

Beyond the Numbers: How SDG Measurement Frameworks Shape Economic Development Priorities

Aaria Adhvaryu

Obero International School, Mumbai, India

Abstract:

The Sustainable Development Goals (SDGs) provide a global framework for monitoring economic, social and environmental progress. However, differences in indicator design, data availability and statistical reliability raise concerns about how effectively these measures represent development needs and influence policy decisions. This study examines the extent to which SDG indicators shape policy prioritisation and resource allocation in developing economies, where governments face competing objectives and limited resources. Using a qualitative approach based on a critical review of academic literature, United Nations reports and official SDG documentation, the study investigates the relationship between development measurement and institutional decision-making. A comparative examination of SDG 4 (Quality Education) and SDG 13 (Climate Action) explores how differences in measurement requirements, data availability and policy time horizons may affect development priorities. Drawing on economic concepts including information asymmetry, institutional incentives and opportunity costs, the analysis considers how measurement frameworks influence policy evaluation and resource allocation. The findings suggest that unequal indicator coverage and measurement uncertainty can affect the visibility and interpretation of development challenges, potentially influencing institutional attention. However, a direct causal relationship between indicator availability and government expenditure cannot be established, as allocation decisions also depend on political priorities, administrative capacity and budgeting practices. The study concludes that integrating quantitative indicators with qualitative assessments, recognising measurement limitations and strengthening statistical capacity can support more informed, accountable and equitable development prioritisation.

Keywords: sustainable development goals, development economics, policy prioritisation, resource allocation, development indicators

1. INTRODUCTION

The measurement of economic and social development has become an essential component of contemporary policymaking, enabling governments and international organisations to monitor progress, evaluate interventions and establish development priorities. The adoption of the United Nations 2030 Agenda for Sustainable Development in 2015 introduced a

*Corresponding Author Email: Indiaaariaadhvayu@gmail.com

Published: 29 October 2026

DOI: <https://doi.org/10.70558/IJSSR.2026.v3.i5.301400>

Copyright © 2026 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

comprehensive framework consisting of 17 Sustainable Development Goals (SDGs), designed to address interconnected global challenges including poverty, inequality, education, environmental degradation and economic growth. Supported by a system of measurable targets and indicators the SDG framework seeks to promote accountability and evidence-based decision-making. However despite its contribution to standardizing development assessment, questions remain regarding the extent to which quantitative indicators accurately represent multidimensional development outcomes and influence the priorities of policymakers.

The relationship between measurement and policymaking presents a significant challenge. While indicators provide a systematic basis for comparing development outcomes, they inevitably simplify complex economic and social conditions. Merry (2011) argues that quantitative indicators can reshape how social problems are understood by translating multidimensional realities into standardised measurements. Similarly, Fukuda-Parr and McNeill (2019) highlight the political dimensions of SDG indicator selection, demonstrating that decisions concerning what should be measured can influence how development objectives are interpreted. Consequently, development indicators may function not only as instruments for evaluating progress but also as mechanisms that shape institutional perceptions of development priorities.

A further complication of the effectiveness of the SDG measurement framework is differences in data availability. According to the United Nations (2025) almost 70% of SDG indicators have good data coverage, representing substantial progress in global statistical capacity. Nevertheless, significant disparities persist across individual goals. For instance, while SDG 7 (Affordable and Clean energy) demonstrates trend data coverage exceeding 80%, SDG 13 (Climate Action) remains below 30%. These inequalities raise concerns regarding the visibility of development challenges that are difficult to quantify or inadequately represented in existing statistical systems.

From an economic perspective, such disparities are particularly relevant to developing economies, where governments must allocate limited financial and institutional resources to meet competing development objectives. Differences in the availability and reliability of information may influence how policymakers identify urgent challenges, evaluate interventions and justify public expenditure. However the relationship between measurement and resource allocation is not necessarily direct, as political considerations, institutional capacity and broader economic conditions also influence policy decisions.

This paper aims to critically examine the extent to which the design and use of SDG indicators influence policy prioritisation and resource allocation in developing economies. Through a qualitative review of academic literature and a comparative examination of selected SDG measurement challenges the study investigates the relationship between indicator availability, institutional incentives and development decision making. It argues that the effectiveness of the SDG framework depends not only on the accuracy of its indicators but also on how measurement systems influence the visibility and prioritisation of development needs.

2. LITERATURE REVIEW

2.1 Quantitative Indicators and Measurement of Development

The increasing reliance on quantitative indicators in development policymaking reflects a broader shift towards evidence based governance where measurable outcomes are used to assess institutional performance and monitor progress. While indicators enable international comparisons and enhance accountability frameworks they are not without limitations. Existing literature questions their ability to represent the multidimensional nature of sustainable development.

Merry (2011) examines the growing influence of numerical indicators in global governance arguing that the simplification of complex social conditions into standardized measurements can obscure important contextual differences. While quantification enables comparisons across countries, the construction of indicators involves decisions about which dimensions of development should be prioritised. Consequently indicators may shape institutional understandings of development rather than merely provide objective descriptions of existing conditions.

Extending this argument to the Sustainable Development Goals Fukuda-Parr and McNeill (2019) demonstrate that the selection of SDG indicators involves both technical and political considerations. Their analysis highlights how translating broad development objectives into measurable targets can alter their original meaning particularly when certain dimensions are easier to quantify than others. This suggests that the effectiveness of the SDG framework depends not only on the availability of the statistical information but also on whether selected indicators adequately represent the underlying development objectives.

Dang and Serajuddin (2020) further examine the measurement challenges associated with monitoring progress towards the SDGs, highlighting the importance of indicator selection, data availability and the interpretation of statistical evidence. Their analysis reinforces the need to distinguish between measurable progress and the broader development outcomes that indicators seek to represent.

MacFeely (2020) examines the statistical challenges associated with monitoring the SDG framework, particularly the demands placed on national statistical systems by its extensive range of indicators. This highlights how differences in statistical capacity may affect the availability and comparability of development data across countries.

2.2 Institutional Incentives and Policy Prioritisation

Beyond their role in measuring progress, development indicators may influence institutional behavior by establishing benchmarks against which government performance is evaluated. When measurable targets become central to policy assessment institutions may face incentives to prioritize improvements in reported outcomes.

Bevan and Hood (2006), examining performance targets in the English public healthcare system, demonstrate how target-based evaluation can create unintended incentives and encourage organisations to prioritise measured performance. Although the research focuses on

healthcare rather than SDG implementation, it illustrates a broader institutional risk associated with performance measurement.

This relationship can be examined through the economic concept of information asymmetry. Citizens, international organizations and development agencies often depend on government produced statistics to evaluate policy effectiveness. Standardized indicators can reduce information gaps by providing accessible evidence of progress. However, where indicators capture only selected dimensions of development, reported improvements may not fully reflect changes in underlying social economic conditions.

Fukuda-Parr and McNeill (2019) identify the political implications of indicator selection, suggesting that measurement decisions can influence how development priorities are interpreted. Building on this perspective the present study considered whether the availability and visibility of particular indicators may affect institutional attention. Nevertheless the existence of measurable targets does not necessarily imply that policymakers prioritize statistical performance over substantive outcomes. Indicators may also expose policy failures, strengthen transparency and encourage governments to address previously neglected development challenges.

2.3 SDG Indicators and Public Resource Allocation

The relationship between development measurement and public expenditure is particularly significant in developing economies, where governments face competing policy objectives and limited financial resources. From an economic perspective, allocating public expenditure involves opportunity costs, as investment in one development objective may restrict resources available for others. Reliable indicators can support these decisions by identifying development gaps and providing evidence for evaluating policy interventions.

Hege, Brimont and Pagnon (2019) investigate the incorporation of SDGs into national budgeting processes through nine country case studies. Their findings reveal that governments have adopted different approaches to SDG budgeting, including expenditure mapping, qualitative reporting and performance evaluation. However the direct use of SDG indicators as instruments for resource allocation remained relatively limited among the countries examined. This suggests that the relationship between development measurement and public expenditure depends on institutional arrangements rather than operating through an automatic connection. Biermann et al. (2022) similarly find that, although the SDGs have influenced political discourse and policy agendas, evidence of substantial changes in institutional practices and resource allocation remains limited. Their findings support the distinction between the adoption of development frameworks and their practical influence on government expenditure.

Furthermore, the United Nations (2025) identifies substantial disparities in data availability across the SDG framework with some goals supported by considerably more comprehensive trend data than others. Such differences raise questions about whether development challenges with stronger statistical representation receive greater visibility in policy discussions. However, unequal data coverage alone does not establish that governments allocate resources disproportionately towards better measured objectives.

2.4 Research Gap

Existing literature established that development indicators can influence how policy objectives are defined, interpreted and evaluated. Research has also examined the incorporation of SDGs into national budgeting processes and the persistent inequalities in global data availability. However further analysis is required to determine how variations in indicator measurability and data availability interact with institutional incentives and resource constraints. This Study addresses this issue by examining the potential relationship between unequal SDG measurement capacity, policy visibility and development prioritisation. Rather than assuming that indicators directly determine public expenditure, the research evaluates the conditions under which measurement systems may influence economic decision making and considers the implications for effective and equitable development governance.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study adopts a qualitative research approach based on a critical review of academic literature and secondary data concerning the measurement and implementation of the United Nations Sustainable Development Goals (SDGs). The research examines how differences in indicator design, measurability and data availability may influence policy prioritisation and public resource allocation in developing economies.

The approach of using conceptual analysis and comparative evaluation to investigate the relationship between development measurement and institutional decision-making is appropriate because the research seeks to understand the mechanisms through which indicators may shape policy priorities rather than establish a direct statistical correlation between measurement systems and government expenditure.

3.2 Data Sources and Selection

The research draws on peer reviewed academic publications, official United Nations reports and publicly available SDG indicator documentation. Sources are selected according to their relevance to three central themes: the limitations of quantitative development measurement, the influence of indicators on institutional behavior, and the relationship between development monitoring and resource allocation.

The United Nations' *Sustainable Development Goals Report 2025* provides the principal source of secondary data concerning differences in indicator availability across development objectives (United Nations, 2025). The official United Nations SDG global Indicator Framework is also used to identify the indicators associated with SDG 4 and SDG 13 and establish the basis for their comparative examination (United Nations Statistics Division, n.d.-a). Academic studies by Merry (2011), Fukuda-Parr and McNeill (2019), and Hege et al. (2019) provide theoretical and institutional perspectives on the role of measurement in development governance.

The comparative component focuses on SDG 4 (Quality Education) and SDG 13 (Climate Action). These goals are selected because they represent distinct dimensions of sustainable

development and involve different measurement challenges. Their comparison is intended to illustrate how differences in indicator coverage and the nature of measured outcomes may influence the interpretation of development progress.

3.3 Analytical Framework

The analysis is organised around three interconnected dimensions.

First, measurement availability and validity are examined to evaluate whether existing SDG indicators adequately represent the development outcomes they are intended to measure. Particular attention is given to the gaps in data coverage and the limitations of standardised indicators.

Second, institutional incentives and policy visibility are considered to assess how measurable targets may influence government accountability, policy evaluation and the identification of development priorities.

Third, economic resource allocation is examined through the concepts of opportunity cost and information asymmetry. This dimension considers how differences in the availability and reliability of development data may affect policymaking when governments face competing objectives and limited resources.

Together, these dimensions provide a framework for examining the potential relationship between development measurement and policy decisions. The analysis distinguishes between relationships supported by existing evidence and theoretical mechanisms that require further empirical investigation.

4. SDG MEASUREMENT AND DATA AVAILABILITY

4.1 Unequal Data Availability Across SDGs

The effectiveness of the Sustainable Development Goals (SDGs) as a framework for monitoring economic and social development depends significantly on the availability, consistency and reliability of statistical information. Although the SDG framework establishes internationally recognised indicators, differences in national statistical capacity and data collection processes creates inequalities in the extent to which development outcomes can be monitored.

According to the United Nations (2025), the proportion of SDG indicators with good data coverage increased from approximately one-third in 2016 to almost 70% in 2025. This improvement reflects considerable progress in the development of statistical systems and internationally standardised measurement methodologies. Nevertheless, the availability of the indicators does not necessarily guarantee their reliability or comparability. Dang and Serajuddin (2020) and MacFeely (2020) identify methodological and statistical challenges in monitoring the SDGs, suggesting that improvements in data coverage must also be assessed alongside the quality and consistency of the information collected.

For example, SDG 7 (affordable and Clean Energy) achieved trend-data coverage exceeding 80% in 2025, whereas SDG 13 (Climate Action), SDG 5 (Gender Equality) and SDG 11

(Sustainable Cities and Communities) remained below 30% (United Nations, 2025). These figures demonstrate that improvements in the global measurement framework have not occurred uniformly across development sectors.

Such disparities have important implications for development assessment. Where reliable data points are consistently available, governments and international organisations can more easily identify trends, evaluate interventions and compare progress over time. Conversely, limited data availability may restrict the ability of policymakers to establish the scale or urgency of particular development challenges. However, inadequate statistical coverage should not be interpreted as evidence of limited development needs. Rather, it represents uncertainty regarding the extent to which existing measurement systems capture those needs

4.2 Indicator Design and the representation of development outcomes

Beyond differences in data availability, the design of indicators influences how development outcomes are represented. Sustainable development encompasses economic, social and environmental dimensions that cannot always be fully captured through individual quantitative measures.

Merry (2011) argues that indicators simplify complex structures by transforming multidimensional conditions into comparable numerical representations. Although this process supports standardisation and accountability, it may also reduce the visibility of contextual factors that are difficult to quantify.

This challenge is particularly relevant when indicators measure specific aspects of development rather than the complete outcomes policymakers seek to achieve. For instance, SDG 4 (Quality Education) includes indicators concerning educational completion rates and minimum proficiency levels in reading and mathematics (United Nations Statistics Division, n.d.-b). These measures provide valuable information about educational access and learning outcomes. Yet, these metrics fail to independently measure the full scope of education including teaching quality, school infrastructure and student personal growth.

Similarly, in the case of SDG 13 (Climate action), indicators relating to gas emissions, disaster impacts and national climate-policy frameworks are incorporated (United Nations Statistics Division, n.d.-b). While these indicators capture important dimensions of climate action, their interpretations require consideration of national circumstances, institutional capacity and differences in exposure to environmental risks.

Consequently, the limitations of development measurement arise not necessarily from the absence of relevant indicators but from the difficulty of representing complex development outcomes through a standardised international framework.

4.3 Implications of Policy Visibility

Differences in measurement availability and indicator design may influence the visibility of development challenges within policymaking institutions. When progress can be demonstrated through regularly updated and comparable statistics, policymakers possess clearer evidence for identifying trends and evaluating interventions.

In contrast, development challenges characterised by incomplete or inconsistent data may be more difficult to assess through conventional performance monitoring systems. This creates the possibility that availability of information influences which problems receive attention during policy evaluation.

However, this relationship should not be interpreted as evidence that better measured objectives necessarily receive greater financial resources. Governments may prioritize poorly measured challenges because of political commitments, public pressure or their perceived social importance. Furthermore, the existence of reliable indicators may reveal inadequate progress and encourage corrective intervention rather than reinforce existing priorities.

The central concern is therefore not that quantitative measurement inherently produces inappropriate policy decisions but that unequal measurement capacity may create differences in how clearly development needs are represented. In developing economies where statistical resources and public finances are often constrained, recognising these limitations is important for ensuring that policy priorities reflect substantive development needs rather than availability of measurable information alone.

5. POLICY INCENTIVES AND DEVELOPMENT PRIORITIES

5.1 Information Asymmetry and Policy Decision Making

Development indicators influence policymaking partly through their role in reducing information asymmetry. Governments, international organizations and citizens often possess different levels of information regarding development challenges and the effectiveness of public interventions. Standardised SDG indicators can reduce these information gaps by providing comparable evidence that supports policy evaluation and accountability.

However, the usefulness of this information depends on its accuracy, accessibility and relevance to policy decisions. When governments assess competing development objectives, differences in the quality of available evidence may affect their confidence in identifying problems and evaluating possible interventions. Consequently, measurement systems can influence not only what policymakers know but also the degree to which there is uncertainty associated with various policy choices.

This distinction is particularly relevant in developing economies, where limited administrative capacity may increase reliance on readily available statistical information. Nevertheless, indicators represent only one source of evidence, alongside qualitative assessments, public consultation and political priorities.

5.2 Institutional Incentives and Accountability

The relationship between indicators and institutional behavior can be examined through the principal agent theory. Citizens and elected representatives delegate responsibility for implementing development programmes to public institutions, creating a need to monitor whether these institutions achieve their objectives. Performance indicators can help address this challenge by establishing measurable benchmarks against which results are evaluated.

However, accountability mechanisms may also generate unintended incentives. When institutional performance is assessed primarily through numerical targets, agencies may concentrate on activities that produce measurable improvements rather than those generating broader social benefits. Bevan and Hood (2006) demonstrate how performance targets can generate unintended organisational incentives, while Deber and Schwartz (2016) caution that measurable outcomes do not necessarily capture the aspects of public service performance that matter most. This reflects a potential tension between demonstrating progress and achieving substantive development outcomes.

The significance of this risk depends on how indicators are used. Where quantitative assessments are complemented by independent evaluations and qualitative evidence, they can strengthen accountability without necessarily narrowing institutional priorities. Therefore, the influence of SDG indicators depends not simply on their design but also on the governance systems through which they are interpreted.

5.3 Opportunity Cost and Resource Allocation

Public resource allocation involves opportunity costs because governments must distribute limited financial resources among competing development objectives. In this context, indicators can support decision making by providing evidence about development needs, programme outcomes and potential areas for investment. However, the availability of measurable outcomes does not necessarily determine expenditure priorities. Hege et al. (2019) demonstrate that the incorporation of SDGs into national budgeting varies across countries, with expenditure mapping and reporting often more developed than the direct use of SDG frameworks in allocation decisions. This suggests that measurement influences resource allocation only when statistical evidence is meaningfully integrated into budgeting institutions. This interpretation is consistent with Biermann et al. (2022) who identify limited evidence that the SDGs have produced substantial changes in resource allocation despite their influence on political agendas. This distinction suggests that improved measurement and greater policy attention do not necessarily translate into changes in public expenditure.

The economic concern is therefore whether differences in measurement quality affect the evaluation of competing investments. A programme supported by extensive performance data may be easier to justify through conventional budget assessments than one addressing a less measurable challenge. However, this represents a potential decision making bias rather than an established pattern of government expenditure. Overall, SDG indicators are best understood as informational tools whose policy influence depends on institutional incentives, accountability mechanisms and budgeting practices. Their effectiveness lies not merely in generating measurable evidence but in ensuring that such evidence contributes to decisions reflecting broader development needs.

6. COMPARATIVE ANALYSIS OF SDG 4 AND SDG 13

6.1 Measurement of education Development: SDG 4

SDG 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities. Its indicator framework includes measures of educational participation,

completion rates, learning proficiency and inequalities in educational outcomes (United Nations Statistics Division, n.d.-b). These indicators provide governments with information that can support the identification of education disparities and the evaluation of public interventions.

An important advantage of educational indicators is their potential connection to identifiable policy interventions. For example, information concerning school completion rates and learning proficiency can help policymakers assess whether investments in educational infrastructure, teacher training or learning support are associated with improvements in educational outcomes.

However, the interpretation of such indicators requires caution. Improvements in school completion rates do not necessarily demonstrate equivalent improvements in learning quality, while national averages may conceal inequalities between socioeconomic groups or geographical regions. Although the SDG framework incorporates indicators addressing learning outcomes and educational inequality, differences in data quality and national assessment systems may limit their comparability.

Consequently, the effectiveness of SDG 4 measurement depends on whether policymakers interpret multiple indicators collectively rather than relying on isolated measures of educational progress.

6.2 Measurement of Climate Action: SDG 13

SDG 13 focuses on strengthening responses to climate change and its impacts. Its indicators address areas including disaster resilience, climate-related policy integration and institutional capacity (United Nations Statistics Division, n.d.-b).

Unlike some educational outcomes, the benefits of climate related interventions may emerge over extended periods and depend on environmental conditions beyond the direct control of individual governments. For example, investments in flood protection or climate resilient infrastructure may reduce future economic losses, but their effectiveness can be difficult to evaluate through short term performance indicators.

Climate-related outcomes also present challenges concerning attribution. Changes in disaster-related losses may reflect variations in the severity of environmental events rather than the effectiveness of government policies alone. Similarly, the adoption of national climate strategies demonstrates institutional commitment but does not independently establish successful implementation.

These characteristics complicate the relationship between measurable progress and policy effectiveness. Governments may therefore require a combination of quantitative indicators, scientific assessments and forward-looking risk evaluations when determining climate-related investment priorities.

6.3 Comparative Implications for Development Prioritisation

The comparison between the two demonstrates how the nature of development outcomes can influence the usefulness of measurement systems in public decision making. Nilsson et al.

(2016) emphasise the importance of recognising interactions between Sustainable Development Goals, as progress towards one objective may support or constrain progress towards another. This perspective highlights the need to evaluate development priorities within an interconnected policy framework rather than treating individual SDG indicators as independent measures of success. Educational interventions may sometimes be evaluated through relatively direct indicators of participation and learning, whereas climate adaptation investments frequently require assessments of uncertain future risks and benefits. This distinction has economic implications. When governments compare competing expenditures, differences in the time horizons, uncertainty and measurability of expected outcomes can affect how investments are evaluated. Programmes with readily observable results may be easier to assess using conventional performance measures, while interventions producing long-term or preventive benefits may require more complex evaluation methods.

However, these differences do not establish that governments systematically favour education over climate action. Both goals contain diverse indicators and actual expenditure priorities depend on political commitments, institutional capacity and national development needs. The comparison instead highlights a broader limitation of applying uniform performance expectations across distinct development objectives. Effective resource allocation requires evaluation methods that reflect the characteristics of each policy area rather than assuming that all development outcomes can be measured and compared in the same way.

For developing economies, this suggests that improving SDG implementation requires more than expanding statistical coverage. Governments must also consider how indicators are interpreted, how uncertainty is incorporated into policy evaluation and whether existing budgeting practices adequately recognise long term and multidimensional development benefits.

7. DISCUSSION AND POLICY IMPLICATIONS

7.1 Interpreting the Relationship Between Measurement and Development Priorities

The preceding analysis suggests that the influence of Sustainable Development Goal indicators extends beyond their function as statistical measures. By shaping the information available to policymakers, indicators may affect how development challenges are evaluated and incorporated into institutional decision making. However, their influence is conditional upon governance structures, administrative capacity and the extent to which measurement frameworks are integrated into public policy processes. The comparison of SDG 4 and SDG 13 illustrates that development objectives differ in their measurement requirements, particularly concerning the time horizons, uncertainty and attribution of policy outcomes. Consequently, applying uniform performance expectations across different sectors may produce incomplete assessments of development needs. This is particularly relevant in developing economies, where constrained public resources increase the importance of evaluating competing investments effectively.

7.2 Policy Recommendations

To improve the effectiveness of SDG measurement in development policymaking, three approaches should be considered.

First, governments should integrate quantitative indicators with qualitative assessments when evaluating development priorities. Statistical measures can identify trends and support accountability, while stakeholder consultations and independent evaluations may provide information about outcomes that are difficult to quantify. Combining these approaches can reduce dependence on isolated performance indicators and address the risk that measurable outcomes may not fully represent substantive policy objectives (Deber & Schwartz, 2016).

Second, public budgeting frameworks should explicitly account for measurement uncertainty. Rather than treating incomplete data as evidence of limited development needs, policymakers should identify areas where statistical limitations affect the evaluation of proposed interventions. This is particularly important for preventive and long-term investments, whose benefits may not be immediately observable.

Third, governments and international development institutions should strengthen statistical capacity in underrepresented development areas. Investments in data collection, methodological consistency and institutional coordination can improve the reliability of development assessments. However, expanding data availability should be accompanied by efforts to ensure that indicators are interpreted within their appropriate social, economic and environmental contexts.

7.3 Broader Implications for Development Governance

These recommendations suggest that effective SDG implementation requires attention to both the production and institutional use of development statistics. Improving indicator coverage alone may be insufficient if budgeting and evaluation systems continue to overlook uncertainty or rely excessively on narrowly defined performance measures.

The central implication is that measurement should inform development priorities without becoming a substitute for evaluating development needs. By recognising the limitations of quantitative indicators and incorporating complementary evidence, policymakers may be better positioned to allocate resources according to substantive economic and social objectives.

8. LIMITATIONS OF THE STUDY

This study is subject to several limitations arising from its qualitative research design and reliance on secondary sources. First, the analysis identifies potential relationships between SDG measurement, institutional incentives and policy prioritisation but does not establish a direct causal relationship between indicator availability and public resource allocation. Government expenditure decisions are influenced by multiple factors including political priorities, economic conditions and institutional capacity, which cannot be fully isolated through conceptual analysis.

Second, the comparative examination of SDG 4 and SDG 13 is illustrative rather than statistically representative. Although the comparison highlights differences in measurement requirements and policy evaluation, its findings cannot be generalised to all Sustainable Development Goals or developing economies.

Finally, the study relies on existing academic literature and publicly available statistical documentation, which may not fully capture informal decision making processes within government institutions. Future research could address these limitations through country specific budget analysis, policymaker interviews and longitudinal investigations examining how changes in indicator availability relate to development expenditure.

9. CONCLUSION

This study examined the extent to which the design and use of sustainable development goals indicators influence policy prioritisation and resource allocation in developing economies. The analysis suggests that indicators may shape development decision-making by influencing the visibility of policy challenges, reducing information asymmetry and establishing institutional performance expectations. However, their influence on public expenditure is neither direct nor uniform, as resource allocation also depends on political priorities, administrative capacity and budgeting practices.

The comparison between SDG 4 and SDG 13 demonstrated how differences in measurement requirements, uncertainty and the timing of policy outcomes can complicate the evaluation of competing development objectives. These findings suggest that the effectiveness of SDG measurement depends not only on statistical availability but also on how evidence is interpreted and incorporated into institutional decisions.

Ultimately, development indicators should serve as instruments for informed policymaking rather than definitive representations of development needs. Strengthening statistical capacity, incorporating qualitative evidence and recognising measurement uncertainty may support more comprehensive and equitable development prioritization.

REFERENCES

- Bevan, G., & Hood, C. (2006). What's measured is what matters: Targets and gaming in the English public health care system. *Public Administration*, 84(3), 517–538. <https://doi.org/10.1111/j.1467-9299.2006.00600.x>
- Biermann, F., Hickmann, T., S nit, C.-A., et al. (2022). Scientific evidence on the political impact of the Sustainable Development Goals. *Nature Sustainability*, 5, 795–800. <https://doi.org/10.1038/s41893-022-00909-5>
- Dang, H.-A. H., & Serajuddin, U. (2020). Tracking the sustainable development goals: Emerging measurement challenges and further reflections. *World Development*, 127, Article 104570. <https://doi.org/10.1016/j.worlddev.2019.05.024>
- Deber, R., & Schwartz, R. (2016). What's measured is not necessarily what matters: A cautionary story from public health. *Healthcare Policy*, 12(2), 52–64. <https://doi.org/10.12927/hcpol.2016.24941>
- Fukuda-Parr, S., & McNeill, D. (2019). Knowledge and politics in setting and measuring the SDGs: Introduction to special issue. *Global Policy*, 10(S1), 5–15. <https://doi.org/10.1111/1758-5899.12604>

- Hege, E., Brimont, L., & Pagnon, F. (2019). Sustainable development goals and indicators: Can they be tools to make national budgets more sustainable? *Public Sector Economics*, 43(4), 423–444. <https://doi.org/10.3326/pse.43.4.5>
- MacFeely, S. (2020). Measuring the Sustainable Development Goal indicators: An unprecedented statistical challenge. *Journal of Official Statistics*, 36(2). <https://doi.org/10.2478/jos-2020-0019>
- Merry, S. E. (2011). Measuring the world: Indicators, human rights, and global governance. *Current Anthropology*, 52(S3), S83–S95. <https://doi.org/10.1086/657241>
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534, 320–322. <https://doi.org/10.1038/534320a>
- United Nations. (2025). *The Sustainable Development Goals Report 2025*. United Nations. <https://unstats.un.org/sdgs/report/2025/>
- United Nations Statistics Division. (n.d.-a). *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*. United Nations. <https://unstats.un.org/sdgs/indicators/indicators-list/>
- United Nations Statistics Division. (n.d.-b). *SDG indicators: Metadata repository*. United Nations. <https://unstats.un.org/sdgs/metadata/>