THE DEVELOPMENT OF INFRASTRUCTURES IN LAPULU FISHERMEN KAMPONG AS FLOATING TOURISM KAMPONG IN KENDARI-INDONESIA

DIAN PUTERI NURBAITY
Urban Design, Department of Architecture, Sepuluh Nopember Institute of Technology.
Perum ITS, Jl. Teknik Industri Blok D.16, Sukolilo
Surabaya, Indonesia
dianputerinurbaity.dp@gmail.com

PROF. IR. ENDANG T. S. B. DARJOSANJOTO, M. ARCH., PH.D
Lecture of Urban Design,
Department of Architecture, Sepuluh Nopember Institute of Technology.
Perum ITS, Jalan Teknik Pemukiman D-11
Surabaya, Indonesia
endar@arch.its.ac.id

IR. PURWANITA SETIJANTI, M.SC., PH.D
Lecture of Housing and Human Settlement, Department of Architecture, Sepuluh Nopember Institute of Technology.
Surabaya, Indonesia
psetijanti@arch.its.ac.id

ABSTRACT

The present study concerns on providing development in Lapulu fishermen kampong as tourism kampong. In the development process, it should be supported by adequate infrastructures. In the existing condition, the potential and problems are as follows; there is environment route, fish drying space, mountain peak, shipbuilding space, and fish processing space. Various potentials are not well-managed so that to overcome such problems the present study employed qualitative descriptive with behavior observation analysis technique and character appraisal. Therefore, to provide clear development as floating tourism kampong it requires smart eco-kampong concept to create harmony and continuity in life to achieve public properness both in social, economy and ecology.

Keywords: Floating Tourism Kampong, Infrastructures, Lapulu Fishermen Kampong.
1. INTRODUCTION
1.1 Background of Research

The coastal area is an area that is vulnerable to interference and easily changed, both of scale temporal and spatial scale. Things that cause these changes for a variety of existing activities, such as industrial, residential, transportation, ports, aquaculture, and tourism. Peter Mason (2003) in his article quoting Holden (2000) says that an environmental or physical condition is one important part of tourism. Where tourism is highly dependent on the physical conditions and environment, both of the main attractions of tourism and activities that occur.

Indonesia is a country that has tremendous natural wealth with the tourism sector, and is one of the State's revenue which would need to be able to pay attention to the impact of tourism and the environment in which it occurs. So that natural conditions can be maintained sustainability and be a tourist attraction that has its own added value, hence the need for the development of related infrastructure is based on ecological, social and economic. Who can pay attention to the natural conditions, the environment and the economy to be a means of income.

This study is located in the coastal bay of Kendari and historically the city is growing as a city coastal and have good potential for the future. Lapulu Fishermen Kampong in Kendari is a residential area of the coastal communities in Kendari. People who are in this area are mostly fishermen who live, grow and develop in coastal areas, which is a transition area between land and sea. Most of the coastal communities, either directly or indirectly, dependent survival of managing potential of marine resources. The processed results can be utilized by the local community as a step to support the needs of everyday life.

Physically of Lapulu fishermen kampong that there are houses on stilts typical of coastal communities as a residential unit, have institutions in preparation result of the sea, spot the drying of fish together, but less utilized properly and optimally, has a dock as the circulation of the fishermen, but it does not look aesthetic that can attract visually, the gulf as an important point that must be guarded and the preservation of ecosystems but utilized as a garbage dump by the public. This happens because of the unavailability of facilities and infrastructure to accommodate the needs of society. Besides that there is a peak that serves as a public space but is not managed and utilized properly. So the potential that exists in Kampung Nelayan Lapulu need for referrals development so structured and well ordered. Based on the potential and the problems described, Lapulu Fishermen Kampong appeal to attract public attention. Therefore, to make the fishermen kampong as one of the neighborhoods with the feasibility of livelihood both in terms of economic, environmental and social Lapulu Fishermen Kampong, hence the need for materialization Smart - Eco Kampong but still maintain the culture of the community of Fishermen Kampong is packaged in a container landing development of infrastructure, facilities and infrastructure Lapulu Fishermen Kampong.

1.2 Location of Research

Area The location is administratively located in the Kampong Lapulu, District Abeli has an area of ± 150 Ha and 96 Ha is a residential area. Spacious village Lapulu based measurements of self mapping is ± 2.1 km².
2. LITERATURE REVIEW

2.2 Concept Design

Based on the potency and problems described in the previous chapter, that the problems faced by the study site is Lapulu Fisherman Kampong sustainability both in terms of economic, social and environmental coastal communities and their territory. Therefore, the need for a theme that is able to sustain and resolve the issue of sustainability of the communities where Lapulu Fisherman Kampong Kendari city through the theme "Smart Eco-Village".

**Smart concept** in the direction of the development of Kampong Lapulu Fisherman is a translation of a form of smart city and sustainable city. Where in the smart city concept, the area that is designed to improve the quality of life of people who live in the city (Hendriks, 2002). In the process, the important point in the benchmark for the achievement of a smart city that is: smart living, environment, utility, economy, mobility, people (human, society ). Of the six smart city concept can be developed based on the criteria and characteristics of the needs of the urban population, which is not the same between the cities with one another (Tai Chee Wong, 2011). Besides that smart concept can be applied to educate people from both children and adults related to their potential for shipbuilding, manufacture of fishing nets, fish processing and seaweed that can be consumed.

**Eco-kampong** concept is a form of arrangement of the village or rural area that prioritizes environmental terms (Hildur, 2002). In the direction of development activities Lapulu Fisherman Kampong based on the environment, namely Green Infrastructure. (Provision of green infrastructure in question is to give the green line at the circulation area), Vegetation Vertical and Horizontal (In an effort to provide cooling to the temperature of the dwelling unit has no access to the housing space), Provision of River and Sea Border as Conservation and Public Space (Focus on public space, retail, pedestrian way. Provision pockets of open space for air circulation to avoid the 'heat island' at Lapulu Fishermen Kampong. This area make region active walking area, with outlets of food, beverages and processed marine integrated in the area of the environment).
2.3 Fishermen Kampong

Fishermen kampong is a residential area inhabited by the majority work as fishermen. This region has significant differences when compared to other kampong. Due to movement activity, social and cultural are intertwined in it makes the kampong has its own characteristics. So far the fishermen kampong is not equipped with facilities and infrastructure sufficient to sustain a kampong so that most integrated spaces is the main street of the settlement, it is as an access to workplace and space for socializing (Darjosanjoto, 2007). Department of Public Works has environmental criteria fishermen kampong, which are not being in disaster-prone areas, there are in the region and the coastal border river, not being in protected areas, do not lie on the cultivation area buffer, such as mangrove areas. And Department of Public Works for copy writing work on the characteristics of fishermen kampong are occupancy consisting of units of housing that has a variety of facilities and infrastructure that support the lives and livelihoods of its inhabitants, adjacent to or directly adjacent to the waters, and have high access to waters, 60% of the population are fishermen, and other work associated with the processing and sale of fish, have a variety of facilities and infrastructure that support the lives and livelihoods of the population as a fisherman, particularly associated with the exploration activities of fish and fish processing. Of various parameters on the characteristics of a fishermen kampong can be formulated that fishermen settlement is a community environment with facilities and infrastructure that support, which has ties to the community for their livelihood as fishermen.

2.4 Facilities and Infrastructures Fishermen Kampong

Residential environment is a healthy environment that consists of a collection of healthy home Regular layout and have facilities adequate environment, such as roads, sewers, latrines, clean water source, neighborhood centers such as schools, health centers and places of worship (Dahuri, 2008). The following are included means Fishermen Kampong quoted (Dahuri, 2008) include are health facility, education facility, means trade, social support, the play and exercise, the drying of fish, fish auction, boat berth, pier, and infrastructure (roads, water networks, drainage and solid waste).

2.5 Tourism

In a sense, tourism is an activity or trips taken by tourists in a place with the intention of enjoying the trip and meet the diverse desires. The type of tourism is divided into several types, among others nature (exploit natural resources and environmental system to be subjected to travel), cultural tourism (utilizing art and culture to serve as the target of a tour), travel -made / special interest, use natural resources and the potential of art and culture to evoke fascination and special interests as the target of a tour . Planning and management of coastal areas requires the process of drafting phases of activities involving various elements of interest in the use and allocation of marine resources for the welfare of society. A tourist area can be said to be good and managed optimally based on four aspects, namely : maintaining environmental sustainability , ensure visitor satisfaction , improve the integration and unity in community development in the surrounding area and the zone arrangement , improving the welfare of people in the area.
3. METHODOLOGY

The method used in this study are included in qualitative research using descriptive method in outlining a systematic, factual and accurate information on the direction of development of infrastructure, facilities and infrastructure in Lapulu Fishermen Kampong to serve as a tourism attraction kampong with the concept of Smart Eco-Kampong. In the method of collecting data related to this study are primary data and secondary data. The primary data used in data collection by observation and interviews with study materials that documentation, interviews, and observations. While the secondary data is by collecting the study of literature and local government agencies. In addition, an analytical technique used in this research is the analysis of behavioral observation and character appraisal.

4. RESULT AND DISCUSSION

Lapulu fishermen kampong is the only fishermen kampong located in Kendari. The kampong has various good potentials to be developed as a tourism kampong, such as a panorama bordering bay and strategic location which is able to attract the visitors to enjoy the kampong. The domestic tourists tend to visit mountain peak and fish drying space for relaxing and interaction. In order to determine which area is able to be the development of infrastructures in Lapulu fishermen kampong, first, it requires analysis on community activities by employing behavior observation analysis. Then, it character appraisal on the open space characteristic to determine the potential areas to be the tourism areas. The explanation is as follows:

4.1 Behavior Observation Analysis Related to Community Activities

Behavior observation analysis is observation analysis by tracking and recording movement, utilization, activities and social interaction within the existing urban community or the existing built environment (MFE, 2009). The analysis is also known as behavior mapping analysis. To support the present study regarding to community’s activities in the area which serves as tourism kampong, mapping and behavior observation analyses employed are perceiving and understanding the human activities to manage themselves in a certain setting order, especially for an area that serve as tourism kampong (Sommer, 1980) dalam (Haryadi, 1995).

Figure 2. Community Activities On Friday January 22, 2016 Date, 07.00-14:00 pm
Source : Researcher analysis, 2016
Based on the above explanation, to find the analysis result of community’s activities in Lapulu fishermen kampong are described by the following processes:

The result of community’s activities in specified time interval, indicates that there are several dominance activities in the area. They are as follows:

1. The dominance activities in Lapulu fishermen kampong is interacting and chatting by the children or adults in every space both in front of their houses or the surrounding environment.

2. Activity in fish drying space dominated by children and adults. It is due to the shade area so that the community often visit that place.

Accordingly, the various activities have already given good neighborhood both day and night to the community of the village and outside the village. So, in terms of region it has led to a variety of community activities both social and activity related to space. Therefore, the activities of the community will contribute to the sustainability of the village serving as tourism kampong since the activities comes from other community will trigger the activity of the community within the kampong. So that the village will be able to attract more visitors and the fishing activity will also increase the economy and revive the area as productive kampong.

4.2 Character Appraisal Related to Open Space Characteristics of the Lapulu Fishermen kampong

Character appraisal is an analysis tool to perceive and capture the characteristic of the observation object. To determine the open space characteristic of Lapulu fishermen kampong is by the environment, green open space, reforestation the edge of the bay, garden, and shipbuilding space, fish drying space, fish processing place, creative house, and dock. Therefore, the present study employed character appraisal analysis technique, explained as follows:
a. Environment Route and Green open Space

The description of distribution and existing condition related to infrastructure and green open space in Lapulu fishermen kampong is less adequate. It can be seen from the street, parking system, no pavement, and inconvenient environment route which causes chaotic in developing the infrastructures. It will be the problems in the developing process to serve Lapulu as tourism kampong. Besides, the distribution of open space including green open space, no green pen space and junk space is not well-utilized so that it ends up as garbage dump and even has no function. However, several spaces functioned as shipbuilding space and the peak functioned as relaxing and interacting place. To serve fishermen kampong as tourism kampong, the empty space should be use as plaza and the junk space functioned as multifunction space (fish drying space and residential garden), playground, reforestation bay as the boundary of the land and bay will also be an interacting space. The beneficial of reforestation is to improve the visual beauty and ecological function where the boundary is in the form of natural vegetation.

Therefore, the area serving as tourism kampong should provide convenience and safety to the visitors. So, it requires good landscape elements, both soft-scape and hard-scape in Lapulu fishermen kampong. The road for vehicle should be function as pavement for the pedestrian so that the village will not be passed by the vehicles. It is also better to add several murals with the picture of ocean and sea ecosystem to attract the visitors visually and make an impression of the area. The visitors will not feel bored when walking.
b. Infrastructures

![Figure 5. Characteristics of Outer Space Kampung Nelayan (Infrastructures)](image)

Source: Researcher analysis, 2016

The distribution and the condition of infrastructures of Lapulu fishermen kampong emerge problems, due to the inadequate existing condition of the infrastructures as tourism kampong. Littering will trigger to the damage of the bay ecosystem in the area. The shared fish drying space is abandoned and is not well-utilized. Therefore, it requires developing littering regulation. In each residential unit there should be a trash can and every five meters there should be a public trash can. The fish drying space should be well-maintained in order to attract the visitors as well as build a shopping block and floating market as a tourism object. Therefore, the researcher intends to provide infrastructures which are able to accommodate both economic and social life of the community since it will contribute to the physical aspect without damaging the ecosystem. Providing infrastructure likes community hall by optimizing natural air circulation and avoiding heat radiation. Optimizing the utilization of roof garden, woodbind to give impression of comfort to the visitors and visually attract and improve aesthetics of the area. Thus, the following is the concept of Smart eco-kampong of development of infrastructure in Lapulu fishermen kampong which serves as tourism kampong:

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<th>SOCIAL</th>
<th>ECONOMIC</th>
<th>ECOLOGY</th>
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<td>Providing public places as interacting space, such as community hall, worship places, public spaces, playground, dock, parking lot, fish drying space,</td>
<td>1. Management of marine product such as salted fish, fish cracker and seaweed. 2. Providing parking lots for the visitors so that the income will be managed and</td>
<td>1. Vertical vegetation and horizontal for unit residential which has no yard. 2. Providing rooftop garden in the public spaces such as community hall 3. Bay reforestation</td>
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shipbuilding space, fishing net manufacture, etc. benefit for the kampong sustainability. 4. Creating linkages between water and garden in area scale. 5. Providing shade element in circulation path.

Source: Researcher analysis, 2016

Table 1. The Implementation of Development of Infrastructures in Lapulu Fishermen kampong as Tourism kampong in Kendari by Employing Smart Eco-Kampong Concept

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<th>Direction of Development</th>
<th>Implementation of the Concept</th>
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| Green Infrastructure     | • Providing 10 meter width green mangrove belt next to the residential border poultice towards the ocean.  
• Shade along the circulation path  
• The dock with aesthetic design.  
• Providing walking area in the fishermen kampong. |
| Media                    | • Providing public spaces such as playground, sport yard, dock, communal parking lot, drying fish space, mosque, shipbuilding space (an educational place for the visitor), fish net manufacturer (an educational place), creative house for processing marine product (giving knowledge to the visitor regarding to marine product processing), and so forth. |
| Infrastructures          | • Improved accessibility in the area by providing street furniture (street lighting and 3R trash cans) as well as providing signage to the main road. |

Sources: Researcher Analysis, 2016

5. CONCLUSION

The present study concludes that development of infrastructures in Lapulu fishermen kampong as floating tourism kampong is recommended to employ smart eco-village concept by utilizing littoral ecology as one of the potentials to attract visitors. The concept is recommended in order to provide insights in utilizing existing potential and decreasing social, economic, and ecological problems in slum areas. By such contribution, it is expected to serve Lapulu fishermen kampong to be more livable which is supported by the empowerment of the infrastructures to support the economy of the community. So that it will be a productive kampong. Action in making the fishermen kampong as tourism kampong realized with development by providing green mangrove belt, shade along the circulation path, dock with aesthetic design, walking area in
fishermen kampong, providing area or neighborhood public spaces, the most wider land is used for parking lot which is able to increase village income, improved accessibility in the area by providing street furniture which is able to give orderly impression and visual value to Lapulu fishermen kampong.

6. ACKNOWLEDGMENT

I would like to thank the lecturers Prof. Ir. Endang Titi Sunarti, B. D., M.Arch., Ph. D, and Ir. Purwanita Setijanti, M.Sc., Ph. D, which has helped in the writing process research. And also to the LPDP who have helped in the financing of research publication my thesis entitled "Development Of Infrastructures In Lapulu Fishermen Kampong As Floating Tourism Kampong In Kendari-Indonesia " to achieve master program.

7. REFERENCES


