

# *Kampung Dolly* towards Sustainable Senior Housing

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**Abstract-** Tourism is one of the world's fastest growing sectors and is a major source of income for many countries. While tourism development in a sphere of urban housing renewal is necessary through a sustainability concept approach because it becomes a way to minimize the existence of problems that can re-emerged in the post of urban housing renewal. Traditional settlements in Indonesia that also be called as Kampung are potential to be developed into one of many tourism destinations. One of them is Dolly Kampung, which once was a prostitution or red light area that established since 1960's and being the largest prostitution in South East Asia. Because of prostitution business is contrary to the prevailing norms in Indonesia, prostitution activity in Dolly kampung is closed by the City Government in June 2014. But after the closement of the prostitution activity in Dolly kampung, there are a big decline in the amount of residents' income. Prostitution activity which was being the central economic activity for residents was dismissed, so the residents suffer from the significant income degradation because the majority of economic activities there depend on prostitution activity. Several government programs were established there to lift up the Dolly kampung's economic, such as micro enterprises business like batik production, shoes production, and also food production that engage the local residents but it doesn't effectively work to replace economic activity like prostitution business ever did. One alternative to develop Dolly's kampung is to build Senior Housing area. This is because of several reasons, for environmental reason, Dolly Senior Housing can accomodate the reused existing brothel building that have abandoned because of the closement of Dolly's prostitution activity. With several physical improvement, ex brothel building can be improved to be a more decent function as senior housing. For social reason, Dolly's senior housing can lift up new positive image of Dolly's kampung, and also accomodate the abandoned elders all around Surabaya and being one of thematic kampung in Surabaya. While for economic reason, Dolly senior housing can be a generator of new economic existed there that can empower elder people who live there, and also engage other newcomer to generate new business there such as health care economy).

**Index Terms-** Dolly Kampung, Elevated Pedestrian Way, Senior Housing, Sustainable Tourism Development

## I. INTRODUCTION

Tourism is one of the world's fastest growing sectors and is a major source of income for many countries. Being a people-oriented industry, tourism also provides many jobs which have helped revitalise local economies. At local scale, tourism can generate economic growth and population change (Getz, 1986; Ghali, 1976; Gill & Williams, 1994; Smith, 1977). Tourism

development should be directed in line with the principles of sustainable development, highlighting ecology (environment), human (social and cultural), and prosperity (economic) aspects (UN-HABITAT, 2012). While tourism development in a sphere of urban renewal is necessary through a sustainability concept approach because its becomes a way to minimize the existence of problems that can re-emerged in the post of urban renewal.

The commitment of urban and housing development is currently in the spotlight of the world, one of them is with the "New Urban Agenda" summit which held by UN Habitat in 2015. In the conference, there is also a discussion about improving the quality of urban environment and urban economy through sustainable tourism. Where sustainable tourism can be one of the efforts to support the development of urban economy and maintain the sustainability of sustainable development. These efforts can be supported by other additional sectors such as technology, research and innovation, creative industries, cultural conservation, artistic performances and conservation of cultural heritage buildings (New Urban Agenda 2015: article 60).

Traditional settlements in Indonesia that also be called as Kampung are potential to be developed into one of many tourism destinations. It can be said that Kampung is a cultural root of typical informal settlements, in which the residents have various backgrounds and socio-economic status, yet able to survive along with the progress of a city. Even in critical or unfavorable situations, societies living in kampung got their own process to resolve the problem with all their limitedness (Kusyala, 2008). In Indonesia especially Surabaya City, Kampung are being preserved and maintained by the local residents and City Municipal because its contain many cultural heritage and identity of the City itself. One of them is Dolly Kampung, which once was a prostitution or red light area that was established since 1960's and being the largest prostitution area in South East Asia. Even supposedly it can be said that the velocity of money in Dolly can reach 1.2 Billion Rupiah per day that earned from the business of prostitution, drugs, alcohol, gambling, karaoke or other supporting business, such as selling food drinks, parking, laundry and so on. (Basri, 2017)

However, this prostitution business is contrary to the prevailing norms in Indonesia which prohibits prostitution localization. Because of this reason, prostitution activity in Dolly kampung was closed by the City Government in June 2014. Of course it is not an easy job for Surabaya City Government to be able to close the prostitution in Dolly Kampung that have been the largest center of prostitution activities in Southeast Asia. Many efforts had been carried out, such as several cooperation with various elements of society and also developing public awareness of the importance for the closement of Dolly localization. All of these efforts were done in order to gather support from various parties,

including raised sounds of commercial sex workers who have been fostered so far, for many of them who actually became commercial sex workers because of compulsion. Closing Dolly is based on Regulation Letter of East Java Governor Number 460/16474/031/2010 on Prostitution Prevention and Control and Trafficking in Women is explained that closing the localization should be done gradually (Basri, 2017).

After the closement of the prostitution activity in Dolly kampung, there are a big decline in the amount of residents income. Prostitution activity which once was being the central economic activity for residents was dismissed, so the residents suffer from the significant degradation of income because the majority of economic activities there were related to prostitution activity. Several government program was established there, such as micro enterprises business like Batik production, shoes production, and also snack production that engage the local residents but it could not replace the great profit like it was ever achieved from the prostitution business before. Its because the bad image of ex prostitution Dolly Kampung still there and its prevents the development of socio economic of the kampung and the residents.

Therefore, another business activity that already developed there didn't effectively work to replace economic activity like prostitution business did. The most crucial thing is the community doesn't have strong sense of belonging because the majority of them are newcomers (not local people) who came to Dolly years ago to join prostitution business activity for the economic purpose. Also, the trend of local people there is aging population that doesn't really productive anymore. So the main concept to effectively develop Dolly is to change its image into something more positive, then to generate business activity that also engage newcomers and local people.

One alternative to develop Dolly's kampung is to build Senior Housing area. This is because of several reasons, including environmental, socio-cultural, and economic reason. For environmental reason, Dolly Senior Housing can accomodate the reused existing brothel building that have abandoned because of the closement of Dolly's prostitution activity. With several physical improvement, ex brothel building can be improved to be a more decent function as senior housing. For social reason, Dolly's senior housing can lift up new positive image of Dolly's kampung, and also accomodate the abandoned elders all around Surabaya and being one of thematic kampung in Surabaya. While for economic reason, Dolly senior housing can be a generator of new economic existed there that can empower elder people who live there, and also engage other newcomers to generate new business there (health care economy).

## II. LITERATURE STUDY

### *Kampung*

Kampung is a general urban settlement in Indonesia that has its own uniqueness and characteristic (Funo et al, 2002).

Kampung / informal settlement leads to collection of homes of the city that is in poor condition, has limited public facilities, and the majority is occupied by low-income communities (Turner, 1972; Budiharjo 1992; Silas, 1998).

However, kampung conditions in Indonesia could not always be generalized as "slum" or "squatter", because each kampung has their own characteristics, different developmental processes, and attachment to the environment and its respective communities (Herbasuki, et al, 1984; Suchyo, 2010).

The people who live in the kampung bring their identity from their original village to the kampung. As a result, the kampung grows as a residential area that has a multi-dimensional community, ranging from social, cultural, and economic diversity. That is emphasized by Funo et al. (2002) where the kampung has a heterogeneous community and a complex population that usually still holds traditional values. In addition, Raharjo (2010) reveals that kampung shows a strong and urban prehistory relationship that can be traced back to pre colonial times. However, in the context of urban development, kampung sometimes have a negative image due to high density settlements whose infrastructure is still poor and dominated by low-income people (Funo et al 2002).

### *Urban Renewal Aspects*

The challenge that emerging the city, the state and the federal government now is how to renew and revitalise existing urban areas to both make the better use of underproductive land, and create a city that truly reflects the needs and demands of city residents and businesses. Utz Clayton (2014) suggests that basic aspects to be considered in urban renewal development are mentioned as follows:

1. The economic, social and cultural :
  - Site's quality
  - Accessibility
  - Proximity to existing infrastructure.
  - Public policy factors.
  - Local demand
  - Environmental consideration
2. Recognising the Historical and Social context :
  - Using the context to inform the vision, design and planning.
  - Capturing the uniqueness of the context.
  - Re-use historical building.
  - Balancing between:
    - What is already special about a site and embracing new ideas, new contexts and different ways of living.
    - The desire to preserve historic locations and buildings, and the need to satisfy commercial demands.
3. The Actors (Public, Private or Joint Partnership) :
  - Private sector involvement is favourable in situations where the public sector:
    - Seeks private sector innovation, capacity and expertise to deliver a project.
    - Requires private sector financing, either in whole or in part.

- Is looking to transfer responsibility for the design, construction or operation of a project or parts thereof.
- Wants to transfer project risks to private sector.
- From a private sector perspective, urban renewal allows private investors to gain access to prime development sites. For developers, the potential to reposition a site’s use from, for example, an aged industrial facility to a mix of retail, residential apartments and commercial spaces offer significant opportunities to realise an increase in land values.

**Housing for Aging**

The population of the city, sooner or later, will certainly aging. But the fact is the majority of senior housing was built by developers that were not really pay attention to the needs of users. This can because of the designers were not the ones who will be living there and do not consider elder’s perspective about the way they interact with the environment (Idelkope, 2012).

Recognizing senior housing that has been evolved over the years, it surely provide some framework that has been created. Building design for the handicap and aged persons, barrier free design and designing for accessibility as well as providing different types of housing such as independent and assisted living, nursing homes, family homes, veteran’s homes, and adult daycare all should take into account the services that aging persons need (Idelkope, 2012).

Future design for senior housing should focus more on the psychological stresses problem of aging people, and should be able to find solutions for their physical disabilities and degradation. With design techniques such as biophilic architecture, mixed use and warmer materials, senior housing could be less formal, where elder people can feel like they are in new home. The purpose is senior housing design can be comfortable and supportive for their needs (Idelkope, 2012).

**Literature Study**

Here are some designs about elderly housing that exist in various countries. In one area, land use allocation in each country is different based on their needs (table 1).

**Table 1.** Case Study of Elderly Housing

Location	Land use Mapping	*
Stuttgart, Germany	Commercial District	Generationenhaus means built for people of different generations, with the idea of people aging in place and accomodating the aging population.
	Generationenhaus	
	Community Park and Church	
	Residential Neighborhood	

Location	Land use Mapping	*
Rotterdam, Netherlands	Residential Neighborhood	Plussenburgh is an example of combining two types of housing for the elderly which assisted living apartments where residents are able to go about their business privately and independently. However, if they need help with laundry, bathing, food preparation, etc, it is available through what they call the “back door”.
	Plussenburgh	
	Shopping Centre and Commercial District	
	Traffic Circle	
Amsterdam, Netherlands	Protected Open Space	Wazoco was dealing with a restricted zoning ordinance, which forced architect to cantilever eleven units rather than build upward.
	Wazoco	
	Residential Neighborhood	
Brattleboro, Vermont	Residential Neighborhood	Provides assisted living and short-term respite for seniors with diverse facilities.
	Public Park and Highway 91	
	Holton Home	
	Commercial/Industrial Shops	
Brattleboro, Vermont	Commercial/Industrial Area with some Restaurants	Provides assisted living, nursing home, dementia and sub-acute rehabilitation.
	Residential Neighborhood	
	Thompson House	
	Cemetery	
	Hospital	
Brattleboro, Vermont	Commercial/Industrial Area with some Restaurants	Provides nursing home, extended care rehabilitation, assisted living and dementia care.
	Residential Neighborhood	
	Hospital/Health Park	
	Pine Heights Assisted	

Location	Land use Mapping	*
	Living and Thompson House to the west	
	Community Park and Cemetery above	
Amherst, Massachusetts	Commercial/Industrial Area with some Restaurants	Provides assisted living and memory loss care.
	The Arbors Assisted Living	
	Health Centre	
	Recreational Fields	
Amherst, Massachusetts	Hampshire College	Provides amenities, large single and double occupancy units with a personal balcony or first floor patio with garden space.
	Commercial Farmland	
	Applewood Retirement Community	
	Open Space	

From the existing literature study, it was taken synthesis of literature study which will be used in Dolly Senior Housing, which are:

**Table 2.** Land Use Mapping of Literature Study

Land use Mapping	Stuttgart, Germany	Rotterdam, Netherlands	Amsterdam, Netherlands	Brattleboro, Vermont	Amherst,
Community Park and Church	v		v	v	v
Residential Neighborhood	v	v	v	v	v
Shopping Centre and Commercial District & Restaurant	v	v		v	v
Backdoor (laundry, bathing, food preparation, etc)		v		v	
Cemetery				v	
Health Care (Hospital, nursing home, rehabilitation, dementia care, etc)				v	v

### III. GENERAL DESCRIPTION

Kampung Dolly is a former famous prostitution area, but the long history of this prostitution activity stops in 2014. Surabaya municipality insists to closing this prostitution activity with the basis of regional regulations that prohibit human trafficking and

bad social impacts for children around kampung dolly. This also considered not to be in accordance with the morality of Indonesian culture and religion. Kampung Dolly is located on Kupang Gunung Timur 1, Putat Jaya District Surabaya. The research area is located along the corridor of Kupang Gunung Timur 1 street which is the former core area of prostitution activity. Based on the observations, it can be obtained some potentials and problems of Kampung Dolly according to Utz Clayton (2014). Detailed explanations are presented as follows.

#### a) The Economic, Social and Cultural Aspects

As a former prostitution area, the area is filled with brothels buildings. The brothels building's shape are still the same with the condition before closing but they have changed and adapt their design and function. From the observation, after the closement of Dolly prostitution activity some ex-brothels buildings turned into boarding houses, open space area and coffee shops. BARBARA is the biggest brothel building in dolly prostitution area and was an icon of Dolly. After the closement of Dolly prostitution, BARBARA is taken over by the government and the building is under renovation into a community craft business which produces slippers, shoes and batik (traditional Indonesian fabric). Here is an identification of brothels buildings with 558 whores before Dolly prostitution still active and Dolly's condition now (after the closement of prostitution activity).



**Fig 1.** Site Before and After the Closing of Kampung Dolly (source: writer 2017)

This area is a dense residential area with poor environmental conditions. The lack of greenery area makes the high density of buildings more visible and looks like slums, in which plants are very rarely seen. As a greening counterpart in this area, the government has provided 2 green open spaces in the form of parks and fields (fig 2).

Narrow street conditions also add to the impression of density in this kampung because there are several vehicles parked on the street while the road is a two-way street, so it is not rarely to see congestion on this road especially during peak hours. This condition is absolutely not feasible to be offered as a tourism attraction.



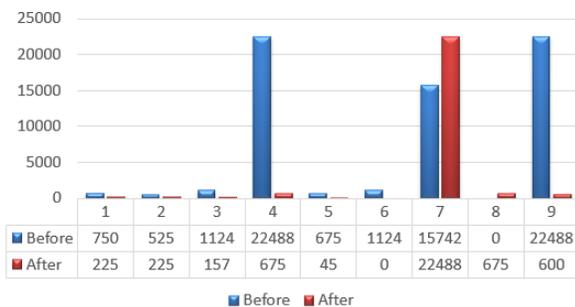
**Fig 2. Lack of Green Area in Kampung Dolly**  
(source: writer 2017)

While the economic condition of Dolly's kampung after the closing of prostitution area, people lived there are suffer from the great declining of income amount. It is because the community business there was dependent on Dolly's prostitution activity. Where the list of business in Dolly are mention as follow (fig 3 and 4):

Dependent Business Activity	Interdependent Business Activity
Parking Area	Sound System rental
Warkop (Coffee Shop & Food Stalls)	Billiard Board production
Grocery Shop	Eyeglass pocket
Brothel (Wisma)	Nirvana Cafe
Laundry	Shoes Laundry
	Shoes Factory

**Fig 3. List of Business Activity in Dolly**

While the comparison of omzet income per month before and after the closing of Dolly prostitution activity are mention below:



**Fig 4. Declining People Income Graphic in Dolly** (source: survey 2017)

**b) Recognising the Historical and Social Context**

Ex-brothels building that is not occupied, could be a potential assets in the formation of elderly settlements in this area. Some buildings are formed with a unique architecture that can be used as an object that attracts tourists. There are also murals in several spots in this kampung that content words of moral value as a sign that this area has been released from the activities of prostitution (fig 5 and 6)



**Fig 5. Ex-Borthel with Artistic Design**  
(source: writer 2017)



**Fig 6. Mural on the Wall of BARBARA**  
(source: writer 2017)

Kampung Dolly is a densely populated settlement with a majority of Javanese people. Before the dolly prostitution was closed, the people in this area were mixed between the natives and the migrants. The migrant population consists of prostitutes and business actors. We did not find any community association that empower the society independently. There are common activities such as regular social gathering for women, community service or recitation. After the closing of dolly prostitution, people only depend on the economic activity that the government has provide. But the fact is, the economic activities provided by the government do not attract much the locals and only able to run in a short time. The initiative of the community to manage its environment is severely lacking. They have little reference and education for the management of residential areas other than the prostitution area.

**c) The Actors (Public, Private or Joint Partnership)**

There is an intervention program from the government that is considered less optimal and does not attract local people to join and some people even judge the government's training programs are not effective. Government of Surabaya bought BARBARA building than used it as a training centre that producing slippers or shoes which gained profit around 2999 USD/month. So far only Surabaya city government who run its role as a public actor in Kampung Dolly. Cooperation with

private sector is seen from the efforts of Surabaya city government in finding customers to order shoes / slippers production in Kampung Dolly. This shows that this production has not been able to independently maintain their sustainability (fig 7).



Fig 7. Government Intervention

#### IV. RESULT AND DISCUSSION

##### a) Design Criteria

For the design concept of Dolly Senior Housing, the provision that should be there according to the literature study are :

1. Community park and church
2. Residential neighborhood
3. Shopping centre and commercial district & restaurant
4. Backdoor (laundry, bathing, food preparation, etc)
5. Cemetery
6. Health care (hospital, nursing home, rehabilitation, dementia care)

While for Dolly's kampung site, land use mapping is shown below (fig 8):



Fig 8. Proposal for the Dolly's Site

##### b) Design Concept

For the design concept, there will be several development phase of Dolly Senior Housing, which are:

##### 1. Dolly Site Now

Here is the existing of Dolly kampung now, that mostly have two floor building and functioned as ex brothel housing (fig 9):

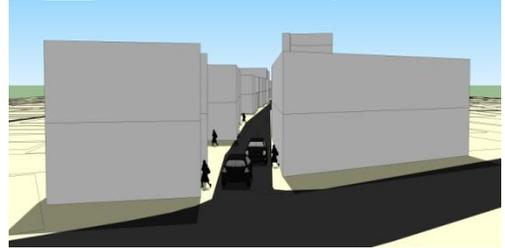


Fig 9. Doly's Existing Site

##### 2. Greening the Dolly's Area

Because one problem that exist there is the lack of greenery area, the first phase development of Dolly Kampung is greening the existing kampung (fig 10).



Fig 10. Greening the Dolly's Area

### 3. Build a Ramp for Vertical Circulation due to Elderly Importance

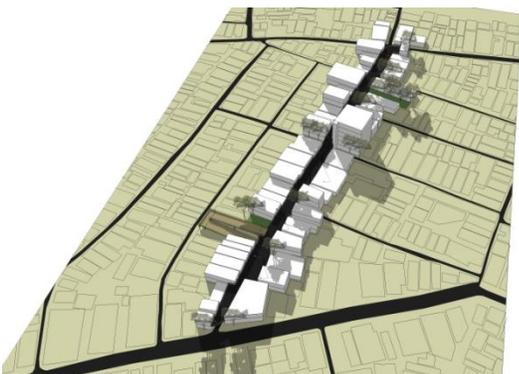
Because mostly buildings in Dolly's kampung have two floors, there should be vertical circulation for elderly there. This vertical circulation is ramp that proposed to be build beside the existing field (fig 11).



**Fig 11.** Proposal for the Ramp

### 4. Build an Elevated Pedestrian Way in the Second Level

Elevated pedestrian way proposed to be built in the Dolly's kampung to make it easier for elders to access the second floor of senior housing. Beside that, it has another purpose such as being social space, commercial space for street vendors, and even tourism space for outsiders who want to visit Dolly kampung (fig 12).



**Fig 12.** Proposal for the Elevated Pedestrian Way

### 5. Build Street Components (Lamp, Bench, Rubbish, etc) and Greening the Second Level Street (Elevated Pedestrian Way)

To make it convenient to users, elevated pedestrian should be planted with some greenery trees that can shade the elevated pedestrian way (fig 13).



**Fig 13.** Proposal for the Street Component and Greening the Second Level Street

### 6. Build additional second floor on the building that still have one floor level

To make some more space, in the final phase will be built additional second floor on the buildings that still have one floor level. It can be functioned as additional senior housing room or another supporting facilities (fig 14).



**Fig 14.** Build Additional Second Floor



Fig 15. Build Additional Second Floor



Fig 16. Elevated Pedestrian Way Design before the additional second floor (above), and after the additional second floor (below)

### 7. Elevated Pedestrian Way Design

In elevated pedestrian way, there are some direct connection to the second floor of senior housing, so that will make it easier to elder people to access the second floor even with wheelchair (fig 17)



Fig 17. Elevated Pedestrian Way Design with Direct Connection to the Second Floor of Residential Neighborhood

Beside ramp, there is also existing lift in ex Barbara's building that can be utilized to be the vertical circulation into the elevated pedestrian way.



Fig 18. Elevated Pedestrian Way Design with Lift that Located in ex Barbara Building

## V. CONCLUSION

Dolly kampung towards sustainable Senior Housing area can become one of thematic kampung in Surabaya. This development is because of several reasons, including environmental, socio-cultural, and economic reasons. For environmental reason, Dolly Senior Housing concept can accommodate to reuse the existing brothel building that have many rooms. Ex brothel building now become abandoned because of the closement of Dolly's prostitution activity. With several physical improvement, ex brothel building can be improved to be a decent senior housing's rooms. For social reason, Dolly's senior housing can lift up new positive image of Dolly's kampung, and also accommodate the abandoned elders all around Surabaya and being one of thematic kampung in the city. While for economic reason, Dolly senior housing can be a generator of new economic there that able to empower elder people who live there, and also engage other newcomers to generate new business there (care economy).

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