

# THE ROLE OF SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN REALIZING QUALITY EDUCATION IN INDONESIA

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**Abstract.** The fourth goal of the Sustainable Development Goals (SDGs) emphasizes the importance of ensuring inclusive and quality education and supporting lifelong learning opportunities. This study aims to analyze the role of SDGs in improving access and quality of education in Indonesia. The data used included literature studies, government reports, and interviews with relevant stakeholders. The results show that SDGs-based programs, such as the Smart Indonesia Card (KIP), have improved access to education for marginalized groups, although regional inequality is still a significant challenge. In addition, efforts to improve the quality of learning can be seen from the implementation of teacher training and the use of educational technology, although the distribution of resources is not even. Multi-sectoral collaboration between the government, the private sector, and civil society is a key element in realizing quality education. However, the implementation of the SDGs in Indonesia's education sector faces various obstacles, including limited infrastructure, inter-sector coordination, and low public awareness. Based on these findings, this study recommends strengthening investment in education infrastructure, policy alignment, and increasing the capacity of educators to accelerate the achievement of the SDGs. With effective integration, quality education in Indonesia can be the foundation for creating an inclusive, competitive, and sustainable society.

**Keywords:** Quality Education, Sustainable Development Goals (SDGs).

## 1. INTRODUCTION

In the global context, the SDGs are a guide for countries to achieve sustainable development by paying attention to the balance between economic, social, and environmental aspects. Among the 17 goals, education has a central role because it can be a catalyst for the achievement of other goals. Education not only improves the ability of individuals to break out of the cycle of poverty, but also strengthens awareness of the importance of environmental sustainability and social responsibility (Basheer et al., 2022). This makes quality education a very important priority for Indonesia.

In Indonesia, the education gap between urban and rural areas remains a significant challenge. Although programs such as the Smart Indonesia Card (KIP) have been launched to increase access, many children in remote areas still have difficulty accessing adequate educational facilities. Not only related to infrastructure, but also the distribution of educators which is often uneven. This inequality shows that SDGs-based approaches need to be integrated more deeply into national education policies (Tyas et al., 2024).

In addition, the industrial revolution 4.0 brings new challenges that must be responded to by the education system. Technological transformation and digitalization demand students to have 21st-century skills, such as critical thinking, creativity, and collaboration. However, Indonesia's education curriculum is still often considered less relevant to this need. By adopting the SDGs framework, Indonesia can strengthen an education base that is not only inclusive, but also adaptive to changing times (Yanti et al., 2024).

It is also important to highlight the role of the government in aligning education policies with the SDGs targets. Several initiatives, such as strengthening teacher training and increasing education budget allocation, show promising commitments. However, these measures require ongoing monitoring and evaluation so that the results are truly felt by all levels of society, including the most vulnerable.

On a local scale, community involvement is also an equally important element. Community initiatives, such as self-study classes and mentoring programs in remote villages, can support government efforts. Synergy between various parties, from the central government to local communities, is key to ensuring quality education is accessible to everyone without exception (Hunaepi & Suharta, 2024).

By strengthening its commitment to the SDGs, Indonesia has a great opportunity to not only improve the quality of education, but also prepare future generations who are able to face various global challenges. Inclusive and quality education is the foundation for a more sustainable and equitable future.

However, to achieve the vision of education that is in line with the SDGs, it is important for Indonesia to further integrate technology in the learning process, especially in the 3T (Disadvantaged, Frontier, and Outermost) areas. The use of digital technologies such as online learning platforms and digital libraries can be a long-term solution in reaching geographically isolated students. Governments and the private sector need to establish strategic partnerships to provide adequate digital infrastructure and ensure the availability of learning tools that can be accessed by all levels of society (Fitriansyah, 2024).

In addition, gender equality in education is still an important aspect that must receive serious attention. Although the primary education participation rate between men and women is relatively balanced, disparities are still seen at secondary and tertiary education levels, especially in rural areas. Cultural, economic, and social factors are still obstacles for girls to continue their education. In the context of the SDGs, ensuring equal access to education for all genders is not only a matter of justice, but also a strategy to improve the overall quality of human resources (Amina Otieno et al., 2024).

On the other hand, it is also important to instill sustainability values in every level of education. The curriculum must be able to foster environmental awareness, social responsibility, and global ethics from an early age. Education is not only about the transfer of knowledge, but also the formation of character and collective awareness of the importance of protecting the earth and fighting for social justice. Education based on SDGs values will produce individuals who are not only intellectually intelligent, but also morally and socially empowered.

Finally, collaboration between academics, the industrial sector, and policymakers is needed to ensure that education in Indonesia is always relevant and effective. Research conducted by higher education institutions must be directed to support the achievement of SDGs targets, including in the field of education. Thus, a positive cycle is created in which the world of education is not only a beneficiary of policies, but also a major actor in creating social change and sustainable development (Suparyati, 2022).

## **2. LITERATURE REVIEW**

### **2.1 The Concept of Sustainable Development Goals (SDGs)**

The Sustainable Development Goals (SDGs) are global initiatives agreed by United Nations (UN) member states to achieve a more just, inclusive, and sustainable world by 2030. Consisting of 17 goals and 169 targets, the SDGs cover various aspects of life, ranging from poverty alleviation, gender equality, to environmental protection. The fourth goal in the SDGs, which is to ensure inclusive and quality education and encourage lifelong learning opportunities, is seen as a key element in supporting the achievement of all other goals. Education has a significant domino effect, because through education, humans can empower themselves and their communities to become agents of change (Wadhvani & Malpani, 2023).

## **2.2 Definition and Indicators of Quality Education**

Quality education is not only about access to formal education, but also about meaningful and sustainable learning experiences. UNESCO defines quality education as an education system that ensures that all children and adults acquire the knowledge, skills, and values necessary to live with dignity, contribute productively and responsibly to the environment and society. Indicators of quality education include the availability of proper infrastructure, the ideal teacher-student ratio, the competence of educators, the effectiveness of the curriculum, and a safe and supportive learning environment. In Indonesia, the measurement of quality education is often seen from the results of the National Examination, the Education Development Index, as well as the Pure Participation Rate and the Long School Expectation Rate (Fatimah et al., 2024).

## **2.3 Challenges of Education in Indonesia Challenges of Education in Indonesia**

Although the Indonesian government has committed to the development of the education sector, various challenges still shackle the achievement of quality education. Inequality between urban and rural areas remains significant, with many children in remote areas not yet gaining access to schools with proper facilities. In addition, there is still an imbalance in the distribution of teachers, especially in the 3T (Disadvantaged, Frontier, and Outermost) areas. A curriculum that is still theoretical and less relevant to the skills needs of the 21st century is the main obstacle in creating graduates who are ready to face global challenges. In addition, budget and infrastructure constraints hinder the modernization of education, especially in terms of technology integration and digital learning (Handayani & Sukari, 2024).

## **2.4 The Role of Government Policy**

The Government of Indonesia through the Ministry of Education, Culture, Research, and Technology has launched various strategic policies to support the SDGs targets, such as the Independent Curriculum, the Driving Teacher Program, and the Smart Indonesia Program (PIP). This policy aims to expand access, improve the quality of teaching, and bridge the education gap. However, implementation challenges remain, such as less synergistic inter-agency coordination and limitations in policy monitoring. To achieve maximum success, it is necessary to evaluate policies regularly and make adjustments based on socio-economic dynamics in the field (Miftahudin et al., 2024).

## **2.5 International Studies on SDGs and Education**

International studies show that countries that successfully implement the SDGs in their education systems tend to have a holistic approach to learning. Finland, for example, emphasizes flexible curriculum, project-based learning, and the active role of teachers as facilitators, not just teachers. Japan is known for its integration of cultural and social values in education, as well as high investment in teacher training. These countries have proven that education innovations that are aligned with the SDGs can strengthen the readiness of the younger generation to face global challenges. Indonesia needs to adopt similar principles by paying attention to the local context (Messy et al., 2023).

## **2.6 Multi-Sectoral Synergy in Education**

In the education ecosystem, cross-sector collaboration is an important foundation. The government cannot work alone without the support of the community, the business world, and international institutions. Partnerships with the private sector can provide the technology and resources needed to accelerate the digitalization of education. Meanwhile, NGOs and local communities can bridge social gaps through initiatives such as alternative classes, digital literacy training, and mentoring programs. This synergy allows for the creation of an education system that is inclusive, adaptive, and responsive to the needs of the community (Riehl & Lyon, 2017).

### **3. RESEARCH METHODS**

This study uses a qualitative approach with a descriptive method. Data sources were obtained through literature studies that included books and scientific articles from journals relevant to the research focus. Descriptive approach according to (Irwindy, 2023) It is a type of research that presents data in the form of a description of the issue being researched, as well as describing real conditions as an illustration. Data collection is carried out through reading activities and recording information from the material that has been studied. Furthermore, the data is analyzed through conceptual discussion and presented systematically, as explained by (Nguyen, 2021).

### **4. RESULTS AND DISCUSSION**

#### ***4.1 Results of SDGs Implementation in Education in Indonesia***

Implementation Sustainable Development Goals (SDGs), especially the fourth goal that focuses on quality education, has made a real contribution to the development of the education sector in Indonesia. Policies and programs have been designed to ensure that every child has access to inclusive, equitable, and quality education. One concrete example is the implementation of the Smart Indonesia Card (KIP) program (Rulandari, 2021), which has succeeded in increasing school participation rates, particularly among students from low-income families. These programs not only help finance formal education, but also encourage parental involvement in ensuring children stay in school.

In several regions, especially developing areas outside Java, there has been an increase in the number of new schools and the strengthening of basic education services. Some regions even experienced a surge in the number of students enrolled in primary and secondary schools after the enactment of SDGs-based education assistance programs. However, this positive impact has not been evenly distributed nationally. Remote and disadvantaged areas such as Papua, NTT, and Kalimantan still face serious challenges in the form of limited access to infrastructure, limited educators, and low availability of proper learning facilities.

#### ***4.2 The Impact of SDGs Programs on Access to Education***

Field data show that various programs designed based on the SDGs framework have succeeded in expanding access to education, especially for vulnerable groups such as children with disabilities, children in conflict areas, and indigenous peoples. In rural areas and small towns, cooperation initiatives between governments and international organizations such as UNICEF, Save the Children, and other donor agencies have facilitated the construction of child-friendly classrooms, inclusive teacher training, and the provision of school transportation (Beasy et al., 2023).

For example, in some disaster-prone areas, SDGs-based emergency response programs have allowed children to continue learning even in emergencies such as floods, earthquakes, or pandemics. Nevertheless, there are still geographical challenges that are difficult to overcome, such as schools that can only be reached by more than a two-hour walk or boat. This challenge emphasizes the importance of a place-based approach in the implementation of national education policies.

#### ***4.3 Improving the Quality of Learning***

Another aspect that is the main highlight in the implementation of the SDGs is improving the quality of learning. The government has launched various programs such as Driving Teachers, Driving Schools, and training-based blended learning which aims to increase the professional capacity of educators. The implementation of technology in the teaching and learning process is also further improved through the provision of digital platforms such as Rumah Belajar, Merdeka Mengajar, and the use of Learning Management System (LMS) in several leading schools (Gangmei & Thomas, 2022).

However, the digital divide is a significant problem. Schools in urban areas have greater access to the internet, technology devices, and digitally literate teachers. In

contrast, schools in the 3T (Disadvantaged, Frontier, and Outermost) areas still face various limitations, including network limitations, lack of ICT training for teachers, and lack of digital learning tools. This underscores the need for technologically fair investment and policies.

#### **4.4 The Role of Multi-Sectoral Collaboration**

The successful implementation of the SDGs in the education sector cannot be separated from cross-sector collaboration. The central and local governments work with the private sector, NGOs, religious organizations, and local communities in supporting various educational programs. CSR (Corporate Social Responsibility) programs from large companies have been widely used to build classrooms, donate books and stationery, and even finance teacher training in disadvantaged areas (Riehl et al., 2019).

In addition, community organizations and local communities are also actively involved in informal education, such as adult literacy classes, learning assistance for street children, and student mentoring programs in villages. This collaboration forms an educational ecosystem that not only relies on the formal system, but also reaches out to the community through a community-based approach. This close partnership is very important in answering the complexity of education challenges in Indonesia which are multidimensional.

#### **4.5 Obstacles and Challenges Encountered**

Despite many achievements, the implementation of the SDGs in the field of education in Indonesia still faces various structural and cultural obstacles. From a structural perspective, the allocation of the education budget that is not optimal, especially in areas with low Regional Original Income (PAD), is the main obstacle in financing sustainable education programs. Coordination across sectors and between the central and regional governments also still shows inconsistencies in policy implementation (Alfarizi & Sari, 2024).

From a cultural perspective, public awareness of the importance of quality and inclusive education as part of sustainable development is still low. In some areas, girls still face discrimination to access education, while children have to work to help families and leave school. In addition, resistance to curriculum innovation and the use of technology in the school environment is also a factor that hinders educational transformation in line with the principles of the SDGs (Ashioya, 2016).

### **CONCLUSION**

Based on an in-depth analysis of the implementation of the Sustainable Development Goals (SDGs) in the education sector in Indonesia, it can be concluded that this framework plays a strategic and fundamental role in directing the development of inclusive, equitable, and quality education. The SDGs, particularly the fourth goal that focuses on quality education, not only provide a measurable policy framework, but also create a long-term development orientation that aligns social, economic, and environmental aspects.

One of the real contributions of the implementation of the SDGs in the world of education in Indonesia can be seen from the increase in access to education for marginalized and vulnerable groups. Programs such as the Smart Indonesia Card (KIP) have become an important bridge to equalize the educational rights of children from underprivileged families. In addition, the development of education infrastructure in disadvantaged areas and collaboration with international organizations such as UNICEF have opened access to learning that was previously closed due to geographical and economic limitations.

However, challenges in the form of inequality of access and quality of education between regions are still a big homework. Schools in urban areas tend to have better access to quality learning facilities and educators, compared to schools in remote areas

that often still rely on limited resources. This gap shows that government interventions need to be strengthened with a more contextual and local needs-based approach.

The quality of learning has also improved along with more intensive teacher training and the adoption of technology in the educational process. Programs such as Teacher Mobilization and digital training have opened up space for improving educator competencies and adopting more adaptive learning methods. Nevertheless, the digital disparity between schools in developed and disadvantaged areas raises the need for more equitable investment, especially in strengthening digital literacy and providing technological infrastructure.

The successful implementation of the SDGs in education is greatly influenced by cross-sectoral collaboration. Synergy between the government, the business world, civil society, and international institutions is a strong foundation for building a more resilient education system. The contribution of the private sector through Corporate Social Responsibility (CSR) programs as well as community participation in informal education such as community literacy programs, shows how collaboration can strengthen the results achieved.

However, there are still significant obstacles such as limited education budgets, weak inter-institutional coordination, and lack of public understanding of the urgency of implementing the SDGs. To overcome these challenges, a strategic approach is needed that includes increasing education investment, policy alignment between sectors, and strengthening a clear indicator-based monitoring and evaluation system.

Education not only stands as the ultimate goal, but also as a multidimensional transformation tool that contributes to the achievement of other SDGs goals, such as poverty reduction, job creation, gender equality, and resilience to climate change. Therefore, the integration of education within the framework of the SDGs must be seen as the main pillar of sustainable development.

In the future, with strong political commitment, targeted budget allocation, and active participation from all elements of society, Indonesia has a great opportunity to realize a truly inclusive and quality education system. Education is a long-term investment whose impact will be felt across generations. Therefore, ensuring the successful implementation of the SDGs in the education sector is not only about meeting global targets, but also about building the foundation of a competitive, fair, and sustainable nation.

## REFERENCES

- Alfarizi, M., & Sari, R. K. (2024). Education Budget Allocation Towards The Vision of The SDGs In Indonesia: Comparative Literature Insights On Asean Countries. *Journal of Budget: Issues and Problems of State Finance*, 9(1), 1–34. <https://doi.org/10.22212/jbudget.v9i1.194>
- Amina Otieno, David Mwangi, & Peter Kariuki. (2024). Gender Equality in Education: Progress and Barriers in Secondary School Enrollment. *International Journal of Educational Development*, 1(1), 26–30. <https://doi.org/10.61132/ijed.v1i1.125>
- Ashioya, D. I. A. (2016). Quality Education for Girls: Implications for achieving Sustainable Development Goals in Developing countries. *International Journal of Advanced Engineering Research and Science*, 3(10), 242–246. <https://doi.org/10.22161/ijaers/3.10.39>
- Basheer, M., Nechifor, V., Calzadilla, A., Ringler, C., Hulme, D., & Harou, J. J. (2022). Balancing national economic policy outcomes for sustainable development. *Nature Communications*, 13(1), 5041. <https://doi.org/10.1038/s41467-022-32415-9>
- Beasy, K., Smith, C., & Watson, J. (Eds.). (2023). *Education and the UN Sustainable Development Goals (Vol. 7)*. Springer Nature Singapore. <https://doi.org/10.1007/978-981-99-3802-5>
- Cahyaning Tyas, A., Maheswari, N. P., & Aprilia, R. D. (2024). Education Services in Remote Areas: Education Problems in Indonesia. *Indo-MathEdu Intellectuals Journal*, 5(1), 1020–1026. <https://doi.org/10.54373/imeij.v5i1.684>
- Fitriansyah, A. (2024). IMPLEMENTATION OF TECHNOLOGY AND INFORMATION DEVELOPMENTS IN IMPROVING INDONESIAN EDUCATION. *Edusight International Journal of Multidisciplinary Studies*, 1(1). <https://doi.org/10.69726/eijoms.v1i1.7>

- Gangmei, N., & Thomas, K. A. (2022). Use of Information and Communication Technology for Quality Education. 375–385. <https://doi.org/10.22492/issn.2435-9467.2022.32>
- Hunaepi, H., & Suharta, I. G. P. (2024). Transforming Education in Indonesia: The Impact and Challenges of the Merdeka Belajar Curriculum. *Path of Science*, 10(6), 5026–5039. <https://doi.org/10.22178/pos.105-31>
- Irwandy, F. (2023). Analysis of Anxiety Levels in Nursing Staff in Special Isolation Rooms for Covid 19 Patient Care: Literature Study. *NURSING UPDATE : Scientific Journal of Nursing Science* P-ISSN : 2085-5931 e-ISSN : 2623-2871, 14(1), 246–254. <https://doi.org/10.36089/nu.v14i1.1069>
- Messy, Putri, F., & Ilmi, D. (2023). IMPLEMENTATION OF HOLISTIC LEARNING STRATEGIES. *El-Rusyd : Journal of the Tarbiyah College of Sciences STIT Ahlussunnah Bukittinggi*, 8(1), 63–70. <https://doi.org/10.58485/elrusyd.v8i1.140>
- Meti Fatimah, Nur Ayu Setyariza, Sri Erna Widayati, Intan Kusuma Wardani, & Yekti Handayani. (2024). The Concept of Quality Education to Realize Superior Schools. *JOURNAL OF EDUCATION AND SOCIAL SCIENCES (JUPENDIS)*, 3(1), 180–192. <https://doi.org/10.54066/jupendis.v3i1.2852>
- Muhamad Fadil Miftahudin, Nazwa Tazkiyatun Nufus, & Tatu Hilaliyah. (2024). Evaluation of the Implementation of the Independent Curriculum in School Learning Practices in Indonesia. *Journal of Sadewa : Publications of Education, Learning and Social Sciences*, 3(1), 159–168. <https://doi.org/10.61132/sadewa.v3i1.1473>
- Nguyen, M.-H. (2021). Data collection - Wikipedia. <https://doi.org/10.31219/osf.io/3gpy4>
- Riehl, C. J., Henig, J. R., Wolff, J. R., & Rebell, M. A. (2019). Building Impact: A Closer Look at Local Cross Sector Collaborations for Education-Overview and Key Findings. <https://doi.org/10.59656/YD-CS5301.003>
- Riehl, C., & Lyon, M. A. (2017). Counting on Context: Cross-Sector Collaborations for Education and the Legacy of James Coleman's Sociological Vision. *The ANNALS of the American Academy of Political and Social Science*, 674(1), 262–280. <https://doi.org/10.1177/0002716217735284>
- Rulandari, N. (2021). Study of Sustainable Development Goals (SDGS) Quality Education in Indonesia in the First Three Years. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2702–2708. <https://doi.org/10.33258/birci.v4i2.1978>
- Suparyati, A. (2022). Achievement of Sustainable Development Goals In Indonesia: Quadruple Helix Model. *Proceedings of the First Lekantara Annual Conference on Public Administration, Literature, Social Sciences, Humanities, and Education, LePALISSHE 2021, August 3, 2021, Malang, Indonesia*. <https://doi.org/10.4108/eai.3-8-2021.2315145>
- Wadhwani, D., & Malpani, P. (2023). United Nations Sustainable Goals: Global to Local Need of the Hour. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4426147>
- Yanti, D., Prastawa, S., Utomo, W. F., Wiliyanti, V., & Utomo, B. (2024). Education in the Industrial Revolution 4.0: A Case Study of the Evaluation of the Independent Curriculum in Indonesia. *Edu Cendikia: Scientific Journal of Education*, 4(02), 380–390. <https://doi.org/10.47709/educendikia.v4i02.4471>
- Yekti Handayani, & Sukari Sukari. (2024). Problems of the Education System in Indonesia. *JOURNAL OF EDUCATION AND SOCIAL SCIENCES (JUPENDIS)*, 3(1), 168–179. <https://doi.org/10.54066/jupendis.v3i1.2851>