

International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies

http://TuEngr.com





Slum Upgrading Without Displacement at Danukusuman Sub-District Surakarta City

Sunarti ^{a*}, Joesron Alie Syahbana ^b, and Asnawi Manaf ^b

ARTICLEINFO

Article history: Received 01 August 2013 Received in revised form 31 March 2014 Accepted 28 April 2014 Available online 02 May 2014

Keywords: Livable; Upgrading form; Slum upgrading process; Indonesia;

ABSTRACT

The displacement of dwellers has often been included in slum upgrading schemes; creating problems even more complex than the ones they were trying to solve (UNESCAP, 2008). This has lead to thinking of slum upgrading without displacement; an successfully effort carried out in Danukusuman Sub-district, Surakarta City-Indonesia. This study examined and described the form of upgrading using qualitative methods. Data collected through interview, field observation, and document review is analyzed using qualitative descriptive technique.

Analysis showed that the upgrading process was carried out through bottom-up planning, involving the local community throughout the process starting from finding the problems, planning the program, construction and maintenance process. The process included legal certification of land ownership; giving them a better legal standing. The upgrading included physical improvements of houses and infrastructures. Without displacing, it was found that people felt more comfortably and safely. By upgrading, it was for them to improve their economy.

© 2014 INT TRANS J ENG MANAG SCI TECH.



1. Introduction

Usually slum upgrading is carried out through top-down approach (Das and Takahashi 2009). Such approach according to UNESCAP (2008) has been used because governments

*Corresponding author (Sunarti). Tel/Fax: +62-24-7460054, E-mail addresses: narti08@gmail.com. ©2014. International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies. Volume 5 No.3 ISSN 2228-9860 eISSN 1906-9642. Online available at http://tuengr.com/V05/0213.pdf.

^a Doctoral Program of Architecture and Urbanism Engineering Faculty of Engineering Diponegoro University INDONESIA

^b Department of Urban and Regional Planning Faculty of Engineering, Diponegoro University INDONESIA

wanted to improve the conditions of the slums to meet certain standards and norms (Payne, 2005). Top-down approach has a weakness in that it may fail to absorb values and aspirations coming from the slum inhabitants. Upgrading is often carried out to merely serve government interests or to profit the private sectors; the local communities are often viewed as the source of problems (UNESCAP, 2008).

One of the main causes of displacement (or eviction) is the strong role of capital interest in the planning of cities (Uitermark and Loopmans, 2013; UNESCAP, 2008). Lands which previously had been planned for settlements may have been developed into commercial uses; not serving the social interest of the communities (UNESCAP, 2008). The displacement often caused new and more complex problems leading to large-scale urban poverty. The new poor would then increase in numbers and had to live in not livable places (Boonyabancha, 2009; UNESCAP, 2008). In top-down planning the local communities could not speak for their interest and express their aspirations to stay in their lands.

All this have lead to the thinking of bottom-up approach in slum upgrading; a process based on the aspirations of the local community, rarely does it involve displacement of the inhabitants. The Surakarta City administration has successfully carried out such upgrading process and gained an award from the central and provincial governments on slum management. The upgrading was legalized through Mayor Regulation Number 13 Year 2007 titled "Pedoman Pelaksanaan Pemberian Bantuan Pembangunan/Perbaikan Rumah Tak Layak Huni Bagi Masyarakat Miskin Kota Surakarta" a form of a manual for slum upgrading for the area. The administration did not displace the inhabitants which already have legal ownership of the land and is in compliance to the city plan; this is an effort to respect the rights of the people as stated in the Agrarian Law Number 5 Year 1960.

The success has lead to the awarding of the BSP2S program from the ministry of housing (*Kemenpera*) in 2008 and 2009 (BSP2S: *Bantuan Stimulan Pembangunan Perumahan Swadaya* - a form of stimulus package for home improvements). The ministry also provided grants for home and infrastructure improvements in 2010 through the BSP2S and PKP program for 200 houses. The location was set in Danukusuman Sub-District by the city government, namely in RW IX and RW X for several reasons: (1) it has the worst condition of houses, (2) many of the lands are legally owned, and (3) the location is in compliance to

the city plan, and (4) the houses are built in close proximity therefore increasing efficiency of the infrastructures being built or repaired. This study examined and described the form of upgrading which have been carried out in Danukusuman Sub-district in Surakarta City Indonesia.

2. Literature Review

2.1 Aspects in Slum Upgrading Without Displacement

Displacement, according to UNESCAP (2008), is the moving, be it temporary or permanent, which is involuntary and against the will of the individuals, families, or communities, from the place that they have inhabited, without provision or access to any form of protection. Displacement is not desired by the displaced, because it causes despair and poverty (Uitermark and Loopmans, 2013). It was often carried out without agreements from the community of the company of legal order from the government. It was also considered to be against the international law because it breaches the rights of the citizens.

This has lead to the emergence of slum upgrading without displacement, especially in locations which are in compliance to the city plan. The process while including improvements of the physical, social and economic environment of the area, may be the most inexpensive and humane choice in the provision of low-income housing direly needed by urban areas. Commonly the community focused on the technicalities such as road, drainage, clean water, sanitation, and waste system improvements in the upgrading program; however, other aspects such as the house, land, income, public facilities and access to public services should also be considered (UN Habitat, 2003; Davis, 2006; UNESCAP, 2008; Karanja, 2010).

The first aspect is the house, as the physical structure the families dwell in. The second aspect is land in terms of its long term ownership, which in turn will guarantee their existence. The third aspect is income, which includes the ability to access better jobs and income or create small businesses. The fourth aspect is public facilities, which includes improvements of spaces used together by the community such as playgrounds and markets. The sixth aspect is access to public service which included improving access roads to public facilities. The seventh aspect is welfare which is the establishment of a communal welfare system, managed by the people and may help the poorest members of their community (Usavagovitwong and

Posriprasert, 2006; UNESCAP, 2008).

There are many reasons for the approach; not only that it promotes participation in the following processes, letting people stay where they are keeps them together and consolidated, maintains the social stability and builds a support mechanism (Uitermark and Loopmans, 2013). The first step included planning and implementation of the project, it continues with the communal management of the social and economic activities in the community. This will stimulate the population to invest in the rehabilitation of their homes and the neighborhood. The improvements of the houses and living environment will also improve the quality of life of the population while removing the threat of eviction. Setting legal ownership of the land also means building assets and improves value of the land. Having owned the land and the house, the population may use it as collateral for loans, be rented or sold in times of needs (Davis, 2006; Boonyabancha, 2009).

In the process of upgrading, the rearrangement of space for infrastructures, schools, playgrounds, health clinics or places of worships is possible, this builds the community's morale and pride. Upgrading also allows the population to use their houses to develop more income through creating small shops, renting rooms or building workshops. Lastly, having a legal address also means an easier access for jobs in the formal sector which would guarantee better payment (Davis, 2006; UNESCAP, 2008).

2.2 Drawbacks of Common Slum Upgrading

The imposition of the top-down approach has been the main weakness of the common slum upgrading; it has lead to the failure of replication to increase the scale, scope and affectivity of the strategy (Cities Alliance 1999; World Bank 2001 in Das 2009). The increasing number of slums may have been caused by, among others, lack of standards in the buildings, high price of land, regulatory hassles, and incompetence.

In community based programs, regulatory blunders, institutional disconnection, and lack of political will have hindered the potential to increase standards (Nitti and Dahiya 2004 in Das and Takahashi 2009). Imparato and Ruster (2003, in Das and Takahashi 2009) suggested that such program will only be meaningful when covering at least 10% of the urban poor. They also considered political sustainability as an important aspect in raising the standards

besides strategies involving cost recovery. City-wide upgrading policies must be supported by locally and nationally conducive regulatory framework, strategic cooperation with private sector and individuals, and transparent development of institutional management (Das and Takahashi 2009).

3. Method

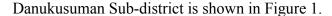
This study employed case study method which according to Denzin (2005) explores best learning practices through examination of the case being studied. The exploration may include the core problem of the case, the relationship to its scientific environment and context, the embedded theories it may contain, and the correlation of issues in the case, and ultimately what may be learned from the experience to better humanity. Groat and Wang (2002) explained that case study may combine explanatory, descriptive and exploratory methods in a research.

Data collection was completed through interviews, field observations and document reviews. Interviews were carried out with key persons such as local officials, public figures and members of the community. Observations were completed to capture the change in the physical form of the settlement based on photos and construction drawings. Planning document regarding the upgrading of the slum was reviewed. Qualitative descriptive analysis was carried out by describing data extracted from document reviews, interviews, and field observations and explorations.

4. Sub-District Danukusuman

Danukusuman sub-district is located 1.5 km south of Surakarta city center, with 5.08 Ha area. It is located in a flat area and mostly used as settlements along with other uses such as commercial and governmental. Administratively it is divided into 15 RWs (*Rukun Warga* - community) and 58 RTs (*Rukun Tetangga* - neighborhood). This study area consisted RW IX and RW X which are mostly inhabited by poor people living in slums. The study area is in Danukusuman Sub-district, Surakarta City Indonesia.

One of the advantages of the area is being located in a strategic location on the main Solo-Wonogiri road, with high land value due to commercial uses around the area. RW IX has 3 RTs while RW X has 4 RTs, totaling at 1,423 people in 422 households. The details map of



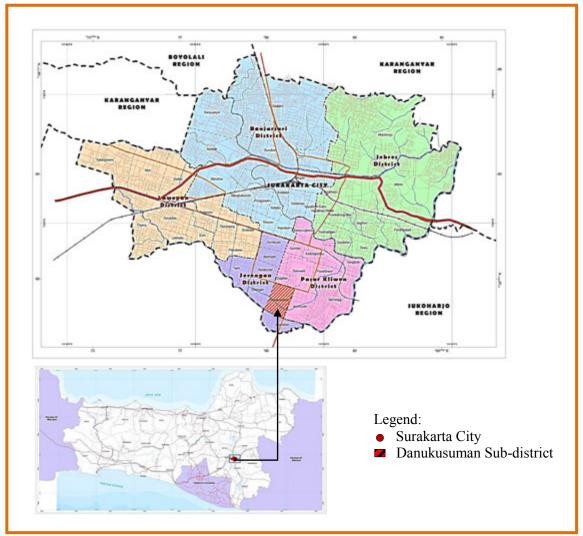


Figure 1: Surakarta City and the Study Area (courtesy of Planning Agency of Surakarta)

Most of the inhabitants are native locals living by generations, only a small number are immigrants. Most of those immigrants are males taking local females as their wife. Most of the inhabitants have low education level (only finishing elementary school) work as merchants, force labors, and industrial or construction workers.

There are 256 houses in the study area; however only 200 houses categorized as not-livable received aid as much as 5 million Rupiahs per house unit from *Kemenpera*, the aid for infrastructure improvement amounted at 4 million Rupiahs per unit. The total of aid was 1,8 billion Rupiahs, this amount was added with money owned by the people in order to improve their own houses. Table 1 describes about population and households in the study area of Danukusuman Sub-district. Table 2 shows the data on the condition of the house in the study

area divided in livable and not livable house.

Table 1: Population and Households in the Study Area (Monografi of Danukusuman Sub-district 2013)

| (Wollogian of Danukusuman Sub-district, 2013). | | | | | | |
|--|---------------------|--------|-------|------------|--|--|
| RW/RT | Population (people) | | | Number of | | |
| | Male | Female | Total | households | | |
| RW IX: | | | | | | |
| RT 01 | 104 | 125 | 229 | 53 | | |
| RT 02 | 123 | 107 | 230 | 74 | | |
| RT O3 | 121 | 112 | 233 | 73 | | |
| Sub-total | 348 | 344 | 692 | 200 | | |
| RW X: | | | | | | |
| RT 01 | 83 | 87 | 170 | 45 | | |
| RT 02 | 86 | 91 | 177 | 56 | | |
| RT O3 | 89 | 106 | 195 | 63 | | |
| RT O4 | 94 | 95 | 189 | 58 | | |
| Sub-total | 352 | 379 | 731 | 222 | | |
| Total | 700 | 723 | 1,423 | 422 | | |

Table 2: Housing Condition in the Study Area (KSM Danukusuman 2010)

| RW/RT | House (units) | | | |
|-----------|---------------|-------------|-------|--|
| KW/KI | Livable | Not-livable | Total | |
| RW IX: | | | | |
| RT 01 | 9 | 19 | 28 | |
| RT 02 | 6 | 31 | 37 | |
| RT O3 | 10 | 26 | 36 | |
| Sub-total | 25 | 76 | 101 | |
| RW X: | | | | |
| RT 01 | 20 | 25 | 45 | |
| RT 02 | 4 | 29 | 33 | |
| RT O3 | 6 | 35 | 41 | |
| RT O4 | 1 | 35 | 36 | |
| Sub-total | 31 | 124 | 155 | |
| Total | 56 | 200 | 256 | |

Before the rejuvenation process, the lands in Danukusuman Sub-district were owned either by the Keraton or the people. In 1997 the lands were starting to be acquired by private owners, in 2007 all of the lands are stated as privately owned (HM). Legal ownership of the land had been related to increased welfare, reduced poverty, improved housing and infrastructure, reserved social stability and better economy (Payne, 2005; Boonyabancha,2009), this drove Surakarta government to rejuvenate the area without displacing the people.

The area often suffered from flooding due to lack or absence of good drainage. It also suffered from disordered arrangement of housing plots, deteriorating infrastructure such as unaccommodating roads, lack of access to clean water, low sanitation, and waste management. These were compounded with health and nutritional problems, along with low income and high crime rate.

5. Discussion

5.1 Stage in the Upgrading

Slum upgrading in Danukusuman Sub-district has been carried out since 2010, conforming to *Kemenpera*'s budget year. It was preceded by data collection by Surakarta City government of people who are poor and living in legally-owned houses categorized as 'not livable', as specified by *Kemenpera*. The survey found 200 houses which met the criteria but 2 houses were not approved as it was considered as 'livable'. However, the community voted the two houses as 'not livable' and therefore eligible for the program. The decision was approved by the government.

The first step was socialization to the community. The government contacted several political figures because the area was highly influential in the area (Das and Takahashi 2009). The program ran smoothly as the figure already possessed close relationships with the government as grant provider. Socialization was carried out in 4 stages; 1st about the data collection, 2nd about slum upgrading, 3rd about the construction and 4th about the implementation mechanism.

Right after the first socialization and the community agreed on the beneficiaries, a team was established known as KSM (*Kelompok Swadaya Masyarakat*). It coordinated the upgrading in small groups therefore absorbing all aspiration from the community. The group consisted of 25 people representing every household. There were 8 KSMs representing 200 low-income households in the area. The next step was planning with the assistance from the government; plans were prepared by the government based on the data collected in the year prior to the program. A planning document containing designs for infrastructures and housing prototypes was made. Upon completion of the planning document, the next step is socialization of the program to the communities.

The next step is the construction, done by the people accompanied by PNPM and contractor as quality controller. Construction processes were carried out according to the plans and prototypes agreed therefore the people already knew how the improvements should be made. The improvements included changing roof panels, wall repairs, floor works, painting, and also windows and doors repairs. Community infrastructure improvements included provision of clean water, along with drainage, sanitation, and waste, and open space improvements.

5.2 Slum Upgrading Without Displacement

The upgrading process which took place at Danukusuman Sub-district had been in the form of building quality and neighborhood infrastructure improvements, no eviction whatsoever. People stayed where they used to live, in the very same house, however, the physical condition of the houses were improved. The re-arrangement of housing plots only included tidying up the form of several plots as to conform to the data at BPN (National Land Bureau) and another 8 plots to provide additional space for road improvement which increased accessibility to the area.

The form of upgrading without displacement by improving the physical condition of the environment (Davis, 2006; UN Habitat, 2003, Karanja, 2010) was chosen by Surakarta City for being inexpensive and humane in providing housing for low income population. It was also chosen because it gave the community the opportunity to stay in their lands and helped create social stability. Displacing slum inhabitants will only create new problems and worsen poverty without actually solving any problem in the urban area (UNESCAP, 2008; Das and Takahashi 2009).

By upgrading without displacement the community may feel more comfortable, safer, and quieter, have healthier environment, and have better accessibility thus improving their economy (Payne, 2005; Boonyabancha, 2009). It may also reduce poverty in the urban area therefore helping governments in improving overall quality of life of the community.

Forms of the upgrading which took place at the study area are upgrading without displacement. Table 3 explained how upgrading without displacement served the rights of the people already having legal ownership of the land thus allowing them to employ their full

capacity for improvement. Interview with Mr.Topo, a local figure, indicated improvements in both physical and non-physical aspects of the neighborhood, however; he warned that without proper maintenance the neighborhood may regress into a slum.

Table 3: Forms of upgrading in the Study Area.

| T . | 01: 4 | | upgrading in the Study An | |
|------------|--------------------|--|---|---|
| Item | Objects | Problems | Improvements | Benefits |
| 1 | House plots | Roadside lots are not properly aligned reducing the road width. | Plot rearrangement: - Conforming the plots to IK BPN - Reducing certain plots for infrastructure | Main road is now accessible to cars (for example ambulance and fire trucks) |
| 2 | House structure | Unhealthy house construction | improvement: - Roofline - Rainwater drainage - Addition of windows and ventilation - Door repairs - Construction of the house - Wall repairs & paintings | Better house facades Protection from the sun and the rain Stronger houses Better interior conditions |
| 3 | Roads | Deteriorated dirt and gravel roads | - Re-pavement of the roads using pavement blocks | Better function of the roads Cleaner roads and less floods |
| 4 | Clean water | Lack of clean waterWater is dirty and foul-smelling. | Well improvements Communal clean water supply | - The use of clean well water communally |
| 5 | Drainage | Trapped drainage and service disparity | Construction and repair of primary and secondary canals Making of biopores Construction of water infiltration boxes | - Less flooding - Cleaner environment |
| 6 | Sanitation | Lack of sanitation | - Communal toilets | - Better and cleaner toilets for everyone |
| 7 | Open Space | Absence of empty land for park, parking and street vendors No public space for socializing | Plantation in the river banks Plantation of productive plants Building of fences Provision of parking areas for cars and carts | Better housing environment Cleaner river environment Better parking for carts and vehicles Places for the community to socialize |
| 8 | Waste | No waste disposal system | Waste management establishmentSocialization for cleaner living | - Less visible waste - Better behavior |
| 9 | Economics | - Low income - Lack of capital | Training for home industry Loans to home industry owners | Extra income for the populationMore job opportunities |
| 10 | Health | - Undernourished children - Frequent occurrence of dengue fever, diarrhea and typhus. | Provision of nutritional foodsTreatment for dengue, typhus and diarrhea | Better nutrition Healthier environment and less disease |

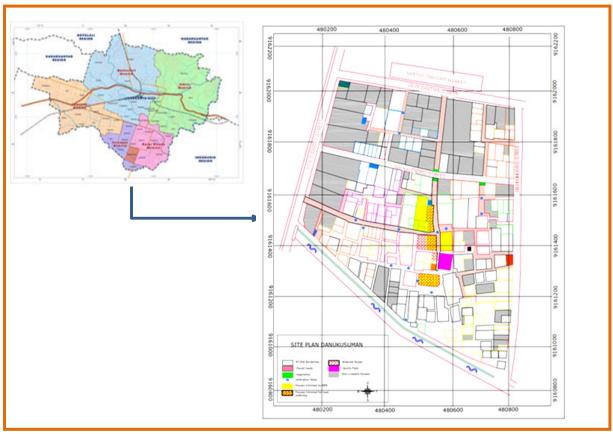


Figure 2: Slum Upgrading in the Study Area (courtesy of Planning Agency of Surakarta City)



Figure 3: Improved Houses and Roads.



Figure 4: Renovation of Houses (facade, floor and roof).

6. Conclusion

Slum upgrading without displacement is an alternative to appreciate the legal ownership of the lands and whenever the location conforms to the urban development plan. Development without displacement will reduce poverty in the urban areas, provide investment opportunities in the provision of low income housings, improve livability and environmental sustainability, stabilize the communities socially and economically, and build better morale and pride. Political factor played an important role in the upgrading because the community believed a certain political figure in the area.

The form of the upgrading included housing improvement, infrastructure improvement, opening access and promotion of healthy living arrangements. The outcome has been the better tie between the community and the place it occupies. The challenge has been how to prevent the environment from returning into slum, and whenever possible to improve its condition even better. The presence of a key figure was needed to ensure sustainability and prevent environmental degradation. The community needs to have initiative in managing the quality of the environment, as opposed to waiting for another government grant or improvement program. There was a need for housing environment management team which may be established comprising the people involved in the early stage of the upgrading.

7. Acknowledgements

The author would like to thank leader and staff of Danukusuman Sub-District and Danukusuman Local Figures who have given information about this study, Planning Agency of Surakarta City who have given permission for the research and data collection, and PNPM of Surakarta City who have given data collection.

8. References

Boonyabancha, Somsook. (2009). Land for Housing the Poor – by the Poor: Experiences from the Baan Mankong nationwide slum upgrading programme in Thailand. *Environment & Urbanization* Vol. 21(2): 309–329

Davis, Mike. (2006). Planet of Slums. British Library Cataloguing in Publication Data

Das Ashok K. and Lois M. Takahashi. (2009). Evolving Institutional Arrangements, Scaling Up, and Sustainability Emerging Issues in Participatory Slum Upgrading in Ahmedabad, India. *Journal of Planning Education and Research*

Groat, Linda N and Wang, David C. (2002). Architectural Research Methods. Published

Simultaneously in Canada.

- Karanja, Irene. 2010. An Enumeration and Mapping of Informal Settlements in Kisumu, Kenya, Implemented by Their Inhabitants. *Environment and Urbanization 2010* Vol. 22(1):217-239
- Payne, Geoffrey. 2005. Getting Ahead of the Game: A Twin-Track Approach to Improving Existing Slums and Reducing the Need for Future Slums. *Environment & Urbanization* Vol. 17:135
- UNESCAP, UN-HABITAT. (2008). Perumahan bagi kaum miskin di Kota-Kota Asia. Masalah Penggusuran: Upayakan alternatif lain yang lebih berpihak kepada kaum miskin. *Panduan ringkas untuk pembuat kebijakan*.
- UN-HABITAT. (2003). The Challenge of Slums: Global Report on Human Settlements 2003. *Earthscan Publications Ltd London and Sterling, VA*.
- Usavagovitwong, Nattawut and Prayong Posriprasert. (2006). Urban poor housing development on Bangkok's waterfront: securing tenure, supporting community processes. *Environment & Urbanization* Vol 18(2): 523–536
- Uitermark, J. and M. Loopmans. (2013). Urban Renewal without Displacement? Belgium's 'housing contract experiment' and the risks of gentrification. *Journal of Housing and the Built Environment* 28.



Sunarti is a student in Doctoral Program of Architecture and Urbanism Engineering Faculty of Engineering, Diponegoro University-Semarang-Indonesia. She is also a lecturer in Department Program of Urban and Regional Planning, Faculty of Engineering, Diponegoro University. She received her master degree from Bandung Technology Institute in 2001. Sunarti current interest are in areas of housing and settlement planning.



Joesron Alie Syahbana is associate professor in Department of Urban and Regional Planning, Faculty of Engineering, Diponegoro University-Semarang-Indonesia. He also as the Promotor (Dissertation Supervisor) of Sunarti. He has research focused on Community Based Management, Qualitative Method And Urban Planning.



Dr. Asnawi Manaf is an associate professor in Department of Urban and Regional Planning, Faculty of Engineering, Diponegoro University-Semarang-Indonesia. He is received his doctoral degree from Urban and Community Planning, Kassel University, Germany in 2005. He is focusing on housing and settlement planning, urban management, and community development. He is also as head of Department of Urban and Regional Planning, Diponegoro University.

Peer Review: This article has been internationally peer-reviewed and accepted for publication according to the guidelines in the journal's website. Note: Original version of this article was accepted and presented at the International Workshop on Livable Cities (IWLC2013) – a joint conference with International Conference on Sustainable Architecture and Urban Design (ICSAUD2013) organized by the Centre of Research Initiatives and School of Housing, Building & Planning, Universiti Sains Malaysia, Penang, Malaysia from October 2rd to 5th, 2013.