

Community Economic Improvement on Flats Based on Sustainable Housing Concept

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Abstract: *Flats is one alternative to solving the housing and settlement needs. Provision flats aimed at low income household. To improve the quality of life requires an increase in sustainable economic aspects. The concept of Sustainable Housing at economic aspects in use of home based enterprise as a solution. The method used in this study is a qualitative research method. The technique of collecting data using interviews and observation. Results of this research is sustainable housing concept of flats in the economic aspect.*

Keywords: Flats, low income household, sustainable housing, home base of enterprise

I. Introduction

Flats development is one alternative to solving the housing needs and housing, especially in urban areas where the population continues to increase. Build vertical housing is a priority of the government program to provide housing for the urban poor [6]. Limited space makes the price of land to be expensive, especially in downtown. With limited land, vertical housing development is an alternative to be developed as more minimal in terms of land use [10]. Flats procurement savings are based on the land and the ability to pack / high capacity of the building, which is the designation for residents displaced people and low income. Reality on the ground shows that low-income people had, can adapt vertical pattern of life in the Flats. Flats are citizens originating from land around the dwelling, then there are similarities scope of social / cultural, so that residents simply need to adapt to vertical housing live alone. As for flats, the residents come from a variety of different areas; there are differences in social or cultural sphere; so that residents need to adapt in several respects, including the economy[17]. Construction of flats in the city of Surabaya is one of the government's policy as an alternative housing for low-income household who are unable to access a decent home independently [5]. The first flats in the city of Surabaya is built using the concept community based development is on the Dupak Bangun Rejo Flat.[2].

The problems posed flats post occupancy tends to be slum, do not have the awareness in the maintenance, noise and lack of privacy, many residents quality of life is getting worse, the lack of public facilities and commercial facilities that inhibit economic activity occupant [6]. Economic so people who live in public housing needs to be improved, so that they could leave the apartment and can access appropriate housing. For many low-income households, housing is one of the few resources they have to generate revenue [8]. In improving the quality of the

concept of sustainable housing in the community mentions Home Based Enterprises to support sustainability in the economic aspect [13].

This study aims to improve the economic quality of the people who live in flats. so the results of this study is to formulate the concept of sustainable housing in flats in the economic aspect.

II. Research Theory

Housing one floor built horizontally need large area, so that in these days, where land is becoming more scarce and more expensive, the government began to replace the more practical form of the house and do not require too much land, ie flats. Construction of flats is one alternative to solving the housing needs and housing, especially in urban areas where the population continues to increase [5]. Build vertical housing is a top priority of the government program to provide housing for the urban poor [6]. Limited space makes the price of land to be expensive, especially in downtown. With limited land, vertical housing development is an alternative to be developed as more minimal in terms of land use [10]. Flats as an alternative to urban renewal, has helped create a clean environment. Flats in Surabaya is generally occupied by a group of lower middle income people who live together to consider planning as a whole, among others, pay attention to the background of the occupants of the need to stay in the environment, need to pay attention to the needs and habits of physical, social, economic as well as the behavioral habits of the occupants because it will affect the behavior of the occupants create a comfortable living environment or uncomfortable [9].

In improving the quality of the residents of the apartment, takes the concept of sustainable housing in the economic aspect. UN-Habitat describes the sustainability of the economic aspects of the flats are within range of micro (neighborhood, household) include ensuring housing affordability for different social groups, providing adequate flats, to raise labor productivity, ensuring housing is integrated with employment, supporting domestic economic activities and enterprise , promoting petty landlordism and self-help housing, housing management and maintenance, and strengthening resilience and futureproofing of homes[13]. Abolade and Tipple also describes the formation and growth of home-based company as a branch of the informal sector[1] [12].

According to Silas Home Based Enterprises (HBE) is a household business activity which is basically a people's economic activities are run by the family. Where activities are flexible and not too bound by rules which are generally applicable. Including working hours can be arranged itself as

well as a loose connection between the capital to the business[11].

There are 5 main characteristics HBE, the home and the household became the capital and the base of the economic activities of the family, the family became the main force in organizing the HBE, ranging from setting up, running up to control all the activities, facilities and infrastructure involved, basic and work patterns HBE related to the implementation of home-ladder. Wife / mother and children into the bones of users and the organization of HBE, home more clearly is a process that always resolve themselves in the context of the events that had passed, including the activities perform various forms of HBE and the various conflicts that arise as a consequence of the HBE at home can be resolved naturally, both internally and with the home environment and their neighbors are involved directly or indirectly in a variety of activities HBE.

Of the type of business consists of five types of HBE is a manufacturing / producing goods, such as handicrafts etc., Service / services for example salon and so on, distribution and sales, such as a store selling groceries handicrafts, farming / agriculture associated with, for example, raise chickens, and and others / is a combination or can not be classified in any of the above types [11].

III. Methodology

This type of research is supported by quantitative qualitative. Quantitative methods are used to measure the level of compliance with the criteria of sustainable residential / housing sustainable on economic aspects rusunawa Dupak Bangunrejo. Then the results are explored in detail using the qualitative approach, the technique of interview and observation data retrieval. This study was used qualitative method. This method emphasizes the actual situation, focus on interpretation and meaning, respondents understanding, and can use variety of data acquisition techniques [4]. Qualitative research Involves Subjective assessment of attitudes, opinions and behavior [3]. The concept of sustainable housing in the economic aspects of triangulation analysis is done through the study of literature, related policies, and the field results.

The variable in this study was

- The quality of community productivity
- Ease of access to work places
- Support for urban farming activities (urban agriculture) in flats
- Supporting the Manufacturing / producing goods, such as handicrafts etc.,
- Support Service activities

The population in this study include the occupants of flats Dupak Bangunrejo, sampling techniques is the non-random sampling technique / purposive sampling, since sampling was conducted in the population overall.

To produce the economic aspects of the concept of sustainable housing flats done some analysis stage. The following stages of analysis performed:

- Identify the empirical facts of economic conditions of community Dupak Bangunrejo flats
- Conduct evaluation of the economic conditions of the community of Dupak Bangunrejo flats

- Formulate the concept of sustainable housing economic aspects Dupak Bangunrejo flats.

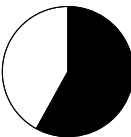
IV. Results and Discussion

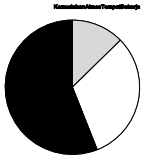
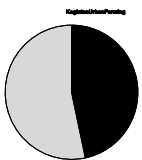
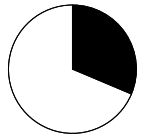
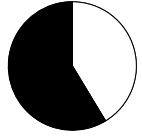
Flats Dupak Bangunrejo administratively located in the Village Dupak, District Krembangan, Surabaya. Bangunrejo Dupak flats covered in RT 21 and RW 5 who joined the village who are nearby. Bangunrejo Dupak flats has an area of 3000 m², consists of 6 blocks, 3 floors each block, all of which functioned as a shelter, with the outside of each unit of 18m² and a total of 150 units. In its construction is divided into two stages of development, the first phase consists of blocks A and B which was founded in 1989. The second stage consists of four blocks, namely blocks C, D, E and F were established in 1990.

Empirical facts used to view existing condition Dupak Bangunrejo Flats. This part of the economic assessment of the quality of public flats, performed with a qualitative processing. The economic aspect is an important aspect in sustainable housing to improve the quality of life. Economic aspects in flats is explained most of the people work as street vendors, private employee, pedicab drivers, salespeople, entrepreneurs and driver. For many low-income households, housing is one of the few resources they have to generate their income. In supporting the economic activities of home-based enterprise some residents are already conducting Manufacturing / producing goods such as making *hasduk* (rattan) by absorbing manpower in the flats, and create interest flannel by absorbing manpower in flats whose results are sold to market, milkfish presto, a small shop, and a box of rice manufacture to order. It also supports the activities of urban farming in the flats is done by planting in dapan home / terrace floor 1 located on floors 2-3 using pots / polybag carried out by some residents, it has the potential to be developed into one of the home-based businesses ladder that can be managed together thus increasing people's income. And activities such as salon services are also carried out community towers.

All activities HBE is done in units of towers by dividing the unit area for business activity and housing, and use a common kitchen for food processing, although the extent secara less. So that occupancy is not yet fully integrated with the work going on in society at Dupak Bangunrejo flats, because some community are already using the concept of home-based enterprise in the household. The location is also adjacent flats by means of trade and services, it can be used for the distribution of goods processed. And for access to the place of work is also very easy, because of the strategic location of the towers. Evaluation of the economic aspects are described in Table 4.1 as follows:

Table 4.1 Empirical facts

Variables	Diagram	Description
The quality of community productivity		58% is not good at all, 42% unfavorable, showing some community activities to improve the quality ekonominya productivity, but most

		do not do.
Ease of access to work places		12.7% poor, 31.3% is quite good, 56% good, showing the proximity of public works is in the towers, outside the towers as well as to migrate to other cities.
Support for urban farming activities (urban agriculture) in flats		46.7% less splendidly done when there are competitions between blocks, 53.3% less well showed a few people who do urban farming activities on the environment
Supporting the Manufacturing / producing goods		31.3% is not good at all, 68.7% showed unfavorable producing activities undertaken by some of the community are not exhaustive.
Support Service activities		41.3% is not good at all, 58.7% less good shows salon activities / services sepertisalon, sewing is done by some people to divide their flat unit for these activities.

The results of the empirical facts that are tailored to the research variables are:

- The quality of community productivity. The results is productivity of people by some community only
- Ease of access to work places. The results is proximity and ease of access to work places
- Support for urban farming activities (urban agriculture) on Flats. The results is some people do urban activities farming
- Supporting the Manufacturing / producing goods, such as handicrafts etc.. The results is some people do manufacturing activities
- Support Service activities. The results is some residents perform servicing activities / services

From the analysis of empirical facts then performed an evaluation of each variable. The resulting evaluation results as follows:

- The quality of community productivity. The results is necessary assistance in terms of community development efforts, through training on a regular basis and required business development activities.
- Ease of access to work places. The results is improving the quality of housing to integrate circuitry work with the activities carried out at the household / HBE

- Support for urban farming activities (urban agriculture) in flats. The results is gave the training of residents related to urban farming, planting hydroponically by utilizing a narrow area such as the lobby, corridors and balconies for urban farming activities, managing in groups in places together and form a group of urban farming that can be developed and sold.
- Supporting the Manufacturing / producing goods, such as handicrafts etc., The results is optimising space in the kitchen and space unit, provides gas network in order to maintain security in production / cooking
- Support Service activities. The results is provide training to citizens to improvement skills, and increase the width of unit space for these activities, so that it can continue to be made and sustained

Policy to determine the variables associated with the concept of sustainable housing, namely:

- The quality of community productivity.
 - *Undang-Undang Republik Indonesia Nomor 13 Tahun 2003*, explain:
Increased productivity as referred to in paragraph (2), carried out through the development of productive culture, work ethics, technology, and efficiency of economic activities towards the realization of national productivity. [15]
- Ease of access to work places.
 - *UU RI No.1 Tahun 2001*, explain:
Common house construction as referred to in paragraph (1) shall have access to the service center or workplace [14].
- Support for urban farming activities (urban agriculture) in flats.
 - *Permen PU No. 05/PRT/M/2008*, explain: Green open space in the yard area that is not too broad or narrow, open space hijaudapat used also to plant medicinal plant / herb, and potted plants that can add to the aesthetic value of a house. For space efficiency, potted plants referred to can be set in the makeup / vertical form [16]
- Supporting the Manufacturing / producing goods and Support Service activities.
 - *UU RI No.1 Tahun 2001*, explain:
Utilization of the house can be used as a limited business activities without endangering and not interfere with the function of occupancy[14].

The concept of sustainable housing be made one of the criteria in the analysis of triangulation. the concept of sustainable housing as follows:

- The concept of sustainable housing in the UN Habitat is to provide adequate shelter to increase workforce productivity, ensure housing integrated with employment, support economic activities based on the household / Home-Based Enterprise[13].
- Five types of businesses based household/ home based enterpraise namely manufacturing/ producing goods, such as handicrafts etc., Service, distribution, such as a store selling groceries handicrafts, farming/ related to agriculture, and others/ a combination[13].

The concept of the economic aspect of flats can be formulated as follows:

- Improve and develop the productivity of society. realized with the independent community empowerment through domestic efforts.
- Increasing community empowerment in the agricultural business. Realized by providing training citizens one way hydroponic cultivation with the rest of the land use / land like a narrow hallway, corridor and balcony on floors 2-3, while the first floor remaining land cultivation place that is not used for activities. This activity is carried out with the communal system managed by the group, planting can include vegetables, fruits, etc. are cost and the harvest is divided between people who take care of the garden.
- Increasing community empowerment in producing goods. Realized by optimizing kitchen space and a unit space for production activities that exist today such as milkfish presto, rice box, craftsmen *hasduk* (rattan), artisans and flower accessories provide gas network in order to maintain safety in production activities.
- Develop the existing production activities with training activities of citizens.
- Enhancing community empowerment in service activities. Realized by optimizing space occupancy room.
- Enhancing the role of the government in meeting the quality of public housing flats, especially the integration with the job.

IV. Conclusion

This research resulted in the concept of sustainable housing in the economic aspects to improve the quality of life of flats includes the increase and develop the productivity of the community, increase community empowerment in the agricultural business, improve community empowerment in producing goods, develop the activities of the existing production community training activities, empowering communities in service activities, and increase the role of government in meeting the quality of public housing flats, especially the integration with the job.

References

i. Abolade, O., Adigun F.O., Akande, Oluwatosin David, (2013), *Impacts of Home Based Enterprises on the quality of Life of Operators in Ibadan North Local Government, Nigeria. International Journal of Humanities and Social Science Invention, Vol. 2*

- ii. Bahri, S. (2005) *Rumah Susun Sebagai Bentuk Budaya Bermukim Masyarakat Modern, Jurnal Sistem Teknik Industri Vol. 6, No. 3.*
- iii. Cohen, Louis, Manion, Lawrence, Morrison, Keith, (2007), *Research Methods in Education:sixth editions, Routledge, New York.*
- iv. Groat, Linda & Wang, David, (2002), *Architectural Research Methods, John Wiley & Sons Inc, New York.*
- v. Hartatik, P. S., Sri Nastiti NE (2010) *Peningkatan Kualitas hidup penghuni di Rusunawa Urip Sumoharjo pasca-Redevelopment, Seminar Nasional Perumahan Permukiman dalam Pembangunan Kota, Surabaya*
- vi. Iriansyah, N. (2011), *A Need for affordable housing in Banda Aceh, Indonesia. Vol. 1 No. 2.*
- vii. Kothari, C. R. (2004), *Research Methodology: Methods and Techniques, New Age International Publisher, New Delhi.*
- viii. Lawanson, T. (2012), *Poverty, Home Based Enterprises And Urban Livelihoods In The Lagos Metropolis, Journal of Sustainable Development in Africa, Vol. 14, No.4.*
- ix. Pamungkas. 2010. *Kriteria Kepuasan Tinggal Berdasarkan Respon Penghuni Rusunawa Cokrodirjan Kota Yogyakarta. In Teknik Pembangunan Wilayah Dan Kota Semarang: Universitas Diponegoro.*
- x. Randy, M. (2013), *Identifikasi Kemampuan dan Kemauan Membayar Sewa Masyarakat Berpenghasilan Rendah Terhadap Rumah Susun Sederhana Sewa Dan Faktor-Faktor Yang Mempengaruhinya, Jurnal Perencanaan Wilayah dan Kota Vol. 24 No. 2, 95 - 108.*
- xi. Silas, Johan 2000. *Rumah Produktif dalam Dimensi Tradisional dan Pemberdayaan, ITS. Surabaya*
- xii. Tipple, G. (2006) *Employment and work conditions in home-based enterprises in four developing countries: do they constitute 'decent work'? Work, Employment & Society, Vol.20, 167-179.*
- xiii. UN-Habitat. 2012. *Sustainable Housing For Sustainable Cities. Nairobi: UNON, Publishing Services Section.*
- xiv. Indonesia, (2011), *Undang-Undang tentang Perumahan dan Kawasan Permukiman, Nomor 01, Pemerintah RI, Jakarta*
- xv. Indonesia, (2003), *Undang-Undang Republik Indonesia tentang Ketenagakerjaan, Nomor 13, Pemerintah RI, Jakarta.*
- xvi. Indonesia, (2008), *Peraturan Menteri Pekerjaan Umum tentang Pedoman Penyediaan dan Pemanfaatan Ruang Terbuka Hijau Di Kawasan Perkotaan, Nomor 05, Pemerintah RI, Jakarta.*
- xvii. Darmiwati, R. (2000) *Studi Ruang Bersama Dalam Rumah Susun Bagi Penghuni Berpenghasilan Rendah. Dimensi Teknik Arsitektur, Vol. 28, No. 2, 114 - 122.*