International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 8.141
Peer Reviewed Bi-Monthly
Vol. 6 No. 19 March - April - 2025

Vikasit Bharat @2047: Integrating Sustainability into Economic and Social Development Goals

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DOI - 10.5281/zenodo.15109422

Abstract:

India's vision of Vikasit Bharat @2047 aims to transform the nation into a globally competitive, economically prosperous, and socially inclusive entity by its centenary of independence. Sustainability is a core pillar, ensuring economic progress aligns with environmental conservation and social equity. Addressing challenges such as climate change, resource depletion, and inequality requires integrating sustainability into development goals.

This research examines sustainability's role in Vikasit Bharat @2047, focusing on economic resilience, environmental stewardship, and social well-being. Using a multidisciplinary approach, it analyses policy frameworks, economic trends, and sustainability indicators from government and international reports. The study identifies key gaps and opportunities in India's progress on Sustainable Development Goals (SDGs).

Findings highlight the need to leverage green technologies, circular economy models, and digital transformation for sustainable economic growth. Strengthening social infrastructure—education, healthcare, and skill development—is crucial for inclusive progress. Robust governance, public-private partnerships, and financial mechanisms like green financing are essential for sustainable transformation.

By providing a strategic roadmap, this study offers policy recommendations to integrate economic growth with sustainability, supporting policymakers, businesses, and stakeholders in building a resilient and equitable Vikasit Bharat @2047.

Introduction:

Vikasit Bharat @2047 is an ambitious roadmap to transform India into a developed and self-reliant economy by its centenary of independence. This vision prioritizes economic growth, technological advancement, social equity, and environmental sustainability, ensuring progress without ecological degradation or social disparities. By fostering innovation, infrastructure, digital transformation, and human capital development, it aims to create an inclusive and resilient economy.

Sustainability is crucial for long-term prosperity, ensuring resource-efficient economic growth and equitable access to education, healthcare, and employment. Without sustainable planning, India risks environmental challenges like climate change, pollution, and resource depletion, which could destabilize economic progress. Achieving *Vikasit Bharat @2047* requires balancing economic aspirations with environmental responsibility while fostering social inclusivity.

This research explores how India can align economic growth with environmental conservation and social justice. It examines policy reforms, sustainable industrialization,

urbanization, and rural development, along with the role of technological innovation and public-private partnerships in achieving sustainability.

The paper covers global and national sustainability models, India's SDG progress, economic and social sustainability strategies, and actionable policy recommendations. A structured analysis of green industrialization, circular economy practices, and social infrastructure ensures a comprehensive understanding of India's sustainable development pathway toward *Vikasit Bharat @2047*.

Literature Review:

Sustainability is a key aspect of global economic development, shaping policies worldwide. The Brundtland Report (1987) defined sustainable development as meeting present needs without compromising future generations. Frameworks like the Triple Bottom Line (TBL) and Doughnut Economics guide nations in balancing economic growth with environmental responsibility (Elkington, 1997; Raworth, 2017).

India, a signatory to the UN's 2030 Agenda, has made strides in renewable energy, poverty reduction, and education. However, challenges persist in climate resilience, water security, and inequality (NITI Aayog, 2023). With a target of 500 GW of non-fossil fuel energy by 2030, India is committed to sustainability but needs stronger policy implementation and financial mechanisms to support green investments (Ministry of New and Renewable Energy, 2022).

India's policy landscape has evolved from 1991 liberalization to sustainability-driven reforms. The National Action Plan on Climate Change (NAPCC, 2008) focused on clean energy, while newer initiatives like the National Green Hydrogen Mission and Production-Linked Incentive (PLI) scheme drive green industrialization (Ministry of Power, 2023). Future policies aim at sustainable urbanization, circular economy adoption, and decarbonization, aligning with global climate commitments.

Germany's Energiewende policy, Sweden's circular economy approach, and China's green finance initiatives highlight the effectiveness of targeted interventions in sustainable development (BMWi, 2021; European Environment Agency, 2020). India can benefit from strong regulatory frameworks, public-private partnerships, and policy innovations to drive its sustainability goals.

Viksit Bharat, or Developed India, envisions a thriving nation that prioritizes inclusive growth and sustainable development across various sectors. Sustainable business models play a crucial role in this vision by integrating environmental stewardship, social responsibility, and economic viability, thereby ensuring that businesses contribute positively to society while achieving profitability. By embracing practices such as circular economy principles and renewable resource utilization, businesses can drive innovation and resilience, ultimately contributing to a more prosperous and sustainable future for all (Rathod et al., 2024).

Viksit Bharat, or Developed India, represents a vision for a prosperous and inclusive nation, yet it faces several challenges such as income inequality, inadequate infrastructure, and regional disparities that hinder equitable growth. However, this vision also presents remarkable opportunities, including leveraging technology for better governance, fostering sustainable development through green initiatives, and enhancing skill development to meet the demands of a dynamic workforce. By addressing these challenges head-on, India can capitalize on its demographic dividend and innovative potential to create a more robust and equitable economy (Harale & Pawar, 2024).

India's progress in SDG implementation and policy reforms provides a foundation for *Vikasit Bharat @2047*. However, addressing challenges and adopting best practices from global leaders will be crucial in ensuring a sustainable, inclusive, and resilient future.

Methodology:

This study employs a mixed-methods approach integrating qualitative and quantitative analysis to assess sustainability in *Vikasit Bharat @2047*. The methodology includes data collection, an analytical framework, and research methods to evaluate economic and social sustainability policies.

Data Sources:

The study relies on:

1. **Government Reports & Policy Documents** – *NAPCC, National Green Hydrogen Mission, SDG India Index* (Government of India, 2008; NITI Aayog, 2023).
2. **SDG Progress Reports** – NITI Aayog, UNDP, and World Bank assessments (UNDP, 2022; World Bank, 2023).
3. **Economic & Environmental Data** – RBI, MoEFCC, IMF, and OECD reports on sustainability trends (IMF, 2023; RBI, 2023).
4. **Case Studies & Empirical Data** – Global sustainability models from *Germany's Energiewende, Sweden's circular economy, and China's green finance policies* (BMWi, 2021; European Environment Agency, 2020).

Analytical Framework:

The study evaluates sustainability integration using key indicators:

- **Economic** – Green GDP, renewable energy share, circular economy adoption, and green finance investments.
- **Social** – HDI trends, education, healthcare, gender equality, and poverty alleviation.
- **Environmental** – Carbon footprint, air & water quality, biodiversity conservation, and climate resilience.

Research Methods:

1. **Quantitative Analysis** – Statistical evaluation of sustainability data, trend analysis, and regression modeling.
2. **Qualitative Analysis** – Policy reviews, case study comparisons, and expert interviews on sustainability challenges and opportunities.

This approach ensures an **evidence-based roadmap** for sustainability in *Vikasit Bharat @2047*, offering **strategic policy recommendations** for policymakers, businesses, and stakeholders.

Sustainability in Economic Development:

Sustainability is key to India's economic progress under *Vikasit Bharat @2047*, ensuring balanced industrial growth, environmental conservation, and social well-being. Key areas include the green economy, renewable energy, circular economy, digital innovations, and sustainable urbanization.

Green Economy and Resource Efficiency:

A green economy promotes growth while reducing environmental risks. India's National Resource Efficiency Policy and Perform, Achieve, and Trade (PAT) Scheme drive energy efficiency, while green finance mechanisms like green bonds support climate-resilient investments (UNEP, 2011; RBI, 2022).

Renewable Energy and Sustainable Industrialization:

India targets 500 GW of non-fossil fuel capacity by 2030, with solar, wind, and hydro energy driving its clean energy transition (Ministry of New and Renewable Energy, 2022). The Make in India and Production-Linked Incentive (PLI) Scheme promote sustainable manufacturing, including electric vehicles (EVs), solar PVs, and battery storage (DPIIT, 2023).

Circular Economy and Waste Management:

India is adopting circular economy principles in plastic waste management, e-waste recycling, and construction. The Extended Producer Responsibility (EPR) framework mandates sustainable product life cycles (MoEFCC, 2023). Swachh Bharat Mission and Waste-to-Wealth projects further promote waste reduction and renewable energy generation (Ministry of Housing and Urban Affairs, 2022).

Technological Innovation and Green Growth:

Smart grids, AI-driven energy management, and IoT-enabled efficiency solutions are enhancing economic sustainability. The FAME-II policy accelerates electric mobility, while hydrogen fuel cells and biofuels contribute to carbon reduction (Ministry of Heavy Industries, 2023). Precision farming using drones and climate-smart solutions is improving agricultural sustainability (ICAR, 2022).

Sustainable Urbanization and Infrastructure:

With 600 million urban residents by 2030, sustainable urbanization is critical (NITI Aayog, 2021). The Smart Cities Mission promotes green infrastructure, public transport electrification, and energy-efficient buildings (MoHUA, 2023). Infrastructure programs like NIP and PM Gati Shakti integrate climate resilience into transport, logistics, and construction (NITI Aayog, 2021).

India's sustainability-driven economic model will ensure long-term resilience, inclusive growth, and environmental responsibility, making *Vikasit Bharat @2047* a global leader in green development.

Sustainability in Social Development:

Social sustainability is essential for *Vikasit Bharat @2047*, ensuring equitable opportunities, improved quality of life, and environmental stewardship. Key focus areas include education, healthcare, inclusive growth, gender equity, and indigenous knowledge systems to build resilient communities.

Education and Skill Development:

Education drives sustainable development by equipping individuals with relevant skills. NEP 2020 promotes skill-based education, digital learning, and multidisciplinary approaches (Ministry of Education, 2020). Initiatives like PM eVIDYA and DIKSHA expand digital education access, but regional disparities must be addressed (NITI Aayog, 2022). Training in renewable energy, green technology, and sustainable agriculture supports India's sustainability goals.

Health and Well-Being:

A strong healthcare system is crucial for sustainability. Ayushman Bharat (AB-PMJAY) has improved healthcare access, while energy-efficient hospitals, telemedicine, and AI-driven

diagnostics enhance service delivery (Ministry of Health and Family Welfare, 2022). National Food Security Act (NFSA) and Poshan Abhiyaan address malnutrition, but further investment in climate-resilient agriculture and biofortified crops is needed (FAO, 2023).

Inclusive Growth and Social Justice:

olicies promoting poverty reduction and economic inclusion are critical for social sustainability. PMGKY provides economic relief, while MGNREGA generates jobs in eco-friendly infrastructure and afforestation (Ministry of Finance, 2021; Ministry of Rural Development, 2023). JAM Trinity improves financial inclusion for marginalized communities (NITI Aayog, 2022). Strengthening labor rights, land ownership, and legal safeguards ensures long-term social equity (World Bank, 2023).

India's sustainable social development will foster inclusive economic growth, resilience, and long-term prosperity, aligning with *Vikasit Bharat @2047*.

Gender Equity and Sustainable Livelihoods:

Gender equity is crucial for social sustainability, ensuring equal opportunities for women in education, employment, and entrepreneurship. Initiatives like Beti Bachao Beti Padhao, Mahila Shakti Kendra, and MUDRA Yojana promote women's empowerment through financial inclusion and skill development (Ministry of Women and Child Development, 2022).

Despite progress, women's workforce participation remains low, necessitating flexible work policies, childcare support, and training in renewable energy and the digital economy. The Self-Help Group (SHG) movement fosters inclusive growth in rural India (NABARD, 2022). Sustainable livelihoods in handicrafts, agro-processing, and ecotourism enhance economic resilience, while micro-enterprises and financial literacy strengthen women's economic participation (ILO, 2023).

Indigenous Knowledge and Community-Based Sustainability:

Indigenous communities play a key role in environmental conservation, climate resilience, and sustainable resource management. Traditional eco-friendly farming, water conservation, and biodiversity preservation provide valuable sustainability models (UNDP, 2022).

Initiatives like Van Dhan Yojana empower tribal populations through forest-based livelihoods, integrating traditional knowledge with modern sustainability practices (TRIFED, 2022). Eco-tourism projects in the Western Ghats and the Himalayas promote conservation while generating employment. The Forest Rights Act (FRA) ensures land protection and participation in environmental governance (Ministry of Tribal Affairs, 2022).

By strengthening gender equity and indigenous sustainability initiatives, India can achieve inclusive, resilient, and socially just development, aligning with *Vikasit Bharat @2047*.

Policy Recommendations and Roadmap for Vikasit Bharat @2047:

A sustainable *Vikasit Bharat @2047* requires integrating sustainability into governance, strengthening regulations, fostering public-private partnerships, and implementing green financial strategies. A structured roadmap is essential to balance development with environmental and social sustainability.

Integrating Sustainability into Governance:

A National Sustainability Council (NSC) should oversee sustainability policies, ensuring sectoral alignment and inter-ministerial coordination (NITI Aayog, 2023). Policies must prioritize climate-resilient agriculture, eco-friendly industries, and sustainable urban planning. Green GDP reporting should be introduced to track environmental costs (RBI, 2022).

Strengthening Regulatory Frameworks:

Reforms in the Environmental Protection Act (1986) and Forest Conservation Act (1980) should enforce stricter compliance and promote clean technologies (MoEFCC, 2023). Expanding Corporate Social Responsibility (CSR) policies and introducing carbon pricing and emissions trading systems will encourage industries to reduce their carbon footprint (Ministry of Finance, 2023).

Public-Private Partnerships (PPPs) in Sustainability:

PPP models can scale up green infrastructure, renewable energy, and circular economy adoption (World Economic Forum, 2022). Programs like the National Green Hydrogen Mission and PLI Scheme have already demonstrated success in sustainable industrialization (Ministry of Power, 2023). Establishing Technology Transfer Hubs (TTHs) and aligning Startup India with sustainability goals can drive innovation in green entrepreneurship and eco-friendly SMEs (DPIIT, 2023).

By integrating strong governance, regulatory reforms, and PPP-driven innovation, India can achieve sustainable, inclusive, and resilient growth under Vikasit Bharat @2047.

Financial Strategies and Roadmap for Vikasit Bharat @2047:

Green Financing and Sustainable Investments:

Expanding green finance through sovereign green bonds, green banks, and sustainability-linked loans is essential for funding sustainable initiatives (RBI, 2023). Tax incentives should support businesses investing in renewable energy, circular economy projects, and green infrastructure (Ministry of Finance, 2023). Strengthening ESG disclosure norms and SEBI's reporting framework will enhance corporate accountability (SEBI, 2023).

A Sustainable Development Fund (SDF) should finance rural sustainability projects, eco-tourism, and climate adaptation. Integrating carbon credits and blue economy investments into financial markets will diversify funding sources (World Bank, 2023).

Roadmap for India's Sustainable Future:

Short-Term Strategies (2024-2035):

- Adopt **Green GDP** for sustainability tracking.
- Expand **renewable energy** to 500 GW by 2030.
- Strengthen **waste management and circular economy incentives**.
- Develop **green urban infrastructure** under *Smart Cities Mission*.
- Scale up **green finance** with tax benefits and green bonds.
- Enhance **AI, IoT, and digital governance** for sustainability.
- Implement **mandatory ESG disclosures** for corporations.

Long-Term Strategies (2036-2047):

- Achieve **net-zero emissions by 2070**.
- Establish India as a **global leader in green technology**.
- Ensure **universal healthcare and social security** with sustainable funding.
- Promote **AI-driven precision farming** for climate resilience.

- Expand **100% electrified transport** through EV adoption.
- Implement **nature-based solutions** for conservation.
- Position India as a **hub for green manufacturing**.

Challenges and Opportunities:

Key Challenges:

1. **Policy Gaps** – Bureaucratic inefficiencies hinder sustainability implementation (NITI Aayog, 2023).
2. **Financial Constraints** – High costs and limited green finance options slow progress (RBI, 2023).
3. **Fossil Fuel Dependence** – Transitioning industries to **renewables** requires phased policy support (Ministry of Power, 2023).
4. **Socioeconomic Inequality** – Marginalized communities must benefit from sustainability initiatives (World Bank, 2023).
5. **Climate Risks** – Extreme weather and biodiversity loss require **adaptation strategies** (MoEFCC, 2023).

Opportunities for Global Sustainability Leadership:

1. **Renewable Energy Hub** – Expanding **solar and wind energy exports** (ISA, 2021).
2. **Sustainable Manufacturing** – Leading in **eco-friendly industries and circular economy** (NITI Aayog, 2022).
3. **Green Innovation** – Driving AI-powered **climate tech, smart grids, and green finance** (DPIIT, 2023).
4. **Smart Cities & Infrastructure** – Scaling **sustainable urban planning and mobility** (MoHUA, 2023).
5. **Global Climate Diplomacy** – Strengthening India's role in **COP summits and climate finance** (UNFCCC, 2023).

Conclusion and Future Directions:

Key Findings:

- Strengthening **sustainability governance and regulatory frameworks** is crucial.
- Expanding **green finance and ESG standards** will drive sustainable investments.
- **Public-private partnerships** and **digital innovation** will accelerate sustainability adoption.

Implications:

- **Policymakers** must prioritize **climate action and financial incentives**.
- **Businesses** should integrate **ESG principles and clean technologies**.
- **Communities** must adopt **sustainable consumption and waste reduction**.

Future Research Areas:

- **Green GDP metrics and sustainability assessments**.
- **Impact of climate change on key economic sectors**.
- **Role of AI, blockchain, and digital finance in sustainability**.
- **Decentralized renewable energy models for rural India**.
- **Sustainable supply chains and circular economy strategies**.

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