

EVALUATION OF SOMBO FLATS ASSOCIATED WITH ENVIRONMENTAL DEVELOPMENT

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ABSTRACT

Homes as basic human needs have an important role in the growth of the inhabitants. In fact, many people do not have access to adequate housing. Surabaya as one of the big cities in Indonesia also has problems in providing decent dwelling for the residents of the city. Flats are built as one of the solutions for settlement problems in Surabaya. One of the settlement problems that are answered with the provision of flats is the Sombo flats. The Sombo flats were built in stages and has been operating since 1992. When viewed today, the existing condition of Sombo flat has undergone many functional shifts and quality degradation. In addition to the growing population, there are internal problems of the inhabitants such as low ecological cultural awareness. This research is a form of evaluation of the function and quality of Sombo flat with descriptive-qualitative method. From the evaluation and analysis conducted, it currently needs rejuvenation with ecological and sustainable community and environmental participation approach.

Keywords: *environmentally friendly, ecological, community, flat.*

INTRODUCTION

Slums are spread throughout Indonesia, especially in big cities. One of the big cities that also has slums is Surabaya. The uneven impacts of urbanization and development make people without homes and end up living in any place, resulting in slum. On Jalan Sombo, Simokerto district, since pre-war times, the local government of Surabaya has a land that is reserved for storing city maintenance equipment. However, since the fifties this place has been used as dormitories of the city cleaners of the Dutch era, and become more slums. Therefore, the local government of Surabaya dared to take the policy of the development by building flats of Dupak flats that was first present (Johan Silas, 1996, flat). Dupak flats was built in 1989. Followed by the construction of Sombo flats in 1992.

The construction of Sombo flat at that time has been able to answer the problem of slum settlement of Sombo. Inhabitants of the flats in their efforts to

survive, bringing the culture of horizontal settlements to the flats which in fact is a vertical settlement. Many conflicts occur between horizontal settlement culture, gender culture, and environmental ecology.

The Sombo flats were built as an effort by the Surabaya City Government to deal with the degradation of the cleaners' settlements in the Sombo area. The population is also high and continues to grow but not accompanied by the addition of flat units to make the condition of the flats looks chaotic. Not only the high population numbers, the lack of awareness of the residents of hygiene and the importance of the environment make the decline in the function and quality of the Sombo flats because the age factor (20 years) becomes even worse.

Turner (1972) argues that home is a process and not merely a result. The house will always be processed as and while the occupants in it also proceed. Housing process is closely related to the quality of occupancy and the feasibility of occupancy. In line with Turner, Rapoport (2005) suggests that homes are closely related to the social, economic and cultural systems of the population. Conditions and circumstances of the house can help to describe the condition of its inhabitants due to a process related to the house and its occupants. From these two theories can be seen that the condition of the house is related and describes the state of the social system of society, economy, and culture that takes place between the inhabitants as well as in each individual self.

Slums are not just local issues. Currently the world is also working together to fight slum settlements driven by the UN Millennium Development Goals (MDGs). One of the objectives is slading upgrading as an effort to combat poverty and hunger.

Kepmenpera number 06 / KPTS / 1994 on General Guidelines of Housing Development On the Group, it is mentioned that the development of community-based housing is a development pattern that puts the community (individual / group) as the main actors and determinants where all development decisions and actions are based on community aspirations, Public interest, community ability, community effort. Development has indeed been pursued through a community approach in the hope that it will be on target and the community has a sense of responsibility and is able to maintain the flats.

Kemenpera-RI through the program of Housing Environmental Management and Slum-Based Settlements (PLP2K-BK) confirmed several strategies to deal with the problem of slums:

1. Tridaya approach (community, environmental, and economic approach).
2. Organizing settlements that are integrated with the layout
3. Encourage economic growth and development through integration with the city system
4. An integrated approach with various sectors

THEORY / METHODS

Research Limitation

1. Location

Study area is Sombo flats complex, Surabaya. This flat was chosen because it has a history as a slum area previously. This flat is also 20 years old (see Figure 1) so it is necessary to evaluate the analysis and review of the operation feasibility of the flats.



Figure 1. Layout of Sombo Flats
(Source: google earth)

2. Scope of substance

The scope of substances to be discussed are socio-cultural aspects (social system prevailing in Sombo society), ecological and environment-friendly aspect, as well as integration aspect with urban development.

Research Methods

The purpose of this study is to understand the aspects affecting the development of flats and to evaluate the ecological and sustainable environmental function and quality of the Sombo flats. From that purpose, this research uses descriptive qualitative research method which will describe the present condition in Sombo flats from the function aspect and the quality of the environment. Data collection methods were conducted with field surveys and interviews.

Five Principles Key of Housing Concept and Environmental Security

The first principle in an environmentally sound concept is to maintain and enrich existing ecosystems. In the Sombo Flats case study, the land is maintained. The flat is expected to support the sustainability of the economic and social of the dwellers. The existence of flats also add facilities that can be utilized by the ecosystem, the children in the surrounding neighborhood that can take advantage of the playground and field in the area of the flats.

The second principle is the minimal use of energy. In the construction of these flats, the materials used were locally available materials in the area. Local materials such as bricks and clay tiles will reduce energy both in manufacture and transportation. For the design side, the Sombo flat clearly emphasize the number of openings to allow air to flow smoothly without the users feeling the need of air conditioning inside the unit and the breezeway of the flat. Opening was adequate and comfortable for residents which will suppress the use of electrical energy from both air-conditioning and lights. However, residents of flat often turn on the lights in the hall during the daytime. The third principle is waste control and pollution. This principle was not fully achieved in this flats. The existence of this flat turned out to have a negative impact on the surrounding in the rainy season. Garbage collection system in Sombo flats is not to running well because the garbage from the flat were often dumped in the ditch causing flooding. However, the floods did not inundate the flats, but the surrounding which altitude about one meter lower than the flat. Some residents, represented by the head of RT, have complained about this. But the city government's response is slow because the people are still experiencing flooding due to clogged sewer.

The fourth principle is to maintain the local social and cultural system. This principle tends to persist in the Sombo flats because the majority of the inhabitants have the same cultural and ethnic roots. Indirectly, their togetherness which is accompanied by the similarity of fate and culture can protect the existence of the culture itself. This includes how they socialize among neighbors (See Figure 2).



Figure 2. Openings and Wide Hallways as a Form of Air and Light Utilization
(Survey results, 2012)

The Fifth Principle is an increased understanding of environmental concepts. In this last principle, the government seems to have to work extra hard to change the behavior of residents. For two decades occupying a vertical dwelling, it did not completely make the flats residents accustomed to the environment. An example of their insensitivity to environmental problems is, there are residents of flats that build toilet right on the ground floor of the flat. It is as if adapting their old habits that often build toilet on the river. However, UPT Sombo flats do not give up and keep trying to green this flats by making the gardens at some point of the ground. This effort is not fully responded positively to the residents of the flat because some parks have been damaged, including the playground. At least the park is still good and beautiful to date is the park in front of the office Sombo flat. In fact,

the presence of this park is quite raising awareness of a clean environment for residents. Since the presence of the park in front of the office of the UPT, residents of flats became reluctant to dispose of litter arbitrarily in the area. The area in front of UPT office is now managed to keep clean and neat. The presence of these flats, although occasionally causing flooding of surrounding area, proved to have a positive impact. The positive side is indirectly the surrounding of the flat also participate in arranging the park. According to the residents who live right in front of the Sombo Flats, their neighborhood environment is at least neater and cleaner than when the flats has not been built. Although, according to the field observation, the kampung houses in front of the flats actually tend to be irregular due to piles of flea goods and stalls.

RESULTS AND DISCUSSIONS

Activities in Sombo Flats

Sombo Flats as settlements have many activities involving the community or residents in it.

1. **Human life:** The life of the residents of Sombo flat is actually like the population of the kampung in general. Good social interaction between neighbors, culture, and typical culture of the village such as drying crackers and washing clothes with neighbors still visible in the Sombo flat even though they live in vertical settlements (Flats) (see Figure 3).
2. **Social Society:** The majority of residents of flats are migrants from Sampit, (Madura), so that their emotional connection can be maintained properly. In addition, they are also able to blend in with the surrounding kampung inhabitants. The kampung inhabitants also have a mixed ethnic mix of ethnic Madurese and Javanese.
3. **Economy:** The residents of Sombo flat has a middle to lower economic quality. Some residents open stalls in their units and also occupants who work as pedicab drivers, casual workers, public transportation drivers, and others. One of the most eager enforces of the economy is women. In Sombo flats the role of women in family reconstruction is more prominent than men who are more likely unemployed. This is indirectly related to the Madurese culture that makes women work harder in their families.



Figure 3. Life of The Residents Of Sombo Flats
(Survey results, 2012)

4. Transportation: Sombo flat is easy to reach by public transport. In addition, the majority of residents of the flats have their own vehicles such as motorcycles and some also have tricycles as short-distance transport (see Figure 4.).
5. Sports, recreation: sports and recreation facilities in Sombo flat complex is a library which open every day except Saturday and Sunday, sports field in the form of futsal field, and a playground for children both coming from the flats as well as children who are around the flats despite the condition that is not maintained.



Figure 4. Motorcycles Belonging to The Residents of Sombo Flats as One of The Transportation They Use
(Survey results, 2012)

6. Education: education facilities in Sombo flats are kindergartens (TK) and Madrasah Ibtidaiyah (junior high school). The majority students who studied at the level of kindergarten and Madrasah Ibtidaiyah come from Sombo flats and some are coming from outside the flat. Although Sombo flat has educational facilities does not mean that all the children in the Sombo flats have gone to

school, there are also children who do not want to go to school and the parents do the omission even if their children do not want to go to school.

7. Industry: Although not many, but small industry also took place in the flats. Such as snack market and madura porridge sold outside the flats.
8. Supporting Health: Posyandu and elderly activities are routinely conducted, and organized social activities related to health from various institutions are often held as well. In addition, the building manager support the health of the Sombo residents by always remind the residents through billboards to attract awareness of environment and health.

Related Towards with City Development

The commencement of a simple flats project in Surabaya since the early 1990s is closely related to regional development, especially in the settlement sector. Dupak and Sombo flats as pioneers became a study of precedent in various flats construction in Surabaya, even for DKI Jakarta. This is because the flats are considered to be one of the best solutions to address the difficult needs of settlements. However, the position of Sombo flats that are set as a precedent should be reviewed. This is related to the physical condition of the current Sombo flats which has led to vertical slum, since the main purpose of the construction of this flats is to eradicate the existing slum.

Environmental Impact of Sombo House

Some impacts arising from the Sombo flats buildings in terms of both positive and negative aspects can be divided into several points:

1. Physical Impact Assistance

The physical impact of the target is divided into positive impact that Sombo has become more organized, because the place was once a destitute place. Negative impacts, i.e residents often experience flooding problems if the rainy season arrives. The cause of flooding is the sewer (sewer) from the Sombo flats to the exhaust outside is blocked due to the garbage that accumulates in the water channel. Moreover, the position of the Sombo altitude flats is 1 meter higher than the surrounding residential. In addition to the clogged sewerage, there are few water channels. There was a sewerage flats to three directions, then after the construction of the flats only one remaining sewerage. As a result, the amount of water debit when the rainy season increases, exceeds the amount of water that can be accommodated by water channels which brings impact of flood on the surrounding community.

The presence of these flats does bring subtle physical changes to the surrounding environment. Although the development also encourages the arrangement of the surrounding kampung, the technical problems such as clogged waterways that impact harm to the surrounding must be considered.

1. Natural Physical Impact

Before the Sombo flats was built, the area was a residential area but not yet feasible, slums and irregular. Once Sombo flats was built, the environment especially ecosystems becomes more shady with the number of green plants. The quality of diversity in the ecosystem is getting better and inviting fauna, like some bird species, which make the shady spots of flats become more beautiful. However, there are still many people who have not realized the meaning of reforestation and sometimes only the managers of the flats and some concerned citizens try to implement the activities of reforestation.

In addition, there is a source of clean water in the form of wells which according to surrounding residents is the best source of clean water around the area. The well used during the construction of the Sombo flats was being closed by the managers but the residents retain the well. Finally, the well was not closed and the water is still being utilized by the residents and is still the best source of clean water. Moreover, when there are constraints in the distribution of city water that stopped in the flats, some residents rely on this well.

Overall, when compared with the initial condition of the flats which is a slum, the ecosystem condition of the current flats is better. However, the effort to maintain the natural ecosystem has not been done by the entire flat dwellers. This is seen from the shady and green areas in the flats which are not much more than the slum areas with additional illegal buildings.



Figure 5. Drainage Conditions In Sombo Flats
(Source: survey results, 2012)



Figure 6. Sombo Flat Condition is Still Slum and Irregular
(Source: survey results, 2012)

2. Socio-Economic Impacts

The social impact of the Sombo flats more refers to the social of the children. Small children around the community sometimes play in the neighborhood, make friends with the children of the flats and utilize the facilities in the flats. Meanwhile the economic impact of flats on the surrounding residents of the flats are often shopping for everyday purposes. It is located outside the flats area, in the neighborhood stalls, and thus triggering better interaction with each other. Social impact on fellow residents of flats is seen from cooperation between residents either on the same floor or not. The residents are cooperating with maintaining public facilities on the first floor such as bathroom facilities, kitchens, mosques and more.

It can be concluded that the socio-economic impact of the sombo flats, both internal and external, is a positive impact. The public is able to appreciate and there is no exclusiveness of the residents of the flats. Positive reciprocity in the economy also arises between the inhabitants of the flats with the villagers.



Figure 7. Outsiders Who Trade in The Sombo Flat
Source: Survey Results, 2012

Applicable Regulations in Sombo Walk-up Flats

1. Rules for each Units

As long as the sombo flats are built, it has twice increased the monthly rental price that every resident must pay for. In Regional Regulation no. 21 of 2003 states that for the Sombo residents are required to pay each month with 4 categories. Residents living on the 1st floor is obliged to pay Rp. 20.000,00 / month, 2nd floor must pay Rp. 15.000,00 / month, 3rd floor Rp. 10.000,00 / month, and 4th floor must pay Rp. 5.000,00 / month. In 2010, the municipal government intends to raise the rent rate of the flats but the plan was immediately rejected by the residents on the grounds of too expensive. However, through a consolidation meeting between the municipal government and the residents regarding planned increase of rental fees, the meeting resulted in an agreement that once every 3 years, the rental rate increased with a maximum increase of 100%. Although the rental rates are fairly cheap, it does not rule out the possibility that residents feel unencumbered by the rental price. In fact with the tariff of Rp 20.000 / month there are still many residents who have monthly rent arrears. Some delinquents are even owing up to 15 years rental fees.

Seeing such things could have been due to the influence of different ethnic between managers and residents. The managers are of the Javanese ethnic who have different characters from the dominant residents which is Madurese. The likelihood will be maximized if the managers and residents have one view, one of which may be by having managers and residents from the same ethnicity.

2. Environmental Hygiene Rules

- A) Tenants shall maintain and keep blocks occupied rental unit and the surrounding environment. In Sombo flats, the residents are enthusiastic to

do cleaning week coordinated by RT of each block. In addition, DPBT Surabaya actively takes garbage every day to make Sombo flats fairly clean.

- B) Every citizen must maintain the public space of Sombo flats. There are two types of public space: public space outside the Sombo flat and public space inside the flats. The condition of public space outside the flats is quite apprehensive with the dead grass that is not maintained which leaves only the ground, a playground for children condition is already worn-out and unattractive so that few children are interested playing there. As for the public space inside the flats, the hall act as a place to interact with residents who lives in units in front of them. The hall is quite clean.
- C) Following an environmental cleansing program, Sombo flats has a program to create a clean environment called a clean week program. Every Sunday morning all residents / family heads representatives coordinated by the head of each RT participate in the program.

Although there have been many clean environment programs that exist in the Sombo flats, but Sombo flats remains as slum. This is due to lack of a sense of self-awareness and care about the environment of residents to the environment. One of the causes is that the residents who live in Sombo Flats is no longer a native who lived since before the construction of Sombo Flats but there are many new residents who rent the existing house units in Sombo Flats. It should not be allowed, because the sense of belonging is less. They can not see the changes that occur after the construction of a flats which is much better than the previous conditions.

3. Rules of parking of vehicles

In Sombo Flat there are parking facilities for motorcycles and becak while no car parking available. Problems that exist in the Sombo Flat regarding the parking of vehicles, there are some cars which owner is a resident of Sombo flats who parks the vehicle on the road slate which resulted in reducing the circulation area and a warning has been made but ignored. As with becak, parking for becak is provided by the managers but becak owners rather park their becak outside Sombo flat than at the places provided. The reason is that residents are looking for ease in parking their vehicles than to park the vehicle where it should be. Therefore, many residents parked their vehicles at the entrance.



Figure 8. The Four-Wheeled Vehicle That Parks The Vehicle on The Side of The Sombo Flat Road

(Source: survey results, 2012)

4. Building Additions and Changes

Regarding the rules in addition and change of building (unit) in the flats, it is not allowed to add the building either semi-permanent or non-permanent. However, in the field many residents add buildings that violate the rules that have made the flats seem run-down and irregular in terms of aesthetics. For example, by the residents on the ground floor as kitchen in over function to be a place of sale and a coffee shop. There are also residents who make non-permanent bathrooms plus the drainage system is not clear.

Just as in the previous point, the lack of awareness of the residents about area where he lived became the cause of the Sombo Flats become irregular. The different of views between the manager and residents, which has a different perspective according to the character of each ethnicity became the cause of the rules Sombo flats is not optimally applied.



Figure 9. Number of Additions and Changes to The Sombo Flats Facade

(Source: Survey Results, 2012)

RESULTS AND DISCUSSION

Standing for two decades, Sombo flats has become one of the oldest flats in Surabaya. With its age and status, Sombo flats has never done a phase of rejuvenation. The developments held in the new flats are just improvements and the addition of some infrastructure such as parks. With 20 years or more without the rejuvenation of the building, the condition of Sombo becomes very shabby. The comparison, from what was once a slum landed house, is now transformed into a vertical slum settlement.

Another factor causing this slum is the residents of flats that are still not fully aware of how to live healthy and take care the environment. They are still carrying a landed house culture that some of them have 'damaged' the flats, such as raising livestock to damaging the park, making the hallway to put things and building illegal toilets over a ditch.

In addition, there are changes and additions to the building function. An example is to open a stall in the hall, and block the hall to be used as an additional unit rented by resident. This clearly violates the rules of the flats because it should not be allowed to utilize public areas for personal benefit, especially for rent to third parties.

The results that can be obtained from the evaluation is between leader and the led (in this case managers and flats residents) must understand each other, understand each other's character and needs. Thus it will be easier for managers to convey the rules that exist if they have understood the residents. One action that can be done is the officer of the management of Sombo flats is a person who understands well with the character of Madurese society, it could be people who come from Madura and have long lived in Surabaya or Surabaya residents who know a lot about the nature and character of Madurese society.

CONCLUSIONS

From the results of the analysis that has been done, it can be concluded that:

1. Sombo Flats is the second oldest flats of Dupak flats in Surabaya. Its condition is apprehensive, slums, and not well-maintained. Besides, it is lack of awareness from residents to always live healthy and to take care for the environment.
2. The existence of Sombo flats poses a positive and negative impact on the surrounding environment, whether physical, socio-economic, chemical, ecosystem, and biological impacts.
3. The rules prevailing in the Sombo flats are generally the ones that are violated by the residents themselves and without the sanctions from the managers. These violations are: 1) Units residents that do not pay the rent on time; 2) the rules of Environmental Hygiene: removing the garbage not in place; 3) Vehicle parking rules; and 4) Building Changes.
4. One way to overcome the problem of Sombo flats is to unite the view between the managers and flats residents through understanding each character and needs.

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