## Urban Ecotourism Developme Planning Area At Ciliwung Corridor<sup>1</sup>

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#### ABSTRACT

Ciliwung is the longest river passing through Jakarta, the capital city of Indonesia. It has an important role and history to the Jakarta community as well as urban landscape. Nowadays, along the river, there are many various problems that related to the land use change, cleanliness, flood hazards and water pollutions. The objective of this research is to make a plan of urban ecotourism development model of Ciliwung's corridor, by developing the area to be an urban ecotourism. We can devide it to be a nature ecotourism zone, a semi nature ecotourism zone and an ecotourism support zone. The result is a development program area that refers to the ecotourism society principle; such as physical renovation, facilities construction and developing tourism infrastructures, flora and fauna conservation, green utility system and community participation.

Keywords: planning and development program, river corridor, urban ecotourism.

#### 1. INTRODUCTION

Ciliwung is the longest river that passing through in the middle of Jakarta, the capital city of Indonesia. The river that curves naturally and the flood plain topography is hilly on the headwaters is a potential place to be developed as tourism resources and can increase Jakarta image. This is as Husain (2001) has said that, river should be a complete urban element that shows quality image and unique character of a big city, where it can be a focal point and identity for the city and its people.

The territory Government of DKI Jakarta has done many things to make Ciliwung as an attractive tourism area in Jakarta, but their efforts to develop it has many obstacles especially connected to the dirtiness. The causes are change of land use to be residences gave negative impacts to the physical condition environment, water quality and river environmental aesthetics quality. That is why we need some activities in that area, to improve physical environment quality also to increase community life quality. One of the activities is urban ecotourism development on Ciliwung corridor. According to Directorat Sumber Daya Daerah (2000), ecotourism is a developing tourism model that responsible to a natural area or managed areas by nature rules where the purpose is enjoying the beauty also involving educational understanding and supporting factors for natural resources conservation and increasing local community income.

Ecotourism on Ciliwung corridor has a potential to be developed, especially with ecotourism concept, which construct facilities and infrastructures is an urban standard. According to Green Tourism Association (2005), urban ecotourism (urban green tourism) as tourism travelling that its activities exploring inside and around urban area, covers:

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- Involving visitors and local people to appreciate natural resources and urban culture.
- Making occasional activities that sources from local heritage and culture.
- Giving profit for urban ecology health.
- Giving physical activity experience, education stimulation and social interaction.
- Helping local community economy.
- · Easy to be accessed and accepted by all.

From the research result by Rosmalia and Nurisyah (2009) shows that Ciliwung or idea a potential to be developed as an urban ecotourism area. It can be seen from

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Ciliwung corridor layout that devided in six potential zones, based on environment physical potential analysis result, tourism resources and community suport (Figure 1). Based on the research, the development can be done by making development planning of Ciliwung corridor to be urban ecotourism area, this is the purpose of the research.

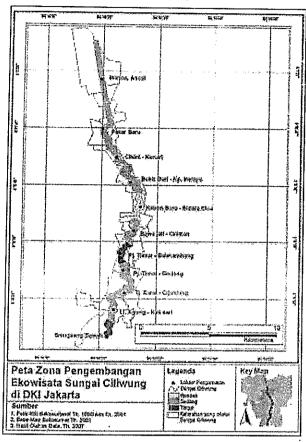


Figure 1. Spatial Planning for Developing Ecotourism Map on Ciliwung River (Source: Rosmalia and Nurisyah, 2009)

### 2. URBAN ECOTOURISM DEVELOPMENT PLANNING METHOD

The planning of ecotourism area development is based on potential area layout for urban ecotourism development (Rosmalia and Nurisyah 2009). The planning is divided in (1) Concept of development area planning, (2) Spatial concept and ecotourism area circulation, (3) Ecotourism area development program and (4) Infrastructure development ecotourism support planning.

The concept of development area is a development area planning of sustainable urban ecotourism. The concept is illustrated in tourism space development model that consider on landscape character and tourism potential.

The spatial concept is formed with illustration by putting tourism main area, support area, receptionist area and transition area in ecotourism area. Putting room concept is based on development planning concept. For concept of circulation planning described by making connection between tourism activities groups and between tourism activities.

The development area programme is a renovation planning and management area according to area development concept. The planning programme is according to *The Ecotourism Society principal* (Eplerwood 1999, refers to Fandeli 2000b) modified by communicating tourism area potential values (absolute value), which the results are the area development direction. Development direction is illustrated in graphically as a guide of ecotourism area management Ciliwung corridor.

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Ecotourism infrastructure support is made based on the need to the developed area. This is giving a satisfaction to deliver comfort and secure feel for the visitors (tourist satisfactory). The concept is based on ecology consideration.

# 3. ECOTOURISM DEVELOPMENT AREA PLAN AT CILIWUNG CORRIDOR

## a. Ecotourism Landscape Development Planning Concept

In developing one area to be an ecotourism, we need a concept as a basic planning and the purpose is to keep the natural and cultural conservation also to increase local community prosperity. The developed concept is a sustainable urban ecotourism. It is an area plan concept to accommodate continuation and quality of river natural environment, local community participation and economy opportunity. The concept on landscape is a planning development model adjusted with landscape character itself and tourism potential in that area.

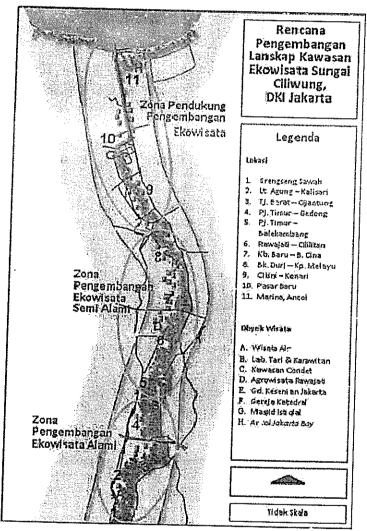


Figure 2. Illustration Map of Development Landscape Plan Ciliwung Ecotourism Area (Source: planning result 2008)

From potential evaluation result, we know that there is two locations as an ecotourism development center with three development models (Figure 2). They are described in three units landscape, as follow:

1. Natural ecotourism development zone, it is an ecotourism area dominant with endemic vegetation. Stengseng Sawah as a development center, covers Srengseng Sawah to

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ig and nunity i plan local inning n that Pejaten Timur – Gedong. The ecology message is concern to keep and improve the continuity of a natural urban river environment quality.

- 2. Semi natural ecotourism development zone is an area combined with natural structure and man made. Balekambang as a center development covers Pejaten Timur Balekambang to Bukit Duri Kampung Melayu. The message is to keep the harmony of community living along the river in ecological urban area. We need to improve the semi natural urban river environment and keep is going.
- 3. Ecotourism development support zone is a dominant man made structure area. It covers Cikini Kenari to Marina Ancol. The quality increasing described with physical renovation on the river banks for the environment.

## b. Ecotourism Area Room Concept and Circulation

The ecotourism area circulation concept that is a circulation link adjusted with landscape development plan concept and tourism potential is a local element of center development area. According to Gunn (1994), corridor that connect the center area with the attraction groups is an important element that can improve potential area.

Ecotourism area of Ciliwung corridor can be visited through two entrance doors located at the center of ecotourism development area which is Srengseng Sawah and Balekambang. The election of the entrance door in that area is based on potential area that been supported with many kinds of objects and tourism attractions. That is why, we hope that this location can be a description or image of Ciliwung ecotourism.

The spatial concept and circulation in this ecotourism area devide the development ecotourism zone into two areas, they are ecotourism development center area and ecotourism development support area (outside room in development area that still in one zone). Figure 3 shows the locations of those areas that connected with circulation way.

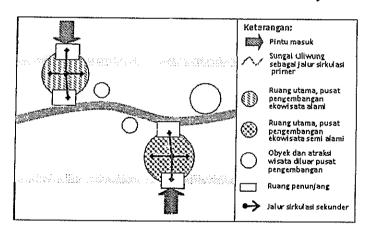


Figure 3. The Spatial Concept and Circulation in Urban Ecotourism Area (Source: planning result 2008)

Main area is a area that accomodate all tourism activities, and to enter the area, we should pass the support area. This support area has functions as a receptionist area also as a transition room. This area will connect the outside room with the main area and also a link between riverspere which is primary way and main area which is located in river banks.

Circulation way in the ecotourism area devided into three, they are primary, secondary and tertiary circulation. Primary circulation is the river itself to connect all main tourism areas and objects that lied along the river banks. Next is secondary circulation to connect all the attraction groups. This circulation is a road that can be used by pedestrian until vehicle. Last is tertiary circulation, it is a pedestrian to connect all tourism attractions in the group.

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#### c. Ecotourism Development Area Program

Program plan for ecotourism development area of Ciliwung has a purpose to improve local environment and culture. It hope that it can increase local community prosperity so they can keep the environment and culture conservation. This thing is in accordance with the concept by Fandeli (2000a), that ecotourism activities are not exploiting the nature but only use nature service and local community to fulfill knowledgement, physical and tourists psychology. The deleopment area program will make Ciliwung corridor as a Jakarta image. This program is planned based on three plan models of ecotourism development area of Ciliwung and that is a renovation descriptin and improving environment quality also to elevate the local community life and culture also the history itself.

Ecotourism development area program is a guide for development area plan that illustrated in area development direction. The program covers physical reconstruction, activites development and tourism facilities and the management which the river banks and the water is the media to accommodate ecotourism activities in that area.

The physical reconstruction is restructuring the area with purpose to make all landscape elements on the banks of river to be one unite riverscape of Ciliwung, with the river as the orientation. To develop the tourism activities and facilities has an educational rekreative. It will be done by using local resources potential and also come from physical activities management (renovation and restructuring the area). For management that involving the local community has purpose to create awareness for community about river potential so they will be more care and want to manage and keep the river condition. Beside that, Table 1 shows ecotourism development area program of Ciliwung corridor.

Refer to the ecotourism development principal The Ecotourism Society (Eplerwood 1999, refers in Fandeli 2000b), in making development program as an ecotourism area need to consider below:

- 1. Application of development concept will consider on physical condition of Ciliwung which is susceptible and limited support.
- Construction of tourism facilities should be on river boundary zone, with local traditional architectural appropriate with climate and using local material and energy resources
- 3. The effort of facilities construction and tourism activities development on Ciliwung area to support flora and fauna conserfation also to keep local Batavian culture. Consideration is needed to minimize the impact to the nature and culture. Prevention and tackling will be adjusted with the character of nature and community culture.
- 4. Area utility system which is environment friendly and zero waste concept (minimum waste disposal).
- 5. Transportation in this area is friendly environment vehicle and avoid gasoline use.
- 6. Development of tourism activities will be mainly in educational. The process will be applied to the tourists and local people and directly in the field.
- 7. The development of local community residences is appropriate with ecotourism development concept.

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- 8. Community participation in planning and managing will support the increasing of prosperity. This is also to encourage the community to keep nature and culture conservation.
- 9. Dues and taxes which are the direct income will be managed by the ecotourism management. This will be useful to build, conservate and increase the quality of conservation and local culture.

Table 1. Urban Ecotourism Development Program

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#### Absolut Value **Development Program** a. Increasing and I. Srengseng Sawah Natural Ecotourism Development Center keeping Biophysical existing natural a. Retaining wall combines with structure and vegetation along the river resources banks. quality. Making a dam as a filter and controller of water debit. b. Natural area c. Structuring the area naturally by showing a unique and real local endemic dominant with vegetation, such as bamboo and typical plants. endemic **Tourism** vegetation. a. Using local resources as the tourism object and attraction that has c. Environment ecology element and giving some educations such as out bond, orientation gardening, fishing, foto hunting, canoeing etc. towards the b. Structuring the area by making reception area as a main entrance to the Ciliwung ecotourism area. The river view will be showed as an attraction. river. d. Sampling area c. Providing ecology infrastructure to support ecotourism activities. of caring d. Involving local people in creating tourism object and attraction and community to managing the activities. the environment. II. Natural Ecotourism Development Center Support (Srengseng Sawah) Biophysical a. Retaining wall combines with structure and vegetation along the river b. Structuring the river banks so the unique and real local endemic vegetation will be dominant, such as bamboo and typical plants. c. Structuring the buildings along the area to be more ecology and oriented towards the river. d. Involving local people in managing environment. a. Providing ecology facilities to support ecotourism activities. b. Using landscape element and educational. a. Batavian I. Semi natural Ecotourism Development Center Balekambang culture image Biophysical and fruits a. Structuring river banks to prevent landslide by retaining wall combine b. Traditional with structural and vegetation. architecture b. Structuring line river boundary (GSS) by: and batavian Relocating the residences and change the orientation to the river. culture GSS greeny. c. Quality c. Residences with zero waste concept by making facilities: residence Sewage water treatment for environment scale. environment. Waste treatment (environment scale). d. Education for d. Involving local people in environment management. the plants Tourism e. Sampling area a. Renovation and accessibility dfrom river and main road to the area by of caring making enterance door and providing receptionist room, good community to transportation and friendly environment. be outonomous b. Increasing area image by keeping rules as a batavian culture conservation area and fruits. c. Cultural conservation building reconstruction. d. Providing batavian facilities to support ecotourism activities such as visitor information center, interpretation board, dock, pedestrian etc. Involving local people in managing ecotourism. Absolut Value **Development Program** II. Semi Natural Ecotourism Development Center Support Biophysical

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as Simulating river line boundary area (GSS), recovering the area to be a

green one by relocating all residences in the GSS area.

- b. Managing the residences who live along the river banks to stay healthy and ecology and oriented to the river.
- c. Constructing processing facilities for solid and liquid waste and not to throw them to the river.
- d. Socializing and keep the rules to the community about environment cleaning.
- b. Providing facilities and tools with ecology to support ecotourism activities.
- c. Making tourism attraction contains educational elements.
- a. The ecology Waterfront city
- b. Festive as a Jakarta Urban cultural image
- c. Historical and cultural architecture area
- d. Open space area

### II. Ecotourism Area Support

Biophysical

- a. Retaining wall renovation along river banks to be ecology, by adding combination of structural and vegetation.
- b. Area management with purpose to put together all buildings as the tourism objects to be one area for ecotourism support. Also to change the orientation to the river.
- c. Making receptionist room for area joining also to put together some various styles of architectural buildings and their historical values.

Tourism

- d. Adding tourism facilities, such as information center and interpretation
- e. Infrastructure renovation, moda intersection between busway, train, public transportation and private vehicle.

Source: planning result 2008

#### d. Tourism Infrastructure Support

Service is the mainfactor in developing tourism area. One of the factors which determine is tourism infrastructure preparation. The development is needed for tourists' comfortability and safety when they visit the area. According to Karyono (1997), the infrastructure or tourism covers hotels, information place or office and recreation facilities.

The infrastructure development of Ciliwung ecotourism area will be adjusted with room concept and tourism circulation also with area development plan. Table 2 shows infrastructure development plan on ecotourism Ciliwung corridor area.

Table 2. Infrastructure Development Planning on Site Plan

Circulation way and Room	Infrastructure	
1. Main Tourism Area	1. Panoramic/viewing Tower	<ol><li>Performance Stag</li></ol>
a. Natural ecotourism development	2. Interpretation Board	<ol><li>Outdoor classroor</li></ol>
center	3. Hotel	7. Shelter
b. Semi natural ecotourism	4. Hall	8. Stall
development center		
2. Support Area	1. Information Center	5. Toilet
a. Receptionist area	2. Restaurant	6. Musholla
b. Transition area	3. Souvenir shops	7. Public phone
	4. Park Area	
3. Primary circulation	1. Pier/quay	4. Raft
	2. Road 3-5 m	<ol><li>Rowing boat</li></ol>
	3. Pedestrian	6. Boat
4. Secondary circulation	1. Trecking	3. Beca
	2. Bicycle	4. Delman

Figure 4 and 5 show infrastructure development plan on site plan of Natural Srengseng Sawah and Balekambang semi natural ecotourism development center.

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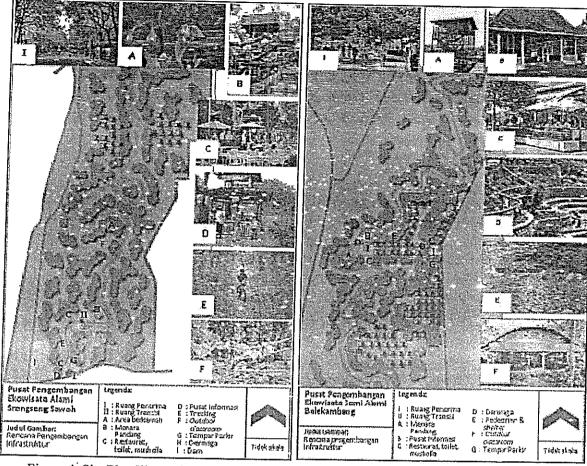


Figure 4. Site Plan Illustration of Natural Ecotourism Development Center Srengseng Sawah

(Source: planning result 2008)

Figure 5. Site Plan Illustration of Semi Natural Ecotourism Development Center Balekambang

(Source: planning result 2008)

#### 4. CONCLUSION

Urban ecortoursm development model of Ciliwung devided into three zones, with two development center. They are, natural ecotourism development with Srengseng Sawah as a center, second, semi natural ecotourism development with Balekambang as a center and third, support ecotourism development.

The program for Ciliwung ecotourism development plan is made based on evaluation result of area condition, that is environment improving quality, range of tourism infrastucture support and community involvement in management. The program for environment improving quality will be more focus on area that in medium and low classification. Next, the program for range of tourism infrastructure additional support will be done on development area as ecotourism development center. The last is community involvement, this program will be done on both programs which are environment improving quality and range of tourism infrastructure.

#### REFERENCES

Direktorat Sumber Daya Daerah. 2000. Pedoman Umum Pengembangan Ekowisata Daerah. Jakarta: Depdagri.

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- Fandeli C. 2000a. Perencanaan nasional pengembangan ekowisata. Inside: Fandeli C, Mukhlison, editor. Pengusahaan Ekowisata. Ed-I. Yogyakarta: Fahutan UGM, Unit Konservasi SDA DI Yogyakarta, Pustaka Pelajar. p 95-113.
- Fandeli C. 2000b. Pengertian dan konsep dasar ekowisata. Inside: Fandeli C, Mukhlison, editor. Pengusahaan Ekowisata. Ed-1. Yogyakarta: Fahutan UGM, Unit Konservasi SDA DI Yogyakarta, Pustaka Pelajar. p 3-12.
- Gunn CA. 1994. Tourism Planning Basics, Concepts, Cases. Washington DC: Taylor & Francis.
- Green Tourism Association. 2005. The Green Map of Toronto. <a href="http://www.greentourismassociatio.html">http://www.greentourismassociatio.html</a>. [March 8<sup>th</sup> 2007]
- Husein H. 2001. Urban recreational riferfronts. Inside: Successful Revitalisation Elements. Conference Proceedings on 38th IFLA World Congress; Singapore, tgl. 26-29 Jun 2001. p 88-96
- Inskeep E. 1991. Tourism Planning: An Integrated and Sustainable Development Approach. VNR Tourism and Commercial Recreation Series. New York. Van Nostrad Reinhold.
- Rosmalia D, Nurisyah S. 2009. River Corridor Spatial Planning for Urban Ecotourism Development at Ciliwung River. Inside: Sustainable Slum Upgrading in Urban Area. Informal Settlements and Affordable Housing Proceedings on CIB Working Commission W110; Surakarta. p II-151-162

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