International Journal of Engineering Sciences & Research Technology

**Technology** (A Peer Reviewed Online Journal) Impact Factor: 5.164





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JESRT

[Wunarlan*et al.*, 9(8): August, 2020] IC<sup>TM</sup> Value: 3.00

### INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY

#### THE MORPHOLOGY OF THE OLD TOWN CENTER MARISA POHUWATO REGENCY GORONTALO PROVINCE

Irwan Wunarlan<sup>\*1</sup>, Sugiono Soetomo<sup>2</sup>& Iwan Rudiarto<sup>3</sup>

\*1Student Of Doctoral Program Of Architecture And Urban Sciences Diponegoro University Semarang-Indonesia

<sup>2</sup>Doctoral Program Faculty Of Architecture And Urban Sciences Diponegoro University Semarang-

Indonesia

<sup>3</sup>Doctoral Program Faculty Of Architecture And Urban Sciences Diponegoro University Semarang-Indonesia

DOI: https://doi.org/10.29121/ijesrt.v9.i8.2020.3

#### ABSTRACT

The established economic activity is also influenced by road network patterns and transportation accessibility, to encourage the emergence of new urban activities, activity patterns and movement patterns. The height of land function in the residential area of Marisa is influenced by the ease of accessibility and the demand for residential because it is next to the Central Office district and the urban center. The study aims to (1) Identify components of morphological form comprising land use, road and building network patterns (patterns and densities), (2) Analyzing the morphological form of the old City of Marisa and combine it with characteristic morphological forming components. The methods of research used are qualitative methods of phenomenology. The results showed that (1) the City of Marisa has a characteristic of a village-city frame zone (zobikodes) that is fertile, developing naturally for surplus commodities. The land use pattern of Marisa City, Marisa City Road network, and the patterns and functions of Marisa City are a component of the morphological constituent of Marisa. (2) The City of Marisa forms a compact city i.e. octopus morphology (octopus shaped/star shaped cities) and the custom Tawulongo into local wisdom in organizing the layout of Old Town center Marisa.

**KEYWORD:**City Marisa, morphology, components and surplus.

1. INTRODUCTION

#### Background

Marisa includes two sub-districts of Marisa and part of the Paguate sub-district. The location of both districts is in coastal areas, as are the areas of the district in Pohuwato is mostly in the coastal area of South Gorontalo province. People who are living as farmers and fishermen 70.72%, people are in Livelihood as fishermen settle in coastal areas of farmers settled in rural areas.

In addition, the two sub-districts have the highest population of 35,860 inhabitants, Marisa subdistrict has a population of 20,112 and a group of 15,748 people. The availability of infrastructure is complete and high producer of agricultural commodities. The existing conditions of Marisa and Paguat subdistrict as producers of export agricultural commodities (exportable commodities). Marisa and the Paguat Sub-district can produce a copra of 2,789.8 tons of coconuts and corn plants as much as 45,870.7 tons for each year. The existence of various types of infrastructure in Marisa and Paguat districts shows the process of economic of scale and urbanization economies which are strong enough in both regions. Pontoh and Kustiawan (2009) said that it relates both concepts to the principle of profit at the concentration or occurrence of agglomeration, as in urban areas.

The position of Marisa, surrounded by other cities, makes the city flourish and grow into a transit city. Marisa has urban characteristics that grow and develop into a new growth center in the western region of Gorontalo Province because it is supported by city facilities, regional trade activity of surplus agricultural commodities in Hinterland region, and inter and interregional connections. Connectivity between regions connected with

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**ISSN: 2277-9655** 

**CODEN: IJESS7** 

**Impact Factor: 5.164** 

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IC<sup>TM</sup> Value: 3.00

**ISSN: 2277-9655 Impact Factor: 5.164 CODEN: IJESS7** 

Country roads and sea transportation in the village/Kelurahan Bumbulan District Paguat. This raises the activity and mobility of the population with the characteristics of agricultural activities. As a new growth center, Marisa and Paguat sub-

districts have an influence in attracting residents and types of businesses to be in this region (urbanization economics). Prime location accessibility and city facilities provide an impact on the interactions of various interregion activities, forming patterns of interaction of various activities. Surplus of agricultural production and demand from outside the region and industry opens the opportunity for residents to conduct trade transactions between regions, especially for agricultural sectors both corn crops and coconut plantations (copra).

#### Formulation of problems

1. How to identify a morphological component of a form comprising land use, road tissue patterns, and buildings (patterns and density).

2. How the morphological form of the old town of Marisa by combining the characteristics of the morphological forming component?

#### 2. LIBRARY OVERVIEW

#### City and city development

Initially, the city grew and flourished because of the influence of an urban power that grew rural because of the impact of industrial revolution and rural agglomeration that created the development of services that led to urban conditions with the characteristic of non-agricultural life that grows in the history of rural developments. The city comprises two important aspects intertwined that is physical aspect as space with its elements and human aspect as the subject of development and the user of the city room. As human city space users gather in a community to interact for certain purposes and interests (Soetomo, 2009).

The larger a city, the higher the human interaction. The consequence of the characteristics of communal society or assembly is the need for infrastructure to support communal community activities (Karyono, 2013). People who use urban space help to change land utilization tailored to the needs of their activities The change in land utilization has a varied impact on the physical state of the city.

Increasing and density of urban areas resulting from high concentration and population activity, buildings dominated by permanent structures and functional activities and the interaction between urban spaces (Bintarto, 1983; Jonah, 2008). The city is a certain area with the character of non-agricultural land use, most of the cover building stands for settlements and neon settlements to provide a more dominant land cover than vegetation cover, the population density is especially high housing. Complex road network pattern in units of compact and relatively large residential area of the surrounding rural settlements. Meanwhile, the area in question has been touched by facilities such as shopping complexes, public and public facilities as a marker for the development of a city room (Jonah, 2011; ZAHND, 2006).

When viewed from the development of the city, there are three prime factors affecting the development and growth of the city, namely human factors, factors of human activity, factors of movement between human activities. Subsequently, Lee, 1979 as Jonah referred to (2005) said that there were six factors affecting the city's growth process, namely: (1) accessibility, (2) public services, (3) The characteristic of Land, (4) Characteristics of landowners, (5) spatial regulations, and (6) The sixth developer of this factor is not applicable in Indonesia as a developing The opinion expressed by Lee (1979) about the development process of the city differs slightly from the opinion expressed by Soetomo (2009). Where Soetomo (2009) argues that the development process of a city can be seen from the increased socio-economic activity of urban communities and mobility of its inhabitants. The development of the city is heavily influenced by population growth, land utilization intensity, socio-1. Urbanization and change of morphology of the city

Urbanization according to its nature is a spatial concentration of population and economic activity in a particular place. Economic activity generated from the urbanisation process forms the economic agglomeration to trigger national economic growth (Sebego and Gwebu, 2013).

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According to Paul Knox in Soetomo (2009) It says that the process of urbanization as a process is driven by an economic change that encourages and is encouraged by human factors, natural resources and technology (artificial resources) and produces economic, social and physical state output and problems that have to be addressed in determining the development policy of the city. The urbanisation process is divided into three parts, namely (1) the process of change or urbanization which is driven by economic factors that drive change in all aspects of population, culture, social, technology, environmental resources, and historical results, (2) the outcome of such changes, in the process of urbanisation towards internal in the city produces physical products of environmental or morphology of the city, social interaction or social ecology, land utilization, creating urban life in all aspects (social , economic, political, cultural) or so-called urbanism. Being externally creates an urban system in the sphere of both physical and non-physical regional systems.

#### 3. RESEARCH METHODS

The method used in this study is a qualitative descriptive method of research. Use of qualitative methods is used to assess the physical development of the city. Meanwhile, this qualitative approach is based on the philosophy of Post-positivism or interpreted, used to examine the condition of natural objects and data analysis is inductive so that the results of his research are more meaningful than generalization (Sugiyono, 2014). Method of survey used to know the development of Marisa City, whose year 1980-2017.

#### 4. RESULTS OF RESEARCH AND DISCUSSION

#### Use of Marisa city land analysis

The land-use change pattern was derived from the comparison of land use in 1980 and in 2017. Land use in the year 2017 is the current use of existing land. The pattern of land use within the period of 37 years with analysis of 20 (twenty) yearly, except between the years 2001 to 2017 by using the annual analysis of 17 (seventeen), is expected to overview of the overall tendency of land use. The results of land use map analysis from 1980 to 2017 using ArcGis 10.3 software. Area and type of land use in Marisa City can be classified in the land use, namely (1) Cities/settlements: Settlements, government offices, education, health, worship, RTH, stadium, terminals, trading and services, (2) industries, (3) Agriculture: plantation, Rice, paddy fields, dry farms, and ponds, (4) Waters: Body water and land waters, (5) Forest: Primary Dryland forest and primary mangrove forest, (6) Padang: Shrub, (7) open land. Land use tendencies in Marisa City are presented in the following table.

No	Land Use Type	Land Use Area (Ha)					Percentage (%)	
		1980	1990	2000	2010	2017	1980	2017
1	Plantation	2201,23	2688,56	1770,3	1675,75	1450,53	36,77	24,23
2	Settlements	122,11	141,55	240,56	284,69	640,65	2,04	10,70
3	Rice fields	0	0	0	0	0	0,00	0,00
4	Body of water	75,88	58,15	0	149,2	120,03	1,27	2,00
5	Dry farming Semusim	168,14	709,57	1824,29	1837,92	1580,43	2,81	26,40
6	Primary Dryland Forest	1754,01	1257,44	834,37	846,63	845,12	29,30	14,12
7	Open land	392,75	0	117,02	10,02	0	6,56	0,00
8	Shrub	864,71	807,15	809,18	843,49	850,28	14,44	14,20
9	Moor	0	119,73	99,09	25,07	32,15	0,00	0,54
10	Land water	0	0	0	0	0	0,00	0,00
11	Phc	0,35	0,35	0,35	0,35	0,35	0,01	0,01
12	Hospital	0	0.,00	0	6,1	6,1	0,00	0,10

Table 3. Land use in Marisa year 1980-2017

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13	Hotel	0,5	0,5	0,8	1	1,13	0,01	0,02
14	Education	0	0	0	1,09	1,09	0,00	0,02
15	Trade and services	1,15	2,19	3,65	3,9	4,15	0,02	0,07
16	Warehousing	0,07	0,07	0,27	0,27	0,27	0,00	0,00
17	Office	2,21	2,21	3,9	5,12	5,12	0,04	0,09
18	Sports facilities	0	0,03	0,03	0,03	0,03	0,00	0,00
19	The means of worship	0,45	0,5	0,55	0,62	0,62	0,01	0,01
20	School	0,9	0,9	1,1	1,3	1,3	0,02	0,02
21	Transportation	0,04	0,04	0,05	0,06	0,06	0,00	0,00
22	Primary Mangrove Forest	402,09	197,65	281,08	281,08	281,08	6,72	4,70
23	Pond	0	0	0	12,4	164,24	0,00	2,74
24	Stadium	0	0	0	0	1,36	0,00	0,02
25	Terminal	0	0	0	0,5	0,5	0,00	0,01
	Amount	5986,59	5986,59	5986,59	5986,59	5986,59	100	100

Source: Analysis result, 2018

Table 3 above informs the land use in Marisa City from 1980 to 2017. In 1980, three types of land use dominated the plantation land of 2,201.23 Ha (36.77%), the primary Dryland forest of 1,754.01 Ha (29.30%) and scrub of 864.71 (14.45%), the smallest type of land use i.e. water and housing bodies and settlements of 75.88 Ha (1.27%) and 122.11 Ha (2.04%). In the year 2017, all three types of land use is the largest dry farming, plantation and shrub still dominates land use in Marisa. These three types of land use have a taken part area of 1,580.43 Ha (26.40%), 1,450.53 (24.23%) and 850.28 Ha (14.20%), the smallest type of land use is a terminal of 0.5 Ha (0.01%) And the Stadium of 1.36 Ha (0.02%).

#### The morphological analysis of the usage patterns of Marisa City

Changes in land function, the provision of city infrastructure and the growth of the population of Marisa City as a result of the increasing socio-economic activity of the city has an impact on the morphology of the city. Through the process of growth and development, it is believed that Marisa has various stages of development with certain characteristics.

The phenomenon of the development of socio-economic activity of the city is evident in the growth patterns of city dwellers. In addition, the development of urban areas with internal restructuring process in the city, both socio-economic and physically. Physically restructuring process is characterized by the change in use of land, both in the core of the city as well as in suburban areas. The downtown area or the city's core has undergone a very intensive change in land use from residential areas to commercial areas, while in the suburbs it occurs over the function or conversion of fertile agricultural land into an awakened area of industry, settlements and other services.

Over the function of land or land use in a city development process is an inevitable, so the population growth is rapidly demanded the need for land so that there is often a conflict of interest between land use with the plan of its designation. The limitations or scarcity of land in the middle of town force the city to develop physically towards the outskirts of the city. Suburbs are one of the city's areas that have undergone much change in land function or land-function, i.e. from unawakened or non-agricultural land to awakened land. Marisa City as one of the suburbs in Gorontalo province is a suburb that is very far from the city of Gorontalo or the National Activity Center so that it does not get influence, the city grows and develops naturally with its resources.

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Fig. 4. The morphology of Marisa

The region of Marisa has rapidly developed in 1980-2017. In that period there has been a development and growth of the city which causes the land function from agricultural land to non-agricultural land. This can be seen from the reduction of farmland in Marisa City namely 287.60 Ha, while non-agricultural land experienced a widespread boost. Marisa is one of the small towns in Pohuwato Regency and has the highest population in Pohuwato Regency. According to BPS data of Pohuwato District the population of Marisa in 2018 is 22,887 people with a population density of 382.34 inhabitants/Ha, while from the land use statistics of Marisa in 1980-2017, it is known that in Marisa City there has been a decrease in agricultural land to 1450.53 Ha. The decline in agricultural areas is because of the development of various needs of public infrastructures that take up productive agricultural lands such as building office blocks that convert mangrove forest land or mangrove and coconut plantations, the construction of the Panua District General Hospital that converts coconut plantation land.

In 1980, the highest land use was a plantation with an area of 2,201.23 Ha or 36.77% of the total area of Marisa. The next largest land use was the primary Dryland forest of 1,754.01 Ha or 29.30% followed by the use of bushland of 864.71 Ha or 14.44% and further the largest land use was the primary mangrove forest of 402.09 Ha or 6.72%, the open land of 392.75 Ha or 6.56% of the total area of Marisa city. While the use of agricultural land dry Same season settlement and water body with consecutive area of 168.14, 122.11 and 75.88. While for

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industrial land use, trade and services, tourism has not been clearly seen. The low use of agricultural land is as dry as the townspeople have not been interested in the processing of dry land and agricultural land, where corn is Tanami, where at the time corn only to be consumed independently, sold in the traditional market Marisa and not yet become an export commodity.

In the year 2017 the largest use of land in a row is the use of dry land agricultural land with a land of 1580.43 Ha or 26.40%, plantation with land use of 1450.53 Ha or 24.23%, scrub with land use of 850.28 Ha or 14.20%, primary Dryland forest with land use of 845.12 Ha or 14.12%, housing with land use of 640.65 Ha or 10.70% followed by the use of primary mangrove forest land, pond and body of water with a percentage of 2-5% of the total area of Marisa city.

Land use that tends to increase is residential land and settlements where at the beginning of the year 1980 has land use area reached 122.11 Ha and in the next 10 years showed successive increases to 141.55 Ha, 240.56 Ha, 284.69 Ha and 640.65 Ha. This increase is therefore caused by the function of productive agricultural land and primary mangrove forest into residential land and city settlements. The function of agriculture and the primary mangrove forest is a thing that can not be stopped because the need for settlements and other city infrastructure is a very important need.

#### Road network pattern

Road network pattern road structure that forms a certain order. It forms the pattern of the road network from the physical loudness of the major network and the road dimensions. The road dimension owned by Marisa and parts of Paguate sub-district is quite varied. This is seen from the road dimension which is owned by the road Trans Sulawesi as the primary road that crosses the village/Kelurahan Buhu Jaya, Libuo, Maleo, Teratai, Palopo, South Marisa to the North Marisa has a dimension of 14 meters street, Jalan Sultan Amai as a collector road that crosses the village/Kelurahan South Marisa, a dimension of Port Road as a collector road that crosses the village/Kelurahan South Marisa, East Pohuwato, and Pohuwato has a dimension of street 8 meters, Jalan Diponegoro, Nani Wartabone, General Sudirman is also the Collector Road has a street dimension 12 meters is a way The dimension of the road owned by each village/Kelurahan shows a level under the role and function of the road. Roads with larger dimensions show higher roles and functions when compared to roads with smaller dimensions.

The road network dimension is the basic form of the road network structure and becomes the insert for road network patterns. The main road in Marisa is the Trans Sulawesi Road and has several branches are in the village/Lotus Kelurahan namely Lotus-Sipatana Road, village/district of Palopo namely Palopo Raya-Diponegoro Street and Jalan Jenderal Sudirman, village/District Marisa Utara that is Jalan Sultan Amai, village/Kelurahan Marisa Selatan is the Port road. The basic form of the road formed on the area of Marisa is linear. The principal road form is a branched arterial road with the Collector Road to the north by the Sultan of Amai Road and to the south by the port which forms a branching junction four. The existence of a four-junction square shows the connection between the center of Marisa City and the suburbs running well. Jalan Trans Sulawesi is the major street in the central area of Marisa and the Jalan Sultan Amai and the Harbour Road is a branch that reaches out to all the activities centers or activities of the townspeople and residential and settlement areas in Marisa city.

The road network when reviewed from the main road basic form and the road width dimension in the central area of Marisa shows the spinal pattern. This spinal pattern is the connectedness between the road in the central area of Marisa, namely the primary road with roads in the activities centers of the inhabitants of Marisa, namely the Collector road. Then the Collector road is in the activities centers or activities of the inhabitants of Marisa is a main road that has a branch with local roads or environmental roads. The pattern of road network formed in the activities centers and settlements are very simple grid form. Road patterns that form in the central area of Marisa and other centres of activity show that it can access all directions either between the central area of Marisa and other centres of activity.

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#### Pattern Analysis and building functions

The pattern of layout and environment and the shape of buildings in an area will give a characteristic or identity and function to the shape and face of the city's appearance. The patterns and functions of the buildings in Marisa

City are still very simple and most of the building is housing and settlements that serve as a place to live and the production of agricultural produce or catch fisheries. Patterns and functions of the building is a single building that is simple and spread that has a residential function. There are other buildings in the research site comprising trading and services, offices, public infrastructures, housing and settlements and industries that make up the city's activities or activities centers.

The shape function and mass of buildings for housing and settlements on average have a height of 4-4.5 meters, with a distance between buildings that are 10-20 meters, except the village/Kelurahan Pohuwato and East Pohuwato that have a distance between the buildings are 1-2 meters and the average KDB/KLB owned is 63/55then combined with the appearance and configuration of the The building forms mass plots (single and block patterns) and open spaces. The building develops larger or smaller with a shape and looks according to the wishes of its owner and is made with a separate building structure. To facilitate the achievement of building, it places the building on the left or right along the Trans Sulawesi road such as housing and settlements, hotels, banks, shops, pharmacies, Puskesmas, government offices and hospitals. The buildings derive from the succession of residential functions and city dwellings that have undergone form and function change as with hotel, pharmacy and banking. These buildings are along the Sulawesi Trans Road. It concentrates on government office buildings in the block plan Office Village/Sub-village of Palopo which became the new downtown Marisa. We intend the concentration of office buildings to facilitate the function of coordination between government agencies. Height of the building comprises 1 floor except the Regent's office, the Office of the Immigration and High Court office of Religion and Makodim 1313 has a building of 2 floors.

#### Analysis of the morphology forms of Marisa city

The land use pattern of Marisa City, Marisa City Road network, and the patterns and functions of Marisa City are a component of the morphological constituent of Marisa. These components have a role in shaping the morphology of the city. The composition of each component illustrates the morphology of the former city. The results of the composition eventually formed the compact city of octopus morphology (octopus shaped/star shaped cities). Octopus shaped/Star shaped cities (octopus) have certain characteristics where the shape of the city center and other buildings developed following the pattern of the existing road network.

In the form of octopus morphology (octopus shaped/star shaped cities), the center of Marisa comprising the center of Trade and Services is on the major road, namely the Trans Sulawesi Road with the density of buildings reaches 22.14%. The development of the center of Marisa area continues to experience the development marked by the awakened land following the pattern of the Road branch network. The density of the building on this branch is lower than 12.35% compared to the central area of Marisa, which is on the major road.

Octopus morphology (octopus shaped/star shaped cities) in both the areas of the activities of trade and services or residential areas and settlements scattered in the city of Marisa comprises three parts namely the core part, the body part and the framework. At the core of the center of activities, especially trading and services, show that buildings have the highest density with the primary activities of commercial or trade. The activities of the core are evidenced by the use of land trade and services used to accommodate the needs of the city residents. The central area of Marisa is on the left and right side of the Trans Sulawesi Road, the Port Road, and the Sultan Amai Street include the village/Southern Marisa villages and the northern Marisa. Part of the body, namely the basic structure of the center of Marisa. The body is formed by road network patterns. Agency is the base on the shape of octopus (octopus shaped/star shaped cities) the central area of Marisa is a branch road (spinal). This branch is a network of roads that have access to all directions. This branch road shows connectivity between the central area of Marisa and the suburbs, forming the basis of the morphology of Marisa city. The framework of the morphological form of the city on this region is the collector road and then branched out with a road network that has a lower function. The skeleton section is the third part of the octopus shaped/star shaped cities and is the development of the previous part that is identical with the awakened land and develops around the existing area

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and follows the road network of branches (spinal). The skeleton section of the area shows a low awakened land followed by a farmland of coconut plantations (copra) and corn plantations in the north and the central fisheries area in the south.

#### Pattern and density, building function in Marisa City

The density of the building is an area that is a percentage between the awakened area compared to the total area of awakening. Inf Marisa there are three density levels of low density (KDB/KLB < 0.50) and Medium density (0.50 < KDB/KLB < 0.70), High density (KDB/KLB > 0.70). The low density in Marisa includes plantations, green open space, and several villages/villages that are not awakened or suburban areas are villages/Kelurahan Buhu Jaya, Libuo, Maleo, Teratai, Palopo, Bulangita, Botubilotofu Indah and Pohuwato. Medium density in Marisa includes the village/South Marisa Kelurahan. The high density of the area of Marisa includes the villages/districts of North Marisa and East Pohuwato. Thus it can be said that the density of the building is directly proportional to city distance. The buildings in the area are the building blocks of shops and residential housing with the height of buildings from 1 to 2 floors. Buildings with high density are located around the road of Sultan Amai and Marisa traditional market with the use of major land is commercial. While the fishermen settlement area in East Pohuwato Village/Kelurahan is a region with the highest level of density with the use of its prime land is settlement. Settlements in this region are irregular and seem grungy.

The buildings in left along the Trans Sulawesi Road differ which have low-to-moderate density, the pattern of the building is linear and rectangular comprising a single block with the height of buildings 1 and 2 floors and have different shapes, sizes, and functions. The function of the building is in left along the Trans Sulawesi Road, namely: (a) building education, (b) office Building, (c) restaurant building/restaurants, (d) hotel building, (e) Building worship, (f) Building dealers and workshops, (h) building houses and shops/kiosks/stalls/businesses, and (i) Residential buildings.



Fig. 3. Types of buildings in Marisa City

Figure 3 shows several types of buildings located in Marisa City. Some buildings show the height of a 2-storey or 4-10-metre building such as Pohuwato District Regent Office, Hotel Sri Golden, and SMAN 1 Marisa. Meanwhile, the buildings of Attaqwa Mosque and Warkop Beringin show 1 floor building. The appearance of the building shows the function of the building itself that has different functions.

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**ISSN: 2277-9655** 

**CODEN: IJESS7** 

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The density pattern of the residential area in the center of Marisa is the village of North Marisa and the East Pohuwato is relatively high and gradually shows a decline towards the suburbs of Maleo Village/Kelurahan Libuo

and Buhu Jaya. This indicates that there is no uniformity in the density of buildings in the region. However, high density levels occupy the area near the roadside which is generally occupied by shops and offices or commercial areas and will decline in the area behind it comparable to the main road distance or Shaft road.

#### Marisa City Administration Center analysis

Marisa City Administration was originally in the Old city center by taking the town square (field) as the center of the orientation . The Sub-district office (formerly Jogugu House) sits on the north side of the town square with the building facing north. City Square (field) serves as a page of the district office, besides that the square (field) is served as a place of various activities or activities of the city's inhabitants such as Independence Day Memorial ceremony, National Education Day Memorial ceremony, subdistrict anniversary ceremony and so forth.

On the west side of the town square (field) stands a mosque, namely the Annur Mosque that serves as a center of Islamic religion and makes the city square as the home page of the mosque. Sometimes the square (field) is also enabled as a memorial place for various religious activities such as Maulidan, Isra Mirat, Eid prayer, Eid al-Adha and Jumatan. The office of Banthayo Poboide serves as a customary stakeholder standing on the east side of the city square. Banthayo Poboide is a chamber of Consultative Hall of the indigenous stakeholders is a space element of the Old city center of Marisa. Banthayo poboidefor the level of village/Kelurahan or sub-district identified or interpreted with the Office of the Meeting hall or Office of the Assembly of village/Kelurahan/subdistrict (MPDK) is being left to the district/city identified or interpreted as representatives of the people in the DPRD. Banthayo Poboide stands on the east side of the town square. In addition, the local Locationbanthayo Poboide is a place for city dwellers to convey aspirations, ideas, and ideas related to governance in the region. The placement of Banthayo Poboide close to the Sub-district office or in one area with the office of Camat (Government Center) is intended to be able to control and coordinate with the government (Camat) in running the system of regional governance.

In the spice trade period, the northern part of Sulawesi Island is one of the Silk Road (Makassar-Kendari-Luwuk-Gorontalo-Ternate-Tidore), so that the security disturbance of the pirates or the high enough pirates can threaten the merchants and security of the region, thus the existence of police/military (Apitalau) is necessary to ward off the disruption of the pirates or pirates and maintain the safety of Olongiaor Buwatulo Bubato (regional government) and its families. The presence of police/military (security stakeholders) is responsible for the security of the entire region. Regional security is a good starting condition to begin the process of regional development.

Police/military (security or Apitalau) is one of the important space elements in the old downtown area of Marisa, where the police/military Office (security stakeholders) are placed not far from the transport lines of both river and land transportation and close to the district office (regional leadership) and close to the residential and urban townspeople. In the downtown area of Marisa, the police/military Office (security stakeholders) is located close to the Sub-district office or on the south side of the town square.

Marisa's traditional market is one element of the structure of a city room which is very important, because the market is the place between sellers and buyers intending to conduct economic transactions and traditional markets there are bargaining process between buyers and sellers so that the interaction occurs social culture.

We can categorize early in the traditional market of Marisa as a spilled market in the Trans Sulawesi crossroad or on the north side of the street and Marisa Town square. Marisa's traditional market position is separated by Sulawesi's Trans road. This position makes it possible to serve sellers and buyers from various hinterland regions that enter the old Town center of Marisa and is very affordable by the city residents so that the market is exploding. It can access the traditional market of Marisa via river transportation other than by land

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transportation. The rise of land transportation using the access of Trans Sulawesi Road encourages the Government of Marisa to reorganize the traditional market of Marisa because they consider it to impede traffic flows and endanger sellers and users of transportation services. Therefore, in 1980, the Government moved the traditional market position of Marisa and shifted to the northwest from its original position.

Marisa's traditional market is rapidly growing and functioning, supporting the old downtown area of Marisa. Around the traditional market area of Marisa there is a post office, a mosque and several stores that support the

existence of the traditional Marisa market that provides the needs of food and clothing for buyers originating from Hinterland region and the inhabitants of Marisa. In addition, housing developments and population settlements grow and thrive around the traditional market area of Marisa.

They also scatter the services and trading in several locations on the right side of the left along the Trans Sulawesi Road. The development of the services and trade in this location is more because of the high downstream vehicles in the Trans Sulawesi Road to switch the function of the home role of a single function into multifunctional (housing, lodging and shop) and the penetration of commercial functions.

School as one building located around the town square. The school is the center of Education for the old townspeople, Marisa. There are two school buildings that stand around the central square of Marisa's Old town, the school has a distinct education level. SD Negeri 01 Marisa is a basic education on the south side of the town square, is on the west side of the city Square standing junior high School 1 Marisa which is a medium level education. These two educational facilities are easily accessible from a variety of directions by the inhabitants of Marisa, or school-age residents are in other hinterland areas close to the city of Marisa. The second existence of educational facilities in the Old Town center of Marisa becomes a symbol as a marker characteristic of the region and has fulfilled the needs of the education both in terms of quality and quantity. The townspeople can reach this educational facility because it is close to city dwellers.

The existence of the square was a central activity of the six other elements in the concept of conceptualizing and became a supporter of the center of power and included in the first circle of spatial structure of the city and became a public space for the population. The town square or the land is open space, is in the downtown area and can not be separated from the center of power. The shape of the Old city center Marisa in the formation of spatial space based on the concept of local wisdom that is Towulongo, where the city square or the land becomes central and then followed by the construction of other buildings around the town square.

The existence of the square in the Old city center of Marisa is currently preserved, but its function has now changed, namely from the city's activity center to become a Recreational city park, among others, as a place to exercise, gathering places and informal trading activities. Using space with a recreational activity can bring the city park more crowded, especially on holidays and evenings, the city park is utilized by Angkringan traders in the game of fortune. Figure 4 informs the morphology of the old downtown Marisa.

Along with the development of the city from time to time the city becomes crowded and the expansion of the region demanded to provide the best service to the residents of the city, then in 2004 the government is moved to the village/Kelurahan Palopo  $\pm 1.32$  km from the previous government center with all the buildings are all new. At present, the city of Marisa has undergone a change in status from district to district. The central government office is the Regent's office which became the sentar of the unknown downtown area with a still carrying the concept of local wisdom that is the concept of traditional Towulongo although experiencing irregularities. Meanwhile, the district office has been transferred to the village/Kelurahan Botubilotofu Indah to give resident services on a sub-district scale.

Deviations of customary Towulongo is the placement of the city Square (field) on the right side of the current Regent office and does not make it a center of orientation that serves to bind all existing buildings around it so that placing the building becomes irregular. If the city square (field) becomes the center of the new downtown area of Marisa, then the clearer the deviation or change. Table 5 provides deviance information on the concept of Towulongo in the central area of Marisa.

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	Table 5.         Some deviations of Townlongo concept in Marisa city center.					
No	City Center forming	The concept of Towulongo	Marisa New Town			
	elements					
1.	Government Center	It stands on the north of the	Not suitable due to west side			
	(buwatulo bubato)	square and faces	and facing north from the			
		southwards.	field			
2.	Deliberation Hall	It stands east of the square	Not suitable because the			
	(Buwatulo Banthayo	and faces towards the west.	building is on the north side			
	Poboide )		and facing towards the West			
3.	Mosque (Buwatulo	Located on the west side of	Not suitable because the			
	Syaraqa)	the square.	mosque is in the northwest			
4.	Security (Apitulu)	Located next to the	Building is not suitable and			
		southwest or the back side	building facing east.			
		of the central government				
		building.				
5.	Market (Sahabandeli)	It is located north of the	Appropriate			
		square or the field and				
		should not be in one area.				
6.	Center Education	Located to the south of the	Not suitable because the			
	(Patila)	square/field. Sometimes it is	school is in the northwest			
		placed alongside Masjidam	near the mosque.			
		one area.				
7.	Square/Field	The city	Appropriate			

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Source: Analysis result, 2019.

Deviations of customary Towulongo concept in the new city center area Marisa can be seen in the picture 5 below.

#### 5. CONCLUSION

Marisa is the capital of Pohuwato District is an urban fairy area far from the influence of the National Activity Center (Gorontalo city). The city of Marisa has a characteristic of a village-city frame zone (Uzbeks) that is fertile (Jonah, 2008) grows and develops naturally for a surplus of corn and coconut plantation agricultural commodities (Soetomo, 2009). The mixing of these characters can be showed by the pattern of land utilization, demographic characteristics, and availability or public infrastructure services (Rudiarto, DKK, 2013). The area of corn and coconut plantations reaches 1580.43 Ha and 1450.53 Ha (2017) with a production amount of 65,880.53 tons and 185.10 tons. The area of corn and coconut plantations is a very dominant land besides the bushland and settlement land that has a consecutive land area of 1580.43 ha, 1450.53 ha, 845.12 ha and 640.65 ha that are scattered in some villages/neighborhoods in Marisa City. However, the last few years have occurred over the functioning of land from non-awakened land to an awakened land. The occurrence of land function is for the urbanization flow and natural increase of population. Urbanisation and the increase of population cause the need for land also increased, so that there is land function.

Land-over function causes a change in the physical appearance of spatial patterns and the structures of the city Room (morphology of the city), where the city morphology comprising density and road patterns, the amount of land vegetation or land use, patterns and blocks of buildings, and open space (Soetomo, 2009) has undergone over the function of land into housing and settlements, shops, offices, workshops, hospitals, hotels and banking. The land use pattern of Marisa City, Marisa City Road network, and the patterns and functions of Marisa City are a component of the morphological constituent of Marisa. These components have a role in shaping the morphology of the city. The results of the composition eventually formed the compact city of octopus morphology (octopus shaped/star shaped cities). In the form of octopus morphology (octopus shaped/star shaped cities), the center of Marisa comprising the center of Trade and Services is on the major road, namely the Trans Sulawesi Road with the density of buildings reaches 22.14%. The density of the building in the lower branch was 12.35% compared to the central area of Marisa, which is on the major road.

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The growth and development of Marisa is heavily influenced by the city's economy based on corn and coconut plantation farming. This is drawing from the activities of the city's inhabitants, who rely on both commodities that have comparative and competitive advantages that become the base economy. Corn and coconut commodities have high economic value and are traded regionally and internationally to form an external market. Revenues received from the base economy were used to buy imported goods (domestic) and were invested back into the base economy. In 2017, corn and coconut commodities had a contribution of PDRB Kota Marisa amounting to 16.28% and 14.77% with a revenue value of 296.45 billion and 1.45 billion rupiah. The value of this income is then used by the district government to build various public infrastructures in supporting the base and on base

economies, while for the residents of the city the revenue is used in the investment of building houses, education, health and for daily consumption. While it invests the individual or private parties to build hotels and re-invest in the base economy.

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