



SELECTIVE PERFORMANCE AND ACTIONS FOR SUSTAINABLE DEVELOPMENT: A CASE OF INDIA

¹Sonakshi Singh & ²Karuna Shanker Kanaujiya

¹Research Scholar, Department of Applied Economics, University of Lucknow, Lucknow, India,

²Assistant Professor, Department of Applied Economics, University of Lucknow, Lucknow, India,

Abstract : Prioritizing sustainable development and economic growth is essential for social prosperity. Among the recommended policy consequences are ideas like improved sustainability, sustainable resource use, and sustainable growth. These concepts also have financial ramifications. These ideas make the traditional neoclassical notion of sustainability criterion unnecessary in real-world applications. After that, it tries to explain why politically difficult short-term sacrifices can be required to achieve the best and most sustainable growth paths and why market mechanisms might not be able to achieve them. conventionally defined as ecologically sustainable.

The Sustainable Development Goals (SDGs) emphasize the need to end poverty and call for the adoption of policies that support the socioeconomic advancement of the disadvantaged. Some criticisms also cast doubt on the SDGs' broadest sense measurability and monitoring. This article examines and quantifies the discrepancies in the SDGs. It also looks at which of the environmental, social, and economic pillars is most helpful in achieving sustainable development. The data analysis's findings demonstrate that developed countries need to keep focusing on their social and environmental policies. While environmental policies remain crucial for sustainable development, developing nations would be best served in the near run by focusing on their social and economic policies.

While determining that the SDGs have limited transformational potential from an analytical approach, this study concludes by underlining the strategic importance of the SDGs for visions, research, and practices towards transformative change towards sustainability.

Key words - Economic Growth, Sustainable Development, Economic Development

INTRODUCTION

Economic and environmental considerations are the main emphasis of natural resource accounting, particularly as the accounts are further extended. Accounting often does a good job of illustrating how the environment and economy interact with respect to specific natural resources. Sustainable development (SD) is "the paradigm for integrating environment and development strategies" and aims to address present-day needs while guaranteeing the dignity of future generations of people. Therefore, it's critical to prioritize environmental preservation and conservation while also taking sociological and economic concerns into account.

Economic and GDP-based data have been the main method used to evaluate national development initiatives up to this point. Sustainable economic development has to be quantified using both the SDG indicators and the set of environmental footprint indices. Economic, social, and environmental variables are frequently taken into consideration in the SDG metrics gathering. "The foundation of economic development is economic growth. In the present era, these concepts are more alike than ever. The concept of sustainable

development is introduced and its three parts—social, economic, and environmental—discussed in this essay. The concept of economic growth, which mostly refers to gross domestic product, is a component of economic development.

The sustainable development model, on the other hand, is a multidisciplinary concept that relies on resource conservation, the development of clean alternative energy, environmental protection, and the enhancement of quality of life, despite its complexity. Due to their comprehensive, expanding, human-centered, and global nature, the Sustainable Development Goals (SDGs) have also been referred to as the "transformative agenda" (UN 2015). The SDGs aim to protect the environment, advance socioeconomic inclusion, and eradicate poverty. Criticism also raises questions about how well the SDGs can be monitored and quantified. The expectation is that each government would create its own national or regional plans, and the Sustainable Development Goals (SDGs) are not legally enforceable. Additionally, it is unclear where the financial resources and investments needed to achieve the SDGs will come from and how much will be invested in them.

To address these concerns, the report investigates and provides data that quantifies the inconsistencies within the SDGs. Besides that, it examines other SDG metrics and studies which of the three SDG pillars (environmental, social, and economic) is most helpful in achieving sustainable development. In 2020–21, India advanced farther in attaining the Sustainable Development Goals (SDGs). India's total score on the NITI Aayog SDG India Index & Dashboard 2020–21 increased to 66 from 60 in 2019–20 and 57 in 2018–19. There were Front Runners (scoring 65–99), ranging from 10 states and UTs in 2019–20 to 22 states and UTs in 2020–21. The best state and UT in terms of SDG performance in 2020–2021 were Kerala and Chandigarh, respectively.

In North East India, 64 districts were Front Runners and 39 districts were Performers, according to the NITI Aayog North-Eastern Region District SDG Index 2021–2022. India was one of the 193 countries that supported the Sustainable Development Goals (SDGs), which were described in the UN resolution "Transforming our world: the 2030 Agenda for Sustainable Development," in September 2015. The global SDG database shows that the availability of globally comparable data for SDG monitoring has significantly improved, going from 115 indicators in 2016 to 217 indicators in 2022. The MDGs, which covered the earlier fifteen-year period from 2000 to 2015, were replaced. It is challenging to properly understand the pace of development toward the realization of the 2030 Agenda, disparities among areas, and who is being left behind due to considerable data gaps that still exist in terms of geographic coverage, timeliness, and amount of disaggregation.

Less than half of the 193 nations or regions have globally comparable data from 2015 or later for 8 of the 17 SDGs. The most data are available for Goals 3 (health) and 7 (energy), with more than 80% of nations having at least one data point since 2015, however only about 20% of countries have data for Goal 13 (climate action). Disaggregated statistics for tracking the development of vulnerable demographic groups are also lacking. Only 21 of the 32 SDG indicators that call for sex disaggregation have the most recent data readily available in the majority of countries (more than 80% of countries have at least one data point since 2015); for 8 indicators, there are no sex disaggregated data at all.

Changing our social, economic, and environmental demands to support the welfare of the present and future generations is the aim of sustainable development. By working together to address social, environmental, and economic challenges and refraining from overusing valuable natural resources, a sound community can be established over time. "Rational improvement" refers to this sustainable development forces us to monitor and enhance our asset base by gradually changing the ways in which we create and apply innovations. Countries should be able to meet their basic requirements for energy, food, commerce, water, and sanitary facilities.

Economic growth should be encouraged, and emerging countries should be given the same opportunities for growth as developed countries. The four goals of sustainable development are as follows: These include environmental preservation, natural resource conservation, social progress and equality, and steady economic growth. Everyone has a right to live in an environment that is safe, clean, and healthy. Everyone has a right to live in an environment that is safe, clean, and healthy.

REVIEW OF LITERATURE

Trade-offs in the global SDG agenda, according to Obersteiner et al. (2016), will materialise as roadblocks to advancement at the regional and national levels. For instance, satellite data from the Congo Basin has determined that the main causes of deforestation and habitat degradation are agricultural growth and the exploitation of fuelwood and lumber (Celine et al. 2013). Similar effects of increased agricultural commodity prices may be seen in Sumatra, where tropical forests and their biodiversity are suffering (Gaveau et al. 2009). However, there is little information regarding the degree and severity of this frequently asserted conflict between sustainability and development (ICSU and ISSC 2015; Stern et al. 1996; Redclift 2005).

One of the few, if not the only studies, Spaiser, Ranganathan, Bali Swain, and Sumpter (2016) quantifies and models these potential SDG contradictions. Their analysis is based on a sizable dataset of 1,423 economic, social, environmental, and political indicators for 217 countries, covering the years 1980 to 2014 (including information from the World Bank, Polity IV, CIRI Human Rights Data Project, Freedom House, and the Heritage Foundation/The Wall Street Journal). In order to assess the consistency of an abstract, non-observable construct like sustainable development, Spaiser et al. (2016) first use confirmatory factor analysis (CFA). A latent variable

for sustainable development is assessed by picking one indicator for each of the three SDG pillars. The highest factor loadings for sustainable development are found in these chosen indicators: child mortality, education, and CO2 emissions.

According to Easterly (2015), the SDGs are exhaustive, meaning that nothing is a priority because everything is given importance. He makes the important point that it is unclear how the U.N. will proceed in order to achieve the unachievable SDGs, including those relating to "ending poverty in all its forms and dimensions," "universal health coverage," "ending all... preventable deaths [related to newborn, child, and maternal mortality] before 2030," "[end] all forms of discrimination against all women and girls everywhere," and "achieve universal health coverage." There is validity to Easterly and other critics, which even ardent SDG supporters will concede. Because they were specific and measurable, the MDGs were enticing (Easterly 2015). Having non-quantifiable, non-measurable, and non-monitored goals is worthless. However, it might be difficult to quantify a multifaceted idea like sustainable development. Sustainable development indicators have been required since the 1970s, when Agenda 21 first proposed them.

The OECD (2004) created sustainability metrics with a focus on an integrated economic, environmental, and social framework. In support of the European Union's sustainable development strategy, Eurostat also established a task force of national experts in 2001. The first set of indicators was adopted in 2005 and later reviewed in 2007. (OECD 2008).

Sen's theory of development as freedom and capabilities approach offers a more expansive interpretation of social capital and human capital. Thus, efficient, equitable, and intergenerational justice across economic, social, and environmental pillars make up the complex, multi-domain challenge of sustainable development. The concept of well-being, which is the discounted present value of future utility, can be used to gauge sustainable development. The definition of consumption must be expanded in order to account for well-being when measuring it (OECD 2008).

According to Dasgupta (2001), welfare and the extra advantages gained from non-consumables like the existence of basic human rights, forest products, lovely sunsets, etc. are all included in the concept of well-being. In some ways, the idea of sustainable development is still anthropocentric.

Recent literature defines sustainable development as promoting intergenerational prosperity or inclusive wealth (Arrow et al. 2012). Inclusive wealth assesses a society's total stock of capital assets, including natural and human capital as well as replicable and productive capital, as well as how they have changed over time while taking population growth and technological advancement into account. Evidence suggests that Inclusive Wealth Index, as opposed to GDP per capita and Human Development Index (HDI), is better suited to capture sustainable development through changes in intergenerational wellbeing (Dasgupta, 2013). The lack of cross-country, time series data, however, severely restricts this measure (Arrow et al. 2012; Dasgupta 2013). According to several scholars, the three pillars of sustainable development are natural capital, social capital, and physical capital (Hamilton et. al2004). If the per capita worth of these assets is equal to or greater than the level of existing well-being, a path is sustainable. This is what Pearce et al. (1989) call weak sustainability. Since some of these assets may not have marketplaces, determining their worth is challenging. Hamilton (2004) contends that expanding national accounting systems necessitates the measurement of sustainability. Sustainability measurement is encouraged by Nordhaus and Kokkelenberg (1999) because it is crucial for a number of developing nations due to the interaction of low rates of saving, high rates of resource depletion, high rates of population growth, and effective public investments, particularly in education.

In the GGKP Report on Measuring Inclusive Green Growth² (IGG) at the Country Level, the primary trustworthy sources and limitations for data gathering at the country level are highlighted. However, the paper also discusses inclusive green growth and goes beyond the SDGs (WB 2012). The IGG context with "inclusive, green, growth" places more emphasis on their interplay from a dynamic perspective than than the social, environmental, and economic dimensions.

According to Chivu et al. (2012), sustainable development serves as a bridge connecting human development, environmental sustainability, and economic progress. The three facets of sustainability were addressed (economic, social and environmental). Without the preservation of the environment, sustainability is impossible. By industry (air pollution, waste liquids and solids), deforestation and intensive land use, or by wasting water, people have a negative impact on the environment, either willingly or inadvertently.

Using conceptual definitions, ideas, and models of economic growth, Troanca (2013) explores the connection between economic growth and sustainable development. The concept of growth is complex, so understanding it is important. For example, economic outcomes should be tracked over time, and real-world growth should be studied along with demographic trends and macroeconomic expansion.

OBJECTIVES OF RESEARCH

1. Identify the need for Sustainable Development Goals.
2. Examine the possible causes of the failure to achieve the various sustainability ideals.
3. Examine possible sustainable policy measures.

RESEARCH METHODOLOGY

The research is descriptive in nature using secondary sources of data. Secondary data collection includes Journal and newspaper articles, From reports produced by governmental and non-governmental organisations like the United Nations and NITI Aayog, Economic survey, Ministry of Environment, Forest and Climate Change. Because primary data could not be collected due to geographical constraints, this study relied on secondary data. Indicators of sustainable development make an effort to assess sustainable development as a whole, taking into consideration its multidimensional and interrelated nature. We can only expect indicators to represent high levels of quality and reliability, policy relevance, and user manageability under these circumstances. It is obvious that any time policy-relevant indicators are used, they must consider both the socioeconomic and environmental facets of agricultural development. These indicators can be separated into efficiency-oriented indicators and equity-oriented indicators. In addition to efficiency and equity as level and distribution measures, environmental externalities can be further separated into emissions of pollutants and ambient concentrations in various locations. Regarding the integration of the social, economic, environmental, institutional, and sustainable development dimensions, the persistent poverty cycles are a result of the low level of practitioners' and poor people's own involvement in economic and environmental issues.

THE NECESSITY OF SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) have taken the place of the Millennium Development Goals (MDGs), which were aimed at eradicating poverty and hunger, tackling HIV/AIDS, malaria, and other diseases, as well as enhancing access to primary education, enhancing maternal health, promoting gender equality, and ensuring environmental sustainability. The Millennium Development Goals (MDGs) were very successful in achieving primary education for all, enhancing access to clean water, and addressing HIV/AIDS, malaria, and tuberculosis. The eight Millennium Development Goals (MDGs) were determined to be insufficient to address the problems caused by climate change, therefore they were enlarged with a focus on sustainable development.

The attainment of the SDGs can go a long way in guaranteeing sustainable and equitable economic growth for a country like India, which has severe developmental problems due to its vast population, widespread poverty, poor infrastructure, and weak socio-economic indicators. By gradually altering the methods we create and use technologies, sustainable development constantly motivates us to protect and improve our natural resources. All nations should be able to meet their basic requirements for employment, food, energy, water, and sanitary facilities. Everyone has a right to live in a safe, clean, and healthy environment. Development that satisfies current demands without compromising the capacity of future generations to satisfy their own needs is referred to as sustainable development. The equality of nations, races, and genders to ensure a fair distribution of resources is another facet of sustainable development. Better living conditions are offered by sustainable development, as long as the underlying ecology can handle it. Here are a few approaches to verify the sustainability of development:

- i. Any action that promotes economic growth should consider its effects on the environment.
- ii. Before beginning any new development project, such as excavating a mine or constructing a new dam, an honest Environmental Impact Assessment should be conducted.

There is a need for sustainable development because:-

1. Dams, big motorways, and other development projects have the potential to harm ecosystems, sustainable development is necessary. Large tracts of forest have to be cleared to build them. For the protection of renewable resources, regulation of atmospheric carbon dioxide levels, and preservation of atmospheric oxygen levels, forests are crucial. Human development is hampered by the loss of trees, endangering future generations.
2. Heavy industry's toxic and nuclear waste pollutes the air and water supplies, which causes environmental degradation. Therefore, it is important to carefully consider both economic growth and the effects on the environment.

Ecologically sound economic growth is not a novel concept. The necessity for harmony between the environment, society, and economics has been acknowledged by numerous cultures over the course of human history. The phrase "economic growth that is environmentally sustainable" is a synonym for the widely used phrase "sustainable development." The objective of which is to achieve equilibrium or harmony between environmental, economic, and sociopolitical sustainability.

INDIA'S OVERALL GOAL-BASED PERFORMANCE: NITI AAYOG SDG INDIA INDEX REPORT AND DASHBOARD 2020–21

India's overall score on the NITI Aayog SDG India Index & Dashboard improved to 66 in 2020-21 from 60 in 2019-20 and 57 in 2018-19, showing progress in India's journey towards achieving the SDGs. Despite 2020-21 being a pandemic year, India performed well on eight of the 15 SDGs measured by the NITI Aayog SDG India Index. These included – goal 3 (good health and well-being), goal 6 (clean water and sanitation), goal 7 (affordable and clean energy), goal 10 (reduced inequalities), goal 11 (sustainable cities and communities), goal 12 (responsible consumption and production), goal 15 (life on land) and goal 16 (peace, justice, and strong institutions).

According to India's federal framework, states must assume responsibility in order to advance toward realising the nation's SDGs. The world's first government-led sub-national indicator of SDG progress is the NITI Aayog SDG India Index. It was created in order to track how each state and the union territories (UTs) were doing as they worked to meet the SDGs. This score is founded on the idea of cooperative and competitive federalism since it acknowledges the need for action at all levels.

In order to assess the sub-national unit's overall performance across the 16 SDGs, overall state and UT scores are created from goal-wise scores. These values range from 0 to 100, and states and UTs are ranked according to their scores as Aspirant (score 0-49), Performer (scoring 50–64), Front Runner (65–99), and Achiever (score 100). The NITI Aayog SDG India Index has changed since its first baseline report in 2018, as shown in the graph below. Due to its less comprehensive coverage of targets and indicators, the 2018 baseline assessment is not precisely comparable with later assessments.

EVOLUTION OF THE NITI AAYOG SDG INDIA INDEX

Baseline report 2018	Report 2019-20	Report 2020-21
13 goals	16 goals+ quantitative analysis on goal 17	16 goals+ quantitative analysis on goal 17
39 targets	54 targets	70 targets
62 indicators	100 indicators	115 indicators
Goal-wise ranking on States/UTs	Goal-wise ranking on States/UTs + States/UTs profile	Goal-wise ranking on States/UTs + States/UTs profile
Preceded National Indicator Framework (NIF)	Aligned with NIF:68 indicators completely aligned, 20 refined, 12 new to cover goals 12,13 and 14	Aligned with NIF:76 indicators completely aligned, 31 refined, 8 in consultation with line ministries

Source: NITI Aayog

Note: Ministry of Statistics and Programme Implementation (MoSPI) has developed the National Indicator Framework (NIF) comprising 306 statistical indicators for monitoring of SDGs at the national level

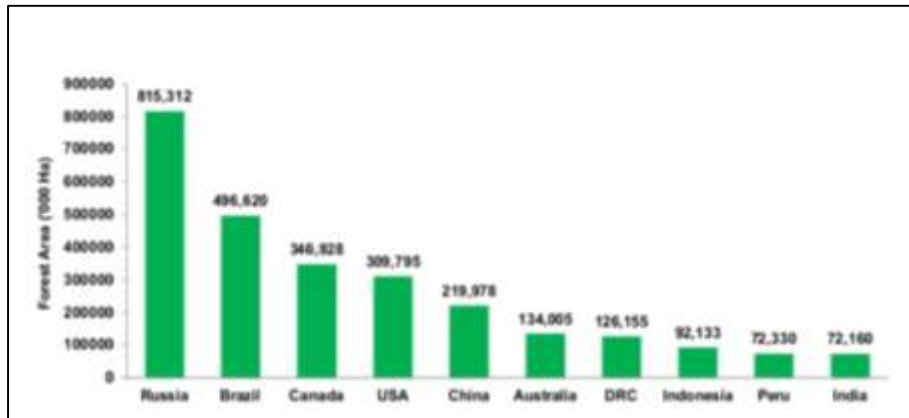
STATE OF THE ENVIRONMENT

Sustainable development requires balancing of rapid economic growth with conservation, ecological security and environmental sustainability

LAND FORESTS

Forest Area refers to area recorded as forest in government records and is also called “recorded forest area”. Figure 1 shows that Russia, Brazil, Canada, USA and China were the top five largest countries by forest area in 2020, while India was the tenth largest country by forest area.

Figure 1: Top Ten Countries by Forest Area in 2020

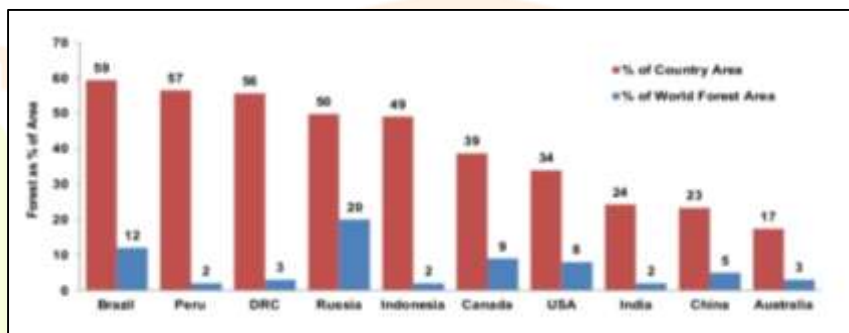


Source: India State of Forest Report 2021

Note: DRC: Democratic Republic of the Congo

Forests covered 24 per cent of India’s total geographical area accounting for two per cent of the world’s total forest area in 2020. Figure 7 shows the top ten countries by forest area as per cent of the total geographical area of the country and per cent of world forest area. The top 10 countries account for 66 per cent of the world’s forest area. Of these countries, Brazil (59 per cent), Peru (57 per cent), Democratic Republic of Congo (56 per cent) and Russia (50 per cent) have half or more of their total geographical area under forests.

Figure 2: Top Ten Countries by Forest Area in 2020 w.r.t Country and World Forest Area



Source: India State of Forest Report 2021

Note: DRC: Democratic Republic of the Congo

Forests covered 24 per cent of India’s total geographical area accounting for two per cent of the world’s total forest area in 2020. Figure 7 shows the top ten countries by forest area as per cent of the total geographical area of the country and per cent of world forest area. The top 10 countries account for 66 per cent of the world’s forest area. Of these countries, Brazil (59 percent), Peru (57 per cent), Democratic Republic of Congo (56 per cent) and Russia (50 per cent) have half or more of their total geographical area under forests.

PLASTIC WASTE MANAGEMENT AND ELIMINATION OF IDENTIFIED SINGLE USE PLASTICS

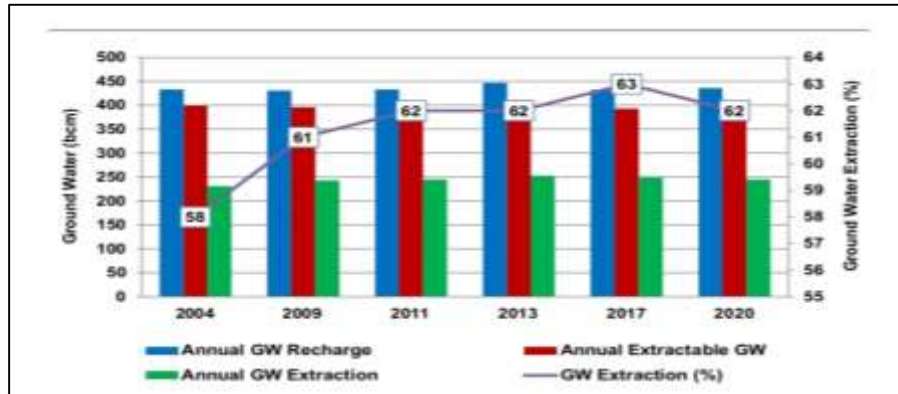
India is committed to mitigate pollution caused by littered single use plastics. In 2018, the Hon’ble Prime Minister announced that India would phase-out single use plastic by 2022. The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended regulate the import of identified plastic waste into the country by SEZ and EOUs. The regulation of import of

plastic waste prevents dumping of plastic waste by other countries in the country and allows for recycling of plastic waste generated in the country. At the 2019 Fourth United Nations Environment Assembly, a resolution on "Addressing Single Use Plastic Product Pollution" was pioneered by India. The resolution acknowledges that the pollution caused by single-use plastic goods must be addressed by the international community.

WATER

Ground Water India's agriculture, industry, and supply of drinking water all depend heavily on ground water security. However, unsustainable extraction, defined as extraction that exceeds or comes close to yearly recharging, can seriously jeopardise ground water supplies.

Figure 3: Ground Water Resource Assessments (2004-2020)



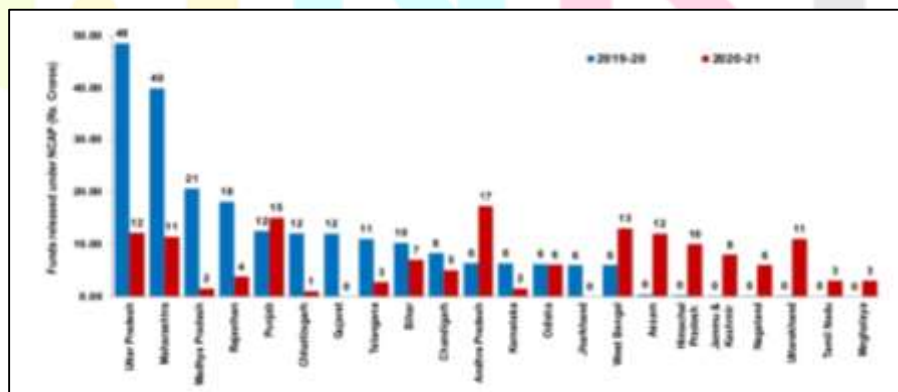
Source: National Compilation on Dynamic Ground Water Resources of India, 2020

Figure 3 shows the annual ground water recharge, annual extractable ground water resources, annual ground water extraction, and the stage of total ground water extraction in India from 2004 to 2020 (the ratio of annual ground water extraction and annual extractable resources, or utilisation vs availability expressed in percent). The annual ground water recharge may be seen to have stayed the same between 2004 and 2020. (except in 2013). During this time, the yearly ground water extraction has generally ranged from 58 to 63%.

AIR

One of the major global environmental problems is air pollution. To address the issue of air pollution comprehensively, the Indian government launched the National Clean Air Programme (NCAP) in 2019. The program's goal is to achieve a 20–30% reduction in particulate matter (PM) concentrations across the nation by 2024, using 2017 as the baseline year for comparisons of concentration. The NCAP is implemented in 132 cities, 124 of which were chosen because they failed to meet the national ambient air quality requirements for five years running.

Figure 3: Funds released under the National Clean Air Programme (Crores)



Source: Ministry of Environment, Forest and Climate Change

Several steps are being taken to control and minimize air pollution from various sources in the country, which inter alia include:

1. **Vehicle Emission:** As of April 2020, India's fuel and vehicle standards have advanced from BS-IV to BS-VI. Greater improvements have been made to metro rail systems for public transportation, and more cities are now served. Cleaner/alternative fuels have been introduced, including ethanol blends in gasoline, CNG, and LPG. Phase-II of the FAME Scheme, with a budget of 10,000 crore for a period of five years beginning on April 1, 2019, has been authorised by the government. Amounts of roughly 86% of the budgetary assistance have been set aside for incentives to spur demand for electric vehicles in the nation. By supporting 7,090 electric buses, 5 lakh electric three-wheelers, 55,000 electric four-wheeler passenger cars (including strong hybrids), and 10 lakh electric two-wheelers, this phase intends to create demand. There is no longer a permit required for electric automobiles.
2. **Industrial Emission:** Thermal power plants using coal now must adhere to strict emission standards. Since July 2018, only authorised processes are allowed to use imported pet coke in the nation. High-polluting enterprises have implemented online continuous emission monitoring equipment. To lessen pollution, brick kilns have been converted to zig-zag technology.
3. **Air pollution from waste burning and dust:** Six waste management regulations encompassing solid waste, plastic waste, e-waste, bio-medical waste, building and demolition waste, and hazardous waste have been made known. There are now waste processing facilities. The concept of extended producer responsibility for managing plastic and e-waste has been established. Burning of biomass or trash is prohibited.
4. **Monitoring of Ambient Air Quality:** As part of initiatives like the National Air Monitoring Programme, the network of manual and continuous monitoring stations for air quality has grown. To evaluate alternative ambient monitoring technologies, such as cheap sensors and satellite-based monitoring, pilot projects have been launched. In Delhi, Kanpur, and Lucknow, the Air Quality Early Warning System is being used to deliver notifications for appropriate action.

CLIMATE CHANGE

India launched the National Action Plan on Climate Change (NAPCC) in 2008, establishing eight National Missions to advance action on the country's climate priorities. The majority of India's climate activities, particularly the adaptation efforts, are funded domestically and 30 projects totaling '847.5 crores have been approved from 2015 to 2019 through the National Adaptation Fund on Climate Change (NAFCC), which was started in 2015. The programmes are being conducted to improve the adaptive ability of the most vulnerable populations and ecosystems, with an emphasis on climate-sensitive sectors like agriculture, water, forestry, and the coastal and Himalayan ecology.

SUSTAINABLE POLICY MEASURES

Following are the policies for sustainable development:

1. **Decreasing poverty:** The main objective of policy is to lessen poverty. Projects providing more opportunities for work for the disadvantaged should be launched. Investments in public utilities, such as the provision of drinking water and sanitary facilities, etc., would improve the country's environment.
2. **Subsidies should be eliminated:** To lessen environmental harm, subsidies for the use of resources like electricity, fertiliser, pesticides, and diesel should be eliminated. They are used wastefully as a result of these subsidies. Environmental issues result from these as well.
3. **Market-based approaches:** Market-based approaches must be adopted immediately in order to protect the environment. They want to make consumers and businesses aware of the impact that exploiting natural resources has on the environment. The best course of action is to use instruments based on the market. These tools take the form of environmental taxes, which also include user fees and emission levies.
4. **Economic incentives:** Economic incentives for quantity, price, and technology can also be more beneficial. For the amount of pollutants in air, water, and land use, resource users are typically given incentives in the form of variable fees. If they produce less trash or pollution than the government-mandated criteria, they receive refunds.
5. **Public awareness:** To improve environmental conditions, public participation and awareness are very helpful. Environment management education initiatives should be carried out through formal and informal channels. The management of parks, the conservation of animals, and other activities can all benefit from public engagement.

- 6. Participation in international environmental initiatives:** It is believed that taking part in international environmental initiatives can lessen the harm caused by environmental degradation. As a result, efforts should be undertaken to reach environmental protection agreements.

INDIA'S DIFFICULTIES IN FULFILLING THE SUSTAINABLE DEVELOPMENT GOALS

India must overcome a number of obstacles to achieve the SDGs. A major issue is the inadequate infrastructure, which has an impact on growth. Even while the financial markets are active, they are still underdeveloped, particularly in the area of debt, which makes it difficult to finance infrastructure projects and leaves the banking industry as the only source of financing. Due to the NPA issue affecting the Indian banking industry, the private sector is experiencing lending constraints. India is falling behind and unable to embrace and adapt climate change resilient farming practises or eco-friendly industries due to low levels of research and development and insufficient innovation. The slow growth in the SDGs indicators is also a result of the high degree of poverty in India and the country's limited access to primary healthcare, sanitation, and education.

MAJOR INITIATIVE AND ACHIEVEMENTS

In order to produce hydrogen using renewable energy sources, India has launched the National Hydrogen Mission. In order to use it as a transportation fuel and an industrial input for refineries, hydrogen is being combined with CNG thanks to technological breakthroughs. The Honourable Prime Minister declared 20% ethanol blending in gasoline by 2025 on June 5, 2021. The ambitious goal is a crucial component of the economy-wide energy revolution because it moves the blending objective from 2030 to 2025.

The Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhayan (PM-KUSUM) Scheme was introduced by India to promote energy and water security, de-dieselize the agricultural industry, and increase farmer income through the production of solar electricity. The programme seeks to increase solar capacity by 30.8 GW with a total central funding commitment of more than \$34,000 Crore.

CONCLUSION

While several Indian states made progress across all parameters in 2019, there are still some states that were unable to raise their ranking. Additionally, there has been a startling lack of progress toward other objectives, such as SDG 5 on gender equality, which all states save Kerala, Himachal Pradesh, and Jammu and Kashmir have failed to meet. India's performance on SDG 13 (action on climate change) has declined from 2019 to 2020. The nation's aggregate national score on SDG 13 was 54 (out of 100) in 2020, which is much lower than the score of 60 in 2019. Eight states — Bihar, Telangana, Rajasthan, Uttar Pradesh, Karnataka, Andhra Pradesh, Punjab, and Jharkhand — whose scores have decreased under SDG 13 in the past two years are principally to blame for this reduction in India's overall performance. The Covid 19 pandemic-driven global recession would make it harder than ever to achieve the SDGs since it will hinder income growth and put a pressure on government resources. However, there is still time before the deadline of 2030, and creative strategies supported by the involvement of all stakeholders, including the private sector, can aid India in achieving its objectives.

The overall score of India's performance on the NITI Aayog SDG India Index increased from 60 in 2019–20 to 66 in 2020–21. India has also made tremendous progress in expanding its forest area, ranking third internationally in terms of net forest area growth during the past ten years (2010-20). The improvement in very dense forest cover, which increased by around 20% throughout the time, is responsible for a large portion of India's rise in forest cover between 2011 and 21. Additionally, the open forest cover increased by 7% throughout this time. States and UTs must better manage their ground water resources to prevent further deterioration of the critical and semi-critical assessment units by increasing recharge and reducing overexploitation.

REFERENCE

1. According to the GGKP report, IGG has five basic characteristics: natural assets, resource efficiency and decoupling, resilience and risks, economic opportunities and efforts, and inclusiveness. A. Bali Swain
2. David, M. P. C. (2018). Sustainable Development Goals (SDGs)-Challenges for India. Indian Journal of Public Health Research & Development, 9(3), 1. doi: 10.5958/0976-5506.2018.00172.9

3. Lynn R. Kahle, EdaGurel-Atay, Eds (2014). *Communicating Sustainability for the Green Economy*. New York: M.E. Sharpe. ISBN 978-0-7656-3680-5.
4. Sachs, Jeffrey D. (2015). *The Age of Sustainable Development*. New York: Columbia University Press. ISBN 9780231173155.
5. Brundtland Commission (1987). "Report of the World Commission on Environment and Development". United Nations.
6. Liam Magee; Andy Scerri; Paul James; James A. Thom; Lin Padgham; Sarah Hickmott; Hepu Deng; Felicity Cahill (2013). "Reframing social sustainability reporting: Towards an engaged approach". *Environment, Development and Sustainability*. 15: 225–243. doi:10.1007/s10668-012-9384-2.
7. Dasgupta S, Laplante B, Wang H, Wheeler D (2002) Confronting the environmental kuznets curve. *J Econ P*.
8. Sachs JD (2012) From millennium development goals to sustainable development goals. *The Lancet* 379:2206–2211. [https://doi.org/10.1016/S0140-6736\(12\)60685-0](https://doi.org/10.1016/S0140-6736(12)60685-0)
9. Pichler M, Schafartzik A, Haberl H, Görg C (2017) Drivers of society-nature relations in the Anthropocene and their implications for sustainability transformations. *Curr Opin Environ Sustain* 26:32–36
10. Abdi, Y., Li, X., & Càmara-Turull, X. (2022). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age. *Environment, Development and Sustainability*, 24(4), 5052-5079.
11. Ellili, N. O. D., & Nobanee, H. (2022). Impact of economic, environmental, and corporate social responsibility reporting on financial performance of UAE banks. *Environment, Development and Sustainability*, 1-17.
12. Forest Survey of India. 2021. *India State of Forest Report 2021*. <https://fsi.nic.in/forest-report-2021-details>
13. Forest Survey of India. 2011. *India State of Forest Report 2011*. <https://fsi.nic.in/forestreport-2011>
14. NITI Aayog. 2021. *North Eastern Region District SDG Index & Dashboard Baseline Report 2021-22*. https://www.niti.gov.in/sites/default/files/2021-08/NER_SDG_Index_NITI_26082021.pdf
15. OECD, 2004. *Measuring Sustainable Development: Integrated Economic, Environmental and Social Frameworks*. ISBN: 92-64-02012-8. OECDa, 2005. *Society at a Glance – OECD Social Indicators*, OECD, Paris.

