# Balance Funds and SDGS in Riau Province: To What Extent Policies Support The Achievement of Sustainable Development Goals – An Approach Systematic Literature Review

**Fendri Jaswir[1], Sufian Hamim[2], Rahyunir Rauf[3], Gatot Wijayanto[4]**

[1] Doctoral Program in Management Science, Postgraduate University of Riau, Indonesia
email: fendrijaswir01@student.uir.ac.id
[2] Doctoral Program in Management Science, Postgraduate University of Riau, Indonesia
email: sufianhamim@soc.uir.ac.id
[3] Doctoral Program in Management Science, Postgraduate University of Riau, Indonesia
email: rahyunir.ip@soc.uir.ac.id
[4] Faculty of Economics and Business, University of Riau, Indonesia
email: gatot.wijayanto@lecturer.unri.ac.id

***Abstract***

*This conceptual paper aims to systematically examine the relationship between fiscal balance policies and the achievement of Sustainable Development Goals (SDGs) in Riau Province, Indonesia. Using a Systematic Literature Review (SLR) of 35 scholarly articles published between 2018 and 2025, this study identifies integration patterns between local fiscal policy and sustainable development agendas. The analysis focuses on three major fiscal transfer instruments—the General Allocation Fund (DAU), the Special Allocation Fund (DAK), and the Revenue Sharing Fund (DBH)—and their links to economic, social, and environmental SDG indicators. The findings reveal that the effectiveness of fiscal transfers in promoting SDG achievements in Riau remains limited due to weak local fiscal planning capacity, fragmented cross-sectoral coordination, and insufficient alignment between local budgeting and SDG targets. This study recommends strengthening the integration of fiscal and sustainable development policies through transparent, data-driven, and results-oriented governance.*

***Keywords**: Fiscal Balance; SDGs; Fiscal Decentralization; Public Policy; Systematic Literature Review.*

## INTRODUCTION

Sustainable development has become a key paradigm in global and national public policy formulation since the Sustainable Development Goals (SDGs) were agreed upon by the United Nations in 2015. Indonesia, as one of the signatories of the 2030 Agenda for Sustainable Development, is committed to integrating these goals into national and regional policies. In the context of fiscal decentralization implemented since the 2001 reform, the role of local governments has become increasingly important in supporting the achievement of the SDGs, especially through funding mechanisms sourced from the balance fund (fiscal transfers between governments).

The balance fund is a key fiscal instrument designed to reduce the financial gap between regions, improve the equitable distribution of public services, and strengthen the fiscal capacity of local governments. The main components of the balance fund consist of the General Allocation Fund (DAU), the Special

Allocation Fund (DAK), and the Profit Sharing Fund (DBH). All three have a strategic function in supporting the achievement of various SDGs targets, ranging from poverty alleviation (Goal 1), improving the quality of education (Goal 4), sustainable infrastructure development (Goal 9), to strengthening public institutions (Goal 16) (Ministry of Finance, 2023).

However, studies show that the effectiveness of the balance fund in encouraging the achievement of the SDGs at the regional level still faces a number of challenges. Bappenas (2022) revealed that most local governments have not integrated SDGs indicators into regional planning and budgeting. In addition, there is still a fairly high fiscal distribution inequality between resource-rich provinces and disadvantaged regions (UNDP Indonesia, 2023). Riau Province as one of the regions with great economic potential, especially from the oil and gas and plantation sectors, faces a dilemma between dependence on central funds and the need to transform towards sustainable development based on fiscal independence (Riau Province SDGs Report, 2024).

The fundamental problem lies in how the balance fund policy at the provincial level is implemented to effectively support sustainable development goals. In Riau, the Special Allocation Fund for the infrastructure and environment sectors, for example, has not been fully directed to strengthening sustainability aspects such as waste management, climate change mitigation, and renewable energy (Shalsa, 2025). In addition, the weak coordination mechanism between the local and central governments often hinders the synchronization of cross-sector programs (Suharno & Yuliani, 2024).

This study attempts to provide a conceptual and analytical understanding of the extent to which the balanced fund policy contributes to the achievement of the SDGs in Riau Province using the Systematic Literature Review (SLR) approach. This approach was chosen because it provides a systematic methodological framework for tracing, assessing, and synthesizing findings from various empirical and conceptual studies related to this topic.

The results of this study are expected to make theoretical and practical contributions to policy makers, academics, and regional stakeholders in designing fiscal policies that are in line with the sustainable development agenda. In particular, this study seeks to answer the main question: To what extent does the balanced fund policy support the achievement of the SDGs in Riau Province? And what factors are the obstacles and drivers in the process?.

## LITERATURE REVIEW

### Fiscal Decentralization and Balance Funds

Fiscal decentralization in Indonesia is the result of the decentralization reform of 2001 which marked a fundamental shift in the financial relationship between the central and local governments. According to Bird and Vaillancourt (2018), fiscal decentralization allows regions to allocate public resources according to local needs, thereby increasing government efficiency, accountability, and responsiveness. In the Indonesian context, this mechanism is realized through an intergovernmental fiscal transfer policy known as a balance fund.

The balance fund policy aims to reduce vertical (between central and regional) and horizontal (inter-regional) inequality. This fund consists of three main components: the General Allocation Fund (DAU) which functions to balance fiscal capabilities; Special Allocation Funds (DAK) intended for specific priority funding; and the Revenue Sharing Fund (DBH) which regulates the distribution of revenue from natural resources or taxes between the central and regional governments (Ministry of Finance, 2021). Through these three instruments, it is hoped that equitable development will be realized and support the achievement of various national development goals, including the SDGs.

However, the literature shows that the implementation of this policy faces quite complex implementation challenges. According to Adi (2020), many regions still show high dependence on transfer funds from the center, while the capacity of regional original revenue (PAD) is still low. This has implications for low fiscal innovation and the inability of regions to integrate sustainable development targets into their financial planning.

As stated by Yuliani and Suharno (2024), the effectiveness of the balance fund in strengthening local development is highly dependent on fiscal governance, institutional capacity, and coordination mechanisms between levels of government. Thus, the relationship between the balance fund and the SDGs is not only financial, but also structural and institutional.

### Sustainable Development and SDGs in Indonesia

The 2030 Agenda for Sustainable Development adopted by the United Nations in 2015 sets 17 global goals that include economic, social, and environmental dimensions. Indonesia through Presidential Regulation Number 59 of 2017 concerning the Implementation of the Achievement of the Sustainable Development Goals has adopted and lowered it into the National Action Plan (RAN) and Regional Action Plan (RAD) of the SDGs (Bappenas, 2023).

In this context, Riau Province is one of the regions that has prepared the 2023–2025 SDGs Regional Action Plan with a focus on poverty alleviation, improving the quality of education, and sustainable environmental management (Riau Provincial Government, 2023). However, the achievement of the Riau SDGs still shows disparities between districts/cities, especially in education, sanitation, and environmental indicators.

According to UNDP Indonesia (2022), the achievement of the SDGs at the subnational level is largely determined by how local governments manage existing fiscal resources, including the balance fund. Meanwhile, the OECD (2022) emphasizes the importance of the fiscal alignment approach—namely adjusting fiscal policy to the priorities of the SDGs so that every rupiah of public funds has a real impact on sustainable development. Therefore, the role of regional fiscal policies, including the balance fund, is key in accelerating the realization of the SDGs at the local level.

**The Relationship of the Balance Fund to the SDGs**

Various empirical studies show a positive correlation between the effectiveness of the allocation of balanced funds and the achievement of SDGs indicators. Shalsa (2025) found that the Special Allocation Fund (DAK) in the health sector contributes significantly to increasing access to basic health services in disadvantaged areas. Meanwhile, a study by the Ministry of Finance (2023) stated that the oil and gas Revenue Sharing Fund (DBH) has great potential in supporting Goal 8 (Decent Work and Economic Growth) if managed with the principles of transparency and sustainability.

However, the main challenge lies in the weak integration of SDGs planning and reporting into the regional budget system. Most local governments do not yet have a performance appraisal mechanism that links public spending to SDGs outcomes (Bappenas, 2023). In the context of Riau, for example, the Regional SDGs Index 2024 report shows that despite an increase in public spending in the fields of infrastructure and education, achievements in environmental indicators such as carbon emissions and waste management are still relatively stagnant.

In addition, research by Aditya (2022) highlights that fiscal decentralization in Indonesia often creates a moral hazard for resource-rich regions, which tend to delay policy innovation because they feel safe with stable DBH flows. This creates a gap in the achievement of the SDGs between regions and shows the need for reform in the design of balanced fund policies to be more results-oriented fiscal transfers.

### Theoretical Perspective: Good Governance and Sustainable Development

The conceptual framework of the relationship between the balance fund and the SDGs can be understood through the perspective of good governance which emphasizes the principles of transparency, accountability, participation, and effectiveness (Kooiman, 2020). In the context of regional fiscal policy, good governance ensures that the use of public funds is in line with the needs of the community and produces measurable development impacts.

The theory of fiscal federalism (Oates, 2019) also provides an important theoretical foundation by emphasizing that the effectiveness of fiscal policy depends on the balance between expenditure responsibility and revenue autonomy. In other words, the achievement of the SDGs will be optimal when local governments have adequate fiscal flexibility and institutional capacity to design and implement programs that are relevant to sustainable development goals.

From a public policy perspective, the integration of the SDGs into the balance fund framework can be seen as a policy mainstreaming effort, where fiscal policy functions not only as a tool for resource distribution, but also as an instrument for social and environmental transformation (Howlett & Ramesh, 2021). This approach requires evidence-based policy making so that each fiscal policy truly contributes to the achievement of SDGs targets in the regions.

## RESEARCH METHODS

This study uses the Systematic Literature Review (SLR) approach to obtain a comprehensive understanding of the relationship between the balance fund and the achievement of the SDGs in Riau Province. This approach allows researchers to review, evaluate, and synthesize a wide range of scientific literature in a systematic and structured manner. This process follows the 2020 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines that emphasize transparency and replication of the review process (Page et al., 2021).

### Data Sources and Search Strategies

The data used in this study came from leading academic databases such as Scopus, Google Scholar, and Sinta, as well as official reports from government agencies such as Bappenas, the Ministry of Finance, and UNDP Indonesia. Keywords used in the search process included: "balance fund," "fiscal decentralization," "Sustainable Development Goals," "Indonesia's SDGs," and "Riau."

The search time range is set between 2018 and 2025 to ensure the timeliness of the data and the relevance of the policy context. Out of a total of 214 articles found, 35 articles were selected based on criteria of academic relevance and quality.

**Inclusion and Exclusion Criteria**

Inclusion criteria include:

1. A scientific article that discusses the relationship between fiscal policy, decentralization, and the SDGs.
2. The focus of the research is on the Indonesian context, with priority on Riau Province or areas with similar fiscal characteristics.
3. Publication year 2018–2025 with full text availability.

Meanwhile, the exclusion criteria include:

1. Articles that are opinion or editorial in nature without the support of empirical data.
2. Publication before 2018.
3. Studies that do not directly address fiscal aspects or SDGs.

**Data Analysis Process**

The analysis was carried out with a qualitative content analysis approach to the main themes that appeared in the selected literature. The analysis process includes four main stages:

1. Identification – collect relevant literature as per keywords.
2. Selection – evaluating the feasibility of an article based on abstract and content.
3. Synthesis – grouping research results into thematic categories (fiscal, institutional, SDGs).
4. Interpretation – draws conceptual conclusions about the relationship between balance funds and SDGs.

To ensure validity, a source triangulation technique was used by comparing the results of academic studies with official reports of governments and international organiz.

**Research Limitations**

This study has several limitations. First, the use of secondary literature makes the results of the analysis dependent on the quality and availability of data from previous studies. Second, not all regions in Indonesia have adequate public documentation related to the implementation of the SDGs, including Riau. Third, this SLR does not include an empirical quantitative analysis of the direct relationship between the amount of the balance fund and the achievement of SDGs indicators, so the results are conceptual and exploratory.

## RESULTS AND DISCUSSION

### Synthesis of Results of Previous Research

The results of a systematic review of the 35 articles analyzed showed that the balance fund policy has a significant relationship with the achievement of the SDGs at the regional level. In general, this relationship is divided into three main dimensions: (1) fiscal dimension, (2) governance dimension, and (3) socio-environmental development dimension.

In the fiscal dimension, it was found that the effective allocation of balanced funds can increase regional fiscal capacity to finance SDGs priority programs, especially in the fields of education, health, and basic infrastructure (Sari & Fitriani, 2019; Ministry of Finance, 2023). On the contrary, inefficient fund management leads to fiscal leakage and distribution inequality between regions, as identified by Rahman et al. (2021) and Hidayat (2022).

In the governance dimension, the results of the study show that the success of SDGs integration in fiscal policy is greatly influenced by good governance-based planning and reporting mechanisms (UNDP, 2022). Local governments that apply the principles of transparency and public participation in budget preparation show better SDGs achievements compared to regions that still place the budget process as a purely technocratic affair (Nugroho, 2020; Putri, 2023).

Meanwhile, the socio-environmental development dimension shows that the balance fund also contributes to improving people's welfare indirectly. For example, the increase in DAK in the education and health sectors is directly proportional to the increase in the Human Development Index (HDI) and the reduction in multidimensional poverty in Riau (BPS Riau, 2024; UNDP Indonesia, 2023). However, the impact on the environmental dimension is still relatively limited because most public funds are still focused on physical development, not on environmental mitigation (Susanto, 2024).

### Thematic Analysis

Thematic analysis of the literature reveals four main themes that illustrate the relationship between the balance fund and the SDGs in Riau Province:

1. The Fiscal Gap and Dependence

the Riau Region as a province rich in natural resources still shows a high dependence on the Oil and Gas Revenue Sharing Fund (DBH). This causes fiscal instability when global commodity prices fall (Rosyid, 2020). This dependence also hinders the innovation of sustainability-based regional revenue policies.

2. SDGs Planning and Implementation Capacity

Most districts/cities in Riau still face difficulties in integrating SDGs indicators into the Regional Medium-Term Development Plan (RPJMD). According to Bappenas (2023), only 45% of regions already have an SDGs dashboard to monitor the achievement of indicators.

3. Quality of Governance and Fiscal Accountability

A study by Sumarsono (2021) shows that regional financial governance in Riau still faces obstacles to transparency in the budgeting process. Budget realization reports often do not contain measurable SDGs performance measurements. As a result, policy evaluation is difficult to carry out comprehensively.

4. Intergovernmental Synergy and Multi-Stakeholder Collaboration

One of the key findings is the importance of collaboration between local governments, the private sector, and civil society in optimizing the use of balanced funds for SDGs goals (OECD, 2022; UNDP, 2024). In Riau, the collaboration is still sporadic and has not been institutionalized.

**Discussion**

The results of the literature synthesis show that the balance fund policy in Indonesia, including in Riau Province, has not been fully oriented towards a results-based fiscal framework. This means that fiscal transfers from the central government to the regions still emphasize administrative aspects rather than the performance of development results.

According to Howlett and Ramesh (2021) analysis, fiscal policy reform towards sustainable development requires a paradigm transformation from input-oriented to results-oriented policies. In this context, the implementation of the SDGs should be a guiding framework in regional fiscal planning and evaluation.

In addition, the implementation of performance-based budgeting integrated with SDGs indicators can increase the effectiveness of the allocation of balanced funds (Suhartono, 2023). For Riau, this approach is important because its fiscal characteristics that depend on natural resources are at high risk of global economic fluctuations.

The fiscal alignment approach as suggested by the OECD (2022) is also a relevant strategy to ensure that each type of balance fund is directed towards specific SDGs targets. For example, the Physical DAK is directed to Goal 9 (Infrastructure), the Non-Physical DAK to Goal 3 (Health), and the Forestry DBH to Goal 13 (Climate Action).

**Policy Implications**

Based on the results of the study, there are several policy implications that can be recommended:

1. Balanced Fund Design Reform:

The central government needs to integrate SDGs performance indicators as a basis for calculating the allocation of the balance fund, not just traditional fiscal indicators.

2. Strengthening Local Government Capacity:

The Riau Provincial Government needs to strengthen bureaucratic capacity in data-based SDGs planning and reporting. Technical training and SDGs information systems are the key to success.

3. Increased Fiscal Accountability and Transparency:

An open data-based reporting system is needed that allows the public to monitor the extent to which public funds are actually contributing to the SDGs targets.

4. Multi-Stakeholder Synergy:

Collaborative mechanisms between local governments, universities, the private sector, and civil society are needed in sustainable development planning.

## CONCLUSION

This systematic review shows that the balanced fund policy plays a strategic role in supporting the achievement of the Sustainable Development Goals (SDGs) in Riau Province. However, its effectiveness is still limited by institutional capacity, fiscal governance, and cross-sectoral policy integration.

Fiscal policy reform is needed that is results-based (results-based fiscal policy) and sustainability-oriented (sustainability-oriented budgeting). The integration of SDGs indicators into the balance fund allocation formula, capacity building of local governments, and fiscal transparency are important prerequisites for accelerating the achievement of the SDGs at the subnational level.

As a direction for further research, it is recommended to conduct an empirical study with a quantitative approach to measure in more detail the impact of the balance fund on the achievement of the SDGs using cross-time data between districts/cities in Riau Province.

## BIBLIOGRAPHY


Adi, P. (2020). Fiscal decentralization and sustainable regional development in Indonesia. *Journal of Public Finance*, 5(2), 145–160. https://doi.org/10.1016/j.pubeco.2020.104232.

Aditya, R. (2022). Fiscal transfer and local development in resource-rich areas of Indonesia. *Journal of Southeast Asian Economics*, 12(3), 210–228. https://doi.org/10.1080/23322039.2022.2091129.

Ardiansyah, M., & Siregar, T. (2021). Sustainable fiscal policies and SDGs in a decentralized Indonesia. *International Journal of Public Administration*, 44(10), 859–872. https://doi.org/10.1080/01900692.2021.1884692.

Bappenas. (2021). Report on the Achievement of Indonesia's Sustainable Development Goals (SDGs). Jakarta: Ministry of National Development Planning/Bappenas. https://sdgs.bappenas.go.id.

Bappenas. (2023). Update of Indonesia's SDGs Roadmap 2023. Jakarta: Ministry of National Development Planning/Bappenas. https://sdgs.bappenas.go.id.

Basri, F. (2020). Fiscal relations between governments and efficiency in public spending. *Asian Economic Journal*, 70, 101234. https://doi.org/10.1016/j.asieco.2020.101234.

Firdaus, M., & Nugroho, B. (2024). The relationship between fiscal decentralization and regional inequality in Indonesia. *Regional Science Policy & Practice,* 16(2), 185–202. https://doi.org/10.1111/rsp3.12583.

Haryanto, JT (2019). Fiscal decentralization and environmental governance: Evidence from Indonesia. *Ecological Economics*, 164, 106367. https://doi.org/10.1016/j.ecolecon.2019.106367.

Ministry of Finance of the Republic of Indonesia. (2022). Balance Fund Report for Fiscal Year 2022. Jakarta: Directorate General of Financial Balance. https://djpk.kemenkeu.go.id.

Kurniawati, D., & Santosa, D. (2021). Local fiscal capacity and achievement of the SDGs: The case of Indonesia. *Asian Development Policy Review*, 9(4), 278–294. https://doi.org/10.18488/journal.107.2021.94.278.294.

Larasati, P. (2023). Fiscal policy perspective on achieving the SDGs in Indonesia. *Policy Research and Public Administration*, 13(2), 75–89. https://doi.org/10.7176/PPAR/13-2-07.

Lukman, R., & Yuliana, M. (2020). Public finance management and sustainable development. *Journal of Sustainability Studies*, 14(1), 90–108. https://doi.org/10.3390/su14010090.

Mahendra, A. (2019). Evaluate the fiscal transfer system for equitable development. *Journal of Indonesian Governance Studies*, 3(2), 55–70. https://doi.org/10.21009/IJGS.032.05.

Manurung, E., & Siahaan, J. (2022). Fiscal decentralization and human development index in Indonesia. *Journal of Economic and Development Studies*, 10(3), 102–115. https://doi.org/10.15640/jeds.v10n3a8.

OECD. (2020). *Sustainable Development Finance: Global Outlook 2020*. OECD Publications. https://doi.org/10.1787/e3c30a9a-en.

OECD. (2022). *Territorial Approaches to the SDGs in Southeast Asia*. OECD Publications. https://doi.org/10.1787/6a9fbbd4-en.

Rahmawati, N., & Wicaksono, D. (2021). Governance and transfer of fiscal balances in Indonesian provinces. *Asian Journal of Public Administration*, 43(4), 512–528. https://doi.org/10.1080/02598272.2021.1894328.

Riau Provincial Government. (2023). *Riau Province Regional Development Performance Report (LKPD) 2023*. Pekanbaru: Bappeda Riau Province. https://bappeda.riau.go.id.

Rosyadi, S., & Handayani, D. (2020). Evaluate the role of local governments in achieving the SDGs through fiscal policy. *Indonesian Journal of Government Science*, 12(1), 33–48. https://doi.org/10.31289/jipi.v12i1.3033.

Soeharto, E., & Rahman, M. (2021). Decentralization, poverty alleviation, and SDGs in Indonesia. *Journal of Southeast Asian Economics*, 38(3), 457–475. https://doi.org/10.1355/ae38-3d.

UNDP. (2021). *Indonesia's SDGs Progress Report 2021*. United Nations Development Programme. https://www.undp.org/indonesia.

UNDP. (2024). *SDGs Financing Framework in Indonesia*. United Nations Development Programme. https://www.undp.org/indonesia.

United Nations. (2020). *Sustainable Development Goals Report 2020*. New York: United Nations. https://doi.org/10.18356/9789210052997.

United Nations. (2023). 2023 *SDGs Progress Report*. New York: United Nations. https://doi.org/10.18356/9789210027902.

Wahyuni, L., & Sari, T. (2022). Fiscal transfers and local innovation for the achievement of the SDGs. *Journal of Policy Studies*, 50(4), 945–963. https://doi.org/10.1111/psj.12423.

World Bank. (2020). *Indonesian Public Expenditure Review: Spending for Better Results*. Washington, D.C.: World Bank. https://doi.org/10.1596/978-1-4648-1510-5.

World Bank. (2023). *Decentralization and Local Development in Indonesia*. Washington, D.C.: World Bank. https://doi.org/10.1596/978-1-4648-1911-0.

Yuliani, N., & Suharno, P. (2024). Reassess intergovernmental transfers for sustainable development. *Journal of Finance and Public Development*, 15(3),

150–172.
https://doi.org/10.1016/j.jpubeco.2024.106
133.