

**PUBLIC PARTICIPATION OF KAMPUNG SUPPORTING THE  
DEVELOPMENT OF SURABAYA ECO-CITY**

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**ABSTRACT**

*Public participation is necessary in realizing the construction of Surabaya eco-city. Today Surabaya tried to make an environmentally city, it starts with improving the quality of housing, especially the Kampung in city. The program "Green and clean" is one way the government to achieve it. Public participation encourage environmental, economic, social and cultural. This research aims to study the role of the public in Kampung supporting development Surabaya Eco-city. The method used in this research is qualitative, data collection techniques used are field studies and literature. The results of this study indicate that public participation is needed in realizing the construction of eco-city.*

**KEYWORDS** – Public Participation, Eco-city, Environmental settlement.

**INTRODUCTION**

The city as one of the most active than another space activity and has a variety of systems that applies it. The complexity of the system of social, economic, ecological and urban culture require a management method that is effective and efficient in order to create a sustainable life. This development and application of the eco-city concept rapidly growing Surabaya city [1].

The kampung needed to improve the public participation. Public participation is a process that involves the public, namely the two-way continuously communication process to improve public understanding in full on a process activity [2]. In addition, the role of the public allows a group profit from the environment in which they live. Public participation can improve the quality of the environment, both economic, social and cultural.

The issues discussed in this research is how the role of the public in supporting the development of eco-city, if associated with the environmental, economic, social and cultural. This research aims to study the role of the public in Kampung supporting development Surabaya Eco-city.

## **1. Review of Literature**

### **Environmental Concept**

The settlement is a part of the environment outside conservation areas, either urban areas or rural environment that serves as a residence or residential environment and activities supporting the life and livelihood [3]. One of the efforts to create environmentally sustainable settlement by planning an ecological residential area with more attention to environmental aspects in the housing plan.

Implement sustainable housing development is very important to consider environmentally sustainable settlements. Several concepts ever presented by experts in implementing environmentally development are conservation ecology, green technology, and addressing environmental pollution. [4]

The relationship between sustainability and affordability are discussed in a concept of sustainable housing. In addition, sustainable housing is often considered the green concept, this guide aims to look at sustainable housing not only as a standalone unit or group of "green building", but also socially-increasing sensitivity to the environment that the system is integrated into the urban / residential wider. [5]

The Green concept gives full attention to saving land, materials, and energy, while the concept of sustainability in ecological aspects (bio-physical environment), economic aspects, and cultural (social and cultural). Action towards sustainability consists of three components, namely [6]:

- Ecological design component, namely water resource management, urban landscape, waste management, transportation, and sustainable technologies.
- The economic component, is the economic strength strategy of sustainable development, including changes in land use rural-suburban-urban, settlements-employment policy, infrastructure and maintenance costs, the loss of green open space, pollution, and traffic jam.

- Socio-cultural components, which increase public participation, development based on local knowledge and local wisdom, assess the level of public sustainability.

The concept of environmentally settlement aims to achieve sustainable development. That sustainable development could be implemented if it can provide the latest contribution which can be a solution. Sustainable development strategies are changing constantly and as well as balance. Aspects of sustainable development are generally recognized: ecological, economic, social and The components of the ecological, economic, and social resolved by the ethical aspects. Other approaches emphasizes the cultural aspects as the fourth component. [6]

Some strategic planning environmentally settlements can be seen on the following principles:

1. Manage and maintain the environment in order to function properly, ex landfills, environmental drainage and sewage systems.
2. Minimize the effect of the building on the surrounding environment, ex space utilization, service facilities, network infrastructure should be planned efficiently.
3. Protecting natural resources and land resources for future generations, for example: to protect the use of water resources, soil and air.
4. Reduce waste generated by residential buildings, eg process waste from building buildings so as not to cause pollution of the surrounding environment, planting crops that can protect the ecology of the region.
5. Increase public involvement in promoting ecological preservation area, for example: promote the importance of sustainable settlements so that the public also participated nurturing environment.
6. Socialize social importance of an environmental "healthy", for example: environmental safety, health, environment and public participation.

Land use to maximize the building will effect to increasing the influence of the building on the environment. Green open space will help create environmentally sustainable settlements. [7] Housing is one thing as determining the quality of life and welfare of people living inside. In designing and build a housing should pay attention to environmental, social, cultural and economic structure of society aspect. Because very closely related and influence in everyday life of the community bith in terms of the security, health, and welfare. Housing is part of the relationship between people and their

environment. The construction of housing requires a large consumption of natural resources (land, energy, water, and building materials), while generating waste, air pollution, and water pollution, includes the following [5]:

1. Facilitate privacy, adequate space, as well as accessibility for residents.
2. Creating a sense of security.
3. Creating comfort, ex from terms of warming and ventilation in the house.
4. Have facilitate infrastructure, such as clean water, sanitation and waste management.
5. Have a good environmental quality and create a healthy environment.
6. Adjacent to supporting facilities that are connected to workplaces, shops, health and child care, education and other services.

### **Public Participation**

Participation is a voluntary participation by the public in a self-determined changes. Parisipasi can also be interpreted as public involvement in the development of self, life, and their environment. [8]

There are many different interpretations and very diverse regarding the meaning of participation, namely [9]:

1. Participation is voluntary contributions from the public to the project without participating in decision-making.
2. Participation is an active process, implies that the person or related group, take the initiative and use his freedom to do it.
3. Participation is strengthening dialogue between local communities and staff who do the preparation, implementation, project monitoring, in order to obtain information about the local context and social impact.
4. Participation is voluntary participation by the public in a self-determined changes.
5. Participation is public involvement in the development of self, life, and the public in the development of self, life, and their environment.
6. Participation is "sensitize" the public to increase the receptivity and the ability to respond to development projects.

In participating, people can participate directly or indirectly mean public members help provide energy assistance to the activities carried out, while indirect participation tangible financial assistance, ideas, and materials needed. [10]

The public participation in developing countries shows that the concept is widely integrated participation, where participation can be viewed from various perspectives or views. Public participation in the decision-making process to implement the program, enjoy the benefits of the program, and in evaluating the program is an active process of a public taking the initiative and insisted their autonomy. [11]

The scale of participation can be obtained from the assessments in the criteria for the level of social participation, namely [12]:

1. Membership in the organization or social institutions
2. Attendance at the meeting
3. Paying dues / donations
4. Membership in the management
5. The position of members of the management

### **Factors - Factors That Affect Public Participation**

Factors that affect public participation consists of internal factors from the public, namely the ability and willingness public to participate, as well as external factors from the public, namely the role of the apparatus and the existing formal institutions. The ability of people to be associated with social stratification in society suggests a multidimensional view of the public stratification that identifies the presence of three components in it, namely the class (economy), status (prestige) and authority. [13]

Factors that affect public participation can be explained as follows:

#### **1. Internal Factor**

Internal factors are derived from the public itself, namely individual and group unity in there. Individual behavior is closely related or determined by sociological characteristics such as age, gender, knowledge, employment and income. Theoretically, there is a relationship between the characteristics of individuals with the level of participation, such as age, education level, occupation, the length of

being a member of public, the amount of income, involvement in development activities will greatly affect participation. The factors that affect the public participation process to follow are: [12]

a. Knowledge and expertise.

Basic knowledge will affect the whole environment of the public. it makes people understand or not on the stages and forms of participation that exist.

b. Public work

Usually people with a certain level of employment will be able to spend or even not at all take the time to participate in a particular project. The fundamental reason is often the society is a conflict between a commitment to work with the desire to participate.

c. Level of education and illiteracy

This factor is very influential for the willingness ability of people to participate, to understand and to implement the levels as well as forms of participation that exist.

d. Gender

It is known that some people consider these factors can affect the desire and public ability to participate assume that men and women will have different perceptions and views on a subject matter.

e. Trust in certain cultures

The public with a high degree of heterogeneity, especially in terms of religion and culture will determine participation strategies and methodology used. Often espoused beliefs may conflict with existing concepts.

2. External Factor

External factors can be said to stakeholders, which all stakeholders and have an influence on the program. Stakeholders key is who has significant influence, or has an important role for the success of the program. [14]

**2. Research Method**

The method used is qualitative, data collection techniques used are field studies and literature review. Field studies conducted with interviews, question and answer directly to the speakers. Interviews were conducted with officials and public

organizations Kampung.

#### **Data Collection Methods**

In data collecting, conducted a primary survey and secondary survey. The primary survey consisted of direct observation to study areas and conduct semi-structured interviews to obtain the required data.

Secondary survey consists of a survey of the literature. Literature review conducted by reviewing the contents of the relevant literature.

#### **Analysis Method**

To describe the role aspects of public in the Kampung to support the development of Surabaya Eco-city, then do some analysis stage. The following stages of the analysis carried out:

a. Characteristics of Settlement Environmental Aspects

Identify the characteristics of environmental aspects of the settlement is done through a review of the literature. From the results of the literature review was obtained 4 (four) aspects affecting the sustainable development, which includes environmental, social, cultural, and economic.

b. Aspects of society participation in the Study Area Concept Eco-city

To achieve the objective analysis undertaken through qualitative descriptive that looked at the facts in the study areas , namely kampung

### **3. Discussion**

#### **Research Location**

Location of the study was on Gubeng Kertajaya Kampung, Surabaya. ( Figure 1)



Figure 1. Research Location on the Yellow Corridor

Source : *Google Map*, 2014



### **Identify Characteristics of Settlement Environmental Aspects**

In environmentally sustainable settlements there are 4 components that are used as indicators, namely: Economic, Social, and Cultural Environment. When talking about environmentally sustainable settlements, we are not only talking physical indicators, but also speaks of non-physical indicators.

In realizing the Eco-city development, ecological vision of the city in question is creating a city that is in harmony with nature and the environment. The views are evolving according to the concept of Eco-city can be described as follows [15]:

1. Planning housing adapted to the nature and consider biological factors
2. Balance spaces towns and villages without conflicting
3. Planning buildings and residential areas were aligned with the climate
4. decentralization efforts towards energy supply system that is consistent with living systems
5. Agriculture scattered follow the natural contours of the land
6. The pattern of streets that adapts to the condition of the land
7. Protection of the land to preserve the natural evolution
8. river buffer that keeps the natural ability for recovery and self-regulation
9. Protection of land surface through a suitable transport plan
10. Design that blends with the history and characteristics of the local
11. Variations flexible design fused with experience occupants
12. Community kooperatif and good relations
13. Designs that maintain the natural landscape
14. Zoning and building styles adapt to climate
15. Preservation downtown
16. The design space for pedestrian / path does not close completely from the surface of the land
17. Spaces mix-used to stay, work and other activities
18. Creating space for the life of humans, animals and plants
19. City as ecosystem of elements fused



20. City is a picture of life

**Description aspects of public participation in the study area with the concept of Eco-city**

Public participation is needed in realizing the construction of Eco-city. In realizing , did not escape from the aspects related to the environmental settlement. Here is a description of the analysis of relevant aspects of public participation in the development of Eco-city:

1. Environment

Kampungs studied already aware of the importance of protecting the environment. It aims to enhance resilience from disasters and home adaptation and environmental pollution. The residents manage waste began using waste bank. In addition the efficiency of water resource development, the Kampung has been quite successfully made various efforts to overcome the problem of water. Residents have made a Waste Water Treatment Plant (WWTP) although still modest ( Figure 2). Residents worked together to make the WWTP. wastewater after treatment can be recovered by the citizens as a medium breed catfish and watering plants. WWTP treated water is quite helpful in reducing water usage and budget for the activities of the Kampung.



Figure 2: Residents are working on a simple WWTP

Source: Personal Documentation, 2014

To tackle the problem of environmental pollution efforts of citizens herbs plant and Bougenville to reduce air pollution caused by motor vehicles and factories. To tackle the problem of natural disasters (floods), Residents create drainage channels

so smooth water circulation. In addition, Pavement street also made to cope with flooding. Pavement street function so that rain water can seep directly into the ground (Figure 3). This will not happen if the absence of an active participation of the public role.



Figure 3: Pavement Kampung Street and drainage.

Source: Personal Documentation, 2014

In addition, an effort to deal with the problems of environmental pollution and disaster, people grow herbs plan and bougenville to reduce air pollution caused by motor vehicles and factories (Figure 4).



Figure 4: Herbs Plan each Household

Source: Personal Documentation, 2014

## 2. Social

The Kampung which won the competition "Kampung Surabaya Green and Clean 2014" and awarded the Kampung developed with the participation and role of

the best public in Surabaya. This Kampung has several organizations into the container to improve the socio-cultural relations and environmental quality. Existing activities in the Kampung are in accordance with the plan of Surabaya City Government in maintaining the quality of the public space, causing better social interaction.

Public of this Kampung has been carrying out various activities in order to maintain health. However, health facilities are still inadequate. IHC is still considered to be less feasible in serving the needs of healthcare in the Kampung. This is due to the small size of space.

### 3. Culture

Culture is realized by pamulangan group, an association of people who uphold the metaphysics. The activities are carried out by the kampung man even outside public of this kampung which participated in pamulangan group (Figure 5). Preservation of culture can improve the environmental quality of the Kampung, that can increase social interaction between public better.



Figure 5: House of pamulangan Group  
Source: Personal Documentation, 2014

The majority of public kampung are ethnic Javanese. They have a culture of peaceful with each other. It realized in public service activities are regularly carried out every two months (Figure 6), and the responsiveness current public of the unfortunate neighbor, ex death. The public give cash donations and free rental assistance canvas shelters for people who are grieving.



Figure 6: Work routine service residents  
Source: Personal Documentation, 2014

#### 4. Economic

Economic improvement is also done with household waste, both organic and inorganic. The results of the processing organic waste is used to fertilize crops, that organic waste is not a waste but be in improving their economic potential and support the preservation of natural resources. While inorganic waste deposited in the bank by each household garbage and can be cashed, besides garbage plastic bottles processed into handicrafts (Figure 7). Results from the sale of handicrafts. With the results of the processing of organic and inorganic waste can improve the local economy and participate in creating a healthy city (eco-city), as well as making the public towards the creative economy.



Figure 7 : Anorganic waste processing become the handicrafts which worth selling  
Source: Personal Documentation, 2014

Improved security has meant the Kampung safe. The Public can increase economic activity by opening a mini market, and shops (Figure 8). The public has an

independent business / technopreneurship in improving their economy. In addition to the high security can increase the selling price in this Kampung despite the status of the land "Petok Hijau". This arrangement can be said as Kampung corridor with the concept of mix-used to stay, work and other activities towards eco-city, with shopping facilities, services in the corridor of this Kampung.



Figure 8 : Business Minimarket  
Source: Personal Documentation, 2014

**Assessment criteria for the level of social participation in the Kampung:**

1) Membership in organizations or social institutions

Residents have a wide range of organizations that are independent but still under the supervision of the RT. In terms of funding, each organization has a source of funds for financing activities there. Such organizations may include waste banks, PKK, youth, governance structure RT, lectures and public pamulangan.

2) The presence in meeting

Every citizen is present in existing activities in the Kampung. Both of activities that are educational, health, and the environment. Residents also attend and participate in these activities. If citizens do not participate in the activities of the residents of the Kampung is considered to be a citizen who can not be fostered. Residents will get a social sanction of other citizens.

3) Pay dues / donations

Residents pay a monthly fee for the cost of hygiene and safety. Costs incurred residents each month Rp. 16,000. Additionally responsiveness when neighbors of

the unfortunate people is very high. Residents give cash donations and free rental assistance canvas shelters for people who are grieving.

4) Membership in the management

Kampung residents are active citizens in governance. Each organization has its own management but still under the supervision of the RT.

5) The position of members of the management

Members participate in decision-making in planning and running a program to promote the Kampung. And evaluate the work of the program.

## **CONCLUSIONS**

Kampung case study in this research can be said to support the Eco-City. This Kampung has a design that integrates with existing local characteristics and blend with the background of its inhabitants. There are organizations that maintain mutual relationship with each other in the supervision of RT. The public have been very aware of the importance to protect the environment shown on the efforts that have been made. They worked together and actively preserve the environment.

Culture shows that public are still trying to preserve the Javanese culture, and culture among peaceful environment made responsive to the state of other public. Economic activities must be used in accordance with prosudur environmental risk analysis, so that the identification of hazards, magnitude assessment of the impact consequences, due to the security and health of humans on the environment. The spatial arrangement of this Kampung said corridor with the concept of mix-used to stay, work and other activities towards eco-city, with shopping facilities, services in the corridor of this Kampung.

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