

## LAND SPACE AND RIVER SPACE AS THE LIVING CONCEPT IN PAMINGGIR SUBDISTRICT

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**Abstract:** Settlement is a form of physical culture that is very important in human life. Its form is influenced by aspects of nature, human, house, network, social life and culture. These aspects form the characteristics of the settlements, which distinguish one from another. There are seven villages in Paminggir Subdistrict. These villages are settlements located on a large area of water known as Lake Panggang. Each village has the same form of settlement phenomenon because of being in the same environmental conditions. Based on the results of research conducted in three villages, the specific form of settlements tends to be influenced by the mindset of land space and river space on the water environment. These two concepts of space arise from the accumulation of understanding of the environmental conditions in which they live. This study describes the form of land space and river space in the perspective of the community in Paminggir Subdistrict and its influence on the direction of settlements development in these villages

**Keywords:** land space, river space, living concept, Paminggir District

**Abstrak:** Permukiman merupakan wujud budaya fisik yang sangat penting dalam kehidupan manusia. Wujudnya dipengaruhi oleh aspek alam, manusia, rumah, *network*, kehidupan sosial dan kebudayaan. Aspek-aspek tersebut membentuk karakteristik permukiman, yang membedakannya dengan permukiman lain. Terdapat tujuh desa di Kecamatan Paminggir, desa-desa ini memiliki permukiman yang berada di atas air yang menggenang yang dikenal dengan nama Danau Panggang. Masing-masing desa memiliki fenomena wujud permukiman yang sama, akibat berada pada kondisi lingkungan yang sama. Berdasarkan hasil dari penelitian di tiga desa di Kecamatan Paminggir, wujud permukimannya secara spesifik cenderung dipengaruhi oleh pola berpikir tentang ruang daratan dan ruang sungai pada lingkungan yang tergenang air. Kedua konsep ruang ini muncul akibat akumulasi pemahaman tentang kondisi lingkungan tempat mereka hidup. Penelitian ini mendeskripsikan bentuk ruang daratan dan ruang sungai dalam perspektif masyarakat di Kecamatan Paminggir, serta pengaruhnya terhadap arah perkembangan permukiman pada desa-desa tersebut.

**Kata kunci:** : ruang daratan, ruang sungai, konsep bermukim, Kecamatan Paminggir

### BACKGROUND

Settlement is one of the primary human needs that must be fulfilled to live worthy in accordance with their needs. Besides as individual needs, settlements can be a communal need if the individual is married and living in community, because, in principal, humans are social beings. Therefore, the house will basically develop together with the

necessary infrastructure and facilities to form settlements within a region.

Another thing that shapes the existence of a settlement is the "possibility of life." Ritohardoyo (1989) argues that the existence of settlements in a region is caused by the possibility of living for the community in accordance with their skills. The greater the probability of life given by a region, the greater

the probability of the number of people living in the area, or the greater the concentration of the population of the region.

The above settlement process also happened in Paminggir Subdistrict in Hulu Sungai Utara. There are 7 (seven) villages, namely Palbatu Village, Tampakang Village, Bararawa Village, Sapala Village, Ambahai Village, Paminggir Village and Paminggir Seberang Village. Each village has a relatively separate settlement.

Based on local stories from generation to generation, this settlement has been around since  $\pm$  500 years ago. Started from a resident of Daha State who wandered around the lake, then found a land with potentially abundant fish in the middle of Lake Panggang (Palbatu Village now). At this location, the individual begins his life by making a lanting house (floating on the lake). As the population increased due to the descent and the increasing number of residents from Daha State who came to this place, finally it formed 7 (seven) groups of dispersed settlements. This group of settlements eventually formed a system of government and was granted administrative boundaries so that it became 7 (seven) villages in one Paminggir Subdistrict as it is today. According to Sumaatmadja (1981) in Banowati (2006), the dispersion of settlements is seen due to the presence of settlement areas, and or where there are no settlements in a region. It is well-defined in the settlements on Lake Panggang.

Once the house develops into a settlement and then settlements are scattered, settlements will have a certain character called the pattern / form of settlement. The form of settlements in an area is much influenced by the physical condition of the environment – the topography of the region. The influence of the topography is very visible in the form of settlements in rural areas, one of which is a settlement that extends along the river stream. As revealed by Sumadi (2003) that the settlements are highly dependent on environmental conditions, such as extending along the river, the road, and the railroad.

Population of Paminggir Subdistrict in Lake Panggang area is inhabitants of Daha State or better known as the Banjar Tribe. The Banjar tribe is known to have the settlement form

extending along the riverfront. This also happens in the settlements on Lake Panggang; the settlement form is also elongated, and it is said by the inhabitants that the settlements extended along the riverfront. According to the inhabitants, they built lanting houses on the river and the house on stilts on land. However, in fact, their houses stood on a large area of water. So, it can be concluded that the form of settlements on Lake Panggang tend to be influenced by the way or pattern of thinking about land space and river space in this type of environment. These two concepts of space derive from the accumulation of understanding of the environmental conditions in which they live.

## OBJECTIVE AND LIMITATION

This research aims to determine the form of land space and river space in the perspective of the community in Paminggir Subdistrict and its influence on the direction of settlements development in this region. This research is conducted only in three out of seven villages in Paminggir Subdistrict due to the consideration of cost, time, and distance. However, further research into four other villages is currently underway.

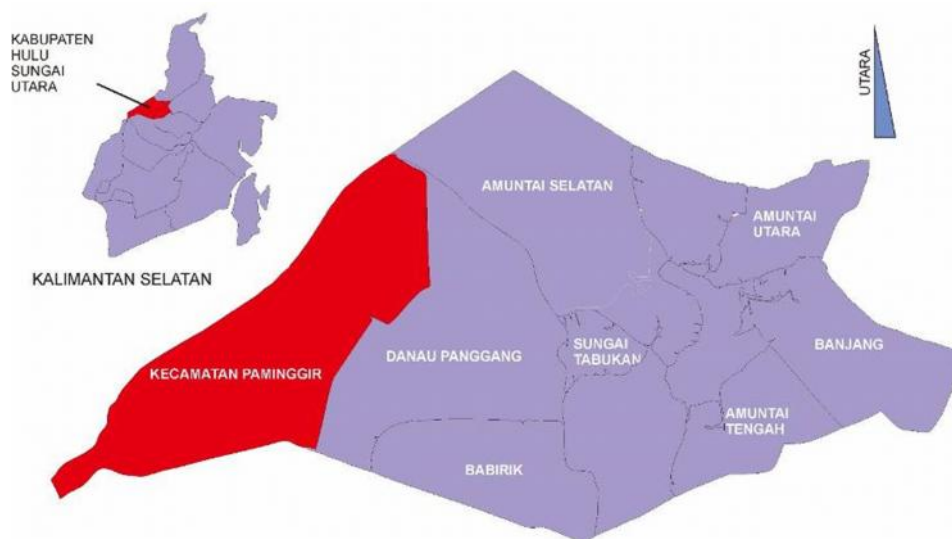
## LOCATION

The research is located in Paminggir subdistrict of North Hulu Sungai (HSU) (Fig. 1). Regency which is 205 km from Banjarmasin City (185 km to Lake Panggang, 20 km to Paminggir Subdistrict). According to the data from the Development Planning Agency at Sub-National Level (known as Bappeda) of HSU Regency, Paminggir Subdistrict has an area of about 156.13 km<sup>2</sup> (the second largest in HSU District after South Amuntai District). HSU is only 2.38% of the Kalimantan Province or about 892.7 km<sup>2</sup>. Of the total area in HSU district, most of them consist of lowland (swamp land) flooded permanently and periodically. The flooded area is  $\pm$  570 km<sup>2</sup>, most of which is still untapped.

One of the subdistricts in HSU Regency whose whole area is in swamp area is Paminggir Subdistrict. The area of Paminggir Subdistrict consists of 0 Ha of non-flooded land; 14,953 Ha of periodic flooded land; and 669 Ha of

permanently flooded land. Although the area is large, the population of Paminggir Subdistrict is the smallest in number compared to other districts. Based on population data of HSU

Regency in 2014, the population of Paminggir Subdistrict is about 7,585 people, with an average population growth rate of 1.42% per year.



**Figure 1.** Paminggir Map

## RESEARCH METHOD

This research uses descriptive-qualitative method with stages as follows:

### 1. Preliminary Study

The first stage in this study is to conduct literature studies as background knowledge. Collected data include: reference books, reports, articles, thematic maps related to the research area, and primary data of initial observations through field visits. In addition, it also collects literature materials that will be used as a data source for researchers to construct theory to solve problems.

### 2. Area Delineation

The second stage is to delineate the area. The theory of image area. To determine the delineation of the region, this research used the theory of image by Lynch (1960). The determinant variables are: Landmark, Path, District, Nodes, Edge.

### 3. Field Research

Field research is conducted after the delineation of the area. Variables that become the object of field observation are Land Space and River Space in the perception of the community. Moleong (2008) states that the qualitative method is a procedure in a study that produces descriptive data where the data obtained in the form of written or oral words of the people and

observed behavior. So, in-dept interviews is conducted in the first phase of field research to explore the perception of the community of Land Space and River Space. The second phase will be participant observation based on information obtained from interviews with informants to get the data directly in the context of community life. While the observation conducted, sketch and photo are recording for data.

### 4. Descriptive-Qualitative Analysis

In this research, the analytical technique used is descriptive-qualitative analysis technique. Moleong (2008) explains that descriptive research is a study that describes the state of the research object at the present moment as it is based on facts. At this stage, the data obtained are described systematically, factually and accurately according to the facts, properties and relationships between phenomena to investigate the interpretation of the Land Space and River Space in the perspective of the community of Lake Panggang. This approach is more emphasized on natural background and individual (inhabitants) holistically.

### 5. Interpretation

Interpretation is the final stage of this research process and covers all previous stages, from data collection to data analysis. Khan (2008) states that interpretation is the stage of building

a statement. According to LeCompte (1992), interpretations can be done with several approaches such as consolidating and applying theory, using metaphors, and synthesizing

results. In this research, the interpretation will be done by synthesis approach to construct the image of Land Space and River Space. Here is the flow chart of this research stage (Fig. 2.) :

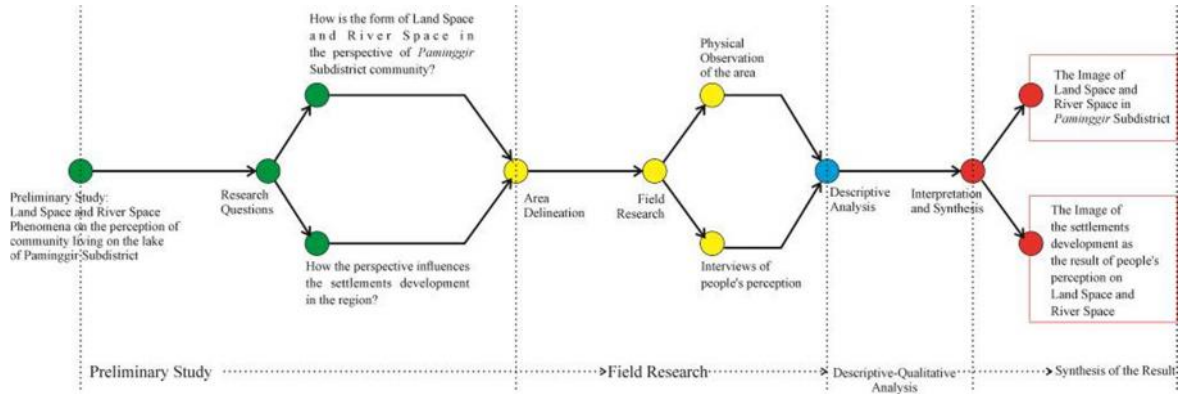


Figure 2. Flow chart of the research

**RESULT AND DISCUSSION**

This part elaborates two subjects as the result of this research; firstly, the description of land

space and river space in three villages in Paminggir Subdistrict, and, secondly, the description of direction the settlements development in those three villages (Fig. 3; Fig. 4; Fig. 5).



Fig. 3. Area Delineation in Pal Batu Village



Fig. 4. Area Delineation in Tampakang Village



Fig. 5. Area Delineation in Bararawa Village

### Land space and river space in Paminggir Subdistrict

Paminggir community understands their environment as a settlement and its dwellings for living. One of Paminggir community's understanding of the environment is the concept of land space and river space. Both of these concepts affect the form of settlements in terms of areas that may be built (land) and areas that should not be built (river). Both of these concepts become distinctive when the boundary between the two (land-river) is not visible due to the waterlogged environment.

Physically, this community marks the boundary between land and river by using a sticks that are

plugged in the boundary; lined up to form a clear boundary line. It is not known when this tradition began to take place, but every male adult in general has ever marked the second boundary of this space by sticking sticks at the edge of the river. When they find a new boundary, the sticks are immediately plugged in. This tradition has prevailed for generations, so now, the boundary between the land and the river becomes clear (Fig. 6). In addition to the sticks, nowadays, the boundary markers are aided by the presence of electric poles mounted along the borderline between the river and the land (Fig. 7).



Fig. 6. Wooden sticks mark the edge boundary



**Fig. 7.** Electric poles mark the edge boundary

In the settlements area, the boundary between the land and the river is very clear. The land area is marked by long-lined dwellings as the borders of the area. These dwellings are built opposite, indicating that there is a river that separates between land. Living on the banks of the river has become a cultural feature of the ancestors of Paminggir community, the tribe of Banjar. According Kasnowihardjo (2004), tribes in Kalimantan, since prehistoric times to the present live, has placed the river in a very important role. Rivers are not only a source of clean water but also the souls of their lives. Sellato (1989) mentions that since the early arrival of Malay immigrants some 1000 years ago, they have settled on the banks of great rivers (Negara River and its tributaries) in South Kalimantan. In those days, most of the area was still a giant bay that stretched from the sea to the foot of the Meratus Mountains. This region in ancient times was part of the sea (Petersen, 2000).

Physically, the condition of the natural environment of the settlements area of Banjar community has a very distinctive characteristic; areas consist many rivers and swamps (Aufa, 2015). However, the settlements in Paminggir have different characteristics from the Banjar community settlements in general. According to Snyder (1985), the settlements form possibly for functional interests, based on the pattern of human activities and the influence of the environment – both physical and non-physical (social and cultural) – that directly affect the pattern of activities and the process of space formation. As the tribe of Banjar, Paminggir community inherits the tradition of living by the river. However, because the environment where Paminggir community lives is different from the Banjar tribe in general, so, the form of settlement is different. Its uniqueness lies in the

character of the waterlogged environment, so that the so-called river banks are not seen and only understood by the local community.

According to information from the locals, to recognize the boundary of land and river space, it is easiest when the lake water is receding. According to the data from the Development Planning Agency at Sub-National Level (known as Bappeda) of HSU Regency (2009), the effective depth of land in Paminggir is divided into categories; 30-60 cm for the lands and >90 cm for the rivers. An area of 14,953 Ha is in periodic flood conditions and 669 Ha is constantly inundated. Although the area is waterlogged, it has a low depth compared with the depth of the rivers.

The understanding of river space as an area not used for buildings and land space for buildings does not significantly affect Paminggir community to build. This is evident from the distribution of buildings/dwellings that tend to cluster along the stream, forming a linear pattern with the river as its axis. They are not randomly constructing buildings on a land area of 14,953 Ha. They prefer to live in a group of their folk (bubuhan) and amongst other folks in one village. Bubuhan in Banjar culture is a term for the kinship relationship of a group/family. It is considered more economically, socially, culturally and politically/governmentally beneficial. So, what they understand of land space, it is only limited to the banks of the river only.

Here is an overview of land space and river space in the perception of Paminggir community in three villages: Pal Batu Village (Fig. 8), Tampakang Village (Fig. 9) and Bararawa Village (Fig. 10).

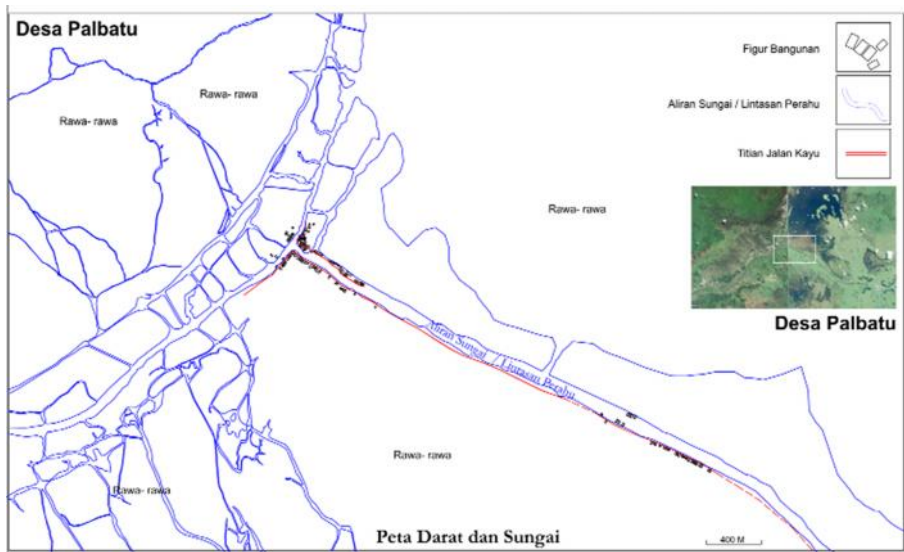


Fig. 8. An overview of land space and river space in *Pal Batu* Village

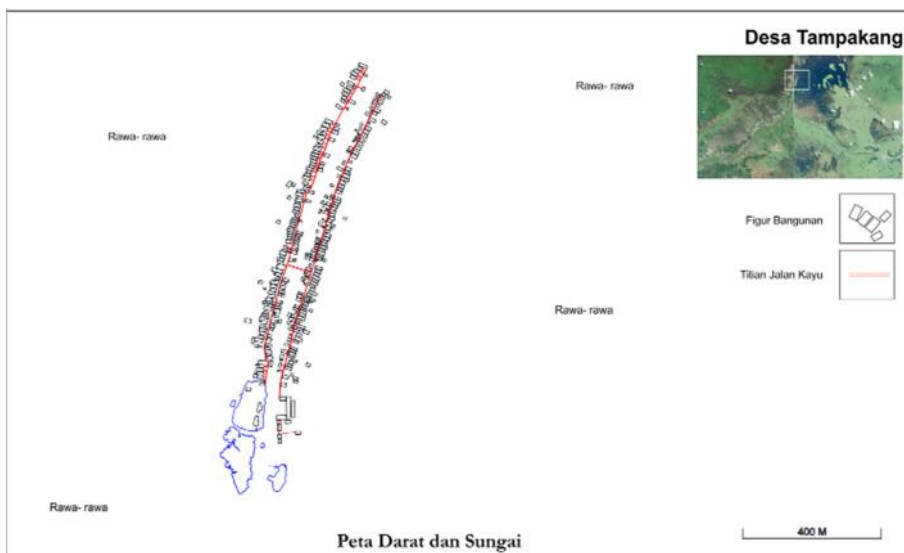


Fig. 9. An overview of land space and river space in *Tampakang* Village

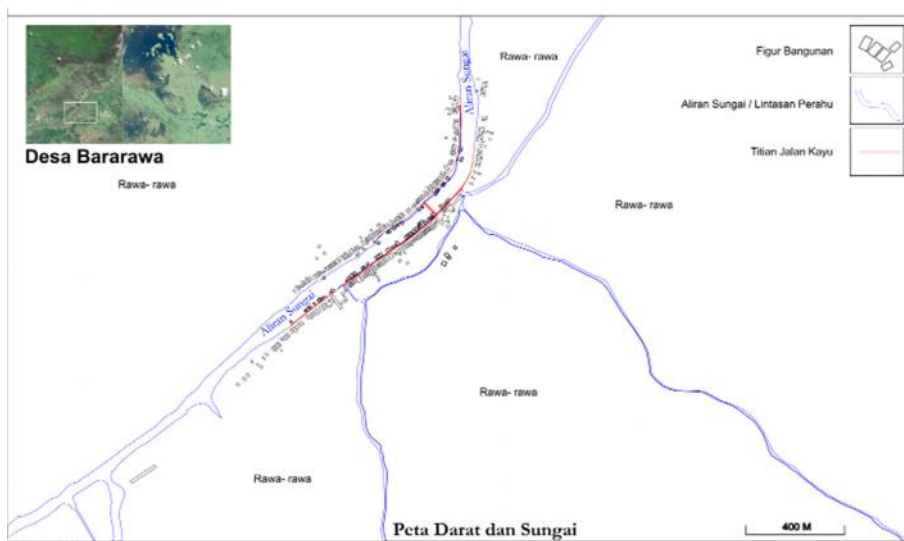


Fig. 10. An overview of land space and river space in *Bararawa* Village

### Direction of settlement development in Paminggir

The distribution of buildings/dwellings in Paminggir Subdistrict tends to cluster along the stream, forming a linear pattern with the river as its axis. It can be seen in Fig.8-10, the linear pattern occurred forms a regular and simple/vernacular settlement arrangement along the stream. The development of settlements in three villages tended to be the same, but have differences, especially for Bararawa Village.

In the villages of Pal Batu and Tampakang, the direction of the settlement development follows the river flow without any further expansion to the land (Fig. 11-12). In Banjar tribe culture, this is called upstream and downstream development (Upstream is the beginning of the water flow, while the downstream is in the

direction a river or stream is flowing). For land that is not adjacent to the river but still waterlogged, it is generally used for agriculture and fisheries. While the land that appears to the surface and not tranquil, it is used for gardens and forests. The growth and development of dwelling areas in this research followed the flow pattern of the river. In the research area, there is no network of highways, thus it is strengthening the function of river accessibility. Rivers as a transportation access and water source for the purposes of life become the starting point of regional growth. Plantation and agricultural areas on the land have affect the grouping of settlements towards the river banks. So, the pattern of land use indirectly formed by itself. Settlement areas are located on the banks of rivers while agriculture and farming are away from rivers.



Fig. 11. Direction of development of *Pal Batu* settlement

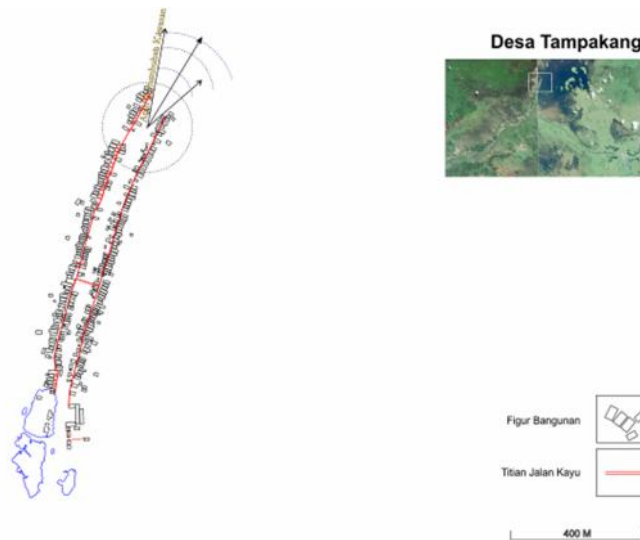


Fig. 12. Direction of development of *Tampakang* settlement



In Bararawa Village, the direction of settlement development, prior to the government's plan to make a road connecting South Kalimantan and Central Kalimantan, is similar to that of other villages (Pal Batu and Tampakang) (Fig. 13). However, since the government's plan to make the road connecting the two provinces across the lake, the development direction in Bararawa Village begins to expand the land, leading to the road plan. Today, the road construction plan is currently halted, leaving a trail of unfinished project, but the development direction in this village is still moving towards this road plan.

There is no tendency to build settlements in Paminggir on the river because its functions are vital for the life of the community. Its existence affects the orientation of the dwellings/buildings. Each dwelling/building located on the riverbank; the position of the building entrance is on the border of the river and land (riverside/land edge). The orientation of the building to the river is reinforced by the connecting bridges between the dwellings, and

the bridges connecting the entrance and the river as a place for boats (jukung in local language) leaning and parking.

Rivers for the Banjar tribe is means of transportation route, so they live closer to the rivers (Aufa, 2016). In Paminggir, the absence of roads does not make the river the only transportation route. The waterlogged area that formed the lake becomes the land space for the community functioning as an alternative path for small jukung (they call it "ces"). Not all the land space becomes popular trails, especially when the lake water receded. Generally, they use a path formed by the activity of swamp buffaloes in the lake. The path made by swamp buffaloes make it easy for "ces" to pass, especially when the lake water receded. Aside from being an alternative transportation route, the path made by swamp buffaloes also serves as a marker of the boundary area. In Paminggir, bubuhan is the name for the group of swamp buffaloes' owners whose buffaloes are in the same cage.

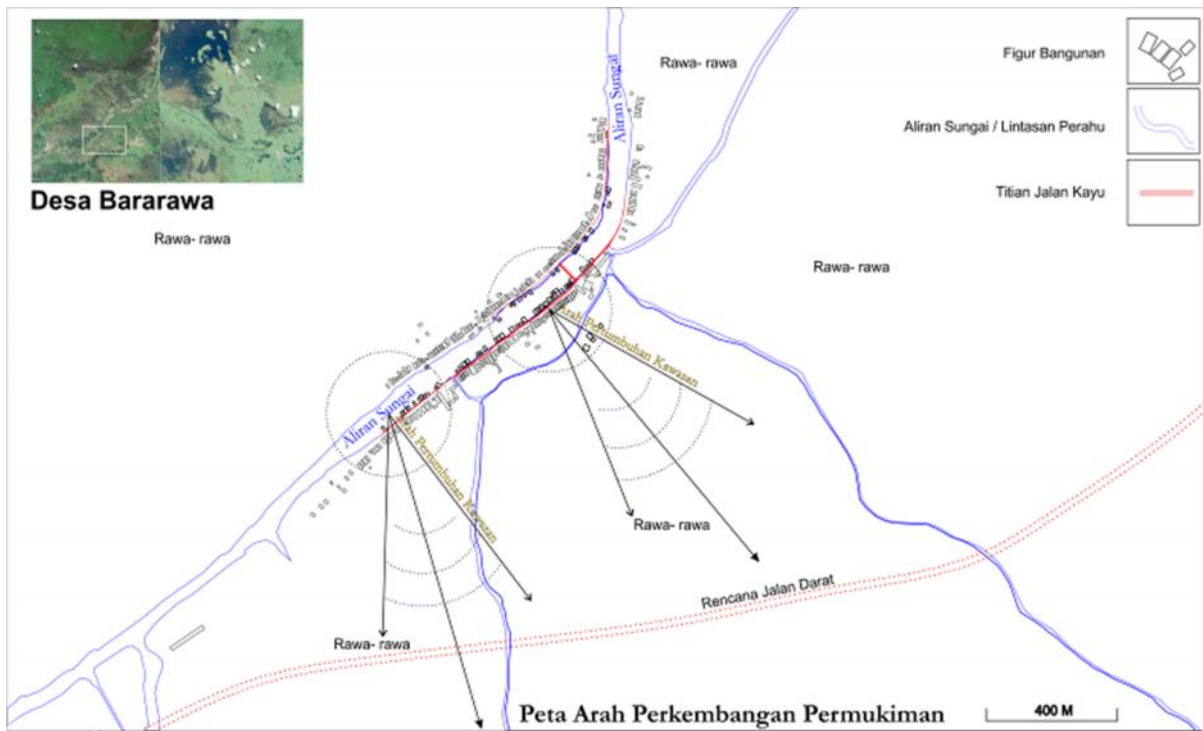


Fig. 13. Direction of development of Bararawa settlement

## CONCLUSION

River space for Paminggir community is an unpopular space to be built / inhabited. This space is created because of its deeper topographic condition from its surroundings with a constantly inundated condition. This space is functioned by the community as a transportation route, inter-village access and inter-village connector.

Unlike the river space, the land space is a periodic floodplain, so that at certain times the land is seen appearing on the surface of the lake. However, not all land is expanding by the Paminggir community. Land space is only limited to the banks of the river only. This is due to considerations of kinship (bubuhan), social, economic, cultural and political / government.

As for its effect on the direction of development of settlements in the region is the settlement develops regularly, simple/vernacular, linear and following the flow of the river. They still hold the traditions of the Banjar tribe that build along the river from upstream to downstream.

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