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Article

Drinking Water Development Plan Evaluation Through Transfer to Regions Fund

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Abstract

Drinking water is one of the national development targets of both central and regional governments. Given the importance of the drinking water sector for the community, the local government allocates funding for drinking water through the Local Government Budget mechanism with all of its limitations. One of the central government's supports for drinking water is the transfer of funds to the regions within the scope of the national priority section of the Government Work Plan (GWP). The drinking water development planning is interesting to review from two planning sides: the central government through the Government Work Plan (GWP) and the regional government through the Regional Government Work Plan (RGWP). This study aims at the level of linkage of transfer fund planning related to national priorities, namely the Special Allocation Fund (SAF) for Physical Assignments, in a top-down and bottom-up manner. The method used is a mixed method approach through planning gap analysis based on literature studies on central-regional planning documents and questionnaires. On a more specific side, Central Java Province was chosen as the recipient of the largest SAF allocation in the drinking water sector. The analysis result state that Central Java has not fully allocated a budget for the issue of rural drinking water supply in its regional development planning. The priority for drinking water development in this province has not been stated correctly in the RGWP. Meanwhile, the results of the questionnaire indicated that the implementation of SAF in Central Java which the central government funded was considered to have a positive impact on improving drinking water services and infrastructure as part of the minimum service standard (MSS). The development of drinking water with the SAF budget in Central Java is carried out with good supervision and sufficient funding so that output and realization can occur according to the target. From a planning perspective (gap analysis), the suitability of the SAF menu with the Regional Government Work Plan for drinking water issues is 60 percent.

Keywords: Drinking Water; SAF; Regional Development; RGWP.

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1. Introduction

The water problem in the last few decades has grown in terms of quality, quantity, and accessibility. Not all people have the same access to the ideal conditions for their life related to water (Rofiana, 2015). In addition to access and problems related to meeting water needs, humans face the threat of water crises and conflicts (Jury & Vaux, 2007). Drinking water for residents of an area is of concern to various parties (Yu et al., 2022). The provision of vital human services such as drinking water is essential in ordinary life and emergencies, whether due to natural (e.g., earthquakes and droughts) or technological hazards (Pagano et al., 2021). Water and water resources must maintain their functions and benefits to meet the needs of all sectors and future generations (Pambudi, 2021; Pambudi et al., 2021a; Brown et al., 2015). The availability of water is related to environmental and human issues. Therefore human development is also something that cannot be separated if the quantity and quantity of water is to be sustainable. There is a positive correlation between the development of the Human Development Index (HDI) and the EQI or Environmental Quality Index (Pambudi, 2020; Rudra & Chattopadhyay, 2018). Adequate water allocation is a citizen's right within the framework of environmental sustainability (Howey & Graly, 2021). The drinking water sector requires a significant investment in supporting the achievement of social benefits in national development. So far, the development of drinking water in Indonesia has also been related to private investment (Rifai, 2017).

The sustainability of water supply programs in developing countries is influenced by many interrelated and dynamic factors, which further demonstrates the need to analyze the system behavior of water supply programs (Daniel et al., 2021). Nevertheless, no research examines planning synchronization that affects the sustainable development of the drinking water supply holistically, and this research aims to fill this gap. This discrepancy can be from planning carried out by the central government or regional governments, including regarding the synchronization of their budgets. For local governments, drinking water infrastructure development is constrained by limited sources of Local Government Budget funding (Pambudi, 2022). Meanwhile, the demand for drinking water is an urgent matter to be carried out as part of the state's mandate to fulfill essential services for the country and become the 6th goal of the 17 goals in the Sustainable Development Goals (SDGs). Special transfer funding through Physical SAF is an attractive option for regions to meet this need (Ibrahim & Abdul, 2019).

The policy direction of Physical SAF Assignment of the Drinking Water Sector based on Presidential Decree 141/2018 is to realize universal access to drinking water and fulfill minimum service standards (MSS) and support national priority programs in Cities/Districts priority for slum management, Regencies/Cities with service coverage approaching 100 percent, Regencies/Cities that have regional drinking water supply systems (SPAM) and Regencies that have implemented community-based drinking water supply and sanitation (PAMSIMAS). The aim and target of Physical SAF for Drinking Water are to increase the coverage of good drinking water services by increasing the number of House Connections (HC) through protected Pipeline Networks (PN) or Non-Pipeline Networks (NPN).

Table 1. Activities and Location Criteria for Physical SAF Assignment of Drinking Water Sector

No	Activities	Location Criteria
	Urban Drinking Water	
1	Expansion of piped DWSS through the utilization of the idle capacity of the drinking water supply system (DWSS) built	Has a remaining capacity of DWSS idle capacity of DWSS to be utilized (L/second)
		Include the target house connection (HC unit) and the target population served (1 HC = 4-5 people)
		Has a DWSS management agency
		The activities have been listed in the Municipal Waterwork business plan (for the construction of a Piping Network DWSS (PN) located in the Municipal Waterwork service area)
		Included in the Community Work Plan (CWP) for community-based DWSS activities
2	New development for areas that do not yet have drinking water services through the construction of DWSS PN, with modules covering WTP construction, broncaptering building, and well construction	Intended for areas that do not yet have DWSS services
		There is a source of surface water with a reliable capacity
		Has a DWSS management agency
		The land is free/ready to use
		There is a permit to take/use raw water sources
		Detailed Engineering Design (DED) and Feasibility Study (FS) are available
		The distance of the DWSS unit (well/spring catchment building) to the source of pollution or septic tank is more than 10 m
3	Increase through additional capacity and/or volume of built DWSS facilities and infrastructure	Intended for areas where DWSS services are not yet 100%
		There is a source of water with a reliable capacity
		Has a DWSS management agency
		The land is free/ready to use
		The permit for taking/using raw water sources already exists
		Detailed Engineering Design (DED) and Feasibility Study (FS) are available
		The distance of the DWSS unit (well/spring catchment building) to the source of pollution or septic tank is more than 10 m

No	Activities	Location Criteria
		Complemented by simple water treatment
		Activities listed in the Work Plan – CWP for community-based DWSS activities
	Rural Drinking Water	
1	Expansion of pipeline DWSS through the utilization of the idle capacity of the drinking water supply system (DWSS)	Has idle capacity DWSS to be utilized (L/sec)
		Include the target house connection (HC unit) and the target population served (1 HC = 4-5 people)
		Has a DWSS management agency
		Activities have been listed in the Municipal Waterwork business plan (for the construction of DWSS PN, which is in the Municipal Waterwork service area)
		Included in the Work Plan – CWP for community-based DWSS activities
2	Increasing DWSS through increasing capacity and or volume of facilities	Intended for areas where DWSS services are not yet 100%
		There is a source of water with a reliable capacity
		Has a DWSS management agency
		The land is free/ready to use
		The permit for taking/using raw water sources already exists
		Detailed Engineering Design (DED) and Feasibility Study (FS) are available
		The distance of the DWSS unit (well/spring catchment building) to the source of pollution or septic tank is more than 10 m
		Complemented by simple water treatment
		Activities have been listed in the Work Plan – CWP for community-based DWSS activities.

Source: GoI, 2018a

So far, the allocation of SAF has been considered ineffective and still oriented towards performance-based budgeting because these funds tend to focus on inputs rather than outcomes (benefits) (Yaqin & Herwanti, 2019). In its implementation, special allocation funds require an evaluation process to improve the quality of development planning funded by SAF in the future (Pambudi et al., 2021b; Sulaeman & Andriyanto, 2021). Presidential Regulation 141 of 2018 regarding the Physical SAF Guidelines, specifically in Article 13, paragraph 2, mentions the importance of evaluating the SAF by involving many Ministries/Institutions. Given the importance of drinking water and especially those funded by the Physical SAF for local governments, analyzing the synchronization of this study aims to assess the extent to

which top-down and bottom-up Physical SAF planning is linked to regional development as input to national and regional development.

2. Method

This study uses a mixed method approach through gap analysis based on literature studies on central-regional planning documents (qualitative) and questionnaires (quantitative). Apart from the literature study, data collection was also carried out through questionnaires that were distributed electronically (filled in via the Google form) and physically (filled in manually). Filling in the questionnaire is addressed to activity managers and also beneficiaries. The use of the Google Form platform is carried out to facilitate the flow of data information on the implementation of the Physical SAF in the Drinking Water Sector, especially in aspects of the scope of implementation governance at the site level. Processing is carried out quantitatively to display a portrait of drinking water development with SAF funding in the regions as a basis for taking stock-taking issues associated with the gap analysis of top-down and bottom-up planning synchronization.

This study aims to assess the extent to which Physical SAF planning is related to regional development. This research also discusses the problem of drinking water development from the point of view of the regional government and the central government. This research only analyze the 2019 Physical SAF in the Drinking Water Sector. The consideration for choosing this field is due to the strategic value of drinking water in regional development, especially concerning regional transfer funding options and regional planning. The drinking water sector is a priority for the regions and the central government, so funding, implementation, and evaluation are carried out by many parties as a manifestation of social justice for all Indonesian citizens. The analysis will examine the condition of the existing drinking water policy, carry out an analysis of literature studies on planning gaps, and conduct a specific analysis in an area by taking a sample of Central Java Province.

3. Result and Analysis

3.1. The National Drinking Water Policy in Indonesia

Sustainable drinking water development plans in Indonesia have been scrutinized by many researchers in the past, both from a financial and technical perspective. This is important to ensure the availability of sustainable drinking water for the community. Based on these indicators, it can be concluded that the effectiveness of drinking water development plans in Indonesia still needs to be improved. The table below is a literature review of some research results related to the effectiveness of drinking water development plans in Indonesia.

Table 2. A literature review of some research results related to the effectiveness of drinking water development plans in Indonesia.

No	Author	Year	Title	Summary	Digital Object Identifier	Analyis Result
1	Ramadhan, A. M. F., &	2023	Implementasi Bantuan Pembangun	The results of this study found that the authors linked the	https://doi.org/10.3732	Sustainable drinking water

No	Author	Year	Title	Summary	Digital Object Identifier	Analyis Result
	Zahidi, M. S.		an Program Air dan Sanitasi USAID IUWASH PLUS di Indonesia Tahun 2021	principles contained in the Paris Declaration such as the principle of ownership, the principle of local harmony, the principle of harmonization, the principle of management and the principle of shared responsibility.	9/ganaya.v6i1.2220	development plans in Indonesia have been scrutinized by many researchers in the past, both from a financial and technical perspective. This is important to ensure the availability of sustainable drinking water for the community. Based on these indicators, it can be concluded that the effectiveness of drinking water development plans in Indonesia still needs to be improved.
2	Chehafudin, M., Wibawa, S., & Wibowo, S.	2022	Evaluasi Kebijakan Dana Desa untuk Penanggulangan Kemiskinan dan Peningkatan Infrastruktur Pelayanan Dasar Air Minum serta Sanitasi Kabupaten/ Kota di Indonesia	The Village Fund had an effect on improving sanitation but it was not significant nationally or in all districts/cities. The Village Fund for drinking water had no significant effect on poverty reduction nationally and for all districts/cities. The Village Fund for sanitation had no effect on poverty reduction nationally or in all districts/cities but it had an effect on districts/cities with low fiscal capacity and poverty rate even though it was not significant. The implementation of the Village Fund policy needs to consider the fiscal capacity and diversity of regional characteristics in order to make the effectiveness of the Village Fund more optimal.	https://doi.org/10.47828/jianaasian.v10i1.94	
3	Yati, I., Trilestari, E. W., Sufianti, E.,	2021	Evaluasi Pelaksanaan Kebijakan Program Penyediaan	The evaluation of the policy implementation of the water supply and sanitation program was analyzed using six	https://doi.org/10.23969/kebijakan.v12i2.3508	

No	Author	Year	Title	Summary	Digital Object Identifier	Analyis Result
	Mochtar, S., Gedeona, H. T., & Sugiharti, D.		Air Minum Dan Sanitasi Berbasis Masyarakat (Pamsimas) Di Kabupaten Purwakarta (Studi Kasus Di Desa Cikadu Kecamatan Cibatu)	aspects of program evaluation, namely effectiveness, efficiency, adequacy, equity, responsiveness and accuracy. The most important obstacle affecting the successful implementation of the water supply and sanitation program is the lack of good coordination between Working Group members. Collaborative activities, the role of the Pamsimas program is very important to encourage relevant regional apparatus to accelerate the development of rural water supply and sanitation access.		
4	Miolo, M., Kasim, N. M., & Tijow, L. M.	2020	Pengaturan Hukum tentang Program Penyediaan Air Minum Dan Sanitasi Berbasis Masyarakat (Pamsimas)	The results of the research application of the legislation of community-based drinking water supply and sanitation program (Pamsimas), has been implemented following the existing regulations and effectiveness of the application of community-based drinking water supply and sanitation program (Pamsimas). However, the implementation of this program has not been effective in terms of adaptability to change and the problem of equitable budget allocation.	https://doi.org/10.32662/golrev.v3i2.984	

No	Author	Year	Title	Summary	Digital Object Identifier	Analyis Result
5	Insani, S.	2016	Efektivitas Program Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat (PAMSIMAS) di Temanggung	The Community-Based Water Supply and Sanitation Program (Pamsimas) has shown effective results as seen from the existing indicators of productivity, efficiency, satisfaction, adaptability, and development at the micro scale. However, there is still a need for macro-scale strengthening for drinking water development such as health counseling, and improved time management, so that the implementation or construction stage can be completed on time.	-	

Source: Analysis Result, 2023

If we look at the posture of the APBN, the proportion of Physical DAK allocations in 2021 is Rp63.648 trillion, or about 8% of the Transfers to Regions and Village Funds (TKDD) allocation. Although the contribution to the total TKDD is only 8%, because the Physical DAK focuses on the development of physical facilities and infrastructure in the regions, the Physical DAK has a strategic role in the economy. In 2021, Physical DAK will undergo a refocusing and simplification of types/sectors/activities so that the allocation per region is significant and optimal in the context of recovering the impact of the COVID-19 pandemic, increasing and equitable provision of public service infrastructure, and strengthening synergies with ministry/institutional expenditures (K/L) and other sources of funds. Regular Physical DAK focuses on minimum service standards achievement and filling gaps in education, health, and connectivity services. The Regular Physical DAK budget consists of education, health, and family planning. Physical DAK Assignments Budget are cross-sectoral based on themes/programs that support the achievement of Major Project targets and specific priorities. DAK-Physical Assignment consists of 4 themes: (1) The theme of reducing maternal mortality and stunting, (2) The theme of poverty alleviation, (3) The theme of food security, and (4) The theme of sustainable economic and infrastructure provision.

The development of drinking and clean water is mandatory and is a concurrent matter for the government (Purwanto, 2020; GoI, 2014). The drinking water sector is included in National Priority (NP) 1, namely Human Development through Poverty Reduction and Improvement of Basic Services with 5 (five) Priority Programs (PP), namely: 1) Accelerating

poverty reduction; 2) Improving public health and nutrition services; 3) Equal distribution of quality education services; 4) Increasing public access to proper housing and settlements; 5) Improvement of essential service governance. The Priority Program for Increasing Community Access to Decent Housing and Settlements includes the drinking water sector. Job creation balanced by improving the quality of environmental education impacts holistic access to various essential services, including clean water (Pambudi, 2020).

Table 3. Objectives and Indicators of Priority Activities (PA) Related to Access to Drinking Water and Sanitation.

No	Objective	Indicator	Location
1	Increased access to drinking water	Availability of access to drinking water for 100% of households	34 provinces
		Availability of access to sanitation (domestic wastewater management) for 100% of households, consisting of 85% proper access and 15% primary access	34 provinces

Source: GoI, 2018b

Based on Presidential Regulation 141 of 2018, the policy direction of the SAF Physical Assignment of Drinking Water Sector aims to achieve universal access to drinking water and fulfillment of Minimum Service Standards (MSS) and support national priority programs in priority Cities/Districts for handling slums, Regencies/Cities with service coverage approaching 100 percent, Regencies/Cities that have Regional Drinking Water Supply Systems (DWSS) and districts that have implemented Community-Based Water Supply and Sanitation (PAMSIMAS). The Special Allocation Fund for the Physical Assignment of the Drinking Water Sector is intended to support the achievement of the MSS of drinking water designated for Regencies/Cities that meet the following criteria: a) 31 priority cities for the acceleration of handling slums Ministry of Public Works and Public Housing (PWPH), which is also the location of KOTAKU/National Slum Upgrading Project (NSUP) and Neighborhood Upgrading and Shelter Sector Project Phase 2 (NUSP-2) and declared ready to implement drinking water supply; b) The 37 regencies/cities that have operational regional DWSS; c) PAMSIMAS implementing villages in 2008-2018 located in 365 districts that were declared ready to carry out expansion/development of Municipal Waterworks; d) Regions of 12 regencies/cities with service coverage approaching 100 percent.

Table 4. Regional Aspects of the DWSS Program.

No	DWSS Program	Province	Status
1	Banda Aceh Urban DWSS	Banda Aceh	Construction phase
2	Durolis Regional DWSS	Riau	Construction phase
3	Bandar Lampung Urban DWSS	Lampung	Preparation phase
4	Keburejo Regional DWSS	Central Java	Construction phase
5	Magelang Urban DWSS	Central Java	Construction phase
6	Umbulan Regional DWSS	East Java	Construction phase
7	Mojolamong Regional DWSS	East Java	Construction phase
8	Burana Titab Atas Regional DWSS	Bali	Construction phase
9	Burana Titab Bawah Regional DWSS	Bali	Construction phase
10	Samarinda Urban DWSS	East Kalimantan	Construction phase

Source: GoI, 2018b

Based on the regional aspect, there are 10 DWSS locations spread across Indonesia in 7 provinces, including Banda Aceh, Riau, Lampung, Central Java, East Java, Bali, and East Kalimantan.The Physical Special Allocation Fund for the Assignment of the Drinking Water Sector in 2019 will also support 10 National Priority DWSS with status entering the construction phase. Some of these DWSS include: Banda Aceh Urban DWSS, Durolis Regional DWSS, Bandar Lampung Urban DWSS, Keburejo DWSS, Magelang Urban DWSS, Umbulan Regional DWSS, Mojolamong Regional DWSS, Titab Atas Burana Regional DWSS, Titab Bawah Buranan Regional DWSS, Samarinda Urban DWSS.

The priority locations for the implementation of the Physical SAF Assignment of the Drinking Water Sector have also been carried out in thirty-one (31) priority cities for the acceleration of slum management as stated in the Mayor/Regent Decree regarding the Determination of Slums and have been verified by the KOTAKU team. The thirty-one cities are shown in the following table.

Table 5. Thirty-One (31) Priority Cities for the Acceleration of Slum Handling.

No	City	No	City	No	City
1	Banda Aceh City	11	Pekalongan City	21	Banjarmasin City
2	Lhoksumawe City	12	Tegal City	22	Balikpapan City
3	Medan City	13	Yogyakarta City	23	Tarakan City
4	Pekanbaru City	14	Malang City	24	Manado City
5	Palembang City	15	Surabaya City	25	Palu City
6	Tanjung Pinang City	16	Tangerang City	26	Makasar City
7	Bogor City	17	Mataram City	27	Kendari City
8	Cirebon City	18	Bima City	28	Ambon City
9	Surakarta City	19	Pontianak City	29	Sorong City
10	Semarang City	20	Palangkaraya City	30	Jayapura City
				31	Nunukan City

Source: GoI, 2018a

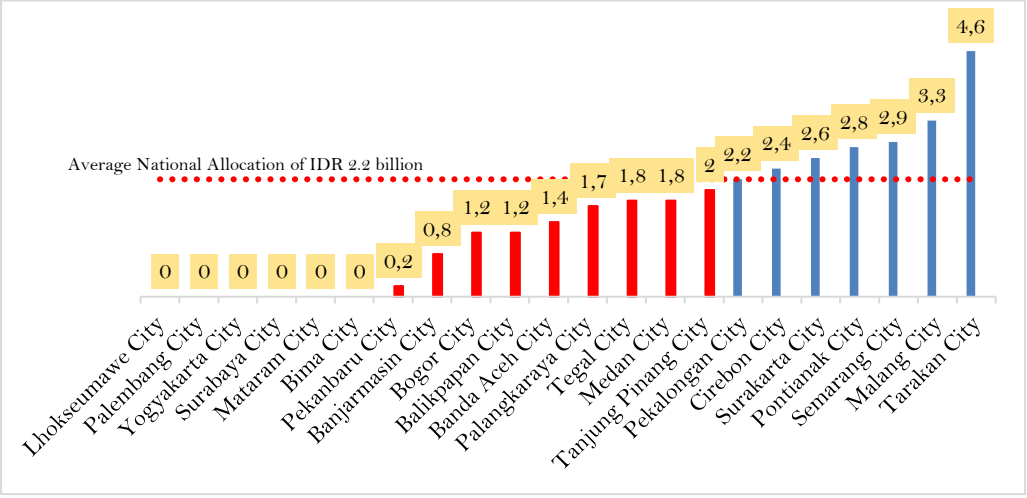

Figure 1. SAF Budget Allocation for the Assignment of Drinking Water Sector at National Priority Locations (KOTAKU)

Source: Regional Autonomy Directorate, Bappenas,2019

The SAF Physical Assignment budget allocation supports clean water in slum settlements through priority KOTAKU locations. Based on the identification results of several KOTAKU locations, the budget allocation for the Physical SAF Assignment of the Clean Water Sector in 2019 is still not ideal for KOTAKU priority locations. Several KOTAKU locations receive a SAF Physical Assignment budget for the Drinking Water Sector below the national average. It shows that the budget allocation for the SAF Physical

Assignment of the Drinking Water Sector is not ideal according to National Priority locations for Presidential Regulation 72 of 2018 and Presidential Regulation 141 of 2018.

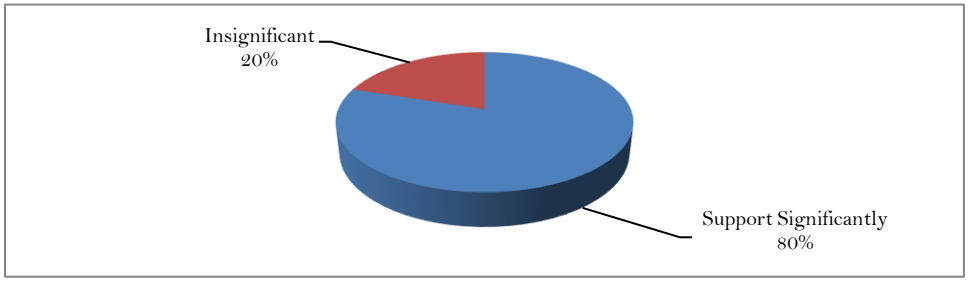

Figure 2. Local government views on the Role of SAF for Drinking Water Development

Source: Questionnaire Results, 2023

3.2. Analysis of Central-Regional Planning Gap Related to Physical SAF Assignment of Drinking Water Sector

Presidential Regulation 72 of 2018 concerning the Government Work Plan (GWP) 2019, stipulates the objectives of implementing the SAF Physical Assignment of the Drinking Water Sector to achieve universal access to drinking water in 2019 and fulfill MSS, and support the NP program in Priority Slum Handling Cities, Regencies/Cities with services close to 100 percent, and districts/cities that have Regional DWSS and districts/cities that have implemented Community-Based Water Supply and Sanitation (PAMSIMAS), through (i) Expansion of SPAM through the utilization of the idle capacity of the Drinking Water Supply System (DWSS), (ii) Development of DWSS through new development for areas that do not yet have drinking water services, (iii) Increasing DWSS through increasing the capacity and/or volume of built DWSS facilities and infrastructure.

Presidential Regulation 72/2018 stipulates 5 (five) activity menus in the SAF Physical Assignment Sector of Drinking Water scheme which supports the National Priority Program, namely 3 (three) activity menus for the Urban Drinking Water Sub-Sector, 2 (two) programs for the Rural Drinking Water Sub-Sector. The six activity menus include 1) Pipeline DWSS expansion through the utilization of the built drinking water supply system (DWSS) idle capacity; 2) New development for areas that do not yet have drinking water services; 3) Increasing DWSS through increasing the capacity or volume of built DWSS facilities and infrastructure; 4) Expansion of DWSS piping through the utilization of idle capacity Drinking Water Supply System (DWSS) explicitly built for Villages that have implemented PAMSIMAS; 5) Increasing DWSS through increasing the capacity or volume of DWSS facilities and infrastructure especially built for villages that have implemented PAMSIMAS.

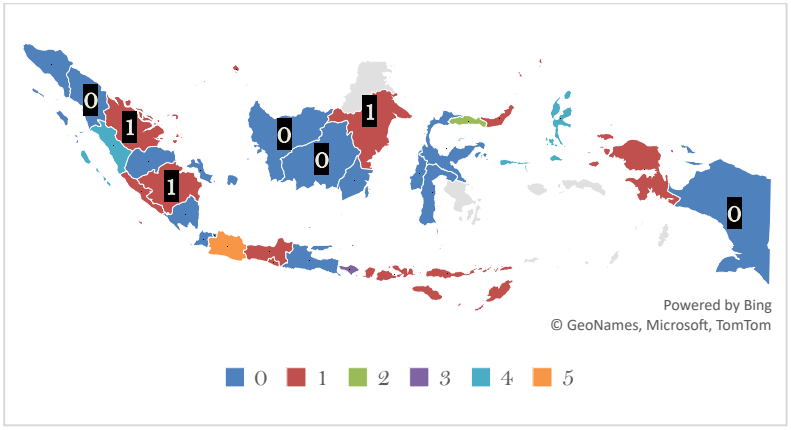

Figure 3. Suitability of the Regional Government Work Plan (RGWP) with the Government Work Plan (GWP) in 2019 regarding the Physical SAF of the Drinking Water Assignment Sector

Source: Analyzed from GWP 2019 and RGWP 2019 of 34 Provinces

Based on the gap analysis (GWP-RGWP) results, out of 34 Provinces, only 2 Provinces have complied 100 percent (5 GWP programs) in their RGWP documents, namely Maluku and West Java Provinces. As many as 32 other provinces are not yet compliant, and even 16 provinces of them have not set drinking water activity menus from the SAF allocation, namely the provinces of DKI Jakarta, Papua, Banten, West Sulawesi, Central Sulawesi, Southeast Sulawesi, Bangka Belitung, Aceh, West Kalimantan, Jambi, Lampung, Central Kalimantan, South Kalimantan, North Sumatra, South Sulawesi, and East Java.

3.3. Synchronization Analysis of Drinking Water Development Related to SAF: Case Study of Central Java Province

Central Java Province has adjusted its policy direction to the national policy. It can be seen that the Central Java RGWP 2019 is in sync with the 2019 Government Work Plan. In the GWP 2019, 5 (five) National Priorities include: 1) Human development through reducing poverty and improving essential services; 2) Reducing disparities between regions through strengthening connectivity and maritime affairs; 3) Increasing added value to the economy and creating jobs through agriculture, industry, tourism and other productive services; 4) Consolidating energy, food and water resources security; and 5) The stability of national security and the success of general elections, have been set forth in the RGWP of Central Java Province through the following programs: 1) Poverty reduction; 2) Improving the quality of life and competitiveness of human resources in order to support the demographic bonus; 3) Reducing regional disparities; 4) Strengthening regional economic competitiveness; 5) Management of natural resources and the environment as well as disaster management; 6) Realization of food and energy security and 7) Consolidation of government governance and regional conduciveness.

Based on the results of Table 5, there has been synchronization of development planning in a top-down and bottom-up manner so that further analysis can be made regarding the relation to drinking water development as a derivative of existing development priorities. Funding through SAF for this sector will become synchronized when the SAF menu prepared by the central government aligns with regional planning for the water sector.

Table 6. Synchronization of National and Provincial Priorities for 2019

GWP 2019 (National Priority)	RGWP 2019 of Central Java (Provincial Development Priority)
Human development through poverty reduction and improvement of essential services	1. Poverty alleviation 2. Improving the quality of life and competitiveness of human resources to support the demographic bonus
Reducing disparities between regions through strengthening connectivity and maritime affairs	1. Reducing regional disparities
Increasing economic added value and job creation through agriculture, industry, tourism, and other productive services	1. Strengthening regional economic competitiveness
Consolidating energy, food, and water resources security	1. Management of natural resources and the environment, as well as disaster management 2. Realization of food and energy security
National security stability and general election success	1. Strengthening government governance and regional conduciveness

Source: GoI, 2018b; GoI, 2018

Central Java Province received the most significant National SAF Physical Assignment budget for the Drinking Water Sector but still needs to fully allocate the drinking water sector in its development planning, especially for the issue of rural drinking water supply. It shows that Central Java Province has not prioritized the drinking water program in its regional development, so it is not included in the RGWP.

Table 7. Synchronization of Center-Regional Programs in the Context of DAK Assignment of Drinking Water Fields

SAF Assignment of the Drinking Water Sector in the GWP 2019	Programs and Activities in Presidential Regulation 141 of 2018 concerning SAF Technical Guidelines	Provincial Development Program in the Drinking Water RGWP 2019
Urban Drinking Water (for slums and regional DWSS): 1. Expansion of pipeline DWSS through the utilization of the idle capacity of the Drinking Water Supply System (DWSS) built 2. New development for areas that do not yet have drinking water services through the construction of DWSS PN 3. Increasing DWSS through increasing the capacity and/or volume of built DWSS facilities and infrastructure	1. Expansion of pipeline DWSS through the utilization of the idle capacity of the drinking water supply system (DWSS) built 2. New development for areas that do not yet have drinking water services through the construction of DWSS PN 3. Increasing DWSS through increasing the capacity and/or volume of built DWSS facilities and infrastructure	Regional DWSS development
Rural Drinking Water (for PAMSIMAS expansion): 1. Expansion of pipeline DWSS through the utilization of the idle capacity of the Drinking Water Supply System (DWSS) explicitly built for Villages that have implemented PAMSIMAS 2. Increasing DWSS through increasing facilities and infrastructure capacity and volume explicitly built for villages that have implemented PAMSIMAS	1. Expansion of pipeline DWSS through the utilization of the idle capacity of the Drinking Water Supply System (DWSS) built 2. Increasing DWSS through increasing facilities and infrastructure capacity.	Not available

Source: Analyzed from Presidential Regulation 72/2018, Central Java RGWP 2019, Presidential Regulation 141/2018

Based on data from the Directorate of Regional Autonomy Bappenas, Central Java Province has an allocation of Physical SAF for Drinking Water of IDR 85,490,000,000.00 in 32 regencies/cities; spread over 146 sub-districts and 209 villages/subdistricts.

Table 8. Allocation of Physical SAF Assignment of Drinking Water Sector of Central Java

No	Regency/City	DAK Allocation in 2019 (IDR)
1	Wonosobo Regency	6,048,000,000.00
2	Malang Regency	3,625,000,000.00
3	Jepara Regency	3,505,000,000.00
4	Sragen Regency	3,433,000,000.00
5	Tegal Regency	3,283,000,000.00
6	Boyolali Regency	3,245,000,000.00
7	Holy District	3,200,000,000.00
8	Wonogiri Regency	3,187,000,000.00
9	Batang Regency	3,181,000,000.00
10	Semarang city	2,964,000,000.00
11	Kebumen Regency	2,947,000,000.00
12	Brebes Regency	2,915,000,000.00
13	Cilacap Regency	2,798,000,000.00
14	Karanganyar regency	2,781,000,000.00
15	Klaten Regency	2,693,000,000.00
16	Surakarta City	2,653,000,000.00
17	Banyumas Regency	2,643,000,000.00
18	Sukoharjo Regency	2,600,000,000.00
19	Grobogan District	2,599,000,000.00
20	Purworejo Regency	2,531,000,000.00
21	Magelang Regency	2,470,000,000.00
22	Semarang Regency	2,447,000,000.00
23	Pekalongan Regency	2,374,000,000.00
24	Pekalongan city	2,250,000,000.00
25	Banjarnegara District	2,111,000,000.00
26	Kendal County	1,882,000,000.00
27	Tegal City	1,807,000,000.00
28	Pati Regency	1,743,000,000.00

No	Regency/City	DAK Allocation in 2019 (IDR)
29	Rembang Regency	1,683,000,000.00
30	Demak Regency	1,500,000,000.00
31	Blora Regency	1,e445,000,000.00
32	Temanggung Regency	945,000,000.00

Source: Regional Autonomy Directorate, 2018

Until September 2019, when the field visit was carried out, the progress of implementing the 18 regencies was still in the bidding process at 56.25 percent, the physical progress of the 13 regencies/cities was more than 50 percent, and the average physical progress reached 2.78 percent.

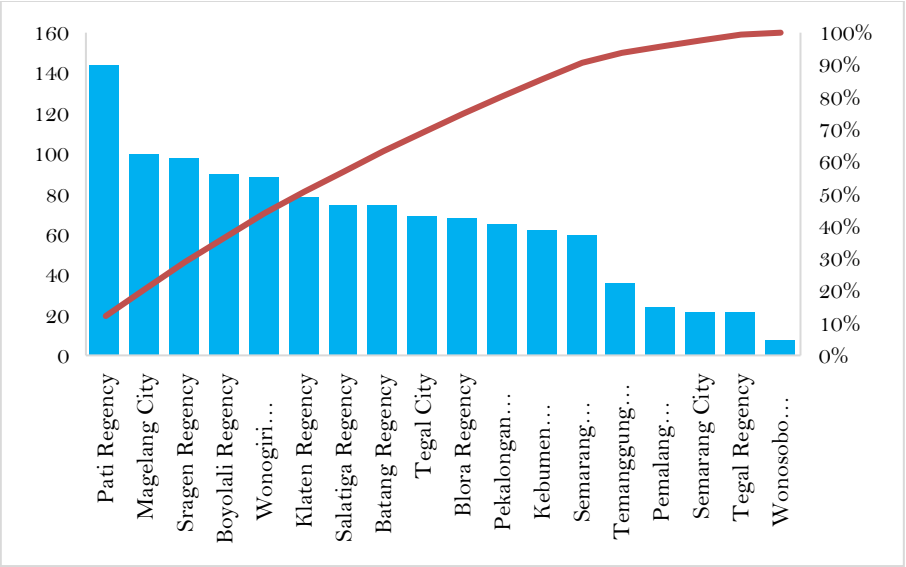

Figure 4. Percentage (%) of Physical Assignment Progress in the Drinking Water Sector in the 3rd Quarter of 2019 Central Java Province

Source: GoI, 2019b

Based on the target of the National Medium-Term Development Plan, access to drinking water in Central Java Province in urban areas has reached 82.89 percent, in rural areas 74.78 percent, and sanitation 82 percent. About 7.5 million people in Central Java Province have not received drinking water. SAF Physical Assignment of Drinking Water Sector activities was carried out in Demak and Jepara Regencies to support national priorities. Demak Regency, with a population density of 1,124,968 people in 2018, has access to proper drinking water 59.29 percent, with 46,760 HC (House Connections) units and 204,356 piped access. In 2019, Demak Regency received a physical SAF assignment in the drinking water field for IDR 1,500,000,000.00.

The Demak Regency Government is targeting the construction of a pipeline of 30,039 HC or 123,160 inhabitants. Another condition found in Demak Regency is the high non-revenue water (NRW) rate of 34.78 percent in 2018. The leakage rate in Demak Regency

shows an increase compared to 2012, which was 26.45 percent. Old pipes and water meters in poor condition cause this condition. Field visits by the Bappenas team were carried out in three villages in Demak and Jepara Regencies with the following notes:

1) Kalikondang Village, Demak District, Demak Regency

The rural drinking water menu carried out in Kalikondang Village is the expansion of the piped DWSS. The location determination was made based on the community's proposal to the Municipal Waterwork and the availability of idle capacity data. The target for constructing a water pipe connection in Kalikondang Village is four months (August–November) due to the length of the auction and phase I disbursement process (January–July). The construction progress as of September 2019, at the time of the visit, had reached 75 percent. The number of pipes built is 25 units, with a fund allocation of approximately IDR400,000,000.00 divided into two terms: a down payment and a 100 percent payment after the project is completed. There are two types of pipes built in Kalikondang Village: a 3-inch pipe with a length of 421 meters and a 4-inch pipe of 1.7 km. The water discharge channeled through the pipeline is 5 liters per second (Lpd).

2) Klampok Lor Village, Kebonagung District, Demak Regency

Klampok Lor Village, Kebonagung District, received the SAF Physical Assignment program in the Drinking Water Sector with 110 households, with an allocation of IDR500,000,000.00. Activities implemented in collaboration with Community-Based Water Supply and Sanitation (PAMSIMAS). Drinking water treatment in Klampok Lor Village uses the WWTP (Wastewater Treatment Plant) system with an implementation time of 150 calendar days.

3) Tengguli Village, Bangsri District, Jepara Regency

Tengguli Village, Bangsri District, Jepara Regency received the SAF Physical Assignment program for the Drinking Water Sector with 100 households. Additional groundwater wells in Tengguli Village were built with a capacity of 2 liters/second with a Water Tower and installation of pipes of approximately 1800 m in length with 100 house connections (HC). The implementation period is from 21 June 2019 to 17 November 2019, or one hundred and fifty calendars, with a maintenance period of one hundred and eighty. SAF fund allocation for this activity is IDR746,000,000.00.

Monitoring the implementation of the Physical SAF Assignment of the Drinking Water Sector in Central Java Province was conducted through a questionnaire survey to see the local government's perception of SAF activities. A total of 20 regencies and cities filled out the questionnaire of 32 regencies and cities that received SAF Physical Assignments in the Drinking Water Sector.

Table 9. Closed-Ended Questionnaire Results.

No	Condition	Answer Choices (percent)	
		Yes	No
1.	DWSS Regional Operations in Regencies and Cities	40.9	59.1
2.	Implementation of the 2008-2018 PAMSIMAS program	91.3	8.7
3.	Existence of a DWSS management agency	95.7	4.3
4.	Ownership of the Drinking Water Supply System Master Plan (RISPAM)	100	-
5.	Included in the KOTAKU/National Slum Upgrading Project (NSUP) location	91.3	8.7
6.	Existence of Drinking Water Working Group	81.8	18.2
7.	Availability of Provincial Drinking Water Roadmap	64.3	35.7
8.	Guidelines for drinking water technical planning at the provincial/regency/city level	52.9	47.1

Source: Questionnaire Results, 2019

The target for the development of residential areas in the 2015-2019 National Medium-Term Development Plan (RPJMN) is to increase the population's access to proper drinking water by 100 percent at the level of basic needs in 2019. Developing a Drinking Water Supply System (DWSS) is one of the National Priorities in the water sector drinking, with the target of building 31 Regional DWSSs throughout Indonesia. The Provincial Government of Central Java has been developing Regional DWSS since 2011 with a target of developing 9 Regional DWSS in their area.

Of the 20 districts and cities that received SAF Physical Assignments in the Drinking Water Sector who filled out the questionnaire, eight regions had already operated Regional DWSS, namely Tegal City, Sragen Regency, Pekalongan Regency, Karanganyar Regency, Cilacap Regency, Blora Regency, Kudus Regency, and Kebumen Regency. 91.3 percent of regencies and cities have implemented the Community-Based Water Supply and Sanitation Program (PAMSIMAS) in the 2008-2018 range, except for the City of Tegal. In addition to the PAMSIMAS program, Central Java Province also received an assistance project funded by the World Bank through the National Slum Upgrading Project (NSUP) to increase access to urban infrastructure and services in slum areas with target sectors including water supply, waste management, sanitation, urban transportation, and health. As many as 91.3 percent of regencies and cities are the priority for accelerating the management of slums through the NSUP/City Without Slums (KOTAKU) program, except for Sragen and Batang districts.

The central government has given a mandate through Presidential Regulation Number 185 of 2014 concerning the Acceleration of the Supply of Drinking Water and Sanitation for provincial and district/city governments to form a drinking water and sanitation working team. The results of the questionnaire showed that 81.8 percent of regencies and cities in Central Java had drinking water and sanitation working groups, while the other 18.2 percent did not yet have working groups, namely Tegal City, Banyumas Regency, and Semarang Regency. Semarang Regency is the only area that does not have a DWSS management agency.

Presidential Regulation Number 185 of 2014 concerning the Acceleration of Drinking Water and Sanitation Provision in Article 8 also mandates the provincial government to prepare guidelines for implementing roadmaps and technical guidelines for drinking water. The Provincial Government of Central Java does not yet have a drinking water roadmap. Several districts/cities also (47.1 percent) do not yet have drinking water technical guidelines, namely Wonosobo Regency, Tegal City, Banyumas Regency, Blora Regency, Semarang Regency, Sukoharjo Regency, and Batang Regency. In the technical implementation of drinking water, Central Java Province refers to the performance indicators of the Central Java Provincial Medium-Term Development Plan for 2018-2023 as follows:

Table 10. Performance Indicators for the Drinking Water Sector in the Central Java Provincial Medium-Term Development Plan

Indicator	2019	2020	2021	2022	2023
Percentage of urban safe water access	86.15	88.15	90.15	92.15	94.15
Percentage of rural safe water access	76.30	78.05	79.80	81.55	83.30

Source: GoI, 2019a

When compared with the 2019 performance target, based on the status as of June 2019, the performance of urban drinking water in Central Java Province reached 84.67 percent and rural drinking water 75.44 percent. Central Java Province received an allocation of SAF Physical Assignment in the Drinking Water Sector of IDR 85,490,000,000.00, which was divided into 32 regencies and cities. The largest allocation was for Wonosobo Regency of IDR 6,048,396,000.00, Pemalang Regency of IDR 3,625,000,000.00, and Jepara Regency of IDR 3,505,235,000.00. In contrast, the smallest SAF recipient area is Temanggung Regency IDR 945,000,000.00. As many as 65.2 percent of regencies and cities stated that the SAF budget allocation was insufficient to meet the minimum service standards (MSS) for handling slums. It is due to (1) SAF's budget allocation is lower than proposed, (2) Some areas are not included in the Decree on Slums of Central Java Province, (3) Difficult access to remote and vulnerable areas, including difficulty in obtaining raw water, and (4) There is a regulation whereby regions that have average access equal to the national standard do not need to apply for SAF for Drinking Water, even though the SAF locations are PAMSIMAS villages, not slum areas, the majority of which are in urban areas.

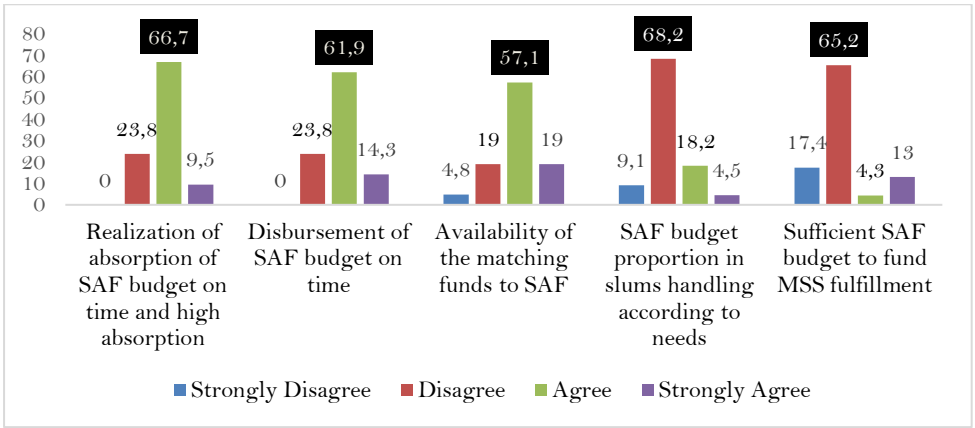

Figure 7. Perceptions of Fund Allocation in Fulfilling MSS

Source: Analysis Result, 2023

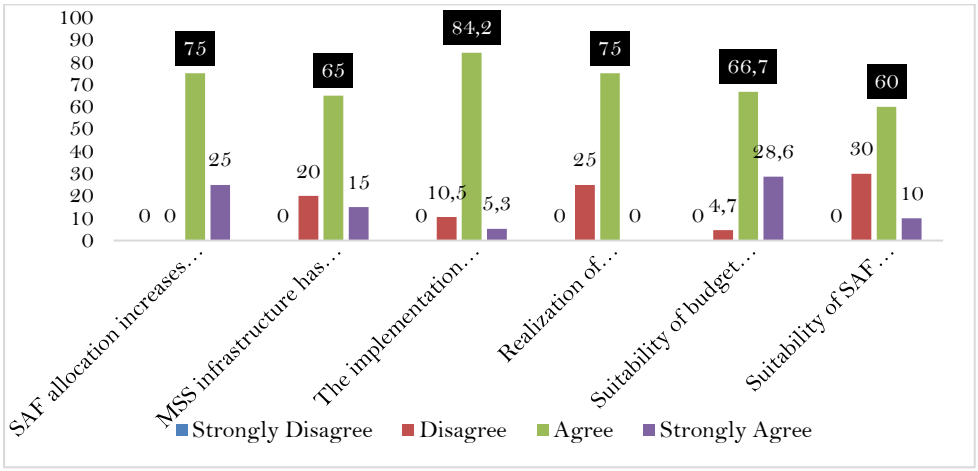

Figure 8. Perceptions of the SAF Assignment Implementation of the Drinking Water Sector in Central Java

Source: Analysis Result, 2023

Based on the results of the questionnaire, in terms of absorption and distribution of the SAF budget, the majority were good (above 50 percent), but as many as 66.7 percent of respondents stated that the SAF budget had not been proportional in fulfilling the Minimum Service Standards (MSS) and handling slums. This is due to the extensive area of the regency and city, the difficulty of raw water sources, and many areas in Central Java Province that are not included in the slum area (not PAMSIMAS villages/sub-districts).

Based on the questionnaire results, the SAF implementation in Central Java positively improves drinking water services and MSS infrastructure. It is due to good budget proportions, execution, and supervision. Achievement of output and realization of time can be carried out according to the target. In implementing the SAF Assignment of Drinking Water in Central Java, compliance with the Regional Government Work Plan (RGWP) was 60 percent, while compliance with the Budget Implementation Document - Regional Work Unit was 66.7 percent.

4. Conclusion

The Special Allocation Fund for the Physical Assignment of the Drinking Water Sector is intended to support the achievement of the MSS of drinking water designated for Regencies/Cities that meet specific criteria, and Central Java Province fulfills this to get the largest allocation of physical SAF funding for this sector in Indonesia compared to other regions.

From a planning perspective, the gap analysis results (GWP-RGWP) from 34 provinces in Indonesia, the Province of Central Java, are not 100 percent compliant (5 GWP programs) in their RGWP documents. Central Java Province received the most extensive National SAF Physical Assignment budget for the Drinking Water Sector but has not fully

allocated the drinking water sector in its development planning, especially for the issue of rural drinking water supply. It shows that Central Java Province has not prioritized the drinking water program in its regional development, so it is not included in the RGWP.

Of the 20 districts and cities that received the SAF Physical Assignment of the Water Sector who filled out the questionnaire in Central Java, 8 (eight) regions had already operated Regional DWSS, namely Tegal City, Sragen Regency, Pekalongan Regency, Karanganyar Regency, Cilacap Regency, Blora Regency, Kudus Regency, and Kebumen Regency. The SAF implementation in Central Java has a positive output for improving drinking water services and MSS infrastructure. It is due to good proportions of budget, execution, and supervision. Achievement of output and realization of time can be carried out according to the target. In implementing the SAF Assignment of Drinking Water in Central Java, compliance with the Regional Government Work Plan (RGWP) was 60 percent, while compliance with the Budget Implementation Document - Regional Work Unit was 66.7 percent.

5. Recommendation

A literature study of central-regional planning documents and questionnaires with case studies in Central Java Province found that several things still needed to be improved in implementing and synchronizing SAF planning for the Water Sector in the future. Some of the recommendations suggested include: 1) Large funding from SAF in an area needs to be balanced with synchronous planning to obtain optimal benefits from the allocated budget; 2) Synchronization of development planning requires ex-ante evaluation in stages in each proposal and implementation process to ensure timeliness and resources related to transfer funds in a region; 3) The need for assistance from the central government regarding the development of regional DWSS so that its implementation targets can be more evenly distributed in all regions towards universal access to drinking water and fulfillment of minimum service standards (MSS) and support national priority programs; 4) The need for assistance with a broader reach by Units Provincial DWSS Development Work in providing information regarding the menu of activities and priority locations of SAF Drinking Water Sector, as well as ensuring that proposals from districts/cities are in accordance with the menu of activities and priority locations determined, as well as participating in verifying the Proposal of Activity Plans.

In particular, for the development of drinking water to be funded through SAF, the central government should synergize the planning and allocation of the Physical SAF for Drinking Water with other sectors, such as sanitation and the environment, as part of implementing thematic, holistic, integrative, and spatial planning. Regulations regarding establishing technical guidelines and operational instructions, as well as the budget ceiling of the Physical SAF, can be established earlier as a step forward in anticipating the recurrence of implementation problems in previous years. What is also urgently needed is an evaluation of regulations regarding the Physical SAF in the Drinking Water Sector in terms of time synchronization so that local governments can implement SAF activities more optimally according to national targets with predetermined targets.

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