



PUBLIC POLICIES AND THEIR ROLE IN ADVANCING ENVIRONMENTAL, SOCIAL AND ECONOMIC SUSTAINABILITY THROUGH COHERENT GOVERNMENT STRATEGIES

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Abstract : Long-term environmental, social and economic trajectories are sensitive to public policies as these emerging trajectories unfold in the context of growing inequality, resource depletion and climate change. Comprehensive approaches are required to respond to these linked challenges. Previous research ignores comprehensive policy coherence mechanisms between the sustainability pillars but focuses on single sectors and unilateral trade-offs. This rapid review helps fill that gap by synthesizing the recent (2020-25) evidence base on coherent public policies, providing new directions for policy makers in developing countries such as India. **Aim:** the present rapid review examines how the different policy coherence mechanisms influence sustainability outcomes across environmental, social and economic aspects. **Materials and Methods:** The present rapid review followed PRISMA 2020 guidelines using literature searched on Scopus, Web of Science, Google Scholar for peer-reviewed articles published between 2015-2025. **Key findings:** The findings reveal that combined regulatory frameworks, subsidies, incentives, competitive strategies, multi-tier governance models with institutional coherence tools including sustainability impact assessment, involvement of stakeholders and intergovernmental initiatives foster cross-sectional cohesiveness. Moreover, institutional disparities, political views and lack of monitoring remain a limitation. **Recommendations:** Government ought to institutionalize sustainability implications, adopt and employ combined integrated policies and apply adaptive governance strategies to tackle sustainability aspects. Also, prioritize impact assessments for synergies/trade-offs. **Conclusion:** It can be concluded that emphasis must be made on the utility of coherent and multiple levels of governance with conjoint planning in addressing the heterogeneity in policy making as well as its implementation.

Keywords: Public policy; Sustainable development; Environmental sustainability; Social sustainability; Economic sustainability; Multi-level governance; Policy coherence

I. INTRODUCTION

The world is experiencing significant pressures that are jeopardizing sustainable development. Rapid demographic expansion, increase in inequality, rise in changing climatic conditions and burgeoning zoonotic disease outbreaks are undermining societal wellbeing, while exacerbating the deterioration of ecological wellness (UN WHO 2019; Steffen et al., 2015; Lu et al., 2015; WHO 2008). Global income disparities, unequal access to resources across and among the nations have further exposed structural weaknesses in governance and major economic systems, hindering the societal coherence, sustainability and future catastrophic vulnerability (Betti, 2018).

Accelerating climate change, biodiversity loss, social inequalities and increasing economic instability have intensified the need for integrated sustainability governance. These interrelated challenges have compelled the governments globally to reconsider traditional growth-oriented developments models and also adopt more holistic approaches. Sustainability has consequently been embedded in national as well as international policy frameworks, notably through the adoption of the United Nations 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). These empirical evaluations revealed that SDGs have enhanced the policy alignment across agencies, national indicator framework monitoring and integrated planning in nations. It has been found to improve

multi-stakeholder involvement and policy transparency, although development is unequal between different domains and targets revealing implementation gaps (Bogers et al., 2022).

Environmental, social and economic aspects are deeply interlinked, making individual policy solutions ineffective. Fragmented approaches fail to address the complex issues such as climate change, global warming, public health emergencies, inequality and resource degradation. Further, this change is mirrored in the 2030 Agenda for sustainable development, which acknowledges the 17 SDGs as inseparable and calls for coordinated execution across the several sectors in the governmental tiers. On the contrary, the fragmented approach strategy adopted by the Millennium Development Goals (MDGs), SDGs mainly focus on integration, inclusion and policymaking that takes historical facts into account. The need for governance frameworks that can handle trade-offs and harness synergies among development goals were brought into light by the shortcomings of the MDGs, especially their lack of focus on cross-sectoral interactions and national ownership (Datta et al., 2024; Hazlewood, 2015).

Governments operationalize sustainability goals primarily *via* public policy across three interconnected pillars: environmental, social and economic viability (Pillay, 2023; Breuer et al., 2023). However, balancing these pillars remains a persistent challenge. Institutional fragmentation, weak coordination and conflicting policy objectives often generate unintended trade-offs, undermining long-term sustainability (Bogers et al., 2018; Zink et al., 2017).

As a result, policy coherence for sustainable development (PCSD) has emerged as an important idea in modern governance, advocating for the harmonization of policies across different aspects of influence and tiers of government. The PCSD movement calls for coordinated government policies rather than implementing separate initiatives. Therefore, to effectively manage the systemic risks and advance the transformational goals of the 2030 Agenda, it is vital to strengthen the policy coherence through inclusive governance and effective institutions (Leininger et al., 2018; Nunes et al., 2021).

Despite the growing evidence, sustainability governance literature still focuses on individual policy or particular SDGs without considering the mechanism behind cross-sectoral coherence and multi-level governance strategy implementation. Not enough studies have revealed how the regulatory, fiscal and participatory mechanisms operate together in coherence for implementation of several policy frameworks to achieve harmonious sustainability.

Therefore, the present study amalgamates the present findings reviewed from publications published from 2015-2025 on policy coherence approaches and strategies with sustainability, resulting in addressing this research gap. The integration of environmental, social and economic issues in the individual governance framework and building of an operational model of policy coherence make the present evaluation distinct. Also, the present review examines the most significant policy frameworks, coherent strategies, governance models and implementation challenges for evidence-based integrated sustainable policy making.

II. MATERIALS AND METHODS

The present study adopts a rapid review design which synthesizes current policy coherence strategies and related sustainability findings in environmental, social and economic aspects. Immediate, policy-relevant insights were obtained from a quick literature search while ensuring the empirical transparencies.

2.1. Search Strategies

Literature databases such as Scopus, Web of Science and Google Scholar were searched. The search criteria involved the research articles/review papers published in the last 10 years i.e. from 2015-2025. Keywords included 'Policy integration'; 'multi-level-governance'; 'integrated governance'; 'institutional coordination'; 'sustainability impact assessment'; 'environmental sustainability'; 'social sustainability'; 'economic sustainability'; 'policy regulation'; 'SDG implementation'; 'sustainable governance'; 'public policy' and 'policy coherence'.

Inclusion criteria:

- i. Peer-reviewed journal research papers/review articles
- ii. Articles published between 2015-2025
- iii. English language
- iv. Articles published on 'policy coherence' and 'sustainability aspects'

Exclusion criteria:

- i. Articles published before 2015
- ii. Articles not involving cross-sectoral coherence
- iii. Conference abstracts and editorials

2.2. Data Extraction and Analysis

The relevant data was retrieved and analyzed on different policy instruments, coherence strategies, multi-level governance approaches, sustainability outcomes and reported limitations. Multidisciplinary frameworks and outcome patterns were identified using a thematic approach.

III. CONCEPTUAL FOUNDATIONS

3.1. Three Pillars of Sustainability

The last 20 years has witnessed a significant increase in the surge of publications and research articles quoting 'sustainability' and 'sustainable development' as a major theme (Marra, 2025; Baidya and Saha, 2024). Yet, 'sustainability' is still a vague notion and remains an open concept with thousands of wide interpretations and context-dependent understandings. However, as evident from Figure 1, it should be noted that the description of 'sustainability' employs three independent pillars encompassing the environmental, societal and economical aspects (Arushanyan et al., 2017; Boyer et al., 2016). This tripartite definition is frequently, but not invariably, depicted as three intersecting circles representing environmental, social and economy with sustainability positioned at their junction.

Although contemporary discourse increasingly focuses on the SDGs, the three-pillar framework informed their development (UN 2012a). The present review acknowledges that the three-pillar model lacks a single unified theoretical base but remains analytically useful for understanding integrated sustainability governance.

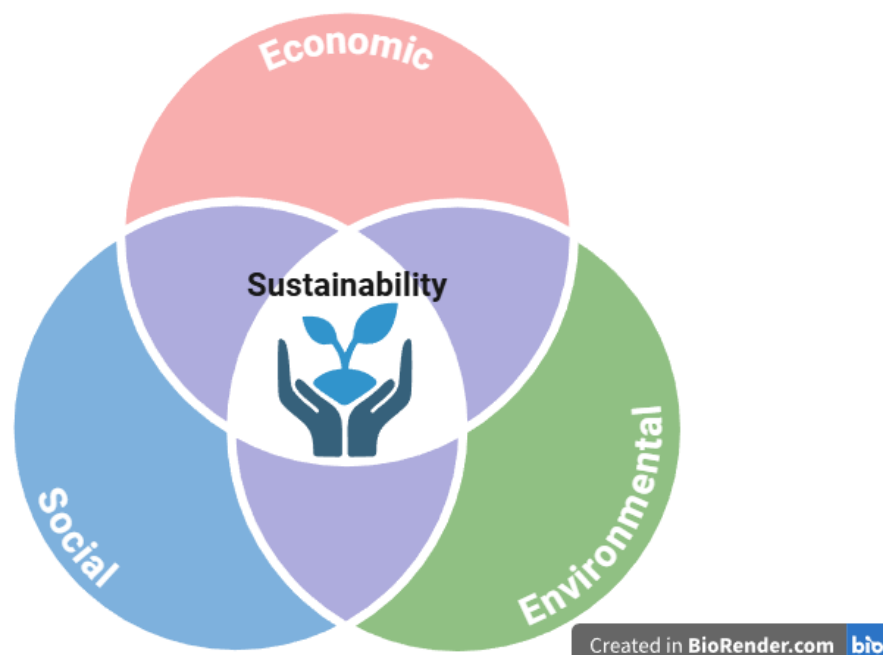


Figure 1. Schematic representation of the three pillars of sustainable development (created using BioRender.com)

The 'three pillars' are deeply interconnected with public policies. Economic production systems are generally influenced by environmental regulations; social policies are known to affect labor markets and economic participation, while economic policies serve to shape environmental outcomes throughout investment patterns. As a consequence, the outcomes of sustainability are strongly dependent on the integrated and coherent implementation of policy interventions across all of these domains (Eelager et al., 2025).

3.2. Public Policy as a Driver of Sustainable Development

Public policy advances sustainable development by establishing the framework for the pursuit of environmental, social and economic objectives.

3.2.1. Regulatory Framework and Standards

Regulatory instruments establish norms that align economic activity with environmental and social objectives. They include pollution control standards, emission limits, waste water treatment requirements and set air quality standards. Such measures aim to reduce ecological damage and safeguard public health (Mahardhani, 2023). Effective regulation requires enforcement capacity, municipal engagement and monitoring mechanisms to control industrial emissions and promote energy-efficient practices.

3.2.2. Government Subsidies and Incentive Structures

Financial incentives and subsidies support sustainable transition by reducing adoption costs. However, some researchers have also examined the potential differences and non-linear relationship between incentives and greener innovations; it has been noted that government funding can minimize the cost of implementing sustainable strategies and approaches. Incentives for renewable energy plans such as installation of solar panels and wind turbines, tax incentives for energy-efficient technologies, grants and low-interest loans could encourage households to invest in energy saving technologies. These monetary rewards attract the market to make sustainable choices (Mahardhani, 2023). It is evident that public policies along with the coherence of government can reduce financial barriers to adopting and encouraging sustainable choice making.

3.2.3. Sustainable Urban Planning and Infrastructure

Sustainable urban planning reduces the negative impact on the environment, improves the quality of life and also optimizes the utilization of natural resources. Multipurpose developmental strategies can cut off commutes and increase walking and cycling by integrating residential, commercial and recreational spaces. Moreover, public transport systems that are more efficient and accessible can help reduce individual car usage, traffic and vehicle emissions. Moreover, implementation of policies that encourage bike lanes, pedestrian walkways and transit-centered growth can make cities more livable. This planning includes encouraging public parks, green roofs and urban forests that enhance air quality, provide recreational spaces and also reduce the heat island effect (Mahardhani, 2023). Therefore, transit-oriented development and sustainable infrastructure planning might enhance resource efficiency, while mitigating environmental impacts.

3.2.4. Education and Public Awareness

Sustainability mindsets, actions and decisions are shaped by education. Educators can foster critical thinking and responsibility by incorporating sustainable concepts into science, social studies and other relevant courses. At the same time, early exposure can shape future actions. Government can amalgamate NGOs, media and several community groups to educate and involve the public in sustainability programs (Mahardhani, 2023).

3.2.5. Multilateral Cooperation

Sustainable development is a global challenge that requires international cooperation and collaboration. Alignment of national policies with international accords and frameworks facilitates collective action on transboundary challenges. Also, governments can collaborate and share relevant data and information to solve global issues by joining international efforts. For example, the Paris Agreement on climate change facilitates sustainable cooperation globally, aiming to reduce greenhouse gas emissions, strengthen climate resilience and support sustainable development practices. Nations can work collectively to address transboundary pollution, biodiversity conservation and sustainable development in areas of vulnerability (Mahardhani, 2023).

IV. POLICY COHERENCE FOR SUSTAINABLE DEVELOPMENT (PCSD)

PCSD has been found to eliminate policy silos and government heterogeneity, which is essential for maximizing SDG synergy and managing trade-offs. It aims to prevent domestic policies from undermining long-term sustainability goals and intergenerational well-being.

Experiences and studies demonstrate that the concept of one-size-fits-all is not applicable to all solutions in improving PCSD. Nonetheless, there are several common institutional practices and initiatives for improving PCSD (OECD, 2019). The Organization for Economic Co-operation and Development (OECD) has identified building blocks that assist governments of various political and administrative traditions in achieving greater policy coherence, enlisted in Figure 2.

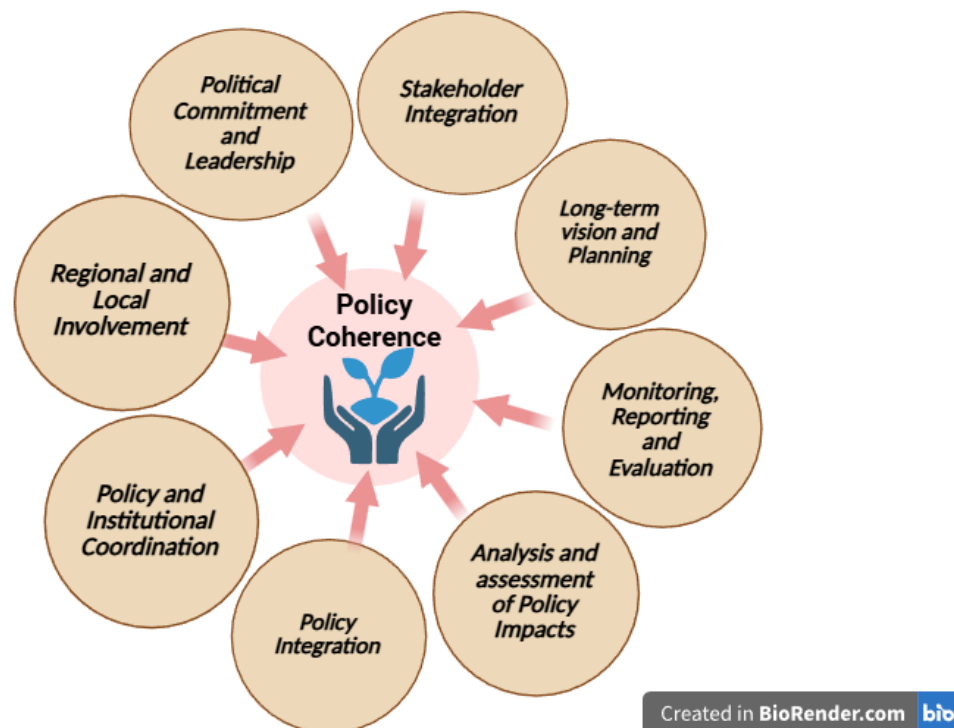


Figure 2. Schematic portrayal of building blocks of Policy Coherence for Sustainable Development (created using BioRender.com)

V. ENVIRONMENTAL SUSTAINABILITY

5.1. Regulatory Frameworks

Environmental sustainability has historically been central to sustainability policy. Governments implement regulatory standards, environmental impact assessments (EIAs) and conservation measures to mitigate pollution, safeguard biodiversity and the natural environment and enhance sustainable resource utilization (Chang et al., 2022). Strong institutions with robust environmental governance frameworks and regulatory integrity are associated with significantly improved environmental sustainability and reduced carbon emissions (Haque and Ntim, 2018).

The environmental regulatory framework in India functions under a federal constitutional system that officially distributes powers among the Union, State and municipal governments, while effectively favoring the Centre. India is already known to have extensive environmental law, but the major challenges that pose significant problems are due to insufficient monitoring, implementation and irregular management of pollution, biodiversity, forests, animals and toxic chemicals (Sahu and Kar, 2024).

5.2. Market-Based Instruments

Renewable resources, emission trading systems (ETS) and green incentives are some examples of market-driven initiatives which are considered essential to environmental policymakers (Kaplan, 2026). Evidence from OECD nations indicates a positive association between carbon pricing and reduced emissions alongside technological advancements (Bashir et al., 2024).

5.3. Implementation Challenges

Despite considerable policy advances, several implementation gaps persist in environmental legislation due to lack of knowledge, weak enforcement, limited institutional capacity, political constraints and financial barriers (Olhoff et al., 2024; Sundar et al., 2024). Therefore, there is a need for international collaboration, focused and flexible policy tiers that are attuned to local socioeconomic conditions while preserving environmental integrity (Sundar et al., 2024).

VI. ECONOMIC SUSTAINABILITY

6.1. Resilient Economic Development

Economic sustainability is one of the primary goals worldwide, emphasizing preservation and long-term economic viability while reducing environmental damage and social inequity (Opitz et al., 2019). Effective management of policy and policymaking can stabilize the economy *via* fiscal policy, institutional strategies, trade policies and labor market regulations, fostering inclusive and resilient growth (Verma et al., 2025). Key drivers of economic growth are research and development capabilities, highly skilled workplaces and workforces, and advanced technology and infrastructure. Sustainable growth strategies seek to dissociate economic expansion from environmental degradation by fostering resource efficiency, clean technologies and sustainable industries (Ben, 2022; Khanna et al., 2025). Moreover, economic

sustainability extends beyond GDP growth; investments that integrate social equity and environmental considerations enhance overall well-being and long-term resilience (Managi et al., 2024).

6.2. Innovation-Oriented Policies

Innovation is essential for sustained economic transformation. Public policies that promote green innovation, entrepreneurship and skill development bolster economic resilience and create new job possibilities (Cek and Kalmaz, 2025; Verma et al., 2025). Achieving inclusive and sustainable growth requires a reevaluation of industrial strategy and financing methods.

Studies reveal that public institutions and bureaucracies must develop innovative solutions to effectively address policy challenges and support policy beneficiaries. Policy innovation may be better understood by looking at the goods, procedures and dramatic or minor modifications from the literature on economic innovation. Policy innovation, whether it is an initial success for a specific institution or a worldwide game-changer, may be better understood *via* the use of evidence-based case studies. Evaluation of positive and negative aspects, as well as the success of an endeavor in helping policy beneficiaries, may be shown *via* case studies.

Unlike private companies, public institutions' innovation drivers are not as readily apparent. The idea that competitive and/or inductive policies encourage innovation in firms is widely held, with the financial motive fueling the entrepreneurial spirit. Public policies and institutions develop without clear reasons or incentives because of the lack of competition and the fact that public institutions are not subject to commercial incentives. Given the highly political nature of policymaking, it focuses on and offers information on the political factors that influence the process. The present framework helps in analyzing local political capacities; however, Karo and Kattel (2018) highlight the significance of dominant political and ideological values, political decision-making traditions and legal systems.

VII. SOCIAL SUSTAINABILITY

7.1. Social Equity

It has been generally observed that social equality and fairness is neglected in sustainable development. Social justice has been defined as 'equal opportunity, in a safe and healthy environment for all'. Moreover, social justice has been defined as equitable access to livelihood, education and resources, along with full community involvement in political and cultural aspects, with self-determination in fulfilling basic requirements.

Intergenerational equality pertains to the rights of subsequent generations, which is provided in environment-friendly forms. This highlights the need to consider the effects of present-day human activities on the foreseeable future of coming generations, especially in light of the fact that skills related to long-term consequences are not usually taught at the primary school level. Humanity is showcased through the lens of intergenerational equality as an interdependent unit. All generations must have equitable access to and use of diverse natural resources. Moreover, justice and fairness in dealings and relationships among the youth, adults and elderly is what represents intergenerational equality in social, psychological and economic aspects (Bustami, 2025).

The changes in sustainability depend on including social and intergenerational fairness in well-being evaluations. Addressing equity issues across different aspects of well-being and suggesting examples of how to include equality into well-being dialogues and decision-making are a crucial part of prioritizing social sustainability.

7.2. Civic Participation and Trust

It has long been known that democracies cannot function without public input into policymaking; nonetheless, this does not come without non-trivial costs and also does not ensure better governance (Campbell and Im, 2016; Rothstein, 2020). Performance of government and increasing public engagement both have a positive effect on confidence and trust in the ruling government. However, public participation cannot make up for poor policy performance. Implications for theory and practice abound from this finding, which shows that trust is enhanced by participatory procedures but only when policies are well implemented.

This experimental approach constrains research outcomes beyond correlational studies, which might conceal causation direction due to reciprocal effects, and reveals a strong causal relationship between government performance and trust. In order to mirror the way individuals often perceive the results of the public sector, performance has been defined in clear and easily understandable terms. Further, studies reveal a causal association between trust and public engagement, albeit a weak one. The significant impact of involvement became apparent after performance was accounted for, thereby indicating that participation enhances trust rather than serving as a replacement for good governance. These findings are in agreement with the larger body of research on governance that has shown that policy efficacy and institutional legitimacy are enhanced by inclusive decision-making, stakeholder participation and accountability (Mansoor, 2021; Hamid and AlObaid, 2025).

In general, the present findings show that when civic involvement is part of an institution that is ethical, transparent and performance-oriented, it greatly helps in developing confidence within governance tiers. Sustainable development and sustainability objectives need public trust in government over the long term, along with validation, cooperation

across different sectors and long-term financial investments; hence integrated governance strategies are very important for achieving these goals.

VIII. MULTI-LEVEL GOVERNANCE AND POLICY INTEGRATION

Major concerns with sustainability cut across governmental jurisdictions and need concerted efforts at the state, federal and international levels. For this very reason, it is critical to have coherent policy approaches in place to guarantee that national development plans are consistent with international obligations. Furthermore, it must be ensured that the SDGs do not work in isolation, but rather support one another. To improve this coherence and manage trade-offs across all sustainability goals, evidence suggests that successful policy integration must happen horizontally, across policy sectors, and vertically, across governance tiers. Thereby, using these multi-level forms of governance, global frameworks may be conceptualized. This means that local actors can tailor policies to meet unique socio-economic and ecological needs, all while being aligned and legitimate (Marenco and Kern, 2025; Hickmann et al., 2024).

The need for integrated policy approaches has further heightened with the increased complexity of environmental and socio-economic concerns. Instead of focusing on individual sectors, coordinated 'policy mixes' combining various objectives and broad tools are needed to address climate change adaptation, environmental preservation and societal vulnerability (Rezaeian et al., 2024). Policymakers have known for decades that global issues such as poverty and malnutrition are linked with sustainable development and are too complicated for piecemeal, one-dimensional policymaking (Cejudo and Michel, 2017). Altogether, a lack of understanding of the practical processes for successful policy implementation persists, despite the widespread recognition of the necessity for integration (Candel, 2021; Luo et al., 2020; Candel and Biesbroek, 2016).

Therefore, the present study contends that a better grasp of policy mixing, both theoretically and empirically, is very much necessary for further policy integration. Research in the field of policy sciences has recently centered on examining 'packages', 'bundles', or 'portfolios' of policy tools that aim to address intricate aspects of governance (Van et al., 2021; Trein et al., 2023). Using the present theme as the foundation, this article develops a model to explain integrated policy mixes.

IX. CHALLENGES AND FUTURE DIRECTIONS

Despite its methodological rigor, the review only focused on literature published in Scopus, Web of Science and Google Scholar. Several institutional and internationally published works were not included in the present review. The present approach provided consistency, openness and reproducibility; however, it may somewhat overstate certain policy opinions. Additionally, most of the existing evidence remains conceptual rather than longitudinal.

The quality of evidence might also be a major constraint, where most of the accessed literature emphasizes conceptual and theoretical cases without providing long-term factual confirmation. Despite growing recognition of the need for uniformity in public policies, challenges still persist. Institutional inertia and bureaucratic processes prevent sustainable objectives from being integrated into core policy tiers, resulting in disconnected implementation across sectors and administrative departments. Legislative short-termism worsens these imbalances by prioritizing economic and electoral gains above sustainability. The lack of exhaustive assessment and policy coherence strategies limit systematic learning and accountability, preventing governments from evaluating progress across different targets and tiers. Moreover, capacity constraints, especially at regional and community levels, hinder adaptive governance and global covenant execution.

Future research must examine the power dynamics at different levels of governance, with federal and decentralized policy coherence measures taken alongside institutional innovations that might enable adaptive and transformational governance for sustainable development.

X. CONCLUSION

An evolutionary transition from discrete environmental challenges to broader and interdependent tiers for sustainable development has persisted throughout the history of environmentalism. Sustainability defies reduction to a single, all-encompassing description owing to its complex nature, rather than highlighting its foundational concepts alone. These include a range of issues such as preservation of resources for future generations, ensuring that current populations have equal access, balancing economic growth with environmental preservation and honouring cultural traditions within a particular region.

The goal is to promote a healthy environment, a successful economy and socially beneficial practices, while simultaneously reducing negative impacts on the environment. Cultural dimensions have recently emerged as an important yet often overlooked aspect of SDGs. Culture interacts with environmental, social, economic and geographical spheres, influencing developmental outcomes in complex ways. These intricacies of SDGs make them difficult to localize and emphasize the need for holistic strategies that set different priorities for activities under consideration.

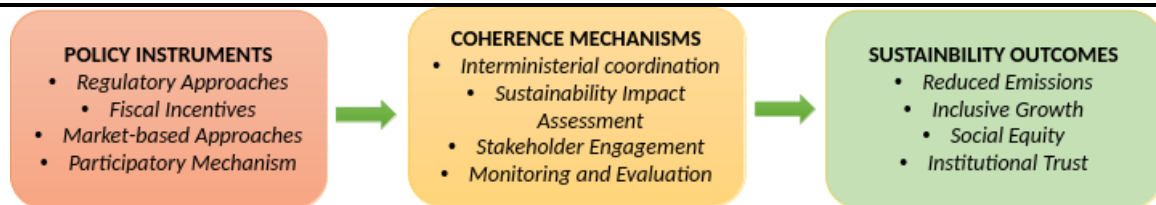


Figure 3. Suggestive integrative coherence model for sustainable development

On the contrary, instead of disjointed sectoral initiatives, the research mainly stresses that public policies must be coherent, integrated, interlinked and based on scientific evidence for the maintenance of sustainable growth. Most importantly, the present review addresses a key research gap in sustainability governance literature, which often examines individual sectors or SDGs without explaining how policy instruments produce coherent outcomes. The conceptual framework proposed (Figure 3) in the present review links policy instruments, coherence mechanisms and sustainability outcomes, providing a structured understanding of how integrated governance can function in practice. The present model offers a practical reference for policymakers and educators by clarifying relationships between governance strategies and sustainability outcomes. By emphasizing policy coherence as a central mechanism, the study contributes to advancing an integrated and actionable strategy for achieving long-term sustainability goals.

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