# SUSTAINABLE HOME BASED ENTERPRISE: CRITERIA TOWARD THE CONCEPT

Case Study: Kampung Sate, Ponorogo, Indonesia

#### Rahmatyas Aditantri

Universitas Mercu Buana Jakarta Email: rahmatyas.aditntri@gmail.com

#### **ABSTRAK**

Usaha berbasis rumah tangga merupakan salah bentuk usaha dari masyarakat dalam rangka meningkatkan kesejahteraan ekonomi dengan memanfaatkan rumah tinggal sebagai tempat untuk bekerja. Kondisi seperti ini banyak terlihat pada sebagian besar negara berkembang, termasuk Indonesia. Usaha berbasis rumah tangga muncul sebagai sebuah solusi bagi rumah tangga berpenghasilan rendah dalam meningkatkan kesejahteraan ekonominya. Kampung Sate merupakan salah satu kampung usaha berbasis rumah tangga di Ponorogo yang telah tumbuh dari waktu yang lama. Di Kampung ini, masyarakat masih menggunakan peralatan tradisional dalam menjalankan aktifitas ekonominya. Rumah - rumah dimodifikasi menjadi ruang kerja untuk menjalankan aktifitas ekonomi. Dari survai primer yang telah dilakukan dapat dilihat bahwa penghuni kurang memberikan perhatian pada kondisi rumah mereka. Padahal hal penting terkait rumah produktif adalah dampak dari aktifitas produksi pada lingkungan. Saat ini isu lingkungan menjadi hal penting karena pembangunan berkelanjutan tidak akan dapat tercapai apabila masyarakat tidak peduli tentang dampak aktifitas yang diberikan pada lingkungan. Oleh karena itu, penelitian ini diharapkan mampu memberikan penjelasan mengenai kriteria dari konsep usaha berbasis rumah tangga berkelanjutan di Kampung Sate, Ponorogo. Kriteria – kriteria tersbeut dapat digunakan sebagai acuan dalam menentukan konsep pembangunan lingkungan berkelanjutan pada rumah produktif.

Kata Kunci: kriteria, usaha berbasis rumah tangga, kampung, pembangunan berkelanjutan

#### **ABSTRACT**

Home based enterprise is one of the forms of effort of people in order to gain economic prosperity by using their homes as the place to work. This condition is easy seen in most developing countries, including Indonesia. Home based enterprise appears as a solution for low-middle income household to gain economic prosperity. Kampung Sate is one of home based enterprise village in Ponorogo which is evolved years. In this Kampung, the people still use traditional equipments to conduct their economic activities. The houses are modified into workshop to conduct their economic activities. From primary survey it can be seen that the inhabitants pay less attention to their house condition. The other important thing related to productive house is the impact of the production activities toward the environment. Nowadays environmental issues become important because sustainable development can not be achieved if the community does not care about the impact of a given activity on the environment. Therefore, this research is expected to give overviews regarding the criteria of sustainable home based enterprise concept in Kampung Sate, Ponorogo. Those criteria can be used to determine the sustainable concept toward the built environment in productive housing.

Keyword: criteria, home based enterprise, kampung, sustainable development

#### 1. INTRODUCTION

A house is a building which has function as an adequate shelter, place for family raising and property as well. In other words, housing not only has the function for shelter but also the beginning place for living

development. Affordable housing is a productive asset of house that has important contributions to national welfare and economic development. Moreover, decent affordable housing and related infrastructure are among the key factors that also make



local places more attractive, inclusive and competitive (HABITAT, 2012). Generally, there are two types of house (Silas, 1993), namely conventional house and productive house. Commonly in developing countries, many low and middle-income household use their dwellings as workplaces. In some case, those phenomenons can also be found in many kampungs in Indonesia as well. These circumstances resulted in what is called productive housing. In Indonesia, we can see a lot of productive houses which are spread out with different names and characteristics such as Kampung Tempe, Kampung Batik, Kampung Tas.

Kampung Sate in Ponorogo is a kampung located in Kelurahan Nologaten which was built since 1950s. In this kampung, it can be seen not only satay maker but also supporting components such as rice skewers and satay sauce as well. Beside, productive housing in this kampung is evolved with conventional housing. The total productive housing in this kampung are around 17-20 houses. In the beginning of 1990s, Kampung Sate Ponorogo (it was Gang Sate at that time) was evolved become one of culinary tourism in Ponorogo. Gang Sate became famous not only in Ponorogo but also the other cities. In the beginning of 2013, the government inaugurated this Gang Sate became Kampung Sate, Ponorogo and also one of tourism destination in Ponorogo.

On the other hand, this time we were to face sustainable development goals in 2015. These goals lead us to concern about environment, social and economic aspects in order to reach our development (Bruntland, 1987). Austin (2012) argued that the original intent of sustainable development included concerns of social equity between generations, basic global living standards, non-exploitation of others, and reducing the rate of consumption of non-renewable resources.

One of the factors that must be overcome achieve sustainable to development is how to improve destruction of the environment without sacrificing the needs of economic development and social justice. For most people, sustainable development is closely related to economic growth and how to find a way to advance the economy in the long term, without depleting natural capital. But for most people, the concept of economic growth itself problematic, because the earth itself resource limited.

If we look back to Kampung Sate, to conduct their economic activities, the people still use traditional equipments to do so. Workshop rooms (satay kiln) inside the house with lack of ventilation are the common condition in this kampung. Some of the workers also do the chicken slaughter behind their houses and the sewage is streamed into the sanitation in front of their houses. The workers are trying to increase their social welfare without concern to their environment. They just focus to how to make their satay delicious and people come to buy

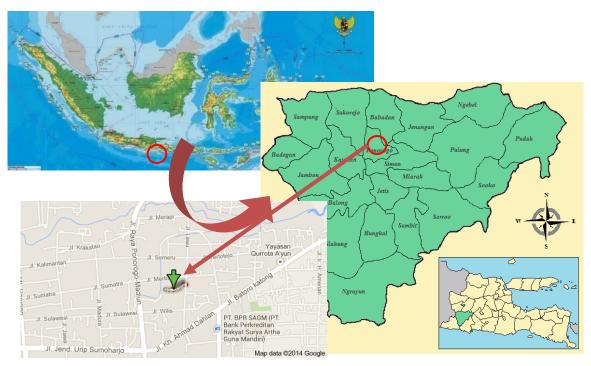
The other important thing related to housing and the activities inside, in this case about productive house, is regarding to the impact of the activities toward environment surround it. It will be linked to sustainable housing development and the aspect inside. The activities of productive housing are quite different with conventional housing. The productive housing can more generate the negative impact rather than the conventional housing. The concept of sustainability, sustainable development and a sustainable housing is currently very frequent term and a key concept in the legislation fields. There is an increasing effort to understand the possible links between the environmental, economic. social institutional dimensions of development and the ways in which these spheres are measured not only individually but also in connections. In general, the term is often understood as a vision of further development, which sees the mutual respect and seeks a balance between social, environmental and economic side.

According to the introduction, the following objectives are explained the purpose of this research:

- 1. Analyzing the characteristics and the impact of productive housing to sustainable housing aspects Kampung Sate, Ponorogo.
- 2. Formulating the criteria to be implemented in sustainable home based-enterprise in Kampung Sate

#### 2. **RESEARCH METHOD**

This research will be conducted in Kampung Sate, Lawu Street I, RT 4, RW 5, Nologaten, Ponorogo Regency, East Java Province, Indonesia. The study area is all area in Kampung Sate Ponorogo in that street. The research location can be seen in figure 2.



Location of Kampung Sate Source: Google Maps, 2015

In Ponorogo Masterplan, Kelurahan Nologaten is designated as residential area (RTRW Ponorogo, 2012).

#### 2.1. Research Approach

This research will be conducted to determine the criteria related to sustainable home based enterprise in Kampung Sate, Ponorogo. The objects of this research are the productive house in there. Therefore, the methods will conform to the purpose and the target.

#### 2.2. Data Collection Method

Primary and secondary survey are used to collect the data.. The primary survey consists of direct observation to study area and semi-structured interviews to obtain the required data. The secondary survey consists of institutional survey and literature survey.

#### 2.3. Analysis Method

To conduct the study so that the objectives can be achieved it is necessary to use appropriate analytical methods to process the data and information that has been collected through primary and secondary survey. The first objective is analyzed by descriptive qualitative analysis while the second objective is analyzed by Delphi Analysis.

#### 2.4. Respondent

There are 2 types of respondent based on each objective in this research. The respondent for the first objective is the 17s inhabitants who are involved in satay activities. While the respondent for the second objectives is the stakeholders who have importance and influence in economic activities in Kampung Sate such as local government agencies (local planning government, environmental local government agency, local cooperative agency), head of kampung sate and one of community near the kampung.

#### 3. RESULT AND DISCUSSION

#### 3.1. Characteristic and Impact of Productive Housing in Kampung Sate

## 3.1.1. Characteristic of Home Based Enterprise in Kampung Sate

A house is a building where people live and carry out their lives. In addition, a house is also the site of the socialization process when an individual is introduced to the norms and customs that prevail in a society. So each house has a value system that applies to its citizens. The value system is different from one to another residential housing, depending on the region or the state of the local community (Budiharjo, 1998).

Interactions between individuals in the house and in residential ensued.

The data from field observation and interview is analyzed by descriptive qualitative analysis and associated with literature review.

#### **Space Function**

Space function is a reflection of inhabitant effort to divide their house into a private area and production area. The effort is might be different from one productive house to another. It depends on such as the size of building/building area or number of family. In this kampung cases, the size of building/building area is the main reason for the differences. The more size of the house so the more allocation of space and the function (Silas, 2000). Most of the productive

houses in this kampung have similar space function.

From 17 types, it can be concluded that terrace, living room, bed room, shop, production room, and bathroom are the common type of space function. The people in kampung sate used their personal kitchen as the production rooms as well. This is done to simplify the satay production and personal activities. In term of space function, the unique characteristic of this kampung is production room accessible for guest/tourist. The guest can see the process of making/baking satay. So that's why the production room has ease of access to front yard or side yard of the house. The common space function of productive house in Kampung Sate can be seen on figure 3.

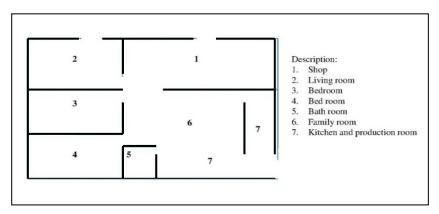


Figure 2 Common Space Function in Kampung Sate Source: Analysis, 2015

#### **Use of Work Tools**

The traditional equipment such as brazier, wooden cutting board, and traditional cormorant/boiler are the default equipment to produce satay. Figure 4 will show the condition of each work equipments.





Figure 3 Some Equipment in Making Satay, Rice Cake and Sauce (Source: Primary Survey, 2015)

From the figure 4 it can be seen that the satay maker pay less attention to the hygiene and the cleanness of their production room or kitchen. Indeed the combustion/baking process produces a lot of smoke and dust. However, the people in this productive house have to give more attention to their cleanness. This traditional cormorant/boiler gives the impact to the house such as lot of smoke, dust, charcoal black color on the wall, window and ceiling kitchen.

#### c. Involvement of Family Members

As the basic activities are conducted in the house, usually family members tend to be included in this productive house activity. So the wage can be minimized and the work hour is flexible. HBE also will involve various stakeholders, especially members of the family to share tasks among households with personal activities in HBE activity itself. The children will also be involved in these activities. From the primary survey, it can be gained that 72 people are involved in this enterprise.

Usually, the children and adult also involved in this enterprise activity. The children and adult from 10-17 years old are involved. But, the impact is after finish their junior or senior high school, those children don't continue their study. They prefer to involved and gain the money rather than having higher education. This condition will give the impact to economic aspect as well.

#### d. Environment

The operational definitions for environment aspect are about condition of ventilation in each productive house also availability and condition of open space in Kampung Sate. Condition of ventilation will define the level of people attention in term of hygiene and cleanness. While the availability and condition of open space will define the people attention to sustainable development and keeping the environment surround them.

As mention before, traditional equipments are still use in the enterprise activities in this kampung and give negative impact such as smoke and dust. But, unfortunately, its use is not accompanied by understanding to provide adequate ventilation in the production room or kitchen. The condition of most ventilation and ceiling in this kampung can be seen at figure 5.





Figure 4
Condition of Ceiling
(Source: Primary Survey, 2015)

From the figure it can be seen that the lighting just come from the ceiling and ventilation. In some houses, there is no exhaust system. The exhaust system is only from the door, ceiling and ventilation. When seen from the quality of the lighting, ceiling and ventilation, there is no adequate quality there. Inhabitant gives no attention about that. Some people often complaining about sore throat and infection in respiratory. But, after recovery from sickness, they seemed to forget the origin of the sickness. Some people said that they prefer gain more money rather than give more attention to the condition of the house or their health. The ceiling conditions as shown at the figure not only give the sickness but also interferes the cleanness.

### e. Physical Aspects

The operational definitions for physical aspect are water consumption availability, condition of sanitation and condition of sanitation or sewage. From primary survey it's gained that the people in this kampung get the water supply from the groundwater and some of them from local water company. With the existing height, the area is still possible to obtain groundwater. Before, the water was supplied from local water company. But water supplies from local water company are often jammed. So that's why the people in this kampung would like to prefer use groundwater rather than water supply from local water company. The problem is the groundwater is next to the septic tank. Based on SNI number 03-2916-1992 on Specifications on dug wells for water source, that horizontal distance of wells upstream from groundwater flow or sources of fouling (leach field / septic tank tank) more than 11 meters. The existing condition in study location shows that there is no house follows the rules. The feared would happen as a result of groundwater pollution industrial activities existing households.

In Kampung Sate, drainage sanitation utilities are not separated. The channels boils down are Cokromenggalan river. Meanwhile, there is also domestic channels which come from household sewage and enterprise activities sewage. The domestic channel also boils down into the same river. The channel is open type.





Figure 5 Drainage as waste disposal (Source: Primary Survey, 2014)

The people throw their waste disposal, both personal or production disposal, directly to drainage channel. From the figure above it can be seen that drainage channel is blend

with waste disposal channel. This drainage is flow into Cokromenggalan River. Since production disposal also directly throwing into this channel, sometimes it smells stingy. When the rainy falling, the rain water can't flow in the drainage channels so that run over to the road.

#### **Social Culture**

Social culture can be seen from the local custom in a place. In Kampung Sate, all satay makers are still relatives. They come from the same ancestor who built this kampung. Many neighbors around this kampung work as an employee in productive house. Although they are still relative, but there is one productive house which rapidly growing. Usually when holiday is coming, this big productive house will ask satays and rice cakes to other satay maker. But, although this big productive house encourage the growth of the other satay maker, it doesn't seem produce the significant result. It happens due to the lack of understanding and knowledge how to manage the good enterprise. Most of the satay makers have last educated on senior high school. Sometimes they are difficult to create the new and innovative strategic planning.

#### **Economic** g.

Economic aspect will be seen from the impact income activities to community. As mentioned before, lack of understanding and knowledge in how to manage the good enterprise are the biggest problem related to economic aspect in this kampung. The understanding of sustainable economic is needed to the people in this kampung. Good enterprise means optimizing the economic activities without depleting the environment surround.

Beside, HBE activities in this kampung have been proven generate the income for household. In table 1 it shows that the satay makers are still have extra money from monthly income for saving. But, the fact is the physical appearances of their houses doesn't show that they are success in economic.

Table 1. Monthly Income and Expending of Satay Maker in Kampung Sate

Monthly Income (Rp)	Monthly Expending (Rp)	Saving (Rp)
7.500.000 – 12.000.000	3.500.000 - 7.000.000	2.200.000 - 5.000.000

Source: Primary Survey, 2015

Regarding the impact of activities to community surround this kampung, some people near this kampung also involved and join as employee. So that, this kampung not only give economic impact to the kampung itself but also to community surround it.

### 3.1.2. Impact of Productive Housing in Kampung Sate toward Sustainable Housing Aspect

The second objective is analyzed by descriptive qualitative analysis. This analysis is strengthening by depth interview analysis to the data. The depth interview analysis is conducted by interviewing the stakeholder of

Kampung Sate, Ponorogo who are understand the sustainable concept and Kampung Sate, Ponorogo.

Analysis is derived from the interview to the stakeholders. The discussion in this chapter is discussed the impact of economic activities toward each indicators.

To conduct their economic activities, Kampung Sate gives both positive and negative impact toward environment, physical and social economic aspects. In order to make sustainability economic in this kampung, it's required more attention from stakeholders who are involved and has importance to this kampung.

Table 2 Potency and Impact of Kampung Sate to Sustainable Housing Aspect

Aspects	Potency / Positive Impact	Negative Impact
Environment	<ul> <li>The location of this kampung is in IKK (Ibukota Kecamatan Ponorogo)</li> <li>There are some open space in this kampung which are not in use yet</li> </ul>	<ul> <li>Produce waste disposal. Both solid and liquid. Beside, the enterprise activities also produce smoke and dust to the environment surround.</li> <li>The smog also causes respiratory disease to inhabitant although not in worse condition</li> <li>The poor lighting of the house causes by the lack of ventilation and ceiling.</li> </ul>
Physical and Social	<ul> <li>The housing location is near each other. This condition make the satay maker easy to find and appointed as Kampung Sate and culinary tourism.</li> <li>Sate can generate new income to the people. This economic activity can generate new jobs in this area</li> </ul>	The groundwater is built less than 10 meters from sanitation. Related to physical aspects, the groundwater will disturb the sanitation The traffic generation can't be ignored in this kampung. The road is only 7 meters and the vehicles (mostly cars) are come over and over again. Off street parking don't allowed when peak season is coming the rain water can't flow in the drainage channels so that run over to the road
Economic	Sate can generate new income to the people. This economic activity can generate new jobs in this area	Involving the family members give impact that the children tend to prefer to join the enterprise than continue the study

Source: Analysis, 2015

# 3.2. Criteria for Sustainable Home Based Enterprise in Kampung Sate, Ponorogo

Formulate the criteria for sustainable housing concept means grouping the subcriteria into criteria. The similar sub-criteria is

grouping into the same criteria. The Delphi analysis process is conducted into 2 iteration phases. It's happened due to there are some additional sub criteria from stakeholders. The summary of the Delphi analysis can be seen on table 3.



Sub-Criteria	Criteria	Analysis
Energy efficiency		A housing is related to the materials used, how to
Healthy house building	Physical housing	manage the building, the technology used and the
Strong; solid		condition in it.
Have enough green open space	Harmony with the	Environmentally friendly home design is a form of support for environmental friendliness. It should be
·	nature	harmony with the nature, because the exploration of
Harmony with the climate		energy use can threaten the lives of future generations.
Safety from damage waste	Supporting	A housing and settlement can't be apart from the
Clean water	facilities and	supporting facilities and infrastructure. These facilities
Housing infrastructure	infrastructure	and infrastructure will support every activities in this
Good sanitation	iiiiasiiuciuie	area
Economic productivity		Financial system is related to how to manage and gain
Facilitate self-supportive financial system	Financial system	economic welfare by using the local wisdom or housing environment itself
Use of technology		
Social culture	Social culture	Social culture related to how to improve the quality of
		life and neighborhood interaction
Good institutional	Institutional	Good institutional will support the better economic
		activities

Source: Analysis, 2015

#### 4. CONCLUSION

This research determines the characteristics of productive housing in Kampung Sate related to 6 aspects. Those are space functions, use of work tools, involvement of family members, environment, physical aspects, social-culture economic aspects. The actual data discover that each aspect has their own support related to economic activities in this Kampung.

To conduct their economic activities. Kampung Sate gives both positive and impact toward negative environment. physical and social economic aspects. The negative impact have to be solved and the positive impact should be maintain so that this kampung not only good in economic condition but also in other aspects condition. Those good conditions are concluded into sustainable home-based enterprise. determine the sustainable home-based enterprise it's needed to analyze the criteria which are appropriate to this kampung if the concepts are implemented. From analysis it can be gained that there are 6 criteria that can be implemented to determine the sustainable home-based enterprise. Those are physical housing, harmony with nature, supporting facilities and infrastructure. financial system, social-culture and good institutional. The criteria for sustainable home-based enterprise are analyzed to determine the concept. The analyzing phase is conducted by compare the literature review, stakeholder's point of view and regulation toward the criteria mentioned before.

sustainable home The enterprise concepts are the way to solve the negative impact of economic activities in Kampung Sate. The concepts are related to sustainable for home criteria physical housing, enterprise such as harmony with the climate, financial system, supporting facilities and infrastructure, social condition and good institutional.

#### 5. REFERENCES

Austin, G. (2012). "Sustainability and Income-Valuation: North Producina Property Recommended American Status and Procedures", Journal of Sustainable Real Estate, Vol. 4, 78-122.

Bruntland. (1987). Report of the World Commission Environment on and Development: Our Common Future. Oslo.

Budiharjo, Eko. (1998). Sejumlah Permasalahan Penerbit Permukiman Kota. Alumni. Bandung

HABITAT, U. N. (2012). Sustainable Housing for Sustainable Cities: A Policy Framework for Developing Countries. United Nations Human Settlement Program. Nairobi

Maslow, Abraham. (1954). Motivation Personality.NY:Harper. New York

Silas et al, J. (2000). Rumah Produktif: Dalam Dimensi Tradisional dan Pemberdayaan.UPT Penerbitan ITS. Surabava

Silas. Johan. (1993).Housing Beyond Home.Pidato Pengukuhan Guru Besar ITS Tahun 1993. Surabaya.

Turner, John. F. (1972). Freedom to Build, Dweller Control of the Housing Process .The Macmillan Company. New York