

## **Evaluation of the Community-Based Drinking Water and Sanitation Provision Program (PAMSIMAS) III in Aceh Jaya Regency**

**Papat Maliki**

Bapperida Kab. Aceh Jaya, Indonesia

Email: [papat.basith@gmail.com](mailto:papat.basith@gmail.com)

---

### **ABSTRACT**

The provision of community-based drinking water and sanitation is a program aimed at addressing sanitation problems. This study evaluates the performance of clean water services and management through the PAMSIMAS III Program in Aceh Jaya Regency from 2017 to 2023. Using qualitative methods, secondary data from the PAMSIMAS website, and primary data from village heads, communities, and the PAMSIMAS III team were analyzed descriptively. The research was conducted in selected villages of Aceh Jaya, chosen as recipients of the PAMSIMAS III program, to increase public awareness of drinking water provision. The evaluation criteria effectiveness, efficiency, adequacy, equity, and responsiveness show that the PAMSIMAS III program has been successfully implemented but not optimally. Key challenges include limited human resource quality, under-functioning institutions, and poor communication and coordination. For rural communities receiving PAMSIMAS III assistance, socialization on healthy lifestyles and environmental care is necessary. Implementing institutions are encouraged to establish a dedicated forum to improve inter-agency coordination. Local government policies and strategies should focus on attracting investors to support the development and management of drinking water, sanitation, and environmental sustainability in Aceh Jaya Regency. Finally, strengthening the commitment and consistency of village officials and communities in managing clean water facilities is essential to ensure long-term access to clean water.

**Keywords:** *PAMSIMAS III*

---

This article is licensed under [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/) 

### **INTRODUCTION**

Based on the geographical location of Aceh Jaya Regency is located at the coordinates 04°22' 05°16' North Latitude and 95°10' 96°03' East Longitude with an area of 387,272.36 Ha consisting of 9 Districts, 21 Mukim, 172 Gampongs and 34 small islands, the sea area of authority is 4 miles, covering an area of 2,718.50 Km<sup>2</sup>, the airspace over land and sea authority, and includes the space within the earth under the land and sea area of authority.

Geographically, the sub-districts in the Aceh Jaya Regency area are directly adjacent to the Indonesian Ocean. The coastal strip is also the most densely populated residential area compared to residential areas far from the coast. The network of roads along the coast that connects Banda Aceh with cities in the western and southern parts of the province is a very supportive factor for residents to build settlements along the coast. Trade centers and various other economic activities are also generally located in sub-district cities along the coast of this region.

Administratively, Aceh Jaya Regency consists of 9 sub-districts, 21 sub-districts, and 172 villages. This region has clear administrative boundaries, namely to the north it borders Aceh Besar Regency and Pidie Regency, to the south it borders the Indonesian Ocean and West Aceh Regency, to the east it borders Pidie Regency and West Aceh Regency, while to the west it is directly adjacent to the Indonesian Ocean.

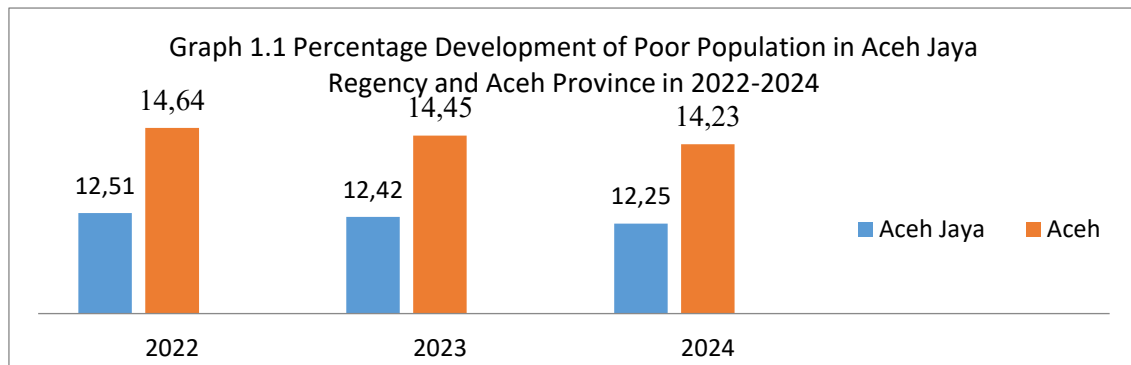
The fulfillment of basic drinking water and sanitation needs for rural communities is the Government's main policy to accelerate the improvement and distribution of welfare, especially for low-income communities. The Community-Based Drinking Water and Sanitation Provision Program (PAMSIMAS) is one of the leading programs in fulfilling these basic needs, which is oriented to the community empowerment process so that the community is able to independently provide proper and sustainable drinking water and sanitation facilities. The Government of Indonesia is committed to achieving the target, namely the number of low-income people to access sustainable drinking water and

## Evaluation of the Community-Based Drinking Water and Sanitation Provision Program (PAMSIMAS) III in Aceh Jaya Regency

sanitation services, as well as increasing the value and behavior of clean and healthy living in order to achieve the target of safe drinking water and sanitation through the mainstreaming and expansion of community-based development approaches. PAMSIMAS is carried out for 5 (five) years, namely the PAMSIMAS Program phase I with the aim of increasing the number of rural and suburban poor (peri-urban) who can access proper drinking water and sanitation and practice clean and healthy living behaviors. The PAMSIMAS Phase II program aims to increase the number of low-income communities in rural and peri-urban areas who can access sustainable drinking water and sanitation, increasing the application of values and skills for clean and healthy living. The PAMSIMAS Phase III program aims to increase the number of underserved communities in rural and peri-urban areas who can access drinking water and sanitation continuously.

As stated in Law number 32 of 2004 concerning Regional Government and Government Regulation Number 38 of 2007 concerning the Division of Government Affairs between the Government, Provincial Regional Governments, and Regency/City Regional Governments, that the provision of basic services including drinking water and sanitation is a mandatory affair under the authority of the Regional Government.

Although in the last 3 (three) years the number of poor people in Aceh Jaya Regency has decreased, there are still many people in rural areas who have difficulty getting the provision of drinking water and sanitation. The implementation of the PAMSIMAS III Program in Aceh Jaya Regency faces various challenges, such as the low quality of Human Resources (HR), institutions that have not functioned optimally, and ineffective coordination and communication between implementing agencies. In addition, community participation in paying dues for operations and maintenance is also very low, which threatens the sustainability of the program. The number of poor people who receive assistance from the Aceh Jaya Regency PAMSIMAS III program in 2022 – 2024 can be seen in Graph 1 below:



Source : Central Statistics Agency of Aceh Jaya Regency (2024)

Based on Graph 1, the percentage of the poor population in Aceh Jaya Regency has decreased in 2022 by 12.51 percent, in 2023 by 12.42 percent and in 2024 by 12.25 percent and the number of poor people is still below the percentage of poor people in Aceh Province where the poor population has also decreased, namely in 2022 by 14.64 percent, in 2023 it is 14.45 percent and in 2024 it is 14.23 percent. The decrease in the number of poor people in Aceh Jaya Regency is due to the Gampong Fund Budget (ADG) which is distributed to villages. so that the number of villages that received assistance from the PAMSIMAS III Program was 67 villages spread across 9 sub-districts, namely Jaya, Indra Jaya, Sampoiniet, Darul Hikmah, Setia Bakti, Panga, Krueng Sabee, Teunom and Pasie Raya Districts. The results of the implementation of the PAMSIMAS III Program in Aceh Jaya Regency will be evaluated which is a process of measuring effectiveness to achieve the goals. The results of this

evaluation will then be used as a reference for the analysis of the next PAMSIMAS program. (Badan Pusat Statistik, n.d.)

The PAMSIMAS program has a crucial role in increasing access to drinking water and proper sanitation, especially for the poor and vulnerable in rural areas. The success of this program not only has an impact on improving the level of public health through Clean and Healthy Living Behavior (PHBS), but also supports the achievement of sustainable development targets (SDGs), especially Goal 6 on clean water and proper sanitation. A comprehensive evaluation of the program is urgent to identify the weaknesses and strengths of its implementation, so that improvement strategies can be formulated for the next phase and ensure the sustainability of its benefits.

Recent research in the last decade provides in-depth insights into community-based water supply programs, institutional coordination, and post-disaster recovery relevant to the implementation of PAMSIMAS phase III. Daniel et al. (2021, 2022) conducted a comprehensive analysis of the sustainability of PAMSIMAS by examining 28,936 projects in 33 provinces, finding that 85.4% of the system is fully functional, where strong management, good financial status, and household connections increase the probability of failure by up to 98%. Their follow-up research reveals that health promotion activities and women's participation have a significant impact on the functioning of the system, while financial contribution through the tariff system is crucial for sustainability. Kurniatin et al. (2022) identified post-program sustainability challenges, namely difficulties in maintaining management and preventing facility neglect due to limited community resources and village governments. In the post-disaster context, Nazari et al. (2024) identified critical factors for emergency water provision that emphasized a comprehensive approach including infrastructure readiness and inter-agency coordination, while Krishna (2019) showed that WASH recovery programs require health education, adherence to social norms, and community participation through interconnected approaches. Research on Aceh's post-tsunami recovery by Aida et al. (2023) reveals various patterns of recovery and inter-agency coordination challenges, supported by network analysis that shows a complex organizational landscape with polycentric governance systems.

A multi-stakeholder coordination study by Panneer (2024) and Abdeen et al. (2021) highlights challenges including hierarchical breakdowns, information gaps, and administrative inflexibility during disaster management. Water governance research by Bayu et al. (2020) identified government effectiveness, regulatory quality, and policy inclusivity as crucial elements, noting that only 27% of countries consistently implemented water access policies for poor populations, while realist reviews identified five key mechanisms (accountability, diffusion, market dynamics, ownership, and social pressures) that explain the outcomes of community participation. Studies of community participation show a quantitative impact on disaster resilience, where active community participants are 23% more likely to adopt mitigation measures, and participatory processes play an important role in influencing power dynamics and institutional change. This literature emphasizes the need for an integrated approach that combines institutional analysis, stakeholder engagement, and policy coherence while addressing implementation challenges and coordination gaps that are particularly relevant in post-disaster contexts such as Aceh Jaya.

There is a research gap regarding the evaluation of the performance of the PAMSIMAS III Program with a multidimensional approach (effectiveness, efficiency, adequacy, alignment, responsiveness, and accuracy), especially in Aceh Jaya Regency. In addition, an in-depth analysis of supporting and inhibiting factors such as the quality of human resources, institutions, and communication, as well as strategic solutions to address the problem of low community participation and program sustainability is still not widely disclosed. This research makes a new contribution by conducting a comprehensive evaluation of the implementation of the PAMSIMAS III Program in Aceh Jaya Regency using complete performance criteria. This study also integrates the analysis of the

geographical and historical context after the Aceh tsunami disaster that affects groundwater quality, and offers specific and concrete policy recommendations based on the identification of the key inhibitory and driving factors found in the field.

The purpose of this study is to evaluate the performance of the PAMSIMAS III Program in Aceh Jaya Regency for the 2017-2023 period based on the criteria of effectiveness, efficiency, adequacy, harmony, responsiveness, and precision. The benefits of this research are: (1) Academically, enriching the treasures of Public Administration and Public Policy, especially in the evaluation of community-based programs; (2) For local governments and stakeholders, the results of this evaluation can be used as input and basis for consideration in planning, implementing, and improving similar programs in the future to achieve more optimal and sustainable results; (3) For the community, it is hoped that it can increase awareness of the importance of participation in maintaining the sustainability of the drinking water and sanitation supply program.

## **METHOD**

This study uses qualitative methods and types of secondary data obtained from the PAMSIMAS website and primary data from informants such as village heads, communities and the PAMSIMAS III implementation team, then the data is analyzed descriptively. This research was conducted on villages in Aceh Jaya Regency that were selected as recipient villages of the PAMSIMAS III program in Aceh Jaya Regency.

All sub-districts in Aceh Jaya Regency receive assistance from the Community-Based Drinking Water and Sanitation Provision Program (PAMSIMAS) III and focus on villages that are not reached by the provision of drinking water and sanitation only.

The condition before the entry of the PAMSIMAS III program, in general, rural communities had difficulty getting clean water for daily consumption. The PAMSIMAS III program in its implementation must consider quality (i.e. the water consumed must have good quality), quantity (i.e. the quantity is sufficient), continuity (i.e. the amount is sustainable) and the price is affordable. The PAMSIMAS III program in its implementation strongly supports the government in 2 ways, firstly to increase the coverage of the population to proper and sustainable drinking water and sanitation services, namely 100% access to drinking water and 100% access to sanitation, and second, community-based total sanitation, namely by involving the community. The performance evaluation of PAMSIMAS Aceh Jaya Regency includes effectiveness, efficiency, adequacy, leveling, responsiveness, and accuracy.

### **a. Effectiveness**

Effectiveness is a performance to select various alternatives to be used as recommendations based on consideration of whether the recommended alternatives have an impact or not. Based on the effectiveness criteria obtained from the results of interviews with village heads, the PAMSIMAS III program in Aceh Jaya Regency is considered effective, which can be seen from the targets and achievements of PAMSIMAS III recipient villages that have met the target.

### **b. Efficiency**

Based on efficiency criteria, the PAMSIMAS III program in Aceh Jaya Regency is classified as efficient because the budget realization is in accordance with its portion. This can be seen from the comparison of the budget realization every year with the budget target.

### **c. Adequacy**

Sufficiency is used to select several alternatives to be used as recommendations by seeing how far they can solve the problem. Based on information from informants, namely village heads and communities, as well as other implementers of the PAMSIMAS III program in Aceh Jaya Regency, the PAMSIMAS III Program held in Aceh Jaya Regency has succeeded in meeting the needs of clean water for consumption and sanitation of the poor in rural areas. The implementation of the PAMSIMAS Program went smoothly because of a lot of support from various parties and the community. This can

be seen in terms of infrastructure from the PAMSIMAS III program in Aceh Jaya Regency that has been 100 percent completed, such as tower reservoirs, borewells, infiltration wells, excavation wells, intakes, pipeline networks to people's homes. However, the number of facilities for providing clean water services is still lacking.

d. Alignment

Based on information from village heads and communities in the villages receiving the PAMSIMAS III Program in Aceh Jaya Regency, the leveling criteria when reviewed in terms of facilities that the establishment of coordinate points from PAMSIMAS III has been in accordance with the procedures as needed. However, sometimes people disagree about the location of the construction of water source provision. They want the place to be close to their homes so that they can get water faster. but in general, the community has benefited from the PAMSIMAS III Program.

e. Responsiveness

Based on information from village heads and communities in the villages that receive the PAMSIMAS III Program in Aceh Jaya Regency regarding the responsiveness criteria, the PAMSIMAS III program in Aceh Jaya Regency has not been achieved optimally overall because the community does not want to pay contributions, but the PAMSIMAS III program has succeeded in changing patterns, habits and healthy lifestyles to the poor in rural areas in Aceh Jaya Regency. Although the community does not want to pay contributions due to low income, on the other hand they support the PAMSIMAS III program in Aceh Jaya Regency by participating in the socialization held by the PAMSIMAS III program implementation team. But they are happy and feel helped by the PAMSIMAS III program. If there is no PAMSIMAS III program, they have to buy drinking water at a higher price.

f. Accuracy

Based on information from village heads and communities in the villages that receive the PAMSIMAS III Program in Aceh Jaya Regency, the PAMSIMAS III program in Aceh Jaya Regency has been right on target for villages and communities that receive the PAMSIMAS III program.

Supporting factors describe the success of the PAMSIMAS III program in Aceh Jaya Regency which is determined by human resources, institutions, and communication, so that the evaluation carried out on the PAMSIMAS III program in Aceh Jaya Regency is more effective. Based on information from the PAMSIMAS III program Implementation Team in Aceh Jaya Regency and village heads that:

a. Human Resources

PAMSIMAS in its implementation urgently needs Human Resources for the success of the programs carried out. Human Resources of PAMSIMAS III Aceh Jaya Regency is reviewed from the quantity is sufficient, but judging from the quality of its human resources, it is still very lacking.

b. Institutional

The role of the institutions involved in PAMSIMAS III Aceh Jaya Regency is very important for the performance of PAMSIMAS III Aceh Jaya Regency, but the institution lacks coordination so that there are often mistakes in decision-making and policies, and even the KJSPAM institutions of sub-districts and sub-districts are not functioning.

c. Communication

Good communication has been implemented by the implementers of PAMSIMAS III Aceh Jaya Regency but because of the lack of quality human resources, communication is less done.

Based on the inhibiting factors that are problems for the performance of the PAMSIMAS III Program, it is necessary to solve these problems as a solution such as:

- a. Sharing village funds which is still not optimal by 10 percent has now been coached and directed towards the use of village funds for the drinking water sector.
- b. The monthly contribution from the community for the payment of clean water channels to people's houses does not run so that it has an impact on maintenance operations, so it is overcome by charging

monthly contributions per Head of Family (KK) to the gampong fund. The contribution imposed on the community is Rp 10,000 per month for each Head of Family (KK). This shows that the level of community participation in Aceh Jaya Regency is still very low and the knowledge of the community is low, even though the contributions are used for the operation and maintenance of the service system including the payment of electricity amper.

- c. For the village Drinking Water Management System (SPAM) group that is not functioning, it is overcome by increasing the capacity of the SPAM management group through coaching and digestion.
- d. Strengthening AMPL cadres needs to be carried out with the aim of mapping drinking water and sanitation needs in each village.

## RESULTS AND DISCUSSION

The risk of sanitation is a decrease in the quality of life, health, buildings and the environment due to low access to sanitation sector services and clean and healthy living behaviors. Risk areas are described by classifying and mapping areas such as villages within the scope of districts/cities based on the level of sanitation risk. The approach to risk areas is carried out with the EHRA study including health conditions (including water supply systems, waste disposal services, availability of sewage sewers) and hygiene and sanitation behaviors (including washing hands with soap, defecation, and waste disposal). This EHRA study is used based on indicators of population density, poverty rate, and drinking water service level. (Ili et al., n.d.)

Aceh Jaya Regency is one of the districts in Aceh Province that implements the PAMSIMAS Program and the PAMSIMAS Program which is being implemented is now phase III for the 2017-2023 period. The PAMSIMAS program was held because there are still many people in rural areas who are not able to access clean water supply services carried out by PDAM. PDAM only covers clean water supply services in urban areas. So that the rural poor in Aceh Jaya Regency still find it difficult to get access to proper drinking water and sanitation. In addition, Aceh Jaya Regency is located in the coastal area has experienced natural disasters such as earthquakes and tsunamis that occurred on December 26, 2004 where the Aceh Jaya Regency area suffered the most severe damage. Physically the land area shifted as far as 2-4 km from the coastline, transportation connections outside and into the area were cut off, residential areas around the coast were destroyed and environmental damage was severe enough that this had an impact on the quality of groundwater that was unfit for drinking so that now the people of Aceh Jaya Regency find it difficult to get fresh water.

The number of households that receive assistance in providing drinking water and sanitation from the PAMSIMAS III Program can be seen in Table 1 below:

**Table 1. Number of Population, Sources of Funds, Other Assistance from the Community-Based Drinking Water and Sanitation Provision Program (PAMSIMAS) III by Village and Sub-district in Aceh Jaya Regency in 2017-2023**

No	Village	District	Year 2017		Number of Accesses (KK)	Source of Funds	Other Help
			Total Population (souls)	CD			
1	Cot Dulang	Victory	528	153	153	BUDGE T	DAK
2	Panton Makmur	Victory	263	65	65	BUDGE T	ROOF
3	Blang Monlung	Sampoinite	346	120	120	BUDGE T	DAK Proposal
4	Ligan	Sampoinite	927	251	251	BUDGE T	DAK Proposal

Evaluation of the Community-Based Drinking Water and Sanitation Provision Program  
(PAMSIMAS) III in Aceh Jaya Regency

No	Village	District	Year 2017		Number of Accesses (KK)	Source of Funds	Other Help
			Total Population (souls)	CD			
5	Pajar	Darul Hikmah	735	229	185	BUDGE T	ROOF
6	Kubu	Teunom	159	47	47	BUDGE T	-
7	Tanoh Manyang	Teunom	1.590	525	142	BUDGE T	-
8	Lhok Kruet	Sampoinite	597	179	179	APBK	APBK 2024 (Initial location of dry water source, in 2024 move New location with 2024 APBK source)
9	Pante Cermin	Jaya	676	193	193	APBK	ROOF
<b>Year 2018</b>							
1	Putue	Jaya	359	66	66	BUDGE T	-
2	Ceunamprong	Indra Jaya	650	160	90	BUDGE T	-
3	Mukhan	Indra Jaya	435	128	128	BUDGE T	DAK Proposal
4	Kuala Bakong	Sampoinite	625	151	132	BUDGE T	HID T.A 2020
5	Blang Luah	Sampoinite	420	150	150	BUDGE T	-
6	Krueng No	Sampoinite	428	107	107	BUDGE T	-
7	Alue Gro	Sampoinite	185	63	63	BUDGE T	ROOF 2022
8	Gunong Cut	Darul Hikmah	395	111	111	BUDGE T	-
9	Gampong Baro P	Darul Hikmah	237	135	77	BUDGE T	-
10	Sawang	Faithful Devotion	857	254	181	BUDGE T	-
11	Gle Putoh	Bank	191	61	61	BUDGE T	-
12	Bintah	Ray's Belt	450	150	110	BUDGE T	-
13	Ceuraceu	Ray's Belt	376	106	106	BUDGE T	-
14	Sarah Raya	Ray's Belt	457	267	267	BUDGE T	-
15	Pasi Timon	Teunom	526	157	157	BUDGE T	HID Proposal
16	Alue Meuraksa	Teunom	289	72	72	BUDGE T	DAK Proposal
17	Ujong Seudhen	Jaya	165	53	42	APBK	-
18	Meudhang Ghon	Indra Jaya	180	57	79	APBK	DAK Proposal
19	Gampong Baroh	Faithful Devotion	284	71	55	APBK	-
<b>Year 2019</b>							
1	Lam Durian	Jaya	674	193	193	BUDGE T	-

Evaluation of the Community-Based Drinking Water and Sanitation Provision Program  
(PAMSIMAS) III in Aceh Jaya Regency

No	Village	District	Year 2017		Number of Accesses (KK)	Source of Funds	Other Help
			Total Population (souls)	CD			
2	Babah Krueng	Jaya	557	153	103	BUDGE T	-
3	Sabet	Jaya	448	138	138	BUDGE T	-
4	Kuala	Indra Jaya	935	291	291	BUDGE T	-
5	Jeumphek	Sampoinite	551	168	90	BUDGE T	-
6	Paya Laot	Faithful Devotion	350	53	40	BUDGE T	-
7	Lhok Timon	Faithful Devotion	1,969	556	176	BUDGE T	-
8	Pante Kuyun	Faithful Devotion	812	220	150	BUDGE T	-
9	Sapek	Faithful Devotion	630	190	105	BUDGE T	-
10	Gunong Meunasah	Faithful Devotion	506	63	70	BUDGE T	-
11	Lhok Geulumpang	Faithful Devotion	993	288	108	BUDGE T	-
12	Lueng Gayo	Teunom	675	172	72	BUDGE T	-
13	Sebonebok Padang	Teunom	678	205	89	BUDGE T	-
14	Babah Nipah	Sampoinite	263	74	42	APBK	-
15	Cot Langsat	Sampoinite	186	54	54	APBK	-
16	Kuala Ligan	Sampoinite	414	104	78	APBK	-
<b>Year 2020</b>							
1	Batee Ro	Teunom	470	179	126	BUDGE T	-
2	Kabong	Krueng Sabee	750	250	136	BUDGE T	-
3	Gampong Baro	Jaya	465	245	195	BUDGE T	-
4	Ie Jeurengah	Sampoinite	467	102	102	BUDGE T	-
5	Seumira	Teunom	203	64	64	APBK	-
6	Meunasah Kulam	Sampoinite	283	66	66	APBK	-
7	Arongan	Darul Hikmah	255	65	65	APBK	-
<b>Year 2021</b>							
1	Sango	Jaya	671	179	179	BUDGE T	-
2	Curek	Krueng Sabee	520	250	250	BUDGE T	-
3	Panggong	Krueng Sabee	250	64	64	BUDGE T	-
4	Pasie Geulima	Teunom	339	118	118	BUDGE T	-
5	Buket Keumuneng	Ray's Belt	74	19	19	APBK	-
<b>Year 2022</b>							
1	Kuta Tuha	Bank	1.193	298	54	BUDGE T	-

Evaluation of the Community-Based Drinking Water and Sanitation Provision Program  
(PAMSIMAS) III in Aceh Jaya Regency

No	Village	District	Year 2017		Number of Accesses (KK)	Source of Funds	Other Help
			Total Population (souls)	CD			
2	Panton	Teunom	879	55	53	BUDGE T	-
3	Ladang Baro	Bank	942	63	48	BUDGE T	-
4	Tuwie Kareung	Bank	966	75	68	BUDGE T	-
5	Pulo Raya	Sampoinite	291	73	50	APBK	-
Year 2023							
1	Krueng Tunong	Jaya	600	150	150	BUDGE T	-
2	Teumareum	Indra Jaya	972	243	243	BUDGE T	-
3	Keude Unga	Indra Jaya	398	99	99	BUDGE T	-
4	Crak Mong	Sampoinite	577	144	144	BUDGE T	-
5	Babah Nipah	Sampoinite	199	50	50	APBK	-
6	Alue Raya	Bank	201	50	50	APBK	-

*Source : PAMSIMAS (2024)*

Based on Table 1 above, the PAMSIMAS III program of Aceh Jaya Regency is implemented in 9 sub-districts in Aceh Jaya Regency in 67 villages sourced from the State Revenue and Expenditure Budget (APBN) and the District Revenue and Expenditure Budget (APBK), as well as other assistance from the Special Allocation Fund (DAK).

## CONCLUSION

Policies guiding drinking water management aim to achieve community welfare through sustainable water supply by addressing financial, technical, environmental, institutional, and social factors. Indonesia's legal framework, including the 1945 Constitution, Law No. 23 of 2014, Presidential Regulation No. 59 of 2017, and international commitments such as the MDGs and Kyoto Declaration, mandates state responsibility for clean water and sanitation availability. In Aceh Jaya Regency, alternative policies focus on poverty reduction, resilient infrastructure, and environmental improvements, implemented through strategies like expanding service coverage, strengthening institutions and regulations, securing sustainable raw water sources, fostering private-sector and community partnerships, optimizing village funds, and enhancing the capacity of rural SPAMS managers. Evaluation of the PAMSIMAS III program indicates moderate success but highlights challenges in human resources, institutional capacity, and coordination. To improve outcomes, recommendations include increasing community socialization, establishing inter-institutional coordination forums, attracting investment, optimizing village fund use, and reinforcing local government and village officials' commitment to sustaining water facilities. Future research should explore effective models for capacity building and coordination among stakeholders to overcome institutional constraints and enhance the long-term sustainability of community-based water and sanitation programs.

## RERERENCES

Abdeen, F. N., Fernando, T., Kulatunga, U., Hettige, S., & Ranasinghe, K. D. A. (2021). Challenges in multi-agency collaboration in disaster management: A Sri Lankan

- perspective. *International Journal of Disaster Risk Reduction*, 62, 102399. <https://doi.org/10.1016/j.ijdr.2021.102399>
- Aida, A. N., Kawasaki, A., Meguro, K., & Shaw, R. (2023). Measuring disaster recovery: Lessons learned from early recovery in post-tsunami area of Aceh, Indonesia. *Sustainability*, 15(24), 16870. <https://doi.org/10.3390/su152416870>
- Ali, S., & George, A. (2022). Fostering disaster mitigation through community participation – Case of Kochi residents following the Kerala floods of 2018 and 2019. *Natural Hazards*, 111, 389–410. <https://doi.org/10.1007/s11069-021-05058-0>
- Badan Pusat Statistik. (n.d.). *Aceh Jaya dalam angka*. Badan Pusat Statistik.
- Bayu, K. G., Ikhsan, M., & Effendi, J. (2020). Water governance contribution to water and sanitation access equality in developing countries. *Water Resources Research*, 56(4), e2019WR025330. <https://doi.org/10.1029/2019WR025330>
- Daniel, D., Djohan, T. P. A., & Nastiti, A. (2021). A system dynamics model of the community-based rural drinking water supply program (PAMSIMAS) in Indonesia. *Water*, 13(4), 507. <https://doi.org/10.3390/w13040507>
- Daniel, D., Djohan, T. P. A., Nastiti, A., Prasetiawan, T., & Fitriana, S. (2022). Factors related to the functionality of community-based rural water supply and sanitation program in Indonesia. *Cleaner Water*, 1, 100007. <https://doi.org/10.1016/j.clwat.2022.100007>
- Daniel, D., Djohan, T. P. A., Nastiti, A., Prasetiawan, T., Fitriana, S., & Soetrisno, L. S. (2022). The effect of community contribution on the functionality of rural water supply programs in Indonesia. *Global Environmental Change*, 73, 102482. <https://doi.org/10.1016/j.gloenvcha.2022.102482>
- Henderson, J., Dicken, S., Weir, R., Yaron, G., & Aryamanya-Mugisha, H. (2021). How community participation in water and sanitation interventions impacts human health, WASH infrastructure and service longevity in low-income and middle-income countries: A realist review. *BMJ Open*, 11(12), e053320. <https://doi.org/10.1136/bmjopen-2021-053320>
- Iii, B. A. B., Bersih, A. I. R., & Indonesia, D. I. (n.d.). Bab III (pp. 80–106).
- Krishna, H. B. (2019). Water, sanitation and hygiene (WASH) and disaster recovery for community resilience: A mixed methods study from Odisha, India. *International Journal of Disaster Risk Reduction*, 35, 101065. <https://doi.org/10.1016/j.ijdr.2018.12.030>
- Kurniatin, K., Munandar, A. I., & Widodo, S. (2022). Sustainable strategy for community-based drinking water supply (PAMSIMAS) post program in rural Indonesia. *Journal of Governance and Public Policy*, 9(3), 215–233. <https://doi.org/10.18196/jgpp.v9i3.14629>
- Nazari, R., Khosravi, A., Samimi, A., & Hosseinzadeh-Bandbafha, H. (2024). Drinking water supply for communities affected by natural disaster emergencies: A qualitative study. *BMC Public Health*, 24, 1437. <https://doi.org/10.1186/s12889-024-18951-0>
- Panneer, S. (2024). Multistakeholder participation, collaboration, and networking in disaster risk reduction and pandemic management: Insights and future policy framework. *Social Development Issues*, 46(2), 1–22. <https://journals.publishing.umich.edu/sdi/article/id/5989/>
- Rusli, Y., Kusumasari, B., & Prabowo, H. (2015). Post disaster governance, complexity and network theory: Evidence from Aceh, Indonesia after the Indian Ocean tsunami 2004.

Evaluation of the Community-Based Drinking Water and Sanitation Provision Program  
(PAMSIMAS) III in Aceh Jaya Regency

*Procedia - Social and Behavioral Sciences*, 227, 1–9.  
<https://doi.org/10.1016/j.sbspro.2016.06.037>

Sou, G. (2023). Shifting power through participation in post-disaster recovery: A scoping review. *International Journal of Disaster Risk Reduction*, 95, 103824.  
<https://doi.org/10.1016/j.ijdr.2023.103824>