



# Sustainable environmental governance as the implementation of state defense policy

Lilik Muslikhatin<sup>1\*</sup>, Asep Adang Supriyadi<sup>2</sup>

<sup>1</sup> Defense Science, Republic of Indonesia Defense University, Bogor, 16810, Indonesia;

<sup>2</sup> Sensing Technology, Faculty of Science and Technology, Republic of Indonesia Defense University, Bogor, 16810, Indonesia.

\*Correspondence: muslikhatin.lilik@gmail.com

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## ABSTRACT

**Background:** Land waters in urban areas often become a source of problems if they are not managed wisely and firmly. The threat and risk of danger, disease and even death always haunt the people who live on the banks of the river. Poverty and slum areas are negative effects of less than optimal land water management in urban areas. The Indonesian government has taken various steps to address this, but the lack of urban land for settlement is the reason why immigrants from other regions reside and reside in dangerous areas such as riverbanks. The compulsion to live minimally in urban areas is a burden for local governments in their efforts to increase welfare as well as improve sustainable urban governance. Many other cities in developed countries have made efforts to improve inland water areas to alleviate poverty and at the same time beautify the urban landscape. The experts agreed to hold discussions to formulate the best policy steps for sustainable urban governance in Indonesia. **Methods:** In the process of data analysis and decision making related to sustainable environmental governance as implementation of national defense policy, this article utilizes the Analytical Hierarchy Process (AHP) Data Processing Method. **Finding:** The results of in-depth discussions and interviews with experts in the field of environment, urban governance, economic experts and poverty management experts from various institutions such as the Ministry of Social Affairs, PUPR Ministry, Spatial Planning and City Planning Services, Academics and also the Military were processed using the Analytical Hierarchy Process (AHP). **Conclusion:** The best decision alternative will be a recommendation for policy makers regarding sustainable urban governance. **Novelty/Originality of this study:** This study is relevant to the Analytical Hierarchy Process (AHP) Method to formulate sustainable urban water management policies in Indonesia, involving various experts and related institutions to overcome poverty and improve urban landscapes. Therefore, this study can show policy recommendations based on various aspects and views.

**KEYWORDS:** inland waters; SDGs; sustainable environmental governance.

## 1. Introduction

One of the objectives of the Sustainable Development Goals (SDGs) set in 2015 in Paris is to Create Sustainable Cities and Communities (Visvizi & del Hoyo, 2021). Goal number 11 in the SDGs is to create cities and settlements that are strong, safe, clean, livable and resilient for their residents. The task of the government and related stakeholders in realizing the SDGs goals is to carefully plan long-term environmental management of cities and residential areas. Stakeholders must be able to design smart city model policies that provide a sustainable livable environment, especially in inland water areas such as riverbanks and

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lakes (Bell & Mallinson, 2021). In the Paris Agreement there are no restrictions on how a country determines steps to achieve the SDGs. Each country is given the freedom to determine its own governance policy model related to smart cities and their environment, depending on the situation and budget availability (Sanphillippo, 2022).

According to the White Paper on National Defense of the Republic of Indonesia, national defense policy is implemented through various efforts in managing national resources and infrastructure to overcome various forms of threats. Every citizen is a component of the national defense reserve who is obliged to support the direction of national defense policy that has been determined by the responsible state agency. One of the obligations of the reserve components is to comply with state defense guidance, one of which concerns the residential environment. Here, citizens are required to participate in supporting government policies in creating decent, healthy and safe urban settlement conditions (Ministry of Defense of the Republic of Indonesia, 2015).

Sustainable environmental management in inland waters in areas around the banks of rivers and lakes requires careful planning and policy direction in order to support the creation of a resilient smart city (Clement et al., 2023). According to environmental and urban governance experts, further serious treatment is needed regarding residents along rivers and lakes to reduce the threat and risk of undesirable things happening to residents. This is because of the high threat and risk factors for residents around these inland waters. Apart from that, the social and economic conditions of the people along rivers and lakes need to be considered as citizens who are the responsibility of the government. In implementing urban and residential policies and regulations, Indonesia needs assistance and cooperation from international agencies to facilitate the implementation of these policies (Babuna et al., 2023). Apart from that, integration of information technology in realizing a smart city is also needed starting from the planning process, implementation, monitoring to maintenance (Mortati et al., 2022). Based on in-depth discussions and interviews with environmental experts, the residential buildings around rivers and lakes are no longer suitable and dangerous. For this reason, wise alternatives are needed that the government can take in handling cases like this. The alternatives offered are relocation, construction, or tourism. Decision making in making the best choice from these alternatives will be processed using the Analytical Hierarchy Process (AHP) method by considering the results of discussions with environmental and urban governance experts through Focus Group Discussions (FGD) (Saaty, 1987)

### *1.1 Towards sustainable development goals (SDGs) number 11 before 2030*

Achievement growth The economy in the 21st century often leaves developing countries neglected sustainability environment, as well as the security and risks experienced by its residents. Poverty, hunger, disease and death, unpredictable weather and climate are social, economic and environmental problems as a result of excessive human actions. Handling this requires the synergy of all policy stakeholders so that it is handled quickly, effectively and efficiently, which is the SDGs target and must be achieved before 2030 (Lanshina et al., 2019). In 2015, world leaders gathered to hold an international conference and formulated 17 sustainable development goals (SDGs) as a continuation of the Millennium Development Goals (MDGs). Achieving the quality of development from various sectors formulated in the SDGs is a barometer of the country's defense strength from a non-military perspective (Duggan & Kochen, 2016).

Responding to the global challenges stated in goal number 11 of the Sustainable Development Goals (SDGs), namely creating cities and settlements that are strong and resilient in the long term and sustainable for their residents, is the shared responsibility of all parties (Greenland et al., 2023). Realizing the city as a safe and sustainable place to live and carry out daily activities by creating more green spaces for the public, reorganizing slum and untidy areas in a more humane way and arranging well-planned environmental management. Stakeholders must be able to design policies on both micro and macro scales

in the institutional dimension and can imitate political and policy learning systems from other countries (Bell & Mallinson, 2021).

Both countries proceed as well as developing countries member UN agreed And accept declaration political in SDGs, with consider problem ecology and economics as problem Which most critical related with environmental contamination and ecological sustainability (Jahanger et al., 2023). The 2030 Agenda in the SDGs goals only formulates targets that must be achieved before 2030, but the steps and policies taken by each country are not clearly defined. Each country formulates its own policies and governance that suit the characteristics of its region and citizens. Each country determines its own strategic policy steps in accordance with typical citizens and the extreme conditions that occur in their country according to the SDGs targets. Indonesia is a country with thousands of islands that cannot be managed centrally. The central government only acts to monitor and evaluate the progress of public policies implemented by each region. Regional governments and related stakeholders cannot work in silos without the assistance and coordination of the central government (Aslan et al., 2011).

Collaboration of all parties in formulating national defense policy as public policy in the context of implementing the achievement of the SDGs is absolutely necessary so that the acceleration of the achievement of the SDGs can be carried out according to the agenda. Collaboration is needed between government agencies and institutions, both vertically, horizontally and integration between local governments and community and private stakeholders so that achievements bring benefits to the state and the population. Without strong collaboration, achieving SDGs goals will be slow and unstructured. Strong synergy between institutions is needed to avoid overlapping policies which will only hinder the acceleration of achieving SDGs goals (de Jong et al., 2023).

A complex problem that must be addressed immediately in urban areas is related to handling slum and poorly organized areas around inland water areas such as rivers and lakes. Serious efforts are needed starting from planning, implementation, monitoring and evaluation in the social, economic and environmental sectors. This treatment must be carried out holistically both for the population living in these areas and their ecological conditions. Often environmental conditions for residents who live on the banks of rivers or lakes experience unexpected disasters such as floods, landslides, living close to piles of rubbish that are thrown away and flow into rivers or lakes (Mohammadi, 2023). The social conditions felt by the community are the threat of disease, inadequate education, children not developing optimally, and an inadequate cycle of life. Economically, the population is in a cycle of poverty, low purchasing power, and the majority are informal workers with wages below standard (Khan et al., 2015).

In-depth discussions were held with experts in the fields of environment, urban governance, economic experts and poverty management experts from various institutions such as the Ministry of Social Affairs, PUPR Ministry, Spatial Planning and City Planning Services, Academics and also the Military. Based on the results of the expert judgment, several criteria and sub-criteria were formulated as material for consideration in achieving the goal of establishing Sustainable Environmental Governance as the Implementation of National Defense Policy. Apart from that, several alternative best choices were determined as a way out of existing problems. These alternatives are (1) relocating residents who live on the banks of rivers and lakes to more appropriate and humane settlements (Jamero et al., 2019) , (2) building protective construction such as dams or walls that are flood or tsunami resistant (Roldán -Valcarce et al., 2023) and (3) making rivers and lakes and the surrounding area a tourist arena like in developed countries (Karouzakis & Tzioumis, 2021).

## *1.2 National defense policy as public policy in accordance with the white paper on national defense of the Republic of Indonesia*

The National Defense Policy contained in the 2015 National Defense White Paper states that threats to national defense can take the form of military threats, non-military

threats and hybrid threats. Every citizen as a component of national defense must support and implement the direction of national defense policy. One of the non-military state defense policies is to provide state defense to civilians. Awareness of defending the country is manifested in the educational environment, residential environment and work environment. In residential environments, integration between communities, social solidarity and conducive residential conditions are required. National defense policy is implemented through various efforts in managing national resources and infrastructure to overcome various forms of threats (Ministry of Defense of the Republic of Indonesia, 2015).

The National Defense white paper clearly states non-military national security threats related to social, economic and environmental security. According to global security experts, the biggest threats that are a priority to be addressed immediately are economic and environmental threats. Because these two threats will affect security conditions in other sectors (Baldwin et al., 2023). The rules and provisions for non-military policy are clearly regulated in the National Defense White Paper. All elements of government must work together to achieve the goal of adaptive sustainable environmental governance. Every state institution and government institution must contribute to supporting efforts to implement national defense policy. The main actor implementing this policy is the regional government which is considered to best know the conditions and characteristics of its citizens. The central government as the supervisor of state administration carries out its duties in monitoring, providing advice and supporting decisions taken by local governments (Sánchez-Rivero et al., 2023).

### *1.3 Sustainable environmental governance*

Environmental conditions in urban areas are increasingly disturbing, endangering and threatening the lives of citizens. Irresponsible actions resulting from human actions result in environmental conditions that are increasingly complicated to handle. Firm and clear efforts are needed from policy makers to determine definite steps to handle ecological problems (Nuralina et al., 2023). Based on data collected by the National Disaster Management Agency (BNPB), every year residents who live on riverbanks in urban areas experience floods and landslides several times due to the force of the land around rivers and lakes experiencing erosion (Farrukh et al., 2022). Physical losses are inevitable, property damage is commonplace due to disasters, besides that, loss of life is also often unavoidable due to the slow arrival of help. Meanwhile, psychological loss is a feeling of always being anxious and uneasy because this disaster can come suddenly without early warning.

The government is working hard to find a solution to this problem. However, the government experienced quite a few obstacles. The flow of urbanization that is difficult to suppress, the reasons why people have no other place to live, feel forced to live in urban areas because their hometowns can no longer provide the desired job opportunities, weak laws, unclear regulations are a thousand reasons why rural residents are flocking to move to city. As a result, cities are getting denser, unemployment is getting higher, poverty is increasing, slum areas are getting wider and national security problems are increasingly threatened (Mohammed & Baiee, 2020).

Restricting the flow of urbanization, clear regulations regarding the residential environment, and providing decent employment opportunities in rural areas need to be regulated in clear provisions. So that every citizen feels safe and comfortable in any area, not chasing job opportunities and a better life in cities. Regional governments are responsible for the lives of their citizens and their respective regions. It is the responsibility of local governments to improve the standard of living of their people. Providing employment opportunities and organizing sustainable environmental governance at all levels (Jati, 2023).

## 2. Methods

In the process of data analysis and decision making related to sustainable environmental governance as implementation of national defense policy, this article utilizes the Analytical Hierarchy Process (AHP) Data Processing Method. The opinions of experts such as Kurttila et al are a strong reason for implementing this method. Using the AHP method, identification of the best alternative is carried out and policy recommendations are obtained based on the criteria and sub-criteria determined by the researcher (Kurttila et al., 2000). This decision-making method becomes the basis for researchers' recommendations to provide input and suggestions to the government and authorized policy stakeholders.

The criteria and sub-criteria proposed in this research, based on expert agreement, are as follows. First, aspects of threats and risks that will occur and have occurred in many communities in recent years (Schroeder, 2023). The sub-criteria chosen are the occurrence of floods, both due to high rainfall and postal floods, which are often experienced in several regions; landslides, because the land structure around rivers or lakes is prone to landslides; and the spread of disease due to unclean environmental conditions. Second, aspects of social conditions that occur in communities along rivers and lakes are reflected in the following sub-criteria: poverty that is difficult to eradicate; slum areas that are densely packed with rubbish and unpleasant odors; and the need for community support and involvement in handling urban planning for better environmental management (Greenland et al., 2023). Third, the country's economic situation is predicted to experience several challenges: additional budget allocations requiring significant funds to implement sustainable environmental governance policies; the government cannot work alone, and state institutions need to synergize with the private sector through Corporate Social Responsibility (CSR) as a form of company concern for government policy programs for civilians (Keränen et al., 2023); and public policies formulated by the government will likely impact people's purchasing power, which may decline due to the implementation of national defense policies. However, the government will seek the best solutions for the welfare of its citizens (Zeng et al., 2023). Fourth, as a UN member country, the implementation of public policies cannot be achieved without the assistance and cooperation of other countries or international bodies. Several world strategic bodies have contributed significantly to realizing sustainable environmental governance, such as the United Nations Development Program (UNDP), which is closely related to development program issues and provides assistance, particularly in the psychological process of human development (United Nations Development Program, 2017); the Food and Agriculture Organization (FAO), which acts as an advisor on food issues to maintain food security stability (Casadei & Albert, 2016); and the United Nations Children's Fund (UNICEF), which is essential in addressing the problems of children and teenagers living around river and lakebanks.

Finally, the integration of information technology is crucial. In the era of the industrial revolution 4.0, humans cannot be separated from the use of modern technology (Xie et al., 2023). Addressing national security policies related to sustainable environmental governance requires the integration of information technology. Sub-criteria for technology integration include increasing digital skills for residents around river and lakebanks, enabling them to assist the government in managing local populations through knowledge of e-commerce, website development, or other platforms; creating geostrategic thematic models of residential areas around rivers and lakes to monitor population conditions and ecological characteristics; and designing agricultural technology in and around inland water areas, especially for food crops, to support the lives of local residents and reduce dependence on external food supplies.

With consideration of all these criteria and sub-criteria, several alternatives are proposed which could possibly be implemented by the government and other state institutions. Based on expert judgment, these alternatives are (1) relocating or moving residents who live on the banks of rivers and lakes to more appropriate and humane

settlements, whether in the same province as the old settlement or migrating to other provinces. The government is responsible for providing a safe place to live, both socially, economically and environmentally, at a cost that is affordable for the community. This aims to maintain national security while improving the welfare and standard of living of people, especially those in conditions of poverty (Liu et al., 2023); (3) Building protective construction such as dams and walls that are flood or tsunami resistant, such as the plan to build a giant sea wall in the Java sea area (Strating & Wallis, 2022). Another alternative is if the government has difficulty relocating residents to safe places due to limited new areas or insufficient budget. The government must think about how to protect citizens from threats and risks that commonly occur in inland water areas such as rivers and lakes. To protect residents from landslides that often occur around rivers and lakes, the government must start building dams or protective walls with safe heights and materials that can withstand floods and landslides. Development projects are carried out in stages starting from areas that experience flooding most frequently with the worst impacts such as the Ciliwung river in Jakarta (Gao et al., 2023); (3) making rivers and lakes and the surrounding area a tourist arena like in developed countries (Tian et al., 2023). Developed countries on the European continent use rivers and lakes as a means of tourism in urban areas. Apart from maintaining environmental balance, tourism facilities can increase economic growth and boost Gross Domestic Product (GDP) in the entertainment and tourism sectors. The Tourism Arena also increases residents' income and indirectly improves community welfare. In this way, three (3) sectors are handled at once, namely in the social sector it can improve health because the environment is cleaner and neater, in the economic sector it can reduce poverty because local residents are involved as tourism actors, while in the environmental sector, areas that were previously slum and less organized to be beautiful, safe and free from unexpected disasters.

The following are the steps for making decisions according to the theory of the inventor of the AHP method, namely L. Saaty in 1987. (1) Determining the Hierarchy Structure, where level 1 is determining the goal, level 2 is filled with criteria, level 3 is the breakdown of each criterion into sub-criteria and level 4 determines alternatives. (2) Create a pairwise comparison matrix (pair wise comparison matrix) to determine the comparison scale value between elements. (3) Calculating the mathematical normalization of the pairwise comparison matrix. (4) Calculating the consistency ratio (CR) with the rule that if the CR value is below 10 percent or 0.1 then the research can continue. However, if the CR value is above 0.1, further discussions must be held with experts so that the consensus results obtained are not biased and remain consistent. (5) Determine the weight of the criteria, the largest weight at the alternative level will be the best alternative chosen in decision making

### 3.1 Comparison scale/comparative judgment

The comparison scale assigns weight values to criteria and sub-criteria based on relative assessments. In the Analytical Hierarchy Process (AHP), this is represented in a pairwise comparison matrix ranking alternatives. Table 1 presents the AHP comparison scale.

Table 1. Paired comparison scale

Scale	Definition
1	Both elements are equally important
3	The first element is slightly more important than the other elements
5	The first element is quite important compared to other elements
7	The first element is much more important than the other elements
9	The first extreme element is more important than other elements
2 4 6 8	The value between two adjacent values
Reciprocal	If the first element has one of the numbers above compared to the second element, then the second value has the opposite value when compared with the first element

From the Table 2, it can be interpreted that according to experts the threat and risk criteria are slightly more important than social conditions, quite important than economic conditions, slightly more important than international cooperation and slightly more important than information technology integration.

Table 2. Examble of providing a comparison scale

Criteria	Criteria				
	Threats and risks	Social	Economic	International cooperation	Integratation of IT
Threats and risks	1	3	5	3	4
Social	0.33	1	3	4	5
Economic	0.25	0.33	1	5	4
International cooperation	0.5	0,25	0.33	1	4
Integratation of IT	0.33	0.2	0.25	0.25	1

### 3. Results and Discussion

Experts have discussed the best alternatives in making decisions regarding the most beneficial treatment and minimizing security risks based on various aspects that exist in Indonesia. Based on ideological, political, economic, social, defense and security conditions as well as current demographic conditions, this short-term decision is expected to improve socio-economic conditions and domestic security. In order to create a sustainable smart city, these results must be supported by all parties, both the central government and regional governments as policy makers, as well as the community as research objects and citizens who must comply with government decisions. Based on data and information processing using the Analytical Hierarchy Process (AHP), the following results were obtained in Table 3.

Table 3. Mean priorities by criterion

Criteria	Relative Percentage	Mean
Threats and Risk Aspects	43.89	0.438899
Social Aspect	4.17	0.041656
Economic Aspect	6.77	0.067732
International Cooperation Aspect	8.03	0.080273
Technology Aspect	17.77	0.177678

$IC = 0.0818$ ;  $RC = 7.303\%$

According to discussions by environmental experts, from the available criteria, namely threat and risk aspects, social aspects, economic aspects, international cooperation aspects and technological aspects, the threat and risk aspects are the main priority in making policy changes related to land waters in Indonesia with a relative percentage of 43.89 percent, the highest compared to other criteria (Tabel 3 and Figure 3).

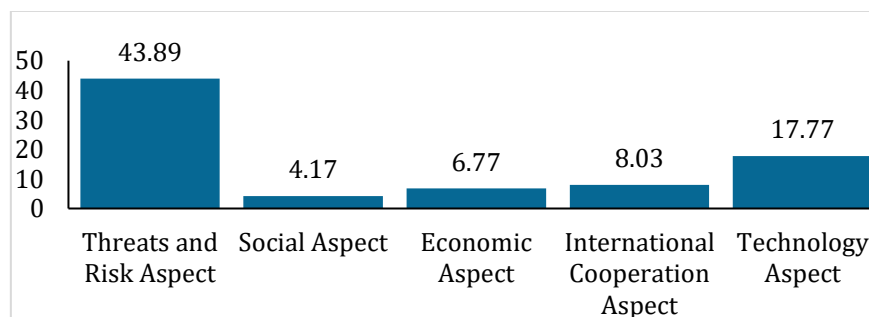


Figure 1. Graphical of mean priorities by criterion

Table 4. Priorities by subcriterion of threats and risks aspect

Threats and Risks Aspect	%
Flood	77.754
Disease	7.899
Landslide	14.348
IC = 0.009; RC = 1.503 %	

Regarding the threat and risk aspect criteria, environmental experts agree that flooding is the most crucial problem that is often faced by residents along land waters, especially rivers. This flooding could be caused by high rainfall due to recent unexpected climate changes or due to flooding from other areas, such as what happened on the Ciliwung river in the Jakarta and Bogor areas (Table 4).

Table 5. Priorities by subcriterion of social aspects

Social Aspects	%
Poverty	73.695
Community Involvement	7.677
Wil Slum	18.628
IC = 0.039; RC = 6.677 %	

In terms of social aspect criteria, social demographers assess that poverty remains a significant social issue affecting residents along land waters, particularly rivers. This poverty results in a domino effect, contributing to the prevalence of slum areas and various diseases caused by low health standards in riverbank communities. Table 5 illustrates these interconnected challenges.

Table 6. Priorities by subcriterion of economic aspects

Economic Aspects	%
Budget	76.437
CSR	6.978
Purchasing power	16.586
IC = 0.050 ; RC = 8.628 %	

In the economic aspect criteria, among the sub-criteria of budget, Corporate Social Responsibility (CSR) and purchasing power, economists agree that the budget is a vital thing that must be considered in making sustainable environmental changes related to land waters (rivers and lakes) in order to provide benefits to community members. as well as improving urban environmental security in the context of strengthening national defense. Without proper budget preparation, government policies will not be implemented optimally (Table 6).

Table 7. Priorities by subcriterion of internation cooperation

Internation Cooperation	%
UNDP	73.797
FAO	9.444
ASEAN	16.759
IC = 0.002; RC = 2.130 %	

UNDP (United Nation Development Program), FAO (Food and Agricultural Organization), and ASEAN (Association of Southeast Asian Nations) are three of the many world organizations where Indonesia is part of this international institution. Global cooperation that has involved Indonesia is considered an important part in implementing state policies in development or in realizing urban improvements so that they become sustainable areas. Indonesia needs international support and cooperation in realizing



sustainable urban areas related to the development of inland water areas, especially rivers and lakes. Many other countries have used land waters as a national resource that can increase regional income or as a state asset that is interoperable. According to international relations experts, in the context of the use of inland waters in Indonesia, UNDP is considered the institution that provides the most support in implementing government policies (Table 7).

Table 8. Priorities by subcriterion of technology aspects

Technology Aspect	%
Upskill	71.507
GeoStrategic	9.782
Agricultural Technology	18.710

IC = 0.002; RC = 0.284 %

In the era of the 21st century, everything requires artificial intelligence (AI). Communication and information systems all depend on modern applications which require a change in mindset. In terms of technological aspect criteria, experts feel it is necessary that all community members, especially those living on riverbanks, have better technological abilities, for this reason it is necessary to upskill or increase skills, especially in the field of technology, such as increasing skills in e-commerce, building websites, applications, commercial or platforms that can be a source of income so that residents can be independent if changes occur in their environment. Apart from that, it is necessary to implement geostrategic policies related to the environment and areas in areas around rivers or it is also necessary to think about developing agricultural technology that can be installed in areas around land water banks such as rivers and lakes. Modern agricultural technology has increased in quality and quantity in developed countries to support food security (Table 8). Based on discussions and in-depth interviews with environmental and technology experts, it was agreed that improving the skills of residents around river banks is the most important part in increasing technological knowledge. This is necessary to support government policies in improving land water systems in order to improve the quality of the urban environment in a sustainable manner.

Table 9. Priorities by alternatives (%)

Crit./Alt.	Tourist	Construction	Relocation	CI	RC
Threats and Risks	63.9181	23.8996	12.1823	0.0000	0.0000
Flood	64.7947	22.9871	12.2182	0.0027	0.4650
Disease	63.3346	26.0498	10.6156	0.0277	4.7725
Landslide	59.4888	27.6611	12.8501	0.0037	0.6429
Social Aspect	66.6923	21.4983	11.8094	0.0000	0.0000
Poverty	68.0643	20.1411	11.7947	0.0191	3,2986
Community involvement	58.1264	30.9150	10.9586	0.0025	0.4245
Wil Slum	64.7947	22.9871	12.2182	0.0027	0.4650
Economic Aspect	68.5811	22.5297	8.8893	0.0000	0.0000
Budget	70.1437	21.3238	8.5324	0.0264	4.5552
CSR	63.9335	27.3718	8.6948	0.0394	6.7869
Purchasing power	63.3346	26.0498	10.6156	0.0277	4.7725
International Cooperation	66.8299	21.2856	11.8845	0.0000	0.0000
UNDP	68.0643	20.1411	11.7947	0.0191	3,2986
F.A.O	60.7962	27,2099	11.9939	0.0506	0.0873
ASEAN	64.7947	22.9871	12.2182	0.0027	0.4650
Technology Aspect	67.9025	21.3312	10.7664	0.0000	0.0000
Upskill	69.9941	19.3504	10.6556	0.0074	1.2806
GeoStrategic	65.2991	25.0997	9.6011	0.0136	2.3496
Agricultural Technology	61.2698	26.9312	11.7989	0.0128	2.2122

By considering the advantages and disadvantages of all criteria and sub-criteria, experts agree that tourism is the best step compared to other alternatives in efforts to better sustainable environmental governance in urban areas. So far, Indonesia specifically does not have river tourism in urban areas that is well managed like developed countries which have wide river flows. Land waters in urban areas must be better organized and managed more centrally so that they are more effective in improving community welfare. Through tourism, people living around riverbanks will be involved in environmental management so that it can be beneficial in a sustainable manner. The benefits felt will also be felt for the survival of future generations. Apart from minimizing threats and risks due to inhumane land water management, tourism also improves people's standard of living and also beautifies and adds to the charm of the city itself (Table 9). All levels of society must support state policies in realizing inland water tourism in order to realize better sustainable environmental governance in order to support strong state defense in urban areas.

#### 4. Conclusions

Achieving Sustainable Development Goals (SDGs) number 11, namely creating sustainable cities and settlements, is the responsibility of a country's government. To create a Smart City, the government must also consider the human side and environmental balance. Public policies taken by the government as implementation of state policy must be based on urban and residential systems that are strong, safe, clean, livable and resilient for citizens. Starting from planning, implementation, development and monitoring, it must be carefully thought out in a collaborative manner between the government, state institutions and related stakeholders. The role of local government is also considered vital because this level of government knows its population best.

Implementation of state defense policy in the non-military sector must refer to the National Defense White Paper by developing provisions and rules that have been established, but still within the corridors of state regulations. There is a need for synergy between institutional leaders and government agencies, as well as the need to strengthen international cooperation to achieve SDGs goals related to a sustainable environment so that they fit the agenda. Apart from that, along with technological developments in this modern age, the government must utilize artificial intelligence to monitor policy implementation so that it follows the planned path.

The arrangement of inland water areas, which in this case is limited to rivers and lakes in urban areas, is formulated with considerations of national security both for citizens around the banks of rivers and lakes as well as holistic national security. Preventing the threats and risks faced by residents in settlements around the edges of rivers and lakes is the government's main basis for sustainable environmental management. Social, economic and environmental conditions are the benchmarks for determining the public policy steps to be implemented. In accordance with the 1945 Constitution, the Government as the person responsible for administering the state has the obligation to improve the welfare of citizens. Through discussions with environmental experts, it is hoped that a solution will be found to organize the environment around rivers and lakes, which has been a complicated problem in urban areas up to now.

One of the alternatives decided in discussions by environmental experts, Indonesia specifically does not yet have river tourism in urban areas. Land waters in urban areas must be better organized and managed so that they are more effective in improving community welfare and also supporting national development. Through tourism, local communities living along riverbanks will experience benefits for their survival. The benefits that can be gained are apart from minimizing threats and risks due to inhumane land water management, it also improves the standard of living of the community and also beautifies and adds to the charm of the city itself. The state and society must work together and support each other in the realization of inland water tourism in order to realize sustainable environmental governance in supporting strong national defense in urban areas.

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The authors declare no conflict of interest.

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### Biographies of Authors

**Lilik Muslikhatin**, Briefly describe the author's name, affiliation, latest education and area of expertise in 1-2 paragraphs (maximum in 100 word).

- Email: [muslikhatin.lilik@gmail.com](mailto:muslikhatin.lilik@gmail.com)
- ORCID: 0009-0005-6341-5769
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: N/A

**Asep Adang Supriyadi**, Briefly describe the author's name, affiliation, latest education and area of expertise in 1-2 paragraphs (maximum in 100 word).

- Email: [aadangsupriyadi@gmail.com](mailto:aadangsupriyadi@gmail.com)
- ORCID: 0000-0003-1103-6669
- Web of Science ResearcherID: N/A
- Scopus Author ID: h57201546735
- Homepage: <https://sinta.kemdikbud.go.id/authors/profile/6751325>