

983-2823-1-  
PB\_Prof\_Haeruddin\_Saleh  
*by Turnitin Id*

---

**Submission date:** 21-Jun-2024 10:38AM (UTC+0200)

**Submission ID:** 2406195640

**File name:** 983-2823-1-PB\_Prof\_Haeruddin\_Saleh.pdf (391.91K)

**Word count:** 6278

**Character count:** 35684

# Impact and Sustainability of Regional Development Center Point of Indonesia Makassar

Haeruddin Saleh<sup>a,1</sup>, Agus Salim<sup>b,2</sup>, Zulkifli Maulana<sup>c,3</sup>, Rahmaniah Rahmaniah<sup>d,4</sup>, Darmawati Manda<sup>d,5</sup>

37

<sup>a</sup> Faculty of Economics and Business Universitas Bosowa, Makassar 90231, Indonesia

<sup>b</sup> Faculty of Engineering, Universitas Bosowa, Makassar 90231, Indonesia

<sup>c</sup> Faculty of Agriculture, Universitas Bosowa, Makassar, Indonesia

<sup>d</sup> Faculty of Basic Education, Universitas Bosowa, Makassar 90231, Indonesia

<sup>e</sup> Faculty of Economics and Business Universitas Bosowa, Makassar 90231, Indonesia

<sup>1</sup> [haeruddin@universitasbosowa.ac.id](mailto:haeruddin@universitasbosowa.ac.id); <sup>2</sup> [agus.salim@universitasbosowa.ac.id](mailto:agus.salim@universitasbosowa.ac.id);

<sup>3</sup> [zulkifli.maulana@universitasbosowa.ac.id](mailto:zulkifli.maulana@universitasbosowa.ac.id); <sup>4</sup> [rahmaniah@universitasbosowa.ac.id](mailto:rahmaniah@universitasbosowa.ac.id);

<sup>5</sup> [darmawati.manda@universitasbosowa.ac.id](mailto:darmawati.manda@universitasbosowa.ac.id)

\* corresponding author

## ARTICLE INFO

### Article history

Received 09 May 2023

Revised 18 July 2023

Accepted 03 Sep 2023

### Keywords

Beach Reclamation,  
Development Impact,  
Sustainability,  
Socio-Economy

## ABSTRACT

This study aims to understand changes in spatial structure and spatial patterns in the coastal area in the Makassar urban system due to land use conversion. This study uses a qualitative approach, by collecting data through observation, visual analysis, literature study, interviews, and documentation. The results of the study show that changes in spatial use in the Center Point of Indonesia area have led to the marginalization of local communities. Intensive land conversion has changed the work system of local communities, replacing them with the urban industrial community work system. The orientation of the development of the Center Point of Indonesia area is to create business opportunities for people engaged in the informal sector, tourism, transportation, and other service sectors, as well as create a friendly and modern environmental area. Overall, this beach reclamation has a positive impact on the environment that is sustainable and provides business opportunities and increased income for the community.

This is an open access article under the CC-BY-SA license.



## 1. Introduction

Developing country cities are characterized by very rapid population growth due to large numbers of residents migrating from villages to cities. This causes excessive urbanization as these cities are made centers of growth. In the process, not only produce products for individual needs but also for collective needs [1]; [2]. The process is characterized by changes in land use, where space is allocated for settlements, industry, services, and commerce with a focus on developing centers of economic growth and integration of metropolitan urban systems. [3]; [4]. The development of the emerging economic pole is resulting in social change in the local urban community. This change occurs both in the pattern of social relations and economic relations between communities due to changes in the use of space and the presence of agents of change in the suburbs [5]; [6]. Land use in the form of reclamation in Indonesia has been running dynamically in various locations, facing various responses, both rejection and support. The issue of reclamation does not only focus on changes in environmental and ecological conditions but also involves various benefits resulting from these activities [7]; [8].

Makassar City, which is the capital of South Sulawesi Province, is also referred to as the gateway to East Indonesia. This causes the city's rapid growth to start in its coastal area, with the vision of becoming a world city. In order to realize this vision, the construction of equipment and support infrastructure has been carried out to accommodate the different activities of the population. Makassar City's population growth is very rapid, reaching 1.3% per year, and currently has reached around 1.4 million people, and increases every year, causing the need for limited land to be increasingly urgent in urban areas. The need for land is increasingly urgent in urban areas due to an increase in population which continues to increase every year. In the last 10 years, Makassar City has experienced major physical development. Development policies are in line with the efforts of policymakers to make Makassar City the largest city in eastern Indonesia and a world city. One of the most striking projects in the coastal reclamation area is the Center Point of Indonesia (CPI) mega project.

The Center Point of Indonesia development project is not only related to the transformation of space use, the formation of activity systems and regional structures, but also causes changes in the spatial structure of urban areas in general. The expansion of the city is reflected in the increase in population and economic growth due to the development of various activities in the suburbs. [9]; [10]. The growth of the urban core area occurred through a deployment that focused on urban coastal areas. This causes a change in the use of space. Therefore, the direction of development of big cities and metropolitan areas must be managed in an integrated, convenient and efficient regional system. In addition, development sustainability must also be considered in this process. [11]; [12]; [13]. Direct observable effects are population growth, urbanization and unequal land use rights between migrants and local communities as well as the formation of social structures in the periphery. sea [14]; [15]. Accelerated development in the Center Point region of Indonesia, leading to land-use transitions characterized by increased economic productivity, starting with the construction of large-scale residential, commercial and service centers large, encouraging the creation of regions as creative and cultural hubs that reflect the vitality of various economic and social opportunities and patterns of distribution of flows of goods and services. [16]; [17]; [18]. The increase in development activities and economic productivity leads to differences in benefits between communities, the level of trust between communities, as well as changes in economic and social aspects. social interaction patterns, social adaptation and social mobility in response to environmental change. [19]; [20].

The Center Point of Indonesia area which is the object of research is the coastal area which is determined and developed as a center of economic activity in the Spatial Plan. This area is in an administrative area adjacent to Makassar City, Takalar Regency, and Gowa Regency. Previously, the Center Point of Indonesia area, which included the Mariso sub-district, was dominated by local communities with the main focus on the fisheries sector. Based on the data obtained, it shows that the population in the Mariso sub-district before the construction of coastal reclamation in 2012 was 56,524 people. Furthermore, after the construction of the reclamation area in the period 2018 until now, there has been an increase of 59,292 people or a growth of 2,768 people. This figure illustrates that for 10 years, the Center Point area of Indonesia has undergone suburbanization due to the inflow of investment capital into the development of large-scale residential areas and some socio-economic functions. built by developers. The acceleration of development of the Center Point area of Indonesia, very rapid and revolutionary, has been shown to have the effect of reducing coastal land area, reducing environmental quality, changing economic activities. economic, social. structures, social systems and cultural patterns in local communities.

## 2. Method

This research was conducted in the coastal area of Makassar City, whose administrative area is focused on Mariso Subdistrict, Panambungan Village, which is one of the villages that has most felt the impact of the Center Point of Indonesia development. The selection of research locations was based on several considerations, namely; (a) changes in urban space use, quite high intensity and mainly towards large-scale cluster development and economic and commercial activities, (b) the dominance of spatial reproduction by capitalism disproportionate influence on land use rights between immigrants and local communities, (c) changes in land use characterized by urbanization and urban revitalization leading to differences on benefits between communities in response to

stimuli of environmental change, and (d) spatial articulation of capitalism and inequality in the mastery of spatial reproduction causes social change and rationalization of actions between communities.

A qualitative approach in this study was used to reveal **changes in land use** and their impact on **the socioeconomic conditions** of local communities in the Center Point area of Indonesia. , obtained through observation of social situations, with three main factors observed, namely; locations, actors and activities. From these data, an interpretation of the meaning of the process that took place in the field was then carried out [24]. **the meaning of the developing reality is then substantively connected with theory. Therefore, the qualitative approach in this study is used to interpret the social situation. that develops based on the phenomena that develop in the Center Point area of Indonesia.**

### 3. Results and Discussion

One of the 14 Districts located in Makassar City, Mariso District, is also included in the 7 Districts in Makassar City which are bordered by the beach. The area of Mariso District is very small, only 1.04% of The total area of the city of Makassar is about 1.82 square kilometers. The population is about 59,292 souls. The acceleration of development in the Center Point area of Indonesia is quite powerful and very complex, characterized by a diversity of ethnic groups and development towards new growth poles in the urban system. . Three things are related to the development dynamics of the region, which are; First, the spatial physics aspect is characterized by changes in spatial use leading to a decrease in environmental quality, inequality in land tenure, and differentiation of jobs between communities. Second, on the economic aspect, it is characterized by the existence of centers of economic growth causing suburbanization, gentrification, and an increase in development investment flows. Third, the socio-cultural aspect is indicated by differences in interests between communities and has a tendency towards fragmentation in local community life, marked by the strengthening of capitalist community groups in controlling land in the Center Point area of Indonesia. These three aspects illustrate that the existence of capitalism in the development of the Center Point of Indonesia through penetration, invasion, and domination as well as support for capital and investment flows has an impact on land tenure inequality and job differentiation between communities towards a dualistic economic system.

The factors driving the rapid development in Center Point of Indonesia are characterized by the existence of urban performance characteristics including; shopping malls, large-scale settlements, services, offices and some other urban functions. The existence of this activity is supported by the construction of a road corridor to the Central region of Indonesia that works to connect the city of Makassar with the districts of Takalar and Gowa and thus encourages a very strong interaction. strong between cities. Interactions between regions and cities are reflected in the current state of means of transport and the flow of people, goods, services and traffic nodes when a traffic axis exists, which will lead to concentric distortion because along traffic routes associated with high mobility. [25]. The direct observable effect is an increase in traffic volume, marked by the presence of spatial functions along main roads and mainly shopping malls. Field reality shows that the focal point of regional development is characterized by the presence of commercial functions dominated by the capitalist mode of production, which coexist with the pre-capitalist mode of production. but interdependent in terms of management form, and characteristics of production. economic activity. This means that in the context of regional development, Indonesia's focal point suggests the existence of a capitalist power that coexists with the tendency of capitalist modes of production to dominate control of reproduction. urban space and shows the difference between the social forms and work systems of capitalist society on the one hand and the work systems of pre-capitalist societies on the other [26].

#### 3.1 Changes in Space Utilization in the Center Point Area of Indonesia

Space use change due to land use change in Center Point of Indonesia is basically caused by the emergence of saturation **point** in the city center and population pressure factor which continues to increase over time. **The transformation of land use function and change of space use is** a process of infiltration of urban elements into the environment. the coastal areas of cities and areas that are in



the direction of widening are transitional or transitional areas that are undergoing intensive changes, causing integration of urban systems[27]. Suburbanization and gentrification of the Center Point of Indonesia and the integration of urban systems have resulted in high demand for land for development activities. The facts found in the field indicate that the existence of centers of commercial activity and the construction of large-scale settlements built by developers with a sufficiently large area caused the accumulation of in the Center Point area of Indonesia.

**Table 1.** Utilization of Space in the Center Point of Indonesia Year 2012-2022

No	Space Utilization	The year 2012		The year 2022		Information
		Width (Ha)	Percentage (%)	Width (Ha)	Percentage (%)	
1	Settlement	23,23	14,77	66,31	42,17	Increase
2	Offices and Services	2,53	1,61	27,23	17,32	Increase
3	Trading	-	-	15,34	9,75	Increase
4	Social	1,48	0,95	8,05	5,12	Increase
5	Education	3,28	2,09	7,02	4,47	Increase
6	Tour	5,23	3,32	12,25	7,79	Increase
7	Green Line	-	-	7,82	4,97	Increase
8	Fishing land	93,10	59,21	-	-	Decrease
9	Others (Empty land)	28,38	18,05	13,21	8,41	Decrease
	<b>Total</b>	157,23	100,00	157,23	100,00	

\*Source: Primary Data Processed Results

The trend of development in the Center Point of Indonesia area (table 1), illustrates that the dominant drivers of space use are oriented towards the development of human settlements, commerce, and certain functions of urban activity, further emphasizing that inequality Equal control over spatial reproduction leads to differences in economic benefits between communities and differences in jobs within local communities. The development of the Indonesian Regional Center Point is a combination of concentric and linear models. The polarization of economic activity tends to develop towards new urban areas, which then affects the development of spatial structure and hierarchy of service centers through the process of regulation, landscape adjustment of urban areas. Therefore, the existence of economic activity centers in the Center Point area of Indonesia through the construction of the main road will have the effect of connecting Makassar urban area, Gowa district and Takalar district. This fact shows that the existence of main roads has a positive relationship with the process of urban agglomeration and reduction and has a direct effect on urban areas. The development of settlements in the Center Point area of Indonesia due to the development of various activities, population mobility and the development of private housing models, as well as forms of The new causes of increasing urban agglomeration have had a variety of effects. : (a) environmental impacts, (b) transportation impacts, (c) land prices, (d) changes in urban form, and (e) social changes, [28], [29]. As such, urbanized coastal areas tend to perform a variety of functions and play a major role in providing environmental resources and services to surrounding municipalities. The land data found illustrate that land-use conversion, spatial change-of-use, and increased population mobility will increase in intensity and continue to be consistent with development stages. development of Indonesia's Center Point, which has a direct impact on the surrounding urban areas.

This fact shows that the changes in space use according to the stages of implementing new urban development have positively contributed to the reduction of agricultural land area and the shift of agricultural labor to public urban areas. Karma. Note how the coastal areas of these areas can provide key services arising from their economic, social and environmental functions to meet the needs of urban-based communities consumption [30]. Changes in spatial use which were initially dominant on the coast and then developed into the urban industry illustrate that the existence of the Center Point of Indonesia area as a new economic growth pole in urban areas in the Mariso sub-district has a direct impact on the existence of the surrounding urban areas.

**Table 2.** Characteristics of Changes in Space Utilization in the Center Point Area of Indonesia

No	Change Space Utilization	Parameter	Value (%)	Standard (%)	Information
1	Transfer of Land Use Functions	Fisheries Land	25	66-100	Decrease
		Decrease in Fishery Productivity	30	66-100	Decrease
		Land Value	70	66-100	Increase
2	Space Structure	Service Center System	70	66-100	Increase
		Formation of Service Center Hierarchy	70	66-100	Increase
3	Patterns and Functions of Space	Trading	80	66-100	Increase
		Services	70	66-100	Increase
		Education	70	66-100	Increase
		Health	80	66-100	Increase
		Industry	85	66-100	Increase
		Settlements	90	66-100	Increase
4	Population Activity Patterns	Green Open Space/Tourism	70	66-100	Increase
		Economic System	80	66-100	Increase
		Social System	70	66-100	Increase
7	Dualistic Economic System	Formal	75	66-100	Increase
		Non- Formal	70	66-100	Increase
8	Social Structure	Social Stratification	70	66-100	Increase
		Social Status	70	66-100	Increase
		Social Class	70	66-100	Increase
9	Cultural Patterns	Value system	45	66-100	Decrease
		Social Norms	60	66-100	Decrease

<sup>b</sup> Source: Primary Data Processed Results, 2023

It was found that the standard limitation factors and technical aspects in the spatial plan influenced the respondent's views on deviations in the use of space. As many as 85.00% of respondents stated that this factor had an effect, 15.00% considered it less influential, and 0.0% considered it had no effect. Thus, it can be concluded that the limitations of standards and technical aspects have a significant influence on the occurrence of deviations in the use of space in the research location. Therefore, it is advisable to immediately develop standards and technical aspects to minimize irregularities in the use of space in the research location.

The existence of capitalist-dominated economic and commercial functions and the spatial articulation of communities against stimuli of environmental change, go hand in hand with the dialectic of modernity, and rationalize the actions of local communities. Observed field events suggest that the development of Indonesia's Center Point in its dynamism is characterized by coexistence between capitalist modes of production and money production modes, capitalism, which is characterized by capitalism's dominance of space and control of land. This means that the allocation of space and land in the Center Point area of Indonesia is largely determined by capital and income capacity. These conditions aside from changing the spatial structure and spatial patterns physically, also show differences in the typology and pattern of inter-community relations both economically and socially between immigrants and local communities. Typological differentiating factors for the observed activities, namely; first, the existence of two types of modes of production in the domination of spatial reproduction economically which coexist but have no connection with one another either in terms of management or in terms of ownership and the patterns of social relations that are built also tend to be in a different direction. Second, the ongoing economic transactions show differences in the economic strata of society based on activity patterns and capital ownership, it represents the capitalist mode of production on the one hand and the pre-capitalist mode of production on the other. The fact observed in the field shows that there is a huge difference in production methods between migrants and local communities, causing a difference in housing ownership, and this process shows the existence of migrants, the existence of marginal spaces that are mainly inhabited by the local community and tend to develop into urban slums coexisting with the existence of luxury and very luxurious residential areas immigrants live.

The transformation of land use function and change of space use in the Center Point area of Indonesia, driven by the existence of a capitalist economy in control of spatial reproduction, ultimately jointly encourage changes in aspects of the social life of local communities. Explanations may be submitted in relation to (Table 2), namely; First, changes in the use of space lead to changes in the livelihood orientation of local communities. Second, capitalist land tenure leads to the

development of a dual economic system driven by socioeconomic disparities, and third, an increase in economic productivity in the new urban area. lead to lifestyle changes in community groups due to the transformation of new areas. values. Consequences arising as a result of the process, namely; (1) income inequality, (2) changes in land ownership by local communities leading to changes in social relations patterns and group bonds, and (3) changes in cultural values capital inherited by the community is undervalued. These social changes occur in tandem with the microscopic spatial articulation of the local community. The shift of production mode from subsistence agriculture to industrial capitalist production is offset by technology . That is, technology causes a social change in the sense that something that was not possible in the past becomes possible with the help of technology that changes patterns of interaction in society and causes various problems for society [31].

The specialization of the very diverse and complex orientation of community activities in the Center Point area of Indonesia causes income inequality and its tendency towards marginalization, community poverty, and socio-economic segregation in urban communities. The emergence of community poverty is not only due to urban infiltration, lack of access to economic resources and increasing control of land by developing capitalists. This situation is characterized by conflicting desires, which, due to a loss of trust at the community level, leads to a weakening of interpersonal relationships within community groups. The assimilation of the local community and the migrants (migrants), and most of the local people try to find informal jobs to improve their welfare. Spatial reconstruction is a capable process and relies on the action of agents [32]. The shift in traditional values due to increased individualism has affected the weak social relationships and the social capital that has been maintained in the social system of the local communities. That is to say, changes in the means of production towards spatial reproduction and representation of space in the Center Point area of Indonesia, bridged by the presence of capitalism, cause different interests among individuals and groups within them. local community. The role of technology is seen as central in changing everything. This process then creates conflicts between structural rules and aspirations at the individual and community level. Changing the mode of production leads to a change in interaction patterns and ultimately changes the social structure and cultural pattern of the local community through the transformation of the modern values and work system of the society. urban industry association. In the ensuing process, changes in the mode of production actively contribute to the birth of a new social status with all its openness. The construction of new settlements and the economic activity currently predominating in the Center Point area of Indonesia, as well as the development of capitalism, are positively correlated with the distribution of status based on on the education, income, and career orientation that can be achieved by the local community and has an impact on the inconsistency of statutes and the coexistence of modes of production in local communities.

### **3.2. The Impact of Developing the Center Point area in Indonesia**

Changes in social formation in the Indonesian central point have been assessed and significant from their origins as a single homogenous social formation, to the formation of a pre-capitalist society. meaning and the formation of capitalist society. As a result, the social interaction and social adjustment between the local community and the immigrant population has changed in the Center Point area of Indonesia. In local communication, internal social changes lead to refinement of economic classes and changes in cultural patterns, with the transition from traditional agrarianism to industrial urbanization. Karma. Social change that occurs causing changes in social interaction and social adaptation as well as consequences of changes in local communities, is a phenomenon in the Center Point area of Indonesia, supported supported by development policies, thereby encouraging the expansion of capitalism through the processes of land infiltration, conquest, and occupation. The fact that capitalism's expansion by entering the pre-capitalist space reflects the dominance of mastery over the reproduction of the space by capitalism has the effect of defrauding to the margins of local communities. The marginalization of local communities, due to changes in space use, caused by factors of differences in skills and capacities, as well as differences in rights and access Use of resources. social forms coexist.

The justification for marginalization of local communities is assessed on the basis of indicators; poverty, alienation, vulnerability, and inability to control spatial reproduction and access to new spatial functions in the Center Point area of Indonesia. The fact is that changes in use play a decisive role, starting with changes in land ownership status and conversion of land use from primarily



agricultural to primarily agricultural functions. commercial is weak. That means the coexistence of two types of social forms and the dominance of spatial reproduction mastery on the one hand through capitalist social forms and spatial articulation in the suboptimal functioning pre-capitalist society led to marginalization of local communities. <sup>33</sup> therefore, changes in the use of space that occur very quickly and are revolutionary will lead to changes in the social structure, social processes and cultural patterns of the local community. In this study, the development impact findings from the Center Point area of Indonesia reflect the lives of local communities that have experienced change and fragmentation.

In local communities in Indonesia's Center Point region, societal development has resulted in new social formations, including the sharpening of economic stratification from simple stratification to obvious strata. The distinction between fully ascribed status and attained status is based on the efforts made and the accomplishments that can be made, as well as on the knowledge and skills held, and it results in the satisfaction of basic necessities. Local community social systems are evolving in favor of an open social system. Changes in social values and norms from completely social values and norms were born in the tradition of traditional fishing life and then changed to the value system and norms of urban industrial society.

### 3.3. Sustainability of Development of the Center Point Area of Indonesia

The coastal reclamation area in the Mariso sub-district in the Center Point of Indonesia area is evaluated based on three main indicators for assessing sustainable development. These indicators cover coastal resources, buildings, and infrastructure. Land use in this reclamation area is focused on coastal resources, such as green open space, availability of space for water conservation, and per capita land coverage. To improve environmental quality, it is important to pay attention to and increase the availability of Green Open Space (RTH), especially in urban areas, given the significant benefits. Indicators of coastal resources show that 30% of the reclamation area of the planned green open space coverage index of 30%, which consists of parks, green belts, and fields. This is following the requirements of the Spatial Planning law to achieve sustainability.

Regarding building indicators, less than 10% of built-up land (covered with cement) indicates that this area can be sustainable because most of the land is undeveloped. Although there is a tendency for the conversion of land use from built to intensive built, this can be controlled to maintain sustainability. Data from infrastructure, such as the road network, public transport, and distance from major transport routes, is calculated to evaluate its sustainability. The results of the analysis show that this area has an adequate road network, and sufficient public transportation facilities, and is about 2,100 meters from the main transportation route.

The tendency of the development of the Center Point of Indonesia towards increasing economic productivity has a direct relationship to the weak control over the use of space. Spatial integration as a driving force for economic development has a positive association with the creation of market areas and media for changing people's behavior towards consumption. To deal with urban problems, the direction of handling urban development is oriented toward the concept of sustainable physical, economic, and sociocultural development. The concept of sustainable development as a handling solution in Makassar City allows for the implementation of residential environmental rejuvenation that is oriented towards (a) Environmental improvement, more towards strengthening government/public investment capacity as a single factor in urban development, (b) Progressive rejuvenation by utilizing the use of funds from the private sector. This means that the single factor is the large private sector and is a development agenda that needs to be formulated in handling Makassar City.

Environmental rejuvenation policy, namely; (i) involving community participation in development, (ii) developing social capital to change people's behavior in controlling environmental pollution, and (iii) strengthening government institutions through program planning that is oriented towards pro-poor and marginal communities. Therefore, the approach of managing urban growth sustainably in the future is focused on a number of fundamental ideas, including; (1) physical environmental sustainability through efforts to improve settlement infrastructure by facilitating development by self-help through a collaborative pattern between the government of Makassar City and large private parties, (2) enhancing community economic firms' production through entrepreneurship education, venture capital assistance, and market access, and (3) strengthening community institutional capacity and government capacity in handling social problems, social



conflicts, and guarantees for living for community groups and oriented towards the principles of social justice and inclusiveness for all levels of society.

#### 4. Conclusion

The results of this study have the potential to become an important tool for planning a decision-making system supported by geo-spatial technology for managing coastal urban areas, especially in the Center Point Area of Indonesia. This research focuses on assessing the environmental impact of the reclamation area. Reclamation has a variety of economic benefits, including (1) creating jobs through investment, (2) increasing the economic welfare of the community through an investment multiplier effect, (3) increasing local revenue, and (4) encouraging the development of the tourism sector.

Sustainable development in the reclamation area can be achieved by taking into account three determining factors, namely (1) coastal resource indicators, (2) building indicators, and (3) infrastructure indicators. However, in this study, the focus is only given to the physical and economic aspects of the reclamation area, while the social aspects as part of sustainable development can be explored by other researchers. Sustainable development in the reclamation area can be achieved by taking into account three determining factors, namely (1) coastal resource indicators, (2) building indicators, and (3) infrastructure indicators. However, in this study, the focus is only given to the physical and economic aspects of the reclamation area, while the social aspects as part of sustainable development can be explored by other researchers.

The coastal reclamation area has communities living nearby, so a strategy is needed to ensure that the benefits of development can be felt by all communities. To improve the economy of fishing communities in Mariso District as a response to the building of Indonesia's Center Point in Makassar City, a strategy that can be implemented is to utilize the total fisherman population by forming fishing community empowerment institutions. This institution will help protect the surrounding environment and utilize existing infrastructure to improve the economy through economic and tourism businesses in coastal areas.

#### References

- [1] Todaro MP, Smith SC. *Pembangunan Ekonomi edisi kesebelas jilid 1*, PT. Gelora Aksara Pratama, Jakarta Indonesia. 2011.
- [2] Davey T, Davis DE. *Collective Consumption and Food System Complexity: Citizen Mobilization, Territorial Rescaling, and Transformative Change*. *Complex Resilience and Sustainability: Transdisciplinary Perspectives*. 2023: 63.
- [3] Firman T. *New town development in Jakarta Metropolitan Region: a perspective of spatial segregation*. *Pergamon. Habitat International Vol. 28 (2004) pp. 349–368*.
- [4] Volkmann K, Münter A. *Understanding metropolitan growth in German polycentric urban regions*. *Regional Studies*. 2022 Jan 2;56(1):99-112.
- [5] Briassoulis, H. *Analysis of land use change: theoretical and modeling approaches*. 2020.
- [6] Fashae, OA, Tijani, MN, Adekoya, AE, Tijani, SA, Adagbasa, EG, & Aladejana, JA. *Penilaian Komparatif Pola Perubahan Tutupan Lahan di sepanjang Pantai Barat Daya Nigeria menggunakan teknik GIS dan Penginderaan Jauh*. *Ilmiah Afrika* .2022, e01286.
- [7] Priasto B, Suharwanto S, Wicaksono AP. *Perencanaan Teknik Reklamasi Lahan Tambang Kalsilitut pada Tambang Rakyat di Dusun Pengkol, Kecamatan Nglipar, Kabupaten Gunungkidul, DIY*. *Prosiding SATU BUMI*. 2021 Feb 8;2(1).
- [8] Camila TR, Saraswati R. *Vulnerability of the East Coast of Balikpapan City in East Kalimantan (Lamaru Beach-Klandasan Beach)*. In *IOP Conference Series: Earth and Environmental Science 2020 Mar 1 (Vol. 448, No. 1, p. 012128)*. IOP Publishing.
- [9] Bedini MA, Bronzini F. *The new territories of urban planning: The issue of the fringe areas and settlement filaments*. *Land Use Policy*. 2016 Nov 30;57:130-8.
- [10] Westlund H, Nilsson P. *Agriculture's transformation and land-use change in a post-urban world: A case study of the Stockholm region*. *Journal of Rural Studies*. 2022 Jul 1;93:345-58.

- [11] Kowalczyk C, Kil J, Kurowska K. Dynamics of development of the largest cities-Evidence from Poland. *Cities*. 2019 Jun 1;89:26-34.
- [12] Yao Y, Pan H, Cui X, Wang Z. Do compact cities have higher efficiencies of agglomeration economies? A dynamic panel model with compactness indicators. *Land Use Policy*. 2022 Apr 1;115:106005.
- [13] Mallick SK, Rudra S, Maity B. Unplanned urban built-up growth creates problem in human adaptability: Evidence from a growing up city in eastern Himalayan foothills. *Applied Geography*. 2023 Jan 1;150:102842.
- [14] Barnett J, Graham S, Mortreux C, Fincher R, Waters E, Hurlimann A. A local coastal adaptation pathway. *Nature Climate Change*. 2014 Dec;4(12):1103-8.
- [15] Marmin H. A Concept of Housing and Settlements based Sustainable Spatial Articulation for Indonesian Cities. *International Journal of Scientific Research and Management (IJSRM)*. 2022 Oct 4;10(10):928-30.
- [16] Inoguchi T, Newman E, Paoletto G, editors. *Kota dan Lingkungan: Pendekatan Baru Masyarakat Berwawasan Ekologi*. Penerbit Pustaka; 2003.
- [17] Singh VP, Maheshwari B, Thoradeniya B. Options and Strategies for Balanced Development for Liveable Cities: An Epilogue. *Balanced Urban Development: Options and Strategies for Liveable Cities*. 2016:589-601.
- [18] Song X, Feng Q, Xia F, Li X, Scheffran J. Impacts of changing urban land-use structure on sustainable city growth in China: A population-density dynamics perspective. *Habitat International*. 2021 Jan 1;107:102296.
- [19] Umanailo MC, Basrun C. Structure of Social Change in Industrial Society. In *Proceedings of the International Conference on Industrial Engineering and Operations Management Riyadh 2019* (pp. 668-672).
- [20] Ahmad M, Wu Y. Combined role of green productivity growth, economic globalization, and eco-innovation in achieving ecological sustainability for OECD economies. *Journal of Environmental Management*. 2022 Jan 15;302:113980.
- [21] Liu C, Yang M, Hou Y, Xue X. Ecosystem service multifunctionality assessment and coupling coordination analysis with land use and land cover change in China's coastal zones. *Science of the Total Environment*. 2021 Nov 25;797:149033.
- [22] Winarso H, Hudalah D, Firman T. Peri-urban transformation in the Jakarta metropolitan area. *Habitat International*. 2015 Oct 1;49:221-9.
- [23] Martínez Toro PM. La metropolización afectada por laglobalización: reflexión epistemológica sobre la nueva revolución urbana. *Cuadernos de Geografía: Revista Colombiana de Geografía*. 2016 Jul;25(2):77-105.
- [24] Khoa BT, Hung BP, Hejsalem-Brahmi M. Qualitative research in social sciences: data collection, data analysis and report writing. *International Journal of Public Sector Performance Management*. 2023;12(1-2):187-209.
- [25] Nyamai DN, Schramm S. Accessibility, mobility, and spatial justice in Nairobi, Kenya. *Journal of Urban Affairs*. 2023 Mar 16;45(3):367-89.
- [26] Wu S, Bailey AJ, Zou J. Workers' motile subjectivities and the socio-spatial formations of Chinese state-owned enterprises. *Geoforum*. 2022 Dec 1;137:61-71.
- [27] Tavares AO, Pato RL, Magalhães MC. Spatial and temporal land use change and occupation over the last half century in a peri-urban area. *Applied geography*. 2012 May 1;34:432-44.
- [28] Hanief F, Dewi SP. Pengaruh Urban Sprawl Terhadap Perubahan Bentuk Kota Semarang Ditinjau Dari Perubahan Kondisi Fisik Kelurahan Meteseh Kecamatan Tembalang. *Ruang*. 2013 Dec 24;2(1):41-50.
- [29] Bedini MA, Bronzini F. The new territories of urban planning: The issue of the fringe areas and settlement filaments. *Land Use Policy*. 2016 Nov 30;57:130-8..

- 
- [30] Antognelli S, Vizzari M. Penilaian spasial kelayakan hidup lanskap yang mengintegrasikan ekosistem dan layanan perkotaan dengan anggapan pentingnya oleh para pemangku kepentingan. *Indikator Ekologi*. 2017 Jan 1;72:703-25.
- [31] Van Veldhoven Z, Vanthienen J. Digital transformation as an interaction-driven perspective between business, society, and technology. *Electronic Markets*. 2022 Jun;32(2):629-44.
- [32] González-Méndez M, Olaya C, Fasolino I, Grimaldi M, Obregón N. Agent-based modeling for urban development planning based on human needs. Conceptual basis and model formulation. *Land Use Policy*. 2021 Feb 1;101:105110.

ORIGINALITY REPORT

13%

SIMILARITY INDEX

9%

INTERNET SOURCES

10%

PUBLICATIONS

7%

STUDENT PAPERS

PRIMARY SOURCES

1

[encyclopedia.pub](#)

Internet Source

1%

2

[scholarworks.umass.edu](#)

Internet Source

1%

3

Xuezhong Fan, Liquan Zhang, Lin Yuan, Bing Guo, Qinglong Zhang, Huamei Huang.

"Urbanization and water quality dynamics and their spatial correlation in coastal margins of mainland China", Ecological Indicators, 2022

Publication

1%

4

[perfilesycapacidades.javeriana.edu.co](#)

Internet Source

<1%

5

Submitted to New Zealand School of Acupuncture

Student Paper

<1%

6

[scholar.ui.ac.id](#)

Internet Source

<1%

7

Tianhui Fan, Andrew Chapman. "Clarifying the levers of carbon emission reduction in

<1%



# compact cities in China: A multi-sectoral approach", Sustainable Futures, 2024

Publication

8

Batara Surya, Haeruddin Saleh, Seri Suriani, Harry Hardian Sakti, Hadijah Hadijah, Muhammad Idris. "Environmental Pollution Control and Sustainability Management of Slum Settlements in Makassar City, South Sulawesi, Indonesia", Land, 2020

Publication

<1 %

9

Yulia Indri Astuty, Raldi Hendro Koestoer. "APPLICATION OF CA-MC FOR PREDICTION OF DEVELOPED LAND EXPANSION IN THE PERSPECTIVE OF KOLKATA CITY, INDIA AND MATARAM CITY, INDONESIA", GEOGRAPHY : Jurnal Kajian, Penelitian dan Pengembangan Pendidikan, 2024

Publication

<1 %

10

[kth.diva-portal.org](http://kth.diva-portal.org)

Internet Source

<1 %

11

[scientificarray.org](http://scientificarray.org)

Internet Source

<1 %

12

Zahra Kalantari, Carla Sofia Santos Ferreira, Rory Peter Dominic Walsh, António José Dinis Ferreira, Georgia Destouni. "Urbanization Development under Climate Change: Hydrological Responses in a Peri-Urban Mediterranean Catchment", Land

<1 %

# Degradation & Development, 2017

Publication

---

13 Submitted to Arabian Gulf University <1 %  
Student Paper

---

14 journal.pubmedia.id <1 %  
Internet Source

---

15 N Dewi, A Akil, S T Sutomo. "Control of Space Utilization in Urban Coastal Area, Case Study in Sapolohe Village, Bontobahari District, Bulukumba Regency", IOP Conference Series: Earth and Environmental Science, 2023 <1 %  
Publication

---

16 www.coursehero.com <1 %  
Internet Source

---

17 ijsrm.in <1 %  
Internet Source

---

18 Submitted to Australian National University <1 %  
Student Paper

---

19 edepot.wur.nl <1 %  
Internet Source

---

20 Submitted to Curtin University of Technology <1 %  
Student Paper

---

21 www.unioviedo.es <1 %  
Internet Source

---

22 journal.uin-alauddin.ac.id  
Internet Source

<1 %

23

[www.cwejournal.org](http://www.cwejournal.org)

Internet Source

<1 %

24

Batara Surya, Seri Suriani, Firman Menne, Herminawaty Abubakar, Muhammad Idris, Emil Salim Rasyidi, Hasanuddin Remmang.

"Community Empowerment and Utilization of Renewable Energy: Entrepreneurial Perspective for Community Resilience Based on Sustainable Management of Slum Settlements in Makassar City, Indonesia", *Sustainability*, 2021

Publication

<1 %

25

Shuang Wu, Jialing Zou. "Toward an affective geography of contemporary China's state-owned enterprises: Ambivalence, assemblage, and affective socio-spaces", *Geoforum*, 2024

Publication

<1 %

26

Yaodan Zhang, Fei Li, Kai Li, Laiding Sun, Haijuan Yang. "The Influence of Space Transformation of Land Use on Function Transformation and the Regional Differences in Shaanxi Province", *International Journal of Environmental Research and Public Health*, 2022

Publication

<1 %

27

[spektrum.stikosa-aws.ac.id](http://spektrum.stikosa-aws.ac.id)

Internet Source

&lt;1 %

28

H Ruslan, B Surya, M Muhammadiyah, N Anggraini, E Indrawati. "Chitosan membrane technology as adsorbent media: management of Tallo River Basin Makassar City, South Sulawesi, Indonesia", IOP Conference Series: Earth and Environmental Science, 2021

Publication

&lt;1 %

29

[www.vestnik.magtu.ru](http://www.vestnik.magtu.ru)

Internet Source

&lt;1 %

30

Ayu Arni Sarah, Sari Hasibuan Hayati, Asteria Donna. "Environmental Management at the Household, the case of Bekasi City", E3S Web of Conferences, 2018

Publication

&lt;1 %

31

Mariusz Kostrzewski, Ahmed Eliwa, Jan Dižo. "The potential issues of simulation methods application in the analysis of transport poverty", Transportation Research Procedia, 2023

Publication

&lt;1 %

32

Submitted to Leiden University

Student Paper

&lt;1 %

33

[worldwidescience.org](http://worldwidescience.org)

Internet Source

&lt;1 %



34

Submitted to Kaplan College

Student Paper

<1 %

35

Mohammed Bakoji Yusuf, Umar Abbo Jauro. "Impact of Land Use and Land Cover Change on Deforestation in the Central Taraba State: A Geographic Information System and Remote Sensing Analysis", Environmental Protection Research, 2024

Publication

<1 %

36

[ejournal.borobudur.ac.id](http://ejournal.borobudur.ac.id)

Internet Source

<1 %

37

Firman Menne, La Ode Hasiara, Adil Setiawan, Palipada Palisuri et al. "Sharia Accounting Model in the Perspective of Financial Innovation", Journal of Open Innovation: Technology, Market, and Complexity, 2023

Publication

<1 %

38

Submitted to Pusan National University Library

Student Paper

<1 %

39

"Balanced Urban Development: Options and Strategies for Liveable Cities", Springer Nature, 2016

Publication

<1 %

40

"International Perspectives on Suburbanization", Springer Science and

<1 %

## Business Media LLC, 2011

Publication

---

41

Tavares, A.O.. "Spatial and temporal land use change and occupation over the last half century in a peri-urban area", *Applied Geography*, 201205

Publication

---

<1 %

42

Hasbuddin Khalid, Jasmaniar Jasmaniar, Andika Prawira Buana. "Value of Evidence of Arguments Via Whatsapp in Divorce Cases in Court", *Al-Adalah: Jurnal Hukum dan Politik Islam*, 2023

Publication

---

<1 %

---

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off