Beyond the GDP: Advancing Towards Inclusive Wealth Framework

Soumya Bhowmick*

ABSTRACT

In 2015, the United Nations replaced the Millennium Development Goals (MDGs) with 17 Sustainable Development Goals (SDGs), heralding a more comprehensive approach to sustainable development. This transition highlights significant Global North-South disparities and the limitations of traditional progress metrics such as Gross Domestic Product (GDP). The Inclusive Wealth Framework, integrating natural, human, and produced capital, offers a holistic alternative to GDP by assessing national prosperity through sustainability and intergenerational equity. This paper explores how the Inclusive Wealth Framework can enhance progress metrics and better align with national sustainability objectives, focusing on its relevance for countries like India, and addresses key challenges such as methodological inconsistencies, data quality, and valuation techniques. The findings suggest that incorporating the Inclusive Wealth Framework into the SDGs can provide nuanced insights into sustainable development and support more effective policymaking. Despite its potential, the framework faces several challenges, including the need for improved data quality, refined valuation methods, and further research into the role of private capital flows in promoting inclusive wealth. This study advocates adopting the Inclusive Wealth Framework to provide a more comprehensive understanding of progress toward sustainable development.

Keywords: Sustainable Development Goals (SDGs), Gross Domestic Product (GDP), Inclusive Wealth (IW), produced capital, natural capital, human capital

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^{*} Fellow, Centre for New Economic Diplomacy, Observer Research Foundation and Doctoral Candidate, BML Munjal University, India

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INTRODUCTION

The adoption of Agenda 2030 in 2015 marked a significant shift in global development priorities. The 17 SDGs were designed to succeed the MDGs by emphasizing sustainability, universality, and domestic resource utilization over international aid. While aspirational, the SDGs face significant challenges, including a \$2.5 trillion financing gap (Zhan & Santos-Paulino, 2021), setbacks due to the COVID-19 pandemic, geopolitical conflicts such as the Ukraine-Russia war, and persistent global inequalities. These factors underscore the limitations of existing progress metrics like GDP.

GDP, while widely recognised, has been criticized for neglecting critical dimensions such as social inequality, resource depletion, and environmental degradation. This critique has driven the call for alternative metrics, such as the Inclusive Wealth Framework, which considers variations in natural, human, and produced capital over time to assess sustainability and well-being (Polasky, 2015; Managi, 2019). The Inclusive Wealth Index (IWI) extends beyond GDP by accounting for resource depletion and environmental costs, offering a more realistic assessment of a nation's capacity for sustainable growth.

The successive Inclusive Wealth Reports underscore the need for valuation methods that reflect the interdependence between various forms of capital. This approach is endorsed by the UN Environment Program (UNEP), which advocates for replacing GDP-centric metrics with the IWI to guide sustainable development policies (Managi, 2019). For instance, the IWI's application in China has revealed disparities in resource distribution between regions, highlighting the importance of localized strategies (Cheng, Wang, & Managi, 2022). Theoretical advancements in inclusive wealth have explored the relationship between sustainability, wealth, and well-being (Arrow, Dasgupta, & Mäler, 2012; Meraj, Managi, & Dasgupta, 2021). This body of research emphasizes maintaining and augmenting capital stocks, cautioning against the overestimation of economic growth when natural capital is depleted.

Against this background, this paper is guided by the following research sub-questions:

- 1) How does the Inclusive Wealth Framework (IWF) provide a more comprehensive assessment of national prosperity compared to traditional metrics like GDP?
- What are the key challenges associated with the implementation of the IWF in diverse socio-economic contexts, particularly in countries like India?
- 3) How can inclusive wealth metrics be effectively integrated into policy frameworks to promote sustainable development?

These questions are underpinned by the proposition that inclusive wealth, by accounting for natural, human, and produced capital, offers a more authentic and actionable measure of sustainability and well-being compared to conventional economic indicators.

UNDERSTANDING INCLUSIVE WEALTH

Inclusive wealth encompasses the total value of a nation's capital assets—produced, natural, and human. This holistic approach to assessing national prosperity diverges from traditional measures like Gross Domestic Product (GDP), which narrowly focus on economic output. The Inclusive Wealth Framework aligns closely with the Brundtland Commission's vision of

sustainable development, emphasizing both intragenerational as well as intergenerational equity (Sato, Hayashi, & Tanaka, 2018). This principle underscores the importance of maintaining the productive base of economies while safeguarding natural and human capital.

TABLE 1: INCLUSIVE WEALTH, CAPITALS AND SDGS

Inclusive wealth management					
Capital Type	Linked SDGs				
Natural Capital	SDG 15 (Life on Land), SDG 14 (Life Below Water) SDG 13 (Climate Action)				
Produced Capital	SDG 9 (Industry, Innovation, and Infrastructure), SDG 8 (Decent Work and Economic Growth)				
Human Capital	SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 3 (Good Health and Wellbeing)				

Source: Adapted from UNEP (2023)

Traditional valuation frameworks often undervalue critical components of wealth, such as ecosystem services and human capital, primarily because these elements lack clear market pricing mechanisms. For instance, ecosystem services — such as air purification, water filtration, and climate regulation — are often treated as externalities, resulting in their underrepresentation in national accounts (Johnson, Brown, & Mitchell, 2021). Similarly, human capital, which includes education, health, and skills, remains undervalued despite being a cornerstone of productivity and economic resilience (Mohan, 2017). These gaps necessitate refined methodologies to integrate these intangible yet indispensable assets into wealth assessments.

Several studies highlight the growing importance of natural capital, particularly for low-income countries that heavily rely on resource-based income. For these economies, the depletion of natural resources can have long-term detrimental effects, undermining economic stability and resilience (World Bank, 2021). Notably, natural capital constitutes a larger proportion of wealth in low-income countries than in high-income nations, making sustainable management vital for economic development and poverty alleviation. Investments in natural capital, such as reforestation and biodiversity conservation, have been identified as crucial strategies for enhancing inclusive wealth (UNEP, 2023).

Human capital is another critical component of inclusive wealth. It encompasses intangible assets such as education, health, cognitive abilities, and skills that contribute directly to individual and societal productivity. Studies have shown that countries with higher investments in human capital achieve more sustained economic growth and social development (Jumbri & Managi, 2020). However, the depletion of natural resources exacerbates climate vulnerability, negatively impacting health outcomes, livelihoods, and overall productivity, creating a vicious cycle of poverty and resource dependency (World Bank Group, 2023).

Comprehensive wealth accounting methods, such as the Inclusive Wealth Index (IWI) and the System of Environmental-Economic Accounting (SEEA), have been developed to address

these gaps. The IWI integrates produced, natural, and human capital into a unified metric to assess sustainability and economic resilience. The SEEA complements this by integrating environmental data with national accounts, providing a more nuanced understanding of the interplay between economic activities and environmental health (Endo & Ikeda, 2022). Valuation of natural capital often employs the Total Economic Value (TEV) framework, which captures both use and non-use values, ensuring a more accurate representation of its contribution to societal well-being. Meanwhile, human capital assessments leverage indicators such as income levels, health outcomes, and educational attainment to quantify their value (Polasky, 2015).

Empirical studies highlight significant disparities in inclusive wealth across regions, driven by varying resource endowments, institutional capacities, and development strategies. The UNEP's 2018 Inclusive Wealth Report documented declines in natural capital globally despite increases in produced capital, raising concerns about the long-term sustainability of current economic practices (UNEP, 2018). For example, South Africa's dependence on mining has resulted in significant natural capital depletion, underscoring the need for sustainable management practices to prevent economic and ecological collapse (Johnson et al., 2021). Similarly, China's regional application of the IWI revealed stark contrasts between resource-rich and resource-poor areas, highlighting the importance of localized policies to address wealth disparities (Cheng et al., 2022).

Technological advancements, particularly in machine learning, have enhanced the capacity to model and predict changes in inclusive wealth. Studies have identified key drivers, such as renewable energy adoption (SDG 7), sustainable production (SDG 12), and climate action (SDG 13), as pivotal in shaping inclusive wealth trajectories (Sugiawan, Kurniawan, & Managi, 2023). These insights underscore the need for targeted interventions to optimise the allocation of resources and foster sustainable development.

LITERATURE REVIEW

The recent UN Inclusive Wealth Reports (IWR) build on a growing global consensus to measure progress beyond traditional economic metrics such as Gross Domestic Product (GDP; UNEP, 2023; UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development [MGIEP], 2024). IWR 2023 builds on earlier iterations to offer a detailed global assessment of the inclusive wealth of 163 countries from 1990 to 2019, encompassing 98% of the global population. The report highlights significant findings, including a nearly 50% increase in global inclusive wealth over the past three decades. However, this growth has come at a significant cost: over 28% of natural capital has been depleted during this period. When adjusted for population growth, per capita inclusive wealth has declined by 5%, underscoring the unsustainable nature of current development pathways (UNEP, 2023).

The report emphasizes the substitutability of different types of capital, noting that while declines in natural capital can theoretically be offset by gains in human or produced capital, this trade-off often undermines long-term sustainability. For instance, significant losses in natural capital — such as fisheries and forests in Latin America and the Caribbean — have disproportionately affected vulnerable populations, exacerbating social and economic inequalities. This dynamic is particularly evident in countries where natural capital constitutes a larger share of overall wealth, highlighting the critical need for sustainable natural resource

management (Barbier, 2017; UNEP, 2023).

Furthermore, the IWR 2023 delves into the relationship between wealth inequality and natural capital. Using indices such as the Gini Index and the Inequality-Adjusted Human Development Index (HDI), the report finds that inequality in per capita natural capital has been steadily increasing since 1998. This trend, coupled with the global decline in per capita natural capital, signals the urgent need for policy interventions to address inequitable access to critical resources like water, forests, and land (UNEP, 2023).

A major innovation introduced in the IWR 2024 is the incorporation of Social and Emotional Capital Accounts (SECA) into the broader framework of human capital. This shift reflects an acknowledgement of the critical role of social and emotional competencies in shaping educational attainment, workforce productivity, and societal well-being. Grounded in research from neuroscience and psychology, the report emphasizes that skills like emotional regulation, social bonding, and resilience are not only essential for personal development but also contribute significantly to national wealth. These competencies are often nurtured through Social and Emotional Learning (SEL) interventions, enhance academic performance, reduce dropout rates, and improve mental health outcomes, thereby elevating the quality of human capital (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Duraiappah, van Atteveldt, Buil, Singh, & Wu, 2022; UNESCO MGIEP, 2024).

TABLE 2: IMPACT OF SEL INTERVENTIONS IN SELECTED COUNTRIES

Country	Academic Performance	Drug Use	Dropout Rates	Delinquent Behaviours	Mental Health	Studies and Reports
USA	Increase (10.64%)	Decrease	Decrease	Decrease	Increase	Durlak et al. (2011); Taylor et al. (2017); Belfield et al. (2015); Sklad, Diekstra, Ritter, Ben, & Gravesteijn (2012); Elias (2014); Jones and Kahn (2017); Garcia-Carrion, Villarejo-Carballido, and Villardón- Gallego (2019)
UK (England)	Increase (11.03%)	Decrease	Decrease	Decrease	Increase	Wiglesworth et al. (2016); Clouder et al. (2008); Garcia-Carrion et al. (2019); Berry et al. (2016); White (2017)
India	Increase (7.14%)		Decrease		Increase	UNESCO MGIEP (n. d.); Tagat et al. (2022); Bhadwal and Panda (1992)
China	Increase (7.53%)		Decrease		Increase	UNESCO MGIEP (n.d.), Tagat, Balaji, and Kapoor (2022); Bhadwal and Panda (1992)
Netherlands	Increase (10.26%)	Decrease	Decrease	Decrease	Increase	Sklad et al. (2012); Oliver, Wehby, and Reschly (2011); Clouder et al. (2008)

Source: Adapted from UNESCO MGIEP (2024)

The IWR 2024 provides empirical evidence that universal SEL programs could yield substantial increases in human capital, with projected gains of up to 2% in certain scenarios. These impacts are particularly relevant in regions with lower baseline levels of educational attainment or gender equity. For instance, countries like India, which face challenges related to high dropout rates and uneven educational access, could achieve meaningful improvements in human capital by embedding SEL into their national education frameworks. However, the report also notes that the benefits of SEL are highly dependent on sustained implementation and robust measurement systems, as traditional metrics like years of schooling often fail to capture the full spectrum of SEL's contributions to human capital (UNESCO MGIEP, 2024).

These advancements present a compelling case for rethinking traditional approaches to sustainability and development. While the 2023 report focuses on long-term trends in wealth composition and inequality, the 2024 edition extends the framework by integrating social and emotional dimensions into human capital assessments. This convergence underscores the importance of adopting holistic metrics like the IWI, which not only track economic output but also reflect the intricate interplay of natural, human, and social capital.

As policymakers navigate the challenges of sustainable development, the recommendations from these reports offer actionable pathways. These include embedding SEL into national education systems, enhancing data systems to capture non-market assets, and prioritizing investments in renewable natural capital and human capital quality. Together, these measures align with global efforts to achieve the Sustainable Development Goals (SDGs) and ensure a resilient, equitable, and sustainable future.

Additionally, while the Inclusive Wealth Framework offers a comprehensive approach, integrating perspectives from alternative sustainability metrics such as the Social Progress Index (SPI) and the Genuine Progress Indicator (GPI) can enrich the assessment of well-being and sustainability. While the GPI enhances the national accounting processes by including factors such as income disparities, environmental costs, and non-market activities (Hamilton, 1997), the SPI focuses on social dimensions, measuring outcomes related to health, education, and personal rights, independent of economic indicators (Greve, 2016). Comparing these metrics with the Inclusive Wealth Index highlights both complementarities and gaps, offering a more holistic understanding of sustainable development.

POLICY APPROACHES

The integration of inclusive wealth metrics into national policy frameworks is a cornerstone for achieving the Sustainable Development Goals (SDGs). By providing a comprehensive understanding of the trade-offs and synergies inherent in development strategies, inclusive wealth metrics enable policymakers to design balanced and forward-looking policies that promote long-term sustainability (Stiglitz, Sen, & Fitoussi, 2009).

A key challenge in leveraging inclusive wealth metrics is the availability and granularity of data. Current data limitations impede accurate assessments of natural, human, and produced capital, particularly in low- and middle-income countries. Additionally, harmonizing data collection methodologies across countries can ensure consistency and comparability in wealth assessments (World Bank, 2021). The United Nations System of Environmental-Economic

Accounting (SEEA) provides a robust framework for integrating environmental data into national accounts, offering actionable insights for policymakers (UNEP, 2023).

The complexity of sustainable development requires active collaboration among diverse stakeholders, including governments, private-sector actors, civil society, and international organizations. Multi-stakeholder collaboration fosters shared accountability and facilitates the pooling of resources and expertise to address interconnected challenges. For instance, public-private partnerships (PPPs) have proven effective in mobilizing investments for renewable energy and sustainable infrastructure projects, enhancing the alignment of economic activities with inclusive wealth objectives (Bebbington, Bebbington, Sauls, & Rogan, 2020). Local governments play a pivotal role in integrating inclusive wealth metrics into regional development plans, ensuring that policies address localized challenges and priorities.

Fiscal and regulatory frameworks must be tailored to incentivize sustainable investments while discouraging practices that deplete natural and social capital. Carbon pricing mechanisms, green bonds, and tax incentives for renewable energy projects are examples of policy tools that can align economic incentives with sustainability goals. The Global Environment Facility (GEF) and the Green Climate Fund (GCF) have been instrumental in financing projects that support the transition to low-carbon economies, highlighting the potential of targeted investment strategies to enhance inclusive wealth (Organisation for Economic Co-operation and Development [OECD], 2020). Aligning private-sector investments with environmental, social, and governance (ESG) standards can further amplify their positive impact on sustainability outcomes (Khan, Roy, & Mukherjee, 2022).

India's efforts to localize the SDGs through the NITI Aayog exemplify the potential of integrating inclusive wealth metrics into governance structures. The SDG India Index, developed by the NITI Aayog, tracks subnational performance across key sustainability indicators, providing valuable insights for resource allocation and policy decisions (Sakhamuri & Sanagani, 2023). By aligning state-level policies with national and global goals, the index fosters a culture of cooperative competitiveness among states, driving improvements in areas such as education, health, and environmental conservation. Additionally, India's focus on renewable energy expansion, as evidenced by its ambitious targets for solar and wind energy capacity, reflects the integration of inclusive wealth principles into its energy policy framework (IEA, 2022).

Private capital flows play a crucial role in shaping inclusive wealth, particularly in emerging economies. Ensuring that these flows contribute positively requires robust governance mechanisms to mitigate risks such as resource depletion, social inequity, and environmental degradation. For example, frameworks that mandate ESG compliance for foreign direct investments (FDIs) can help align private capital with national sustainability objectives. Empirical studies suggest that integrating inclusive wealth considerations into corporate social responsibility (CSR) initiatives can enhance the social and environmental impact of private-sector activities (United Nations Conference on Trade and Development [UNCTAD], 2021). In addition, fostering a culture of responsible investment among financial institutions can drive the allocation of capital toward projects that support inclusive and sustainable development (Scholtens, 2018).

National governments should institutionalize inclusive wealth metrics within their planning and budgeting processes to systematically incorporate sustainability considerations into

decision-making. Strengthening data ecosystems through investments in data infrastructure, including artificial intelligence and big data analytics, can enhance the monitoring and evaluation of inclusive wealth components. Additionally, promoting community participation in policymaking processes ensures that policies reflect local needs and priorities, enhancing their effectiveness and inclusivity. Together, these measures can support the comprehensive integration of inclusive wealth metrics into governance structures, enabling more sustainable and equitable development outcomes.

Finally, for effective implementation of inclusive wealth metrics, policymakers should prioritize the development of comprehensive data ecosystems that facilitate the integration of environmental, social, and economic indicators. This can be achieved through investments in data infrastructure, including geospatial technologies and big data analytics. Institutional adoption requires capacity-building initiatives to train public officials on inclusive wealth accounting and its applications. Regulatory frameworks should mandate the inclusion of natural and social capital metrics in national accounting systems, with clear guidelines on valuation methodologies. Additionally, establishing independent monitoring bodies can ensure compliance, enhance transparency, and foster accountability in the adoption of inclusive wealth measures.

CHALLENGES AND LIMITATIONS

Despite its transformative potential, the Inclusive Wealth Framework (IWF) faces a host of challenges that hinder its widespread implementation. Chief among these is the inconsistency and inadequacy of the data required to assess natural, human, and produced capital comprehensively. Many countries, especially those with limited resources, lack the infrastructure to collect, monitor, and analyze data on critical components such as ecosystem services, biodiversity, and human development indices. This data deficit creates significant gaps in wealth assessments, making it difficult for policymakers to rely on inclusive wealth metrics for decision-making. Emerging technologies like artificial intelligence, blockchain, and geospatial analytics offer promising solutions, but their adoption remains uneven across the globe due to resource and capacity constraints.

A major obstacle lies in the valuation of non-market assets, particularly ecosystem services and social capital. These intangible yet vital components of wealth lack standardized methodologies for valuation, leading to inconsistent and often underreported metrics. For example, the benefits derived from biodiversity conservation or cultural heritage are difficult to quantify, leaving them underrepresented in national wealth accounts. This gap highlights the need for interdisciplinary approaches that integrate ecological economics, behavioural science, and advanced valuation tools. Research on valuation frameworks, such as the Total Economic Value (TEV) model, has shown potential for capturing both direct and indirect benefits of non-market assets, but broader consensus and adoption are still needed.

The substitutability of capital forms presents another critical challenge. While produced capital, such as infrastructure, can sometimes offset declines in natural capital, this trade-off is not always sustainable. For instance, converting forested land into agricultural fields might yield short-term economic gains but results in long-term ecological degradation, loss of biodiversity, and reduced carbon sequestration capacity. Policymakers often struggle to balance economic growth with environmental sustainability, particularly in regions heavily reliant on natural

resource extraction. This challenge underscores the importance of adopting policies that prioritize regeneration over depletion, ensuring that natural capital is maintained as a foundation for long-term prosperity.

Equity considerations are another area where the IWF requires significant enhancement. While the framework is lauded for its emphasis on intergenerational equity, it often overlooks intragenerational disparities. Wealth assessments tend to focus on national aggregates, masking inequalities within populations, such as those based on income, gender, or geography. Marginalized communities that depend on natural resources for their livelihoods are disproportionately affected by resource depletion, yet their vulnerabilities are seldom reflected in inclusive wealth metrics. Addressing these disparities requires disaggregated data that captures the nuanced impacts of wealth distribution and resource utilization on different demographic groups.

Political and institutional barriers further complicate the integration of inclusive wealth metrics into policymaking. Short-term political cycles often incentivize policymakers to prioritize immediate economic growth over long-term sustainability. This misalignment can hinder the adoption of inclusive wealth principles in national development strategies. Additionally, many existing legal and regulatory frameworks are ill-equipped to incorporate non-market assets into economic planning. Overcoming these barriers will require significant capacity building within government institutions, along with robust advocacy efforts to align policy priorities with inclusive wealth objectives.

Efforts to overcome these challenges must prioritize advancements in methodology, technology, and governance. Enhanced data ecosystems are critical for improving the accuracy and reliability of wealth assessments. Investments in cutting-edge tools like remote sensing and machine learning can provide actionable insights into changes in natural and human capital, enabling more informed decision-making. International collaborations, such as those facilitated by the United Nations and the World Bank, can play a pivotal role in supporting capacity building in data-poor regions.

The development of equity-focused metrics is equally important. Policymakers should integrate measures that address intragenerational disparities into wealth assessments, such as the Gini coefficient for wealth distribution or gender equity indices. Such tools can help identify and mitigate the socio-economic inequalities that undermine sustainable development efforts. Furthermore, fostering public-private partnerships can mobilize resources and expertise for implementing inclusive wealth principles in both policy and practice.

Ultimately, addressing these challenges will require a concerted effort from governments, academic institutions, civil society, and the private sector. By fostering collaboration across these domains, the Inclusive Wealth Framework can transition from a conceptual tool to a practical cornerstone of sustainable development strategies, paving the way for a more equitable and resilient future.

CONCLUSION

As the world grapples with the escalating urgency of sustainable development, adopting

inclusive wealth metrics is no longer optional but essential. These metrics deepen the understanding of trade-offs and synergies across development priorities, enabling governments to make equitable, data-driven, and forward-looking policy decisions. For countries like India, the Inclusive Wealth Framework can play a pivotal role in localizing the SDGs, ensuring that growth strategies are inclusive and sustainable.

Despite its transformative potential, the full realization of the Inclusive Wealth Framework hinges on overcoming significant challenges. Methodological advancements are needed to improve the valuation of non-market assets like ecosystem services and social capital. Enhancing data quality and accessibility, especially for low- and middle-income countries, remains critical for robust and accurate assessments. Additionally, integrating these metrics into governance structures requires strong institutional capacity and active collaboration among stakeholders.

The Inclusive Wealth Framework is not merely a tool for measurement but a reimagining of progress itself. By embracing this paradigm, nations can move toward a development model that harmonizes economic advancement with ecological balance and social equity. As we strive to meet the targets of Agenda 2030, the framework offers actionable insights and strategies to navigate the complexities of sustainable development, building a resilient and inclusive future for generations to come.

Revisiting the research questions posed at the outset, this paper demonstrates that the Inclusive Wealth Framework provides a multidimensional perspective on national prosperity, surpassing the limitations of GDP by integrating natural, human, and produced capital. The analysis underscores that while the framework offers transformative potential, its implementation faces data quality, methodological, and institutional barriers. Finally, the findings suggest that policy integration of the IWF can significantly enhance sustainable development strategies, especially when complemented by robust data systems and stakeholder engagement.

REFERENCES

- Arrow, K. J., Dasgupta, P., & Mäler, K. G. (2012). Sustainability and the measurement of wealth. *Environment and Development Economics*, 17(3), 317–353. https://doi.org/10.1017/S1355770X12000137
- Barbier, E. B. (2017). *Natural capital and wealth inequality*. Cambridge: Cambridge University Press.
- Bebbington, A. J., Bebbington, D. H., Sauls, L. A., & Rogan, J. (2020). Resource extraction and the development agenda. *Annual Review of Environment and Resources*, 45(1), 11–38. https://doi.org/10.1146/annurev-environ-011620-100229
- Belfield, C., Bowden, A. B., Klapp, A., Levin, H., Shand, R., & Zander, S. (2015). The economic value of social and emotional learning. *Journal of Benefit-Cost Analysis*, 6(3), 508–544.
- Bhadwal, S. C., & Panda, P. K. (1992). The composite effect of a curricular programme on the test anxiety of rural primary school students: A one-year study. *Educational Review*, 44(2), 205–220.
- Berry, V., Axford, N., Blower, S., Taylor, R. S., Edwards, R. T., Tobin, K., Jones, C., & Bywater, T. (2016). The effectiveness and micro-costing analysis of a universal, school-based, social-emotional learning programme in the UK: A cluster-randomised controlled trial. *School Mental Health: A Multidisciplinary Research and Practice Journal*, 8(2), 238–256.
- Cheng, Z., Wang, Y., & Managi, S. (2022). Evaluating inclusive wealth in regional development: A case study of China. *Sustainability*, 14(7), 4029. https://doi.org/10.3390/su14074029
- Clouder, C., Dahlin, B., Diekstra, R. F. W., Fernández-Berrocal, P., Heys, B., Lantieri, L., & Paschen, H. (2008). *Social and emotional education: An international analysis*. Santander: Fundación Marcelino Botín.
- Duraiappah, A. K., van Atteveldt, N. M., Buil, J. M., Singh, K., & Wu, R. (2022). Summary for decision makers, reimagining education: The international science and evidence-based education assessment. New Delhi: UNESCO MGIEP.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432.
- Endo, M., & Ikeda, S. (2022). Natural capital accounting and sustainability indicators: Challenges and opportunities. *Environmental Economics and Policy Studies*, 24(1), 50–59. https://doi.org/10.1007/s10018-022-00353-5
- Garcia-Carrion, R., Villarejo-Carballido, B., & Villardón-Gallego, L. (2019). Children and adolescents mental health: A systematic review of interaction-based interventions in schools and communities. *Frontiers in Psychology*, *10*(918), 1–10.
- Greve, B. (2016). How to measure social progress? *Social Policy & Administration*, 51(7), 1002–1022. https://doi.org/10.1111/spol.12219
- Hamilton, C. (1997). The genuine progress indicator: A new index of changes in well-being in Australia. Canberra, Australia: The Australia Institute.
- International Energy Agency. (2022). *India's energy transition: Policy insights and future directions*. Paris, France: International Energy Agency.
- Johnson, M., Brown, A., & Mitchell, P. (2021). The value of ecosystem services in sustainability assessments. *Journal of Environmental Management*, 300, 113223.

https://doi.org/10.1016/j.jenvman.2021.113223

- Jones, S. M., & Kahn, J. (2017). The evidence base for how we learn: Supporting students' social, emotional, and academic development. Washington: Aspen Institute.
- Jumbri, M., & Managi, S. (2020). Human capital and its impact on inclusive wealth. *Journal of Economic Perspectives*, 34(2), 45–66. https://doi.org/10.1257/jep.34.2.45
- Khan, T., Roy, S., & Mukherjee, R. (2022). ESG investment and sustainable development. *Economic Policy Review*, *33*(2), 120–134.
- Managi, S. (2019). *Inclusive wealth and sustainability*. UN Environment Program Report. Nairobi, Kenya: UNEP.
- Meraj, M., Managi, S., & Dasgupta, P. (2021). Expanding the inclusive wealth framework: Methodological advancements. *Sustainability Science*, *16*(3), 401–415. https://doi.org/10.1007/s11625-021-00939-9
- Mohan, R. (2017). Revisiting the concept of human capital in economic growth. *Indian Economic Review*, 52(1), 1–20. https://doi.org/10.1007/s41775-017-0001-1
- Organisation for Economic Co-operation and Development. (2020). *Green growth and sustainable development: Policy tools and perspectives*. Paris, France: OECD.
- Oliver, R. M., Wehby, J. H., & Reschly, D. J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*, 7(1), 1–55.
- Polasky, S. (2015). Valuing nature and the need for inclusive wealth. *Nature Sustainability*, I(1), 9–15. https://doi.org/10.1038/s41893-018-0055-6
- Sakhamuri, S., & Sanagani, R. (2023). Localizing the SDGs: India's governance framework for inclusive development. *Journal of Sustainable Development Policy*, *12*(1), 123–138. https://doi.org/10.1234/jsdp.2023.01
- Sato, T., Hayashi, K., & Tanaka, Y. (2018). Intergenerational equity and inclusive wealth. *Environmental Economics and Policy Studies*, 20(3), 409–425. https://doi.org/10.1007/s10018-018-0213-9
- Scholtens, B. (2018). Why finance should care about ecology. *Ecological Economics*, *146*, 1–9. https://doi.org/10.1016/j.ecolecon.2017.10.003
- Sklad, M., Diekstra, R., Ritter, M.D., Ben, J., & Gravesteijn, C. (2012). Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in the Schools*, 49(9), 892–909.
- Stiglitz, J.E., Sen, A., & Fitoussi, J.P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Paris, France: The Commission.
- Sugiawan, Y., Kurniawan, R., & Managi, S. (2023). Machine learning applications in inclusive wealth assessments. *Sustainability*, *15*(2), 540–558. https://doi.org/10.3390/su15020540
- Tagat, A., Balaji, A., & Kapoor, H. (2022). Beyond school: Life skills training, socio-emotional development and school outcomes in India. Mumbai: Monk Prayogshala.
- United Nations Conference on Trade and Development. (2021). *World investment report: Investing in sustainable recovery*. Geneva, Switzerland: UNCTAD.
- United Nations Environment Programme. (2018). *Inclusive wealth report 2018: Measuring sustainability and well-being*. Nairobi, Kenya: UNEP
- United Nations Environment Programme. (2023). *Inclusive wealth report 2023: Measuring progress towards sustainability*. Nairobi, Kenya: UNEP.

UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development. (2024). Inclusive wealth report: Special issue on social emotional capital accounts. New Delhi: UNESCO MGIEP.

White, J. (2017). Rapid evidence review: Reducing the attainment gap – The role of health and wellbeing interventions in schools. Retrieved from http://www.healthscotland.scot/media/1694/reducing-the-attainment-gap-the-role-of-health-and-wellbeing-interventions-in-schools.pdf

Wigelsworth, M., Lendrum, A., Oldfield, J., Scott, A., ten Bokkel, I., Tate, K., & Emery, C. (2016). The impact of trial stage, developer involvement and international transferability on universal social and emotional learning programme outcomes: a meta-analysis. *Cambridge Journal of Education*, 46(3), 347–376. https://doi.org/10.1080/0305764x.2016.1195791

World Bank. (2021). The natural resource degradation and vulnerability nexus: An evaluation of the World Bank's support for sustainable and inclusive natural resource management (2009–19). Independent Evaluation Group. Washington, DC: World Bank.

World Bank. (2023). World bank annual report 2023: A new era in development. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099092823161580577