

## Analysis of independent city concept in reclamation area PIK 1 & PIK 2 based on community, government, and private sector role

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### Abstract

Reclamation is part of spatial planning to make coastal areas more useful, as well as to increase land resources from an environmental, social and economic point of view. The development of the PIK (Pantai Indak Kapuk) 1 and 2 reclamation areas is a concept of a sustainable Independent City. The role of the community, government and private sector plays an important role in developing the region. It is also necessary to pay attention to the environmental impact caused by reclamation activities. This study uses qualitative and quantitative methods with a descriptive analysis approach by collecting data from review articles, questionnaires and using maps via satellite imagery. Through the participation of the role of the community which is divided into the general public, fishing communities, and affected communities explaining the interrelationships where the general public's perception of the most supporting parameters for independent cities is infrastructure and land use, then fishing communities have an impact on fish catches, as well as affected communities experiencing rejection resulting in a change in livelihood. The government's role in regulatory planning as a regional spatial plan includes planning processes, infrastructure, public services and a sustainable environment. The role of the private sector can be seen from the planning and development process which chooses to build supporting infrastructure such as tourist centers, shops, public transportation and other facilities. CSR programs by private parties or developers are one of the efforts to contribute positively to the environment and surrounding communities. Correlation of independent cities with land use from planning, development and development processes that reflect the commitment and role of the community, government and private sector seen in 1995, 2014, 2023 The concept of balance and independence in independent cities emphasizes the importance of a holistic approach in urban planning and management. PIK 1 & 2 reclamation areas based on independent cities based on the role of the community, government and private sector in regional development are the key to achieving sustainable development.

**Keywords:** government and private; independent city; PIK 1 & 2 reclamation; the role of community

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## 1. Introduction

In "World Population Prospects 2019", the United Nations stated that the world population could increase to around 8.5 billion in 2030, 9.7 billion in 2050, and 10.9 billion in 2100. Previously, in 2008, the United Nations reported on urban areas. Home to 3 billion of the world's population, this number is expected to increase to 5 billion by 2030. Even though urban areas cover only 2% of the earth's surface, they are home to around 50% of the world's population and consume 75% of the world's energy it has an effect of 80 % in global

warming (United Nations, 2019). According to these statistics, cities have developed into centres of civilization and social interaction. However, the urban workload due to migration and population has caused various urban problems, including a decrease in the quality of public services, traffic congestion and environmental facilities and infrastructure, all of which are related to poverty and many other social problems.

As is the case in many parts of the world, population growth and economic development are directly proportional to environmental degradation. Indonesia is one of the fastest growing economies in the world and is currently experiencing an ongoing dilemma in balancing development and environmental protection. Indonesian citizens depend on natural resources that were once abundant but continue to degrade due to largely unsustainable management and ineffective governance. The World Economic Forum 2022 in its latest global risk report (2022) has declared environmental risks as the top three most severe environmental risks: climate action failure, extreme weather, and loss of biodiversity. This is also a factual major environmental risk in Indonesia (Triyanti et al., 2023).

Along with rapid population and economic growth, the space used for activities such as residences, industry and tourism must be expanded. One way is to do reclamation. Reclamation itself is part of spatial planning and has the aim of making coastal areas more useful and better and increasing land resources from an environmental, social and economic point of view (Mauriend, 2018).

The reclamation areas for the PIK 1 and 2 projects in Jakarta are included in the north coast reclamation which will fill up 2,700 hectares of sea in the Jakarta Bay. The boundaries of the reclamation area consist of the boundaries of the Tangerang area to the Bekasi area which are divided into 3 (three) areas, namely the western zone, the central zone and the eastern zone (Susanti, 2018). The development of the Jakarta PIK 1 and 2 reclamation areas can become a sustainable independent city concept. In the concept of an Independent City, the government, community and private sector work together in developing an area that is self-reliant, sustainable and has economic independence. The government as a regulator has an important role in developing the region. The government can provide proper regulations and permits in development, as well as develop adequate infrastructure. Communities as users of the area must be involved in development and pay attention to the surrounding environment. The private sector as a developer must pay attention to the needs of the community and the environment in development.

This study aims to analyze public perceptions, the role of the government, and the role of the private sector towards Independent City in PIK 1 & PIK 2, as well as analyze the concept of Independent City in PIK 1 & 2 with a process of independence & balance. This is to examine whether the reclamation decision at PIK 1 & 2 has been made correctly and what the impact of this reclamation is on the social system of the community and the environment. This research is expected to provide useful insights for future urban development and help the government and related stakeholders to make the right decisions in developing reclamation areas. In addition, this research can also provide useful suggestions and recommendations for the development of independent cities in Indonesia in general.

## 2. Methods

The research was conducted from April to June 2023, in the Pantai Indah Kapuk 1 & 2 reclamation area. The PIK 1 area is in Penjaringan, North Jakarta, while PIK 2 is located in Kosambi District, Tangerang Regency, Banten. This study uses 2 methods, namely qualitative and quantitative. The qualitative method answers the role of the community, the role of the government and the role of the private sector by reviewing articles using a descriptive analysis approach. The use of a qualitative method was chosen because it uses a natural paradigm, based on phenomenological theory (and the like) in researching social problems in an area from the perspective of the background and perspective of the object being studied holistically (Abdussamad, 2021). Qualitative research with a descriptive approach only describes and analyses events without special treatment of the object under

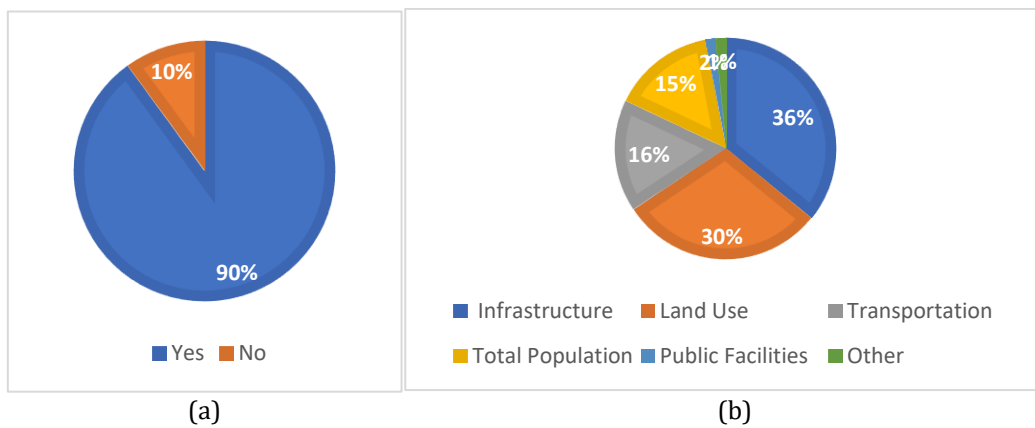
study (Wikšana, 2017). While the quantitative method aims to analyse the percentage of the role of the public in independent cities as well as analysis of land use in the PIK 1 & 2 area. Analysis of the role of the public was carried out by distributing questionnaires and land use using satellite imagery for the time periods 1995, 2014 and 2023. Integration qualitative and quantitative data produce additional insight beyond the information provided by only quantitative or qualitative data (Creswell & Creswell, 2018).

Sampling was determined based on observations through purposive sampling, namely samples taken through certain considerations according to research objectives (Wikšana, 2017). Methods of data collection by observing locations, questionnaires and literature studies related to the independent city concept based on the role of government, community, and private sector in regional development. The subjects of this study were the community, government and private parties who occupy or manage the PIK 1 & 2 area. Questionnaires were given to the public to analyse people's perceptions of independent cities in the PIK 1 & 2 area. The stages of this research started from the data collection process, data analysis and drawing conclusions. Data were analysed to find out (1) the concept of an independent city that is sustainable and environmentally sound, (2) the role of the community in the concept of an independent city (3) the role of government in the concept of an independent city, and (4) the role of the private sector in the concept of an independent city.

**3. Results and Discussion**

*3.1. The Role of Community in PIK 1 & PIK 2*

The role of the community has several aspects that can be analyzed against Independent Cities in PIK 1 & 2. Some people see independent cities as modern and rapidly developing urban areas with attractive designs and adequate infrastructure, on the other hand they can also be economic opportunities and attract investment and business. The role of the community in this study refers to the public, fishing communities, and affected communities. The general public's perception of PIK 1 & 2 independent cities is shown in Figure 1.



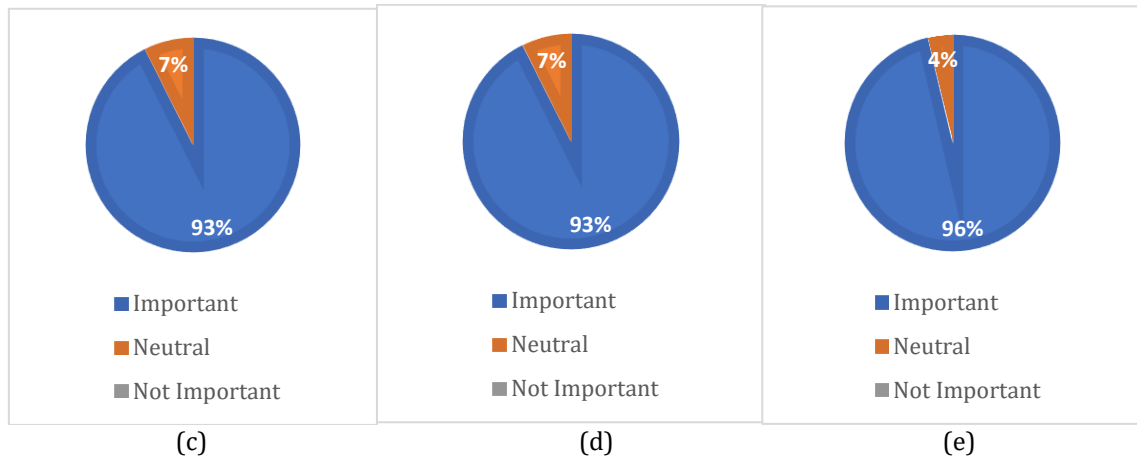


Figure 1. Perceptions of the public towards PIK 1 & 2 independent cities (a) Independent city group (b) Area parameter, (c) Community active role, (d) Government role, (e) Private role (Author’s property, 2023)

Figure 1. Explaining that the general public in question is people who know the PIK 1 & 2 reclamation area and have visited the area. The number of respondents in this data collection amounted to 30 people with a minimum education of senior high school (SMA). From the results of data collection, there were 90% who considered that the PIK 1 & 2 area was an Independent City area which was dominated by infrastructure parameters (36%) and land use (30%) that supported the area. This is supported by [Geumala et al. \(2018\)](#) new independent cities have potential which is seen as having accessibility with the availability of infrastructure and availability of land. In serving the needs of citizens and the community, urban services can improve and develop their infrastructure. The current land use area is also compared between existing conditions and the principles of sustainable urban design ([Suryaudaya and Santoni, 2020](#)). Then according to the results of data collection the role of the community, government and private sector is considered important and neutral where important points dominate all roles with a value of 93% for active community participation, 93% for the role of government, and 96% for the role of the private sector. The principle of regional development is supported by community participation, either directly or indirectly from the planning process to development. The functions of the community, private sector and government have functions that are equally important, requiring mature cooperation to carry out development successfully ([Yuliastuti et al., 2021](#)).

Apart from the public who have an impact on the city area, the fishing community is also influential in this development. The expansion of the PIK 1 & 2 reclamation area has an impact on fishing communities due to the loss of their livelihoods in accessing fishery natural resources. One of the causes of the sustainability of poverty in fishing communities is caused by the development of coastal areas without regard to the environment ([Royandi and Keiya, 2019](#)). In line with research by [Puspasari et al. \(2017\)](#) that the reclamation coastal waters area is a fishing area for traditional fishermen who carry out fishing operations with vessels < 5 GT (small). There are 9,638 passive fishing gears operating in Jakarta Bay spread along the coast including kentang nets, floating serom nets and step nets, as well as other fishing gear. Some fishermen have to travel longer distances due to the existence of the G island that has been formed and incurs costs from certain commodities ([Djamil et al., 2022](#)). Based on the number of scattered fishing gear units, it shows the high activity of capture fisheries carried out by fishing communities. Like the development of the area has an impact on the activities carried out by fishing communities before.

Communities affected by the PIK 1 & 2 reclamation area have several alternative job and business opportunities such as professional staff, construction, motorcycle taxis, stalls and so on. This right can increase the average income by as much as 53%, but there are concerns that it will have an impact on the place of residence of those who are evicted ([Djamil et al., 2022](#)). What was done to reduce community resistance was by using a job

opening approach in the form of developing reclamation where workers were prioritized for the Muara Angke community, assistance with the construction of mosques and prayer rooms, increasing tourism objects for Umrah departure for fisherman leaders, cooperative funds, dredging and making land certificates in Muara Angke. On the other hand, society must pay attention to social jealousy towards certain ethnicities and smuggling of prohibited goods such as drugs (Bintari and Muara, 2018). By considering the various inputs and concerns of the community to be able to further improve and optimize the development of the PIK 1 & 2 area to achieve a balance between economic progress, environmental quality and community welfare holistically.

### 3.2. The Role of Government in PIK 1 & PIK 2

The role of the government in developing and maintaining the Pantai Indak Kapuk (PIK) 1 & 2 area as an independent city has an important role which is in the North Jakarta region. A regional development plan considers local wisdom, philosophical values, and the needs of each region if stakeholders participate in the condition of community expectations. Development planning policies consider the alignment of planning documents so that they must be ensured with general government administration regulations (Nursalim et al., 2021). The government is not only tasked with managing land use but managing resources including water, earth, air and the natural resources contained therein (Zamil et al., 2020). The development of PIK 1 & 2 independent cities has the role of the government in the process of planning, infrastructure, public services and a sustainable environment.

#### 3.2.1. Planning

The government, especially the Provincial Government of DKI Jakarta, has an important role in planning in the form of regulations as regional spatial planning. Each spatial planning, the presence of law greatly influences the success of the policy. Spatial planning consists of 3 (three) stages, namely assessing spatial conditions by looking at patterns and interactions of human elements, space and natural resources; identification of problems associated with spatial use policies; and preparation of space utilization strategies (Simamora and Sarjono, 2022). The government's role in the development of the PIK 1 & 2 reclamation area has influenced the development of the area. Government policies have been reviewed from the New Order era until the reformation period has not been implemented due to the lack of confidence of fishermen in marine and fishery natural resources (Royandi and Keiya, 2019). The sustainability of marine and fishery resources resulting from the development of the PIK 1 & 2 area has an impact on environmental issues.

The regulations relating to the reclamation of the development of PIK 1 & 2 in the north coast of Jakarta indicate that the area has a clear legal umbrella. The regulations that have been established in the planning process are the reference used in the development of PIK 1 & 2. The reclamation policy of PIK 1 & 2 from year to year is shown in Table 1.

Table 1. Jakarta Bay reclamation policy (PIK 1 & 2)

No	Year	Policy
1	1995	• Presidential Decree No. 52 of 1995 concerning Reclamation of North Jakarta Beach
2	1996	• Regional Regulation No. 8 of 1995 concerning Implementation of Reclamation and Spatial Planning for the Pantura Jakarta Area
3	1997	• Decree of the Governor of DKI Jakarta Number 1090 of 1996 concerning the Organization and Work Procedure of the Jakarta Pantura Reclamation Controlling Body
4	1998	• Ministry of National Development Planning or Head of Bappenas No. KEO.920/KET/10/1997 concerning Guidelines for Spatial Planning for the North Coast Area
5	2014	• Decree of the Governor of DKI Jakarta No. 220/1998 concerning the Organization and Work Procedure of the Jakarta Pantura Reclamation Implementing Body

6	2017	<ul style="list-style-type: none"> <li>• DKI Jakarta Governor's Decree No 2238 of 2014 concerning the granting of G Island Reclamation Permit to PT Muara Wisesa Samudera</li> </ul>
7	2018	<ul style="list-style-type: none"> <li>• Regulation of the Governor of DKI Jakarta No. 10 of 2017 concerning Urban Design Guidelines for the Metro Pantai Indah Kapuk Integrated Development Area</li> </ul>
8	2019	<ul style="list-style-type: none"> <li>• Regulation of the Governor of DKI Jakarta No 146 of 2017 concerning Guidelines for the Design of the City of Pantai Indah Kapuk North-West</li> </ul>

Based on Table 1. PIK 1 & 2 area regulations began in 1995 through a Presidential Decree, then until 2019 regulations had been developed to support the development of PIK 1 & 2 areas. In 2018 the Pantura BKP (Management Coordinating Body) was an ad hoc non-regional apparatus in implementing reclamation management coordination whose task is to coordinate planning, implementation and supervision of implementation, yield management, re-planning of the north coast land area, as well as providing policy recommendations for implementing reclamation areas ([DKI Jakarta Governor Regulation, 2018](#)). The realization of PIK 1 & 2 integrated development areas that support independent city areas is carried out with the structuring strategy implemented including adjustments to the detailed spatial and zoning plans, division of development segments, application of the share surface concept as transition zones between regional blocks in increasing public open spaces, area transitions residential areas that are realized through green open spaces, open spaces on private land of buildings that are adapted to urban planning concepts, as well as the layout of buildings around landmarks to match the appropriate skyline concept ([DKI Jakarta Governor Regulation, 2017](#)). The government's role in planning is a key role in ensuring that the regional development process is carried out transparently and involves the participation of all interested parties.

### 3.2.2. Infrastructure

The government's role in the infrastructure development of PIK 1 & 2 is as an inter-agency coordinator in ensuring that development is carried out efficiently and according to the needs and interests of the community. Development as a systematic and conscious effort from the government to improve the quality of life of the community and increase the welfare of the community. Basically, infrastructure is a government asset in the context of service to the community ([Ngongano and Tinggogoy, 2016](#)). Improving infrastructure systems and proper utilization such as the green open space zone which is divided into mangrove forests as ecosystem services in the surrounding environment ([Suryaudaya and Santoni, 2020](#)). BKP as the government's representative as the implementation of coordination in the PIK 1 & 2 area where one of its duties is to coordinate the preparation and technical implementation and reclamation development program which includes land use, construction of facilities and infrastructure, management of facilities and infrastructure and control of environmental pollution ([DKI Jakarta Governor Regulation, 2018](#)).

The reclamation activity is also part of the government's plan to control flooding in the City of Jakarta and develop business areas that are growing rapidly. When the reclamation process began, it showed changes in the waters and fisheries environment in Jakarta Bay ([Puspasari et al., 2017](#)). Therefore, the government as a supervisor to ensure infrastructure development is in accordance with environmental impact standards and analysis. Through a strong government role, it is expected that PIK 1 & 2 infrastructure development will be developed in support of infrastructure development and carrying out supervision and law enforcement related to development.

### 3.2.3. Public Service

The central government and regional governments have regulations in fulfilling public service principles, such as in terms of health, education, socio-economic and transportation services. In fact, the fulfillment of service improvements by the government is going well,

the success of the implementation of public services can be measured by access to public services to the community. Public services for the realization of good governance, the government provides broad opportunities for the public to gain access to public services based on transparency, equality, justice and accountability (Sari, 2018). There are 4 (four) public service principles contained in PIK 1 & 2, including:

#### *3.2.3.1. Education*

Availability of adequate educational infrastructure such as supporting facilities, school maintenance and quality staff. In the PIK 1 & 2 area in the Penjaringan sub-district, North Jakarta City, formal education, such as the number of schools and teachers, is an aspect that supports education. The number of state schools for 2022/2023 is approximately 48 schools in the Penjaringan sub-district covering the levels of Kindergarten (TK), Raudatul Athfal (RA), Elementary School (SD), Junior High School (SMP), Senior High School (SMA), Vocational High School (SMK) (Badan Pusat Statistik, 2023b). While the PIK 2 area is in the Kosambi District area, Tangerang Regency, the number of public schools in 2022/2013 is around 44 schools which include Kindergartens (TK), Raudatul Athfal (RA), Elementary Schools (SD), Junior High Schools (SMP), and Senior High School (SMA) (Badan Pusat Statistik, 2023a).

#### *3.2.3.2. Health*

The government must ensure the availability of adequate health services in PIK 1 & 2, including the construction and operation of health centers or hospitals, basic facilities, and the availability of competent medical personnel. The number of hospitals available in the Penjaringan sub-district in 2022 is 1 general hospital, 2 special hospitals, 7 puskesmas, 75 clinics/health centers, and 93 posyandu (Badan Pusat Statistik, 2023b). Meanwhile, the number of hospitals in PIK 2 available in Kosambi Sub-District are 1 health facility, 2 puskesmas work units, and hospitals spread across Tangerang Regency (Badan Pusat Statistik, 2023a).

#### *3.2.3.3. Socioeconomic*

The government's socio-economic development provides various supports such as traditional markets, shopping centers and places of business that support job opportunities, entrepreneurship and increase the economic welfare of the local community. Socio-economic impacts begin to emerge when there are program activities, projects and policies implemented in the community from before and after reclamation (Royandi and Keiya, 2019).

#### *3.2.3.4. Transportation*

An integrated transportation system is needed in the access used by PIK 1 & 2. This includes the provision of public transportation, improvement of road and bridge infrastructure and good traffic management. One of the existing public transportations is the Transjakarta busway with the City Hall – PIK route and toll road access.

#### *3.2.4. Sustainable Ecosystem*

Monitoring reclamation activities at PIK can add pressure to the condition of the aquatic environment which is indicated by a decrease in water brightness, salinity and diversity index values of macrozoobenthos and phytoplankton, and results in a decrease of around 82.2 tons/year of fish production (Puspasari et al., 2017). Changes in central and regional government policies affect the condition of the mangrove forests in the PIK area with the issuance of permits for the construction of housing and recreational areas. The PIK mangrove ecotourism area in Jakarta is managed by the Forestry Service as a place for a diversity of flora and fauna (Febriyanto, 2020). On the other hand, the Green Open Space (RTH) area in the PIK area where the land that was originally 100% of the green open area has shrunk to 13% remaining. The green open space design process is divided into green and sustainable city design so that it can be integrated with the surrounding conditions

(Suryaudaya and Santoni, 2020). Therefore, the government's role is in wise environmental management and ensuring the sustainability of natural resources, preventing environmental damage, controlling pollution, and reducing the negative impacts of development.

The development of the PIK 1 & 2 area is one of the issues regarding environmental control to avoid the global ecological crisis and environmental degradation. In 2016 the Indonesian Forum for the Environment (Walhi), fishermen from Muara Angke and the Indonesian Traditional Fishermen Coalition (KNTI) sued the local government for issuing permits to implement islands F, I and K, but the Jakarta State Administrative Court won the North Jakarta Fishermen's lawsuit against PT Muara Wisesa Samudra and the Government of DKI Jakarta who issued permits for the implementation of Island G (Rahmawati and Firman, 2019). Through the establishment of BKP Pantura Jakarta, implementation of technical plans and reclamation development programs in terms of maintaining the reclamation environment and controlling reclamation environmental pollution.

### 3.3. *The Role of Private Sector in PIK 1 & PIK 2*

The role of the private sector also cannot be ignored in the concept of independent city development. The private sector has a role as an investor and developer in independent township development projects in the PIK 1 & 2 reclamation area. Private companies can contribute to the provision of infrastructure, residential construction, management of public facilities, and development of the industrial and business sectors in the area. Through partnerships between the government and the private sector, a conducive investment environment can be created to promote economic growth and create jobs for local communities. As with the example regarding road access in independent cities, the existence of better road conditions than in areas far from independent cities. Making independent cities act as centers of economic, business, trade and service activities. This is proof that the independent city functions as a driving force in the development of accessibility in the Kapuk area with the dominance of local roads that are packed with residential areas. Therefore, the existence of good road conditions can be a driving force for village communities to carry out activities around the independent city area (Fitriyani et al., 2021).

Pointing out the negative impacts of various studies on the reclamation plan, then led to the issuance of a decree regarding the infeasibility of reclamation in 2003 by the Minister of Environment. These efforts did not produce results because there was a lawsuit from the developer company. At the PTUN session, the panel of judges granted the entrepreneur's lawsuit at the first and second levels. Based on the thoughts of certain experts, a comprehensive justification is formed that discredits the scientific meaning of EIA. Developers also have a strong basis for carrying out rehabilitation according to DKI Jakarta Provincial Regulation Number 1 of 2012 concerning the 2030 DKI Jakarta Provincial Spatial Planning (Mahdi, 2016). With a clear legal basis, the private sector can carry out development in the PIK 1 & 2 area. The role of the private sector as the realization of PIK 1 & 2 independent cities needs to create a quality and sustainable environment for all commodities.

The Corporate Social Responsibility (CSR) program is one of the efforts made by the private sector to support the development of independent cities in PIK 1 & 2. Through the CSR program, companies can contribute positively to the environment and surrounding communities. Several examples of CSR programs have been carried out in the PIK 1 & 2 area. One example of a CSR program is carried out by Hotel Grand Sahid Jaya Jakarta which aims to build communication and relationships with residents around the mangrove forest, especially residents who live in Pantai Indah Kapuk. This type of CSR program as a social activity is related to the environment, employees and sharing by promoting love for the environment. The actors involved were the Department of Marine and Agriculture of DKI Jakarta Province, the Mangrove Forest Management Office, hotel employees and residents of Pantai Indah Kapuk (Ulfani and Sudomo, 2018). CSR programs are carried out by most companies that have ambitions to implement sustainability with integrated CSR programs



to provide for the environment (Jonker and Witte, 2016). The private party carrying out the development of the PIK 1 & 2 area involves the community in training, skills, and education programs to increase local economic capacity and increase employment opportunities.

#### *3.4. PIK 1 & 2 with The Process of Independence & Balance*

Balance and independence are two important concepts in the context of an independent city. An independent city is an urban area that is designed and managed in such a way as to be able to meet the basic needs of its population independently, without being dependent on other areas. This concept emphasizes the importance of creating a balanced environment economically, socially, and environmentally, while increasing the self-reliance of society.

##### *3.4.1. Balance*

Balance in the context of an independent city means creating harmony between various aspects of life. This includes a balance between economic development, environmental protection, availability of resources, and people's quality of life. An independent city must be able to maintain a balance between sustainable economic growth and the preservation of natural resources, such as water, energy and land. It also involves equitable development, where the needs and aspirations of all levels of society are considered.

##### *3.4.2. Independence*

Self-reliance is the ability of an independent city to meet the basic needs of its population independently, by minimizing dependence on other regions. This involves developing adequate infrastructure and resources, such as renewable energy sources, local food production, clean water systems, and efficient waste management. An independent city must also be able to build a strong local economy, by creating jobs, developing the industrial sector, and prioritizing local businesses (Fitriyani et al., 2021).

In the context of an independent city, balance and independence are interrelated and influence each other. By achieving a good balance between various aspects of life, such as a healthy environment, a strong economy, and an inclusive society, independence can be realized. Conversely, by achieving a high degree of independence, independent cities can more easily achieve a sustainable balance.

The concept of balance and independence in an independent city emphasizes the importance of a holistic approach in urban planning and management. This involves active community participation in decision-making, environmentally sustainable policies, and investment in local infrastructure and resources. By adopting this approach, self-sustaining cities can achieve a sustainable balance between economic progress, good quality of life, and responsible environmental management.

An independent city has a close correlation with land use from the process of planning, construction and development which reflects the commitment and role of the community, government and the private sector. The PIK 1 & 2 area seen in 1995, 2014 and 2023 experienced changes in land use. The election from 1995 refers to the first issuance of Presidential Decree No. 52 of 1995 concerning Reclamation of the North Jakarta Coast so that it can be seen before any changes to the reclamation area can be seen from its initial designation. In 2014, DKI Jakarta Governor Decree No. 2238 of 2014 was also issued concerning the granting of G Island Reclamation Permit to PT Muara Wisesa Samudera where in that year the reclamation process was dominated by construction activities. Meanwhile, 2023 aims to find out the current reclamation progress. The land use map of the PIK 1 area can be seen in Figure 2 and the PIK 2 area can be seen in Figure 3.

Figure 2. 1995 depicts the beginning of the location of the North Coast of Jakarta before the reclamation of PIK 1. From the issuance of a presidential decree in 1995, planning for the reclamation of Jakarta Bay which included the PIK area became a concern for environmental observers and brought about significant changes between community relations (Mahdi, 2016). Then in 2014, a difference of 19 years from 1995 there was a change in land use due to the construction of a reclamation area where the North Maju Beach area had been built. In terms of land use, the PIK 1 area consists of open field,

developed, vegetation, roads, and golf areas, but is dominated by open field due to the development process. Data from the Ministry of Environment and Forestry states that during 2014 North Jakarta was the city with the highest level of air pollution in Indonesia caused by heavy vehicle traffic and emissions from industry (Suryaudaya and Santoni, 2020). On the other hand, the mangrove forest area has also experienced extensive changes where the vegetation cover has changed from 2010 to 2015, experiencing an increase and decrease in the total area (Mulyaningsih et al., 2017). Until 2023 the PIK 1 area has experienced an additional area, namely our beach to the west of the advanced coast. Land use in 2023 has started to change drastically with more detail consisting of water areas, developed, vegetation, roads and golf areas, but it has been dominated by residential areas, vegetation, golf areas, and especially our beaches are more dominated by open field. This change resulted in a change in vegetation where land use in ecosystem areas in the PIK 1 area of critical mangrove land included 272.79 ha damaged and 18.38 ha undamaged category (Sofian et al., 2019).

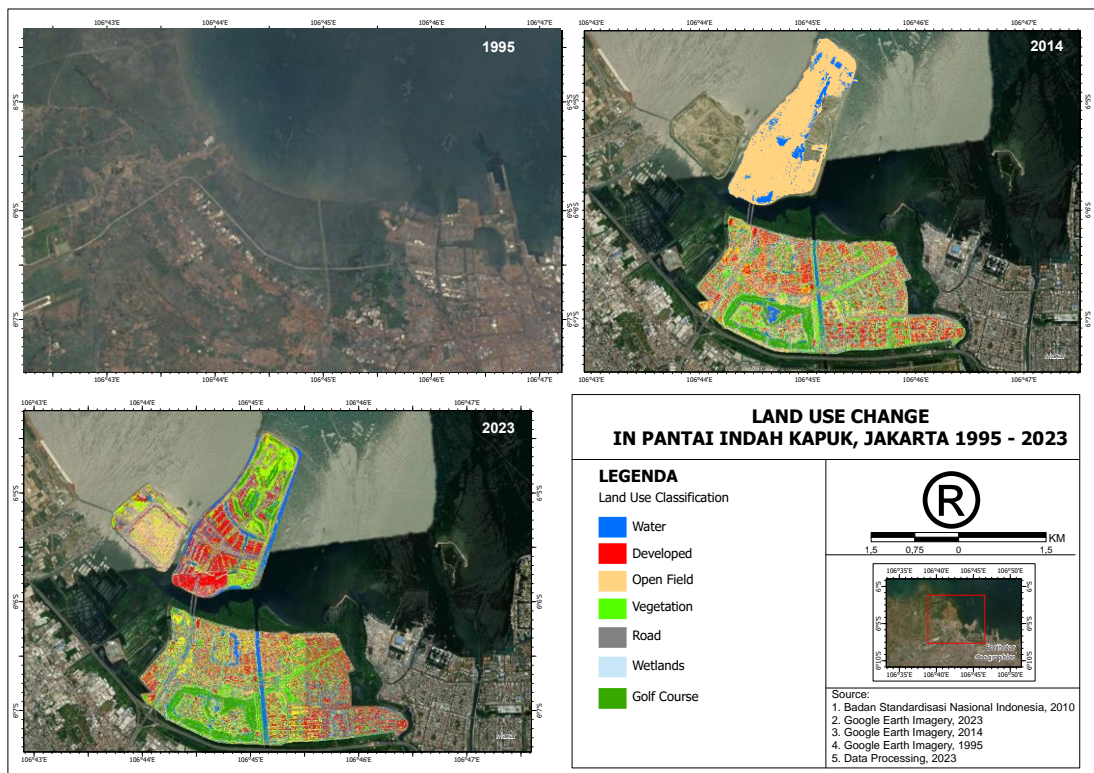


Figure 2. Land use of the PIK 1 area in 1995, 2014 and 2023 (Author's property, 2023)

In 2014, changes in land use were not so significant, which were still dominated by wetland areas and vegetation areas, this was because there were not many reclamation area development processes yet. Meanwhile, if you look at it in 2023, land use in the PIK 2 area will change drastically. Land use that was previously dominated by wetlands and vegetation areas is currently dominated by open field areas, developed, waters and decreased vegetation areas. The RTRW plan for coastal reclamation will cover an area of 9,000 hectares, most of which will fill in coastal waters in the form of seven artificial islands and the rest will dredge aquaculture areas, such as in 2019 the additional area of the PIK 2 reclamation area reached 1,052 ha in East Kosambi Village, most of which occurred as a result of reclamation (Suwandana, 2019).

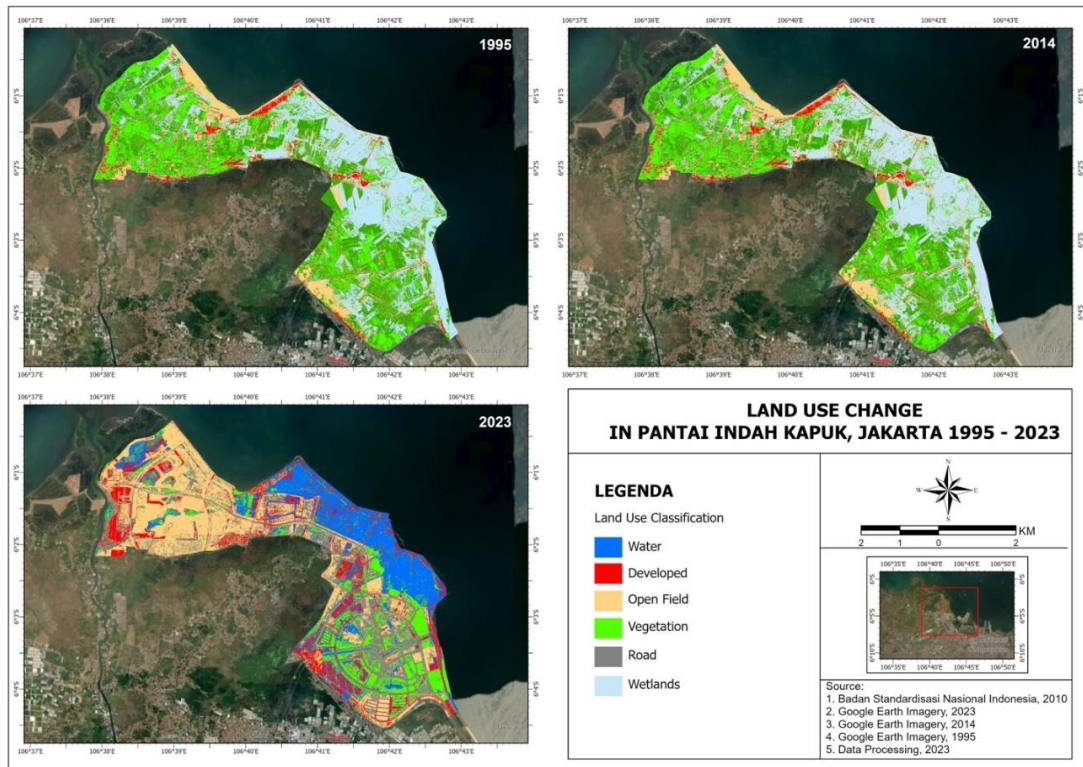


Figure 3. Land use of the PIK 2 area in 1995, 2014 and 2023 (Author's property, 2023)

**4. Conclusion**

The role of the community, government and private sector in the development of the PIK 1 & 2 reclamation area, analysis of independent cities shows that the three parties are the key in achieving sustainable development. Through the participation of the role of the community, which is divided into the general public, fishing communities, and affected communities explained that the general public's perception of the most supporting parameters for independent cities is infrastructure and land use, then fishing communities have an impact on fish catches, and affected communities experience rejection which resulted in a change in livelihood by switching professions in the development process. The government plays a role in regulatory planning as a regional spatial plan covering planning process, infrastructure, public services and a sustainable environment. The role of the private sector in realizing the concept of an independent city based on independence and balance can be seen from the planning and development process. Developers choose to build supporting infrastructure first such as tourist centres, shops, public transportation, and health facilities before moving on to planning the development of residential areas. In this way, the facilities that support the creation of an independent city are ready before people settle down in the area. An independent city has a close correlation with land use from the planning, development and development process which reflects the commitment and role of the community, government, and private sector. The concept of balance and independence in an independent city emphasizes the importance of a holistic approach in urban planning and management. This involves active community participation in decision-making, environmentally sustainable policies, and investment in local infrastructure and resources.

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### Author Contribution

Miranda Hetu Marsella and Putu Adhitya Dita Putra provided ideas and research theme concepts in reclamation PIK 1 & 2. The background to the problem was put out by Putu Adhitya Dita Putra. The writing of abstracts and methods was done by Miranda Hetu Marsella. The preparation of the questionnaire was carried out by Miranda Hetu Marsella and Putu Adhitya Dita Putra. The results of the discussion and discussion were carried out from the process of collecting to data processing carried out by Miranda Hetu Marsella and Putu Adhitya Dita Putra. After the results of the discussion and discussion, the conclusions were drawn up by Miranda Hetu Marsella and Putu Adhitya Dita Putra. Preparation of PIK 1 & 2 maps and analysis of descriptions, process of editing writing and updating citations using the Mendeley application by Miranda Hetu Marsella. The translation process was carried out by Putu Adhitya Dita Putra. The document finalization process was carried out by Miranda Hetu Marsella and Putu Adhitya Dita Putra by conducting a final review of the writing of the research results.

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The authors declare no conflict of interest.

### References

- Abdussamad, Z. (2021). *Metode Penelitian Kualitatif*. CV. Syakir Media Press. [https://books.google.co.id/books?id=JtKREAAAQBAJ&printsec=frontcover&hl=id&source=gbg\\_summary\\_r&cad=0#v=onepage&q&f=false](https://books.google.co.id/books?id=JtKREAAAQBAJ&printsec=frontcover&hl=id&source=gbg_summary_r&cad=0#v=onepage&q&f=false)
- Badan Pusat Statistik. (2023a). Kabupaten Tangerang dalam Angka 2023. <https://tangerangkab.bps.go.id/publication/2023/02/28/cf25f112b67f450a67dfbc33/kabupaten-tangerang-dalam-angka-2023.html>
- Badan Pusat Statistik. (2023b). Kota Jakarta Utara dalam Angka 2023. <https://jakutkota.bps.go.id/publication/2023/02/28/f7e727d8b31caa0c66e7baa5/kota-jakarta-utara-dalam-angka-2023.html>
- Bintari, A., & Muara, T. (2018). Manajemen Konflik Penyelesaian Kasus Reklamasi Pulau G Pantai Utara Jakarta. *Cosmogov: Jurnal Ilmu Pemerintahan*, 4(1), 119–144. <https://jurnal.unpad.ac.id/cosmogov/article/view/18212/pdf>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design Qualitative, Quantitative and Mixed Methods Approaches*. In *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE. [https://www.ucg.ac.me/skladiste/blog\\_609332/objava\\_105202/fajlovi/Creswell.pdf](https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf)
- Djamil, M. H. A. G., Gumilang, M. R., & Hartono, D. (2022). Dampak Reklamasi terhadap Lingkungan dan Perekonomian Warga Pesisir di Jakarta Utara. *Jurnal Pembangunan Wilayah Dan Kota*, 18(3), 296–303. <https://doi.org/10.14710/pwk.v18i3.36930>
- DKI Jakarta Governor Regulation. (2017). Peraturan Gubernur DKI Jakarta No 10 Tahun 2017 tentang Panduan Rancang Kota Kawasan Pembangunan Terpadu Metro Pantai

- Indah Kapuk. <https://peraturan.bpk.go.id/Home/Details/59453/pergub-prov-dki-jakarta-no-107-tahun-2017>
- DKI Jakarta Governor Regulation. (2018). Peraturan Gubernur DKI Jakarta No 58 Tahun 2018 tentang Pembentukan Organisasi dan Tata Kerja Badan Koordinasi Pengelolaan Reklamasi Pantai Utara Jakarta (pp. 1–10). <https://peraturan.bpk.go.id/Details/88333/pergub-prov-dki-jakarta-no-58-tahun-2018>
- Febriyanto, O. (2020). Strategi Pengembangan Kawasan Ekowisata Mangrove Pantai Indah Kapuk Sebagai Daya Tarik Di DKI Jakarta. *Geomedia*, 18(1), 1–11. <https://journal.uny.ac.id/index.php/geomedia/index%0Astrategi>
- Fitriyani, W. I. N., Priyambodo, A., Siahaan, J. E. T., & Husni, M. H. F. (2021). Transformasi Wilayah Kota Mandiri pada Kawasan Permukiman (Studi Kasus: Perkampungan Karawaci, Kabupaten Tangerang, Provinsi Banten). *Jurnal Pembangunan Wilayah Dan Kota*, 17(3), 341–353. <https://doi.org/10.14710/pwk.v17i3.37948>
- Geumala, M., Supriharjo, R., Ariastita, P. G., & Ali, M. (2018). Konsep Pengembangan Kota Baru Di Sukodono Sidoarjo. *U KaRsT*, 2(1), 77–87. <https://core.ac.uk/download/pdf/235152177.pdf>
- Jonker, J., & Witte, M. de. (2016). Management Models For Corporate Social Responsibility. *Springer*. [http://www.untag-smd.ac.id/files/Perpustakaan\\_Digital\\_1/CORPORATE%20SOCIAL%20RESPONSIBILITY%20%20Management\\_Models\\_for\\_Corporate\\_Social\\_Responsibility.pdf](http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/CORPORATE%20SOCIAL%20RESPONSIBILITY%20%20Management_Models_for_Corporate_Social_Responsibility.pdf)
- Mahdi, I. (2016). Reklamasi Teluk Jakarta; Sebuah Prespektif Kekuasaan Dalam Ekonomi Politik. *Jurnal Transformasi*, 4(1), 38–45. <https://doi.org/10.21776/jtg.v4i1.66>
- Mauriend, C. (2018). Analisis Dampak Pembangunan Pulau Reklamasi di Teluk/ Pantai Utara Jakarta. May. [https://www.researchgate.net/profile/Chintia\\_Mauriend/publication/325317989\\_Analisis\\_Dampak\\_Pembangunan\\_Pulau\\_Reklamasi\\_di\\_TelukPantai\\_Utara\\_Jakarta/links/5b055a1eaca2725832b29e01/Analisis-Dampak-Pembangunan-Pulau-Reklamasi-di-Teluk-Pantai-Utara-Jakarta.pdf](https://www.researchgate.net/profile/Chintia_Mauriend/publication/325317989_Analisis_Dampak_Pembangunan_Pulau_Reklamasi_di_TelukPantai_Utara_Jakarta/links/5b055a1eaca2725832b29e01/Analisis-Dampak-Pembangunan-Pulau-Reklamasi-di-Teluk-Pantai-Utara-Jakarta.pdf)
- Mulyaningsih, D., Hendrarto, B., & Muskananfola, M. R. (2017). Perubahan Luas Hutan Mangrove di Wlayah Pantai Indah Kapuk, Jakarta Utara Tahun 2020-2015. *Journal Of Maquares*, 6(6), 442–448. <https://doi.org/10.14710/marj.v6i4.21334>
- Ngongano, Y., & Tinggogoy, D. (2016). Peran Pemerintah Desa dalam Pembangunan. *Jurnal Penelitian Ilmu Administrasi Negara*, 4(1), 64–75. <https://osf.io/tx9pv/download>
- Nursalim, N., Hakim, A., Domai, T., & Setyowati, E. (2021). Increased success of participatory development designing: the role of independent institution as moderation between community involvement and legislative institution responsiveness. *International Journal of Law and Management*, 63(1), 17–33. <https://doi.org/10.1108/IJLMA-12-2019-0288>
- Puspasari, R., Hartati, S. T., & Anggawangsa, F. (2017). Analisis Dampak Reklamasi Terhadap Lingkungan dan Perikanan di Teluk Jakarta. *Jurnal Kebijakan Perikanan Indonesia*, 9(2), 85–94. <http://dx.doi.org/10.15578/jkpi.9.2.2017.85-94>
- Rahmawati, R., & Firman, F. (2019). Reklamasi Teluk Jakarta Ditinjau dari Perspektif Ekofeminisme. *Aristo*, 7(1), 46–63. <https://doi.org/10.24269/ars.v7i1.1303>
- Royandi, E., & Keiya, R. (2019). Kontestasi Aktor Dalam Pengelolaan Sumber Daya Pesisir Di Wilayah Pembangunan Reklamasi Teluk Jakarta. *TEMALI: Jurnal Pembangunan Sosial*, 2(1), 77–98. <https://doi.org/10.15575/jt.v2i1.3619>
- Sari, M. E. P. (2018). Peran Pemerintah dalam Penyediaan Akses Pelayanan Publik. *Jurnal Trias Politika*, 2(1), 1. <https://doi.org/10.33373/jtp.v2i1.1234>
- Setiawan, H., & Supriatna. (2020). Monitoring Perubahan Garis Pantai untuk Evaluasi Rencana Tata Ruang dan Penanggulangan Bencana di Kabupaten Tangerang. *Jurnal Sains Informasi Geografi [JSIG]*, 4(2), 60–67. <https://doi.org/10.31314/j>
- Simamora, J., & Sarjono, A. G. A. (2022). Urgensi Regulasi Penataan Ruang Dalam Rangka Perwujudan Pembangunan Berkelanjutan. *Nommensen Journal of Legal Opinion*, 03, 59–73. <https://doi.org/10.51622/njlo.v3i1.611>

- Sofian, A., Kusmana, C., Fauzi, A., & Rusdiana, O. (2019). Evaluasi Kondisi Ekosistem Mangrove Angke Kapuk Teluk Jakarta Dan Konsekuensinya Terhadap Jasa Ekosistem. *Jurnal Kelautan Nasional*, 15(1), 1–12. <https://doi.org/10.15578/jkn.v15i1.7722>
- Suryaudaya, J., & Santoni, S. (2020). Penataan Lingkungan Dan Ruang Terbuka Hijau Pada Kawasan Perkotaan Pantai Indah Kapuk. *Architecture Innovation*, 4(2). <http://journal.podomorouniversity.ac.id/index.php/JAI/article/view/155>
- Susanti, N. (2018). Upaya Greenpeace Menjaga Kawasan Pantai Indonesia Terkait Proyek Pulau Reklamasi Teluk Jakarta. *Jurnal Jom Fisip*, 5(1), 1–18. <https://media.neliti.com/media/publications/209386-none.pdf>
- Suwandana, E. (2019). Dinamika Morfologi Pantai Kabupaten Tangerang Banten dan Pantai Indah Kapuk Jakarta Melalui Analiss Citra Google Earth. *Jurnal Perikanan Dan Kelautan*, 9(1), 55–68. <http://dx.doi.org/10.33512/jpk.v9i1.7074>
- The World Economic Forum. (2022). The Global Risks Report 2022. 17th Edition. In World Economic Forum. <https://www.weforum.org/global-risks/reports/>
- Triyanti, A., Indrawan, M., Nurhidayah, L., & Marfai, M. A. (2023). Community-Based Fire Management and Peatland Restoration in Indonesia. *Springer*. [https://doi.org/10.1007/978-3-031-15904-6\\_8](https://doi.org/10.1007/978-3-031-15904-6_8)
- Ulfani, M., & Sudomo, A. (2018). Perumusan Program Corporate Social Responsibility (CSR) Penanaman Bakau di Hutan Mangrove Oleh Hotel Grand Sahid Jaya Jakarta. *Jurnal Mahasiswa Bina Insani*, 2(2), 146–159. <https://media.neliti.com/media/publications/471530-none-0fbb2851.pdf>
- United Nations. (2019). World Population Prospects 2019. In Department of Economic and Social Affairs. *World Population Prospects 2019*. (Issue 141). <http://www.ncbi.nlm.nih.gov/pubmed/12283219>
- Wiksana, W. A. (2017). Studi Deskriptif Kualitatif tentang Hambatan Komunikasi Fotografer dan Model dalam Proses Pemotretan. *Mediator: Jurnal Komunikasi*, 10(1), 121–131. <https://doi.org/10.29313/mediator.v10i1.2661>
- Yuliastuti, N., Haryanto, R., & Bima, F. (2021). Challenges for the Land Consolidation Program and The Role of Community Participation in Residential Areas. *E3S Web of Conferences*, 317. <https://doi.org/10.1051/e3sconf/202131704025>
- Zamil, Y. S., Adharani, Y., & Afifah, S. S. (2020). Pembangunan Pulau Hail Reklamasi Teluk Jakarta Dalam Perspektif Pembaruan Agraria. *Jurnal Bina Mulia Hukum*, 4(42), 255–275. <http://dx.doi.org/10.23920/jbmh.v4i2.222>