The Fulfillment of the Quality Education in Indonesia based on Sustainable Development Goals Indicators

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ABSTRACT

One of the Sustainable Development Goals (SDGs) is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This study aims to measure the achievement of quality education in all provinces in Indonesia in 2018-2019. The measurement is carried out by mapping the established indicators with the available data and use content analysis methods to assess each indicator. 22 indicators (i.e., 56.52% of overall established indicators) were selected. The results show that the achievement of each indicator has mostly increased, although some have experienced a decrease. The gross enrollment rate for each level of education has not yet reached the target as set in the National Medium-Term Plan (NMTP). This shows that there are still many school-age children who have not had the opportunity to attend formal education. Indonesia has an assistance program for underprivileged children to attend formal education, namely Smart Indonesia Card (SIC). The average population literacy rate and average length of schooling for residents over the age of 15 has exceeded the target set in the NMTP. The ability to read and write as well as school experiences can open insights of the younger generation which in turn can improve their quality of life.

Keywords: education quality, sustainable development goals, human resources, Indonesia.

1. BACKGROUND

Sustainable Development Goals (SDGs) are a global action plan agreed by world leaders, including Indonesia, to end poverty, reduce inequality and protect the environment with the theme of "Changing Our World: The 2030 Agenda for Sustainable Development." The Indonesia National Medium-Term Development Plan (NMTP) IV 2020-2024 is in line with the SDGs, which are outlined in the 7 development agendas (Bappenas, 2019). One of the development agendas in Indonesia is in line with the fourth goal of the SDGs namely Quality Education. Quality education will improve the quality of human resources and competitiveness and help achieving other goals as set in the SDGs (Nazar et al, 2018). Several studies showed that government budgets in education have a positive effect on the quality education and can eventually improve the quality of human development (Manasan et al, 2007; Gupta et al, 2002; Wardhani et al, 2017).

This study aims to measure the achievement of SDGs goals, especially that related to the quality education in local governments in Indonesia. There has been no research that comprehensively measures the fulfillment of SDG indicators related to the quality of education, especially in the context of Indonesian local governments. The results of this study can be used as an important input for the government to evaluate the achievements of SDGs in the education sector.

2. LITERATURE REVIEW

Legitimacy gaps arise if there are differences between community expectations and organizational behaviour (Deegan et. Al., 2002). Legitimacy is considered important for the organization because it is a strategic factor for future organizational development. Quality education means that ensures an inclusive and equal quality of education and increases lifelong learning opportunities for all. The Indonesian government has committed to implementing sustainable development goal as mentioned in Law No. 17/2007 about the National Long-Term Plan (NLTP) 2005-2025 which was derived into the National Medium-Term Plan (NMTP) with a period of 5 years. In 2015, Indonesia and world leaders signed the SDGs agreement, and it has been aligned with the 2015-2019 NMTP. The achievement of the SDGs in the NMTP is carried out in the form of policies, programs, activities, and sources of financing.

Alisjahbana et al (2018) analyses the readiness of local governments in Indonesia implementing SDGs by analysing 41 indicators of 16 SDGs goals in 34 provinces in Indonesia during 2001-2015. The result indicates that one of the important factors in the readiness of the local government to support the achievement of the SDGs goals is the availability of resources. Local government who possessed rich natural resources is better equipped to support the achievement of the SDGs goals. This result is also supported by Kharisma and Pirmana (2014) which states that the government who has the power to allocate resources can better achieve SDGs goals.

3. METHOD

This study was conducted on 34 Provincial Governments in 2018-2019 and was based on the availability of data and the fulfilment detailed measurement of each indicator use. Indicators are used to measure the achievement of SDGs goals in Indonesia as well as their comparability to other countries in the world or comparisons between regions in Indonesia (Bappenas, 2017a). For the fourth goal in the SDGs 23 indicators have been defined. The number of indicators used in this study was 13 or 56.52% from total indicators with 22 measurements. This study uses content analysis by carried out various secondary data availability, the fulfillment of SDGs indicators related to the quality of education in Indonesian provinces will be measured and tabulated in a descriptive form.

4. ANALYSIS

4.1. Proportion of Student at Junior High School/grade 9 Who Reach The Minimum Standard of Ability.

In 2019 there was an increase in reading skills by 0.06% and followed by an increase in numeracy skills by 0.16% (figure 4.1.). The ability to read and count is very important in achieving the fourth SDGs goal because it is considered a direct measure of learning outcomes (Bappenas, 2017a).
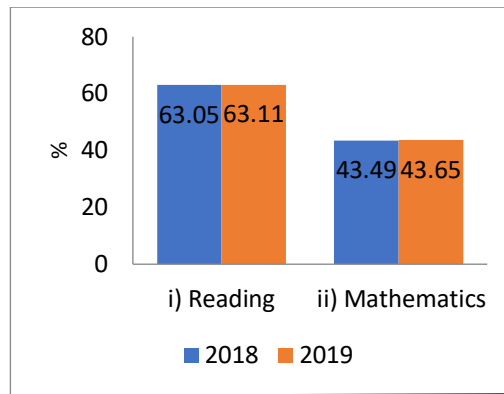
Figure 4.1. Indicator 4.4.1*
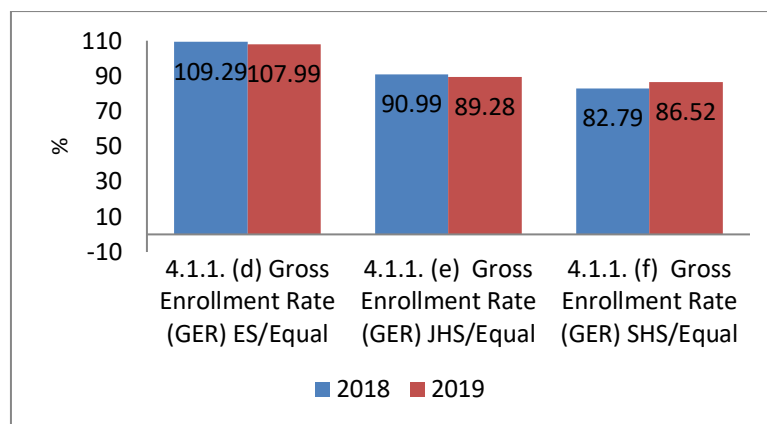
4.2. Gross Enrollment Rate (GER)

Figure 4.2. Indicator 4.1.1. d/e/f

Gross Enrolment Rate (GER) is a ratio between the total population who are still attending school at an educational level with a population that meets the official requirements of the school-age at that education level (Bappenas, 2017a). In Elementary School (ES) level, GER is over 100%, it means that the number of students attending school in this level is more than the number of children at the school-age (7-12 years) (BPS, 2019). In figure 4.2. there is a decrease in the GPR at the ES/equal level by 1.3%. It can be caused by most parents tend to enrol their children at the age of 7 according to the child's school-age readiness. GER in Junior High School (JHS) level does not reach 100%, it means that not all children aged 13-15 years old have received education in this level. In figure 4.2. there is a decrease in the GPR at the JHS/equal level by 1.71%, it can be caused by students dropping out of school. Moreover, at the Senior High School (SHS) level, not all teenager aged 16-18 years old received education in this level. In Figure 4.2. there is an increase in the GER at SHS/equal level by 3.73%, it can be caused by the increasing number of students who repeated (drop out / failing grade).

4.3. Average Length of Schooling for Resident Over the Age of 15
Based on Figure 4.3. there is an increased in average length of schooling in 2019 and this result shows that the awareness of children in Indonesia for education is getting better by having at least school experience up to JHS.

4.4. Gross Enrollment Rate (GER) Early Childhood Education Programs

In Figure 4.4. GER for early childhood education programs decreased by 1.07% to 34.18. This indicates that fewer children have received early education than the number of children at a certain age (3-6 years old). It can be caused by economic factors or regional factors. The higher economic capacity of the family, the higher level of children's participation in early educations will be (BPS, 2019). Likewise with regional factors, families who live in urban areas tend to choose to sign up their children in early education because both parents work so there is no one looks after the child, while families who live in rural areas tend not to sign up their children in early education program (BPS, 2019).
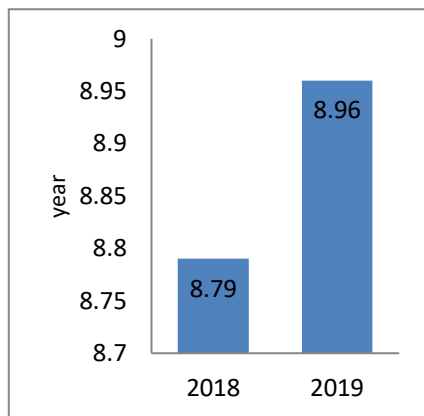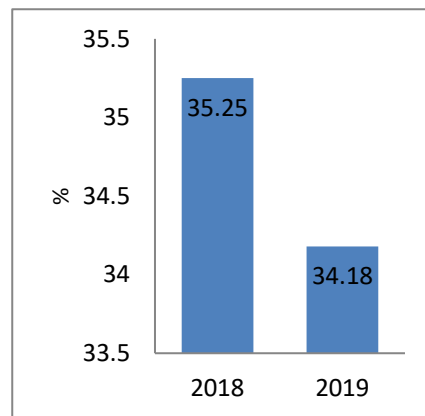

Figure 4.3. Indicator 4.1.1 (g)   **Figure 4.4. Indicator 4.2.2 (a)**

4.5. Gross Enrollment Rate (GER) in Senior High School and College Level

Not all teenager aged 16-18 years old received education in this level. In Figure 4.5. there is an increase in the GPR at SHS/equal level by 3.73%, it can be caused by the increasing number of students who repeated (drop out / failing grade). In college level is the lowest when compared to other levels of educations, because not everyone can continue their education to this level. Economic and regional factors are the main factors in continuing education. In figure 4.5. there was an increase in the GPR in college level by 0.30%, it means that more teenagers can continue their education. In addition, the phenomenon of studying while working is one of the motivations for teenagers to be able to continue their education and as a proof that they can be independent (BPS, 2019).

4.6. Proportion of Teenager and Adult with Information and Communication Technology Skill

Information and communication technology skills in both teenager and adult categories increased by 8.66% and 7.64%. Increasing these skills is also a form of change in the digital era, it can be seen in every daily activity we always utilize of technology advances such as cellular phones and internet (BPS, 2019).

This indicator shows gender equality and justice in the field of education, equality in terms of getting education is an important aspect of human development (Bappenas, 2017a). Bangun (2016) state that among the ASEAN-5, Indonesia has largest gender inequality. Increasing educational budget to 20% of the total state budget is one of indonesian government effort to increase gender equality through the education.

As seen in figure 4.7. in ES/equal level, the ratio of girl and boy increased by 0.22%. In JHS/equal, SHS/equal, and college level there was a decrease in the ratio from 2018 to 2019 by 0.39%, 2.72%, and 6.56% each. The higher level of education, the greater decrease in the ratio between women and men. This could be due to the reduced number

of women continuing to higher levels of education. However, the value still exceeds 100% that means more women than men in each level.
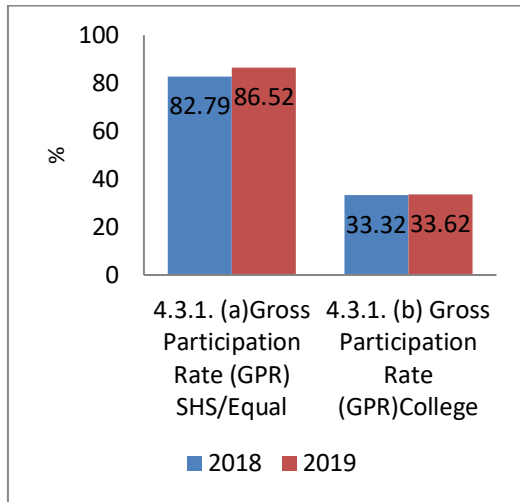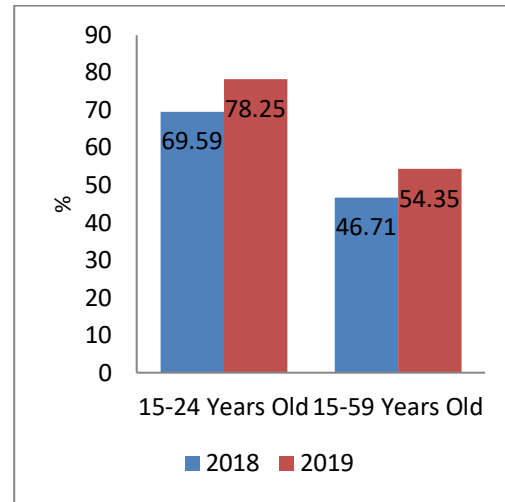

Figure 4.5. Indicator 4.3.1

Figure 4.6. Indicator 4.4.1*

4.7. Ratio of Girl/Boy Net Enrollment Rate (NER) in (1) ES/Equal; (2) JHS/Equal; (3) SHS/Equal; and the Ratio of Female/Male Gross Enrollment Rate (GER) in (4) College
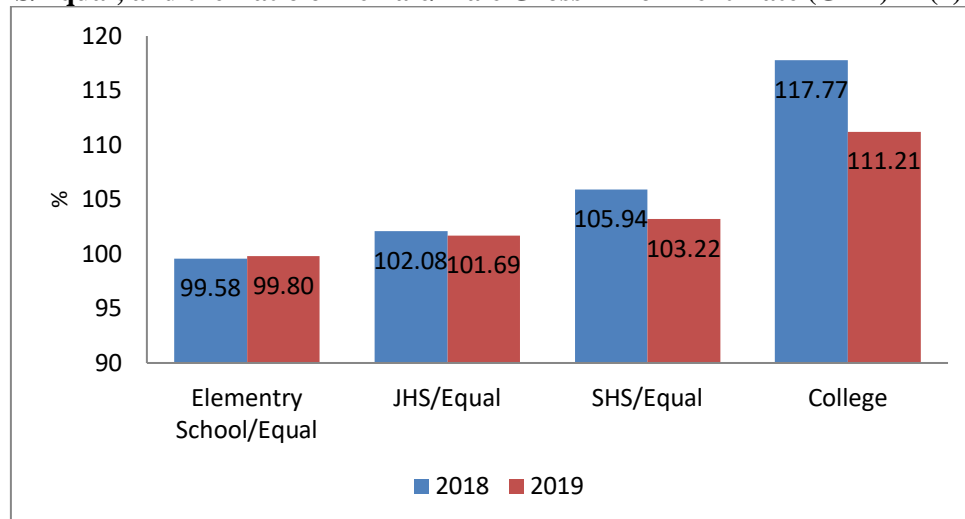

Figure 4.7. Indicator 4.5.1*

4.8. Percentage of Literacy Rate

The ability to read and write is a form of achievement in basic education since the last 10 years (Bappenas, 2017a). The ability of community to read and write can help them expand access to information, thereby increasing their knowledge and skills, and in the end it is hoped that they can improve their quality of life (BPS, 2019).

Indicator 4.6.1. (a) percentage of literacy rate with category of 15 years and over has increased by 0.35% (Figure 4.8). For indicator 4.6.1. (b) the calculation is divided into groups of teenagers and adults. There was an increase in reading and writing skills in both group by 0.14% and 0.27% each. This increase shows that more and more people have basic reading and writing skills.
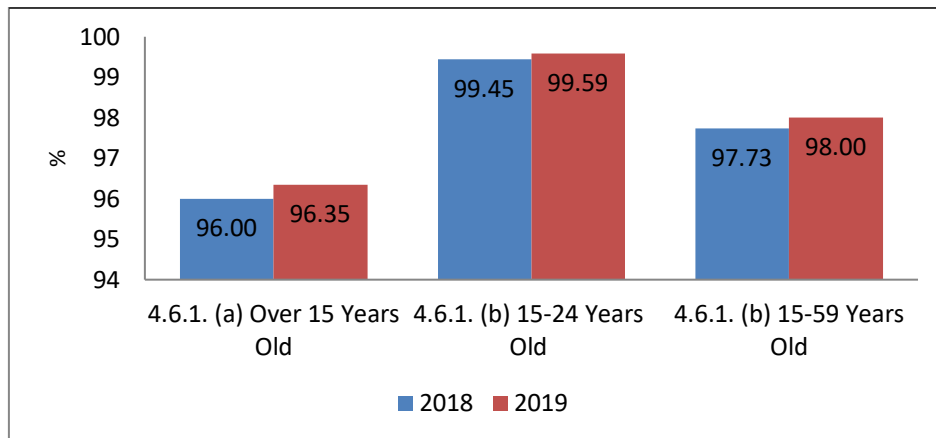
Figure 4.8. Indicator 4.6.1

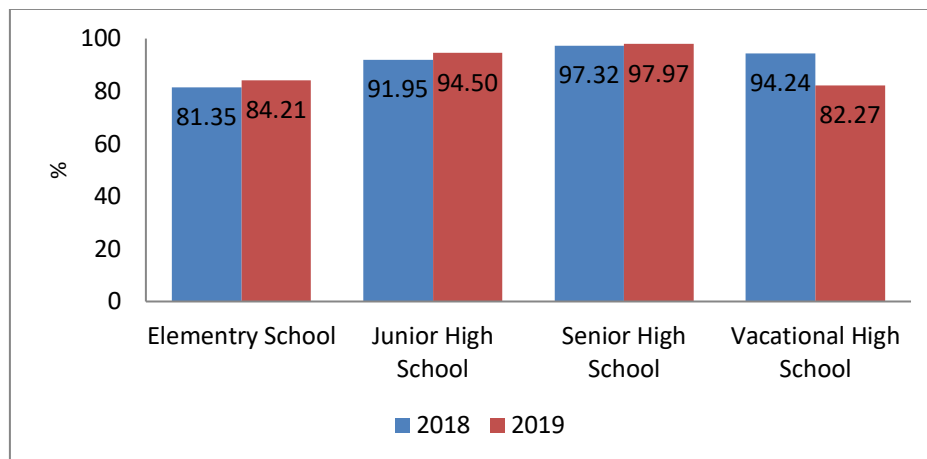## 4.9. Percentage of Certified Educators

Figure 4.9. Indicator 4.C.1*

This indicator aims to monitor efforts to improve the quality and competence of teaching staff in technical mechanisms that have been regulated by the government with the result of awarding certificates to teaching staff who meet professional standards (Bappenas, 2017a). With this indicator, it is hoped that more teaching staff who meet professional standards will be (Unterhalter, 2019)

Figure 4.9. shows that the number certified educators in ES, JHS, and SHS has increased by 2.86%, 2.55%, and 0.65% each. It is expected to help as facilitators in achieving the SDGs for quality of education. However, the decrease in the percentage of certified educators occurred at the VHS level by 11.97%. this can be caused by an increased number of retirement teaching staff and the recruitment of new teaching staff is not optimal yet in VHS level (BPS, 2019).

SDGs are an international commitment to improve the quality of life of one generation to the next. At the national level, Indonesia has a National Medium-Term Plan (NMTP) which describes the president's vision, mission, and programs for national development (Bappenas, 2017b). Through quality of education, it will produce a smart and creative generation that can improve the quality of life from one generation to another (Awan and Hussain, 2020). The 2015-2019 NMTP has also set targets to achieving

quality of education. Table 4.1. shown the comparison of the targets in NMTP (Bapennas, 2017b) with the SDGs indicators for the 2019 period (Table 4.1.):

Table 4.1. Comparison of NMTP Targets and SDGs Indicators

No.	Name	RPJMN 2015-2019	Indicator SDGs 2019
1.	Gross Enrolment Rate (GER) Elementary School/Equal	114.1%	107.99%
2.	Gross Enrolment Rate (GER) Junior High School /Equal	106.9%	89.28%
3.	Gross Enrolment Rate (GER) Senior High School/equal	91.6%	86.52%
4.	Gross Enrolment Rate (GER) College	36.7%	33.62%
5.	Average Length of Population Education over 15 years old	8.80 years	8.96 years
6.	Percentage of Population Literacy Rate over 15 years old	96.10%	96.35%

Based on table 4.1. The Gross Enrolment Rate (GER) for each level of education has not yet reached the target set in the NMTP. This shows that there are still many school-age children who have not had the opportunity to get formal education which can be caused by the family economic conditions, regional factors, and the ability of schools to accept new students that are not yet optimal. Regarding the family economic condition, Indonesia already has a program namely the Smart Indonesia Card (SIC). This is a state assistance program for underprivileged children to be able to attend formal schools. To fulfil the target of providing quality of education and the opportunity for all Indonesian children to get formal education, the government must ensure that this assistance is right on target.

5. CONCLUSIONS

This study aims to measure the achievement of SDGs goals, especially related to the quality of education in all provinces in Indonesia. The results of the content analysis show that the achievement of each indicator has mostly increased, although some have experienced a decrease. The SDGs indicator regarding the average length of education and percentage of literacy rate for population over the age of 15 has exceeded the target set in the 2015-2019 NMTP. The government must ensure that the Smart Indonesia Card (SIC) program is right on target so that it can help children with family economic problems to get formal education. The ability to read and write as well as school experiences can open insights of the younger generation which in turn can improve the quality of life of the generation itself.

Some of the limitations in this study are:
1. This study only uses 2 research periods, further research is expected to increase the study period so that it can provide a better comparison for each year.
2. This study using 13 out of the 23 indicators, further research is expected to use more complete indicators to provide more comprehensive results.
3. This study uses the Provincial Government as a sample, further research can use the City / Regency Government as a sample to get more detailed results.

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REFERENCES

[1] Alisjahbana, A.S., Yusuf, A.A., Anna, Z. (2018), "Menyongsong SDGs Kesiapan Daerah-Daerah di Indonesia", Bandung, *Unpad Press*.

[2] Awan, A.G. and Hussain, S.F. (2020), "Role of Quality Education in Sustainable Development of Pakistan", *Global Journal of Management, Social Sciences and Humanities,* 6(2), 293-319.

[3] Bangun, Wilson. (2016), "Efforts of Indonesian to Improve of Gender Equality on ASEAN Economic Community (AEC*)", Review of Integrative Business and Economics Research,* 5(2), 167-174.

[4] Bapenas. (2017a), "Metadata Indikator Tujuan Pembangunan Berkelanjutan (TPB)/ Sustainable Development Goals (SDGs) Indonesia: Pilar Pembangunan Sosial", Indonesia.

[5] Bappenas. (2017b), "Evaluasi Paruh Waktu RPJMN 2015-2019", Indonesia.

[6] Bappenas. (2019), "Rencana Pembangunan Jangka Menengah Nasional 2020-2024", accessed on February 20, 2020, from https://www.bappenas.go.id/files/rpjmn/Narasi%20RPJMN%20IV%202020-2024_Revisi%2028%20Juni%202019.pdf.

[7] BPS. (2019), "Potret Pendidikan Indonesia: Statistik Pendidikan Indonesia 2019", Indonesia.

[8] Deegan, C., Rankin, M., Tobin, J. (2002), "An examination of the corporate social and environmental disclosures of BHP from 1983-1997", *Accounting, Auditing & Accountability Journal,* 15(3), 312-343.

[9] Gupta, S., Verhoeven, M., Tiongson, E.R. (2002), "The effectiveness of government spending on education and health care in developing and transition economies", *European Journal of Political Economy*, 18(4), 717–737.

[10] Kharisma, B., and Pirmana. (2014), "How Does the Role of Government Improve the Quality of Education and How Its Provision? The Case of Public Junior Secondary Schools in Indonesia", *Journal of Economics and Sustainable Development*, 5(27), 149-160.

[11] Manasan, R.G., Cuenca, J.S., Villanueva-Ruiz, E.C. (2007), "Benefit incidence of public spending on education in the Philippines", *Philippine Journal of Development*, Vol. XXXIV, 63(2), 71–106.

[12] Nazar, R., Chaudhry, I.S., Ali, S., Faheem, M. (2018), "Role of Quality Education for Sustainable Development Goals (SDGS)", *PEOPLE: International Journal of Social Sciences,* 4(2), 486-501.

[13] Unterhalter, E. (2019), "The Many Meanings of Quality Education: Politics of Targets and Indicators in SDG4", *Global Policy*, 10(1), 39-51.

[14] Wardhani, R., Rossieta, H., Martani, D. (2017), "Good governance and the impact of government spending on performance of local government in Indonesia", *International Journal of Public Sector Performance Management*, 3(1), 77-102.