ENVIRONMENTAL REPORTS

Original Research Article
ISSN: 3041-556X
Journal homepage: https://er.researchfloor.org/

Environmental Sustainability: A Study for Favourable Effects

Ram Krishna Mandal*[1] and Bar Yakar[2]

[1]*Department of Economics, Cooch Behar Panchanan Barma University, Cooch Behar, West Bengal, India*
[2]*Department of Political Science, Dera Natung Govt. College, Itanagar, Arunachal Pradesh, India*

Citation: Ram Krishna Mandal and Bar Yakar (2025). Environmental Sustainability: A Study for Favourable Effects. *Environmental Reports; an International Journal*. **DOI: https://doi.org/10.51470/ER.2025.7.2.177**

Corresponding Author: **Ram Krishna Mandal** | E-Mail: **(rkm_1966@yahoo.co.in)**

Received 07 August 2025 | Revised 27 August 2025 | Accepted September 30 2025 | Available Online October 28 2025

ABSTRACT

Sustainable practice in forestry and agriculture and the use of sustainable approaches—crop rotation, organic farming, and sustainable logging initiatives—are essential components of maintaining soil health and biodiversity, both of which are crucial elements of functioning and healthy ecosystems. A comprehensive and integrated strategy that incorporates technical breakthroughs, the development of effective regulatory frameworks, cautious resource management, and the promotion of social fairness is required to create a resilient and healthy future that is accessible to all people on Earth.

Objective: *The objective of the study has tried to examinethe favourable effects of environmental sustainability.*

Methodology: *The proposed study is basically empirical in nature based on secondary sources. This study utilizes a descriptive and analytical research methodology, relying on the compilation, review, and synthesis of secondary information.*

Result and Discussion: *This section details the findings on the major favourableeffects of environmentconfronting environmental sustainability, supported by available data.*

Conclusion: *Environmental sustainability is indispensable in order for long-term ecological balance, economic resilience and social well-being to be achievable. Sustainable health offers cleaner air and water, which leads to better community health and eases the pressure on public health.*

Keywords: *Forestry, Agriculture, Soil health, Biodiversity, Organic farming, Ecological balance.*

INTRODUCTION

Environmental sustainability is defined as the appropriate and undoubtedly responsible use of our environment with the intent to maintain ecological balance and life both now and into the future. This concept aims to effectively balance the capability of the natural environment to sustain life, with the diverse needs of people, especially because of the critical deterioration of environmental conditions recognized in the modern world, .Industrialization, deforestation and over-consumption (World Commission on Environment and Development, 1987) has severely hampered our ability to monitor ecosystem-related sciences. The essence of the idea of environmental sustainability is to stay progressively within the 'ecological limits' defined for our planet, which includes making every effort to limit the use of non-renewable resources, while progressively reducing levels of joker pollutionand remote by understanding and senior all ecosystems that are significant to biodiversity.

Habitual fossil fuels are possible where new energy sources are applied, such as solar, wind, and hydroelectric power, since their contribution of climate change only stems from accuracy, which can only lead to less stableatmosphere, but has been recognized globally for the substantial natural ecosystemaboration rated by climate change an on thelimiting of matter usage has successfully determined in a variety of forms. Humanity must operate within planet boundary levels to continue a positive environment for those able to access them. Authenticate as it would have to prevent impacts having both past and present stigma, according to irritating sections of important research conducted by the center result [34], hopelessly unharmable affectable for future generations.

Sustainable practice in forestry and agriculture and the use of sustainable approaches—crop rotation, organic farming, and sustainable logging initiatives—are essential components of maintaining soil health and biodiversity, both of which are crucial elements of functioning and healthy ecosystems. The sustainable use of soil resources—with sustainable waste disposal options being recycling and reuse of materials—is another critical way to reduce environmental degradation, while conserving resources that are limited and dwindling.

By encouraging environmentally friendly construction practices, public transit accessibility, and walkable urban development that lowers greenhouse gas emissions and improves public health, sustainability may also spur urban development. Moving ahead on these concerns will need education, strict accountability in the implementation of rules to address environmental pollutants, and the development of sustainable engagement with individuals and communities. Moving sustainability actions include addressing and tackling social and economic inequitable circumstances. The Paris Agreement [47] and other international collaborative undertakings represent a collective desire to address climate change at the global collective level with my climate action plans. Global sustainability efforts in poor nations that struggle to get resources and start up their infrastructure are made possible by fostering worldwide collaboration, commitment and implementing integrative and collaborative policies. To sum up, environmental sustainability is a fundamental component of a livable present and future.A comprehensive and integrated strategy that incorporates technical breakthroughs, the development of effective regulatory frameworks, cautious resource management, and the promotion of social fairness is

required to create a resilient and healthy future that is accessible to all people on Earth [https://scispace.com/paraphraser].

OBJECTIVE

The objective of the study has tried to examinethe favourable effects of environmental sustainability.

METHODOLOGY

The proposed study is basically empirical in nature, based on secondary sources. This study utilizes a descriptive and analytical research methodology, relying on the compilation, review, and synthesis of secondary information. The key components of the methodology include:

Data Sources: Information was gathered from a diverse range of credible national and international sources:

1. International and Multilateral Organizations: World Commission on Environment and Development (WCED), Convention on Biological Diversity (CBD),Centers for Disease Control and Prevention (CDC), Consultative Group on International Agricultural Research (CGIAR), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),Food and Agriculture Organization of the United Nations (FAO), International Energy Agency (IEA), International Food Policy Research Institute (IFPRI), International Labour Organization (ILO), International Renewable Energy Agency (IRENA), Intergovernmental Panel on Climate Change (IPCC), International Union for Conservation of Nature (IUCN), Organisation for Economic Co-operation and Development (OECD), United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Human Settlements Programme (UN-Habitat), United States Environmental Protection Agency (USEPA), World Bank Group, World Food Programme (WFP), World Health Organization (WHO), Waste and Resources Action Programme (WRAP), Ellen MacArthur Foundation.

2. Indian Government Ministries and Agencies: Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, Ministry of Housing and Urban Affairs (MoHUA), Government of India, Ministry of Jal Shakti (MoJS), Government of India, Central Pollution Control Board (CPCB), Government of India.

3. Academic Literature: To fulfill the objective of the study, different peer-reviewed journals, different published and unpublished relevant scholarly research articles, books, etc., on environmental sustainability are consulted. After consultation of the literatures, different issues on the topic are brought out and discussed accordingly.

4. Qualitative Synthesis: Analysing policy documents, expert opinions, and findings from various research reports to understand the nuances, effectiveness, and limitations of interventions and the interconnectedness of challenges.

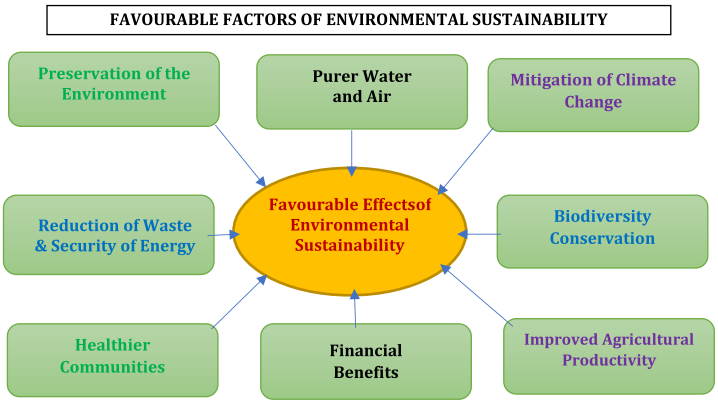
Data Analysis: The various materials gathered from the various sources are then processed, examined, validated, interpreted, arranged and analysed methodically under the relevant headings in order to hold the necessary presentation and conclusion to write up the article.

RESULTS AND DISCUSSION

This section details the findings on the major favourableeffects of the environmentconfrontingenvironmental sustainability, supported by available data.

Environmental sustainability is vital for ensuring ecosystem health and preserving our natural resources, which in turn support biodiversity and the well-being of humans [28]. Environmental sustainability contributes to long-term economic growth by allowing innovation, resource efficiency, and job creation in renewable energy and sustainable agriculture[38]. Pollution reduction can improve public health by reducing instances of respiratory and waterborne illness [52, 53&54]. Building environmental sustainability through the reduction of greenhouse gasses and enhancement of carbon sinks is a key to mitigating climate change and safeguarding communities from extreme weather events [22, 23& 24]. Sustainability contributes to social equity by ensuring future generations will have quality air, water, and natural resources [1]. Environmental sustainability is fundamental to keeping ecosystems in our world healthy. Sustainable practices help conserve biodiversity and ecosystem services that sustain life by ensuring the quality of the air, water, and soil. Healthy ecosystems support food production, clean air and water, and climate regulation [28]. Therefore, maintaining environmental sustainability supports ecosystem integrity and human survival. Also, sustainability promotes the wise use of natural resources while reducing waste and is an opportunity for economic growth. Green sectors that are creative, innovative, and create jobs while reducing environmental impacts include eco-tourism, organic agriculture, and renewable energy [38]. The World Bank (2012) argues that if an economy is sustainable, it is more resilient to shocks such as biodiversity loss, climate change, and resource limitations[56].

By reducing exposure to harmful compounds and pollution, environmental sustainability benefits human health. For example, the prevalence of diseases like cancer, asthma and waterborne diseases is reduced when air and water quality is improved [52, 53& 54]. Sustainable agriculture can also help create healthier food systems by reducing the likelihood of food systems being affected by chemical inputs or diseases caused by specific diets [13& 14]. The management of sustainable practices like conservation agriculture, afforestation and renewable energy will mitigate climate change. This will reduce extreme weather events and stabilise global temperatures by reducing greenhouse gas emissions and improving carbon sinks [22, 23& 24]. This not only protects the environment; it also protects future generations and vulnerable people. Environmental sustainability is about wise management of the natural resource bases that future generations will depend upon to meet their needs. Sustainable development can provide a path for society, showing a trajectory for positive interactions between environmental stewardship, economic and social equity. Some positive considerations are specifically modeled and described below.



DISCUSSION ON FAVOURABLE EFFECTS OF ENVIRONMENTAL SUSTAINABILITY

1. Preservation of the Environment

(i) Long-Term Development - Sustainable development aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. The concept guides the use of resources in the various sectors like agriculture, forestry and water [49]. The overarching aim is to combine economic growth with environmental protection.

(ii) Indigenous Knowledge and Local Community Participation: Local communities -especially indigenous communities- are critically important for conservation of biological diversity and have a role to play within their own traditional knowledge and processes. Participatory conservation initiatives have been successful at conserving resources such as Joint Forest Management in India [17].

(iii) Resource Depletion and Climate Change: Climate change worsens resource depletion by altering ecosystems, increasing temperature, and altering patterns of rainfall. Conservation strategies, therefore, need to be inclusive of climate resilience [22, 23& 24].

(iv) Planting and Replanting Trees: Reforestation projects create carbon sinks for carbon and aid in healing damaged ecosystems. Resources like the Green India Mission, which improves biodiversity and forests across India [30] are important as they stimulate appropriate coverage of forest area again.

(v) Water Resources Management: Freshwater conservation needs to consider not only the watershed, and rainfall capture, but must also reduce pollution. The best way to strategically include water sustainability is to take an integrated approach to water resource management or IWRM [45].

(vi) Law and Policy Frameworks: Conservation initiatives are normally supported by international agreements such as the Convention on Biological Diversity and various environmental laws like India's Environment Protection Act (1986) [2].

(vii) Awareness and Education: A critical aspect to the sustainability of natural resource conservation initiatives is raising awareness rising through education. Ecological literacy is prioritized from an early age through initiatives such as UNESCO's Education for Sustainable Development (ESD) [46].

2. Purer Water and Air

(i) Pollution Sources: Industrial emissions, vehicle fuel combustion emissions, agricultural runoff and sewage discharge are the principal contributors to pollution in air and water. Urban air quality is deteriorating due to particulate matter PM2.5 and nitrogen dioxide (NO_2) emissions (WHO, 2018); and water bodies continue to be contaminated by chemicals like heavy metals and nitrates [40, 41, 42& 43].

(ii) Effects on Health: There is a plethora of serious health related diseases such as cardiovascular diseases, other respiratory diseases, and water-borne diseases like cholera and dysentery associated with exposure to dirty air and water. The WHO estimated that there are 7 million deaths globally due to air pollution each year [52].

(iii) Technological Solutions: Advances in technology have led to reduced pollution, including wastewater treatment plants, air purifiers, catalytic converters, and zero-liquid discharge technology. There is increasing accessibility to cheap air sensors, and solar-powered, rapidly self-renewing water purifiers [48].

(iv) Policy and Regulation: Key laws for pollution control include the U.S. Clean Air Act and Clean Water Act; and India's Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 [5].

(v) Citizen and Community Action: Local communities may help create better air and water by carpooling, avoiding plastic, and maintaining clean rivers. Initiatives like India's "Clean Ganga Mission" and "Swachh Bharat Abhiyan" demonstrate this kind of citizen participation [29].

(vi) Data openness and monitoring: Real-time air and water quality monitoring systems let citizens and governments take swift action. Open data platforms like the Air Quality Index (AQI) and the National Water Quality Monitoring Programme (NWMP) increase accountability [5].

(vii) Sustainability in Urban Planning: Green spaces, waste segregation systems, efficient public transit, and proper drainage may all significantly reduce pollution levels [37].

3. Mitigation of Climate Change

(i) Switch to Renewable Energy: One of the most effective strategies to slow down climate change is to switch from fossil fuels to renewable energy sources including solar, wind, hydro, and biomass. The IPCC emphasizes that expanding renewable energy is essential to limiting global warming to less than 1.5°C [27].

(ii) Conservation and Energy Efficiency: By improving the energy efficiency of buildings, industries, and transportation, greenhouse gas emissions may be reduced without compromising development. Energy-efficient technology and behavioural changes can significantly lower carbon footprints [18] (IEA, 2022).

(iii) Pricing and Emissions of Carbon: Market-based instruments for forcing a decrease in emissions would include cap-and-trade programmes and carbon taxes. Programs such as these have demonstrated incentives to decrease emissions.

Countries such as Sweden and Canada have developed credible carbon pricing initiatives for countries to meet climate targets [60].

(iv) Reforestation and Afforestation: Forests act as carbon sinks as they remove atmospheric CO_2. The protection of forests, particularly in developing countries is encouraged as a mitigation strategy through REDD+, which stands for Reducing Emissions from Deforestation and Forest Degradation [13 &14].

(v) Climate-Smart Agriculture: While agriculture has considerable associated emissions, changing practices to sustainable agriculture, such as crop diversity, organic and slow-ripening fertilisers, adopting regenerative agriculture, no-till farming, mixed ventures and more, can support climate resilience while still decreasing emissions [11& 12].

(vi) Systems of Sustainable Mobility: The transportation sector should be viewed differently from mobility. While the transportation sector represents a significant contribution to global warming, promoting electric vehicles, bicycles, public transportation, and bio-fuels may address a decrease in emissions in this sector [44].

(vii) Global frameworks and agreements: Through Nationally Determined Contributions (NDCs), international frameworks such as the Paris Agreement seek to bring countries together in the fight against emissions. For mitigation to be effective, cooperation and accountability systems are essential [47].

4. Biodiversity Conservation

(i) Protection of Habitats: We can only conserve physical biodiversity by protecting natural ecosystems, including grasslands, peatlands, wetlands, forests, coral reefs etc. The leading cause of species extinction globally, is loss of habitat, [3]. Biosphere reserves, parks and protected areas are valuable tools for conserving habitat.

(ii) Protection of Endangered Species: To lessen the effects of extinction of threatened and endangered species, we can use anti-poaching laws, restoring restoredegraded habitats, and introduce breeding programs. Other initiatives exist like trade controls of endangered species by CITES to lessen exploitation and to protect living natural assets [7].

(iii) Community Community-Based Conservation: When involving indigenous and local communities into conservation programs it includes traditional knowledge, and increases opportunities of sustainable management. Use of the Joint Forest Management program in India and Nepal's community forests can be supported paragons [16].

(iv) Management of Invasive Animal Species: The invasive alien species adversely threatens biodiversity and impacts on the health of ecosystems. Managing alien species is critical for ecosystem health including using biological control of invasive species, the removal of the invasive species, and preventing any alien species from entering our natural ecosystems by quarantine restrictions[26].

(v) Pollution Management: Pollution is harmful to wildlife, and degrading ecosystems caused by plastics, pesticides, and from industry.

To conserve biodiversity, we need to protect chemical and waste management practices [40, 41, 42& 43].

(vi) Climate Change Adaptation: Climate change affects the habitat, migration patterns, and survival of animals. A number of climate adaptation practices for biodiversity are removing barriers like ecological corridors, and enabling species movement [22, 23 & 24].

(vii) Law and Policy Frameworks: Conservation has an explicit legal basis with national laws like Biological Diversity Act (India, ACT No. 18, 2002) and international agreements [3].

5. Improved Agriculture Productivity

(i) Utilising Modern Technology: In many parts of the world, the use of modern technology, including mechanisation, precision agriculture, drip irrigation, and deploying high-quality varieties of seed, has significantly improved yields and efficiencies. AI and other remote sensing technologies are establishing opportunities for producers to make informed choices [15].

(ii) Fertility and Soil Health Management: The basis of sustainable productivity is soil health. Managing and maintaining fertility and preventing deterioration of soil are carried out by crop rotation, composting, using organic fertiliser, and via soil testing [27]. Furthermore, conservation agriculture promotes maintaining a permanent cover on the soil and reducing soil disturbance.

(iii) Climate Smart Agriculture: Agricultural productivity is threatened by climate variability and farmers are adjusting and not just enduring fluctuating conditions with climate-smart practices such as integrated pest management, reliance on weather forecasts, and drought drought-resistant varieties [57].

(iv) Credit and Input Availability: Smallholder farmers are often short of financial resources, good seeds, fertiliser, and equipment at key times. Strengthening farmer cooperatives and rural credit systems enhances productivity and incomes [19].

(v) Research and Development (R&D): Agricultural R&D investments lead to varieties of crops, pest management, and farm management. Research agencies, both public and private, are fundamental to increasing production sustainably [6].

(vi) Farmer Training and Extension Services: Training activities and agricultural extension services can help bridge the gap between research and its application of research. Farmers' potential and productivity increases when they are trained in new technologies, market insights, and in best practices necessary to ensure nuts and fruits meet buyer needs [15].

(vii) Infrastructure and Market Access: Better roads, cold storage, transportation, and market connections all contribute to lower post-harvest losses and higher farmer profits. By reducing waste, effective supply chains boost output [50].

6. Financial Benefits

(i) Natural Capital and Ecosystem Services: The aspects of the economy that ecosystems and the services that they provide, including pollination, soil quality, clean water, and the management of climate, among others, comes from the environment.

Conservation has positive economics, because often, the benefits of these services exceed a national GDP [8]. Wetlands, for example, absorb flooding and therefore save our economy billions of dollars each year.

(ii) Sustainable Economies and Green Jobs: The transition to a green economy creates jobs in ecotourism, waste management, organic agriculture, and renewable energy. The ILO estimates that the global transition to sustainability could create more than 24 million green jobs, by 2030 [20].

(iii) Recreation and Tourism: Many millions of people flock to biologically diverse areas such as national parks and wildlife preserves, contributing to the local and national economies. Ecotourism, for example, is a major source of employment and income for countries such as Kenya and Costa Rica [40, 41, 42&43].

(iv) Costs are reduced through Climate Change Mitigation: The upfront investment in climate mitigation now (i.e., through afforestation and renewable energy) can reduce future costs through disasters, health, and the loss of agriculture. According to the Stern Review, early investments in slowing climate change may cost 1% of world GDP, but inaction on climate change could cost as much as 20% [36].

(v) Improved Productivity and Public Health: Cleaner environments mean healthier populations and enhanced worker productivity, and lower levels of disease and lower health costs. Reducing air pollution improves working adults' productivity, therefore decreasing absenteeism [32& 33].

(vi) The Resilience of the Rural Economy: There are sustainable forestry and agricultural practices that allow rural residents to secure long-term productivity and economic viability. Agroforestry and watershed management enhance food production and security, improve agricultural productivity, and reduce vulnerability to the impacts of drought [13 &14].

7. Healthier Communities

(i) Safe drinking water and clean air: To be a healthy community, it is imperative to have safe drinking water and clean air. Contaminated water can lead to waterborne diseases such as cholera and diarrhea, and polluted air can lead to respiratory and cardiovascular diseases [52, 53 &54)]. Public health is improved by investments in sanitation systems and air quality monitoring.

(ii) Urban Planning and Green Provided Spaces: Green provided spaces including trees, parks, and green belts promote physical activity and reduce stress, and improve air quality. According to the WHO, incorporating green spaces into urban planning improves mental health, and lowers the risk of non-communicable diseases. Nature access is acknowledged as an important public health determinant[51].

(iii) Sanitation and Waste Management: Successful waste management minimizes pollution, speaking to the health of an area, and reduces the spread of infection. Community health promotion improved through programs like the Swachh Bharat Abhiyan in India that promoted optimal rural sanitation and reduced open defecation [31].

(iv) Sustainable Food Systems: Healthy eating patterns as reinforced by responsible, local food systems reduce the risk of obesity, diabetes, stroke, cardiovascular disease etc. Encouraging healthy living through organic agriculture and eating minimally processed foods is a key aspect toward long term community health [13 & 14].

(v) Mobility and Active Transportation: Facilitating transit, walking, and bike riding leads to reduced emissions and higher levels of physical activity. Cities with more integrated bicycle and pedestrian transportation infrastructure experience higher life expectancies and lower obesity characteristics [37].

(vi) Community Health Education: Change begets change - behaviour and awareness lead to healthier communities. Community-based programs can ensure long-term returns on population health investments through programs or campaigns that increase immunisation, promoting promotea healthy balanced diet, cleanliness and hygiene, and mental health awareness [4].

(vii) Resilience to Health and Climate Crises: Communities that invest in climate resilience (planning for flooding, heat response and preparedness, emergency health service delivery) will have health challenges related to climate change and disasters less often[25].

8. Reduction of Waste

(i) The 3Rs: Reduce, Reuse, and Recycle Approach: The cornerstone of efficient waste management is the 3Rs: Reduce, Reuse, and Recycle. Recycling turns trash into new materials, which reduces waste directed to landfills; consumption reduction reduces waste production; and re-use extends the life of items [39].

(ii) Organic waste management and composting: Composting diverts organic waste from landfills and contribute to healthy soils by diverting organic waste into compost (a nutrient-rich amendment) when it breaks down. Several cities globally, such as Pune and San Francisco, have demonstrated municipal composting success [10].

(iii) Reducing Plastic Consumption: Single-use plastic is a significant threat to our environment. Reduction efforts to reduce plastic bags and promoting alternatives such as cloth bags or biodegradable bags involve bans, fees, and education [40, 41, 42 & 43].

(iv) Producer Responsibility: Producers are held responsible by EPR regulations for the last stage of their products. This incentivizes businesses to take part in recycling or take-back programs and creates awareness around environmentally-friendly design [32 & 33].

(v) Source-Based Waste Segregation: For waste management approaches to accept our waste, end-point waste must be sorted into hazardous, recyclable or biodegradable categories or forms at the point of use. This form of source-based waste segregation reduces the risk of contamination and increases the rates of recycling [58].

(vi) Circular Economy Models: The circular economy model reduces waste in its design processes by either reusing or repurposing the designed materials.

Less waste disposals contributes less harm to the environment and reduce our reliance on virgin materials [9].

(vii) Behaviour Change and Education: Education and campaigns are important to reducing waste. Personal behavior and individual action, for example, composting and using reusable goods, can reduce household waste by up to 70% [55].

9. Security of Energy

(i) Energy diversification: Environmentally sustainable development promotes the use of renewable energy such as biomass, hydro, wind and solar, which helps to lower reliance on imported energy and non-renewable fossil fuel resources.

(ii) Less Import Dependence: Building up renewable energy sources at home provides countries with greater energy sovereignty and allows them to reduce their exposure to insecure and volatile global oil and gas markets.

(iii) Security of Supply: The energy supply from renewable is more stable and predictable, since renewable energies are less prone to market fluctuations and geopolitical tensions.

(iv) Local Economic Development: Investment in renewable energy infrastructure.

(v) Climate Disruption Resilience: In combination with decentralized grids and energy storage, sustainable energy systems are generally more resilient to extreme weather and natural disasters.

(vi) Lesser Environmental hazards: Other renewable sources lessen (as opposed to fossil fuels) the risk of air and water pollution, oil spills, drilling, and mining, which mean that energy from such sources can be produced more safely.

(vii) Long-term cost effectiveness: Renewable energy systems are designed to reduce life cycle cost and cost while expected life, as these cost-effective attributes help to bring about long long-term economic stability and energy affordability despite high initial costs.

(viii) Decentralised Energy: There is also a strong desire to see more community and off-grid renewable energy being used which opens up energy in remote and rural areas, particularly in the developing world.

(ix) Reduce Carbon Emissions: Greenhouse gas emissions are significantly reduced by clean energy sources, enhancing environmental integrity and aligning energy production with climate goals.

(x) Energy Conservation and Efficiency: Environmental sustainability also includes energy-saving technology like smart grids, LED lighting, and energy-efficient appliances that reduce total energy consumption and enhance national energy security.

CONCLUSION

Environmental sustainability is indispensable in order for long-term ecological balance, economic resilience and social well-being to be achievable. It is part of the objectives that underpin sustainability initiatives concerned with ensuring the continued delivery of ecosystem services fundamental to human survival by conserving biodiversity and natural resources etc. Sustainable health offers cleaner air and water, which leads to better community health and eases the pressure on public health. In addition, green technology and sustainability agriculture not only deliver higher productivity lowing impact on thethe impact on climate change, but also create new jobs and new economic opportunities [21 & 20]. Ultimately, embracing environmental sustainability creates a community that is fairer and more prosperous, as the goals of environmental preservation are near equivalents to those of social and economic progress[59].

REFERENCES

1. Brundtland Commission. (1987). *Our common future*. World Commission on Environment and Development.
2. CBD (1992). *Convention on Biological Diversity*. United Nations. https://www.cbd.int
3. CBD (2022). *Global Biodiversity Outlook 5*. Secretariat of the Convention on Biological Diversity. https://www.cbd.int/gbo5
4. Centers for Disease Control and Prevention (CDC) (2021). *Community health and economic prosperity: Engaging businesses as stewards and stakeholders—A report of the Surgeon General*. U.S. Department of Health & Human Services. https://www.cdc.gov/ surgeon-general
5. Central Pollution Control Board (CPCB) (2020). *Annual report 2019–20*. Ministry of Environment, Forest and Climate Change, Government of India.
6. CGIAR (2019). *Agricultural research for development: A global perspective*. Consultative Group on International Agricultural Research.
7. CITES (2021). *Convention on International Trade in Endangered Species of Wild Fauna and Flora*. https://cites.org
8. Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., ... & Belt, M. (1997). The value of the world's ecosystem services and natural capital. *Nature, 387*(6630), 253–260. https://doi.org/10.1038/ 387253a0
9. Ellen MacArthur Foundation (2015). *Towards the circular economy: Economic and business rationale for an accelerated transition*. https://ellenmacar thurfoundation.org
10. FAO (2018). *Toolkit: Reducing the food wastage footprint*. Food and Agriculture Organization of the United Nations.
11. FAO (2019). *Climate-smart agriculture sourcebook*. Food and Agriculture Organization of the United Nations.
12. FAO (2019). *The state of the world's biodiversity for food and agriculture*. Food and Agriculture Organization of the United Nations.
13. FAO (2020). *REDD+ and forest carbon*. Food and Agriculture Organization of the United Nations.
14. FAO (2020). *Sustainable healthy diets: Guiding principles*. Food and Agriculture Organization of the United Nations.
15. FAO (2021). *The state of food and agriculture 2021: Making agrifood systems more resilient to shocks and stresses*. Food and Agriculture Organization of the United Nations.
16. Gadgil, M. (1993). Indigenous knowledge for biodiversity conservation. *Ambio, 22*(2/3), 151–156.
17. Gadgil, M., & Berkes, F. (1991). Traditional resource management systems. *Resource Management and Optimization, 8*(3–4), 127–141.
18. IEA (2022). *World energy outlook 2022*. International Energy Agency.
19. IFPRI (2020). *2020 global food policy report: Building inclusive food systems*. International Food Policy Research Institute.
20. ILO (2018). *World employment and social outlook 2018: Greening with jobs*. International Labour Organization.
21. IRENA (2020). *Renewable energy and jobs – Annual review 2020*. International Renewable Energy Agency.

22. IPCC (2021). *Climate change 2021: Impacts, adaptation and vulnerability*. Intergovernmental Panel on Climate Change.
23. IPCC (2021). *Climate change 2021: The physical science basis*. Intergovernmental Panel on Climate Change.
24. IPCC (2021). *Sixth Assessment Report: Mitigation of climate change*. Intergovernmental Panel on Climate Change.
25. IPCC (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. Intergovernmental Panel on Climate Change.
26. IUCN (2020). *Invasive alien species: Global indicators*. International Union for Conservation of Nature.
27. Lal, R. (2020). Regenerative agriculture for food and climate. *Journal of Soil and Water Conservation, 75*(5), 123A–124A. https://doi.org/10.2489/jswc.2020.0620A
28. MEA (2005). *Millennium ecosystem assessment: Ecosystems and human well-being*. Island Press.
29. Ministry of Jal Shakti (MoJS). (2019). *Namami Gange Programme: Framework and achievements*. Government of India.
30. MoEFCC (2018). *Green India Mission: Annual report 2017–18*. Ministry of Environment, Forest and Climate Change, Government of India.
31. MoHUA (2019). *Swachh Bharat Mission Urban annual report 2018–19*. Ministry of Housing and Urban Affairs, Government of India.
32. OECD (2016). *Extended producer responsibility: Updated guidance for efficient waste management*. Organisation for Economic Co-operation and Development.
33. OECD (2016). *The economic consequences of outdoor air pollution*. Organisation for Economic Co-operation and Development.
34. Rockstrom, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E., ... Foley, J. (2009). A safe operating space for humanity. *Nature, 461*(7263), 472–475. https://doi.org/10.1038/461472a
35. State-level policies: Pakke Declaration 2047, SAPCCHH through Arunachal Dept. of Environment & Forests (en.wikipedia.org, National Centre for Disease Control, indiatodayne.in)
36. Stern, N. (2007). *The economics of climate change: The Stern review*. Cambridge University Press.
37. UN-Habitat (2020). *World cities report 2020: The value of sustainable urbanization*. United Nations Human Settlements Programme.
38. UNEP (2011). *Towards a green economy: Pathways to sustainable development and poverty eradication*. United Nations Environment Programme.
39. UNEP (2016). *Global waste management outlook*. United Nations Environment Programme.
40. UNEP (2021). *From pollution to solution: A global assessment of marine litter and plastic pollution*. United Nations Environment Programme.
41. UNEP (2021). *Green economy and trade: Trends, challenges and opportunities*. United Nations Environment Programme.
42. UNEP (2021). *Making peace with nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. United Nations Environment Programme.
43. UNEP (2021). *Sustainability and pollution: A global assessment*. United Nations Environment Programme.
44. UNEP (2022). *Emissions gap report 2022*. United Nations Environment Programme.
45. UNESCO (2009). *Integrated water resources management in action*. United Nations Educational, Scientific and Cultural Organization.
46. UNESCO (2017). *Education for sustainable development goals: Learning objectives*. United Nations Educational, Scientific and Cultural Organization.
47. UNFCCC (2015). *The Paris Agreement*. United Nations Framework Convention on Climate Change. https://unfccc.int/process-and-meetings/the-paris-agreement
48. U.S. Environmental Protection Agency. (2020). *Air sensor toolbox for citizen scientists, researchers and developers*. https://www.epa.gov/air-sensor-toolbox
49. WCED (1987). *Our common future (The Brundtland Report)*. Oxford University Press.
50. WFP (2022). *Reducing post-harvest losses in Sub-Saharan Africa*. World Food Programme.
51. WHO (2016). *Urban green spaces and health: A review of evidence*. World Health Organization Regional Office for Europe.
52. WHO (2018). *Ambient (outdoor) air pollution fact sheet*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health
53. WHO (2018). *Drinking-water: Key facts*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/drinking-water
54. WHO (2018). *Preventing disease through healthy environments: A global assessment of the burden of disease from environmental risks*. World Health Organization.
55. WRAP (2020). *Citizen engagement in food waste prevention*. Waste and Resources Action Programme (UK).
56. World Bank (2012). *Inclusive green growth: The pathway to sustainable development*. World Bank Publications.
57. World Bank (2016). *Climate-smart agriculture: A call to action*. https://www.worldbank.org/en/topic/climate-smart-agriculture
58. World Bank (2018). *What a waste 2.0: A global snapshot of solid waste management to 2050*. World Bank Publications.
59. World Bank (2019). *The changing wealth of nations 2018: Building a sustainable future*. World Bank Group.
60. World Bank (2023). *State and trends of carbon pricing 2023*. World Bank Group.

Website: https://scispace.com/paraphraser