

Ecological Justice in the Implementation of Regional Spatial Planning Policy of Pangkalpinang City, Bangka Belitung Islands Province

Dwi Jati Marta^{a,1,*}, Tika Pustika Fersari^{b,2}

^a Sekretariat Daerah Kabupaten Bangka, Jl. A. Yani Jalur Dua Pemd, Sungailiat and 33215, Indonesia

^b Puskesmas Pangkalbalam, Jl. RE Martadinata 21, Depati Bahri, Pangkalpinang and 33129, Indonesia

¹ dwijati73@gmail.com*

² fersaritika@gmail.com

* corresponding author

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ABSTRACT

This research analyzes the fulfillment of ecological justice in the implementation of spatial planning policies in Pangkalpinang City, with reference to the international framework of Sustainable Development Goal (SDG) 11. The study focuses on how ecological justice is realized in the spatial planning process in Pangkalpinang. Using Kuehn's concept of Ecological Justice, the research examines regional spatial planning policies through four key aspects: distributive, corrective, procedural, and social justice. A qualitative research method with an exploratory descriptive approach was employed, utilizing literature review, interviews, and observations for data collection. The findings indicate that while distributive justice is reflected in various programs, a major challenge remains in ensuring sufficient urban green spaces. In terms of corrective justice, environmental policies are in place, but law enforcement needs to be strengthened. Regarding procedural justice, policy formulation does not adequately prioritize community needs, and public participation, particularly from communities and NGOs, remains limited. In the aspect of social justice, many community production lands, green open spaces, and protected areas—such as swamps—are being converted into economic and residential zones. This issue is further exacerbated by government regulations that contribute to environmental degradation. These findings highlight the need for more effective policy formulation and implementation to enhance ecological justice in Pangkalpinang City.

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1. Introduction

To alleviate poverty, social inequality, unequal resource management and strengthen environmental protection, the global order must find a formulation by strengthening various sectors of people's lives. This global effort is called the Sustainable Development Goals (SDGs) with the approval of the majority (193) of countries around the world. In its implementation, with a target

until 2030, the SDGs have 17 missions with 169 derivative achievement targets in the hope that they can be implemented properly (United Nations, 2015).

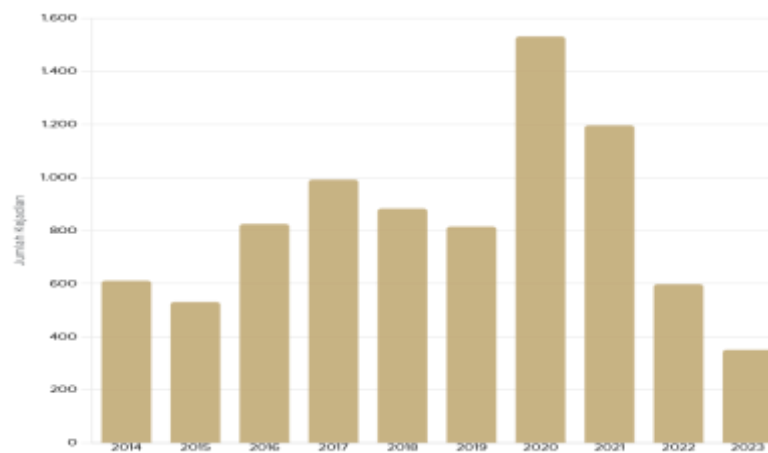
As one of the major countries, Indonesia agreed and committed to the implementation and implementation of SDGs as an effort to overcome various problems in society. The focus of the achievements that Indonesia wants to make is taken from the agreed mission by focusing on the formation of sustainable cities and communities or Sustainable Cities and Communities oriented towards making cities inclusive, safe, strong and sustainable in the 11th mission and the formation of land ecosystems (life on land) which focuses on sustainable forest management, fighting land conversion into deserts, stopping and rehabilitating land and stopping biodiversity extinction that occurs in the 17th mission (Pristiandaru, 2023). These two focuses were taken, because they are very suitable for the characteristics of the topography and the suitability of the phenomena that occur in Indonesian society.

The focus of the SDGs raised by Indonesia is then in accordance with the perspective of ecological justice in the study of social and political science, especially in the field of international relations studies through a justice approach (Kuehn, 2000). Basically, the concept of ecological justice is a concept where the fulfillment of the distribution of rights and obligations and benefits in the environment is fair both between races, classes, and community income. On the other hand, ecological justice is also related to how the public gets the opportunity to make decisions and participate in managing the environment in order to achieve a fair distribution of the environment in the community.

If you look at the phenomena that occur in Indonesia, ecological damage is a phenomenon that often occurs and has a negative impact on both the lives of people's environmental life and even affects various sectors such as the economic and social sectors. Ecological disasters such as floods are disasters that continue to occur throughout the year in various regions in Indonesia (Amindoni & Adzka, 2021). Flooding is an event of overflowing water onto land that can occur naturally or be caused by human actions. This disaster is one that often occurs in almost all parts of Indonesia, especially in the rainy season. Recently, floods that occurred in the Jakarta and West Sumatra regions have attracted public attention.

According to disaster statistics compiled by BNPB in (Rasyid, 2024), there were 8,333 flood disasters that occurred in Indonesia from 2014 to 2023. Although over the past 10 years the phenomenon graph tends to be dynamic, it is certain that from 2015 to 2020 the statistical data on flood events has continued to increase except in 2019. 2020 was also the highest peak of flood events, with 1,531 flood events occurring in Indonesia. As for 2020, the flood disaster managed to take 132 lives and 3,843,714 people suffered. In addition, damage also occurred to 28,824 houses, 511 educational facilities, and 625 worship facilities. Although 2021 has fewer events than 2020 (335 events to be exact), the highest impact caused by floods was in 2021.

Where throughout 2021 flood disasters claimed 337 lives and 4,273,938 people suffered. In addition, damage also occurred to 98,717 houses, 913 educational facilities, and 818 worship facilities. On the other hand, the statistics of flood incidents have started to slope since 2021. Where during the last 10 years, the least flood disaster occurred in 2023, where there were only 351 incidents (Rasyid, 2024). The flood statistics in Indonesia in the last 10 years can be seen in Graph.1 below.



Graph.1 Statistik Banjir di Indonesia dalam 10 Tahun Terakhir
(Source: BNPB, 2024)

The rainy season in Indonesia is often a big challenge for communities and governments. In addition to providing blessings in the form of increased water reserves, this season also triggers an increased risk of hydrometeorological disasters. Based on data on the rainy season in 2023/2024, from October 2023 to February 2024, from the Indonesian Disaster Information Data (DIBI) shows there are 10 provinces in Indonesia with the most disasters that show real threats in the form of floods, landslides and extreme weather. West Java Province took first place with 145 events, followed by Central Java Province with 91 events. Other provinces outside Java also recorded significant disaster numbers, such as Riau Province with 89 events dominated by floods. Meanwhile, North Sumatra faced a combination of floods and landslides. Other provinces such as Aceh, West Nusa Tenggara, West Sumatra, South Sumatra, and West Kalimantan also complete the list of disaster-prone provinces, emphasizing that the threat of disasters is not only concentrated in Java (Kusumastuti, 2024).

Flooding is not only caused by high rainfall intensity, but also by the lack of spatial planning in the region, such as lack of green open space, conversion of river and swamp areas into housing, and deforestation of forests and water catchment areas. Pangkalpinang City is one of the cities that is prone to natural and non-natural disasters in Indonesia, especially floods and forest fires. Where the area is located in the downstream part of the Baturusa watershed and is a coastal area directly adjacent to the sea, namely the Karimata Strait. In the Pangkalpinang City area there are several streams, namely the Pedindang River, the Rangkui River and the Kulan River which functions as the main channel for the city's rainwater discharge which then flows into the Batu Rusa River and ends in the South China Sea (BPBD, 2024).

Water sources for clean water are generally from groundwater in addition to the Kacang Pedang Retention Basin, Bacang Basin and Pedindang Basin and several other basins. Basically, the area of Pangkalpinang City when viewed morphologically is concave where the center of the city is lower, so this situation has a negative impact, which is prone to flooding, especially during the rainy season or the influence of sea tides through the Rangkui River which divides Pangkalpinang City. The areas that are never flooded are located in the north, west and south of the city. While the eastern area bordering the Rangkui River and the South China Sea and the central part of the city traversed by the Rangkui River are often inundated by tides (rob).

The problem of flooding is the culmination of several problems related to spatial planning that continue to occur and even be ignored. Most of the flooding in Pangkalpinang City is caused by the lack of retention ponds, the conversion of swamps into residential areas and the lack of optimized green open spaces. Based on data collected from the Green Circle Association, there are 207 cases

of green open space conversion and conservation swamps and cultivation swamps that are suspected to be used as industries. Land resources are natural resources that are very important and are considered for human survival. Where land is needed in every human activity, such as for agriculture, residential areas. Indonesia has a large population. This number continues to grow every year. Where in the data from the BPS states that Indonesia's population density in 2022 is 275.77 million people and an increase of 1.13% from the previous year (Rahmah, 2019).

A common problem faced by cities in Indonesia is the growing urban population. This is caused by natural population growth and various factors such as urbanization. These two factors will eventually impact and create various problems in urban areas such as lack of space and land for living. Another implication of the increasing need for space in urban areas is the high demand for land. Where the provision of land in the city center is increasingly limited and very expensive so that urban development tends to digest from suburban areas (Budianingrum et al., 2015). With the increase in population in the Kampak area, the higher the demand for basic needs such as food, clothing and shelter (Zainab, 2017).

The emergence of a phenomenon in land use is the existence of land use change or land conversion. Where this phenomenon arises along with the increasing need and demand for land, both from the agricultural sector and from the non-agricultural sector due to population growth and development activities. According to one expert, Kustiawan 1997, he argued that the phenomenon of land conversion occurs due to structural economic and demographic transformations, especially in developing countries. Tua Tunu village is one of the villages that has a fairly large agricultural land. With an area owned by the Tua Tunu village, which is around 137 hectares (Ivoni, 2019). In addition to the disaster aspect, the RTRW problem is also related to the lack of community involvement in policy making and there are even several community groups that are in dispute regarding the fulfillment of spatial planning.

The problems that occur have actually been regulated in Pangkalpinang City Regional Regulation No. 1/2012 which aims to organize the city's spatial area to realize Pangkalpinang City as a regional scale trade, service and tourism city, as well as an international scale industrial city with the concept of an environmentally sound water front city. This regulation is a step taken by the government to focus on regulating the distribution of environmental justice that is equitable for all people in Pangkalpinang City. However, in reality, government regulations related to spatial planning and urban areas have not been fully implemented to the maximum and there are still many shortcomings in several aspects by looking at the various problems above. The fulfillment of regulations carried out by the city government is interesting to see from the perspective of Ecological Justice in the Implementation of the Pangkalpinang City Regional Spatial Policy.

Some previous research that is used as a reference in this research includes a journal article written by (Suweda, 2011) which shows that ideally a city must pay attention to several aspects including livable, comfortable, sustainable, equitable and driving growth and community progress. The arrangement of urban areas must consider pro growth, pro green, pro job, and pro poor in order to achieve the ideal city goals. As an alternative way, there are several concepts that can be applied in big cities in Indonesia. First, the Transit-Oriented-Development (TOD) concept can also be used by combining residential and commercial zones with easy pedestrian access to transportation and must be in accordance with the character of the environment. In addition, the concept of eco town or green city is an environmentally friendly city through efficient use of energy and integrated waste treatment.

Another literature review that is used as a foundation is research from Ilva (2015), where the problems felt by the community today are the lack of space, facilities, and urban services which in

fact are not regulated in the RTRW, so there is a need for additional new rules to meet the needs of the community. So it is necessary to plan the layout of the building and the environment to accommodate these needs. For example, the city of Bandung in implementing its spatial plan, has set the needs of space, facilities and community services in the spatial regulations in the form of building layout plans and in Bandung regional Regulation No. 18 of 2011 on Spatial Planning (RTRW) for certain areas. Basically, RTBL is very necessary because it can contain detailed urban design and in accordance with the character of the city and can be adapted to the needs of the community. RTBL itself is the embodiment of urban design as a bridge between urban spatial planning and building architecture. In addition, from the environmental aspect, RTBL can also realize the existence of a sustainable green city. With the appearance of three-dimensional design as one of the RTBL products, of course, the level of meeting the needs of the community can achieve the desired goals. In addition, in RTBL, investment plans can also be included as a financing function, where in the drafting, prospective investors in the RTBL planning area have been introduced to participate in building the planning area, so it is expected that when RTBL is implemented, there will be no financing constraints.

This research dissects the perspective of Environmental Justice which is divided into distributive justice, corrective justice, procedural justice and social justice into a single unit related to justice in one generation of life (Wibisana, 2017). In the first part, explained about environmental justice in terms of Collin's view is the relationship between the distribution of environmental rights and benefits fairly among race, class, and income of the community. In the next section, it is explained more concisely that the first is environmental justice as a distributive justice that demands a decrease in environmental risk compared to the redistribution of environmental risk and asks for an equitable distribution of the benefits of Environmental Protection and management efforts. The next part is environmental justice as corrective justice which sees a form of justice that is intended as an effort to sanction, burden of recovery obligations or compensation for those who cause environmental losses so that those who damage the environment bear the responsibility to restore environmental impacts and losses. The next part is environmental justice as procedural justice, namely justice towards a fair decision-making process for the environment, prioritizing protection for injured parties and fair access in the decision-making process which is then divided into the right to participation in decision-making, the right to information and the right to sue. The last part is environmental justice as social justice that will encourage the best efforts to achieve a society that is able to meet the needs of human life, with every society must have sufficient resources and power to live a decent life as a human being.

Furthermore, the fourth study used as a literature review is a journal written by (Karina et al., 2017) which can be a reference for how spatial criteria, especially open spaces, are desired by the people of Pangkalpinang City. This study was raised considering the lack of open space available. In the initial introduction explained the meaning and importance of open space because it is able to liven up social interaction outside the building so as to increase the attractiveness of the community compared to indoor entertainment areas such as malls. In the next section, it is explained that according to the respondents in this study, most of the functions of open space are as a place of recreation and education, areas of various social activities, selling areas (food or other merchandise) and the most dominant is as an area of social interaction. Then the next section explains the main reasons for the people of Pangkalpinang city to visit open spaces because of the atmosphere that provides positive energy by doing several activities such as exercising, refreshing, attending various events, buying food, trading and meeting friends or taking pictures. The atmosphere of the space formed from the physical environment, the psychological state of open space users when they come to the open space and the forming aspects of social interaction between users is the attraction of the people of Pangkalpinang City to visit the open space. ecological justice becomes one of the important

frameworks in understanding the dynamics of the relationship between humans, development, and the environment. This concept emphasizes the need for equitable environmental protection while ensuring social justice for affected communities. In Indonesia, spatial policy has a strategic role in regulating the use of space in order to support sustainable development without neglecting aspects of environmental justice. Pangkalpinang city, as the center of government and economy in the province of Bangka Belitung Islands, faces serious challenges due to development pressures that threaten the carrying capacity of its environment. The high rate of urbanization, land conversion, and conflicts of interest in spatial planning often lead to environmental injustice, especially for vulnerable groups of people. This study uses the concept of Ecological Justice proposed by Kuehn to evaluate the application of spatial policy in Pangkalpinang City. The four main aspects analyzed are distributive, corrective, procedural, and social justice, which are relevant in assessing the extent to which the policy reflects ecological justice principles.

2. Research Method

In this study, a qualitative research method with an exploratory descriptive approach was used as a research method in answering the phenomenon raised. Analyzing the influence and relationship between variables with empirical testing is a research design chosen to be able to deeply explore the social phenomena raised. Exploration of the problem and deepening of the phenomenon raised is a research design that can provide a clear picture of the object in this study (Howitt, 2010). It begins with an in-depth literature review discussion on the formulation of Pangkalpinang City's spatial planning policy by looking at the forms of policies that have been made by juxtaposing non-participant observation to obtain relevant data related to environmental justice in the implementation of spatial planning policies in Pangkalpinang City. Non-participant observation was chosen because it allows researchers to observe phenomena directly in the field without being involved in ongoing activities, so as to maintain objectivity and obtain data in a natural context. Cross-checking was also conducted by collecting interview data with policy makers and policy implementers who play a role in the spatial planning scheme of Pangkalpinang City.

This research also provides an overview of the context of the problem presented from the literature that discusses the existing problems juxtaposed with field observations and in-depth interviews with communities affected by existing conditions. Supporting the strengthening of data, this research will also link environmental groups such as environmental NGOs that are concerned with this issue. The findings of literature data, in-depth interviews and field observations will be the initial capital for researchers to explore existing phenomena and analyze the problems faced in a deep and comprehensive manner. The research used three main groups of informants, namely the community, the Pangkalpinang City government including Bappeda and PUPR and environmental groups or NGOs.

3. Results and Discussion

Evaluation of The Concept of Ecological Justice in the Implementation of Spatial Planning Policy in Pangkalpinang City

In this study, using the concept of Ecological Justice from Kuehn, which looks at how it is done and what aspects have been or will be fulfilled in creating Ecological Justice in the application of spatial policy by looking at four aspects, namely distributive, corrective, procedural and social. Thus, in the fulfillment of environmental justice in the implementation of the Pangkalpinang city spatial plan will be guided by these four aspects. The first in the aspect of distributive justice will analyze the application of the Pangkalpinang city spatial plan to provide justice for the allocation of resources to the community and overcome resource inequality and the risk of damage experienced by the community and find the ideal formulation in fulfilling resource Justice.

Second, in the aspect of corrective justice, it will analyze the clarity of sanctions and rewards that are firmly and regularly applied in the implementation of the Pangkalpinang City spatial plan,

especially for the fulfillment of rights and obligations for various sectors in the utilization of ideal spatial planning. Third in the aspect of procedural justice will analyze ideally stakeholders play a role in policy-making Spatial Plan of Pangkalpinang involving various actors fairly such as the community, NGOs, experts and some other actors who have the capacity in the field of Environment. Finally, in the aspect of social justice will analyze ideally in the implementation of the Spatial Plan of Pangkalpinang city has been able to overcome various problems in the community such as poverty, resource inequality, Resource Governance adequacy and fair allocation so as to provide welfare for the community. By looking at the four aspects above, it will get a formulation or module of the ideal spatial plan with the characteristics of the city of Pangkalpinang so that environmental justice can be achieved and continue to take place both in the short term, medium to long term.

a. Distributive Justice

Basically, in analyzing distributive justice in relation to the fulfillment of environmental justice in the implementation of the Pangkalpinang City spatial plan policy, there are several aspects that must be seen: inequality in the distribution of natural resources, unequal utilization, and unbalanced risk of environmental damage. Inequality in environmental justice is also related to various community problems such as poverty, employment inequality, and racial or ethnic threats and is often borne by those who are marginalized both economically, gender, race and ethnicity. So that in this distributive justice must encourage and demand a decrease in environmental impacts rather than environmental distribution (Kuehn, 2000).

In fulfilling environmental justice in the implementation of the Pangkalpinang City spatial plan, the PUPR Office as the institution responsible for development including spatial planning in Pangkalpinang City sees that so far the Pangkalpinang City government has been maximized in achieving the fulfillment of resource allocation in the spatial plan. This is evidenced by some revitalization and new construction of several facilities to meet the ideal aspects of environmental justice. The Pangkalpinang City Government routinely vegetates city parks and adds biota to retention ponds, lakes and rivers. First, the government routinely cleans tributary streams every month in order to restore the function of river water as a reservoir and waterway from the mainland to the Rangkui River in collaboration with the Bangka Belitung Regional Center (Nugraha, 2022).

Second, the Pangkalpinang City government through the PUPR Office has revitalized several underpasses including the Kacang Pedang Retention Area, Kolong Bacang and Kolong Pedindang. Currently, the revitalization of the Rangkui River has been completed, especially in the estuary area of Opas Village and the Teluk Bayur Area so that it provides benefits in accommodating drainage water when it rains so as to reduce the risk of flooding which has been the main problem of the city, while providing benefits to the community, especially as a place of recreation. Even now, the Opas Village estuary revitalization area has become a new tourist attraction in Pangkalpinang City. Tourists can walk along the river, enjoy a variety of traditional snacks along the pedestrian path, or relax in the open space around the river. At night, this tourist attraction is even more beautiful due to the glow of the colorful lights installed along the river. In addition, the Pangkalpinang City government has also revitalized other tributaries that have become clean and comfortable riverside villages for the community, including the Rangkui River area in the Telok Atok area to Pintu Air I, which has now become a park and recreation area for the surrounding community (Nugraha, 2022).

Third, the Pangkalpinang City government has organized several slum areas in Pangkalpinang City. The alleviation of slum areas is carried out in stages with the synergy of programs of both the central and local governments in the area by carrying out several activities, one of which is house renovation. Currently, the government is focusing on slum alleviation programs in Teluk Bayur and Pasir Putih by considering aspects of needs such as sanitation needs, then waste management and the construction of green open houses. There are some other cases that are difficult to handle where

there are still some people who build houses on stilts in flood-prone areas of the Opas Estuary. However, there are some slum areas that are still in the planning stages for relocation, especially the flats in the city center. Pangkalpinang City, which used to have 196.2 Ha of slum areas out of an area of approximately 10,440,464 Ha in 2014, has been reduced to 28.43 Ha in 2024 (Kurniasih, 2024).

Meanwhile, the Bappeda, which is responsible for development planning in the City of Pangkalpinang, observes that currently, the City of Pangkalpinang still meets the aspects of environmental justice, especially the aspect of distributive justice expected by the community. This has happened because for a long time, many plots of land owned by the community have been designated for uses that do not match their actual functions, resulting in an imbalance in the allocation of environmental resources to the community. The government is still striving to provide the community with the necessary allocation of resources and the environment, and has implemented several policies, particularly the presence of green areas that offer comfort and enhance the city's tourism, although it is hindered by spatial planning regulations that limit the development of tourism facilities, especially in riverbank areas and existing delta islands, as well as the still limited green areas within the city (Adrianto, 2022).

The Bappeda, as the development planner in the city of Pangkalpinang, has already organized spatial patterns such as forest areas, residential areas, office areas, and agricultural areas. In addition, the government is also trying to organize the spatial structure to be more orderly with more balanced areas. In addition, Bappeda, along with the relevant departments, is evaluating several developments in the city of Pangkalpinang, especially in flood-prone areas in the Taman Sari sub-district, particularly in the Bukit Tanui area, which quickly becomes inundated during heavy rain, causing waterlogging ranging from 10-30 cm and taking about 3-4 hours to recede. Therefore, by looking at one such example, there is a need for a reassessment of the development pattern in the City of Pangkalpinang. There must be development planning that is oriented towards the landscape patterns and characteristics present in the City of Pangkalpinang. Moreover, Pangkalpinang City is known as a city surrounded by tributaries, which geographically is located in a lowland area with many swamps. However, since the past, the community has not cared about the environment and has been filling in swamps and tributaries and building along the riverbanks, thus disturbing the environmental balance. The government is gradually making several adjustments and evaluations to the spatial planning in Pangkalpinang City to align with the established RTRW (Hasanah, 2024).

However, WALHI BABEL as a non-governmental organization focused on environmental issues, sees that the city of Pangkalpinang still harbors a multitude of problems related to spatial planning (WALHI, 2020). This is evident in the still limited green open spaces in the city of Pangkalpinang, which affects air quality. Based on the current availability of green open space conditions in the city of Pangkalpinang, the existing area of green open space is approximately $\pm 1,462.09$ ha or $\pm 12.35\%$, which consists of public green open space covering $\pm 1,253.09$ ha or $\pm 10.58\%$ and private green open space covering ± 209 ha or $\pm 1.77\%$ (Fahrezi, 2018). Generally, these areas are dominated by green corridors in the form of individual tree plantings or non-clustered trees that grow naturally and are managed by the community and local government. They do not yet meet the requirements of Law Number 26 of 2007 concerning Spatial Planning, which mandates that 30% of the land area in the city of Pangkalpinang be designated as green open space. Additionally, Pangkalpinang City has been prone to ecological disasters such as floods due to spatial planning errors that directly impact the community. Even in 2016, the city of Pangkalpinang experienced its first severe flood with heights ranging from 20-30 cm to 1 meter. The flood events in 2016 on Jalan A. Yani and Jalan Pelipur in Pangkalpinang caused many areas that had never flooded before to be affected by floods, resulting in loss of life.

Certainly, WALHI along with the civil society affected by the flood sued the Mayor of Pangkalpinang at the Administrative Court of Pangkalpinang for violating the Regional Regulation of Pangkalpinang City Number 1 of 2012 concerning the Regional Spatial Plan with three points of demand: first, the failure to provide and prepare since the disaster response, second, the negligence of the City Government in fulfilling the environmental carrying capacity and load, and lastly, demanding the City Government to be responsible for the losses suffered by the flood-affected residents, especially in December 2021. The decision of the Administrative Court Judge of Pangkalpinang City stated that the plaintiff, WALHI and representatives of civil society, won the case. Certainly, with the victory of this lawsuit, it further emphasizes that there is something wrong with the spatial planning management in the City of Pangkalpinang (Yuliusman, 2022). The Pangkalpinang city government, through planning and policy implementation, has done many things. However, the optimization of work programs and several aspects related to distributive justice need to be improved according to the needs of the Pangkalpinang community and the urban environment so that distributive justice can be formed, which supports the achievement of environmental justice comprehensively.

b. Corrective Justice

Essentially, in discussing corrective justice, it is understood as justice aimed at imposing sanctions, assigning obligations, and providing compensation for those who damage the environment to those affected, so that those who cause the damage have the responsibility to restore the environmental damage and losses (Kuehn, 2000). In relation to spatial planning in the city of Pangkalpinang, Bappeda sees that the sanctions imposed on violators or environmental destroyers are already quite strong, as outlined in Article 133 of Regional Regulation Number 15 of 2012. In that article, violators of spatial planning are subject to administrative sanctions in the form of written warnings, temporary cessation of activities, temporary cessation of public services, closure of locations, revocation of permits, denial of permits, cancellation of permits, demolition of buildings, restoration of spatial functions, and administrative fines. Then, for serious offenders, civil and criminal sanctions are also imposed in accordance with the applicable laws. (Adrianto, 2022).

However, in this aspect, WALHI, as a non-governmental organization concerned with environmental issues, views that the regulations regarding sanctions for spatial planning violators are merely written rules without any serious follow-up. This happens because the violators have a power relationship with the authorities, and even the government itself violates the existing regulations. For example, there are still many permanent stone buildings standing on the swamp, whereas government regulations state that the type of construction allowed on swamps is stilt houses to maintain environmental balance. WALHI highlighted the reclamation of swamps and peatlands in Air Hitam Village for the construction of the Bangka Belitung Islands Provincial Government office complex. Although the swamp land belongs to the government, it should not be repurposed carelessly, especially since the swamp areas in Pangkalpinang are becoming increasingly scarce. (WALHI, 2016).

Considering the existing reality, WALHI views the sanctions in the RTRW so far as mere formalities without any real action. All this time, the community has been continuously instructed not to engage in certain activities under the pretext of flooding, while it is the government itself that violates its own policies. In recent years, WALHI has also received several reports from the community about spatial planning violations by the government that impact the community, and WALHI has consistently advocated directly to the government, but there has been no positive follow-up from the government, even neglect has been observed. In fact, in some cases, it is the community that becomes the scapegoat and is criminalized. There is a need for a paradigm shift from the government that spatial planning should not only focus on economic effectiveness, which arbitrarily overrides the interests of the community and the environment, but must prioritize and

consider the aspects of community benefit and environmental sustainability. (Yuliusman, 2022). The legal regulations that have been established and the planned sanctions are good performance by the government. However, in its enforcement, it is necessary to place more emphasis on the process of enforcing the rules and laws that have been established to maximize the results of the law enforcement in place.

c. Procedural Justice

In the aspect of procedural justice, the aspect of concern is the decision-making process that involves all parties fairly regardless of the results of the decisions made. This aspect emphasizes on obtaining equal rights and attention in policy-making related to the fair distribution of natural resources and environmental rights. In implementing this aspect, a more open decision-making model is needed, protecting people or parties who are disadvantaged, and equal access to policy-making (Kuehn, 2000).

In the view of the Pangkalpinang City government, in this case Bappeda, local regulation No. 15/2012 has accommodated community involvement in decision-making related to spatial planning. This is stated in article 125, which explains the role of the community in spatial policy, including spatial planning, spatial utilization and control of spatial utilization. Details in the role of the community are also explained in the points of article 125, including the preparation of spatial plans, determining the direction of regional development, identifying potential and development problems, and determining spatial plans. In addition, the community can play a role in providing input on spatial policies and conducting various activities and cooperating with the government in spatial utilization agendas by taking into account local wisdom (Adrianto, 2022).

Then the PUPR Office stated that so far it has involved the community in every policy making by being carried out by a body formed by the government, namely the regional spatial planning coordination team from the city government in coordination with the DPRD. Furthermore, in the process of formulating and making rules and policies, the parties involved include elements of government, BUMN, private parties, DPRD, spatial consultants and academics. In this process, the community can also convey their aspirations through the DPRD or directly communicate through social media, newspapers or meet directly with the regional head. On several occasions, residents are often involved in gotong royong to clean up creeks and culverts to cope with flooding and have formed environmental cadres to support the government's agenda in realizing ideal and sustainable regional spatial planning (Nugraha, 2022).

A different argument was presented by WALHI as a non-governmental organization that is concerned with environmental issues, seeing that the government has never even ignored the role of ordinary people and civil society institutions. In its journey, the community is only involved when issues related to spatial planning that have been raised by the media have gone viral. WALHI also expressed disappointment that in several policy evaluation processes, input and opinions conveyed by the community were not taken seriously and were even ignored by quickly changing the direction of policy according to government interests. In addition to the absence of community involvement, information disclosure is also not obtained by the community. The lack of information disclosure in WALHI's view is due to the absence of professional data management carried out by the government and even a lot of inaccurate data is found. For example, data related to the amount of waste production by households, in the data collected accurately by WALHI, each person produces 0.6 kg of waste per day, which means that if the total city population produces 1200 tons per day, while data from the government is 300 tons per day. This difference in data certainly affects the policy-making process carried out by the government which is not in accordance with the existing reality.

In WALHI's view, there is indeed a kind of behavior or paradigm in the government when formulating a policy that is not based on facts, not based on existing data. Most of its work in the policy process seems to be a mere formality of making policies while the government must have the ability to see the characteristics of each place's phenomena. There is even a tendency for the government to always make the economy the main basis for policy making, but at the expense of human rights and the environment (Yuliusman, 2022). The need for community involvement and environmental NGO groups in policy-making related to the environment. This is based on the community's experience related to environmental conditions as well as the concerns and concerns of NGO groups on urban environmental issues.

d. Social Justice

In looking at social justice in the fulfillment of environmental justice, it can be analyzed by the extent to which distributive justice, corrective justice, and procedural justice can be fulfilled. Social justice views that the management and utilization of the environment must be able to alleviate poverty. Langhelle revealed that between sustainable development that is vulnerable to environmental problems and social justice is very related and has a relationship with each other. Social justice in environmental justice will encourage all parties to take the best steps in creating a society that is able to meet the needs of the community, has the resources and power over the management of adequate and appropriate resources as human beings (Kuehn, 2000).

The utilization of resources and the environment must be able to provide benefits for the welfare of society and the preservation of the environment itself. The guiding development paradigm is not only focused on development that is needed today, but must consider long-term prospects so that it is sustainable in the future. With such a concept, it can be achieved by integrating environmental aspects in every development activity, meaning that before a development activity is carried out, in addition to the economic and technical feasibility that is considered, it also needs to be seen in terms of social and ecological or environmental feasibility.

In the RTRW policy of Pangkalpinang City, the government continues to strive hard to meet every spatial planning need desired by the community. Of course, its implementation does not proceed quickly because it must go through regulations at both the legislative and executive levels with proper planning and available budget. For example, the government has long wanted to schedule the relocation of residents in slum areas to apartment complexes, but until now it has been hampered by budget constraints and has not yet reached an agreement with the local residents. Then the government continues to strive to add green open spaces in several locations. The government also acknowledges that the city of Pangkalpinang has long undergone changes in its characteristics due to urbanization, resulting in several areas that were originally designated as swamps, riverbanks, and green open spaces now being converted into housing. The government is promoting an urban spatial planning concept oriented towards a water city by continuously revitalizing various tributaries in the city of Pangkalpinang, one of which includes regularly conducting community clean-up activities for the tributaries.

In the view of WALHI, as a non-governmental organization concerned with environmental issues, the community has not yet achieved justice in terms of resource allocation equity. This is evidenced by the still abundant community production land, green open spaces, and protected areas such as wetlands being converted into economic and residential zones, exacerbated by regulations issued by the government that further damage the environment. There must be changes to the RTRW regulations in Regional Regulation Number 15 of 2012 that are more favorable to the community and the environment, rather than adhering to the current rules that seem formalistic. Of course, in this situation, consistency and balanced advocacy must be carried out by the government so that the

aspect of social justice in the RTRW policy of Pangkalpinang City is felt by the entire community, thereby meeting the living needs of the people and their right to the environment. The need to pay attention to green areas and several other areas that are important to protect as a form of social justice for the community and not just focus on land expansion in the housing sector, which overlooks social justice for the community.

4. Conclusion

The government is currently trying to meet every ideal spatial need for the community as evidenced by several efforts including cleaning and revitalizing tributary streams every month in order to restore the function of river water as a reservoir and waterway, even some revitalized tributaries are currently becoming new tourist attractions such as Rangkui and Muara Opas tributaries. Then the government also focuses on slum alleviation programs by considering aspects of needs such as sanitation needs, then waste management and the construction of green open houses (RTH) which have an impact on reducing the number of slum areas by 50%. In existing regulations, the government has also actually regulated several strategic areas such as economic areas, green open spaces, housing, offices and others. The government also recognizes that there must be some evaluation in the existing spatial planning. There must be an evaluation of some developments in Pangkalpinang City, especially in flood-prone areas, evaluation of tributaries that have disappeared, and some slum areas that must be relocated.

In general, when looking at Pangkalpinang City Regional Regulation No. 1/2012, all aspects of ecological justice have been accommodated both in the distribution of resources, sanctions given for environmental violators, community involvement in policy making and social justice. However, the lack of consistency in implementing existing rules by both the government and the community makes existing rules not work well. In some cases there are current RTRW policies that do not fulfill aspects of ecological justice and even harm the community. Currently, there is still an imbalance of areas that should be intended for the community and the environment to become economic areas, reclamation of swamps for office areas that result in environmental damage and the government's failure to overcome ecological disasters that take place every year in Pangkalpinang City. The aspect of ecological justice has also not been fulfilled, which can be seen from the absence of strict sanctions for violators of spatial planning because so far it is not uncommon for the government to be the destroyer of spatial planning itself. Then the lack of involvement of the community and environmental NGOs in access to data and information as well as the policy formulation process related to the Pangkalpinang City Spatial Plan means that there is no evaluation from external actors in spatial policies that do not seem to match the data and facts on the ground.

5. References

- Adrianto, A. (2022). *Perspektif Keadilan Lingkungan RTRW Kota Pangkalpinang oleh Badan Perencanaan Pembangunan Daerah*. Universitas Bina Bangsa.
- Amindoni, A., & Adzkia, A. (2021, February 11). Banjir dan bencana beruntun di tengah cuaca ekstrem, "Menurut pemerintah itu anomali cuaca, kami menyebutnya krisis iklim." *BBC News Indonesia*. <https://www.bbc.com/indonesia/indonesia-56007558>
- Budianingrum, D. M., Fathurrochman, F., & Marom, A. (2015). Evaluasi Dampak Alih Fungsi Lahan Pertanian Ke Non Pertanian Di Kecamatan Gunungpati Kota Semarang. *Indonesian Journal of Public Policy and Management Review*, 4(3), 186–197.
- Fahrezi, M. A. (2018). *Rencana Pengembangan Ruang Terbuka Hijau Publik Kota Pangkalpinang*

- [Universitas Pasundan]. <http://repository.unpas.ac.id/39858/>
- Hasanah, D. A. (2024, June 28). Ada 27 Titik Rawan Banjir di Pangkalpinang, Bukit Tani dan Kawasan Pesisir Paling Cepat Tergenang. *Bangkapos*. <https://bangka.tribunnews.com/2024/06/28/ada-27-titik-rawan-banjir-di-pangkalpinang-bukit-tani-dan-kawasan-pesisir-paling-cepat-tergenang>
- Ivoni, D. (2019). Analisis dampak alih fungsi lahan pertanian sawah terhadap pendapatan dan sistem kehidupan rumah tangga Petani di kecamatan darul imarah kabupaten aceh besar. *Jurnal Ilmiah Mahasiswa Pertanian*, 4(1), 437–449. <http://www.jim.unsyiah.ac.id/JFP/article/view/9918>
- Karina, K., Kusuma, H. E., & Primasari, L. (2017). Kriteria Ruang Terbuka menurut Persepsi Masyarakat di Kota Palembang. *Prosiding Temu Ilmiah IPLBI 2017*, E053–E060. <https://doi.org/10.32315/ti.6.e053>
- Kuehn, R. R. (2000). A Taxonomy of Environmental Justice. *Environmental Law Reporter*, 30.
- Kurniasih, N. (2024). *Kawasan Kumuh di Pangkalpinang Berkurang*. Negeri Laskar Pelangi. <https://negerilaskarpelangi.com/2024/05/04/kawasan-kumuh-di-pangkalpinang-berkurang/>
- Kusumastuti, H. (2024). *10 Provinsi di Indonesia dengan Bencana Terbanyak di Musim Penghujan (2023/2024)*. Goodstats. <https://data.goodstats.id/statistic/10-provinsi-di-indonesia-dengan-bencana-terbanyak-di-musim-penghujan-20232024-Cm8YI>
- Nugraha, A. (2022). *Perspektif Keadilan Lingkungan RTRW Kota Pangkalpinang oleh Dinas PUPR*. Universitas Bina Bangsa.
- Pristiandaru, D. L. (2023, May 17). Mengenal Tujuan 11 SDGs: Kota dan Permukiman Yang Berkelanjutan. *Kompas*. <https://lestari.kompas.com/read/2023/05/17/080000686/mengenal-tujuan-11-sdgs--kota-dan-permukiman-yang-berkelanjutan>
- Rahmah, R. A. (2019). *Alih Fungsi Lahan Pertanian Menjadi Perumahan di Kabupaten Jember* [Universitas Jember]. <https://repository.unej.ac.id/handle/123456789/98849>
- Rasyid, N. A. (2024). *Statistik Banjir dalam 10 Tahun Terakhir*. Goodstats. <https://data.goodstats.id/statistic/statistik-banjir-dalam-10-tahun-terakhir-j6iDl>
- Suweda, I. W. (2011). Penataan Ruang Perkotaan yang Berkelanjutan, Berdaya Saing dan Berotonomi : Suatu Tinjauan Pustaka. *Jurnal Ilmiah Teknik Sipil*, 15(2).
- WALHI. (2016). *Stop Alih Fungsi dan Reklamasi Rawa Pangkalpinang*. Wahana Lingkungan Hidup. <https://walhisumsel.or.id/2016/08/30/walhi-babel-stop-alih-fungsi-dan-reklamasirawa-palembang/>.
- WALHI. (2020). *Tinjauan Lingkungan Hidup Kepulauan Bangka Belitung*. Wahana Lingkungan Hidup.
- Wibisana, A. G. (2017). Sebuah Pengantar Berdasarkan Taksonomi Keadilan. *Mimbar Hukum*, 29(2), 292–307.
- Yuliusman, Y. (2022). *Perspektif Keadilan Lingkungan RTRW Kota Pangkalpinang oleh WALHI*. Universitas Bina Bangsa.
- Zainab. (2017). Dampak Sosial Ekonomi Alih Fungsi Lahan Pertanian Terhadap Masyarakat Petani (Studi Kasus Desa Tunggul Wulung, Kecamatan Lowokwaru, Malang). *Jurnal Ilmiah*.