

REVIEW OF THE DEVELOPMENT OUTCOMES IN KOMPAK DISTRICTS 2015-2019

Report Summary





Review of The Development Outcomes in Kompak Districts 2015—2019 Report Summary ©(2022) Kolaborasi Masyarakat dan Pelayanan untuk Kesejahteraan (KOMPAK)

Writers:

Gregorius D.V. Pattinasarany Ihsan Haerudin Lilik Iswanto

This publication is supported by the Australian Government through the KOMPAK (Governance for Growth) Program. The findings, interpretations and conclusions contained in this publication do not necessarily reflect the views of the Government of Indonesia or the Government of Australia. This publication may be copied and distributed for non-commercial purposes.

For further information regarding this publication, please contact communication@kompak.or.id The publication is also available at www.kompak.or.id

Kolaborasi Masyarakat dan Pelayanan untuk Kesejahteraan (KOMPAK) Program kemitraan Pemerintah Australia-Indonesia

Jalan Diponegoro No. 72 Jakarta Pusat, 10320 Phone (021) 8067 5000 | Fax (021) 3190 3090

Contents

Background	1
Methodology	2
Findings	7
Recommendations for Final Evaluation	. 11
Referensi	. 12

List of Figures, Tables, and Boxes

Figure 1.	Scope of Analysis	2
Figure 2.	Logical Framework of the Contribution of PFM Flagship Activities to Achieve	2
	Programme Goals	5
Table 1.	Summary of ATE Macro Development Outcomes	7
Table 2.	ATE Summary of Public Service Access Outcomes	3
Box 1.	Recommendations for Improvement/Refocusing of Several PFM Flagship	
	Activities	9

Background

Starting in 2015, the KOMPAK programme has been implemented in 24 districts across seven provinces. Although progress was made in those 24 districts over the last five years, there are challenges that still need to be addressed. This report reviews the development outcomes in KOMPAK districts from 2015 to 2019 and examines the contribution of KOMPAK flagship activities, before the programme concludes in mid-2022.

In general, KOMPAK aims to help the poor and vulnerable receive the benefits of improved basic service provision and economic opportunities. To achieve this goal, KOMPAK supports various government capability enhancement initiatives in the governance and provision of basic services and local economic development at the central, provincial, district, sub-district and village levels (KOMPAK, 2020).

KOMPAK activities are grouped into seven flagship activities with the 2019 focus as follows (KOMPAK, 2020):

- Public Financial Management (PFM); applying instruments and analyses of public financial management to improve the delivery of basic services;
- Civil Registration and Vital Statistics (CRVS); increasing the ownership of legal identity documents and improvement in population data;
- Kecamatan and Village Strengthening (KVS); making sub-districts and villages as centres for improving the quality of basic services;
- Village Information Systems; encouraging the use of data for planning and budgeting;
- Social Accountability; strengthening social accountability to improve the quality of service provision;
- Market Linkage; promoting market intermediaries to strengthen local economic development; and
- Health, Education and Innovation; developing and testing innovations to improve the quality of healthcare, education and other services.

Through these seven flagship activities, KOMPAK carries out various activities to achieve end-of-facility outcomes (EOFO) and intermediate outcomes (IO). Activities in the PFM Flagship comprehensively support other KOMPAK Flagship activities. The variety and wide range of PFM Flagship activities is an important asset to achieve (or even accelerate) KOMPAK's EOFO and IO targets. However, the synergy between different flagships also needs special attention to support the achievement of EOFO and IO.

This report examines how KOMPAK activities as a whole contributed to the development outcomes of the KOMPAK districts. An in-depth analysis was carried out to measure the public financial management performance of KOMPAK districts. This reflects the chain of support between PFM Flagships and other flagships.

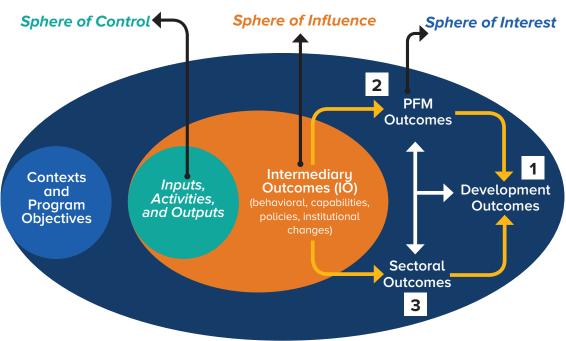
Methodology

n carrying out a review of the development outcomes in the 24 KOMPAK districts, this report analyses yearly changes of several macro development indicators, as well as the sectoral indicators that are relevant to the programme's EOFO. In addition, this report reviews the achievements and changes in district budgetary outcomes using selected indicators from the Public Expenditure and Financial Accountability (PEFA) framework.

The caveats to carrying out this review are as follows:

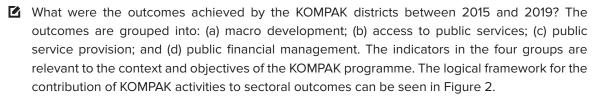
- A number of the indicators reviewed are development outcomes situated at the macro level, that might take years to achieve, and are influenced by many factors. The increase or decrease in the magnitude of the indicators is not fully under the programme's control, but is still within the scope of the programme's sphere of interest (see Figure 1);
- Several achievements at the output level that are fully within the programme's sphere of control, and at the intermediate outcome level (under the sphere influence) have been reported periodically in KOMPAK Annual and Six-Monthly Reports. These achievements are not reviewed in this report; and
- This analysis was carried out when KOMPAK activities in the districts were still on-going and the complete chain of the KOMPAK programme's results had not been achieved. In addition, although KOMPAK activities, as reported in the Annual/Six-Monthly Reports, succeeded in assisting local governments in adopting various innovative instruments and encouraging policy and/or institutional changes in 24 districts, it will still take time for those changes to come into effect.

Figure 1. Scope of Analysis





This study intends to answer the following questions:



To what extent are these outcomes sufficient or need improvement, compared to similar outcomes in non-KOMPAK districts?

☑ Of the outcomes that need improvement, why do they need it, particularly from the public financial management point of view? Also, what improvements need to be made before the KOMPAK programme concludes?

Figure 2 illustrates how the chain of activities in the PFM Flagship comprehensively supports KOMPAK's EOFO and IO achievements.

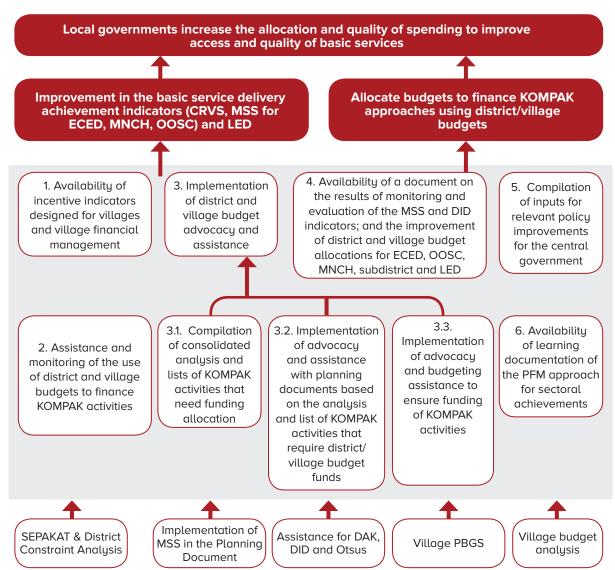


Figure 2. Logical Framework of the Contribution of PFM Flagship Activities to Achieve Programme Goals

One of the goals of the KOMPAK programme is to improve public services for vulnerable groups including the poor, women, and people with disabilities. Further analysis was undertaken to compare different outcomes in the access to public services between vulnerable groups (poor vs non-poor, women vs men, and persons with disabilities vs non-disabled persons) in KOMPAK districts.¹

This is a preliminary report and only uses data from 2015 to 2019. Tracking outcomes at the end of the KOMPAK programme by adding 2020 data, improving the methodology, and using data at a more detailed level, will be able to provide a more accurate picture of KOMPAK programme's outcomes.

This study uses the Difference-in-Differences (DD) method which compares changes in the outcomes over time between a group that follows a programme (the treatment group) and a group that does not follow the programme (the control group). In order to implement DD, we measured the outcomes of groups participating in the programme, and those not participating, both before and after programme implementation. The measurement of this outcome is estimated through the Average Treatment Effect (ATE). In the context of this report, ATE measures the effect of implementing KOMPAK's activities on increasing or decreasing KOMPAK's targeted outcomes. This is measured by the difference between the average outcome of the treatment group, which consists of 24 KOMPAK districts, and the average outcome of the control group, which consists of 24 non-KOMPAK districts, during the period before and after the implementation of the activities.

This report selects non-KOMPAK districts using the Mahalanobis Distance Matching (MDM) method. The five indicators/characteristics (with 2015 conditions as the base year) used in the selection of non-KOMPAK districts using the MDM method are: population, area, poverty level, gross regional domestic product (GRDP) per capita, and district budget per capita. The MDM method requires the use of reference districts in the calculations. The reference district used in this report is the Kendal District in Central Java. This selection is based on the consideration that Kendal has characteristics that lie around the average of all five indicators used in the MDM calculation.²

The mathematical model of the analysis used in this report is as follows (see, among others, Wooldridge, 2013):

$$\begin{split} y &= \beta_0 + \beta_1 PDRBpc + \beta_2 APBDpc + \beta_3 d2016 + \beta_4 d2017 + \beta_5 d2018 + \beta_6 d2019 \\ &+ \beta_7 dKOMPAK + \delta_1 d2016.dKOMPAK + \delta_2 d2017.dKOMPAK \\ &+ \delta_3 d2018.dKOMPAK + \delta_4 d2019.dKOMPAK + u \end{split}$$

where:

У	Outcomes (such as poverty rate, HDI, Gender Development Index)
PDRBpc	Gross Regional Domestic Product (GRDP) per capita
APBDpc	Total expenditure per capita in the district budget
	These two variables are used to control economic activity and district level
	spending; In estimating the improvement in access to education services, the
	total government expenditure per capita of the education function is used, while
	the estimation of the improvement in access to health services uses the total
	government expenditure per capita of the health function.

¹ This calculation is possible because achievement indicators are calculated using individual and household level data sourced from the national socio-economic survey (SUSENAS). Meanwhile at the macro level, the available data does not allow disaggregation by vulnerable groups, except for the human development index (HDI), which is disaggregated by gender.

² The non-KOMPAK districts selected in the analysis are: Aceh Besar, Southwest Aceh, Gayo Lues, Cilacap, Wonosobo, Sragen, Ponorogo, Tulungagung, Mojokerto, Bojonegoro, West Lombok, Central Lombok, Dompu, West Sumbawa, Selayar Islands, Luwu North, Manokwari, South Sorong, Raja Ampat, Arfak Mountains, Yapen Islands, Biak Numfor, Sarmi, and Deiyai.

d2016-d2019	dummy variable for year; the value of d2016 is 1 if the observation is for 2016, and 0 if not
dkompak	dummy variable for KOMPAK districts; the value is 1 if the observation is a KOMPAK district, and 0 if otherwise
d2016.dKOMPAK-	d2019.dKOMPAK: the interaction between the dummy variable for year and dummy variable for KOMPAK districts
δ1- δ4	ATE estimate for each year
u	error terms

To find out if there are differences in achievement between KOMPAK districts on a disaggregated basis—such as between individuals from households with per capita expenditures of the bottom 40 percent (Bottom-40) vs the top 60 percent (Upper-60), women vs men, and persons with disabilities vs non-disabled persons—Difference-in-Difference-in-Differences (DDD) analysis was performed. In principle, DDD analysis is an extension of the DD model in which there are interactions between three dummy variables. The expansion of the DDD mathematical model of access to public services used in this report is as follows:

 $y = \beta_0 + \beta 1 PDRBpc + \beta_2 APBDpc + \beta_3 d2016 + \beta_4 d2017 + \beta_5 d2018 + \beta_6 d2019 + \beta_2 dKOMPAK + \beta_0 dPerempuan + \beta_0 2016.dKOMPAK$

+ $\beta_{10}d2017.dKOMPAK+\beta_{11}d2018.dKOMPAK + \beta_{12}d2019.dKOMPAK$

+ $\beta_{13}d2016.dPerempuan + \beta_{14}d2017.dPerempuan + \beta_{15}d2018.dPerempuan$

+ β_{15} d2019.dPerempuan + β_{17} dKOMPAK.dPerempuan

+ $\delta_1 d2016.dKOMPAK.dPerempuan + \delta_2 d2017.dKOMPAK.dPerempuan$

+ $\delta_3 d2018.dKOMPAK.dPerempuan + \delta_4 d2019.dKOMPAK.dPerempuan + u$

whereas:

dPerempuan	dummy variable for female; the value is 1 if the individual is a female, and 0 if the						
	individual is a male						
d2016.dKOMPAK.dPerempuan-d2019.dKOMPAK.dPerempuan: the interaction between the dummy							
	variable for year, KOMPAK and female						

δ1- δ4 ATE estimate for each year

The analysis was carried out at the district level for macro development outcomes; at the individual level for access to public services, and at the village level for public service provision. Data on macro development outcomes—consisting of poverty level, HDI, and gender development index (GDI)— and GRDP were obtained from BPS publications. The average macro development outcomes were calculated on a weighted basis by weighing the total population of the district (for which data is sourced from the BPS Dynamic Table). The analysis of DD and DDD was carried out in a weighted manner.

Data on access to public services—consisting of School Enrollment Rates (APS) for various age groups, immunisation rates, and childbirth rates—were calculated using the 2015–2019 SUSENAS data. The average achievements in improving access to public services are aggregated at the district level using individual weights in the SUSENAS data. DD and DDD analysis were carried out on a weighted basis.

The achievements in the provision of public services in the villages consisted of: the presence of educational facilities—early childhood education (PAUD), kindergarten (TK), and elementary schools (SD)/equivalent—and the presence of health facilities—village maternity posts (polindes) and village health posts (poskesdes), as well as integrated service posts (posyandu), were calculated using 2014,

2018 and 2019 Village Potential (PODES) data. The average achievement of public service provision at the district level was calculated without using a weight because of the unavailability of the village population size in the PODES data. Hence, the analysis of DD and DDD were carried out without using a weight (unweighted).

Data on the achievement of public financial management is sourced from the Directorate General of Fiscal Balance (DJPK), Ministry of Finance. The same applies to data on the realisation of the district budget (APBD).

Findings

This report examines the contribution of KOMPAK's flagships toward progress in achieving KOMPAK's objectives. The four groups of outcomes studied here are: (a) macro development, (b) access to public services, (c) provision of public service facilities, and (d) public financial management. In the first three groups, outcome was measured based on the Average Treatment Effect (ATE). ATE measures the difference in the average outcome in the 24 KOMPAK districts (treatment districts) with the average outcome in the 24 non-KOMPAK districts (control districts) over a certain period of time (using 2015 as the base year, the start of KOMPAK's activities).³ To enrich the findings, a number of performance indicators also show the ATE in KOMPAK's districts disaggregated by gender (women vs men), households with the lowest 40 percent per capita expenditure (Bottom-40) vs the top 60 percent (Upper-60), and persons with disabilities vs non-disabled persons. Meanwhile, the analysis of public financial management achievements is carried out using the subnational PEFA (Public Expenditure and Financial Accountability) framework.

Table 1 summarises the macro development outcomes, and Table 2 summarises the achievements in accessing public services. The notation used is as follows:

- + Outcomes in KOMPAK districts have increased more than in non-KOMPAK districts. This shows that KOMPAK's activities contribute to achievement acceleration in KOMPAK districts. Because the poverty rate has a "negative" direction (in the sense that a lower poverty rate is better) the opposite holds true.
- Outcomes in KOMPAK districts experienced a lower increase than in non-KOMPAK districts. It can be said that KOMPAK activities have not been optimal in accelerating the achievements in KOMPAK districts. The opposite is true for the poverty level indicator.
- ts ATE is not statistically significant.
- X ATE is not counted because there is no data, inconsistent or irrelevant data.

	All Districts						
Indicators	2016	2017	2018	2019			
Poverty Rate	+	-	-	-			
Human Development Index	ts	+	+	+			
Gender Development Index	Х	ts	ts	ts			

Table 1. Summary of ATE Macro Development Outcomes

³ Indicators on macro development outcomes are calculated at the district level, while the access to public services outcomes are calculated at the individual level. The outcomes in public service provision are calculated at the village level. The ATE calculates the average increase of the 24 KOMPAK districts relative to the average of the 24 non-KOMPAK districts

Macro development outcomes: Activities that have been carried out so far in the 24 KOMPAK districts — including those related to the evaluation of various development outcomes of local governments through SEPAKAT and District Budget Constraint Analysis; assistance in the preparation of planning documents such as RPJMD, RKPD and APBD level provinces and districts including GESI support; integration of Minimum Service Standards (MSS) in planning documents, monitoring and evaluation of MSS indicator achievements; as well as strengthening sub-district and village capacities — have contributed to the acceleration of poverty reduction (2017-2019) and the acceleration of HDI improvement (2017-2019) in KOMPAK districts relative to non-KOMPAK districts. However, KOMPAK's support for gender equality and social inclusion has not reduced the gap between male and female welfare levels, as reflected in the GDI.

	All Observations			Female vs. Male				Bottom-40 vs. Upper- 60				
Indicators	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
School Enrollment Rate 3—6 y.o.	-	-	-	-	+	-	-	-	-	-	-	-
School Enrollment Rate 7—12 y.o.	-	+	-	-	-	-	-	-	-	-	-	-
School Enrollment Rate 13—15 y.o.	+	+	+	+	+	-	-	-	-	ts	-	ts
Immunisation Rate	ts	+	Х	-	Х	Х	Х	Х	Х	Х	Х	Х
Childbirth rates	+	+	+	+	Х	Х	Х	Х	+	-	+	+

Table 2. ATE Summary of Public Service Access Outcomes

Achievement of access to public services: In general, the increase in School Enrollment in KOMPAK districts slowed among children aged 3-6 years (equivalent to PAUD and/or TK), fluctuated among children aged 7-12, and accelerated among children aged 13-15. The School Enrollment Rate of girls aged 3-6 years was higher than for boys (2018–2019), as was the School Enrollment Rate for 13–15 year-olds in all observation years. The reduced increase in the School Enrollment Rate for girls relative to boys aged 3-6 years in 2018-2019, and for those aged 13-15 years in 2017-2019, is an ideal outcome toward equality in accessing basic services for both genders, as the reduced increase for girls will allow the enrollment rate for boys to catch up.

However, what requires attention is the School Enrollment Rate of children from the lowest 40 percent of families, which is experiencing a slowdown compared to the rate of children from the top 60 percent of families. Given that enrollment of children from the lowest 40 percent of families is always lower than that of the top 60 percent, a slower enrollment rate of children from the bottom 40 percent will widen the gap further. This shows that assistance in planning and budgeting and the use of SEPAKAT and Analysis of Regency Budget Constraints; integrating MSS; assistance in the preparation of DAK proposals; assistance in increasing income from DID; assistance in the use of the Special Autonomy Fund, and so on, that have the potential to improve the quality of planning, implementation, and the availability of funds for teaching and learning activities, is still not optimal.

Achievement of providing public service facilities: Using village-level data sourced from PODES in 2014, 2018 and 2019, it was noted that the provision of educational service facilities experienced a lower increase, while the provision of health service facilities experienced a higher increase. KOMPAK

activities, particularly those related to assistance for and integration of MSS in the provincial; district and village planning and budgeting processes; the use of district and village level SEPAKAT, and strengthening of PTPD, need to focus on providing more education and health service facilities that are more accessible to the community.

Achievement of public financial management: Analysis of the achievements of public financial management produced mixed results. Achievement in the Aggregate Budget Credibility indicator in 2014-2016 and 2017-2019 recorded an improvement. However, the indicators for the Budget Credibility by Composition of Expenditures does not appear to have improved during the same periods. It therefore can be concluded that the increase in the Aggregate Budget Credibility in KOMPAK districts was not followed by an increase in the Budget Credibility by Composition of Expenditures. KOMPAK's assistance in planning and budgeting processes at the district (and also village) level needs to accurately consider district needs for one fiscal year. This can be implemented in accordance with assessing existing constraints such as the availability of mandatory revenue and expenditures (through Analysis of District Budget Constraints, preparation of DAK proposals, DID assistance); reviewing existing laws and regulations (such as MSS fulfillment), as well as taking into account the current and future socio-economic conditions and development outcomes and public services (through SEPAKAT).

KOMPAK activities as a whole contributed to accelerated improvement in a number of the outcomes evaluated in this report. However, the report also shows a need for improvement with the:

- acceleration of poverty reduction and increase in HDI focused on KOMPAK districts in Eastern Indonesia;
- accelerated increase in the School Enrollment Rate for children aged 3-6 years for children from the lowest 40 percent of families, as well as in general, and
- provision of PAUD and TK facilities, poskesdes and polindes, and posyandu.

Box 1.

Recommendations for Improvement/ Refocusing of Several PFM Flagship Activities

The comprehensive range of PFM Flagship activities is an important asset in achieving KOMPAK's EOFO and IO targets. This section discusses how to optimize activities in PFM Flagships to leverage programme achievements.

PFM Flaghsip activities include four instruments and analyses of public financial management, namely: Minimum Service Standards (MSS) for basic services; implementation of the Integrated Poverty Analysis and Evaluation Planning and Budgeting System (SEPAKAT); District Budget Constraint Analysis, and E-Planning and Budgeting (KOMPAK, 2020).

The implementation of SEPAKAT and District Budget Constraint Analysis (BCA) plays an important role in evaluating various development and planning achievements by local governments. As of 2019, SEPAKAT had been implemented in 13 KOMPAK districts of

which 10 are located in Western Indonesia; while BCA was completed in nine districts in Western Indonesia and six in Eastern Indonesia (KOMPAK, 2020).⁴ The report's findings that recommend accelerating poverty reduction and increasing HDI in KOMPAK's 11 districts in Eastern Indonesia can be attributed to the absence of SEPAKAT in all 11 districts. In 2020, the implementation of SEPAKAT is planned to be carried out in those same districts (KOMPAK, 2020). Although this plan is expected to improve poverty and HDI achievements in Eastern Indonesia, it is hoped that the acceleration of implementation in the remaining districts that have not yet carried out SEPAKAT will also achieve optimal results. BCA activities are not planned for 2020 and KOMPAK will identify more targeted advocacy strategies, design analysis and technical assistance that are more suited to the needs of district governments (KOMPAK, 2020). The findings from BCA activities in 15 districts (KOMPAK, 2021a) need to be summarized and adapted to the context of each district that has not implemented BCA. In this way, the results can be communicated when the KOMPAK PFM team carries out various technical assistance related to district government planning and budgeting.

At the national level, KOMPAK supports Bappenas in conducting a background study on indicators for the National Action Plan (RAN) for PAUD, as well as contributing to the identification of PAUD as one of the national programme priorities in the 2020-2024 RPJMN. In addition, KOMPAK has also developed a monitoring framework that includes indicators on education, health and nutrition, as well as child protection, care and welfare. The data show a 4.12 percentage point decline in the School Enrollment Rate for children aged 3-6 years between 2018 and 2019 in KOMPAK districts as a whole. The PFM team, in collaboration with the Health, Education and Innovation Team, can advocate for local governments (especially in the KOMPAK districts in Western Indonesia) to take steps to ensure an increase in the participation of children aged 3-6 years in teaching and learning activities, in PAUD and Kindergarten. This can be aligned with the implementation of the PAUD MSS and the funding needed to achieve the MSS, as well as ensuring that the Non-Physical DAK for Operational Assistance for the Implementation of Early Childhood Education (BOP PAUD) is utilized optimally. In addition, the PFM Team needs to work closely with the Gender Equality and Social Inclusion (GESI) Team to make sure district government planning and budgeting takes into account an equal level of PAUD participation for girls from the lowest 40 percent of families.

The BCA study (KOMPAK, 2021a) found, among other things, that in 2018 all 15 KOMPAK districts had met the mandatory spending requirements for education and health. The study further states that the challenges of education and health spending are no longer related to meeting mandatory expenditures, but rather to optimizing funding to increase the number and quality of services. The suboptimal use of funding is reflected in data which show a decrease in the proportion of villages with PAUD and TK, poskesdes, polindes, and posyandu facilities at the village level, between 2018 and 2019. The PFM Team has also conducted trials of a village performance-based financing model in six districts (in Aceh, East Java, and West Nusa Tenggara provinces) that links expenditure allocation and performance. The various interventions and initiatives carried out show that the PFM Team needs to advocate for district and village governments to improve the provision of education and health facilities under their respective authorities, as well as continuing to work with other teams to accelerate development achievements in all KOMPAK districts.

⁴ Until 2019, SEPAKAT and Budget Constraint Analysis had not been carried out in the districts of Papua and Papua Barat Provinces

Recommendations for Final Evaluation

This review of the development outcomes in KOMPAK districts can be further improved as the current analysis is limited to the data from 2015 (as the base year) to 2019 (the last year where most of the data used were available). Extending the observation period data to include 2020 is one way to improve the review as that year Indonesia and the whole world was hit by the COVID-19 pandemic and its economic, social, and political impact. KOMPAK supported its 24 districts by providing assistance in revising their budgets (APBD) to respond to the impact of COVID-19, as well as by making a number of adjustments in their programmes and activities (KOMPAK 2021b). The effect of this change in activity can be seen in the development outcome results.

Improvements can also be made by using more reliable outcome indicator definitions at the district, individual, and village levels to improve ATE estimates. For example, the School Enrollment Rate indicator for children aged 3-6 year-olds which experienced a drastic decline in 2019; the level of complete immunisation in toddlers which experienced drastic fluctuations, as well as the presence of education and health facilities in the villages. The enrollment rate indicator can also use the net participation rate (APM) or the gross participation rate (APK). The definition of complete immunisation could match that used by international organizations such as the World Health Organization (WHO). Village education and health facilities could use the concept of access (in following the MSS indicators). In addition, the use of other control variables should be done to improve the quality of ATE estimations.

The use of more data before the base year could also improve the quality of the ATE estimations and check the assumption of using the DD and DDD models. Finally, due to not all KOMPAK activities being carried out in all our districts, the variations at the beginning and end of each activity, as well as the different levels of district government commitment for each activity, it is possible to establish a variable level of effort from KOMPAK support at the district level. That effort level could be used to estimate ATEs in more detail.

With these improvements, it is hoped that ATE estimates can more accurately describe the contribution of KOMPAK's activities in achieving development outcomes.

Referensi

- BPS. 2020. Indikator Kesejahteraan Rakyat 2020: Kesempatan Penyandang Disabilitas Terhadap Pendidikan dan Pekerjaan. Jakarta: Badan Pusat Statistik.
- BPS. 2021a. *Profil Kemiskinan di Indonesia September 2020*. Berita Resmi Statistik. Jakarta: Badan Pusat Statistik.
- BPS. 2021b. *Indeks Pembangunan Manusia (IPM) Tahun 2020*. Berita Resmi Statistik. Jakarta: Badan Pusat Statistik.
- Gertler, P.J., Martinez, S., Premand, P., Rawlings, L.R., and Vermeersch, C.M.J. 2016. *Impact Evaluation in Practice, second edition*. Washington, DC: Inter-American Development Bank and World Bank.
- King, G. and Nielsen, R. 2019. *Why Propensity Scores Should Not Be Used for Matching*. Political Analysis, 27, 4, Pp. 435–454.
- KOMPAK. 2020. Laporan Tahunan Kompak: Januari–Desember 2019. Jakarta: KOMPAK.
- KOMPAK. 2021a. Public Financial Management Challenges: Lessons Learned from the Budget Constraint Analysis in 15 Districts. Jakarta: KOMPAK.
- KOMPAK. 2021b. KOMPAK six-monthly report: January—June 2020. Jakata: KOMPAK.
- PEFA Secretariat. 2016. Supplementary guidance for subnational PEFA assessments. Washington, DC.
- UNDP. 2020. *Human Development Report 2020: The Next Frontier Human Development and The Anthropocene*. New York: United Nations Development Programme.
- Wooldridge, J.M. 2013. Introductory Econometrics: A Modern Approach, Fifth Edition. Mason, OH: South-Western, Cengage Learning.
- World Bank. 2020. Indonesia: Subnational-PEFA of Lamongan District 2018. Draft Final Report. Jakarta.



