

THE MORPHOLOGY OF THE AGRARIAN TOWN: MARISA

Rural Urban linkage that change the rural life to the urban agriculture life

Sugiono SOETOMO*, Irwan WUNARLAN**

ABSTRACT

Urban rural theory has been born with characters Mc Douglass and Terry Mc Gee, who are part of the new paradigm regional development for developing countries.(the New Paradigm of Regional Development, United Nation of Centre of Regional Development,2001).

However, many research activities are carried out in high urbanization areas. Even Terry Mc Gee saw urban villages in the context of a metropolitan city in his research in Jakarta (1991).

In our research, we want to look at a region that is far from urbanization, a small city on the island of North Sulawesi, one of the Republic of Indonesia's big islands, outside Java, where the national capital is located.

In a very rural area of a provincial town where cities cluster, the town of Marisa grew from a village center to eventually become the capital of a district, the city has corn, coconut and fish products which are an economic powerhouse (LQ di atas 1).

In the development of the city, the city's morphological structure, both the land use pattern and the distribution of buildings, can conserve agricultural areas. And here is the secret why Marisa remains a city that can continue to develop its agricultural potential as a basic economic factor for the city. The base economy exports these agricultural products to various big cities and even abroad. From the results of these exports, life develops with happy facilities. Trade and service activities grow, making Marisa a City and an agricultural city that maintains the city's sustainability.

Export activities are formed with the existence of national transportation facilities in roads and ports because Marisa city is a coastal city.

Two types of morphology keep agriculture conserved. The potential is very valuable so that the spatial model must be preserved in the city master

* Prof., Diponegoro University, Faculty of Engineering, Departement Urban and Regional Planning, Indonesia.

** Dr., State University of Gorontalo, Faculty of Engineering, Department of Architerture, Indonesia.

plan and become a model for agricultural, urban spatial planning. As for the part of the city that offers separate urban development with both morphological typologies,

So an urban-rural linaculty of Ekage phenomenon occurs on a truly remote regional scale, so it does not occur like Java Island with metropolitan cities to small cities and continuous urban, rural areas.

This has become a model for developing areas outside Java with a small population area, during which President Joko Widodo was developing various infrastructure and investments in domestic and foreign areas outside Java, particularly in eastern Indonesia.

Keywords: urban rural linkage, agriculture, morphology

1. INTRODUCTION

Mc Douglas and longer have sparked the relationship between urban and rural areas in dealing with metropolitan developments and the context of globalization in this decade by Terry Mc Gee, (2001). To bring strength from the bottom together up to meet global powers. Mc Douglas made a diagrammatic model that is very well known in terms of urban-rural (Regional Networks Rural-Urban interdependence; diagram 1). A model to replace the top-down approach model of the Growth Industrial Diffusion Model system. (Mc Douglas, 1998).

The context of Urban-Rural linkage develops as a more advanced strategy than agropolitan, which looks more at urban development in rural areas.

Urban power which becomes rural consumption and vice versa, even in every layer from the level of the cities of national centers to secondary areas to small cities, the condition of urban-rural linkage is developed so that there is comprehensive urban-rural throughout the national territory, a strategy that brings rural forces into the context of globalization and other.

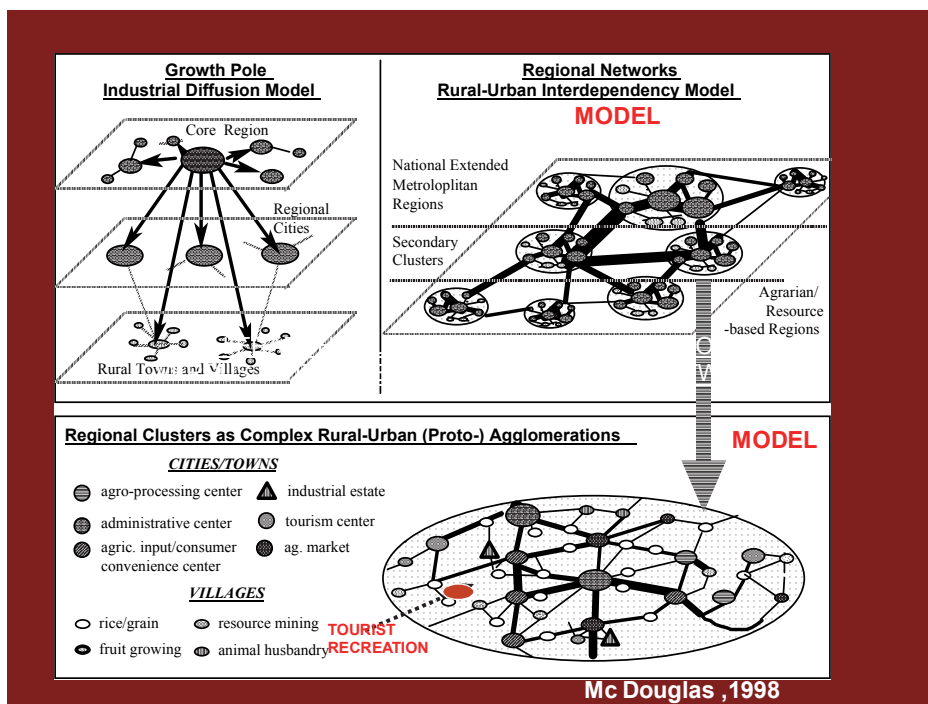


Figure 1. Growth Pole, Regional Network and Regional Clusters as Complex Rural Urban Agglomeration Model

However, the model shows that rural areas are still co-opted by urban areas, namely urban activities, and consumption, even though rural areas receive income from the city. What must be guarded is the local villagers, their education must be encouraged. But education that has been controlled by the local population. Do not modern forces that can destroy the traditional rural ecology. The planning concept or model must be described in detail, namely, social, cultural, economic, and political relations at the field level.

The model made by Mc Douglass is more applied to areas where the urbanization process is high and spread within an urbanized region. How metropolitan cities, big cities, medium cities, to small cities quickly penetrated rural areas. How will rural areas enter into urban consumption? Agents of globalization are rapidly moving into rural areas. This will bring rural power under urban strength, but it does not go directly to the metropolitan area. This flow continues to bring the power of small and medium cities to the metropolitan area as a global city.

In the framework of the theoretical model mentioned above, in this paper we will precisely examine the relationship between rural and urban areas in a small town that grows from a village with a surplus of agricultural products. The village is

progressing and growing independently by exporting agricultural products for urban living needs. The urbanization of the region in the area is still very low, the city is located outside the island of Java, where Java is the center of the national population.

Marisa, a small town is located on the northern island of Sulawesi (Celebes), located far from the island of Java. Indonesia is an archipelago with a huge area, with an area length that can be almost the same as the distance between Paris and Istanbul. Sumatra is the major islands in the western tip, Kalimantan and Sulawesi, in the center, and Papua in the west of Indonesia. And the island of Java is not included in the 4 big islands. The island of Java where the national capital city of Jakarta (population of 9,607,787 in 2010) is located and the major cities of the provincial capitals are located (4 large cities over 1.5 million inhabitants), many cities under 1 million inhabitants up to small town under 0.5 and a huge urban-rural area. On the island of Java, a small island with an estimated population of 60% of Indonesia's total population, which represents 268,074,000 people in 2010. Java Island has an urbanization rate of 40% to 59%. It is an agricultural, horticultural place that has a very high history and rural culture and diverse so that in Java developed a huge urban rural area. (desakota)

The urban-rural network theory, as in the diagram above, is suitable for the Java Island area. Whereas the islands' condition, which is much larger than Java Island, has a small population and is more concerned with forest and mining plants' production. The study of Regional Planning and urban character in these large island areas outside Java is very lacking. Meanwhile, the theory developed in books is more about urbanization areas such as in Java.

So our research tries to find out the findings of problems and the potential of regions with local resources to develop urban poles based on local potential. The horticultural agricultural sector, such as in Java, has not developed much outside Java, but forest-based agricultural products such as copra in Sulawesi are huge.

During the Joko Widodo president administration from 2014 until the current second period, the politic of distribution of development on a large scale was carried out very vast outside island of Java. Infrastructure development such as seaports, toll roads, airports, and various basic agricultural facilities such as dams and others have been built in many major islands of Indonesia since 2014. In fact, starting in the second year of Joko Widodo's administration, large rice fields' development has begun to be built. on the island of Kalimantan, the development of industrialization of nickel mining products and the tourism sector, and other foreign and local investors' sectors.

So the Sulawesi island research regarding urban and regional planning is needed to anticipate government development programs outside Java. The island of Sulawesi, which is almost twice the island of Java, has a population far less than the island of Java. Marisa City is located in North Sulawesi, namely, in the province of Gorontalo. Marisa's city began to grow from the fishery sector, which has pioneered the relationship between the village and other cities by the sea. And in this small town, the people export copra and maize, some of which are processed into oil, which can be marketed to big cities and even abroad, after the construction of national, regional roads and several small ports. The village center developed into a town, and industrialization in the city was only a few coconut oil factories and warehouses for copra and corn demand for export. Marisa's small town is located far from the cluster of cities around the capital city of Gorontalo Province. (seeth map)

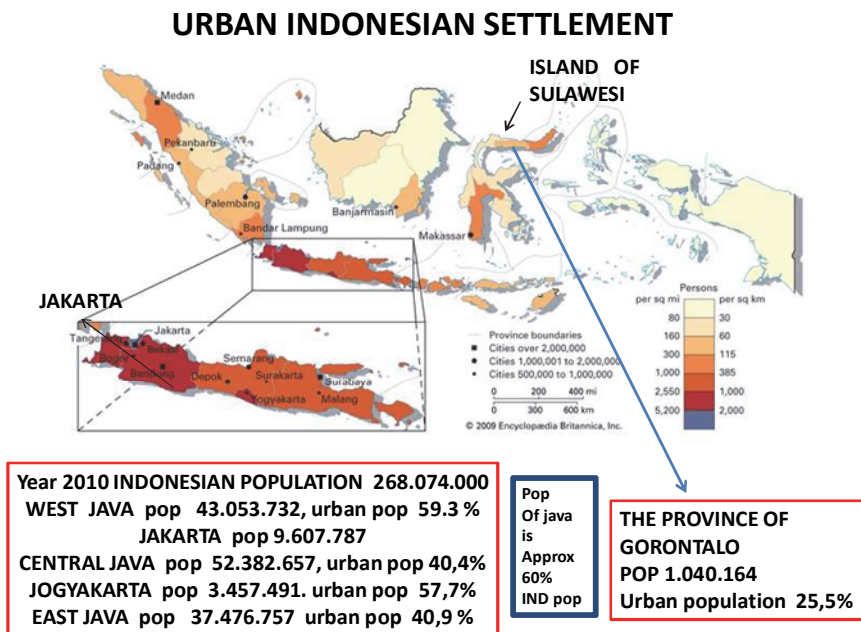


Figure 2. Urban Indonesia Settlemen Source Statistic National Indonesia

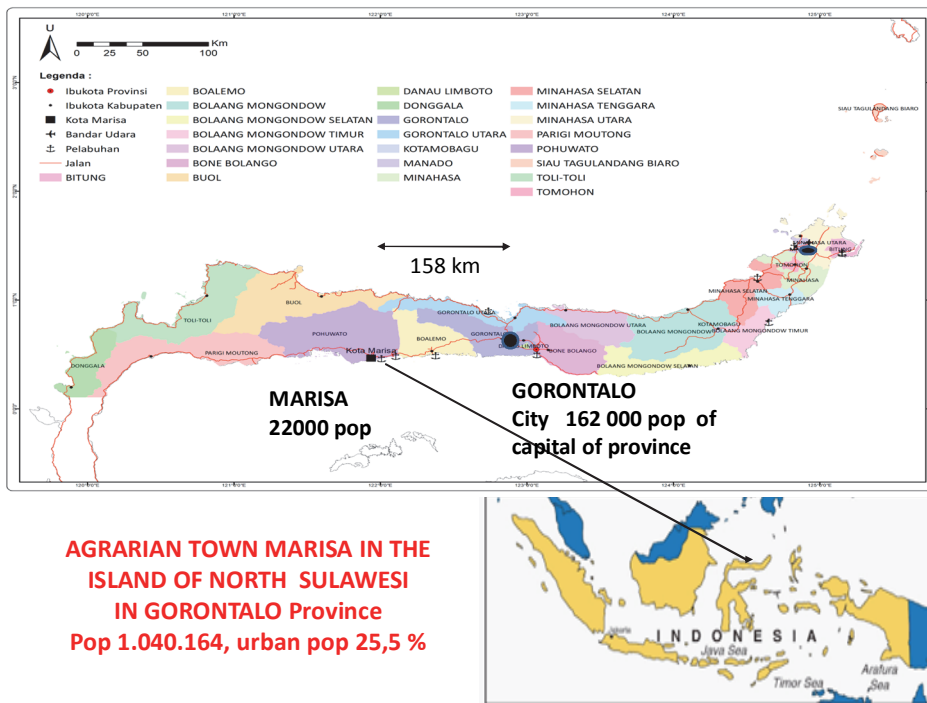


Figure 3. Agrarian town Marisa in the Island of North Sulawesi at Gorontalo province, Indonesia

1.1 Research objectives.

The purpose of our research in the city of Marisa is to find a potential form of spatial and building morphology, how the town can grow together, and depends on the agricultural sector that requires agricultural land. Urban life always creates land-use changes that are needed to be used as the location of buildings. Simultaneously, the land is a place to grow coconut plants, which are also economically needed for urban development costs. So here, the problem of land use and building morphology is important so that the agricultural sector can be conserved.

How can farmers who own copra farms develop with a level of life that develops into urban life ?

How can export activities be carried out easily in foreign countries?

1.2 Research Methods:

Research methods with a positivistic philosophy that begins with deductive power find temporary answers or determine variables. Statistical quantitative

data and mapping were obtained, and through visual, physical observations and qualitative descriptive analysis were carried out. Finally, the form of space and activities in the context of morphology can be found.

2. MARISA TOWN IS A TOWN THAT GROWS FROM AGRICULTURE PRODUCTS

Marisa village is located on the beach facing the southern sea (see map)

With an area of 5985.60 Ha. Growth began with the settlement of fishers from immigrants from the Bugis, a tribe in South Sulawesi. Historically, Bugis immigrants who developed the fishery sector became the forerunner to the growth of Marisa's population settlements. They live by fishing voyages and selling them to various big coastal cities in the south of Sulawesi. Since the beginning, Marisa has been in touch with big cities through a network of shipping and fishing activities. So that the activity of the export-import process has continued with the life of fishermen settlement. More and more Bugis migrants developed the agricultural sector, corn, consumed as a staple food. Indeed, corn in ancient times became the staple food of the Sulawesi region. Besides that, there was transmigration from Java not far from Marisa. They developed horticultural crops and rice that supplied vegetables to the Marisa area.

From the fishing settlement in Marisa, which then grows on the local road heading north. The meeting of the local road with the national, regional road built by the Indonesian central government in 1980, which traverses from the east starting in the city of Gorontalo to the west, creating a hub of activity. This node is a growth point where settlements begin to develop.

It is the national road that makes the development of corn and copra export activities. Land on the island of North Sulawesi, especially along the coast and towards the north, has developed coconut tree forests since the Dutch colonial era. In the era since the Dutch colonialism, copra was actually exported, but the export did not grow the people's economy but to the colonial government.

With this national road, exports of corn and copra to major cities have so far occurred in and outside the country.

The development of the coconut oil industry and warehousing and a small port has also developed in Marisa. With the business of being an exporting area for agricultural commodities and trade and service activities that also occur in Marisa to meet life's needs, urban life is formed.

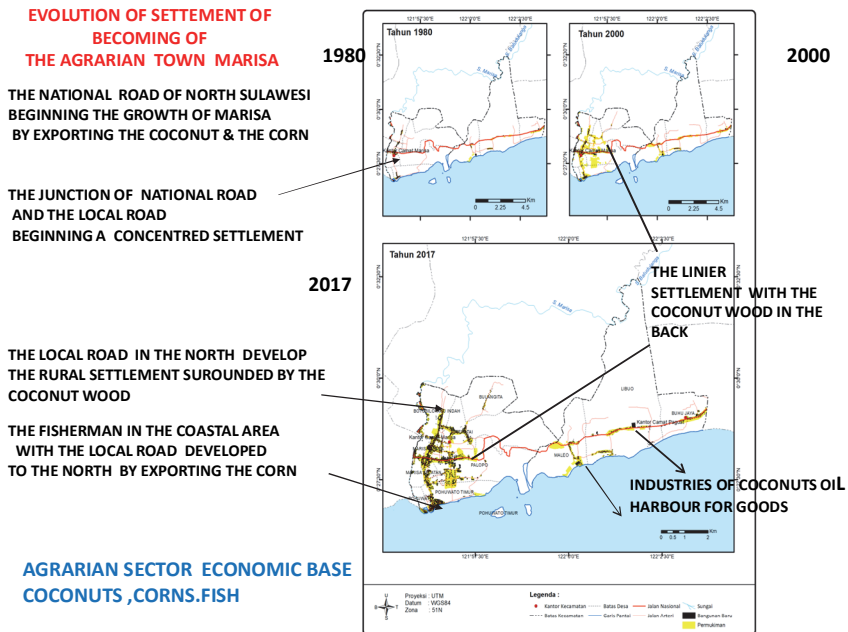


Figure 4. Evolution of Settlement of Becoming of the agrarian town Marisa

3. THE DEVELOPMENT PROCESS OF MARISA

EXPORT OF COMODITIES AGRICULTURE
copra,corn and fish from the town of Marisa

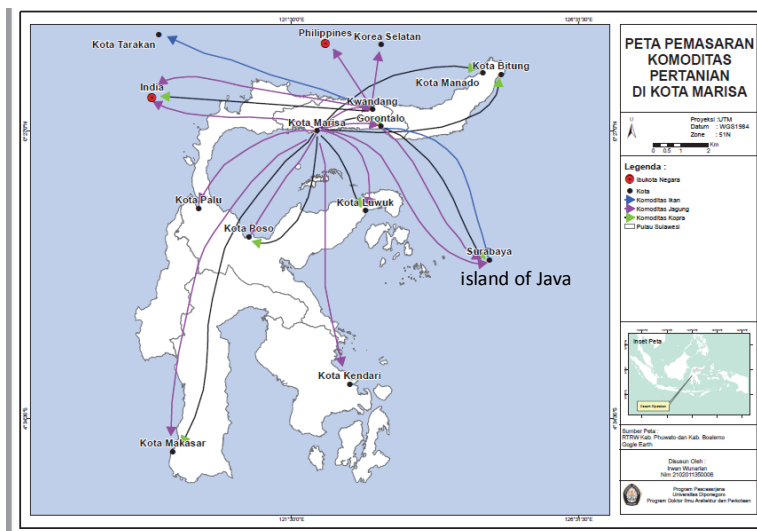


Figure 5. Export of Comodites Agriculture : copra, corn and fish form the town of Marisa to anthor city

In the development of exports of raw agricultural products and semi-finished goods for the industry in the form of coconut oil and corn, these activities become the economic base for the town of Marisa. The value of the product has export power. (LQ economic base values: copra 1.86; corn 1.86 and fisheries 1.27). Seeing the LQ value above, which is far above one, it means that the commodity is high export. The export power means bringing money to Marisa and this power is used for the cost and development of settlements and cities. The cost of agriculture here is very cheap because it does not require planting costs such as copra in the form of plantations or extensive coconut forests, only corn plants with agriculture without irrigation only use rain as seasonal crops, as well as fisheries in raw exports.

The GRDP value of these agricultural commodities is still very dominant . It can be seen that the LQ value of the trade, hotel, and restaurant sectors is also above one, meaning that these activities exceed a large area. Seen in simple terms with economic indicators, the city of Marisa has high agricultural activities, primary agriculture becomes an export commodity, and on the other hand, in Marisa, the urban entrance is hotel services, trade, and development from the government sector because finally, Marisa became the capital of the district (regency). Indication of urban life. Building construction can be seen from the development of the construction sector's value in GRDP very high. The export economic pattern of the Mirasa sector and the development process by the government make the town physically and socially occur. The population continues to flow in looking for work to make the big city of Marisa.

The above can be seen in the image in the diagram:

"From an agrarian economic base to urban life" (see fig)

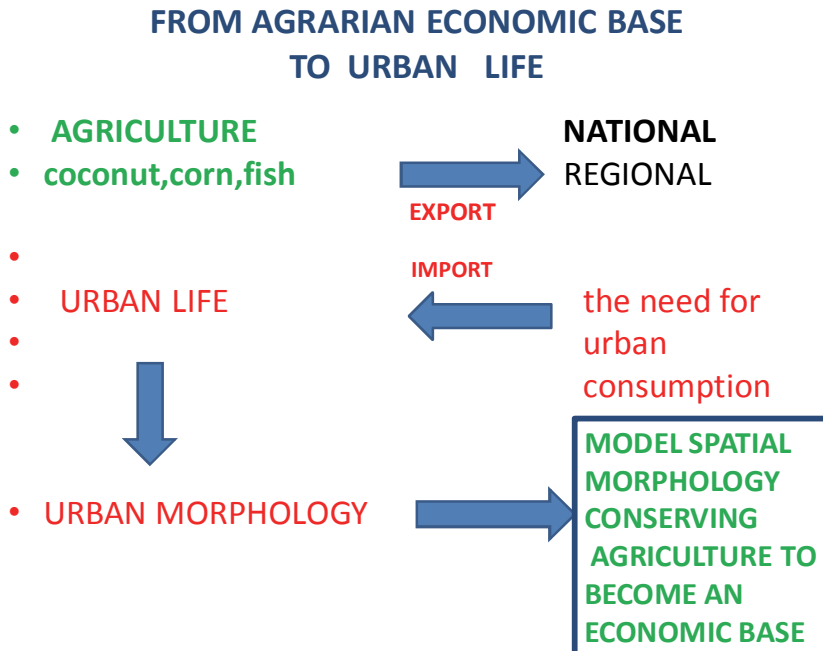


Figure 6. Agrarian economic base activity to urban life

4. MORPHOLOGICAL FINDINGS OF AGRICULTURE TOWN THAT CAN PROTECT THE AGRICULTURE SECTOR

In the development of the morphology of the distribution and grouping of buildings, we can see that the national highway is the axis for the formation of export activities (basic economic activities) where we see that all commodities both on the north and south of the national highway are sent to the axis of the highway for export. The city's morphology describes the economic pattern of the agricultural base with the axis of the road as an export route for agricultural commodities. This situation can be seen in the figure below.

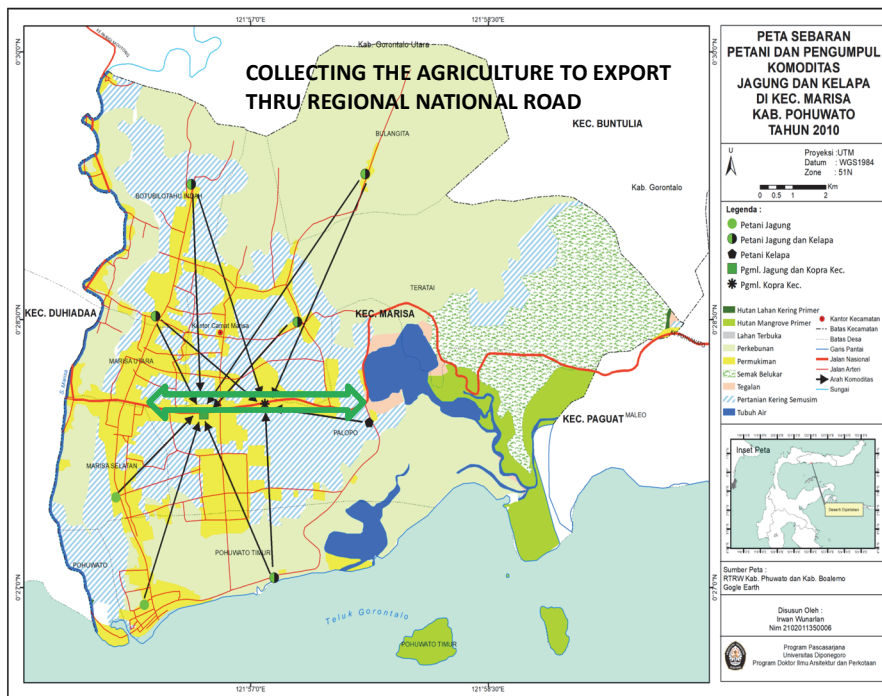


Figure 7. Collecting the agriculture to export thru regional national road

And then, we will see how the structure of the morphological pattern forms the area of urban development and the development of the conservation of coconut and maize plants . So that the growth of Marisa a town that produces buildings can conserve agriculture as the city's economic base commodity, which makes dualism between urban development and agricultural conservation going well. Here is the key that an AGRICULTURAL TOWN can exist simultaneously: Urban development and agricultural conservation as important factors in protecting the economic base.

The development of the city of Marisa can be seen in the map below (fig).

TIPOLOGY MORPHOLOGY OF SETTLEMENT

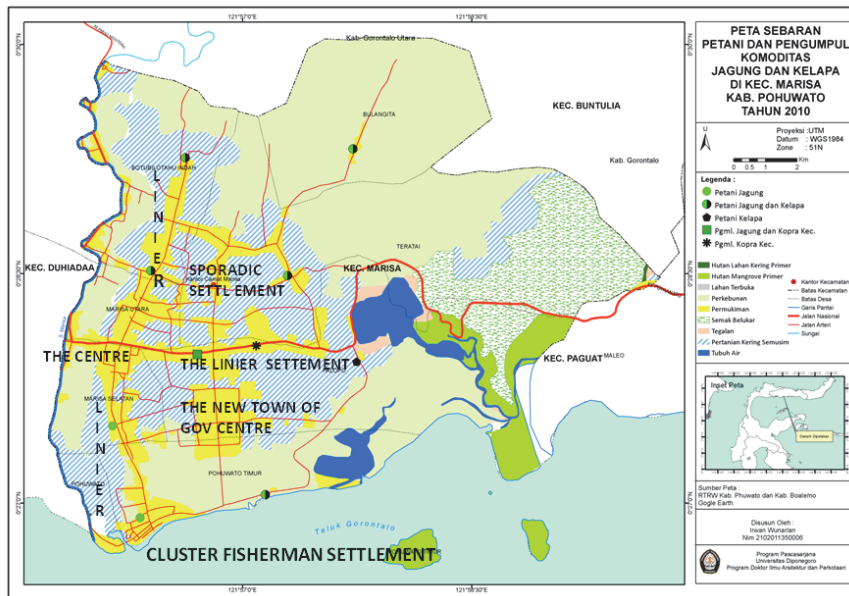


Figure 8. Typology Morphology of Settlement at Marisa Town

Eventually, the city developed into two parts : one to the south of the National Highway and one to the highway. In the southern part, there is an urban settlement developed by the center at the intersection of the local road and the National Highway, the development of a new city built by the provincial government as a facility for the regency capital administration and agglomeration of fishing villages and tourism facilities on the beach.

As for the northern part of Jalan Raya Pembangunan, rural, coconut forest and corn plantation, it is here that we can find a linear agglomeration along the National highway and behind it is a coconut tree forest. And the development of the north developed settlements that spread within the coconut forest and corn plants.

To the north of the National Highway is an urban development that still protects the coconut and maize forests. There are two typologies of morphology: one typology in the form of linear agglomeration along the national highway, which serves as an export route, and another typology in the form of the distribution of houses in coconut maize gardens. Both typologies are urban findings that protect agriculture. Meanwhile, the south of the main road development is a development like normal national urban settlements. Many coconut plants exist behind houses, but in their development, they have become urban buildings.

So from the results of the analysis, two major types of morphological typology can be found: one part of the typology, which is the development of urban space, and one part of the typology of agricultural space, which still accommodates the development of agricultural conservation model settlements in urban development. (See pictures)

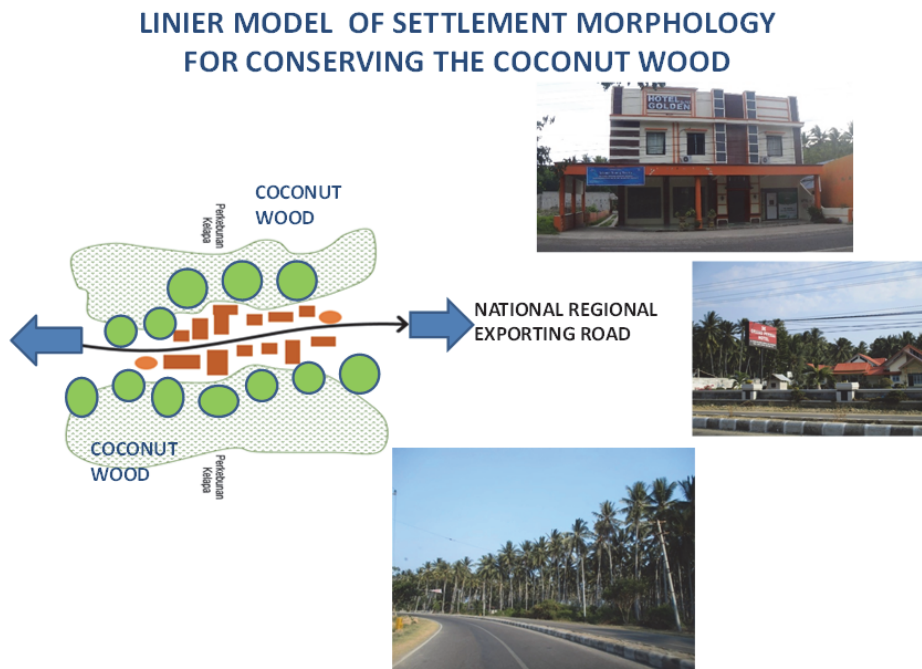


Figure 9. Linear model of settlement morphology for conserving the Coconut Wood

**THE SPORADIC MODEL OF SETTLEMENT MORPHOLOGY
WITHIN THE COCONUT WOOD
FOR CONSERVING THE COCONUT WOOD**

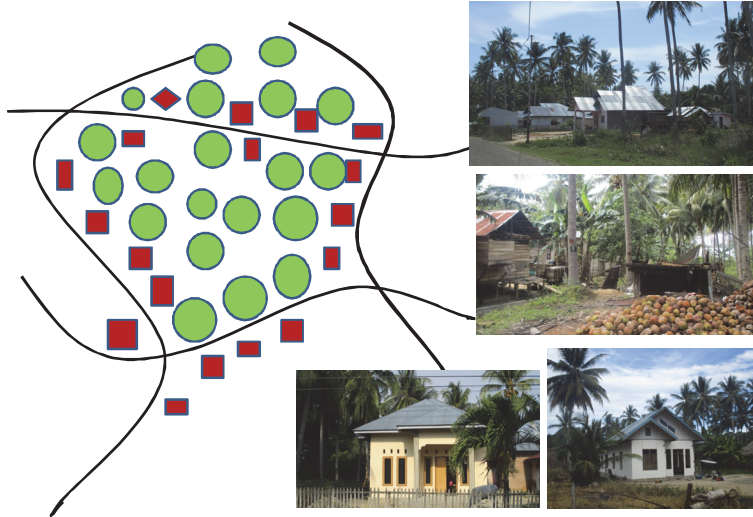


Figure 10. The Sporadic Model of Settlement Morphology

LOCAL GOVERNMENT CENTRE CLUSTER



THE MOSQUE

LOCAL
GOVERNMENT
OFFICE

Figure 11. Local government centre cluster at Marisa town

INDUSTRY AND STORAGE,PORT OF COPRA & CORN



Figure 12. Industry and storage, port of copra and corn at Marisa town

5. CONCLUSION

Briefly and taken by a very valuable student studying phenomena in the small town of Marisa. Experts have never observed the current urban, rural theory. Most of them are preoccupied with the process of urbanization and globalization. Indeed, the trend towards urbanization and the global economy has created global cities.

However, the problems associated with the large urbanization process resulted in theories. However, Indonesia's vast area consists of many islands, a huge area, a population of more than 220 million, a concentrated population, and urbanization on Java. To solve urbanization and development and good equity, empty areas must be done on how to foster development there, so not only studying in low-income areas and high urbanization is misleading for Indonesia. Lessons learned from Marisa's city, with its small population growing into urban areas, the strength of rural-urban relations on a broad level, even abroad. The strength of local potential which has global power from agricultural products that are not only mining products. The relation between rural and urban areas must be studied, and regional facilities such as ports and roads are less complicated facilities but grow export power.

In the implementation of two contradictory types, namely between agricultural land use and the use of urban land that produces buildings, the key is the

morphology and land use pattern itself. So the microarchitectural factor is the key to the conservation of agriculture as an economic basis, and the land is built as urban development.

So the land use typology and urban morphology must be used as the basis for making SPATIAL so that there are no patterns of space for our theoretical models.

HOW TO PROTECT MODELTYPOLOGY WITH LINIER AND SPORADIS MUST BE STRENGTHENED IN DESIGNING AN AGRICULTURAL CITY STRUCTURE THAT HAS OTHER FORM OF A CITY.

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