

## **Correlation of Cultural Activity of River Bank to Tidal River Transportation Function**

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**Abstract** - Mentaya River is a tidal river that is closely related to the coastal and sea. History shows a close relationship between settlements and rivers, in areas of Borneo that have very close relationships between rivers in the formation and development of people and communities. From the development of the people who live on the banks of the river, they can make the river as one of the sources of their life and income sources, both from the aspects of transportation, economic, social and cultural. No one if settlements on the river bank is one characteristic of Sampit City. However, with the progress of the times, there was a decrease in some river culture activities followed by the decline of the Mentaya River function. Based on the settlement condition of Mentaya River, the researcher used the questionnaire sample based on the beginning of the community from 1970-2015 to deeper the knowledge and implementation of the society on river culture and its effect on river transportation function. The research was carried out by Quantitative Rationalistic research method, through correlation analysis technique approach, the result of positive influence and change activity response with different relationship level and influence from some river culture activity to preservation of function of Mentaya Sampit River.

**Keywords:** *Tidal River Culture, river bank settlements and River Transportation Function*

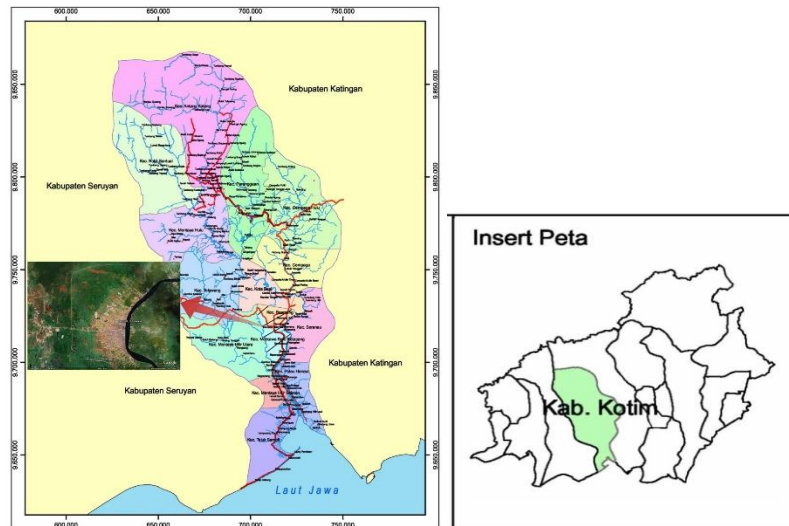
### **1. Introduction**

The Mentaya River located in Sampit City has an important role in the life of the local community. The Mentaya River has an average depth of 6 meters and a width of approximately 400 meters with an average depth of 6 meters (BPS Kotawaringin Timur, 2008). The Mentaya River is the tidal river with the upper watershed is the Java sea (the sea that separates the island of Kalimantan and Java). This condition is used as a water transport route with Sampit-Semarang and Sampit-Surabaya, as well as corporate routes in transporting its production materials. So that River Mentaya give a big influence to the wheels of the economy and the development of social life in urban Sampit.

The existing condition of Mentaya River, on the banks of the Mentaya River is used for various activities, from settlement activities and other activities. Settlements on the banks of the river even has become one of the characteristics of Sampit City. Characteristics of buildings on the banks of the Mentaya River is the type of floating and the stage. This certainly gives the influence of community activities because culturally Sampit City people are very close to the river and difficult to be separated by the river. Activities such as washing toilet toilet (MCK), waste and transportation. Another activity is using the river as a source of life such as taking fish as any consumption, using river water for drinking (through processing). Besides as a source of life is also used as income (economy) as a driver kelotok (river transportation mode) and fishermen.

Decrease of river function occurs in Sungai Mentaya. From the existing conditions that have been studied, the function of the river is as a function of ecology, source of life, economy and transportation. Ecological functions are disrupted by pollution. The function of the source of life is disrupted because the river water as a source of water for the inhabitants of the coast has been polluted, this is in accordance

with diarrhea disease becomes a problem during the dry season each year. In some periods of the previous year, as in 2009, the case of diarrhea remains the largest case handled by hospitals in Sampit City. Unhealthy lifestyles and still many people who consume river water that has been polluted, an indication that the river experienced pollution (Suara Karya, October 6, 2009). Another river function is the function of river transportation which also decreases and as many people have moved to land transportation.



**Figure 1.** Location Of Mentaya River  
Source : <http://wongtaniku.files.wordpress.com>

## 2. Literature Review

### A. Culture, City and Neighborhood Settlements

Cultural manifestations are objects created by human beings as cultured beings, that is, real behaviors and objects, such as behavioral patterns, language, tools of life, social organization, religion, art and so on wholly aimed at helping humans in living a life in society (Hermanto and Winarno, 2009). In the culture they do activities that make it a characteristic. Characteristics that make them different from other communities that we can see directly with the patterns of behavior in individuals or communities in carrying out activities of daily life.

The physical form of a city is formed by the growth and development of all urban activities, whether social, economic, cultural or political (Wilianto, 1992). It shows that the physical city can be an indication to see the living conditions of the local city community. Physical form of a city will affect the activities of society as well as community activities can affect the physical form of a city. Community activities will create a physical element that can bring back the reaction of the community to the physical environment that lived.

Social values exist in relation to land use, which may relate to customs, moral attitudes, taboos, governmental arrangements, cultural relics, and traditional patterns (Chapin, 1972). It can be concluded that the behavior of society is an action and human nature in the land use, actions and behavior is caused by human needs and desires to apply both in social life in the environment and in fulfilling economic desires. The needs and desires that apply in human life will give effect to the values contained in the aspects of life.

Human behavior in the background such as the views of life, beliefs held, the values and norms held will determine the behavior of a person to be reflected in the way of life and its role in society (Haryadi and Setiawan B, 1997). The way life is owned and the system of activities of the community will determine the type and place for the system of activity. It is sufficient to state that the psychological and mental or psychological aspects of man and his cultural culture will shape the activity within and the form of his space.

## **B. River Function**

In the new legislation or in the “PP” (government regulations) Number 38/2011 mentioned that the river has a function as:

- a. Human life, in the form of the benefits of the existence of rivers as providers of water and water containers to meet household needs, environmental sanitation, agriculture, industry, tourism, sport, defense, fisheries, power generation, transportation and other necessities;
- b. Natural life, in the form of the benefits of the existence of the river as a restorer of water quality, flood suppliers, and the main plant ecosystem of flora and fauna.
- c. The function of the river as a water quality restorer needs to be maintained by not burdening pollutants that exceed the natural recovery capability of river water.
- d. River functions as a flood dealer should be anticipated so as not to cause harm to community activities around the river.
- e. The function of river as the main generator of flora and fauna ecosystem need to be kept so as not to decrease. Flora and fauna ecosystems cover a wide variety of river bush vegetation and various species of animal species. Species of animals in the river include: worms (invertebrates), snails (mollusca), crabs (crustaceans), frogs (amphibians), lizards (reptiles), insects (insect), fish (fish), and birds (avian).

Kodoatie and Sugianto (2002) also added that the river is a cross-sectoral that has a dual function of economic, ecological and social functions.

- a. Having an ecological function, is a living place for some living creatures that live either in river bodies (water) or in border.
- b. Has economic function, because it has the potential for economic value such as production space, tourism and raw materials that can be developed as the seed of the local economy.
- c. Having a Social function can serve as a link between the community (as transportation), activities and interactions. This social function becomes one of the psychological aspects needed by people living on the water's edge.

The function of the river above is also reinforced by Agus Maryono (2005) which mentions that

- a. Functions as an Eko-Drainage Channel, as a channel which has the function of holding water to not rapidly flow downstream, in order to withstand the rate of sedimentation. The natural concept of eco-drainage is how to dispose of excess water no later than the river
- b. Functions as ecological, rivers have ecological functions related to flora and fauna. So that river pollution will affect the ecological value and threaten the habitat of flora and fauna that exist in the river. The ecological component of the river can be represented by river area vegetation, river cliffs and river banks. Even deadwood in a transverse or sloping position can indicate the hydraulic function that dead wood will

inhibit the flow of water downstream, the flow of water is damaged so that water is held upstream.

c. As a Transport Function

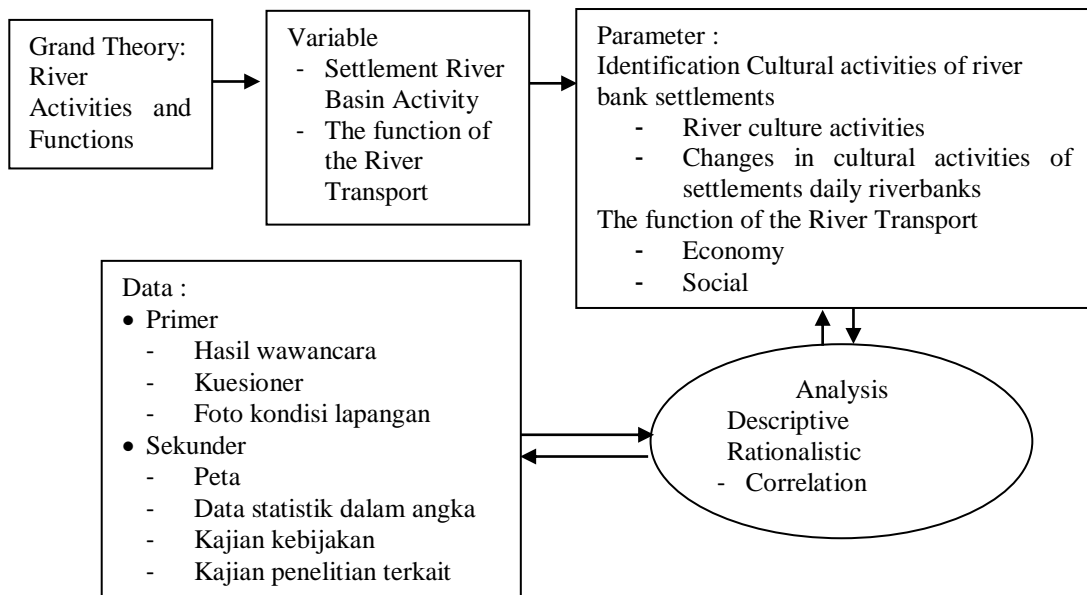
As a function of transportation, the river can be seen from various feasibility, by Maryono (2005) that is

- a) From Economic Feasibility Results; River transport (ship) has a very high effectiveness, this can be seen from the ability of the ship with the most effective carrying capacity. A freighter with a length of 110 m and a width of 10 m can replace 87 trucks or as many as 50 railway cars. Ship Effectiveness This shows the ability of a single-ship fleet to save on gasoline and labor usage.
- b) Environmental feasibility; one of the reasons for the destruction of the quality of the river and the dumping of waste and waste because the river is not utilized optimally as a cheap means for transportation or recreation of history and conditions in Indonesia. The condition of the river that is not used as a means of transportation makes the river become neglected and has a fake function value for the community. If the river does not have a transport function, then the river will only be viewed as a place of water reservoirs. Unlike the river that has the function of transportation, the river will be more noticed because if not treated it will affect the river transportation system so will inevitably will make the river more attention and care. In outside Java such as Sumatra and Kalimantan, rivers have traditionally been used as a means of transportation.

### 3. Research Methods

The research method used is rationalistic quantitative method. According to quantitative rationalistic valid science is an abstraction, simplification, or idealism of the field and terbukti with logic system. In rationalistic conclusions it is not just to present the results of numerical analysis, but to present something that can be part of a larger construction by emphasizing that with intelligence capable of every fact can be seen attached to others. (Muhadjir, 1996). Quantitative research methods state that truth appears in measurable behavior so that it can be studied objectively and neutrally.

Quantitative research methods state that truth can be seen and measured in behavior so that it can be studied objectively and neutrally. Given the name Quantitative because of the leaked quantity into the quantity quantity in data collection and analysis (Purwanto, 2007). This is also reaffirmed by Daniel Muijl, 2004, as an experimental method of a test under controlled conditions designed to demonstrate one is known to be true or to test the truth of one conjecture.



Source: Sudaryono, 2006

Figure 2. Rationalistic Quantitative Research Methods

## 4. Analysis

### A. Transportation Activities of Mentaya River

The river transportation is still used by the community by using modes of transportation in the form of boats, speedboats "kelotok" (small boats with machine), "jukung" (boat without machine) as a means of transportation. Ships and speed boats are usually used for long distance travel (inter district or district), "kelotok" used as a mode of public river transportation used for travel within the city (Kota Sampit). While "Jukung" is used by the public as the most private river transportation that is owned and used for traveling at close range (between house to house). Batang (Trunk) became one of the important facilities in riverbank settlement, not only because as a place of various activities of the community on the river but also a sign that a house can carry out river transportation activities or houses can be visited by kelotok. Houses that have no trunks carry out activities on the river (including transport and toilets) on public stem.

There are two functions of river transportation located in the Mentaya River, which is the function of economic and social transportation :

- 1) The function of economic transportation, According to Urban Planning Product (RTRW) Kabupaten Kotawaringin Timur, Kota Sampit has one of the main functions of the regional river transportation service center with the support of the river Mentaya. Mentaya River flow has an important function in supporting the economic development. River area can be used as river transportation infrastructure. Mentaya River which becomes the center of river transportation services can be an effort to increase economic income both for government and society. Mentaya River becomes the center of river transportation services and the production of fish that can add value of income or input
- 2) The function of social transportation, as one of the water transportation routes that connects primarily between homes, water transportation becomes one of the connecting channels of communication among the residents in the settlement of Mentaya River.

**Table 1. Modes Transportation**

| No | Modes of transportation               | Transport route   |
|----|---------------------------------------|---|
| 1  | Jukung (small boat without a machine) | Inter home to home (close) is usually between neighbors               |
| 2  | Kelotok (small boat with a machine)   | In the city usually carry human passengers                            |
| 3  | Ship                                  | Inter districts, provinces and islands usually carry human passengers |
| 4  | Tongkang (Barge)                      | Between districts, provinces but usually only transporting materials  |
| 5  | Speedboat                             | Between districts, provinces usually carry human passengers           |
| 6  | Motor Ship                            | Inter Island, namely sampit-island Java                               |

Source: Observation Mentaya River's, 2010

## B. Cultural Activities

River Mentaya, still performed rituals of trust in the form of a very festive annual event in welcoming all the existing community. The event is a safar bath, a tradition that is still used as an annual agenda in Kotim Regency is Safar Bath by throwing themselves into the Mentaya River. This is done so that there is mutual respect between communities and government officials, and to familiarize and strengthen the sense of unity of leaders and society. Thus the preservation of the River Mentaya which became the pride of the people of Sampit will be kept clean.

People who will follow the process of Mandi Safar, before throwing themselves into the river Mentaya, have equip themselves with Sawang leaves are tied in the head or at the waist. Sawang leaves were formerly dirajah by local elders or pious scholars. According to the belief, the use of Leaf Sawang is that people who bathe awake safety from all interference both from animal disturbance and spirits.

**Table 2. Analysis of Cultural Activities of Mentaya River and Society Interaction Results**

| Activity Type                               | Time   | Origin   | Meaning  | Status                      | Information                     |
|---|--|--|--|-----------------------------|---------------------------------|
| Mandi safar                                 | Annual (Arba Musta'mir day or the last Wednesday in the safar month) | attributed to the salvation of Noah's ship from the flood, the split of the Red Sea by Moses and Aaron, and the Prophet Ibrahim who avoided the fire. All that happened in the month of Safar. | Sanctify the body as well as the soul of evil nature, malice, contempt, slander or sheep and also to eliminate bad luck. | On going                    | Activities in urban settlements |
| Swimming Competition                        | Annual   | Trust across the myth of who can cross the Mentaya River will achieve success  | A fighting spirit and life   | It has not been implemented | Last activity in the mid-1980s  |
| Dragon Boat Competition (typical of Borneo) | Annual (augustus)  | Independence celebration   | Filling the independence and introducing the typical area  | It has not been implemented | Last activity in the mid-1980s  |
| Ornamental boat competition                 | Annual (augustus)  | Celebretion the Mentaya River as the main transportation   | Filling the independence and introducing the typical area  | It has not been implemented | Last activity in the mid-1990s  |

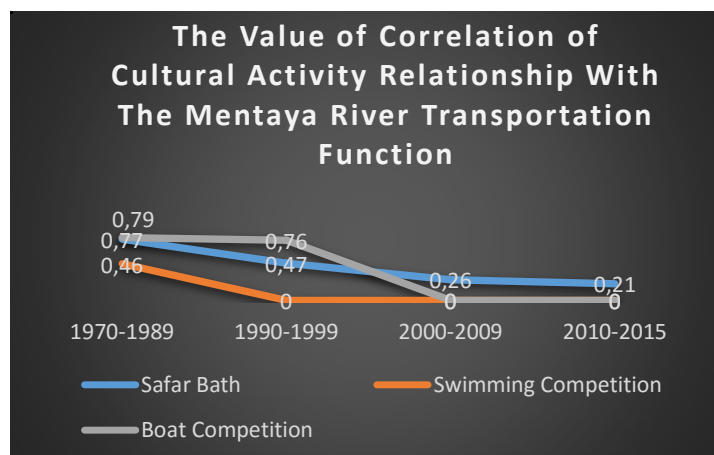


### C. Correlation of Cultural Activity on River Transport Functions

From the analysis results can be seen to have a very strong positive relationship, especially in 1970-1980 which is the peak year of rivers transportation good transportation activities, economic and social community. The bustle of transportation activities is supported by the history of the formation of community settlements that started from the banks of the river and make the river as the main public transportation routes. So at that time the river transportation activities to function for the route of movement of people, the movement of goods to as a container socialize the community. the transportation age of the river in 1970-1980, the income of klotok owners can reach Rp 4,000 / per day with the gold koversi at that time in the range of Rp 1,000 pergram, so the opinion is now about Rp 4.000.000 / per day. So that the majority of people who live on the banks of the river is upper middle or rich society. This period shows that cultural activity gives big enough impact to reach 0,79 in dragon boat limba activity, 0,77 at safar bath activity and 0,46 at swimming competition activity. This means that there is a very strong influence of cultural activities on the function of the river, because this cultural activity attracts many visitors from various regions and the main transport at that time is the river so as to provide good impact on river transportation.

In the 1990s, regional developments began to go to the dunes (up from the river), complemented by the development of on-going road facilities. Flexibility of transportation began to decrease, so the interaction with the river began to decrease once the decrease of river transport activity and even some quality degradation. This is the case with the relationship between river transport and the two cultural activities of the river. Dragon dragon racing activities shifted to ornamental boat competition, this is because the participants of ornamental boat races are the perpetrators and owners klotok (transport mentaya river) so that the form of promotion and sense of appreciation for the community of the transports.

The peak of the transition occurred in the year 2000-2010, the cheap motorcycle loan advances make most of the people of Sampit City have a motor so that it leaves the river function as a transportation. In 2010-2015 transportation activities began to shift functions by simply being the transportation of goods to the market and the function of the river tourism. Human transportation activities have been very rare except in the inter-island passenger transport and river crossings. While the aspect of safar bath activities, when this event is usually the participants not only from the citizens of Sampit City but also people outside the city that uses river transportation as a means to the city of Sampit.



Source: Results of Correlation Analysis, 2016

## 5. Conclusion

- 1) Culture has an important role in the element of development and regional development. This can be seen from the Culture Society of Mentaya River Basin and river functions that have a strong positive relationship. So preserving the culture can be an effort in maintaining the function of the river one of them is the function of the River Mentaya.
- 2) Transportation function on the Mentaya River had reached the "glorious period" but experienced a decrease both in the activity to shift the function of transportation of items and tourism activities. External factors of regional development that continue to lead the land and do not accommodate the development of river transportation. River transportation functions have an important role in river sustainability, because it is one of the activities that directly interact with the river. Overseas such as Thailand, Italy and Amsterdant are revitalizing their streams by enabling river transportation activities.
- 3) The economic function of the river, a function that also has a positive positive relationship. The function of this river makes the river get attention not only from the community but also the real attention from the government. Mentaya River becomes the inter-island water transportation route of Kalimantan-Java, for these activities contribute 6% of total GRDP.
- 4) The annual river culture activities such as the safar bath can be an activity that increases the income (profit) as well as the awareness raising moment of the river (benefit). So it is important to maintain the value of safar bath culture for the preservation of river functions and efforts to create or revive the annual river culture activities that have not been implemented.

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