

## Combatting Slums, Sustaining Poverty: Dynamic Urban Governance in Makassar, Indonesia

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### Abstract

*Urban livelihood asset is an accumulation of labor capital and financial capital. The existence of a slum area in the coastal area of Untia with an area of 7.13 ha of 740.10 ha of the total slum area in the city of Makassar. This area is a potential strategic accumulation of livelihoods in the human capital, institutional, physical, financial and environmental resources, but on the other hand also has a high level of vulnerability. This study aims to obtain an empirical situation regarding the lives of poor people in the slums of the Untia coastal area, Makassar City. The socio-economic conditions of the community, the use of space, the ownership status of land and buildings, the condition of infrastructure and facilities of settlements in coastal slums as a basis for the reconstruction of coastal slums handling models based on dynamic governance. The findings show that urban slum in coastal areas are very rapidly growing. Problems that continue along with various programs carried out by the government. All programs by the state and non-state have been carried out in an effort to eradicate slum areas, but in fact the poverty rate in the region continues to increase. Managing a slums settlement program can use a dynamic governance framework: thinking ahead, thinking again, and thinking across. All of these strategies have been internalized of digital information and communication technology.*

**Keywords:** Slums; Urban Governance; Coastal Area; Dynamic Governance

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## INTRODUCTION

Life in urban areas provides great expectations for many people, compared to rural areas due to various opportunities and conveniences (CDE, 2014, Cruz, et. al., 2019). the latest figures show that urban growth and widespread urbanization have caused 54% of the world's population to live in urban areas, with the most rapid urbanization in Asia and Africa, a region consisting of a large number of developing countries (United Nations, 2014 ).

Sustainability relations with urban slums vary and differ according to the economic conditions of the area (Uddin, 2018). some regions show that the growth of slums is integrated with poverty in developing countries. therefore the causes and consequences of urban growth are essentially important for understanding and resolving urban slum problems. Jogerson and Rice (2016) found that the magnitude of urban slum conditions in developing countries today is a structural characteristic that forms inequality in indicators of health and well-being. The combination of human and natural factors results in a variety of urban hazards with serious impacts on the urban poor, that pose a large risk of earthquakes, fires and floods in urban areas (Adeleken, 2010; Ahmed, 2016). Fenemona has encouraged experts to see cities under pressure from injustice as a big problem (Faisah & Prianto, 2015; Rikard et. al, 2017; Perez, 2018).

Informal settlements and urban informality are serious problems such as high poverty, illiteracy and crime. All policies, strategies, and programs launched by the government to solve urban problems which are the main platforms for informal arrangements (Nassar & Elsayed, 2018). Informal settlements are in legally contested spaces and limited access to information. City managers and planners who work for structuring informal settle-

ments must overcome current challenges to shape a better future for the poor people they serve. Informal settlements can be physically classified based on their construction (permanent or non-permanent construction) or their location with use in accordance with housing and tenure (Hassan, 2012).

The area of Makassar City slums reaches 740.10 Ha (SIAP Document, Makassar City Government, 2017). This situation will be a trigger for the parties to be involved in resolving the slums issue. This effort is simultaneously synergizing with government programs to realize "Indonesia Slum Free in 2020". The main factor in slum is poverty, lack of decent living access which includes housing and infrastructure, facilities and public utilities, legality of residence as evidenced by land ownership, as well as weak and poor governance. Loughhead & Rakodi (Prayitno, 2014), there are three things that are the priority of the poor, namely: survival, security, and finally the quality of life. The improvement of housing and living conditions in slums and informal settlements is very necessary, while a number of alternative affordable housing must be promoted to provide adequate housing solutions especially for low income groups (Banerjee, et. al., 2012, Smets & Lindert, 2016). Slum is the result of not fulfilling the basic rights of poor housing.

The needs of urban communities for proper housing are not always followed by land availability (Faisah & Prianto, 2015). This situation has an impact on the difficulty of reaching equilibrium between the demand for adequate housing and the ability of land resources. The availability of land to build space used as a place for community activities needs to be connected between activities. Residential buildings in slums include building faces that are not directly facing the road, on average 2-3 families in one residential unit, building materials damaged, building con-

struction is a combination of semi-permanent and permanent, does not have permission to educate buildings, and occupancy status is rent (Amalia, 2018). The rapid growth of predominantly low income, the residential cities in the constitution of a serious threat to health, improvement and health in the areas of housing, planning, pollution, control, education and public works (Chimankar, 2016).

The Makassar City Government has compiled and realized various kinds programs for handling slums. Initially starting from poverty alleviation programs in general to more specific programs. Learning from experience, slum eradication programs with various approaches that have been carried out are more likely to be considered as negative input variables. In this case, slum areas are seen as current well-being not as a future well-becoming, so slums are better understood as uninhabitable shelters. The understanding of this approach is that slums are based solely on physical spatial problems (spatial problem based), and the impact of slum dwellers is actually considered a passive victim of development.

The basic concept in physical improvement in slums according to Michiani and Asano (2019) consists of three elements: (1) regulating road networks as the basic system that composes settlements, (2) building a public utility system that is important for livelihoods, and (3) providing public spaces and facilities as "external organs" that form identities and reveal the physical beauty of the location. While (Bah, et. al., 2018) looked at several factors that underlie the success of slums handling strategies carried out by many countries through pro-growth urbanization policies and economic reforms, namely: (1) Increasing the productivity of urban poor by developing skills and providing access to microcredit; (2) improving the living conditions of the poor through basic service provision and the

development of slums, (3) providing guarantees of ownership for poor families living in illegal settlements and increasing their access to low-cost housing and subsidized housing, (4 ) empowering the urban poor through community development and encouraging their participation in decision making.

In a slum area, there is ownership of personal assets that are very lame (Banerjee, et. al, 2012). However, the problem is whether the asset redistribution program policies are appropriate and what models are suitable in handling slums. To find a formula for handling urban slums, a comprehensive study of the coastal Untia slum area of Makassar City is needed, then from the results of the research, a reconstruction of a slums-based handling model based on dynamic governance is carried out. Dynamic governance in developed and democratic countries is an integral part of the country's governance system. Whereas, in developing countries, dynamic governance does not appear spontaneously, but is the result of leadership efforts that have the capability to build a developed nation in order to be able to survive in a rapidly changing environment. Dynamic governance capabilities consist of three elements: (1) thinking ahead, namely the ability to capture the initial signs about the direction of future situation developments that can influence the role and existence of future situations that can influence the role and existence of a country, the ability to determine the vision and mission right; (2) thinking again, namely the ability and willingness to organize and evaluate current policies so that they can be better in performance; and (3) thinking across, namely the ability to benchmark (benchmarking) and openness to cross borders in order to be able to learn from the experiences of others so they can introduce new ideas and concepts into the institutions they lead (Kasim, et. al., 2014).

Siong & Geraldine (2007) describe how Singapore's experience creates dynamic governance. Basically, dynamic governance only emphasizes two important keys, namely capability and culture. These two important keys will drive human resources and the process towards adaptive policy changes or aspired as dynamic governance. A simple framework that refers to the formation of dynamic governance as follows figure 1.

The capability component reflects how the mindset of the government and the people of Singapore over three basic things, namely thinking ahead, thinking again and thinking across. Thinking ahead shows the capacity to think in formulating conditions in the future that might have an impact on domestic conditions. Conversely, thinking again will reflect the ability and openness to reflect on the previous policy, then be evaluated and refined to maximize the achievement of goals. Meanwhile, thinking across is the ability and openness of insight in learning experiences, ideas, and concepts of other actors.

The cultural component is present as the basic foundation in the dynamic

governance process. The inheritance of cultural values will influence behavior and reflect the mental model of society in everyday life. In organizing government, culture can be signs. First, culture will ultimately become a determinant in the process of formulating policies and agendas. Second, culture and norms will act as consideration in adopting or adapting a new policy. Third, culture and norms will become a catalyst in the decision making process.

This dynamic governance framework has been applied to many policies. Application of dynamic governance in handling slums is a cross-subsidy as applied by Singapore. As in the Housing Development Board (HDB) Policy, which eventually became a reference for other countries. This residential project for Singaporeans is derived from the salary deductions of Singaporeans saved in the form of decent apartment flats. This apartment also seeks to integrate Singapore's multi-ethnic communities in residential blocks to create a harmonious life. This housing policy is considered "unusual" but has left no homeless people and slums in Singapore (Phang, et. al.,

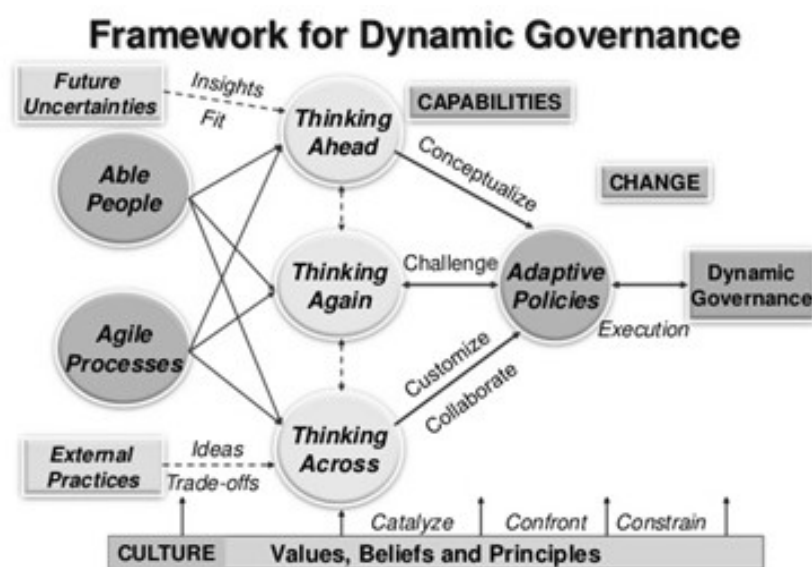


Figure 1. Framework for Dynamic Governance

Source: Siong, N. B. & Geraldine, C. (2007)

2014, Woltersdorf, 2018).

Kwan (2015), adapted the theory of dynamic governance from Siong and Geraldine in the context of urban governance by creating a theory of dynamic urban governance. there are at least five principles of dynamic urban governance: lead with vision and pragmatism, build a culture of integrity, cultivate sound institutions, work with markets, engage the community as stakeholders. The five principles are related to a strong governance paradigm with regard to long-term benefits. By carrying out these five principles of dynamic urban governance, it will lead to elegant and progressive government performance while taking into account strong leadership performance and utilizing digital information and communication technology (Paschoal & Wegrich, 2019).

## RESEARCH METHODS

### Data Grouping and Research Focus

Surveys and observations were carried out in the delineation area of the Untia coastal slums using several aspects,

namely the hue of the coastal area, socio-cultural conditions, economic activities of the community, coastal economic potential and the distribution of slums and characteristics of Untia's slums. The survey was carried out in the coastal area of Untia which was focused on the slum delineation area in several neighborhoods unit (RT) and community unit (RW). RW 01 (RT 01, RT 02, RT 03), RW 02 (RT 02, RT 03, RT 04), RW 05 (RT 01, RT 02, RT 03).

### Quantitative Analysis of Slumness

This study used descriptive quantitative analysis to identify the characteristics of slums by referring to the slums criteria based on Minister of Public Works Regulation No. 02 of 2016 about Quality Improvement of Slum Housing and Settlements. Furthermore, the results of identification of slum conditions are illustrated in the mapping referring to the Document of Settlement Environmental Planning 2018. Documents are arranged in a participatory through self-help mapping by the community.

Table 1. Aspects and Objectives of the Study  
 Source: Processed by the authors (2018)

| Aspect of study           | Object of study  |
|---------------------------|--|
| Baseline of coastal areas | To identify geographical and administrative conditions, socio-cultural conditions, community economic activities, potential coastal ecosystems |
| Slum distribution         | Slum causes, slum area, slum level, population in slum locations, population density in slum locations, characteristics of slum locations, and |
| Slum characteristics      | To identify irregular buildings, environmental road conditions, and environmental sanitation conditions in                                     |

## RESULTS AND DISCUSSION

This section discusses the results and analysis of the consist of the coastal areas of Untia, socio-cultural conditions, community economic activity, the potential of coastal ecosystems, distribution of slums, and characteristics of slums. In the last, we will reconstruct a model of handling urban coastal slums based on dynamic governance.

### Hue of the Untia Coastal Area

#### Geographical and Administrative Conditions

Untia is located in Biringkanaya District, Makassar City. the area is around 256.5 ha and the area of residential area is 8.3 ha and consists of 5 RWs and 14

RTs. Geographically located at coordinates 507'32.91 "LS - 119025'17.37" BT. Administratively, this area is bordered by Maros Regency, Marusu District in the north, Bira Urban-Village, Tamalanrea District in the south, Bulurokeng Urban-Village, Biringkanaya District in the east and West Side with Makassar Strait. The topography of the region starts from the lowlands to the highlands with elevation of 1-19 meters above sea level (Makassar in Figures, 2017). In general, the condition of the beach is muddy and vegetated with mangroves and is a sloping beach, only a small portion is classified as rock. In terms of beach stability, this beach is said to be relatively stable and calm. But it tends to advance towards the sea due to sedimentation from the Mandai River.

Table 2. Criteria and Parameters of Residential Buildings

Source: Ministry of Public Works and Settlement Regulation No. 02/PRT/M/2016 about Quality Improvement of Slum and Slum Settlements (2018)

| Aspect                               | Criterion   | Parameters  |
|--------------------------------------|---|---|
| Condition of Residential Buildings   | Irregularity of Residential Buildings                         | The position of the front yard of the residential building is not facing the road, it is above the border of the river/canal /sea /swamp/lake and is located in the waste disposal area of the factory / under the high voltage line. |
|                                      | Incompatibility with building technical requirements          | The widest roof leaked, cracked wall, the widest floor in the form of land  |
| Conditions of Residential Road       | Quality of residential road surface and road service coverage | The length of damaged roads and affordability of road networks  |
| Conditions of Residential Sanitation | Drainage conditions   | Quality of material and damaged drainage channel structure  |
|                                      | Provision of drinking water                                   | The number of households is not accessible to quality drinking water and the number of households is not served by drinking water needs   |
|                                      | Waste water management  | Household waste water disposal system that is not separated from the environmental drainage channel   |
|                                      | Waste management  | The frequency of garbage transportation and the availability of trash bins at home  |

In addition, there was a 30 m abrasion symptom at the Untia Fisheries Urban-Village (RPJMD, Makassar City, 2014). Hydrologically, the condition of groundwater and surface water is influenced by climate and rainfall as well as the presence of rivers and lakes in the area of Makassar City. During the rainy season some rivers flow with quite large debits such as the Jeneberang River, Pampang River, Tallo River. While in the dry season it continues to flow, but the water discharge decreases. Climate in locations including tropical regions, the average air temperature in 10 years ranges from 24°C - 28.9°C with the highest rainfall intensity in November to February.

#### Socio-Cultural Conditions

The Untia coastal people who are dominated by fishermen have a history and socio-cultural values and social solidarity that have been built since they were still in the fishing community of Lae-Lae Island. The population of the Untia fishing village is a resident of Lae-Lae Island which was successfully relocated in February and March 1998 to 326 families,

but those who have successfully moved to the Untia fishing village have only been around 100 families to date. Generally, those who move are only small-scale fishermen or fishermen laborers, while fishermen with the status of *punggawa* (fisherman boss) still remain on Lae-Lae Island, Makassar. The composition of Untia consists of indigenous people in general and immigrants from Lae-Lae Island who live in fishing villages. The interaction and relationship of the Untia Fishermen Village community with the local community went well even from economic activities, they also mingled into labor and building supervisors, home industry workers and the motorbike service sector.

The population of Untia is 378 households or 1,922 people, consist of 1,013 men and 909 women, with a population density of 231 people per ha. The demographic composition based on ethnicity consists of the Makassar (93.34%), the Bugis (5.93%), the Betawi (0.06%), the Javanese (0.26%), the Ambon (0.26%) and the Flores (0.15%).

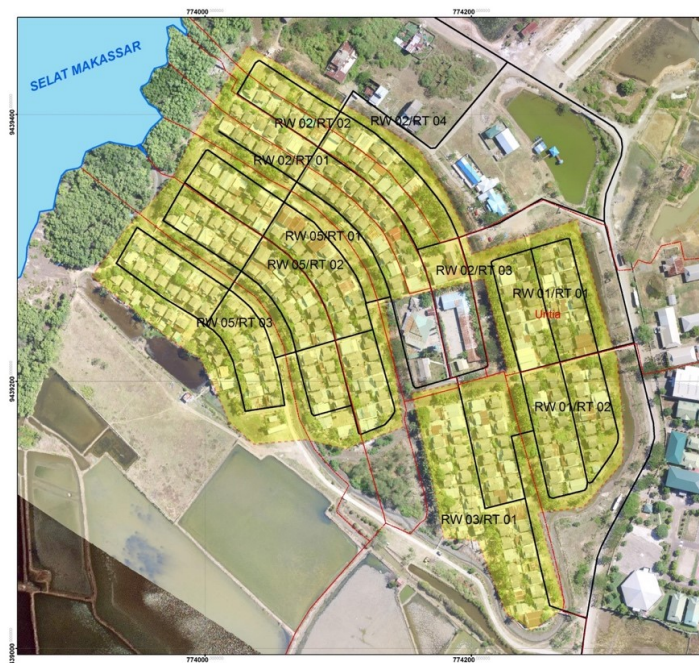


Figure 2. Map of Untia Coastal Slum Area

Source: Neighborhood Settlement Plan of Untia, BKM Untia (2018)

### Economic Activity

The main livelihoods of 378 households in Untia are fisheries, namely fishermen consisting of 117 households. The other sectors are 59 households in the construction and 17 households in the government sector, 86 households in the trade and services sector, 83 households in the industrial manufacturing sector, 15 households in the livestock and agriculture sector, 1 household in the mining sector.

### Potential of Coastal Ecosystems

The Untia Coastal Area has the potential of coastal ecosystems in the form of mangrove forests along the coast with a canopy width of 50-60 meters. In other parts, there is also mangrove vegetation with a canopy width of 10 meters because it has been converted for residential purposes. The mangrove species that grow in Untia are *Rhisophora* and *Avicennia*. The potential of this type of *Rhisophora* mangrove is an ecological function as a store of carbon. While *Avicennia* type mangrove has the potential as food, animal feed, bioformalin, medicine, toxic absorbent plants, and reclamation plants for mangrove areas. Some of the mangrove

vegetation grows naturally and some are planted through government programs with the community, and some are planted independently by local people.

### Slums Distribution

Based on the Decree of Mayor of The Makassar City Number 050.05/1341/Kep/IX/2014 about Determining the Location of Slum Settlements in Makassar City, the Untia Coastal Zone is categorized as a slum area, with an area of 7.13 Ha. Slum typology in coastal areas with characteristics including irregular residential buildings, damaged road conditions, unsatisfied drinking water needs, and poor sanitation. The condition of the Untia slum is influenced by the high urbanization. The rapid development of the city of Makassar and the strategic location of this area from the Makassar Industrial Area (KIMA) make the Untia area a target for urbanites. In the process of urbanization, the average migrant comes from Low-Income Communities (MBR) that occupy the cemetery area around the trading area. Villages around the cemetery area are an alternative choice for migrants, because the location is close to service and distribution centers.

Table 3. The Slum Distribution of Untia  
 Source: Processed by the authors (2018)

| Location      | Slum Area   | Total Population | Population Density | Land Use                       |
|---------------|-------------|------------------|--------------------|--------------------------------|
| RT 001 RW 001 | 0.7         | 136              | 194                | Settlement, trade and services |
| RT 002 RW 001 | 0.8         | 146              | 182                |                                |
| RT 003 RW 001 | 1.2         | 304              | 253                |                                |
| RT 002 RW 002 | 0.4         | 97               | 242                |                                |
| RT 003 RW 002 | 0.4         | 97               | 242                |                                |
| RT 004 RW 002 | 0.5         | 71               | 142                |                                |
| RT 001 RW 005 | 1.0         | 172              | 172                |                                |
| RT 002 RW 005 | 1.0         | 213              | 213                |                                |
| RT 003 RW 005 | 1.1         | 226              | 226                |                                |
|               | <b>7.13</b> | <b>1462</b>      | <b>206</b>         |                                |



## Characteristics of Slumness in Untia Area

### Condition of Residential Buildings

The number of residential buildings in the coastal area of Untia consists of 293 units, 186 units (63.48%) of which are residential that are not in accordance with the building technical requirements (uninhabitable), 96 units (33%) irregular residential buildings and types of building density are low density.

### Condition of Residential Roads

Overall, the length of the residential road in Untia is 4,281 meters and there are 2,688 meters (62.78%) of roads with damaged conditions. The damaged road condition is caused by the poor surface quality and coverage of road services.

### Conditions for Environmental Sanitation

Environmental sanitation consists of drainage conditions, drinking water supply, waste water management and solid waste. Aspects of environmental drainage conditions at the scale of settlements, mostly with concrete material, but the average environmental drainage network is not connected to the secondary drainage channel, causing inundation in swamps and empty land with low land elevation. The overall length of drainage in the Untia slum is 3,656 meters consisting of 2,250 meters (61.54%) in damaged condition. Aspects of the condition of drinking water supply, the scale of service of the PDAM (Local Water Supply Company) Makassar has not yet reached its full extent. So that there are still some people getting clean water from ground water. There are 163 families (50.15%) who have not had access to drinking water and there are 325 households that do not meet drinking water needs (100%). Aspects of waste water management conditions, there are 5 households (1.54%) wastewater management systems that are not in accordance with technical standards and 7 house-

holds (2.15%) do not have latrines so they use vacant land. Waste management aspects, solid waste services have not all been able to be accessed by mobile waste services because of the small volume of roads, so that the community at that location dispose of waste on vacant land around their homes.

## Model of Dynamic Slums Governance

In the previous section, three principles of dynamic governance have been explained: think ahead, think again, and think across. Furthermore, these three principles are elaborated in the form of findings relating to the handling of the Untia coastal slums.

### Think Ahead

The rapid development of cities requires innovative solutions. Innovation practices carried out by various cities must use digital information and communication technology in leadership (Paschoal & Wegrich, 2019). The innovation tips carried out by the Makassar City Government as an effort to organize the coastal slum area of Untia as a manifestation of the principle of think ahead. Results from the study of the Untia coastal slum policy from several Makassar City government documents, namely :

1. Direction of the Makassar City Spatial Plan (RTRW) for 2015-2034, establishes the Untia area as a center for maritime activities, research and higher education service centers, medium and high density housing.
2. Spatial Plans for the area of Untia in 2015-2034, consisting of protected areas and cultivation areas. Protected areas are designated as coastal border areas, areas prone to natural disasters, urban green open spaces, nature reserves and protected areas in the form of conservation and protection of coastal ecosystems and geological protected areas. Whereas the cultivation area is designated as a trade and service area, a designated area for hous-

ing, offices, warehousing, disaster evacuation, fisheries and reclamation.

### 3. Makassar City Sanitation Strategy (MCSS) in 2016

- a. Waste Water MCSS, Untia Region is categorized as zone 3 which is an area with a low population density category, so recommended sanitation technology is an individual local Wastewater Service System, where the strategy is safe for the environment.
  - b. Solid waste in MCSS with solid waste services from households to TPS (Temporary Disposal) then to TPA (Final Disposal Site) and use the concept of reuse, recycle and reduce.
  - c. Environmental drainage in MCSS, Untia area is included in the zone of 0% -22.5% inundation / flood area.
4. Untia's Slum Handling Program, the slum governance program carried out in Untia includes the RISE Program (Revitalising Informal Settlement and Environment) in 2017-2019, NSUP (National Slum Upgrading Program) in 2016-2019, New City Development in 2018-2020, and Development of the Directorate General of Human Settlements Strategic Settlement Area through the Development of the Kampung Untia Watershed Area in 2017-2018, and the NSUP (Neighborhood Slum Upgrading Project) in 2016-2017.

The Government of Makassar City needs continue more policy innovation to handling the Untia coastal slums. Combining the short, medium and long-term policies. The policy innovations carried out in the coastal slum area of Untia include: increasing the quality of environmental buildings, repairing the surface of the road, rejuvenating the drainage canal, improving the infrastructure of sanitation facilities based on the environment, increasing the coverage and fulfillment of drinking water services. All of these strat-

egies make use of various application programs based on information technology and digital communication.

### Think Again

The policy innovation in handling the Untia coastal slum area has been carried out several times by the Makassar City Government. However, existing innovations have not found the right solution to organize the slums. International donor-based programs have arrived with assistance and loan schemes for the government, but have not yet shown optimal results. So far, the approach to the slum settlement project has been designed very rigidly, following the program guidelines compiled technically. The patchwork policy carried out by the Makassar City Government only continued to "preserve poverty" in the slum coastal areas of Untia.

Therefore, policy evaluation must continue to be carried out by considering various aspects, especially aspects of culture. Mahabir, et. al (2016) offers the importance of a synthesis approach between physical, economic and social construction in a slum settlement arrangement program. This synthesis model can make program managers and target communities more holistic and in-depth in understanding slum challenges at the local, national and regional levels. Even by Chauduri (2015) emphasizes the importance of using traditional knowledge, not only to help the urban poor survive, but also for sustainability and a better environment.

### Think Across

Various efforts have been made to organize the coastal slums of Untia. With the alternation of policies, it indicates that the policy of handling the Untia coastal slum area has not run optimally. Policies implemented by the Makassar City Government are more top-down. Eliminating the role of culture in handling the coastal slums of Untia, whose people are very heterogene-

ous. In the next step improvement, it is necessary to consider an ecoculture approach, so that policies intended for the people of the Untia coastal slum area can be in accordance with the conditions of culture and environment.

According to Jermstittiparsert (2017), that the ecocultural aspect must be an important concern in policy making, because the environment is considered a decisive basis for effective implementation. The importance of ecoculture is taken into consideration in policy making because ecocultural aspects are also management schemes aimed at creating sustainable development practices (Phongchiewboon, 2017).

Based on the results of identification of slum characteristics, settlement policy studies and handling programs that have been carried out in the Untia coastal slum area, a dynamic governance-based handling model is drawn up in the form of the following slum handling framework.

## CONCLUSION

Collaboration The slum handling of the Untia coastal area is carried out based on the characteristics of slums, policy studies, and handling programs that have been carried out both by the central and regional governments, the private sector and all stakeholders (Cruz et. al, 2019). The results of identification of slums and policy studies based on the principle of dynamic governance are the basis for determining slum handling models.

First, The slum area of Untia is 7.13 ha with coastal and lowland slum typologies and is categorized as medium slum. Second, Environmental conditions in this region must continue to be improved, especially the high level of vulnerability and anticipating the impact of climate change.

Third, The pattern of handling slums is based on the characteristics of slums, government policies in handling coastal slums and socio-cultural conditions of the community. Improving the quality of

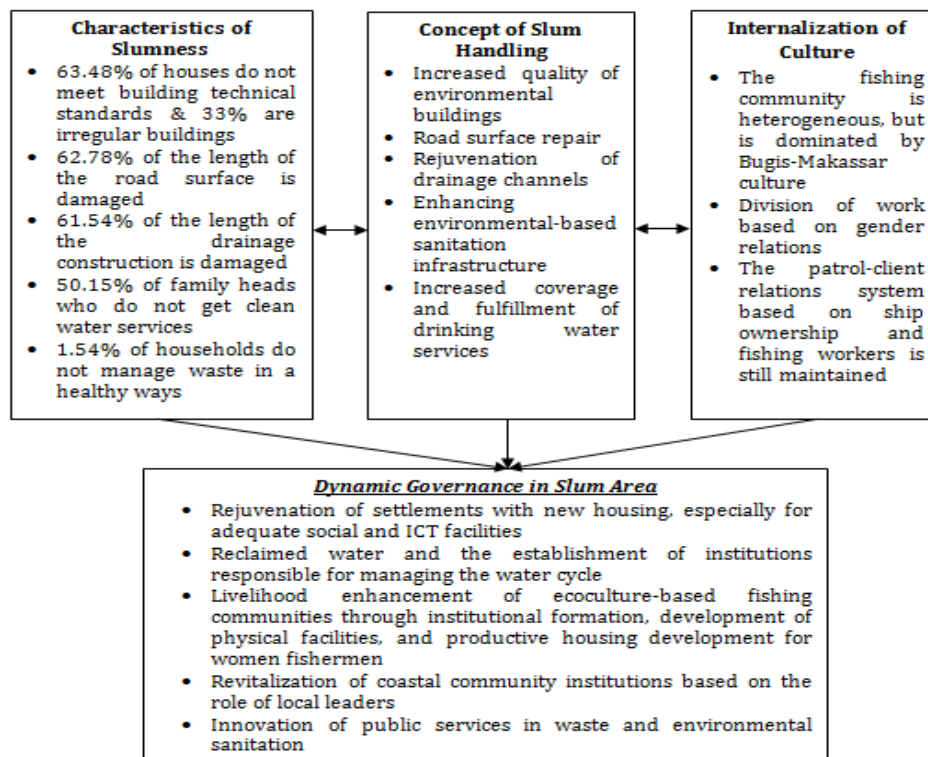


Figure 3. Framework for Untia Coastal Slum Handling Based on Dynamic Governance  
 Source: Processed by the authors (2018)

buildings, road rejuvenation and sanitation integrated with city-scale planning and referring to the Makassar City government settlement policy, and the last, handling of coastal slums in urban areas needs to use a dynamic urban governance model.

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#### REFERENCES

- Acharya, B. L. (2010) Urban Poverty: A Sociological Study of Shankhamul Squatter, *Sociology and Anthropology* (4) : 179-192
- Adelekan, I. O. (2010), Vulnerability of Poor Urban Coastal Communities to Flooding in Lagos Nigeria, *Environment & Urbanization*, 22(2) : 433-450
- Ahmed, Iftekhhar. (2016). Building Resilience of Urban Slums in Dhaka, Bangladesh. *Procedia, Social and Behavioral Science*, 218: 202-213.
- Amalia, A., A. (2018). Karakteristik Hunian Permukiman Kumuh Kampung Sapiria Kelurahan Lembo Kota Makassar, *Nature : National Academic Journal of Architecture*, 5 (1): 13-22
- Bah, E., Faye, I., Geh, Z. (2018). Slum Upgrading and Housing Alternatives for The Poor. *Housing Market Dynamics in Africa*, pp 215-253. London : Palgrave Macmillan
- Banerjee, A., Pande, P., Walton, M. (2012) Delhi's Slum -Dwellers: Deprivation, Preferences and Political Engagement among the Urban Poor, Working Paper, International Growth Centre (IGC), S-5003-INC-
- Bappeda (2017). Slums Improvement Action Plan (SIAP) of Makassar City, Badan Perencanaan Pembangunan Daerah (Bappeda), [Regional Development Planning Board], Government of The Makassar City.
- BKM Untia (2018) Neighborhood Settlement Plan of Untia, Badan Keswadayaan Masyarakat (BKM) [Community Self-Help Agency], Untia, Makassar City.
- BPS (2018) Kota Makassar dalam Angka 2017, [Makassar in Figures 2017], Badan Pusat Statistik (BPS), [Central Board of Statistics], Government of The Makassar City.
- CDE (2014). Cities of Hope: Young People and Opportunity in South Africa Cities. Johannesburg, South Africa: Centre for Development And Enterprise (CDE). ([http://www.cde.org.za/wp-content/uploads/2014/03/CIT-IES\\_OF\\_HOPE\\_Young\\_people\\_and\\_opportunity\\_in\\_South\\_Africas\\_cities.pdf](http://www.cde.org.za/wp-content/uploads/2014/03/CIT-IES_OF_HOPE_Young_people_and_opportunity_in_South_Africas_cities.pdf).)
- Chaudhuri, S. (2015) Urban Poor, Economic Opportunities and Sustainable Development Through Traditional Knowledge and Practices, *Global Bioethics*, 26(2) : 86-93
- Chimankar, A. D. (2016). Urbanization and Condition of Urban Slums in India. *Indonesian Journal of Geography*, 48 (1) : 28 - 36
- Cruz, N, F., Rode, P., McQuarrie, M. (2019) New Urban Governance: A Review of Current Themes and Future Priorities, *Journal of Urban Affairs*, 41(1) : 1-19
- Decree of Mayor of The Makassar City (2014) Surat Keputusan (SK) Walikota Makassar No.

- Kep/IV/2014 Tentang Penetapan Kawasan Kumuh, [Decree of Determining the Location of Slum Settlements in Makassar City], Government of The Makassar City. 399-419
- Faisah, N., Prianto, A., L. (2015) Good Environmental Governance (Studi Kasus Pengelolaan Taman Macan Di Kota Makassar), *Otoritas : Jurnal Ilmu Pemerintahan*, 5 (2) : 174 - 188
- Hassan, G. F. (2012). Regeneration as an Approach for the Development of Informal Settlements in Cairo Metropolitan, *Alexandria Engineering Journal*, 51 (3): 229-239.
- Hariyanto, A. (2007), Strategi Penanganan Kawasan Kumuh sebagai Upaya Menciptakan Lingkungan Perumahan dan Permukiman yang Sehat (Contoh Kasus : Pangkal Pinang), *Jurnal Perencanaan Wilayah dan Kota Unisba*, 7 (2) : 11-37
- Jermisittiparsert, K. (2017), Environmental Civil Societies of Thailand : Expectations and Realistic Observations, *The Social Sciences*, 12 (11): 2051-2057.
- Jogerson, A. K., Rice, J. (2016), Slum Prevalence and Health in Developing Countries: Sustainable Development Challenges in the Urban Context. *Sustainable Development*, 24 : 53-63.
- Kasim, A., Huseini, M., Anwar, R., dan Si-ong, N.B. (2015). *Merekonstruksi Indonesia : Sebuah Perjalanan Menuju Dynamic Governance*. Jakarta : PT Kompas Media Nusantara.
- Mahabir, R., Crooks, A., Croitoru, A., Agouris, P., (2016) The Study of Slums as Social and Physical Constructs: Challenges and Emerging Research Opportunities, *Regional Studies*, 3(1) : 399-419
- Michiani, M. V., Asano, J. (2019), Physical Upgrading Plan for Slum Riverside Settlement in Traditional Area: A Case Study in Kuin Utara, Banjarmasin, Indonesia, *Frontiers of Architectural Research*, pp 1 - 18 <https://doi.org/10.1016/j.foar.2019.03.005>
- Ministry of Public Works and Housing (2016). *National Slum Upgrading Program (NUSP) General Guidelines*, Jakarta : Directorate General of Human Settlements, Ministry of Public Works and Housing
- Ministry of Public Works and Housing Regulation No. 02/PRT/M/2016 about Quality Improvement of Slum and Slum Settlements, Jakarta : Directorate General of Human Settlements, Ministry of Public Works and Housing
- Muta'ali, L., Nugroho, R. (2016), *Perkembangan Program Penanganan Permukiman Kumuh di Indonesia dari Masa ke Masa, [Development of Slum Settlement Program in Indonesia from Time to Time]* Yogyakarta : Gadjah Mada University Press
- Nassar, D., Elsayed, H. (2017), From Informal Settlements to Sustainable Communities. *Alexandria Engineering Journal*, 57: 2367-2376.
- Nugroho, A. R. (2010). *Studi Kawasan Kumuh Kota Banjarmasin, [Study of Banjarmasin City Slum Area]* Research Report, City Development Planning Board of Banjarmasin.
- Pérez, J., M. G., (2018), Urban Inequality: The City After the 2007 Crisis, *Urban Science*, 2018, (2) : 1-5
- Rickards, L., Brendan, G., Boyle, M., O'Callaghan, C., (2016). *Urban Studies After the Age of the City*, *Urban Studies* Vol. 53(8) : 1523-1541

- Paschoal, B., Wegrich, K., (2019) Urban Governance Innovations in Rio de Janeiro: The Political Management of Digital Innovations, *Journal of Urban Affairs*, 41 (1) : 117-134
- Prayitno, B. (2014). *Skema Inovatif Penanganan Permukiman Kumuh, [Inovative Scheme in Handling Slum Settlement]*, Yogyakarta : Gadjah Mada University Press
- Phang, S. Y., Lee, D., Cheong, A., Phoon, K. F., Wee, K. (2014) Housing Policies in Singapore: Evaluation of Recent Proposals and Recommendations for Reform, *The Singapore Economic Review*, 59 (3) : 1450025-1 - 1450025-14
- Phongchiewboon, A. (2018), Book Review: Essential Concepts of Global Environmental Governance, *Asia Political Science Review*, 2 (1) : 117
- Siong, N. B., Chen, G. (2007). *Dynamic Governance : Embedding Culture, Capabilities and Changes in Singapore*. Singapore : World Scientific Publishing Co. Pte. Ltd.
- Smets, P., Lindert, P. (2016). Sustainable Housing and the Urban Poor, *International Journal of Urban Sustainable Development*, 8 (1) : 1-9.
- Uddin, N. (2018), Assessing Urban Sustainability of Slum Settlements in Bangladesh: Evidence From Chittagong City. *Journal of Urban Management*, 7 : 32-42.
- United Nations (2014). *World Urbanization Prospects : The 2014 Revision*. New York : United Nations
- Woltersdorf, A. (2018) A bold Approach To Public Housing : Western nations could learn a thing or two from Singapore's public housing model. But can it really be replicated abroad ?, *International Politics and Society*, [<https://www.ips-journal.eu/in-focus/2018/the-politics-of-housing/article/show/a-bold-approach-to-public-housing-2800/>]