

Ahmad, W. (2025). India Towards Sustainable Development: Concept and Approach. *Brainwave: A Multidisciplinary Journal*, 6(2), 1085–1093.

India Towards Sustainable Development: Concept and Approach

Wasi Ahmad

*National Law Institute University, Bhopal, India
Email: wasiahmad@nliu.ac.in*

Received on: January 25, 2025 | Accepted on: June 24, 2025 | Published on: June 29, 2025

Abstract

The escalating apprehensions in recent years regarding environmental and climatic alterations, along with challenges related to poverty, the widening chasm between social strata, and the strife engendered by social inequities, have positioned sustainable development at the forefront of scholarly discourse. In reaction to these pressing issues, a diverse array of 'sustainability rhetoric' is surfacing within organizational mission statements, internal regulatory frameworks, and external accountability mechanisms. This paper discusses the concept, dimensions, principles, challenges and strategies of sustainable development in Indian context as well as enumerating the government initiatives to achieve sustainability. The paper also throws light on recent developments in the field of sustainability like National Action Plan On Climate Change (NAPCC) and Sustainable Development Goals (SDGs) rolled out under Agenda 2030 in 2015. The paper discusses the SDG Index of India prepared by NITI Aayog demonstrating achievements of Indian States along with policy suggestions to achieve the sustainability targets.

Keywords: *Environment. Sustainability. Climate Change. Poverty. India.*

1. Introduction

The term sustainable development was coined by an Indian economist Nitin Desai who was then the senior economic advisor to the World Commission on Environment & Development (WCED) established by UNEP Governing Council in 1983. This commission subsequently became recognized as the Brundtland Commission, named after Gro Harlem Brundtland, who initially introduced the notion of sustainable development in the year 1987. He was the then Prime Minister of Norway and chairman of the World Commission on Environment & Development. Desai (1986) said

‘development policy in the broadest sense and environmental policy be integrated in a common framework’. And the concept of ‘sustainable development’ can provide the basis for such integration.

Sustainable development is characterized as 'the advancement that satisfies the requirements of the current generation without jeopardizing the capacity of future generations to fulfill their own requirements.' It encompasses two fundamental notions within it;

- i. The notion of 'needs,' particularly the fundamental requirements of the

impoverished populations of the globe, to which paramount importance ought to be accorded.

- ii. The concept of constraints established by technological advancements and societal structures on the environmental capacity to fulfill both contemporary and prospective needs (Chapter 2, *Our Common Future: Report of the World Commission on Environment & Development*, 1987).

2. Objectives

This present article outlines the framework of sustainable development and its core principles. It discusses the key concept, dimensions, principles, and strategies of sustainable development in Indian context as well as enumerating the government initiatives to achieve sustainability. It also attempts to identify the primary challenges in the process and emphasizes the critical role that public administration and governance play in the innovative creation and implementation of specific plans to achieve the SDGs.

3. Methodology

This study uses a mixed methodology that incorporates implicit qualitative data analysis. A comprehensive review of official publications, policy documents, and reports created by various organizations, including the Ministry of Environment and NITI Aayog, is used to collect the data for this study.

4. Sustainable Development: Indian Context

Sustainable development in contemporary society is a matter of significant concern. India constitutes 2.4% of the global landmass while accommodating 16% of the world's populace. The resultant consequence is an acute and unsustainable exploitation of natural resources spanning several generations. India is a developing country and is booming, thus sustainable development becomes more

important. But unfortunately, the nation is experiencing a rapid and widespread environmental degradation due to urbanization causing large number of challenges including overpopulation, poverty etc., and creating huge pressure upon country's land and natural resources.

At the United Nations Conference on the Human Environment held in Stockholm in 1972, the then Prime Minister of India, Mrs. Indira Gandhi, underscored the assertion that the eradication of poverty constitutes a fundamental component of the overarching objectives of a global environmental strategy.

The environmental issues alone are not responsible for connotations of inter-relationship of a shared planet, global citizenship, and spaceship earth; rather, they equally pertain to the collective and interlinked obligations of safeguarding the environment and fostering human development. Indeed, development in this contemporary century ought to be increasingly cognizant of its enduring ramifications. The dilemmas presented are intricate, and the decisions required are demanding. The realization of our shared future necessitates an enhanced comprehension of our collective concerns and mutual responsibilities.

The United Nations Conference on Environment & Development (UNCED) held at Rio de Janeiro in 1992 is considered as the milestone event, as it focused the world's attention on environmental and development problems we face as a global community. The government around the globe and the different organizations, agencies worked together collectively for attaining the goals of sustainable development after this Summit. Thus, Agenda 21 was adopted representing the universal consensus and political commitment at the highest level on socio-economic development and environmental co-operation. The Agenda 21 recognized the need of assistance for developing nations to facilitate the cost of actions for handling the environmental problems and gearing up

sustainable development. The role government and administration is quintessential in achieving the national sustainability targets. A study highlights that public administration plays a key role in promoting sustainable development (Kumar, 2024). Thus, the foremost responsibility to bring this change was placed on national governments and they were expected to plan national strategies and policies for sustainable development in agreement with the countries' prevailing situation, capacity and priorities done in collaboration with international organizations to different NGO's, regional, state or local governments and individuals. Another study emphasized the collaborative effort of government agencies, community leaders, stakeholders along with a multidisciplinary bottom-up-approach to accomplish equal economic, social and environmental targets under sustainable development goals (Rohra, 2025). The analysis of another study suggests that about one in five countries have policies favourable to SDG progress, while half implement policies that hinder progress, and a third maintain neutral policy (Van Zanten & Putintseva, 2025).

Thus, India got an opportunity to recommit itself to the development principles which are rooted in the planning process to guide the country and also no distinct national strategies was needed for nation's sustainable development.

Environment is a broad concept encompassing the whole range of diverse surroundings in which one perceives experience and also reacts to changes. Environmental considerations have always been an integral part of Indian Culture which is reflected in our constitutional, legislation and policy frameworks.

4.1 The Constitution of India

Article 21, Right to Life encompasses, right to clean environment, right to livelihood, right to live with dignity and number of other associated rights.

The Directive Principles of State Policy (DPSP) often referred to as the conscience of the constitution are intended to ensure 'distributive justice' and that political democracy in India is accompanied side by side with social and economic democracy.

4.2 The National Environmental Policy

'Only such development is sustainable, which respects ecological constraints and the imperatives of social justice'. The Environmental (Protection) Act, 1986, enacted after Bhopal Gas Tragedy (1984), is also called as the umbrella legislation. Legislated under Article 253 of the Indian Constitution, the Act provided a legal framework for central government and state authorities to prevent, control, and reduce pollution to ensure environmental upgradation.

4.3 Seventh Five Year Plan (1985-1990)

'If the gains in productivity are to be sustained, resources must also continue to be available over time. This requires that while providing for the current needs, the resources base be managed so as to enable sustainable development'. (Volume 2, Chapter 18)

5. Elements/Dimensions of Sustainability

There are three elements of sustainability;

i. Environmental Discourse

The notion of environmental discourse is regarded as the intricate interrelationship between humanity and the natural world. Although the multifaceted nature of sustainability has often been delineated as an environmental concern (Drexhage and Murphy, 2010). The Stockholm conference in 1972 laid 26 principles that specifically addressed environmental issues by invoking the notion of 'carrying capacity' (Riddell 1981, WRI/IIED 1986). Indeed, the third principle articulated that the 'capacity of the earth to produce essential renewable resources must be preserved, restored, or enhanced' (UN, 1972). In the context of the United Nations, the term

sustainability was first introduced within the framework of the United Nations Environment Programme (Kidd, 1992). The UNEP also emphasized the significance of ‘eco-development’ (Sachs 1984) and reintroduced the concept of ‘sustainable yield’ (Tivy and O’Hare, 1982) in its delineation of eco-development. The World Conservation Strategy, developed by UNEP, WWF, and IUCN in 1980, referenced ‘development that is sustainable’ and sought to advance sustainable development through the identification of key conservation priorities. The Rio Earth Summit generated an inclusive global action scheme for sustainable development through the Rio Declaration, Agenda 21, and the Commission on Sustainable Development (CSD).

Thus, the environmental dimension can be understood as a stable resource base that does not exceed the waste assimilation capacity of the environment or the regenerative functions of the ecosystem, while also ensuring that non-renewable resources are consumed solely to the degree that investments are made in renewable alternatives.

ii. The Social Discourse

The societal dimensions of sustainability were also considered during the developmental phase. According to Dempsey et al. (2011), the World Commission on Environment and Development (WCED) placed considerable emphasis on Intergenerational Equity within its definition, which highlighted social dimensions and notably the fundamental factors of social equity, including social justice, distributive justice, and conditional equality. In this framework, the exclusion from engagement in the socio-economic and political spheres of a community was regarded as central to the idea of social equality, as it has the potential to engender racism and discrimination (Pierson 2002; Ratcliffe 2000). During the Rio +20 conference, the United Nations reached a consensus on the necessity of the Sustainable Development Goals (SDGs), underscoring the significance of both

social and environmental issues and the imperative for a more holistic understanding of the importance of business in sustainable development.

It can be posited that the social dimension aims to attain distributional equity, ensuring sufficient provision of social services encompassing health, education, gender equity, political accountability, and participatory engagement.

iii. The Economic Discourse

The discourse emerged when sustainability became pertinent to the interactions between contemporary corporations and both societal and environmental challenges. As posited by Gray (2010), ‘Capitalism and its deleterious tendencies are manifested through its most significant creation - the corporation’. On one hand, corporations are endowed with the capacity to exercise influence over society and to generate large-scale innovations; they are increasingly perceived by governments as an indispensable mechanism through which ‘social and environmental’ sustainability can be operationalized (Hawken et al 1999). Conversely, corporations are situated at the nexus of apprehensions regarding the degradation of natural resources and the proliferation of social inequalities. This paradoxical approach signifies that a deeper comprehension of the relationship among social, environmental, and economic discourses is requisite.

Therefore, economically sustainable systems must possess the capability to consistently generate goods and services, to uphold a manageable scale of government and external debt, and to prevent sectoral imbalances (thereby preserving diversity).

6. Principles of Sustainable Development

The sustainable develop was meant;

- To deliver economic growth and equity

- Conserving natural resources and the environment for us and future generations
- Social development i.e. ensuring rich fabric of social and cultural diversity, ensuring rights for individual empowerment and simultaneously ensuring jobs, education, food, health care, energy etc.

But these led to confusion and competitions between sustainable development and sustainable productions, extraction, yield and use.

Goals of Sustainable Development

- Restoration of past ecological damage &
- Insulation of the society from the damage as a result of future development (Khoshoo, 1990)

7. Challenges to Sustainable Development

There is a need of analyzing sustainability issues at various levels as;

I. Global Level

- Ozone Depletion
- Climate Change
- Air Pollution

II. National Level

- Water pollution and depletion
- Deforestation
- Biodiversity
- Desertification and Erosion of Soil
- Population
- Poverty
- Inequality
- Consumption of Energy

III. Local Level

- Loss of Soil Quality
- Inequality of Income

The three core drivers of unsustainability are;

- Consumption: use of resources beyond the reasonable limits set by the nature.
- Production: gross inefficiencies in production
- Distribution: Inequitable distribution of income between rich and poor and dividing the society.

8. Strategies of Sustainable development

1. To input efficient technology
2. Using environment friendly, resources of energy
3. Government should pay attention on integrated rural development programs
4. To focus on renewable resources of energy
5. To control the tragedy of commons
6. To stimulate the organic farming and recycling the wastes
7. Aware the citizens to conserve the natural assets for intergenerational equality
8. To utilize resources as per their carrying capacity
9. To improve the standard of living including social, cultural and economic dimensions

8.1 Government Initiatives for Sustainable Development

On 30th June 2008, India released a National Action Plan on Climate Change which outlined the strategies to;

- Promote the adaptation to Climate Change &
- To promote the ecological sustainability for India's development (Vinati, 2016)

The National Action Plan consists of eight core National Missions formed by combining several ongoing programs along with newly formulated ones representing several distinct aspects of the long-term strategies.

1. National Solar Mission
2. National Mission for Sustaining Himalayan Eco-system
3. National Mission on enhanced energy efficiency
4. National Water Mission
5. National Mission for Green India
6. National Mission on Strategy Knowledge for Climate Change
7. National Mission for Sustainable Agriculture
8. National Mission on Sustainable Habitat

These National Missions undertaken by Government of India serve as Umbrella organizations in their respective fields along with many schemes/programs for sustainable development

Agenda 2030 is another major initiative undertaken during the Conference of Parties 21 in Paris in 2015. This framework includes 17 Sustainable Development Goals with 169 targets, to be achieved by 2030. Figure 1 clearly specifies all the goals with images. These goals are outlined as follows:

1. To remove poverty
2. To achieve zero hunger
3. To attain good health and well-being for all at all ages
4. To ensure equitable and quality education for all
5. To attain gender equity and empower all girls and women

6. To ensure popper availability of water and sanitation facility for all.
7. To assure the provision of clean, modern and affordable energy to all.
8. To promote sustainable economic growth along with decent and sustainable employment for all.
9. To build-up resilient infrastructure, sustainable and inclusive industrialization and promote innovative activities.
10. To lower inequality within and between the nations.
11. To encourage the development of sustainable cities and communities.
12. To ensure sustainable ways of production and consumption.
13. To take up measure to mitigate climate change and its impacts.
14. To prevent and sustain ocean and marine life.
15. To conserve, rejuvenate and foster sustainable use of land resources, forests, revert land deterioration and biodiversity loss.
16. To ensure harmonious and inclusive co-existence of societies, justice for all, and promote accountability and inclusivity in institutions at all levels.
17. To enhance global partnership for sustainable development.



Figure 1 Sustainable Development Goals; Source: <https://www.myclimate.org/>

The NITI Aayog, a think-tank of Indian government, has prepared its own SDG index for all states and union territories on 113 indicators to measure the achievements of the nation in each respective goal from 1 to 16. The comprehensive SDG score of the nation in 2023-24 stood at 71. Under the index ranking Goal 13 - Climate Action – accords the highest increase in score from 54 in 2020-21 to 67 in 2023-24, followed by Goal 1 – from 60 to 72. Between 2018 to 2024, the fastest moving states are Uttar Pradesh, followed by Jammu and Kashmir, Uttarakhand, Sikkim and Haryana. Despite of India’s significant achievements and strides in accelerating progress on the SDGs during 2020 to 2024, a lot more is left to be attained in the wake of ongoing climatic crisis and challenges.

8.2 How to Achieve Sustainable Development

1. By adopting eco-friendly products, techniques and generating values for what nature has given/provided to us.
2. By ensuring that productive assets will be available to future generations or not.
3. By preventing unnecessary pollution and helping in restoration of environment
4. By inventing and developing technologies and implementing those to conserve these resources.
5. By spreading educational and social awareness about environment and inducing them in our lives and believing in sustainable and wise use of resources needs to bring massive change in social attitude.
6. By being vocal and acting against serious inequities and their impact on the environment.
7. By avoiding repetition of the past mistakes done by our ancestors.
8. By understanding and implementing the interconnectedness of various ways of communicating of what sustainable practice is.

9. Conclusion

*The greatest threat to our planet is the belief
that someone else will save it*

Robert Swan

Sustainable Development is a vision and a way of thinking so that we can secure the resources and environment for our future generations. This is not possible only by policies, instead would be achieved when society will act on the proposition of sustainability goals while making everyday choices and affecting political and economic decisions. Achieving a sustainable future on a worldwide level requires the engagement of every person and party in building a society where social justice, ecological preservation, and financial freedom harmoniously exist, thus improving the quality of life for both present and upcoming generations while lessening the chances of global disruption.

References

1. Dempsey N., Bramley G., Power S., Brown C. (2011) , The social dimension of sustainable development: defining urban social sustainability. *Sustain Dev*, 19:289-300
2. Drexhage J., Murphy D. (2010), Sustainable Development: from Brundtland to Rio 2012, Background paper for the highlevel panel on global sustainability, United Nations, New York
3. Elena Giovannoni & Giacomo Fabietti,(2014), What is sustainability? A Review of the Concept and its Applicatios. C. Busco et al.(eds)...Integrated Reporting, DOI, springer International Publishing, Switzerland
4. Gray R. (2010). Is accounting for sustainability actually accounting for sustainability and how would we know? An exploration of narratives of organizations and the planet. *Account Org. Soc*, 35(1):47-62
5. Hawken P., Lovins A., Lovins L.H. (1999), *Natural Capitalism: creating the next industrial revolution*. Little, Brown, Boston,MA.
6. Government of India. (n.d.). National portal of India. Retrieved from <http://india.gov.in>
7. Ministry of Environment, Forest and Climate Change, Government of India. (n.d.). Ministry of Environment, Forest and Climate Change. Retrieved from <http://www.moef.nic.in>
8. NITI Aayog. (2024, July). *Sustainable Development Goals India Index (SDA_INDIA)*. Government of India. Retrieved from https://www.niti.gov.in/sites/default/files/2024-07/SDA_INDIA.pdf
9. Kidd C.V. (1992). The Evolution of sustainability, *J. Agr. Environ Ethic*: 5(1):1-26
10. Kumar, Sanjay (2024). The Role Of India In Shaping U N Development Goals: A Public Administration Perspective. *BJPA*, 12(2).
11. Pierson J. (2002), *Tackling Social Exclusion*. Routledge, London
12. Ratcliffe P. (2000), Is the assertion of minority identity compatible with the idea of a socially inclusive society? In:Askonas P. Stewart A.(eds.) *Social Inclusions: possibilities & tensions*. Macmillan Basingstoke.
13. Riddell R. (1981). *Eco-development: economics, ecology and development: an alternative to growth imperative models*: Gower, London
14. S, K., Rohra, H. A., P, K., Nandan, K., & Padil, V. V. (2025). Towards Grassroots Sustainable Development using Human Centered Design and Participatory Rural Appraisal: A Study in Two Rural Indian Villages. *Sustainable Futures*, 100604. <https://doi.org/10.1016/j.sfr.2025.100604>
15. Sachs I, (1984). The Strategies of Eco-development. *FAO Ceres* 17:17-21
16. Tivy J., O' Hare G.(1982) *Human Impact on the eco-system*, Oliver and Boyd, Edinburgh
17. United Nations (1972), Report of the United Nations Conference on the Human Environment. <http://www.un-document.net/aconf48-14rl.pdf>
18. Van Zanten, J. A., & Putintseva, M. (2025). Evaluating governmental policies for the sustainable development goals using hierarchical clustering. *International Journal of Sustainable Development & World Ecology*, 1–19. <https://doi.org/10.1080/13504509.2024.2448669>

19. Vinati (2016). India & Sustainable Development, International Journal of Computing & Corporate Research, Vol. 6, Issue 2
20. World Resources Institute/International Institute for Environment and Development(WRI/IIED) (1986), World Resources 1986, Basic Books, New York, NY
21. Myclimate. (n.d.). myclimate. Retrieved from <https://www.myclimate.org/>

Contributor

Wasi Ahmad

Assistant Professor, National Law Institute University, Bhopal, India.

Email: wasiahmad@nliu.ac.in