equivalent to one ton of Carbon dioxide reduced. The Government of Himachal Pradesh has signed an agreement with the Government of Spain to let them purchase carbon credits under the Bio Carbon Project of World Bank funded by H.P. Mid-Himalayan Watershed Project. This has led the government to earn a sum of ` 1.93 crores in its first instalment itself. The beneficiaries of the cash benefits are about 50,000 villagers from 602 villages who all raised multiple forest plantations on degraded public land in the hilly regions under community led development initiative.

VI. CLEAN DEVELOPMENT MECHANISM

Under the Clean Development Mechanism a developed country can “sponsor” a greenhouse gas reduction project in a developing country where the cost of greenhouse gas reduction project activities is usually much lower, but the atmospheric effect is globally equivalent. The developed country would be given credits for meeting its emission reduction targets, while the developing countries would receive the capital investment and technology or beneficial change in land use. India’s first Clean Development Project under Kyoto Protocol has been assigned to a Refrigerant- gas manufacturer, namely, Gujarat Fluoro-Chemicals (gfl), based in Vadodara (Gujarat). It manufactures hcfc22, a coolant used in air – conditioning and refrigeration applications. hfc23, another fluoro-chemical and a potent greenhouse gas is generated as a by-product. Gujrat Fluoro- Chemicals’ Clean Development Project initiative involves adaptive and eco-friendly process to ensure the fact hfc23 is not emitted. The different types of CDM’s adopted by India in terms of percentage are : 15% are of Biomass energy, 42% are of Wind energy, 8% solar energy , 10% hydro, 15% Biomass , and 10% are others.

VII. DEVELOPED VERSUS DEVELOPING COUNTRIES

A double standard is followed by developed countries in the context of sustainable development. All countries, except US, have signed and ratified Kyoto Protocol. The developed countries never talk beyond total emissions. In the developing countries the scenario is characterized by (i) Poverty (ii) discrimination on the basis of cast, color, creed and religion (iii) state perpetuated terrorism due to difference between rich and poor (iv) terrorist attacks on the basis of religion especially in multicultural diverse countries (v) terrorist groups demanding secession due to their vested interests. In case of developed countries the scenario is different as (i) they take advantage of migrating professionals from developed and under developing countries (ii) utilize natural resources of developed and under developing countries (iii) Multi national organizations operating in developing countries and as a result indigenous technology does not get utilized and due to this local technological advancement does not take place [4]. One needs to address these issues before putting the onus of Sustainable development goals on developing countries.

VIII. CONCLUSION

Inculcating the achievements of sustainable development goals is an enormous task that requires the involvement of every sector and each level of society. India needs to learn from the experiences of pilot countries. Ending poverty, hunger in all its form everywhere, achieving food security, improved nutrition, promoting sustainable agriculture, ensuring healthy lives, promoting well-being for all at all ages, ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all are all the pivotal milestones which need to be achieved for sustainable development.

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