

# Evaluation of government funding support for national priority development related to the environmental sector in regions

ANDI SETYO PAMBUDI

Senior Planner, Directorate for Monitoring, Evaluating, and Controlling Regional Development – National Development Planning Agency (Bappenas)  
Gedung Bappenas Lantai 9, Jl. H.R. Rasuna Said, Kuningan, Setia Budi,  
Jakarta Selatan, DKI Jakarta 12920

Corresponding author: *andi.pambudi@bappenas.go.id*

Submitted 8 Maret 2023; Accepted 24 April 2023

## ABSTRACT

Sustainable development focusing on environmental issues is the target of both central and local governments. Ideally, planning and funding this issue requires harmonizing and implementing top-down and bottom-up alignment. Neglect from a regional point of view often causes various obstacles in implementation, which of course, causes inefficiency. The allocation and distribution of budgeting through special transfer funds for environmental issues are interesting to elaborate with attention to the sustainability of the policy and the expected benefits. The analysis of the implementation of government funding support for the development of national priorities related to the environmental sector in the region is interesting to be elaborated more deeply to provide information on strategic control and integration of future development. This further elaboration is in line with the national economic recovery after the COVID-19 pandemic, which has attracted the attention of many parties. The method used in the analysis is a qualitative approach through literature review and limited discussion (FGD) with stakeholders at the central-regional level and through online survey methods. The literature review uses previous research, journals, books, and planning documents at the central and regional levels to capture the Physical SAF 2021 policy for the environment, analyze budget distribution, and analyze central-regional planning/funding alignment in terms of planning documents. Focus Group Discussion (FGD) method and online questionnaires are used to capture field problems. Expectations desired in this evaluation-based analysis can provide recommendations following the actual conditions in the area as the implementer of this fund.

## ABSTRAK

Pembangunan berkelanjutan yang berfokus pada isu lingkungan menjadi target pemerintah baik pusat maupun daerah. Idealnya, perencanaan dan pendanaan masalah ini membutuhkan harmonisasi dan implementasi top-down dan bottom-up. Pengabaian dari sudut pandang daerah seringkali menimbulkan berbagai kendala dalam pelaksanaannya, yang tentunya menimbulkan inefisiensi. Alokasi dan distribusi penganggaran melalui dana transfer khusus untuk masalah lingkungan hidup menarik untuk dijabarkan dengan memperhatikan kesinambungan kebijakan dan manfaat yang diharapkan. Analisis pelaksanaan dukungan pendanaan pemerintah untuk pembangunan prioritas nasional terkait bidang lingkungan hidup di daerah menarik untuk dielaborasi lebih dalam guna memberikan informasi pengendalian strategis dan keterpaduan pembangunan ke depan. Penjelasan lebih lanjut ini sejalan dengan pemulihan ekonomi nasional pasca pandemi COVID-19 yang menjadi perhatian banyak pihak. Metode yang digunakan dalam analisis adalah pendekatan kualitatif melalui kajian pustaka dan diskusi terbatas (FGD) dengan pemangku kepentingan di tingkat pusat dan daerah serta melalui metode survei online. Tinjauan literatur menggunakan penelitian sebelumnya, jurnal, buku, dan dokumen perencanaan di tingkat pusat dan daerah untuk menangkap kebijakan SAF Fisik 2021 untuk lingkungan, menganalisis distribusi anggaran, dan menganalisis keselarasan perencanaan/pembiayaan pusat-daerah dalam hal dokumen perencanaan. Metode Focus Group Discussion (FGD) dan kuesioner online digunakan untuk menjangkau permasalahan lapangan. Harapan yang diinginkan dalam analisis berbasis evaluasi ini dapat memberikan rekomendasi sesuai dengan kondisi aktual di daerah selaku pelaksana dana ini.

**Keywords:** *environment, planning, regional development, Special Allocation Fund/SAF*

## INTRODUCTION

In the last few decades, environmental issues have become one of the mainstays of development nationally and regionally. Attention to the environment is a form of human ecological awareness that is starting to shift from meeting short-term needs to sustainable development (Al-Qudah et al., 2021; Castro, 2004). The essence of

sustainable development is the internalization of the impact of every social and economic activity on the environment, meaning that every social and economic activity needs to avoid/prevent or consider its impact on environmental conditions. Increasing population growth has the consequence of a fast and instant revolution in fulfilling economic needs; on the other hand, there are side effects related to the environment (Pambudi, 2020a;

Pambudi, 2019; Common & Stagl, 2005). For example, the conversion of an area in forest land is a result of population pressure on the land, indicating that there is a role for the community, both on a specific scale and in general, which affects the condition of the sustainability of natural resources (Watson et al. 2014, Cumming 2016, Mtibaa et al. 2018). Population pressure on this land is driven by an imbalance between the rate of population growth and the availability of land, resulting in increased activity and intensity on existing land or opening up new land (Soemarwoto, 1999). Conversion without regard to topographical, geological, and ecosystem carrying capacity conditions causes natural disasters such as pollution, landslides, floods, and droughts (Sinukaban, 2007).

The development of the environmental sector is not only the responsibility of the central government but also of regional governments in the provinces and districts. Generally, there are two environmental policies: a) conservation and management of natural resources; b) control of environmental damage and pollution. The central and regional governments implement various physical and non-physical policies to regulate and mitigate environmental damage and pollution. In the context of development funding, the central government's special attention to the regions is manifested through a transfer fund mechanism with physical and non-physical Special Allocation Fund (SAF) menus in the environmental sector. Transfer funds to the regions reflect the role of the central government, which functions to help economic growth in the areas (Fauziyah & Trisnawati, 2022). The transfer fund scheme to these regions has changed for simplification.

Special Transfer Funds are funds allocated in the State Budget to regions to help finance special activities, both physical and non-physical, which are regional affairs. The specific activities referred to are regional affairs following the division of functions in Law Number 23 of 2014 concerning Regional Government and following the National Priorities (PN) in the Government Work Plan. One of the transfer fund policies from the central government to the regions is SAF for the environment (GoI, 2020c; GoI, 2020d; Pambudi, 2020b). In 2021, the policy direction for SAF Physical Assignment of the Thematic Environment Sub-sector for Provision of Sustainable Economic Infrastructure was to control environmental pollution and protect and manage the environment, control ecosystem damage and waste management through waste reduction and handling, which are adjusted to conditions characteristic of each region that becomes their authority.

The Physical Special Allocation Fund for the Environment sub-sector will support national priorities for developing the environment, increasing disaster resilience and climate change through the Priority Programs for Improving Environmental Quality,

Increasing Disaster and Climate Resilience, and Low Carbon Development. Specific Physical Allocation Fund Type of Assignment in the Environment and Forestry Sector, the Environment sub-sector, 2021 Fiscal Year supports the program for providing sustainable economic infrastructure, especially in the development of 10 priority tourist destinations to support economic recovery in the regions as an effort to deal with the impact of COVID-19 (GoI, 2021a; GoI, 2021b).

Development planning related to the national environment is also determined by regional development planning (Pambudi, 2021; Mina, 2016). An analysis of government funding support implementation for national priority development related to the environmental sector in regions is interesting to elaborate more deeply to provide strategic control information and future development synergies. This further elaboration is in line with the post-COVID-19 national economic recovery, which was a concern of many parties. The desired hope in this evaluation-based analysis is to be able to provide recommendations following the realistic conditions in the region as the executor of this budget in the field.

## METHODS

An analysis of the implementation of government funding support for national priority development related to the environmental sector in the regions uses a qualitative approach through literature reviews and limited discussions (FGD) with stakeholders at central-regional levels and through online survey methods. The literature review uses previous research, journals, books, and planning documents at the central and regional levels to capture the 2021 Physical SAF policy for the Environment, analyze budget distribution, and analyze central-regional planning/funding collaboration from the planning documents side. To identify field problems, uses Focus Group Discussion (FGD) method, panel discussion, and online questionnaires. Questionnaire data was collected through the Google Form platform and addressed to the SAF Physical Assignment activity manager. The filling list is prepared according to issues in the environmental field. A questionnaire survey was conducted to see the extent to which SAF implementation governance problems were related to various aspects, including institutional, regulatory, budgetary, and implementation technical aspects. This survey was also to obtain input from SAF implementers throughout Indonesia in provinces, districts, and cities. The questionnaire in the Google Form application contains a list of fundamental questions as survey material, including a) Conformity of Physical SAF activities with regional priorities; and b) Obstacles to SAF implementation from institutional, regulatory, and funding aspects. This analysis identifies substantial obstacles in the field as one of the

considerations for recommending SAF improvements related to the Environment.

## RESULT AND DISCUSSION

### Literature Review of Environmental Development Policy through SAF 2021

Thematic Physical Special Allocation Fund for Provision of Sustainable Economic Infrastructure in the Environment Sub-sector has the goal of increasing Environmental Quality as reflected in the Environmental Quality Index (EQI) score of 67.33 in 2021 to increase the achievement of reducing waste in the regions by 24 percent and improving waste handling by 74 percent. It is to achieve the target of the National Policy and Strategy for Household Waste Management and Household Waste-like Waste (Jakstranas) to provide sustainable economic infrastructure, especially in developing 10 (ten) priority tourist destinations.

**Table 1.** Sampling time for seawater quality and phytoplankton.

Activities Menu	Activities Details
Waste management and supporting infrastructure	<ul style="list-style-type: none"> <li>• Development of a Master Garbage Bank (BSI) with a capacity of 3 tons/day</li> <li>• Construction of a compost house with a capacity of 1 ton/day</li> <li>• Construction of a Biodigester with a capacity of 1 ton/day</li> <li>• Provision of hydraulic press machine</li> <li>• Provision of an organic chopping machine</li> <li>• Provision of three-wheeled motorbike garbage transportation equipment</li> <li>• Provision of waste sorting carts</li> <li>• Provision of dump trucks for transporting garbage</li> <li>• Provision of arm roll garbage transportation equipment</li> <li>• Construction of a Recycling Cente with a capacity of 10 tons/day</li> <li>• Procurement of garbage containers (arm roll trucks)</li> </ul>

Source: GoI, 2020d

Physical Special Allocation Funds Thematic Assignments Provision of Sustainable Economic Infrastructure for the 2021 Fiscal Year has location criteria including 1) Represents a Regency/City that has compiled and determined (has been approved by the Regional Head) Regional Policies and Strategies for the Management of Household Waste and Household-like Waste Waste (Jakstrada) and Waste Management Balance Sheet; 2) Is a Regency/city that is included in the priority tourist destination area; 3) Regencies/cities that have adequate commitment and progress in waste management, but the percentage of operational capacity for waste management is still low; and 4) PON Papua 2021 venue based on the Instruction of the President of

the Republic of Indonesia 1 of 2020 concerning the Acceleration of Support for the Implementation of the XX National Sports Week and the 2020 XVI National Paralympic Week in Papua Province.

Physical SAF Activities Types of Assignments for the Environment Sub-sector are carried out by referring to the procedures listed in the Operational Guidelines stipulated by the Minister who administers government affairs in the Environment Sector. Physical SAF activities for the Environment sub-sector, especially in waste management activities, have special provisions, including the construction of a central waste bank, compost house, biodigester, and recycling center and their supporting facilities, which must fulfill the following requirements: a) Procured with intact components/not separated to construct buildings and their infrastructure; b) Land/land from the local government or community grants and free from disputes; c) Considering an effective form of waste management because the characteristics of the waste and the character of society will differ from one region to another; d) Considering household expenses, collection expenses, and environmentally friendly.

The 2021 Physical Special Allocation Fund for the Assignment of the Environment Sub-sector can support the achievement of the sixth National Priority: building the environment, increasing disaster resilience, and climate change. In this regard, several target outcomes are to be achieved, namely increasing the quality of the environment as reflected in the increasing score of the Environmental Quality Index (EQI) of 67.33. Physical Special Allocation Fund for Environment Sub-Sector Output Targets: 1) Establishment of an Early Warning System (EWS) for environmental disaster control by providing information on water quality and mercury to the public in the framework of pollution control and stunting reduction; 2) Increasing the achievement of reducing waste in the regions to achieve the target of the Regional Policy and Strategy for the Management of Household Waste and Household-like Waste (Jakstrada) in 2021; and 3) Improved waste handling to achieve the Jakstrada target in 2021.

The criteria for a locus of Physical SAF for the Environment Sub-Sector in 2021 include: 1) Regencies/Cities that have compiled and established (approved by the Regional Head) Regional Policies and Strategies for the Management of Household Waste and Household-like Waste (Jakstrada) and balance sheets waste management; 2) Regencies/cities that include the following characteristics: a) Locus of handling stunting; b) Areas of 10 priority tourist destinations; c) The 2021 National Sports Week in Papua venue is based on the Instruction of the President of the Republic of Indonesia 1 of 2020 concerning the Acceleration of Support for the Implementation of the XX National Sports Week and the 2020 XVI National Paralympic Week in Papua



**Figure 1.** Distribution of Locations for Special Allocation Fund Implementation in Fiscal Year 2021 for the Environment Sub-Sector

Province; and d) Regencies/cities that have good commitment and progress in waste management, but the percentage of operational capacity for waste management is still low. Locus criteria for the ONLIMO menu and lab tools, including 1) Prov/District/City, which is the locus of villages for handling stunting; 2) Prov/District/City in 15 Priority River Basin Areas, 15 Priority Lakes, and heavily polluted rivers; 3) Prov/District/City which is the locus of the action plan for handling mercury according to Minister of Environment and Forestry Regulation 81 of 2019; and 4) Prov/District/City which has an operational and accredited environmental laboratory or proficiency test.

In 2021, the total budget allocation for SAF for the Physical Assignment of the Environment Sub-sector was IDR332,115,835,600.00 (GoI, 2020a). This budget is distributed to 29 Provinces and 93 Regencies/Cities, or only 4.65 percent compared to the budget ceiling for the Environment sector in BA.029 Ministry of Environment and Forestry. Based on the online reporting <https://monevdak.menlhk.id>, realizing the Physical SAF budget for the Environmental Sub-sector in Fiscal Year 2021 until the 21st of June 2021 is 0.09 percent or IDR291,700,000.00 of the total ceiling. This achievement is still very small considering the implementation of activities has entered the third quarter.

Activities in support of water quality monitoring equipment (EWS and ONLIMO) are available again on the Physical SAF menu of the Environment Sub-sector for 2021. Based on the Joint Monev SAF activities carried out by the Ministry of PPN/Bappenas in 2019, outcomes that support the increase of the Environmental Quality Index (EQI) cannot be obtained directly through the strengthening of tools for monitoring water quality data. There needs to be an activity menu intervention that can have a direct impact on improving the environment so that it can increase the EQI value. From a discussion with Ministries/Agencies and the Ministry of National Development Planning/Bappenas in June 2021, the Planning Bureau of the Ministry of Environment and Forestry clarified that support for EQI achievements from EWS and ONLIMO could not be seen directly. However, ONLIMO is a means of obtaining more accurate data when compared to manual water quality measurements. Water quality monitoring activities require many sample points so that to monitor continuously, ONLIMO (online monitoring) can help facilitate data provision. Online Monitoring (ONLIMO) is one of the pre-preparatory conditions for monitoring data in real-time relating to pollution conditions as a basis for policy-making.

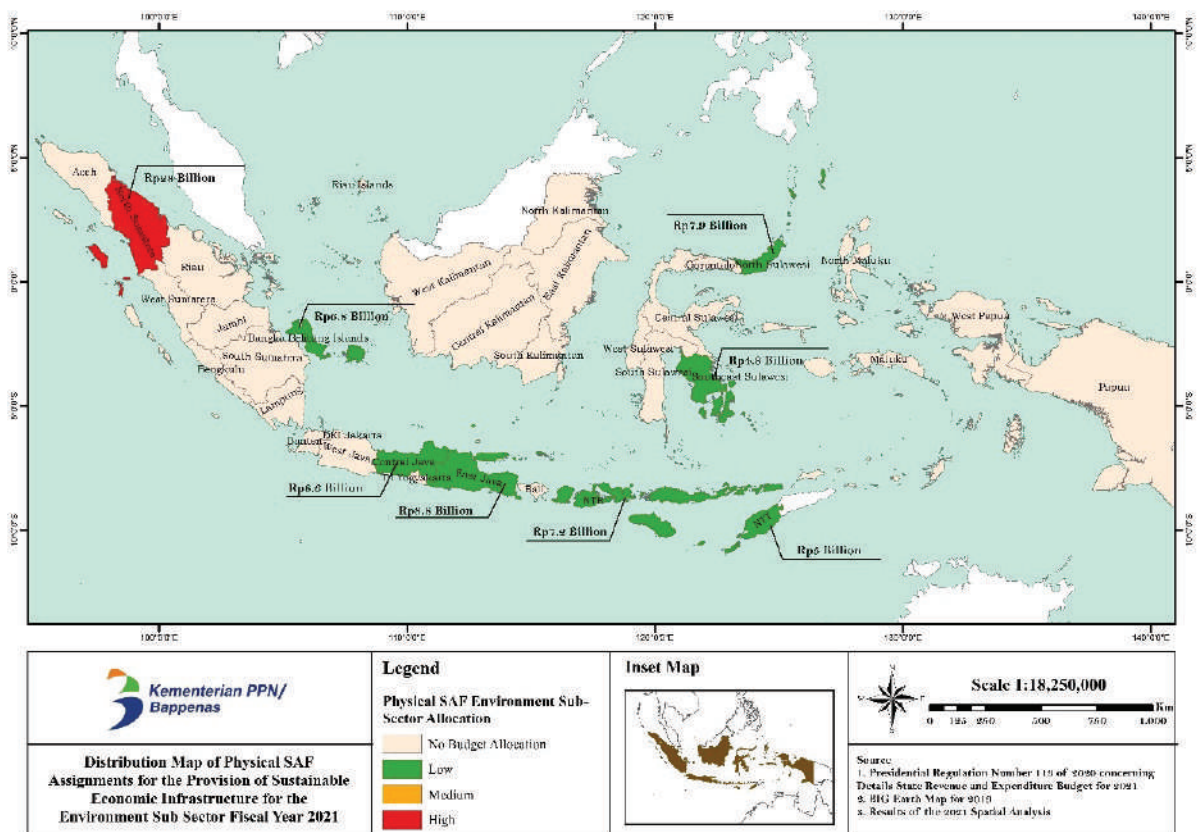
**Evaluation of the Distribution of the Physical SAF Budget Assignment to Provision of Sustainable Economic Infrastructure for the 2021 Fiscal Year of the Environment Sub-sector**

The Special Allocation Fund (SAF) for Physical Thematic Assignments for the Provision of Sustainable Economic Infrastructure (PSEI) for the Environment Sub-Sector has a total budget of IDR77,354,950,000.00 or 2.02 percent of the total SAF Physical Assignment of PSEI, and 0.22 percent of Physical SAF for FY 2021. A Map of the distribution of SAF Physical for Thematic Assignments of PSEI for the Environment Sub-sector for the Provincial Budget for FY 2021 is contained in Figure 6.19. Map of the distribution of the Physical Allocation Fund (SAF) budget for the PSEI Assignment of Environment Sub-sector for the 2021 Fiscal Year based on Presidential Regulation 113 of 2020 concerning Details of the 2021 State Revenue and Expenditure Budget. The SAF Physical Assignment PSEI Budget for the Environment Sub-sector mapped is an allocation accumulated at the provincial level and districts/cities. The results of the analysis show that as many as 26 regions do not have a Physical SAF Assignment PSEI of Environment Sub-sector 2021 budget, seven regions are in the low category (green zone with an allocation of 4-12 billion rupiahs), no areas in the medium classification (orange zone with 12-20 billion rupiahs

allocation), and one region in the high category (red zone with 20-28 billion rupiahs allocation).

Based on the distribution map above, regional governments with large SAF budgets for the Environment sub-sector can be seen from 2 sides: the high central government support or the high dependence of the region concerned. Based on the results of discussions with the Regional Government of North Sumatra, which is in the red category, information is obtained that environmental quality is one of the strategic issues on the development agenda of North Sumatra Province. The existence of an interest in the utilization of natural resources creates pressure on environmental quality, pollution, and other environmental damage. North Sumatra Province is building and developing a sustainable development model through green growth to ensure a balance between economic development and environmental quality, especially since North Sumatra has two Major Projects as centers of economic growth, namely SEZ Sei Mangkei and Lake Toba KSPN.

Based on monitoring the value of the Environmental Quality Index (EQI), Sumatra Province, in the last 5 (five) years, has an EQI score improving from 50.32 percent in 2015 to 69.37 percent in 2020. It shows an improvement in the quality environment in North Sumatra Province during the last 5 (five) years. The achievement of increasing the EQI value of North



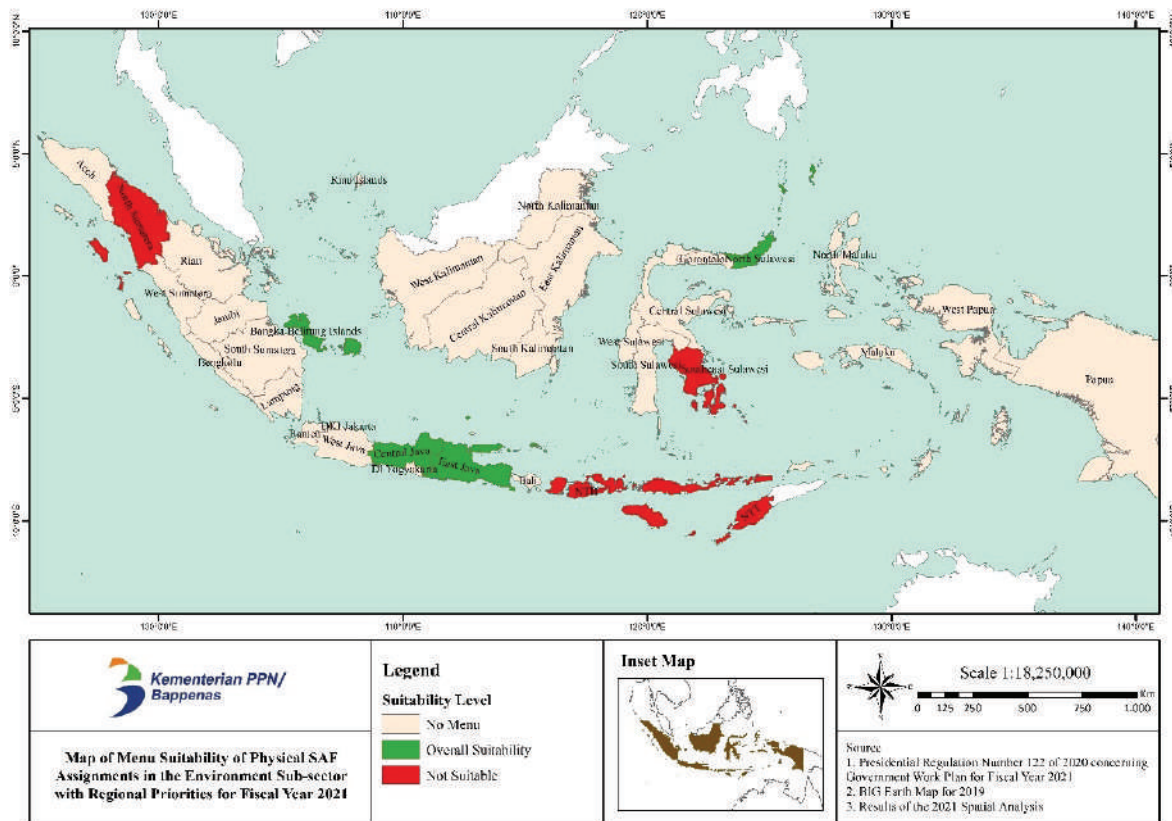
Source: Analysis Results, 2021

**Figure 2.** Distribution of Locations for Special Allocation Fund Implementation in Fiscal Year 2021 for the Environment Sub-Sector

Sumatra cannot be separated from the support of the Environmental Sub Sector activity program. So far, the contribution of SAF Physical activities for the Environment sub-sector to the regions is still relatively high. As happened in Dairi Regency, in 2021, the contribution of the SAF budget for the Physical Assignment of the Environment Sub-sector reached IDR6,820,000,000.00 out of a total budget of IDR15,520,789,458.00 or in other words, the source of the regional environmental sector budget, amounted to 43.94 percent comes from the Physical SAF budget for the Environment Sub-Sector. Physical SAF activities for the Environment sub-sector have a variety of menus that can support the improvement of environmental quality in North Sumatra Province, specifically by reducing river pollution through strengthening waste handling infrastructure.

### Evaluation of Regional Priority Synergies Related to the Environment with the Physical SAF Menu

Nationally, the 5-year development plan is written down into annual planning, which involves relations with regional planning in the planning process (Pambudi et al., 2022; GoI, 2020b). The Physical Special Allocation Fund for the Thematic Assignment for the Provision of Sustainable Economic Infrastructure (PSEI) in the Environmental Sub-sector only has 1 (one) activity menu, namely, waste management and supporting infrastructure. The criteria for the location of the Physical SAF Assignment for the Environment Sub-sector include 1) It is a Regency/City that has compiled and determined (already approved by the Regional Head) Regional Policies and Strategies for the



Source: Analysis Results, 2021

**Figure 2.** Distribution of Locations for Special Allocation Fund Implementation in Fiscal Year 2021 for the Environment Sub-Sector

Management of Household Waste and Waste Similar to Household Waste (Jakstrada) and a Waste Management Balance; 2) Is a regency/city includes as a priority tourist destination area; 3) Is a regency/city that has exemplary commitment and progress in waste management, but the percentage of operational capacity for waste management is still low; 4) The PON Papua 2021 venue based on the Instruction of the President of the Republic of Indonesia 1 of 2020 concerning Acceleration of Support for the Implementation of the XX National

Sports Week and the XVI National Paralympic Week 2020 in Papua Province.

The Physical Special Allocation Fund (SAF) for the Sustainable Economic Infrastructure Provision (PSEI) Thematic Assignment in the Environment Sub-sector Fiscal Year 2021 is only allocated to regions in 8 (eight) provinces, including Bangka Belitung Province, Central Java, East Java, North Sulawesi, North Sumatera, Southeast Sulawesi, West Nusa Tenggara, and East Nusa Tenggara. Based on the planning gap analysis results in

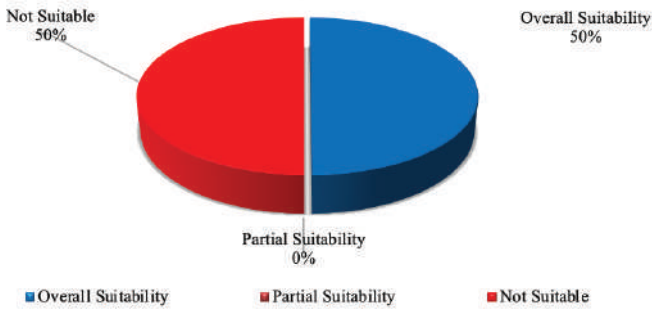
the eight provinces, there are 4 (four) provinces where the regional priorities follow the Physical SAF menu, and there are 4 (four) provinces where the regional priorities are not following the Physical SAF menu. Four provinces with regional priorities relevant to the menu include the Provinces of the Bangka Belitung Islands, Central Java, East Java, and North Sulawesi.

are overall suitable with the SAF menu for the Thematic Assignment of PSEI for the Environment sub-sector is only 50 percent, and those that are not overall suitable are 50 percent.

**Evaluation of Physical SAF Performance Problems in the Environment Sub-sector in the Regions Based on Questionnaire**

A questionnaire survey shows the extent of SAF implementation governance problems related to various aspects, including institutional, regulatory, budgetary, and technical implementation. This survey was also conducted to obtain input from SAF implementers in provinces, districts, and cities throughout Indonesia. Questionnaires filled out by the local government via the Google form were verified through a Focus Group Discussion involving the central and local governments to ensure that the analysis results can be more accountable.

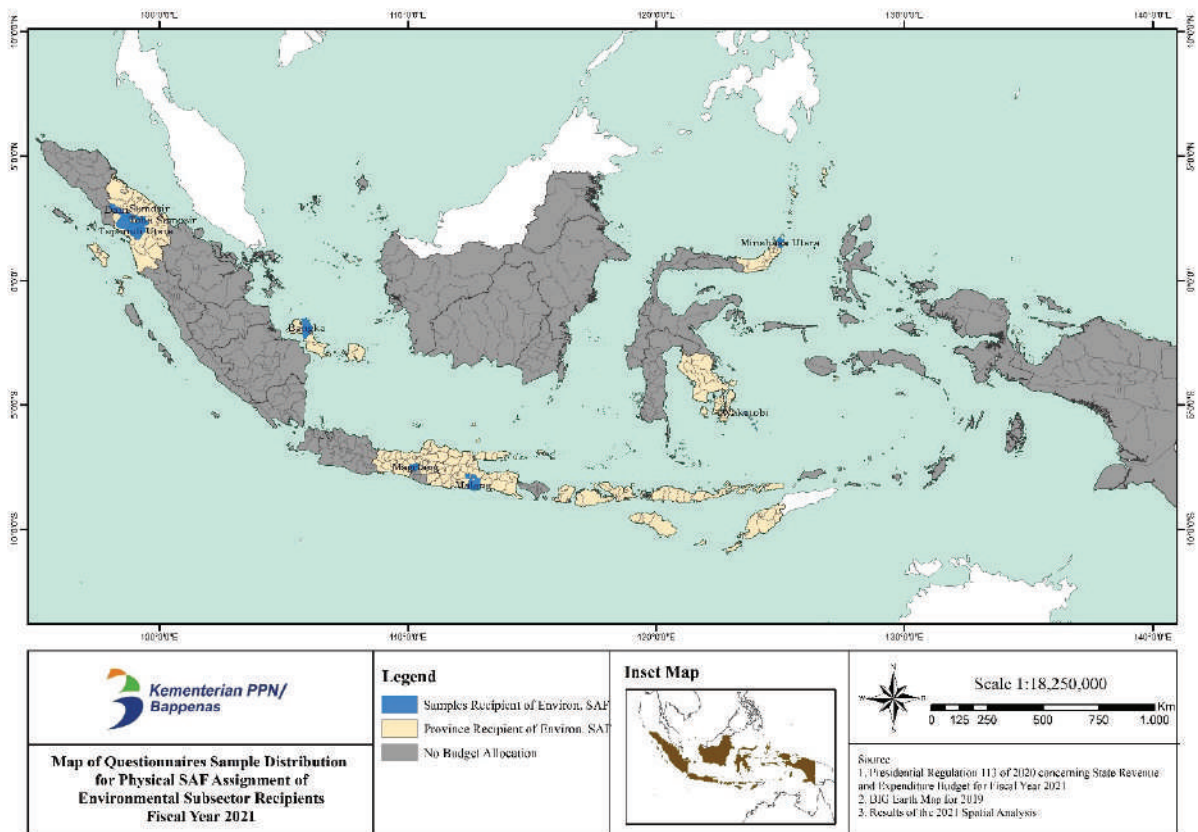
In 2021, there will be 101 regions consisting of 86 Provinces/Districts/Cities receiving Physical SAF Assignment of the Thematic Environment Sub-Sector for Reducing Stunting Rates and 15 Thematic Districts/Cities for Infrastructure Development for Sustainable Economic Development. Several regions (107 regions) have participated in the questionnaire survey for the implementation of the Physical SAF



Source: Analysis Results, 2021

**Figure 4.** Level of Suitability of Physical SAF Assignments for the Environment Sub-sector with Regional Priorities Fiscal Year 2021

Meanwhile, 4 (four) other provinces do not have environmental priorities, including North Sumatra, Southeast Sulawesi, West Nusa Tenggara, and East Nusa Tenggara. Based on the data and analysis results, the proportion of regions with development priorities that



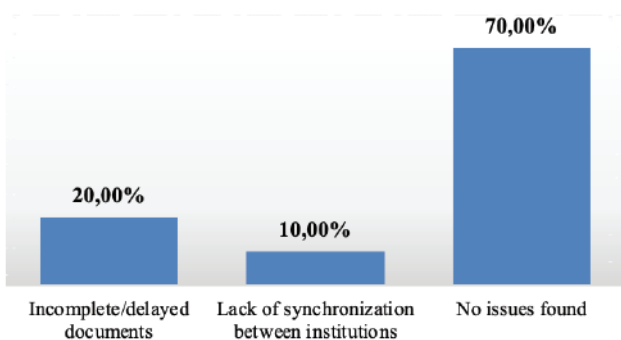
Source: Analysis Results, 2021

**Figure 2.** Distribution of Locations for Special Allocation Fund Implementation in Fiscal Year 2021 for the Environment Sub-Sector

Assignment of the Environment Sub-Sector in 2021, which are spread across 31 provinces, including the Provinces of Banten, Jambi, West Papua, Riau, West Java, West Sumatra, Central Kalimantan, South Sulawesi, Java East, North Sumatra, Babel Islands, North Sulawesi, West Kalimantan, East Kalimantan, Lampung Gorontalo, Central Sulawesi, East Nusa Tenggara, Aceh, Central Kalimantan, South Sumatra, Central Java, East Java, Bali, Southeast Sulawesi, North Maluku, Kalimantan South, D.I Yogyakarta, West Nusa Tenggara, Papua, and DKI Jakarta.

In this analysis, the incoming questionnaire data has been sorted according to the interests of the Thematic Locus for the Provision of Sustainable Economic Infrastructure. Based on the results of further disaggregation, of the 15 Regencies/Cities receiving Physical SAF Assignment Thematic of the Provision of Sustainable Economic Infrastructure (PSEI) for Environment Sub-sector in 2021, 11 respondents coming from 10 Regencies/Cities receiving Physical SAF for the thematic PSEI of Environment Sub-sector including Districts Dairi, Humbang Hasundutan Regency, Toba Regency, North Tapanuli Regency, Samosir Regency, North Sumatra Province, Magelang Regency, Central Java Province, Bangka Regency, Bangka Belitung Islands Province, North Minahasa Regency, North Sulawesi Province, Malang Regency, East Java Province, Wakatobi Regency, Southeast Sulawesi Province.

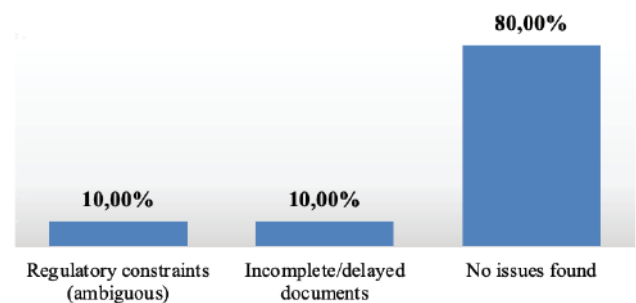
The results of the preference survey for the implementation of SAF Assignments in the Environment Sector, 10 Physical SAF recipient regions (out of 15 recipient regions) have filled out a questionnaire to give preference to the implementation of Physical SAF activities Thematic Assignment for Provision of Sustainable Economic Infrastructure in the Environment Sector 2021. On the institutional aspect, the preference for implementers of SAF in the regions shows that the majority of SAF implementers do not find issues (70.00 percent). Several issues related to institutional aspects include delays/incomplete documents (20.00 percent) and lack of synchronization between institutions (10.00 percent).



Source: Analysis Results, 2021

**Figure 6.** Constraints to Implementation of SAF Assignment of the Environment Sub-sector on Institutional Aspects

Several other issues in the institutional aspect include 1) Overlapping activities with the Public Works and Public Housing Services, particularly sanitation and waste management, requiring cross-agency coordination, which slows implementation time; 2) Community-level group institutions are not yet optimal due to low management commitment, regeneration, and legality, so the effectiveness of SAF implementation and post-implementation is not optimal; 3) The unavailability of an adequate number and capacity of human resources so that work management is not maximized between the administrative division and technical implementers in the field; 4) Not optimal coordination with other institutions, such as the Regional Planning Agency, Settlement Agency, and Environment Agency are not able to be independently related to their duties and functions, so implementation is slow; 5) Delays in activities due to a review involving APIP if the review materials are not fully prepared, resulting in the review process takes a long time; 6) Not optimal utilization of river water EWS because many institutions handle river areas; 7) Not optimal coordination in several regions (eg. Kulon Progo Regency), especially those with two regional apparatuses (the Environment Agency and the Public Works and Housing Agency) for waste reduction and waste management; 8) Delays in fulfilling the requirements of the submitted proposals so that several regions did not receive SAF for the Environment Sub-Sector.



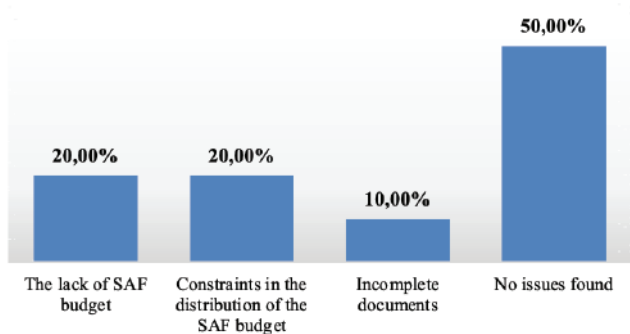
Source: Analysis Results, 2021

**Figure 7.** Constraints to Implementation of SAF Assignment of the Environment Sub-sector on Regulation Aspects

Regarding regulation, the preferences of SAF implementers in the regions show that most SAF implementers also experience no obstacles (80.00 percent). Several issues related to regulatory aspects include ambiguous regulatory constraints (10.00 percent) and incomplete documents (10.00 percent). Several other issues in the technical aspects of regulation include 1) Existing regulations are not yet optimal because existing regulations require SAF proposals in the environmental sector to be regional issues so that SAF activities cannot yet handle local issues; 2) The delays in activities due to regional refocusing policies have resulted in the unavailability of matching funds for SAF; 3) SAF



technical guidelines that are valid for >one year are not yet available to accelerate the implementation of activities. The SAF technical guidelines change every year, resulting the implementation needs to wait for the SAF technical guidelines to be issued; 4) There were constraints on the situation and conditions of the COVID-19 pandemic so that the fulfillment of the deadline for the disbursement of phase one was delayed; 5) Delays in submitting the list of contracts due to doubts by the regional apparatus to carry out activities during the COVID-19 pandemic; 6) The menu for using SAF is not flexible so that SAF activities are not fully suitable with regional needs; 7) Complicated requirements on Item readiness criteria (eg. location certificate) thereby slowing down the implementation time; 8) Lack of understanding of Human Resources in the Regional Apparatus Organization technically in the process and rules for proposing Physical SAF budget so that SAF implementation is delayed; 9) The SAF assignment of ONLIMO is not yet appropriate so that SAF activities are not yet effective in supporting regional problems.

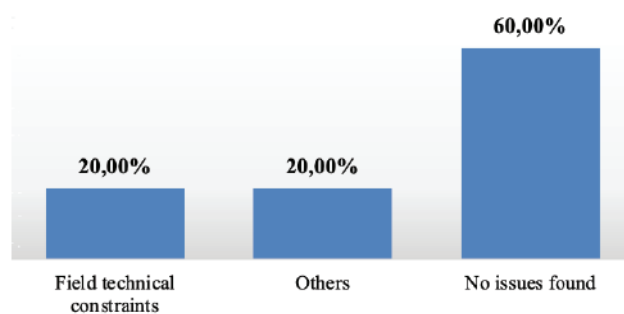


Source: Analysis Results, 2021

**Figure 8.** Constraints to Implementation of SAF Assignment of the Environment Sub-sector on Funding Aspects

Regarding funding, the preferences of SAF implementers in the regions show that most SAF implementers also have no problems (50.00 percent). There are several issues related to the funding aspect, including the lack of a SAF budget (20.00 percent), constraints in the distribution of the SAF budget (20.00 percent), and constraints on incomplete documents (10.00 percent). Several other issues in the funding aspect include: 1) The unavailability of supporting costs for SAF for the Environment sub-sector, including the absence of a budget for planning and supervision, causes the regions to need to allocate budgets for support costs, preparation of planning and supervision, while the impact of refocusing in the regions causes the Local Government Budget limited; 2) Insufficient operational and maintenance costs in the regions so that maintenance of SAF physical facilities can be neglected; 3) The KRISNA menu for the Environment sub-sector is not yet optimal, which only provides a menu for waste management and environmental quality monitoring

equipment, while problems in the environmental sector are very complex, not only physically but non-physically so that the Physical SAF does not optimally support the effectiveness of waste problems; 4) Limited Local Government Budget for supporting facilities for laboratory services, so that laboratory services are not yet optimal; 5) Dependence on the process of disbursing funding with other packages across OPDs which causes the distribution to run slowly; 6) The limited capacity of human resources in the technical Regional Apparatus Organization (OPD) causes the preparation of the RAB to proceed slowly due to the HR not understanding the fulfillment of the proposal requirements; 7) There has been a change in the budgeting system the post-regulation from the Ministry of Home Affairs, so the implementation of SAF activities is backward; 8) The existence of SAF allocations causes pure Local Government Budget support in regional apparatus to be reduced, thereby affecting the performance of the environmental program as a whole.



Source: Analysis Results, 2021

**Figure 9.** Constraints to Implementation of SAF Assignment of the Environment Sub-sector on Technical Implementation Aspects

On the technical implementation aspect, the preferences of SAF implementers in the regions show that most SAF implementers also experience no problems (60.00 percent). Several issues related to the technical aspects of implementation include technical field constraints (20.00 percent). Several other issues in the technical aspects of implementation include 1) Delays in the implementation of SAF activities due to waiting for operational instructions to be published so that the implementation of activities generally takes place at the end of the year; 2) The equipment price survey was not yet optimal during the COVID-19 pandemic because it could not be carried out face-to-face, so they lacked confidence in the implementation of activities; 3) The slow process of selecting the procurement of goods/services in the Electronic System Service Institution application and the limited specifications of goods available through e-catalog. In goods procurement activities, there are times when goods are not available in the e-catalog, this

causes activities to run slowly or not to be carried out; 4) The lack of technical personnel in the implementation of SAF activities has resulted in the slow implementation of activities, especially during the planning, monitoring, and supervision stages; 5) The delay in the delivery of goods is due to the government's policy on CARE in tackling/preventing the COVID-19 pandemic, this also affects the realization of financial achievements; 6) There are inconsistent policies at the central level. For example, at the time of the proposal, the central government only asked for a statement letter on land availability, but during synchronization and harmonization, the requested documents were in the form of land certificates/grant letters/deeds of sale and purchase so that the regions experienced delays in preparing supporting documents; 7) The implementation of work by the provider is hampered due to the Community Activities Restrictions Enforcement (CARE) policy; 8) The implementation of type 4 self-management is hampered because community groups as executors of activities experience funding difficulties. The Commitment Making Officer did not give an advance payment (payment according to achievements in the field), delaying the work implementation because the community group did not have sufficient capital.

The local government has made various efforts to deal with obstacles and problems, especially the implementation of Physical SAF Assignment of the Environment Sub-sector during the COVID-19 pandemic, including 1) Implementation of Physical SAF during the COVID-19 pandemic is the same as the implementation of other sectors, both originating from Regional and Provincial Budget and State Budget, namely following the Health Protocol to prevent transmission of COVID-19; 2) Regions identify priority scale activities and make efforts to accelerate the implementation of both administrative and technical activities; 3) Regions issue Circular Letters for accelerating the implementation and adjustments to the use of local labor; 4) Prioritizing waste facilities and infrastructure needed for the smooth operation of the waste management sector; 5) Through fast and online bidding processes while still paying attention to the physical quality of the work; 6) Carry out activities with due observance of health protocols and carry out several stages of selecting goods providers with an online/online/zoom system; 7) Collaborate or recruit HR from other regional apparatus who have related technical expertise; 8) Providing Personal Protective Equipment (PPE) to cleaning staff, gloves, cloth masks, helmets, boat shoes, and other cleaning equipment; 9) Even though there are regulations from the Regional Head regarding WFH and WFO, still optimizing the time to coordinate with the Working Group Team so that activities are realized on time; 10) Encouraging the

workforce to comply with health protocols and the implementation time is extended due to a lack of labor; 11) There are directions from regional leaders to prioritize local providers and involve local communities with labor-intensive schemes in the implementation of Physical SAF in the procurement of construction services and other services.

## CONCLUSION

Environmental development requires optimizing funding synergies between local governments and the central government. This fund is considered a strategic financing option because it is conceptually aimed at improving environmental quality to increase waste reduction achievements in the regions and improve waste handling in the context of providing sustainable economic infrastructure in priority locations. In 2021, the Physical SAF of PSEI Thematic Assignments for the FY 2021 Environment Sub-Sector will only be allocated to regions in 8 (eight) provinces. It means that 26 regions in Indonesia do not have PSEI Physical Assignment SAF budgets for the Environment Sector in FY 2021. From these eight provinces, seven areas are in a low category (green zone with an allocation of 4-12 billion rupiahs), no regions in the medium classification (orange zone with 12-20 billion rupiahs allocation), and one region in the high category (red zone with 20-28 billion rupiahs allocation).

Based on the questionnaire, it is known that for the Physical SAF Thematic Assignments of PSEI for the Environmental Sub-sector for the FY 2021 on the institutional aspect, in preference to SAF implementers in the regions indicating that there are obstacles to delays/incomplete files, lack of synchronization and coordination between agencies, as well as problems with the length of APIP review. In the regulatory aspect, there are ambiguous regulatory constraints that are according to the regional perspective, problems with incomplete documents, delays in submitting contract lists due to doubts by regional apparatus to carry out activities during the COVID-19 pandemic, and a lack of understanding of SAF implementers in the regions. Meanwhile, regarding the funding aspect, there are several issues about the lack of a SAF budget, constraints on distributing the SAF budget, and incomplete documents that constrain the implementation. Regarding the technical implementation aspect, the preferences of SAF implementers in the regions indicate that several issues need attention, such as the not optimal survey of equipment prices during the COVID-19 pandemic. Because they could not carry it out face-to-face, they lacked confidence in implementing activities. Another thing from the technical side is the slow procurement, lack of human resources, and technical constraints due to CARE's policies during the pandemic.

## RECOMMENDATION

Based on the analysis of budget distribution, analysis of Regional Priority Synergies related to the Environment with the Physical SAF Menu, as well as the findings of problems resulting from the survey, several policies are recommended that can improve and perfect the implementation of the Physical SAF policy for the Assignment of the Environment Sub-Sector in the future. Some of these recommendations include: a) The need for policies that direct and support the implementation of activities that were contractual before to become self-managed to increase community participation in implementing activities so that people are more empowered (increasing their income) during the COVID-19 pandemic; b) The need for supporting costs that can be used in achieving activity outcomes, not just achieving activity outputs; c) The need for allocation of mentoring funds for waste management training in Physical SAF activities for the Environment Sub-Sector; d) The process of distributing SAF funds is needed to be faster so that there are no complaints from providers when the work is completed; e) The need for allocation of Physical SAF for the Assignment of the Environmental Sub-sector, which pays attention to the alignment of border areas and also small islands that require environmental management; f) The need to expand the scope of district/city needs in the Environment sub-sector, not only regional but also local needs; g) The need to provide specifications for goods/services through an adequate e-Catalog.

On the other hand, if it is related to national priorities, it must align the implementation of Physical SAF Assignments (not only related to the environment) with National and Regional Priority Programs which are made periodically, for example, for three years, so that the implementation of SAF activities has a realistic and clear impact. Another thing that needs attention is determining priority locations based on regional standards and proposals and the types of goods adapted to regional needs. Before proposing SAF, regions should be allowed to propose activities so that the SAF menu in the KRISNA application is related to regional conditions.

Problems with regional understanding regarding SAF and its dynamics require intensive socialization and information dissemination efforts if there are changes related to regulations, implementation procedures, and disbursement procedures. In addition, information on SAF proposals should be made earlier so that planning is more mature in the regions as SAF executors. In general, local governments state that the existing menu to be adjusted to the priority needs of environmental management in the regions. Therefore, synchronization between the center and the province/regency/city is suggested to be more intensive during the proposal process so that the regional needs and the center's

interests can be aligned and consistent. Next, an important thing that may rarely be a concern but is relevant to realistic conditions on the field is the need to improve the Physical SAF menu for the Assignment of the Environment Sub-sector according to the needs and characteristics of the Regency/City area. For example, should be a marine debris boat menu in coastal zones.

## ACKNOWLEDGEMENT

Thanks to the Directorate of Monitoring, Evaluating, and Controlling Regional Development Bappenas for providing the opportunity, knowledge, and facility support. I would also like to express my gratitude to the following person: my current director Agustin Arry Yanna, SS., MA.; my mentor Dr. Ir. Medrilzam; my former director Ir. Basah Hernowo, MA., and Ir. Wahyuningsih Darajati, M.Sc.; my team member Devy Paramitha Agnelia, S.T., M.PWK; as well as all staff of the Directorate of Monitoring, Evaluating, and Controlling Regional Development Bappenas for helpful comments on the initial draft of the paper.

## REFERENCES

- Al-Qudah, A. A., Al-Okaily, M., & Alqudah, H. (2021). The relationship between social entrepreneurship and sustainable development from economic growth perspective: 15 "RCEP" countries. *Journal of Sustainable Finance & Investment*, 1–18. doi:10.1080/20430795.2021.1880219
- Castro, C. J. (2004). *Sustainable Development. Organization & Environment*, 17(2), 195–225. doi:10.1177/1086026604264910
- Common, M., & Stagl, S. (2005). *Ecological Economics: An Introduction*. New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511805547>
- Cumming, G. S. (2016). The relevance and resilience of protected areas in the Anthropocene. *Anthropocene*, 13, 46–56. doi:10.1016/j.ancene.2016.03.003
- Fauziyah, S., & Trisnawati, R. (2022). Pengaruh Produk Domestik Regional Bruto (PRDB), Indeks Pembangunan Manusia (IPM), Dana Pihak Ketiga Perbankan Syariah (DPK), Indeks Kualitas Lingkungan Hidup (IKLH), dan Dana Alokasi Khusus (DAK) terhadap perkembangan Sustainable Development Goals (SDGs). *Eqien - Jurnal Ekonomi dan Bisnis*, 11 (1), 1428-1237. <https://doi.org/10.34308/eqien.v11i1.881>
- GoI. (2021a). *Peraturan Menteri Keuangan (PMK 17/PMK.07/2021) tentang Pengelolaan Transfer ke Daerah dan Dana Desa Tahun Anggaran 2021 dalam rangka Mendukung Penanganan Pandemi Corona Virus Disease 2019 (COVID-19) dan Dampaknya (Berita Negara Republik Indonesia Tahun 2021 Nomor 149)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)

- GoI. (2021b). *Peraturan Menteri Keuangan (PMK 94/PMK.07/2021) tentang Perubahan Atas Peraturan Menteri Keuangan Nomor 17/PMK.07/2021 tentang Pengelolaan Transfer ke Daerah dan Dana Desa Tahun Anggaran 2021 dalam rangka Mendukung Penanganan Pandemi Corona Virus Disease 2019 (COVID-19) dan Dampaknya (Berita Negara Republik Indonesia Tahun 2021 Nomor 149)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)
- GoI. (2020a). *Undang-Undang Nomor 9 Tahun 2020 tentang Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2021 (Lembaran Negara Republik Indonesia Tahun 2020 Nomor 239)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)
- GoI. (2020b). *Peraturan Presiden Nomor 18 Tahun 2020 tentang Rencana Pembangunan Jangka Menengah Nasional Tahun 2020-2024 (Lembaran Negara Republik Indonesia Tahun 2020 Nomor 10)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)
- GoI. (2020c). *Peraturan Presiden Nomor 86 Tahun 2020 tentang Rencana Kerja Pemerintah Tahun 2021 (Lembaran Negara Republik Indonesia Tahun 2020 Nomor 304)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)
- GoI. (2020d). *Peraturan Presiden Nomor 123 Tahun 2020 tentang Petunjuk Teknis Dana Alokasi Khusus Fisik Tahun Anggaran 2021 (Lembaran Negara Republik Indonesia Tahun 2020 Nomor 309)*. Jakarta: Pemerintah Indonesia (Government of Indonesia)
- Mina, R. (2016). Desentralisasi Perlindungan dan Pengelolaan Lingkungan Hidup sebagai Alternatif Menyelesaikan Permasalahan Lingkungan Hidup. *Arena Hukum*, 9(2), 149–165. <https://doi.org/10.21776/ub.arenahukum.2016.00902.1>
- Mtibaa, S., Hotta, N., & Irie, M. (2018). Analysis of the efficacy and cost-effectiveness of best management practices for controlling sediment yield: A case study of the Joumine watershed, Tunisia. *Science of The Total Environment*, 616-617, 1–16. doi:10.1016/j.scitotenv.2017.10.290
- Pambudi, A.S., Hidayati, S., & Pramujo, B. (2022). Analisis Permasalahan Pembangunan Infrastruktur Jalan: Studi Kasus Perencanaan dan Pelaksanaan di Provinsi Papua Barat. *Publisia: Jurnal Ilmu Administrasi Publik*, 7(2), 188 - 210. DOI:<https://doi.org/10.26905/pjiap.v7i2.7645>
- Pambudi, A.S. (2021). Kendala Adaptasi Pemerintah Daerah Dalam Implementasi DAK Fisik Saat Pandemi COVID-19. *Jurnal Ilmiah Wahana Bhakti Praja*. 11 (1), 1-17. <https://doi.org/10.33701/jiwbp.v11i1.1536>
- Pambudi, A. S. (2020a). System Dynamics Modelling of Deforestation Rate and Forest Rehabilitation in the Upstream of Ciliwung Watershed, Bogor Regency. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, 4(3), 327-346. <https://doi.org/10.36574/jpp.v4i3.121>
- Pambudi, A. S. (2020b). Evaluasi Kesesuaian RKP dan RKPD 34 Provinsi terkait DAK Fisik Penugasan Bidang Lingkungan Hidup dan Kehutanan 2019. *Bappenas Working Papers*, 3 (1), 88-100. <https://doi.org/10.47266/bwp.v3i1.58>
- Pambudi, A. S. (2019). Water Price Calculations in Concept of Environmental Service: A Case in Cimanuk Watershed. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, 3(3), 325-337. <https://doi.org/10.36574/jpp.v3i3.84>
- Sinukaban, Naik. (2007). *Peranan Konservasi Tanah dan Air dalam Pengelolaan Daerah Aliran Sungai*. Jakarta: Prosiding Bunga Rampai Konservasi Tanah dan Air.
- Soemarwoto, Otto (1999). *Analisis Mengenai Dampak Lingkungan*. Yogyakarta: Gadjah Mada University Press.
- Watson, J. E. M., Dudley, N., Segan, D. B., & Hockings, M. (2014). The performance and potential of protected areas. *Nature*, 515(7525), 67–73. doi:10.1038/nature13947