

# The Arrangement Of Open Space Of Kapuas Riverbank Pontianak Base On Sustainable Tourism

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**Abstract-** Pontianak city has a river area that can be developed as a tourist area. The banks of the Kapuas river have a strong socio-cultural potential to be lifted as tourism. Many activities that can be done by the community on the banks of the Kapuas river, such as boating, playing canoe, fishing, boating tours, carbide cannon festival, Bakcang and Peh Cun festivals, and social activities of residents and other visitors. The existence of this potential is not supported by the quality of the environment and the unpredictability of open space on the banks of the Kapuas river, so it does not balance the environmental aspects, thus affecting the socio-cultural and economic aspects of society. Tourism development in this study base on sustainable tourism, where there are principles underlying the development of tourism, namely; social culture, environment, and economy. This research focuses on socio-cultural aspects because the banks of the Kapuas river have strong socio-cultural characteristics to be developed in open space. The research method used in this research is qualitative descriptive research with observation and interview. This study aims to produce the concept of open space arrangement on the banks of the Kapuas River based on sustainable tourism: 1) Maintain and open the visual of historic buildings; 2) Creating open space as a social area and cultural attraction; 3) Provide supporting facilities; 4) Material selection; 5) Improving the quality of road space and street furniture; 6) Improvement of waste management; 7) Develop the concept of mix use.

**Index Terms-** Socio-Cultural, Kapuas River, Sustainable Tourism

## I. INTRODUCTION

Pontianak City is divided by the Kapuas river, has the identity of the river city and has characteristics and potential that can be developed as a tourist. Characteristic of a typical region has the potential to be developed into a tourist attraction. Kapuas river area will be developed by the Government of Pontianak City and West Kalimantan Provincial Government as a water tourism object [1].

Kapuas River has a cultural and historical value and plays a very important role in the development of Pontianak city typical water. In addition, the same opinion from the Governor of West Kalimantan, that the arrangement of the Kapuas river area can be a leading water attraction for West Kalimantan Province [2]. The

edge of the Kapuas River has the potential that should be optimized, that is the open space of the river bank. As an open space has the potential to become a public space that can improve people's accessibility to the utilization of water bodies. So as to realize the connectivity of the objects of trade and services on the banks of the river [3]. Today tourism development refers to sustainable development or sustainable tourism that refers to environmental, economic and socio-cultural aspects. Where these three aspects must be balanced in the long run [4]. Kapuas riverbank is a public open space in the Pontianak city that is currently considered by the government.

Public open space is an open space outside the building that can be used by everyone and provide opportunities for the emergence of various activities. Public open space within a city is closely related to the social activities / social interactions that exist in it [5]. Open space is a very important need in a city where can improve the quality of life in terms of environmental, social and municipal communities with its function. Open space serves as a park, a place to gather, socialize and can accommodate activities that are recreative.

Kapuas river area becomes a social-cultural space for the community, there are several cultural festivals performed on the edge and body of river water such as Carbide cannon, ornamental boat, sampan race, bakcang festival, and mandi peh cun. In addition, the open space river banks also become a space for interaction of citizens such as playing, fishing and sports such as wave skate, canoe, and football. River basin areas have physical and environmental conditions that are not optimally structuring. The unconnected access to the whole and a lot of waste in the environment affect the social and cultural life of society and the economy of the region and even the city. Based on the condition of the area above, there is an environmental imbalance with the socio-cultural and economic aspects in creating the tour. Therefore, it is necessary to restructure the open spaces of the Kapuas River as a tourism by considering the balance of environmental, socio-cultural and economic aspects base on sustainable tourism. Where in this research emphasizes the development of tourism that focuses on characteristics and socio-cultural areas.

## II. RESEARCH ELABORATIONS AND METHODOLOGY

Sustainable tourism is simply defined as tourism that takes into account of the economic, social and environmental impact for the present and the future to meet the needs of visitors, industry, the environment, and local communities [6].

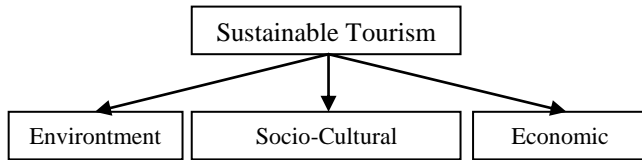


Figure 1. Sustainable Tourism Aspect

Principle of sustainable tourism development has 3 aspects: [4],[7].

### - Environment

Make optimal use of environment resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity.

### - Socio-cultural

Respect the socio-cultural authenticity of hist communities, conserve their built and living cultural heritage and traditional values, and contribute to intercultural understanding and tolerance

## III. RESULTS AND FINDINGS

Taking into account the physical and nonphysical aspects of socio-cultural, environmental and economic to know the characteristics of the location and get the concept of a suitable tourist arrangement developed on the banks of the Kapuas river:

### A. Physical Aspect – Character Appraisal

The physical aspect takes into account the criteria of Hamid Sirvani's theory [12] that is :

First, land use. Land use in the field is dominated by trade buildings, ports, and settlements.

Second, the structure of the building. It is found the order of building mass that is not regular orientation, there is a typology of a mass of building, like typology of Malay building with its house of stilt and typology of a cultural heritage building with Tjong Hoa ornament which is historic in the region.

Third, circulation. The unconnected construction of inspection roads connects all areas to the riverbank.

Fourth, open space. The form of open space in a liner-shaped area follows the shape of the Kapuas riverbank.

Fifth, the pedestrian way. Not found a pedestrian way that supports walking activities in the region. A pedestrian using plaster and road vehicles to get to the destination area on the banks of the river.

### - Economic

Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed , including stable employment and incomeearning opportunities and social services to hosy communities, and contributing to poverty alleviation.

Definitions open space are spaces within cities or wider territories either in the form of areas or in the form of longitudinal areas or pathways wherein its use are more open, essentially without buildings [8]. In addition, open space is a container that accommodates human activity in an environment that has no cover in physical form [9]. Based on land cover and function, open space can be classified into 2 (two) types: green open space and non-green open space.

This research method uses descriptive qualitative research, where this research aims to create a systematic, factual and accurate description of the facts and characteristics of a particular population or region with existing symptoms [10]. The advantages of qualitative methods allow the researcher to gain a thorough understanding of existing conditions and phenomena by exploring the study sites more in depth [11]. The technique of data collection is done by observation and interview. The analysis used in this research consider the non-physical aspects of user activity in the region by taking into account the socio-cultural activities of the community at the location of the research with behavior observation technique analysis. Besides other aspects of the physical aspect to consider the conditions of open space, buildings, and road patterns or access the area with character appraisal analysis.

Six, sign. Lack of presence of signs found on the banks of the river. there is banned forbidden information, but it is not obeyed by boat users.

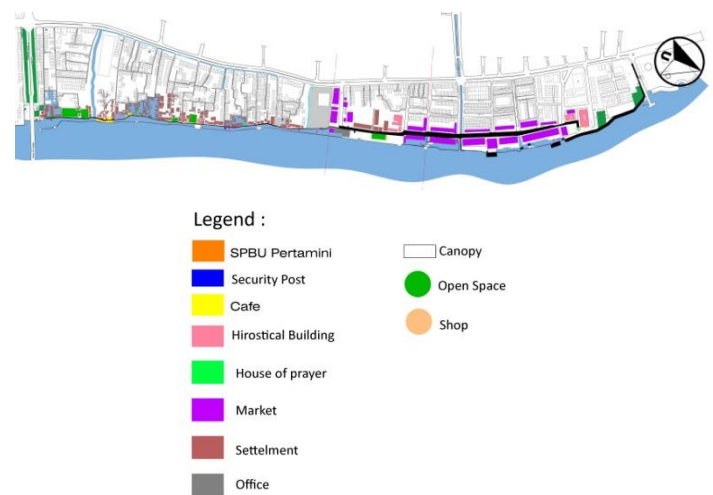


Figure 2. Land Use and Building Function

**B. Socio-cultural activities- Behavior Mapping**

To explore community participation and understand the perceptions of the people and visitors who engage in river activities. Data were collected through interviews with questionnaires to find potential sites for development and those with problems based on public opinion. The questionnaire is closely related to the convenience, preferred place, and problems felt by the users. Questionnaires were distributed in the form of questions supplemented with river cutting maps and suggestions or inputs for the arrangement of study areas.

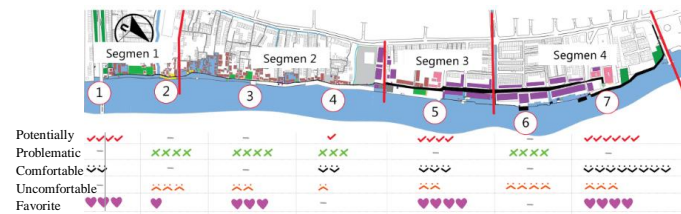


Figure 3. Respondent Questionnaire Results

Based on the results of questionnaires and suggestions to the respondents generated that almost all regions require the arrangement of areas that take into account the connected areas and community activities and festivals that exist. From the results of the above interviews, the most potential areas for tourism developed are located on point 1,3,5 and 7, the problematic areas of the environment at the point of settlement of points 2 and 3, the area considered comfortable at point 7, and the area favored by residents on point 1.5 and 7 on the region.

Observers see the activities that occur during the day and night. Assessment of activity observed on the region to pay attention to the type of activities conducted by the users in the region are:

Primary activities, Activities performed by users on a regular or daily basis, mostly involving walking. Examples are like going to work or school, shopping, waiting for public transportation, doing work.

Optional activities, activities that are affected by external conditions and level of need, allowing users to perform activities. Examples such as standing enjoy the scenery, sitting, fishing, watching the show/festival or sunbathing.

Social activities, activities that involve the existence of others there are open spaces that are spontaneous. This activity is done because of the connection between two users. Examples such as talking, gathering citizens in a game group or a discussion of citizens.

The conclusions of activity analysis in the Kapuas river basin are the findings of main activities such as work activities, shopping, and waiting for public water transport in the morning and afternoon. While social activities become activities produced in the afternoon and evening in the area, where activities are

carried out such as talking, playing canoe, waves, kites and gathering residents as activities interact in the region.

Based on the opinion of the respondents, it is known that the area has a potential place to be developed into a very attractive tourist spot in the area which is a favorite area in the port area of Senghie and the dock area and Kapuas Indah. areas with visually diverse and interesting areas for visitors.

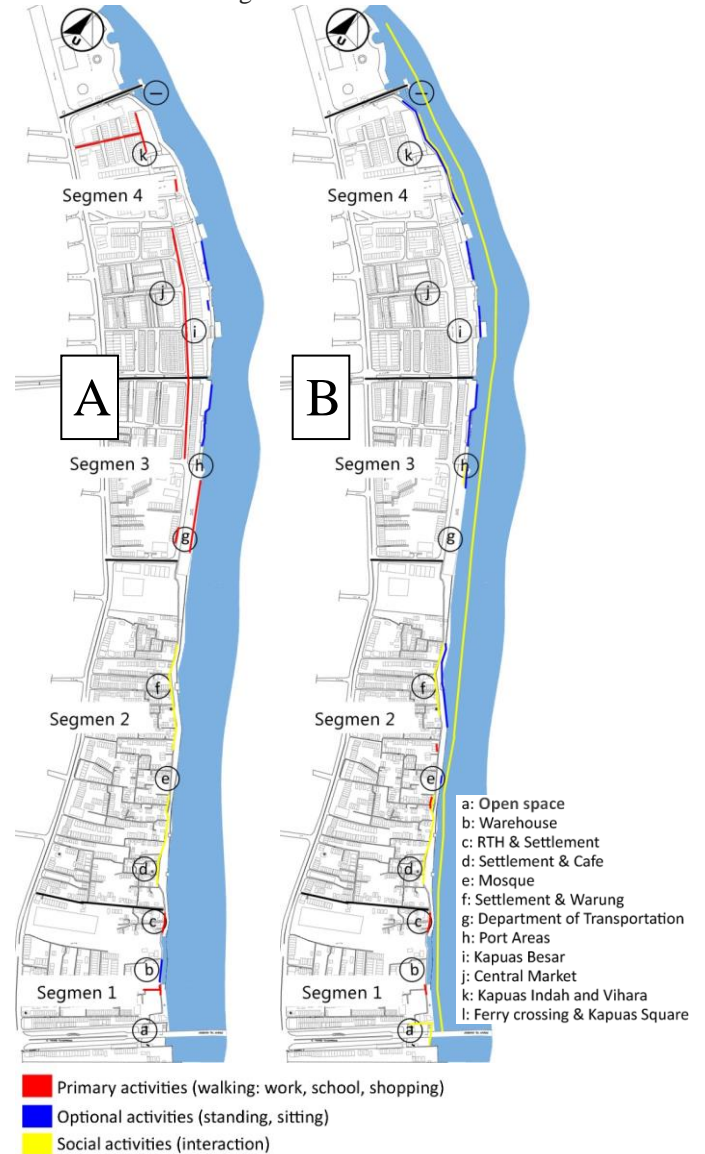


Figure 4. User Activity on the Study Site Daytime and (B) Night

Taking into account the results of physical aspects and socio-cultural activities that exist in the region, can be formulated conclusions analysis of characteristics of the overall area as follows:

**First**, the lack of facilities that can accommodate the whole community activities that affect social and cultural activities.

**Second**, open spaces that have the potential to be developed as social areas, buildings and historic areas as well as community festivals as attractions and attractions and support tourism activities on land and water bodies.



**Third**, the lack of existence of softscape elements and the arrangement of street furniture in the whole area.

**Fourth**, the uneven distribution of inspection and jetty roads in the region affects the connectedness of the area.

**Fifth**, the lack of business space that can support the economic activities of local communities.

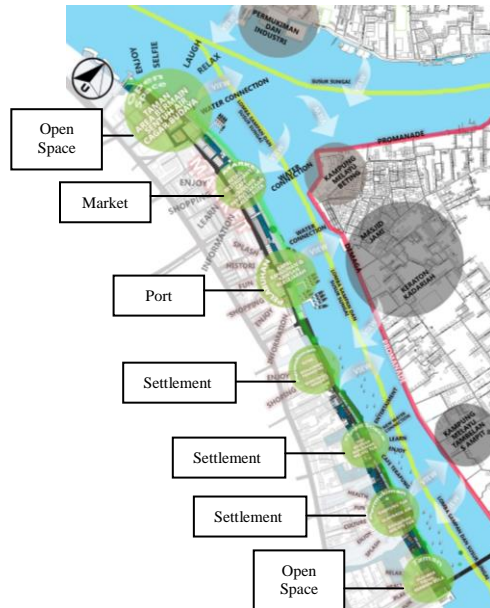


Figure 5. Overview of Overall Results of Area Analysis

Characteristics that have been generated above formulated criteria of spatial arrangement that can support the development of sustainable tourism as follows:

**First**, it must defend the existence and open the visual of historic buildings in the region.

**Second**, it should provide a space that can accommodate cultural activities and festivals as social spaces and tourist attractions.

**Third**, must provide a jetty to connect the area through water bodies and equipped with public facilities and markers of signboard as visitor information

**Fourth**, it must provide open space as a potential for public space and recreation and buffer ecosystems by considering material selection.

**Fifth**, must provide utility infrastructure to improve the quality of road space in the form of construction of road inspection, pedestrian way and arrangement of street furniture on the whole.

**Sixth**, must have waste management to improve the quality of tourist environment and surrounding areas.

**Seventh**, it must provide a selling facility for local businesses and the development of mix use concept in the region.

#### IV. CONCLUSION

The macro concept of the area shows an outline of the arrangement of the area by noticing the connectedness and flow of movement that can be enjoyed by visitors to tourist destinations.

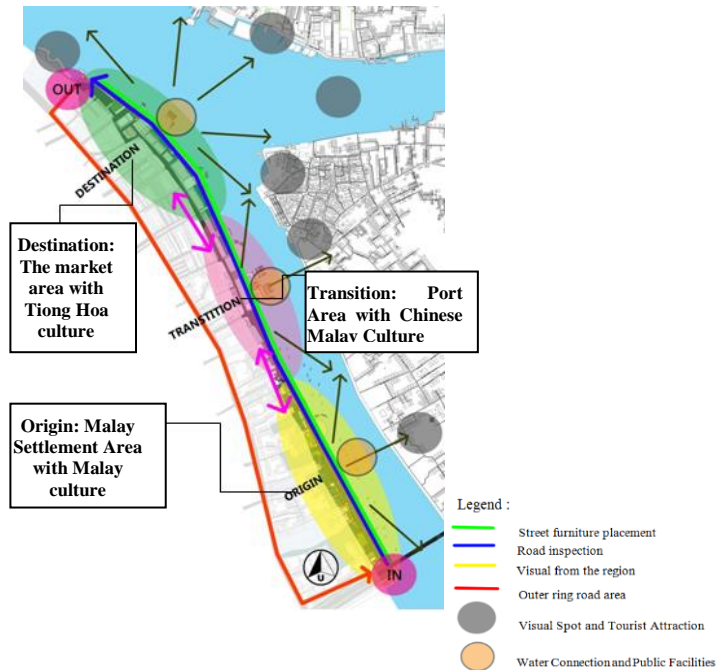
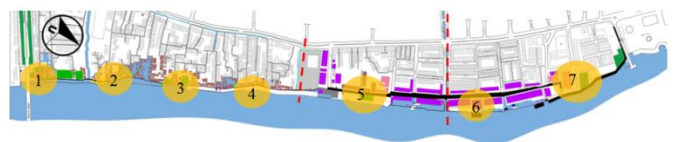


Figure 6. Macro Concept of Area Arrangement

The concept of the arrangement of the area pays attention to the visuals with the arrangement of street furniture on the inspection path and the addition of jetty / small dock as a water connection that connects the land use area. Connect and unlock potential visuals in the region and surrounding area and the movement of visitors from origin-transition-destination.

The concept of micro-spatial planning open space Kapuas river with sustainable tourism approach as follows:

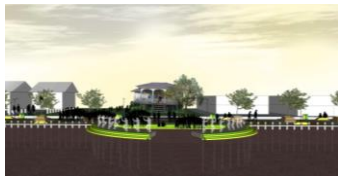
- 1) Maintain and open visuals of historical buildings;
- 2) Creating open space as a social area and cultural attraction;
- 3) Provide supporting facilities;
- 4) Material selection;
- 5) Improving the quality of street space and street furniture;
- 6) Improvement of waste management;
- 7) Develop the concept of mix use.



Point 1



Point 2



Point 3



Point 4



Point 5



Point 6



Point 7



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