

Poverty Linked to Government Performance: Insights from Maluku Barat Daya and Halmahera Timur, Indonesia

Pauline Gaspersz

BPS-Statistics Maluku Province, Ambon, Indonesia

Corresponding Author: Pauline Gaspersz (email: pauline@bps.go.id)

Abstract

This study aims to uncover the connection between government performance and poverty in a process-tracing mechanism, utilizing documentation and archival records of Maluku Barat Daya and Halmahera Timur in East Indonesia, 2016-2019. Incorporating process-tracing as the method to tracing which linkage is a new approach in poverty discourse, which is the novelty of this study. Process tracing is not without challenges, considering that it requires the presence of the expected case-specific implications of its existence, which is constrained by the data availability. However, spatially speaking, the findings of this study provide valuable insights into Indonesia's context as an archipelago nation and can be a reference for any country facing disparity and inequality. Poor government performance lowers the quality of education and infrastructure performance through the limited number of qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability. Poor education resulted in low technological advances, low examination results, and few good accreditation schools. In infrastructure development, the incapability of local government to provide essential services pushed people to survive on their resources and become more vulnerable to experiencing poverty. Therefore, this research concludes that government performance influences poverty reduction through education and infrastructure performance.

Keywords: local government; poverty; process tracing; education; infrastructure

Introduction

Indonesia, the largest economy in Southeast Asia and the world's fourth most populous nation, has performed impressive economic growth since overcoming the Asian financial crisis of the late 1990s. Being a G20 nation, having projected that it will become one of four big economies in the world by 2045, the Government of Indonesia's calculations showed that at the time, Indonesia would have a 5-6 percent level of economic growth and

Gross Domestic Product (GDP) of US\$9.1 trillion and its income per capita is predicted to be at the level of US\$29,000.¹ However, it is more likely that the western region would benefit from this golden era Indonesia is embracing due to its more adequate infrastructures/support required for such a future, in contrast to the eastern part, which is experiencing slow development – hence high poverty. Poverty reduction on the east

¹ <https://setkab.go.id/en/indonesia-will-be-worlds-4th-largest-economy-by-2045-president-jokowi-says/>

side has not achieved significant progress by 2019. Four of Indonesia's five provinces have the highest poverty rates on the east side (BPS-Statistics Indonesia, 2020).

Along with infrastructure, education is another critical sector all tiers of government deal with in empowering poor people. BenDavid-Hadar (2014) demonstrates the benefit of government investment in education to improve the cognitive development of the coming generations, which will partly alleviate poverty. Sen (2000) presents that the more reachable primary education and health facilities are, the better the poor can escape poverty. However, we must be aware of the quality of both services. Despite more spending on education, Indonesia is not getting the appropriate results (Afkar, Luque, Nomura, & Marshall, 2020). Indonesia's policy to allocate 20 percent of its budget to the education sector seems to have no considerable effect. Educational inequality due to the inefficiency of educational policies may affect education development goals in eradicating poverty (Bonal, 2016). In addition, Rosser asserts that the root of Indonesia's low quality of education is the underlying political prerequisites (2018). These statements align with the poor quality of local government staff in eastern Indonesia, directly affecting the development quality in that area (Resosudarmo & Jotzo, 2009).

Governance is the process by which public policy decisions are set – who gets what, when, and how – and implemented as a result of interactions, relationships, and networks between its stakeholders (United Nations of Development Programme [UNDP], 2015; Taylor, 2016). The World Bank shows the importance of governance from the perspective of aid in offering aid support (Moyo, 2009). More than just having money to reduce poverty, there is an increasing acknowledgment of governance, including restructuring social and political institutions (Moyo, 2009; Page & Pande, 2018; Sillah, 2016). Considering that the decentralization mechanism in Indonesia involves the delivery

of proportional funding and authority to support development by the local governments, a significant difference in poverty eradication performance indicates a disparity in the local government's capability to plan and deliver suitable development programs. The provincial/district government is considered incapable and inferior to its higher sphere of government (Stanton, 2009), such as in the internal control system and competent human resources in providing information (Dewi, et.al., 2019). The incapability and inferiority of local governments link poverty to essential governance principles: effectiveness and efficiency, transparency, accountability, competence, performance evaluation, and economic, social, and cultural human rights (Addink, 2019; Kaufmann, et.al., 1999; Taylor, 2016; Organisation for Economic Co-operation and Development [OECD], 2014).

How government performance technically affects poverty reduction efforts is still an interesting topic to work on, and open to new perspectives to employ. Therefore, using two provinces in eastern Indonesia – Maluku and Maluku Utara – in a process-tracing mechanism, this study contributes to the poverty eradication effort Indonesia's government is working on by proposing that poor government performance causes the slow reduction of the poverty rate through poor educational performance and inadequate infrastructure development. Incorporating process tracing as the method of mapping the linkage between poverty and government performance via education and infrastructure performance is a relatively new approach in poverty discourse, which is the novelty of this study. The findings of this study provide valuable insights into Indonesia's context as an archipelago nation; spatially speaking, it can be a reference for any country facing disparity and inequality. In addition, when we link it to the spirit of SDGs which leaves no one behind, this paper participates in localizing poverty analysis that fits any specific situation and level of

government such that the stakeholders may obtain a clearer view of inequality facing a particular area.

Method

Considering that district-level research would provide a more holistic understanding (Chaudhuri & Gupta, 2009), this study sets the district as the unit of analysis. It uses process tracing to identify a causal mechanism (M) between poor government performance (independent variable – X) and slow poverty rate reduction (dependent variable – Y). The essence of process tracing research is that scholars want to go beyond merely identifying correlations between independent variables (Xs) and outcomes (Ys) (Beach & Pedersen, 2016) by performing parsimonious pathways in which X contributes to producing Y.

A mechanism understanding of causality in the process tracing method applied here is a theoretical process whereby X produces Y and does not necessarily imply regular association (Beach & Pedersen, 2016). However, some experts debated the ontology of causality in process tracing. Causation in the regularity approach is considered a regular pattern of association between X and Y in which the actual causal process of X toward Y is black-boxed (Beach & Pedersen, 2016). In other words, researchers make hypotheses about the pattern of the X:Y association and test the observable implications of these hypotheses, but they do not directly observe causal mechanisms. Encountering this school of thought, Bennett and Checkel stated that these experts miss the more fundamental fact that causal mechanisms are, to some extent, ultimately unobservable and that researchers do not get to observe causality (2015). They make inferences about it.

This research deduces a theory from the existing literature. It tests whether causal-process observations (CPOs) show that each part of a hypothesized causal mechanism is

present in the case study and functions as expected. The process tracing to be applied here is theory-testing process tracing in which both X and Y are identified, so the existing conjectures about the potential tool for logical reasoning are formulated.

Process tracing implementation involves test strength. The degree of the test's power falls into two basic terms: certainty and uniqueness (Van Evera, 1997). Tests of predicted evidence with high certainty and uniqueness are the strongest. Furthermore, in combinations of strength and weakness, Van Evera proposes four types of tests of predictions: (i) hoop tests, (ii) smoking-gun tests, (iii) doubly-decisive tests, and (iv) straw-in-the-wind tests, predictions with low uniqueness and low certainty. As doubly-decisive tests are ideal and almost impossible in real-world social science research and straw-in-the-wind tests are never decisive, hoop tests and smoking-gun tests become two main kinds of empirical tests in process tracing (Mahoney, 2012).

The logic of process tracing tests proposed by Mahoney (2012) is practical and will be adopted in this study as follows.

1. For the hypothesis that X is necessary for Y, the hoop test requires that X must be necessary for one or more intervening mechanisms (M) which is sufficient for Y.
2. For the hypothesis that X is sufficient for Y, the hoop test requires that X must be sufficient for one or more intervening mechanisms (M) which is necessary for Y.
3. For the hypothesis that X is necessary for Y, the smoking-gun test requires that X must be necessary for one or more intervening mechanisms (M) which is necessary for Y.
4. For the hypothesis that X is sufficient for Y, the smoking-gun test requires that X must be sufficient for one or more intervening mechanisms (M) which is sufficient for Y.

In the context of process tracing, this study is not examining whether poor government performance tends to covary with slow poverty reduction in a population but whether poor government performance is either a necessary and/or sufficient cause of slow poverty reduction (Beach & Pedersen, 2016). Differing from the mechanism in the statistical method, the quality of evidence in process tracing is not judged by sample size. In other words, the amount of evidence does not matter; it depends on how a piece of evidence contributes to adjudicating in a context-sensitive manner (Bennett, 2010).

The evidence in this study is collected through two sources: documentation and archival records conducted in districts with the highest monetary poverty rate in Maluku Province (Maluku Barat Daya) and Maluku Utara Province (Halmahera Timur). Various data used in this study primarily using the year 2016-2019, referring to the 5-year medium-term development plans called the *RPJMD (Rencana Pembangunan Jangka Menengah Daerah)* used in Maluku Barat Daya and Halmahera Timur.

Discussion

Evidence of Existence

1. Existence of Slow Reduction of Poverty

This study uses the official poverty rate published by *BPS-Statistics of Indonesia* to obtain evidence of poverty. The poverty rate of districts in Maluku Province and Maluku Utara Province continued to decrease between 2010 and 2019 but at a low reduction rate. In these last ten years, even though all districts have a similar pattern, the poverty rates of Maluku Barat Daya and Halmahera Timur are the highest in each province. Between 2010 and 2014, there was a noticeable fluctuation in the poverty rate in Halmahera Timur, while for Maluku Barat Daya, it was from 2010 to 2016. Afterward, the pattern reached a

plateau, indicating that poverty reduction in those areas is not promising. Hence, we can say that slow poverty reduction exists in both places.

2. Existence of Poor Government Performance

The approach to justifying the quality of government performance in this study is by considering the government's responsibility to provide essential services the people need to have a decent life.

a) Limited qualified civil servants

It is often indicated that problems facing Indonesia in the civil service are the low expected levels of educational attainment in terms of skills and competence, stakeholder awareness, and insufficient information (Asian Development Bank [ADB], 2021; Bawono, 2015). The Organisation for Economic Co-operation and Development (OECD) developed a framework to assess the skills needed to provide a professional, strategic, and innovative civil service (OECD, 2017). For the dimension of professional, one of the qualities set up there is qualified civil servants. On the other hand, much literature on human capital identifies educational attainment as a useful proxy (ADB, 2021).

The ratio of civil servants-population in Maluku Barat Daya and Halmahera Timur is less than 50 percent. Yet, more than half of Maluku Barat Daya and Halmahera Timur's civil servants have graduated only from senior high school, which generally represents the low quality of their human resources—the funding required to finance their civil servants, in general, more than one-fifth of total expenditure. A low university-graduated civil servant-population ratio with quite a considerable financing reveals the incompetency in designing their necessity of qualified employees. The limited skilled civil servants affected the development

process, as shown by the government's inability to provide appropriate data and good accountability. To this point, we can say that Maluku Barat Daya and Halmahera Timur have a problem with qualified civil servants, which may hamper the essential principles of governance, such as competence and accountability.

b) Lack of good-quality data

One of the essential duties of a democratic government is to make available information about its activities involving budgetary development programs (National Research Council, 2007). Indonesia's civil service regularly collects data to equip the government with information needed for policy-making decisions. Still, it is not standardized and used adequately (ADB, 2021).

The total area of Maluku Barat Daya in Maluku Barat Daya in Figure 2020 (BPS-Statistics of Maluku Barat Daya Regency, 2020) differs from what was published in Maluku in Figures 2020 (BPS-Statistics of Maluku Province, 2020). This inconsistency also occurred in the publication of Halmahera Timur in Figures 2020 and Maluku Utara in Figures 2020. The provincial and district offices of BPS annually compile a ton of data from almost all stakeholders in a province/district/subdistrict and publish it as "province/district/subdistrict in figure." Yet sometimes, the content is inconsistent between time and when the lower administration's information data is accumulated to the higher level. One example of those inconsistencies is the length of roads and education information. This data inconsistency and incompleteness occurred in Halmahera Timur and Maluku Barat Daya. They conclusively hindered the implementation of governance principles such as effectiveness and efficiency, transparency, accountability, and performance evaluation.

c) Non-optimal budget management

The Government of Indonesia has implemented the Fiscal Decentralization Policy since 2001. The regional autonomy policy aims to delegate executive power from the central government to local government to (1) raise efficiency on the national allocation and the provincial/district government, (2) improve the overall fiscal structure, (3) increase transparency, and (4) expand constituent participation in decision making at the regional level. In both districts, we found that the budget realization for the education sector for the total budget was small. Even much smaller than the budget realization of public works, which cover the development of roads, irrigation, and networks. The proportion of the education sector budget realization in Maluku Barat Daya was less than 10 percent. The situation is similar in Halmahera Timur, except for 2016 and 2018 when the budget percentage was 10 percent.

The tiny realization of the education budget in Maluku Barat Daya was explained by its relatively small absorption, while in Halmahera Timur, not all of the budget was absorbed. Therefore, we can conclude that inefficiency in budget management occurred in Maluku Barat Daya and Halmahera Timur, which represented the existence of poor government performance and failure to fulfill what was mandated by the regional autonomy policy when delegating executive power to local government.

d) Lack of accountability

One of the essential duties of a democratic government is to make available information about its activities involving budgetary development programs (National Research Council, 2007). In line with that, the Minister of Finance of the Republic of Indonesia rules

that financial information should be publicly available.² Regarding good government performance in a local tier of administration, it is vital to ensure that national development objectives are met and that the uniqueness or locality of its people is accommodated in the whole development process. Moreover, information on the “why, how, what, and how much” regarding local government activities should be well-documented and comply with national standards (Shoesmith, et.al., 2020). Unfortunately, in Maluku Barat Daya and Halmahera Timur, the annual Regent’s Statement and Accountability Reports were not publicly available, even though both areas have official websites.

Based on the recapitulation of examination results recommendation given by the Audit Board of the Republic of Indonesia (*Badan Pemeriksa Keuangan* - abbreviated as BPK) 2016-2019, Maluku Barat Daya and Halmahera Timur have either the quantity or amount of improvement recommendations. Several significant corruption cases in Maluku Barat Daya, as reported by the online media, are as listed below.

- a. corruption of airport construction project in 2012 with a value of IDR 25 billion with detrimental to the country as much as IDR 1.3 billion³;
- b. corruption of speedboats in 2015 with a value of IDR1.5 billion⁴;
- c. corruption of the ferry boat management fund in 2016 that caused detrimental amounting to IDR 1.3 billion⁵; and

- d. corruption of the cold storage development project renders state losses amounting to IDR 1.7 billion⁶.

A similar situation also occurred in Halmahera Timur, where its Regent was guilty of receiving gratification worth IDR 6.3 billion from the Head of the Maluku Utara Province’s National Road Construction Board.⁷

One of the pitfalls of the decentralization mechanism is the limitation of central government control and capacity to oversee how the local government conducts its role. This disadvantage increases corruption (ADB, 2021; Arifin, et.al., 2015), which may significantly hinder the government’s effectiveness in redistributive programs in developing countries. Afterward, the government’s ineffectiveness means that goals to enhance people’s welfare may not be fully achieved (Olken, 2006), as in Maluku Barat Daya and Halmahera Timur. The misused funds found by BPK and many corruption cases have represented a lack of accountability, so we can conclude that poor government performance existed in both regions.

3. Existence of Poor Educational Performance

As the world has become more globalized and digitalized, technological advances in educational institutions have become more critical than ever. Advances in technology are necessary for success in the future.⁸ On the other hand, examination results are still one of the universal indicators of student and school quality, which, to some extent,

2 Minister of Finance Regulation Number 74/2016 chapter 10 verse 1

3 <https://www.antaraneews.com/berita/1795209/kejagung-ciduk-dpo-korupsi-konstruksi-runway-bandara-moa-tiaku-maluku>

4 <https://regional.kompas.com/read/2022/01/04/181704578/korupsi-anggaran-speedboat-adik-wagub-maluku-divonis-14-tahun-penjara>

5 <https://regional.kompas.com/read/2021/11/05/182552778/2-tersangka-kasus-korupsi-kmp-marsela-ditahan?page=all>

6 <https://regional.kompas.com/read/2021/11/12/090037778/3-tersangka-kasus-korupsi-proyek-cold-storage-di-maluku-barat-daya-ditahan>

7 <https://nasional.kompas.com/read/2018/09/26/20133811/bupati-halmahera-timur-divonis-45-tahun-penjara>

8 <https://soeonline.american.edu/blog/technology-in-education>

is represented by the school's accreditation. These three variables explain the educational performance due to poor government performance, which in due time influences the effectiveness of poverty reduction.

a) Low technological advances

The Educational Assessment Center of the Ministry of Education and Culture of the Republic of Indonesia published the Diagnosis of 2019 National Examination Results for middle school, differentiated into paper-based and computer-based. Maluku Barat Daya has not conducted a computer-based examination yet, while its counterpart has. This implies Maluku Barat Daya's education system is less developed and advanced than its counterparts, representing a less reliable educational performance. On the other hand, the examination result in Halmahera Timur, which has already conducted the computer-based examination, is far from satisfactory.

Until 2019, Maluku Barat Daya was one of two districts in Maluku Province that did not conduct a computer-based national examination for the middle school level. All districts in Maluku Utara Province have performed it. Naturally, the ability to drive computer-based national examinations results from computer-based learning. The evidence that Maluku Barat Daya cannot obtain computer-based education, especially in their effort to make students digitally literate, was proof of their poor quality of education. Moreover, this evidence strongly indicates the poor technological advances in the primary education institution Maluku Barat Daya. Similarly, the poor quality of the computer-based examination in Halmahera Timur also presents the same picture.

b) Low examination results

Considering that the grading system in Indonesian education uses the interval of 0-100, Maluku Barat Daya and Halmahera

Timur's middle school performance in 2016-2019 was mediocre. Logically speaking, in a regular cycle, the low examinations resulting in the middle school level in 2016 will influence high school performance in the next three years – the typical duration for completing high school in Indonesia is three years. Supporting that logic, the high school national exam results in 2019 were less satisfactory than the middle school national exam results in 2016, which existed both in Maluku Barat Daya and Halmahera Timur. In this case, to some extent, poor performance in education at a certain level accumulates to the next level.

The educational development policy in Maluku Barat Daya and Halmahera Timur regarding qualified teacher recruitment is flawed. Regarding the percentage of Maluku Barat Daya and Halmahera Timur university-graduated teachers, the number of teachers with university education at the middle school level is higher than at the elementary level, indicating that elementary schools have poorer quality teachers than middle schools. The university-graduated teachers were not absorbed appropriately, especially in elementary education, impacting the students' performance, as indicated by the low examination results. As the low quality of teachers prompts students' poor performance (Tchoshanov, 2011; Akinsolu, 2010), we presumed that the poor quality of elementary school graduates might have resulted in the poor quality of middle school students.

c) Few good accreditation schools

Following Law Number 20 of 2003 concerning the National Education System, the Government of Indonesia regulates the mechanism for assessing the feasibility of programs in academic units based on specific criteria or accreditation. Its ratings from the best are A, B, C, and not accredited; a good accreditation school has at least a "B"

classification. Data tells us that until 2019, over half of the schools in Maluku Barat Daya at the elementary and middle school levels were accredited with a “C” classification or less, indicating poor-quality primary educational institutions. Halmahera Timur presents a better picture regarding middle schools’ accreditation, yet the percentage of elementary schools with a “C” classification until 2019 is higher than 30 percent. It convincingly proves the poor performance of its education sector.

4. Existence of Inadequate Infrastructure

Increasing access to clean water, electricity, and transport will positively impact poverty reduction, especially in rural areas, and simultaneously significantly enhance the standard of living (Budiono & Purba, 2022; Sambodo & Novandra, 2019; Cook et al., 2005).

a) Limited clean water service by the government

Until 2019, Maluku Barat Daya only had three subdistricts with clean water access provided by the district-owned water company (BPS-Statistics of Maluku Barat Daya Regency, 2020). No information regarding this matter exists in the official statistics published in Halmahera Timur. The Indonesia National Socio-economic Survey (*Susenas*) presents information that since 2010, almost half of the households in both districts have access to clean water. However, regarding the public service availability of clean water, only about 10 percent of households can access it. Even though a significant portion of Maluku Barat Daya and Halmahera Timur have access to clean water, the service provided by the local governments is limited, revealing the inadequate clean water infrastructure in both areas.

b) Low electrification

Access to electricity is crucial in meeting basic social needs for households, operating domestic appliances, and providing essential services such as education. Electricity in Maluku Barat Daya is not widely available in all subdistricts. Between 2015 and 2019, electricity services were not significantly expanded. Only about 40 percent of the total subdistricts have been electrified in Maluku Barat Daya (BPS-Statistics of Maluku Barat Daya Regency, 2020). Halmahera Timur’s electrification rate is adequate.

c) Low connectivity

According to Maluku Province’s National Road Construction Board (*Balai Pelaksanaan Jalan Nasional* - BPJN), in 2019, the national road class was built on seven islands. Still, only three islands have more than 50 percent good-quality roads. In addition, according to Maluku Barat Daya in Figures 2019, the total length of the district road class of four subdistricts in Wetar Island – 345.92 km, is the longest in Maluku Barat Daya. Road density measurement (road length versus total land area) is better for acquiring more weighted information. Yet, we do not have valid subdistrict information for the entire land area.

Maluku Barat Daya has a slow growth of land mass transport. The stagnancy of passenger transportation numbers in Maluku Barat Daya reflects the local government’s insufficient attention to providing public transport for the people. These statistics should be interpreted carefully, considering that areas with vast seas may have different public transport needs compared to the mainland.

Using seaport samples of Sea Freight Statistics 2019 obtained by BPS-Statistics of Maluku and BPS-Statistics of Maluku Utara, we find that the average monthly unloaded/loaded goods, unloaded goods dominated

the loading-unloading process in Maluku Barat Daya, indicating dependence on supply outside the region. In contrast, the loaded ones had the highest activity in Halmahera Timur, implying that the part has higher productivity and can export goods to fulfill other areas' needs. In addition, as container seaports are highly dependent on road transport (Chen, et.al., 2016), the low-loaded goods in Maluku Barat Daya's seaports could also indicate low land connectivity in that area.

Evidence of Causal Mechanism

As stated in the beginning, this study aims to examine that poor government performance causes the slow reduction of the poverty rate through poor educational performance and inadequate infrastructure development as the intervening mechanisms. In terms of process tracing, that aim may be formulated as hypotheses as follows.

1. Poor government performance is necessary for slow poverty reduction.
2. Poor government performance is sufficient for slow poverty reduction.

The following explanation links poor government performance and slow poverty reduction with poor educational performance and inadequate infrastructure performance as the mechanism in between.

As quoted by Schneider, Bangladesh's case mentioned the public officers' inadequate capacity as one of the obstacles to poverty reduction (1999). At the same time, Banerjee and Duflo (2011) suggest that addressing poverty must focus on broad institutions and carefully understand the motivations of the elements of those comprehensive institutions, including civil servants. In Maluku Barat Daya and Halmahera Timur, a ratio of less than 50 percent of university-graduated civil servant populations impacts how the local government makes regulations, implements them, and then controls and enforces them.

In this digital era, data access and sharing are needed to enhance public service delivery and to identify emerging governmental and societal needs.⁹ Access to and sharing public service data are necessary for improving the quality of public services, supporting innovation, and redesigning and evaluating new service delivery approaches. In other words, the government's good performance in any poverty reduction should be revealed by information-based policies (Schneider, 1999). Therefore, the lack of valid data in Maluku Barat Daya and Halmahera Timur represents the existence of poor government performance.

A non-optimal budget absorption left unmet needs on some issues that should be covered in case the local government manages the budget effectively. This occurred in Maluku Barat Daya and Halmahera Timur, where educational development program funds were not fully absorbed. The existence of non-optimal budget management makes it pass the hoop test. Learning from an experience in rural India (Fan et al., 2000), when it comes to poverty alleviation, the unabsorbed funding would provide a better achievement in overall district performance as it could be switched to other sectors such as public works.

Accountability refers to the situation in which government officials deliver services within an effective administrative system and are supported by efficient managerial practices and procedures (Mumvuma, 2016). By having accountability, a development process is supposed to yield the optimal result, which aims to provide good-quality basic infrastructure to the people. On the contrary, a lack of accountability deviates the development process from its intended goal. A study in Nigeria found that corruption due to lack of accountability is enormous and has a significant relationship with poverty (Idehen & Oriazowanlan, 2020).

⁹ <https://www.oecd.org/digital/ieconomy/enhanced-data-access.htm>

Impacts of the presence of poor quality of government's performance, such as improper planning and budgeting prompted by the limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability of local governments led to inaccuracy in the planning, monitoring, and evaluation process of the development programs, especially the pro-poor programs. In due time, those circumstances hampered poverty reduction. This causal inference implies the existence of a mechanism between poor government performance and the slow reduction of poverty.

1. The Causal Mechanism between Poor Government Performance and Poor Educational Performance

Research on the relationship between education expenditure and poverty in 20 Asian countries by Akbar, et.al. (2019) concludes that the more the government allocates funds to education, the less poverty there is. Maluku Barat Daya and Halmahera Timur have a sizeable fund for the education sector, yet not all of it was absorbed well. The incapacity of the civil servants could prompt the fact that Maluku Barat Daya and Halmahera Timur lacked good-quality data and good-quality schools to obtain adequate information on problems and challenges faced by each school in delivering good-quality educational institutions.

Inefficiency in educational funding management, lack of good quality data, and limited qualified teachers lead to poor educational performance. This mechanism reveals the condition that poor government performance is necessary and sufficient for the existence of poor educational performance. If poor government performance does not exist, poor educational performance may not happen. At the same time, if poor government performance exists, poor educational performance will occur.

Applying this logic to Indonesia's situation, we can say that in Maluku Barat Daya and Halmahera Timur, government-performance-related variables such as limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability may have most likely caused poor educational performance related variables such as low technological advances, low examination results, and few good accreditation schools considering that limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability are shown as necessary and sufficient conditions to low technological advances, low examination results, and few good accreditation schools.

2. The Causal Mechanism between Poor Government Performance and Inadequate Infrastructure

Strategic planning capacity positively influences the public sector's performance (Jung & Lee, 2013; Boyne, 2001), considering that strategic planning and management are approaches to identifying and addressing government challenges. Good planning, monitoring, and evaluation are not accessible when a lack of resources and expertise exists, considering that problems in that process are mainly technical, managerial, and institutional rather than political (Boyne, et.al., 2004; Awortwi, 2016; Conroy & Berke, 2004). In addition, almost three-quarters of infrastructure investment in developing countries is funded by governments regardless of the source (ADB, 2003), which also happened in both areas in question.

Problems facing Maluku Barat Daya and Halmahera Timur in terms of infrastructure that should be provided by the government, as shown by data, are limited clean water service, low electricity, and low connectivity. On the other hand, poor government performance occurred in both areas: limited

qualified civil servants, lack of good-quality data, non-optimal management, and lack of accountability. These facts reveal the condition that poor government performance is necessary and sufficient for the existence of inadequate infrastructure. If poor government performance does not exist, inadequate infrastructure may not happen. At the same time, if poor government performance exists, inadequate infrastructure will occur.

Applying this logic to Indonesia's situation, we can say that in Maluku Barat Daya and Halmahera Timur, government-performance-related variables such as limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability may have most likely caused inadequate-infrastructure-related variables such as limited clean water services, low electrification, and low connectivity. Considering that limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability are necessary and sufficient conditions for limited clean water services, low electrification, and low connectivity.

3. The Causal Mechanism between Poor Educational Performance and Slow Reduction of Poverty

Poor government performance has resulted in many challenges in the education sector. Low technological advances, low examination results performance, and the few good accreditation schools in Maluku Barat Daya and Halmahera Timur are evidence of the government's inability to provide a good education for its people. Due to the inadequate implementation of technology in the learning process, students have less access to many new opportunities to increase their digital citizenship skills.¹⁰ Fairlie, Beltran, and Das also found that having computers at home in the U.S. has a strong positive relationship with grades and

¹⁰ <https://www.gesdubai.com/news-center/articles/effectiveness-technology-education>

a strong negative relationship with school suspension (2010), such that they suggest that disparity in access to technology could be the gate of future disparities in the labor market and other economic outcomes.

Low examination results and the few good-accredited schools indicate poor educational performance. South Africa's case will be a good learning example. South Africa's production of high-level skills was insufficient, and education failed. Teachers allocate less than their work time to teaching and learning and have high absenteeism (Hoadley, 2008). About 65 percent of school leavers are illiterate (Sayed, 2008). Many students graduated from formal education without the basic minimum skills. So they have limited capacity once they enter the labor market, which in due time limits the gain they may have as compensation in the workplace. A study that estimated the effect of education on poverty in Pakistan pointed out that educational attainment boosts people's earning potential, resulting in a higher probability of being out of poverty (Awan, et.al., 2011). Conversely, lower educational attainment will lessen the likelihood of living above the poverty line.

The failure to provide a good-quality primary education, which occurred in both areas in question, impacted the quality of their future workforce and their low competitiveness in the job market and, in due time, for a decent life. These situations reveal that poor educational performance is necessary and sufficient for the slow reduction of poverty. The absence of poor educational performance prevents a slow reduction of poverty. At the same time, if poor educational performance exists, a slow reduction of poverty will take place.

Applying this logic to Indonesia's situation, we can say that in Maluku Barat Daya and Halmahera Timur, poor-educational-performance-related variables such as low technological advances, low examination results, and few good accreditation schools

may have most likely caused slow poverty reduction. Considering that low technological advances, low examination results, and few good accreditation schools are shown as necessary and sufficient conditions to slow down poverty.

4. The Causal Mechanism between Inadequate Infrastructure and Slow Reduction of Poverty

A study by Budiono and Purba involving cross sections of 501 districts in 2018 reveals that besides education, access to clean water significantly reduces poverty disparities (2022). So, the reality that many households in Maluku Barat Daya and Halmahera Timur have access to clean water is good news. However, the adequate service delivered by the local government is limited. If they did better, it might boost the percentage of people who can access clean water at a more affordable price and spend more money on other fundamental issues such as education. The higher availability of clean water is also crucial for sanitation by improving health and environmental quality. In the long run, as people get healthier and live in more decent neighborhoods, the local government may use its health spending for more than merely providing primary health care needs.

The low electrification rate, especially in Maluku Barat Daya, indicates the government's incapability to provide for people's basic needs. The total percentage of households as consumers of state-owned enterprises in Maluku Barat Daya until 2019 reached 60 percent but is still available in limited areas. This situation aligns with the findings of a previous study, which stated that regions with a lower electrification rate are identified as having higher poverty rates (Diallo & Moussa, 2020). Besides its effect on poverty reduction in the short run, proper electrification rate prompts an increase in non-food spending (Ikhsan & Amri, 2022).

Transportation access opens the way

to more accessible economic transactions in markets, education and health services, labor opportunities, and any isolation facing poor people in developing their capabilities. Still, transport infrastructure improvement alone cannot bring the expected impact of poverty reduction without proper policy links to other sectors (Njenga & Davis, 2003). In Maluku Barat Daya, Wetar Island has the most extended road length and, simultaneously, the highest number of 1st Deciles of the 40% of the population with the lowest welfare. That fact aligns with a study by Gachassin et al. (2010) that found that road infrastructure opens a broader way to increase economic activity. However, if road development does not come along with affordable public transport, it cannot significantly improve the quality of life. The fact that public transportation service is limited while people need to travel for various reasons, in due time, will force people to spend more money than in the situation if the government provided mass transport. Under those circumstances, poor people are thus at a disadvantage.

This study finds that inadequate infrastructure is necessary and sufficient for the existence of a slow reduction of poverty. The absence of inadequate infrastructure prevents a slow reduction of poverty. At the same time, if inadequate infrastructure exists, a slow poverty reduction will take place.

Applying this logic to Indonesia's situation, we can say that in Maluku Barat Daya and Halmahera Timur, inadequate-infrastructure-related variables such as limited clean water services, low electrification, and low connectivity may have most likely caused slow poverty reduction. Considering that limited clean water services, low electrification, and low connectivity are shown as necessary and sufficient conditions to slow down poverty.

The relationship between variable X (poor government performance), variable Y (slow reduction of poverty), and the M (mechanisms) in between (poor educational

performance and inadequate infrastructure) is as follows.

1. Poor government performance is necessary for poor educational performance and inadequate infrastructure, while poor educational performance and inadequate infrastructure are sufficient to slow poverty reduction.

Applying this logic to Indonesia's situation, we can say that the presence of limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability in Maluku Barat Daya and Halmahera Timur prompted low technological advances, low examination results, and few good accreditation schools as a reflection of poor educational performance; and limited clean water services, low electrification, and low connectivity as the reflection of inadequate infrastructure, to occur, while low technological advances, low examination results, few good accreditation schools, limited clean water services, low electrification, and low connectivity are the condition for slow poverty reduction to occur.

Because poor educational performance (low technological advances, low examination results, and few good accreditation schools) and inadequate infrastructure (limited clean water services, low electrification, and low connectivity) existed in Maluku Barat Daya and Halmahera Timur, slow reduction of poverty took place. In this situation, poor government performance (limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability) is necessary for slow poverty reduction and makes it pass the hoop test.

2. Poor government performance is sufficient for poor educational performance and inadequate infrastructure, while poor educational

performance and inadequate infrastructure are necessary to slow poverty reduction.

Applying this logic to Indonesia's situation, we can say that because limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability existed in Maluku Barat Daya and Halmahera Timur, low technological advances, low examination results, and few good accreditation schools as a reflection of poor educational performance; and limited clean water services, low electrification, and low connectivity as the reflection of inadequate infrastructure, occurred. Afterward, the presence of low technological advances, low examination results, few good accreditation schools, limited clean water services, low electrification, and low connectivity in Maluku Barat Daya and Halmahera Timur prompted a slow reduction of poverty. In this situation, poor government performance (limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability) is sufficient for a slow poverty reduction and makes it pass the hoop test.

3. Poor government performance is necessary for poor educational performance and inadequate infrastructure, while poor educational performance and inadequate infrastructure are necessary to slow poverty reduction.

Applying this logic to Indonesia's situation, we can say that because limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability existed in Maluku Barat Daya and Halmahera Timur, low technological advances, low examination results, and few good accreditation schools as a reflection of poor educational

performance; and limited clean water services, low electrification, and low connectivity as the reflection of inadequate infrastructure, may occur. The presence of low technological advances, low examination results, few good-accredited schools, limited clean water services, low electrification, and low connectivity in Maluku Barat Daya and Halmahera Timur prompted a slow reduction of poverty. In this situation, poor government performance (limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability) is necessary for a slow poverty reduction and makes it pass the smoking-gun test.

4. Poor government performance is sufficient for poor educational performance and inadequate infrastructure, while poor educational performance and inadequate infrastructure are sufficient to slow poverty reduction.

Applying this logic to Indonesia's situation, we can say that because limited

qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability existed in Maluku Barat Daya and Halmahera Timur, low technological advances, low examination results, and few good accreditation schools as a reflection of poor educational performance; and limited clean water services, low electrification, and low connectivity as the reflection of inadequate infrastructure, occurred. Because of the presence of low technological advances, low examination results, few good accredited schools, limited clean water services, low electrification, and low connectivity, the slow reduction of poverty took place in Maluku Barat Daya and Halmahera Timur. In this situation, poor government performance (limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability) is sufficient for a slow poverty reduction and makes it pass the smoking-gun test.

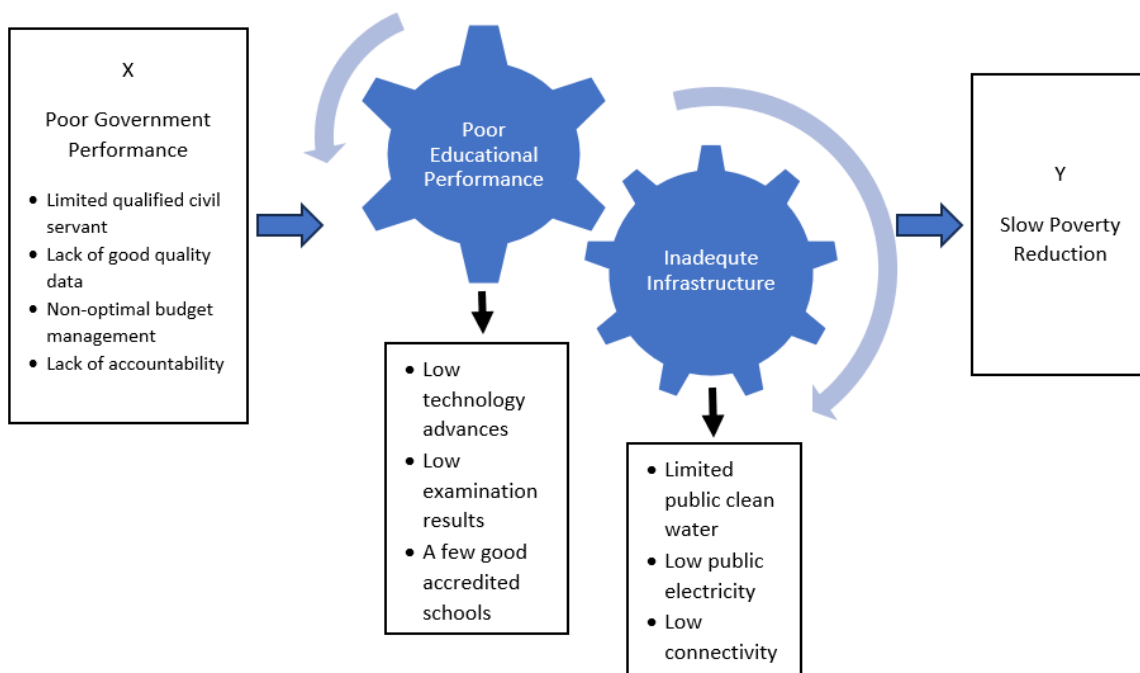


Figure 1. The Mechanism between Government Performance and Poverty

Therefore, this study proves that limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability (poor government performance) pass the hoop test and smoking-gun test, which is necessary and sufficient to cause slow poverty reduction in Maluku Barat Daya and Halmahera Timur, with low technological advances, low examination results, and few good accreditation schools as a reflection of poor educational performance; and limited clean water services, low electrification, and low connectivity as the reflection of inadequate infrastructure, as the intervening mechanisms. The limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability resulted in low technological advances, low examination results, few good accreditation schools, limited clean water services, low electrification, and low connectivity, in due time slow down the poverty reduction as occurred in Maluku Barat Daya and Halmahera Timur.

Conclusion

Governments worldwide are working hard to make more public facilities adequately available, particularly to people experiencing poverty. Yet, the question is: "How adequate is it?" This question should be answered by not forgetting that poverty is a situation where people lack essential things they may need or access uniquely according to their background. For instance, when it comes to basic transportation, it should be differentiated between a mainland area and an archipelagic one. Maluku Barat Daya and Halmahera Timur are a very good sample of it.

Civil servants are one of the cores of any government. The government needs qualified human resources to operate and implement the development programs, so their quality is uncompromising. Another obstacle popped

up: how do you measure the civil servant's quality? Is the ratio between the population and the number of civil servants enough? The population-civil servant ratio in Maluku Barat Daya is higher than in Halmahera Timur, but it has a lower percentage of university-graduated civil servants. Even to this point, is having more well-educated civil servants enough for a good government's performance? Of course not. We can have many sophisticated theories about education and good government performance, but the next challenge comes. We need data to measure it, which is still lacking in Maluku Barat Daya and Halmahera Timur.

Lack of good-quality data leads to inefficiency in planning and discrepancy with the community's actual needs. However, it occurred in Maluku Barat Daya and Halmahera Timur, even from the basic information about the total area. Unfortunately, this is a prevalent problem all regions are dealing with. Clear proof is the Regulation of the Minister of Home Affairs of The Republic of Indonesia Number 72/2019 regarding the Amendment to Regulation of the Minister of Home Affairs Number 137/2017 concerning Code and Data of Government Administrative Area. That official legal product of the central government provides the administrative level name until the village level, yet the information on the total area is only available until the district. That lack of good-quality data might be the reason for budget management's inefficiency, resulting in an excess budget that could be absorbed into other strategic development programs. The not-so-qualified civil servant finally affected the government's budget utilization and accountability. Throughout 2016-2019, there were many recommendations from the Audit Board in both districts due to budget utilization.

Amid the pros and cons of how students' capabilities were measured through a national examination, to some extent, national exam results are still valuable for understanding

students' performance regarding how they enhance their knowledge and skills. Sadly, the results were not promising in both areas of study, especially in Maluku Barat Daya. This district was even among two districts in Maluku that had not conducted a computer-based national examination in 2019. That was not encouraging, considering current students will soon be in the following workforce. Furthermore, their limited human resources will be their main obstacle to being competitive in the job market, leading to a severe challenge for having a better quality of life. We may be tempted to ask what the government's contribution is to improve this situation, while on the other hand, the accreditation of public schools the government provides is mediocre. In this issue, it was likely that Maluku Barat Daya suffered more than Halmahera Timur.

Maluku Barat Daya and Halmahera Timur struggle to provide clean water for all people in infrastructure development. Regarding electrification, Maluku Barat Daya is more under coverage. As an archipelagic district, Maluku Barat Daya deals with more hardships, providing public electricity to dispersed people on more islands than in Halmahera Timur. The state-owned enterprise responsible for electricity needs more resources to ensure all areas in Maluku Barat Daya are electrified. One of many things they need to work on is good connectivity, which Maluku Barat Daya lacked.

Regarding connectivity and its impact on the outflow of goods, Maluku Barat Daya also has poor performance. People in Maluku Barat Daya depend highly on sea transportation to travel within the district and inter-district in Maluku, which takes a relatively higher price and more time than the land transportation dominant in Halmahera Timur. Maluku Barat Daya outnumbers Halmahera Timur in terms of the number of seaports. Yet, it is contrary to the average monthly traffic of goods. In 2019, the average monthly loaded goods in all seaports of Maluku Barat Daya were

fewer than one seaport in Halmahera Timur, indicating the low interconnectivity within Maluku Barat Daya – considering this area's geographic constraints – and also a higher economic activity in Halmahera Timur. On the other hand, a higher economic activity implies a more qualified labor market. This situation aligns with the Gross Regional Domestic Product (GRDP) per capita 2019 of Halmahera Timur (BPS-Statistics of Halmahera Timur Regency, 2022), which is higher than Maluku Barat Daya (BPS-Statistics of Maluku Barat Daya Regency, 2022). In contrast, the unemployment rate in the same year in Halmahera Timur (BPS-Statistics of Maluku Utara Province, 2020) is higher than in Maluku Barat Daya (BPS-Statistics of Maluku Province, 2020). To some extent, having more people absorbed in jobs with a lower value-added implies low productivity and high hidden unemployment in Maluku Barat Daya.

This study does not discuss a very new concept in poverty regarding government, yet it provides another perspective on its relationship. Governance is about a system that ensures that all people live decent lives and have all necessities fulfilled, such that good government performance would impact the lives of poor people. However, government performance does not directly influence poverty reduction, and how the relationship was constructed could vary between regions and highly depend on the available information. This study reveals how poor quality of government performance, as shown by limited qualified civil servants, lack of good-quality data, non-optimal budget management, and lack of accountability, affects education quality and infrastructure performance. These situations influenced the quality of planning, monitoring, and evaluation processes in delivering public services to the people. The educational performance affected by poor government performance was due to low technological advances, low examination results, and

few good accreditation schools. At the same time, in terms of infrastructure, the impacted areas had limited public clean water service, low electrification, and low connectivity. Those aspects of education and infrastructure performance are part of what governments worldwide are working on in poverty reduction.

The consequence of poor government performance in the form of poor educational performance and inadequate infrastructure directly influenced the quality of the labor force, leading to low competitiveness in the job market. It increases the likelihood of somebody being absorbed in informal jobs with low income and high insecurity. On the other hand, people with inadequate basic infrastructure, including the poor ones, are forced to afford essential services by themselves. They should spend more money to fulfill their basic needs; something should be accessed at a lower cost, assuming the government provides it with more affordable prices. The government's goodwill to make radical changes is essential in this situation.

After having more detailed information about the way the government influences poverty reduction through the quality of education and infrastructure performance, the stakeholders can contribute to preparing the needed data to develop a more effective measurement of poverty. While making data available and improving the data quality at the district level, local government also needs to make the related data available at the sub-district and village levels to obtain more precise information for the planning, monitoring, and evaluating of the development process. By implementing these tasks down to the lowest level of government, stakeholders will have the appropriate poverty alleviation programs done and effectively reduce poverty levels in all sub-districts/villages.

Regardless of its generalization limitations and the supporting data in explaining the causal mechanism, this research provides deeper insight into the mechanism of an old-

known relationship between poor quality of government performance and high poverty at the district level. It also contributes to the incoming disparity analysis of what Indonesia is facing and is helpful to further research by elaborating on the variables used here. Rough but careful incident research can be a valuable input to governments, which often have little or no awareness of the possible distributional implications of their policies, especially for local governments in eastern Indonesia that have a lot of homework to do.

Acknowledgments

This research is part of my doctoral dissertation, supported by the Indonesia Endowment Fund for Education (*Lembaga Pengelola Dana Pendidikan - LPDP*), Ministry of Finance, the Republic of Indonesia.

References

- Addink, Henk. 2019. *Good Governance: Concept and Context*. Oxford: Oxford University Press. <https://b-ok.asia/book/5287829/3daeda>.
- Afkar, Rythia; Luque, Javier; Nomura, Shinsaku and Marshall, Jeffery. 2020. *Revealing How Indonesia's Subnational Governments Spend their Money on Education*. Washington, D.C.: The World Bank. <https://www.worldbank.org/en/country/indonesia/publication/subnational-education-public-expenditure-review-2020>.
- Akbar, Muhammad; Khan, Mukaram; Farooq, Haidar and Kaleemullah. 2019. "Public Spending, Education and Poverty: A Cross Country Analysis". *Journal of Multidisciplinary Approaches in Science* 4, Issue 1, 12-20. https://www.researchgate.net/publication/352384075_Public_Spending_Education_and_Poverty_A_Cross_Country_Analysis.

- Akinsolu, A. Olatoun. 2010. "Teachers and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning." *Florida Journal of Educational Administration & Policy*, v3 n2 p86-103 Sum 2010. <https://eric.ed.gov/?id=EJ903008>.
- Arifin, Taufiq; Trinugroho, Irwan; Prabowo, Muhammad Agung; Sutaryo, Sutaryo and Muhtar, Muhtar. 2015. "Local Governance and Corruption: Evidence from Indonesia". *Corporate Ownership and Control Volume 12, Issue 4*, Summer 2015. <https://doi.org/10.22495/cocv12i4c1p3>.
- Asian Development Bank. 2021. *A Diagnostic Study of the Civil Service in Indonesia*. Manila: Asian Development Bank. <https://www.adb.org/publications/diagnostic-study-civil-service-indonesia>.
- Awan, Masood Sarwar; Malik, Nouman; Sarwar, Haroon and Waqas, Muhammad. 2011. "Impact of education on poverty reduction". *Munich Personal RePEc Archive (MPRA) Paper No. 31826*, posted June 24, 2011. <https://mpra.ub.uni-muenchen.de/31826/>.
- Awortwi, Nicholas. 2016. "Decentralisation and Local Governance Approach: A Prospect for Implementing the Post-2015 Sustainable Development Goals". In Gómez, Georgina M. and Knorrington, Peter (Eds.), *Local Governance, Economic Development and Institutions* (Part 1, pp. 39-63). <https://b-ok.asia/book/2806538/ee1178>.
- Banerjee, Abhijit V and Duflo, Esther. 2011. *Poor Economics: A Radical Thinking of the Way to Fight Global Poverty*. New York: Public Affairs.
- Bawono, Andy Dwi Bayu. 2015. "The Role of Performance Based Budgeting in the Indonesian Public Sector" (Thesis). Sydney: Doctor of Philosophy in the Department of Accounting and Corporate Governance, Faculty of Business and Economics, Macquarie University. https://figshare.com/articles/thesis/The_role_of_performance_based_budgeting_in_the_Indonesian_public_sector/19444196/1.
- Beach, Derek and Pedersen, Rasmus Brun. 2016. *Process-Tracing Methods: Foundations and Guidelines*. Ann Arbor: The University of Michigan Press. <https://b-ok.asia/book/2712390/be429a>.
- BenDavid-Hadar, Iris. 2014. "Education, Cognitive Development, and Poverty: Implications for School Finance Policy". *Journal of Education Finance, FALL 2014, Vol. 40, No. 2*, pp. 131-155. https://www.jstor.org/stable/24459391#metadata_info_tab_contents.
- Bennett, Andrew. 2010. "Process Tracing and Causal Inference". In Brady, Henry E and Collier, David (Eds.), *Rethinking Social Inquiry: Diverse Tools, Shared Standards* (Part 2, pp. 207-219). <https://b-ok.asia/book/1223962/606437>.
- Bennett, Andrew and Checkel, Jeffrey T. 2015. "Process tracing: from philosophical roots to best practices." In Bennett, Andrew & Checkel, Jeffrey T (Eds.), *Process tracing: from metaphor to analytical tool* (Part 1, pp. 3-37).
- Bonal, Xavier. 2016. "Education, Poverty, and the "Missing Link": The Limits of Human Capital Theory as a Paradigm for Poverty Reduction". In Mundy, Karen; Green, Andy; Lingard, Bob and Vergerm Antoni (Eds.), *The Handbook of Global Education Policy* (Part 1, pp. 97-110). <https://b-ok.asia/book/2838136/51b828>.
- Boyne, George A; Gould-Williams, Julian S; Law, Jennifer and Walker, Richard M. 2004. "Problems of Rational Planning in Public Organizations: An Empirical Assessment of the Conventional Wisdom." *Administration of Society Vol. 36, Iss. 3*, 328-350. <https://doi.org/10.1177/0095399704265294>.
- BPS-Statistics of Halmahera Timur Regency. 2022. *Gross Regional Domestic Product of Halmahera Timur Regency by Industry*

- 2017-2021. Maba: BPS-Statistics of Halmahera Timur Regency.
- BPS-Statistics of Indonesia. 2020. *Statistical Yearbook of Indonesia 2020*. Jakarta: BPS-Statistics of Indonesia.
- BPS-Statistics of Maluku Barat Daya Regency. 2020. *Maluku Barat Daya Regency in Figures 2020*. Moa: BPS-Statistics of Maluku Barat Daya Regency.
- BPS-Statistics of Maluku Barat Daya Regency. 2022. *Gross Regional Domestic Product of Halmahera Timur Regency by Industry 2017-2021*. Moa: BPS-Statistics of Maluku Barat Daya Regency.
- BPS-Statistics of Maluku Province. 2020. *Maluku Province in Figures 2020*. Ambon: BPS-Statistics of Maluku Province.
- BPS-Statistics of Maluku Utara Province. 2020. *Maluku Utara Province in Figures 2020*. Ternate: BPS-Statistics of Maluku Utara Province.
- Budiono, Sidik and Purba, John Tampil. 2022. "Reducing poverty strategy through educational participation, clean water, and sanitation in Indonesia." *Jurnal Ekonomi dan Bisnis*, 25(1), 177-198. <https://doi.org/10.24914/jeb.v25i1.4158>.
- Chaudhuri, Siladitya and Gupta, Nivedita. 2009. "Levels of Living and Poverty Patterns: A District-Wise Analysis for India." *Economic and Political Weekly*, February 28 – March 6, 2009, Vol. 44, No. 9, pp. 94-110. <https://www.jstor.org/stable/40278558?seq=1>.
- Conroy, Maria Manta and Berke, Philip R. 2004. "What makes a good sustainable development plan? An analysis of factors that influence principles of sustainable development". *Environment and Planning volume 36*, pages 1381 – 1396. <https://doi.org/10.1068/a367>.
- Cook, Cynthia. C; Duncan, Tyrrell; Jitsuchon, Somchai; Sharma, Anil and Guobao, Wu. 2005. *Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction*. Manila: Asian Development Bank. <https://www.adb.org/publications/assessing-impact-transport-and-energy-infrastructure-poverty-reduction>.
- Dewi, Nur Fitri; Azam, S. M. Ferdous and Yusoff, Siti Khalidah Mohd. 2019. "Factors influencing the information quality of local government financial statement and financial accountability." *Management Science Letters* 9, 1373-1384. DOI:10.5267/j.msl.2019.5.013.
- Diallo, Arouna and Moussa, Richard Kouame. 2020. "Does access to electricity affect poverty? Evidence from Cote d'Ivoire". *Economics Bulletin*. <https://hal.archives-ouvertes.fr/hal-02956563>.
- Fairlie, Robert W; Beltran, Daniel O and Das, Kuntal K. 2010. "Home Computers and Educational Outcomes: Evidence from the NLSY97 and CPS". *Economic Inquiry Vol. 48* Issue 3, p.771-792. DOI: 10.1111/j.1465-7295.2009.00218.x.
- Fan, Shenggen; Hazell, Peter and Thorat, Sukhadeo. 2000. "Government Spending, Growth and Poverty in Rural India". *American Journal Agricultural Economics* 82(4) (November 2000):1038-1051. <https://doi.org/10.1111/0002-9092.00101>.
- Gachassin, Marie; Najman, Boris and Raballand, Gaël. 2010. *The Impact of Roads on Poverty Reduction: A Case Study of Cameroon*. Cameroon: The World Bank. <https://openknowledge.worldbank.org/handle/10986/19924>.
- Hoadley, Ursula. 2008. "The boundaries of care: Education policy interventions for vulnerable children." In Maile, Simeon (Ed.), *Education and Poverty Reduction Strategies: Issues of Policy Coherence – Colloquium Proceedings*, (136-156). HSRC Press. Cape Town. <http://hdl.handle.net/20.500.11910/5183>.
- Idehen, Victor Amadin and Oriazowanlan, Angela Obose. 2020. "Impact of Corruption on Poverty Spurred by Poor Accountability, Transparency and Nation

- Building in Nigeria.” *Nigerian Academy of Management Journal* Vol. 15, Number 3, September 2020. <https://namj.tamng.org/index.php/home/article/view/16>.
- Ikhsan, Ikhsan and Amri, Khairul. 2022. “Does electrification affect rural poverty and households’ non-food spending? Empirical evidence from western Indonesia”. *Cogent Economics & Finance*, 10(1), 2095768. <https://doi.org/10.1080/23322039.2022.2095768>.
- Jung, Chan Su and Lee, Geon. 2013. “Goals, Strategic Planning, and Performance in Government Agencies.” *Public Management Review* Vol. 15, No. 6, 787-815. <http://dx.doi.org/10.1080/14719037.2012>.
- Kaufmann, Daniel; Kraay, Aart and Zoido-Lobaton, P. (1999). *Governance matters (English)*. Policy Research Working Paper No. WPS 2196. Washington, D.C: The WorldBank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/665731468739470954/governance-matters>.
- Mahoney, James. 2012. “The Logic of Process Tracing Tests in the Social Sciences.” *Sociological Methods & Research*, vol. 41(4), pages 570-597, November. <https://doi.org/10.1177/0049124112437709>.
- Moyo, Dambisa. 2009. *Dead aid: Why aid is not working and how there is a better way for Africa*. New York: Farrar, Straus and Giroux. <https://b-ok.asia/book/3399422/be2341>.
- Mumvuma, Takawira. 2016. “Enhancing Service Delivery at the Local Level in Zimbabwe: Challenges and Future Prospects”. In Gómez, Georgina M. and Knorranga, Peter (Eds.), *Local Governance, Economic Development and Institutions* (Part 1, pp. 64-85). <https://b-ok.asia/book/2806538/ee1178>.
- National Research Council. 2007. *State and Local Government Statistics at a Crossroads*. Washington, D.C.: The National Academies Press. <https://b-ok.asia/book/948937/e3f808>.
- Njenga, P., & Davis, A. 2003. “Drawing the road map to rural poverty reduction.” *Transport Reviews*, Vol. 23, No. 2, 217-241. <https://doi.org/10.1080/01441640309889>.
- Olken, Benjamin A. 2006. “Corruption and the costs of redistribution: Micro evidence from Indonesia.” *Journal of Public Economics* 90, 853-870. <https://doi.org/10.1016/j.jpubeco.2005.05.004>.
- Organisation for Economic Co-operation and Development. 2014. *The Governance of Regulators, OECD Best Practice Principles for Regulatory Policy*. Available from https://read.oecd-ilibrary.org/governance/the-governance-of-regulators_9789264209015-en#page4.
- Organisation for Economic Co-operation and Development. 2017. *Skills for a High Performing Civil Service*. Available from https://read.oecd-ilibrary.org/governance/skills-for-a-high-performing-civil-service_9789264280724-en#page1.
- Page, Lucy and Pande, Rohini. 2018. “Ending Global Poverty: Why Money Isn’t Enough”. *The Journal of Economic Perspectives*, Vol. 32, No. 4, pp. 173-200. <https://doi.org/10.1257/jep.32.4.173>.
- Resosudarmo, Budy P and Jotzo, Frank. 2009. “Development, Resources and Environment in Eastern Indonesia.” In Resosudarmo, Budy P and Jotzo, Frank (Eds.), *Working with Nature Against Poverty* (Pp. 1-18). <https://b-ok.asia/book/11188151/01d2a6>.
- Rosser, Andrew. 2018. *Beyond access: Making Indonesia’s education system work*. Sydney: Lowy Institute. <https://think-asia.org/handle/11540/8034>.
- Sambodo, Maxensius Tri and Novandra, Rio. 2019. “The state of energy poverty in Indonesia and its impact on welfare.” *Energy Policy Volume 132*, Pages 113-121. <https://doi.org/10.1016/j.enpol.2019.05.029>.

- Sayed, Yusuf. 2008. "Education and poverty reduction/eradication: Omissions, fashions and promises." In Maile, Simeon (Ed.), *Education and Poverty Reduction Strategies: Issues of Policy Coherence – Colloquium Proceedings*, (53-67). Cape Town: HSRC Press. <http://hdl.handle.net/20.500.11910/5183>.
- Schneider, Hartmut. 1999. "Participatory Governance for Poverty Reduction". *Journal of International Development J. Int. Dev.* 11, 521-534. [https://doi.org/10.1002/\(SICI\)1099-1328\(199906\)11:4%3C521::AID-JID599%3E3.0.CO;2-J](https://doi.org/10.1002/(SICI)1099-1328(199906)11:4%3C521::AID-JID599%3E3.0.CO;2-J).
- Sen, Amartya. 2000. *Development as Freedom*. New York: Alfred A. Knoff. <https://b-ok.asia/book/1182669/ddf765>.
- Shoesmith, Dennis; Franklin, Nathan and Hidayat, Rachmat. 2020. "Decentralised Governance in Indonesia's Disadvantaged Regions: A Critique of the Underperforming Model of Local Governance in Eastern Indonesia." *Journal of Current Southeast Asian Affairs*, Vol. 39(3) 359-380. <https://doi.org/10.1177/1868103420963140>.
- Sillah, Bukhari M. S. 2016. "Poverty reduction and good governance: Evidence from Islamic Development Bank member countries." *Global Journal of Quantitative Science* Vol. 3. No. 3, Pp.30-44. https://www.researchgate.net/publication/312017400_Poverty_reduction_and_good_governance_Evidence_from_Islamic_Development_Bank_member_countries.
- Stanton, Anne. 2009. "Decentralisation and Municipalities in South Africa: An Analysis of The Mandate to Deliver Basic Services" (Thesis). Pietermaritzburg: Doctor of Philosophy in Policy and Development Studies, Faculty of Humanities, Development and Social Sciences, University of KwaZulu-Natal. <https://ukzn-dspace.ukzn.ac.za/handle/10413/623>.
- Taylor, Zack. 2016. *Good Governance at the Local Level: Meaning and Measurement – IMFG Papers on Municipal Finance and Governance*. Toronto: Institute on Municipal Finance & Governance, Munk School of Global Affairs, University of Toronto. https://www.researchgate.net/publication/304012216_Good_Governance_at_the_Local_Level_Meaning_and_Measurement.
- Tchoshanov, Mourat A. 2011. "Relationship between teacher knowledge of concepts and connections, teaching practice, and student achievement in middle grades mathematics." *Educational Studies in Mathematics* Vol. 76, No. 2 (March 2011), pp. 141-164. <https://doi.org/10.1007/s10649-010-9269-y>.
- United Nations Development Programme. 2015. *A Users' Guide to Measuring Local Governance*. Oslo: UNDP Oslo Governance Centre. <https://www.undp.org/publications/users-guide-measuring-local-governance-0>.
- Van Evera, Stephen. 1997. *Guide to Methods for Students of Political Science*. New York: Cornell University Press.