**TOPIC: -**

**SUSTAINABLE DEVELOPMENT.**

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 **INTRODUCTION: -**

Concept of sustainable development was widely accepted across the globe in1987 after its appearance in The Brundtland Report(also referred as ‘Our Common Future’). This report was the result of UN commission set up with a purpose to initialize the concept and practice of global agenda for change. In simple terms ‘sustainable development’ refers to wise development strategies which meets the needs of present generation without any comprise for its availability to the future generations. Present scenario of change in the environment conditions and resources due to overexploitation has led to urgent need for taking initiatives at global level with co-ordination and co-operation to circumvent the deterioration of the environment and its resources.

#  DEFINING SUSTAINABLE DEVELOPMENT: -

The word sustainability is derived from the Latin word ‘sustinere’ which means ‘to hold up’, ‘to endure’. It means to use natural resources in such a way that there is no damage to the environment and can be used for longer time as per Cambridge English Dictionary 3.

World Commission on Environment and Development (WCED), chaired by Brundtland submitted a report Our Common Future. The Report defines the concept of Sustainable Development as4 “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Caring for the Earth defines 5 ‘Sustainable Development as improving the quality of human life while living within the carrying capacity of supporting ecosystem’.

Dr. M. S. Swaminathan6, an eminent environmentalist defines ‘Sustainable Development implies a future in which standard of life is improved would wise through economic development where local environment and biosphere are protected and science is mobilized to create new opportunities for human progress’.

Former president Dr. APJ Abdul Kalam7 expressed his views that ‘Sustainable Development does not imply absolute limits to growth and it is not a new name of environmental protection. The concept leads a unique meaning to development and sets an integrated target for the measurement of development which has a combination of parameters including

 economic status, poverty, education, health, women empowerment, harmony, physical connectivity and environmental aspects.” Raymond8 elaborated that the most object and potentially measurable criteria for Sustainable Development is the preservation of the productivity and the full functioning of the resource base. There are various ways to elaborate the concept of sustainable development but it is focused on the conservation of resources for a better quality of life and prosperity. The concept involves the protection of natural, man- made and human capital resources for future generations also. Economic growth and environmental protection need to be established side by side.

#  PILLARS OF SUSTAINABLE DEVELOPMENT: -

**Sustainable**

**Development**

**Society**

**Economy**

**Environment**

Society, environment and economy are the three pillars on which sustainable development thrives. People, their living environment and economic development are inter- related. Any imbalance between the three can create alarming situations. People are dependent on services provided by the ecosystem for living and development. Ecosystems provide food, shelter, business and growth. Every component of ecosystem is important. If soil is required for growing food, water for drinking then, equally important is the waste degradation, maintenance of balance in biogeochemical cycles and production of oxygen. We cannot live in an isolated system and very much dependent on environment for our existence. Any disturbance in the natural balance by human activity leads to harmful consequences which pose threat to existence of living organisms. Stability and success of any society is dependent on healthy and productive population. Healthy biosphere is needed social and economic growth of the society as poverty, disease and unhealthy environment are the major obstacles for overall growth and development. Understanding the role of each component is

necessary for sustainable development. Long-term stability of the economy and environment are the main goals of sustainable development which can be achieved by the integration and accepting all the aspects related to economy, environment and society while decision making process.

#  HISTORY OF SUSTAINABLE DEVELOPMENT: -

The concept of sustainable development formed the basis of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. The summit was the first attempt to form action plans and strategies for moving towards sustainable development at global level. It was attended by over 100 Heads of State and representatives from 178 national governments. The Summit was also attended by public representatives from a range of other organizations. Sustainable development was first listed as the solution to the problems of environmental degradation the Brundtland Commission in the 1987. This report investigated the various concerns raised in previous decades like severe and negative impacts of human and unsustainable patterns of growth and development. The concept of sustainable development received its first major international recognition in 1972 at the UN Conference on the Human Environment held in Stockholm. Though this term was not used exactly as such but the concept of development and environment management in mutually beneficial and interdependent way originated in this conference. World leaders recognized sustainable development as the major challenge in the Rio Summit. World Summit on Sustainable Development was held in Johannesburg in 2002, attended by 191 national governments, UN agencies, multilateral financial institutions and other major groups to assess progress since Rio. The Johannesburg Summit delivered three key outcomes: a political declaration, the Johannesburg Plan of Implementation, and a range of partnership initiatives. Key commitments included those on sustainable consumption and production, water and sanitation, and energy. Millennium Development Goals (MDGs) were the eight international development goals for the year 2015 that had been established in the Millennium Summit of the United Nations in 2000, following the adoption of the United Nations Millennium Declaration. Main goals were to eradicate poverty and hunger, universal primary education, gender equality and women empowerment, reduction in child mortality, improved maternal health, combating HIV/AIDS, malaria, and other diseases, to ensure

environmental sustainability and to develop a global partnership for development. These were replaced by Sustainable development goals in 2015 and were enlisted in Agenda 2030.

#  PRINCIPLES OF SUSTAINABLE DEVELOPMENT: -

The principle of sustainable development received international recognition from Brundtland Commission Report (1987) was supported by all the nations. Some of the salient principles which underlie the concept of sustainable development were spelled out in the Rio Declaration, 1992 and Agenda 21. Therefore, these principles have been pursued for achieving the goals for sustainable development. These principles are as follows10:

1. Inter-generational equity;
2. Use and conservation of natural resources;
3. Environmental protection;
4. The precautionary principle;
5. The ‘Polluter Pays’ principle;
6. Principle of liability to help and co-operate;
7. Poverty eradication; and
8. Principle of ‘public trust’

**INTER-GENERATIONAL EQUITY:** - This principle accepts the right of each generation of human beings to derive benefit from cultural and natural resources of the past generation and obligation of the present generation to preserve such heritage for future generations. This principle highlights the need of conservation of biodiversity and renewable resources like air quality, water, forests, soil etc.

The principle of inter-generational equity has evolved from first and second principle of the Stockholm Declaration, 1972 with the aim of preservation and improvement of human environment. These principles are9:

**Principle 1**- Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for the present and future generations.

**Principle2:** - The natural resources of the earth, including the air, water, lands, flora and fauna, and especially representative samples of natural ecosystems, must be safeguarded for the benefit of the present and future generations through careful planning and management, as appropriate.

**USE AND CONSERVATION OF NATURAL RESOURCES:** - This principle necessitates the conservation of natural resources in such a way that these can be made available for the future generation. Poverty, population explosion, urbanization and industrialization has led to depletion of natural resources and shortage of these resources is possible in future. Therefore, there is urgent need to develop techniques and technologies which minimizes the need for utilization of natural resources. The principle of use and conservation of resources is based on the theory that the present generation should wisely exploit natural resources for preserving these of the future generations. This will ensure favorable survival conditions of survival for future generations. This principle has been accepted by the international community in the form of Principles 8 and 23 of the Rio Earth Summit Declaration, 1992.

**Environmental Protection: -** Environmental protection is vital for sustainable development. Most of the nations have implemented environmental protection laws for sustainable development. Effective environmental protection mechanism is needed to strengthen sustainable development. Poor population is the major sufferer from environmental degradation as large part of their livelihood is dependent on environmental resources. Policy decisions should be environmental oriented and well planned so as to ensure that there is no degradation in the natural environment.

Environment (Protection) Act, 1986 has been implemented in India for conservation and protection of environment. Some other pollution control and prevention laws have been enforced at national and states level. Ban on polythene, outdated vehicles etc. in some states as per need are some of the initiatives for preserving environment from degradation. The ultimate aim is to ensure sustainable development for protection of environment from being degraded or polluted.

**PRECAUTIONARY PRINCIPLE: -** The precautionary principle aims to cap any human activity which is threat to the environment as a precautionary measure to prevent harm to

environment, even if there is no scientific proof of linking that particular substance or human activity to environmental damage. So, precautionary principle assumes that it is the responsibility of the industrialist to show that his action is not harmful to environment. The precautionary principle of is essentially about the management of scientific risk for environmental protection. It is a component of the concept of sustainable development and has been defined in Principle 15 of the Rio Declaration, 1992.” According to this principle, “where there is threat of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation." In other words, any human activity or behavior which bears the harmful effect to the environment has got to prevented at all costs. Precautionary principle has received legal recognition worldwide along with India.

In Narmada Bachao Andolan, court explained that “when there is a state of uncertainty due to lack of data or material about the extent of damage or pollution likely to be caused, then in order to maintain ecological balance, the burden of proof that the said balance will be maintained, must necessarily be on the industry or the unit which is likely to cause pollution.”

**“POLLUTER PAYS” PRINCIPLE: -** “Polluter Pays” principle was considered to be one of the best method for prevention of environmental pollution. Organization for Economic Co- operation and Development (O.E.C.D.) members incorporated the principle of 'polluter pays' in their environmental policies to discourage subsidies that could be detrimental for trade. This was considered necessary for the protection of environment and save the country from threats posed by environmental pollution by industrial development. But there were practical difficulties in working on the scope of the applicability of principle. The “polluter pays” principle was recognized as an integral part of the sustainable development by the international community arid was incorporated as Principle 16 of the Rio Declaration of Earth Summit, 1992. The principle reads as follows: -

“Principle 16 National authorities should endeavor to promote the internationalization of environmental costs and the use of economic instruments taking into account the approach that the polluter should in principle bear the cost of pollution with due regard to the public interest and without distorting international trade and investment.”

In India, Supreme Court ensured the need of ‘polluter pays principle’ as a fundamental objective of Government's environmental policy to prevent and control pollution in M.C. Mehta v, Kamal Nath case. The Court in this case observed that the calculation of environmental damages should not be on the basis of claim put forward by the party, but it should be on the basis of examination of the situation by the Court, keeping in view the factors such as deterrent nature of the award. Himachal Pradesh Government to take over the area and restore it to its original-natural conditions. The Motel was built by encroaching forest land due to the political influence and resulted in floods in Beas river. In this case,

Motel was asked to pay compensation by way of cost for the restitution of the

Court asked

environment and ecology of the area. The pollution caused by various constitutions made by

the Motel in the riverbed and the banks on the river Beas was asked to be removed and

reversed.

In Vellore Citizens’ Welfare Forum v. Union of India, the Supreme Court directed the Central Government to constitute an authority under Section 3 (3) of the Environment (Protection) Act, 1986 and confer on this authority all the powers necessary to deal with the situation created by tanneries and other polluting industries in the State of Tamil Nadu. The authority shall implement the ‘precautionary principle’ and the ‘Polluter Pays Principle.’

#  PRINCIPLE OF LIABILITY TO HELP AND CO-OPERATE: -

This principle has been specifically incorporated in Rio-Declaration (1992) as Principle 9. According to this, the states should co-operate to strengthen indigenous capacity building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge and by enhancing the development, adaptation, diffusion and transfer of technologies including new and innovative technologies. Principle 10 of the Rio-Declaration further emphasizes on the public participation for addressing environmental issues. Principle 12 emphasizes on the need for mutual cooperation in environmental issues with between the States to cooperate to promote a supportive and open international economic system for economic growth and sustainable development in all countries. Principle 27 abide by the mutual co-operation of people and the State in good faith and in a spirit of partnership in the future development of international law in the field of sustainable development.

#  POVERTY ERADICATION: -

Poverty is the major obstacle in development and is the contributing factor for polluting the environment. Former Prime Minister of India Late Smt. Indira Gandhi said, “of all pollutants we face, the worst is poverty” while addressing the Stockholm Conference on Human Environment in 1972. The Brundtland Report (1987) also mentioned poverty as a potential cause of environmental degradation as it reduces the use of natural resources in a sustainable manner by the people. This leads to pressure on environment resulting in its deterioration. Developing nations are facing the problem which is adversely affecting the environmental quality. The Earth Summit, 1992 anticipated the need to eliminate poverty for achieving the goal of sustainable development mainly in developing countries. More than 30 percent of the population in India is living below the poverty line. Scarcity of the resources, unhygienic living conditions, spreading of epidemics and development of slums are the serious threats for the integrity of environment. India needs cooperation and assistance from the developed countries to help and support the poverty alleviation programme and prevent environment. United Nations Development Programme (UNDP) is continuously supporting

system, improving efficiency of vaccination systems in multiple states etc.

**PRINCIPLE OF PUBLIC TRUST: -** It is related to the preservation of natural resources. Forests are valuable natural resource and the State is its trustee. Therefore, it is the moral and legal obligation of the Government to protect forests from destruction by indiscriminate use. Preservation of this natural resource leads to reduction in soil erosion, increased fertility and; maintaining climate, rainfall and groundwater level. But despite these benefits from forests, forest destruction for the construction of industries, complexes and other commercial purposes is being done widely. Government should take efficient measures to protect and preserve the valuable natural resources as a trustee and people should cooperate with the administration to protect environment from degradation. Public participation in the process of decision making for environment protection should be strengthened.

#  SUSTAINABLE DEVELOPMENT GOALS: -

Active participation of countries, people and business along with United Nations has intensified the efforts to achieve **Agenda 2030** for sustainable development. Seventeen Sustainable Development Goals (SDGs) for Agenda 2030 were officially enforced on January 1, 2016 by the leaders of the world. These were earlier adopted in September 2015 by UN summit. These goals are aimed to eradicate poverty, inequality and factors leading to climate change in all aspects from the World with development of every individual and are based on the success of Millennium development goals (MDGs). These goals emphasize on

the efforts to be taken at individual as well as co-operative levels for protecting earth and promoting the progress and prosperity for sustainable development. All the issues related to ending poverty, economic growth, environment protection, attempt to address climate change, education, health, social issues and employment are incorporated in these goals. These goals do not abide any legal laws but an obligation of the governments to take efforts at national levels to protect the planet. It is the responsibility of the nations to take initiatives and review developments in achieving these goals based on facts and figures. Accessibility, quality and data collection at proper time is needed to monitor the progress at national level. These initiatives contribute to the efforts taken at global level in next fifteen years (Brinkel et al., 2009). Implementation of these goals require ample finance in developed as well as developing nations which can be met by proper utilization and mobilization of financial

resources.

Seventeen Sustainable Development Goals are 2:



Goal 1. It aims at eradicating all forms of poverty from everywhere across the globe.

Goal 2. Food security, improved nutrition, remove starvation and promoting sustainable agriculture development.

Goal 3. Healthy living and well-being for everyone irrespective of the age.

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. Global Partnership for Sustainable Development.

# CONCLUSION: -

Improvement and protection of the environment from pollution is dependent on sustainability environment and development. The concept of sustainable development based on the wise utilization of natural resources for the benefit of both present and future generation. Industrial development worldwide puts pressure on the natural resources which are limited. Wide acceptance of the need for sustainable development worldwide has resulted in global co- operation and co-ordination. Principles of sustainable development need to be followed to protect environment along with the economic growth and industrial development.