

# Thematic Village Model Management as an Effort to Established Environmental Sustainability (Case Study at Thematic Village in Malang City)

Tia Subekti<sup>1</sup>, Eka Yuli Kurnia Putri<sup>2</sup>  
{tiasubekti@ub.ac.id<sup>1</sup>, ekayulikurnia99@gmail.com<sup>2</sup>}

Universitas Brawijaya, Indonesia<sup>1,2</sup>

**Abstract.** The aim of this research is observing how thematic village management model in Malang City as an effort to implement environmental sustainability. Several thematic villages whom concern on eco-friendly structuring model are 3D village, Jodipan and 3G. Differences in the selection of village structuring models have impact the villages' eco sustainability. For conceptual framework, sustainable development concept is used to focus on environmental sustainability problem. Furthermore, the methods of research are documentation, interview and observation. Thus, for the result, shows two different methods on thematic village structuring model management. First, management solely based in economic orientation which does not support environmental sustainability. Second, management based on eco-tourism which supports environmental sustainability. Next, the development of thematic village based on ecology will decrease the negative impact of natural disaster towards the area.

**Keywords:** Sustainable Development, Environmental Sustainability, Thematic Village, Kota Malang.

## 1 Introduction

Every year environmental problems are getting more complex. Various countries in the world experience serious environmental problems. For example, on air pollution, the 2019 State of Global Air report launches 10 countries with the highest air pollution resulting in death. The top four countries are China (1.2 million cases), India (1.2 million cases), Pakistan (128,000 cases), Indonesia (124,000 cases) [1]. Another problem is waste management problems. As stated by The Waste Management Word, Kuwait is the highest waste-producing country and the second are Antigua and Barbuda. When compared with the number of population in Kuwait, the average person produces waste up to 5.72 kgs every day [2]. In addition to these two problems, other environmental problems that arise are forest destruction, damage to marine ecosystems, land fires, and others.

Similar with other countries, Indonesia is one of the countries that have severe environmental problems. Based on a summary from Sindonews, Indonesia experiences 10 severe environmental problems. Waste, flood, river pollution, global warming, air pollution, damage to the marine ecosystem, the difficulty of clean water, forest destruction, abrasion. soil pollution [3]. These environmental problems are spread in various regions in Indonesia. One of the most common environmental problems is found in urban areas. Urban areas often positioned an epitome of central of government, center of industry. It results on the emergence of slums in

urban area follows with large number of activities, massive populations and increasing ecological problems.

Slums are a typical problem faced by almost all cities in developing countries such as Indonesia. As a city of education with a high number of newcomers, Malang has transformed into a new metropolitan city. Environmental problems began to emerge such as air pollution, waste, floods, and others. This condition is contrary to the vision of space development in Malang based on RT/RW Malang Area in 2010-2030, which is, "To actualize Malang as a city of quality education, a healthy, and environmentally friendly city, a city of cultural tourism, towards a developed and independent society" [4].

One effort to change the face of urban slums is through the thematic village program which began in various regions in Indonesia. Here are some lists of thematic villages scattered in various regions in Indonesia.

**Table 1.** Thematic Villages in Various Regions in Indonesia

No.	City/Regency	Name of Thematic Village
1	Kediri	Indian Village
2	Bandung	Chinese Village
3	Semarang	Batik Village, Lumpia Village, Hidroponic Village, Mangut Village, Orchid Village
4	Bogor	Labyrinth Village, International Village, Colorful Village
5	Malang	Jodipan Colorful Village, 3D Village, 3G Village, Blue Village, White Village

Source: Data is processed from various sources, 2019.

The rise of thematic villages apparently attracts public interest and become a new tourist destination. It has an impact on shifting the thematic village development goals from environment-oriented structuring model into a more economic-oriented commodities. The structuring concept of the thematic village has direct impact on sustainability and its effect on the village's environment. In the end, this paper tries to see how the thematic village structuring model on actualizing environmental sustainability.

## 2 Conceptual Framework

### 2.1 Sustainable Development

Sustainable development is interpreted in the Indonesian language as "*pembangunan berkelanjutan*". Majjan explained that sustainable development is how (creates policy) to carry out development issue by paying attention to its future impacts. The Brundtland Commission's brief explains that sustainable development is "the ability to make development sustainable — to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" [5]. Furthermore, the concept of sustainable development is associated with three main concepts which are called the pillars of sustainable development, namely environmental sustainability, social sustainability, and economic sustainability. Sustainable environment focuses on preserving the environment in order to ensure economic sustainability and quality of life of the people. Social sustainability focuses on the actualization of human rights, preservation of culture, race and religion. As well as economic sustainable is

needed for human life [6]. Some other opinions about *sustainable development* in 2010-2015 period are explained by the following experts:

- a) Sterling (2010), sustainable development is a reconciliation of the economy and the environment on a new path of development that will enable the long-term sustainable development of humankind.
- b) Marin *et al* (2010), sustainable development gives a possibility of time unlimited interaction between society, ecosystems and other living systems without impoverishing the key resources.
- c) Duran *et al* (2015), sustainable development is a development that protects the environment, because a sustainable environment enables sustainable development [6].

In the end, UNDP established 17 Sustainable Development Goals (SDGs) which included: No poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry; innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice, and strong institutions; partnership for the goals.

## **2.2 Environmental Sustainability**

One indicator of SDGs that is closely related to environmental problems is the indicator of clean water and sanitation. Both of these problems are important because these two problems are commonly faced by community. Meanwhile, in Indonesia the problem of clean and water sanitation can be broken down into several indicators which are expected to be achieved in 2030, which are [7]:

- a) By 2030, achieving universal and equitable access to safe and affordable drinking water for all.
- b) By 2030, achieving access to adequate and equitable sanitation and hygiene for all, and stopping open defecation practices, paying special attention to the needs of women, as well as vulnerable community groups.
- c) By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous materials and chemicals, halving the proportion of untreated wastewater, and increasing the recycling and reuse of safe recycled goods globally.
- d) By 2030, it will significantly improve the efficiency of water use in all sectors, and ensure the continuity of the use and supply of fresh water to overcome water scarcity, and significantly reduce the number of people suffering from water scarcity.
- e) By 2030, implementing integrated water resources management at all levels, including through appropriate cross-border cooperation.
- f) By 2020, protect and restore ecosystems related to water resources, including mountains, forests, wetlands, rivers, groundwater and lakes.

### 3 Results and Discussion

#### 3.1 Management of Slums through Thematic Villages

Thematic village is one of the innovations of Malang city government to organize the village's area or environment in Malang. This program is starting to become famous in line with the popularity of Jodipan colorful village tourist area in Malang, which was initiated by a group of KKN students from Universitas Muhammadiyah Malang (UMM). The success of Jodipan Village as one of thematic villages then inspired the government to implement the same program to organize several villages area in Malang. Up until today, Malang has 17 thematic villages, namely: Padepokan Janti, Sumpersari Historical Village, Sanan Village, Celaket Rampal Ornaments, Mask Village, Tridi Village, Ki Ageng Gribig Madyopuro Tomb, Bambu Mewek Village, Lantern Village, Blue Village, Kramat Kasin Village, Kayutangan Heritage Village, Glintung Go Green (3G) Village, Polowijen Cultural Village, Jodipan Colorful Village, White Village, and Dinoyo Ceramic Village [8].

Each thematic village in Malang has its own thematic characteristics and highlighted for its distinctive marks. For example, there are villages that highlighted their cultural side such as historical and mask villages. Some highlighted historical aspects such as Sumpersari historical village. Then there are those who highlighted superior products from their village such as Sanan Village. And finally, there are villages that highlighted the environmental management aspects such as Jodipan Village, 3G Village, Blue Village, and Lantern Village.

The development of the thematic village has succeeded in changing the image of the village area that was once imaged as a slum area. *Kampung* is identical with slums, dense population and poor sanitation. Some environmental problems in big cities are identical with problems in rural areas. The development of thematic village seeks to change the image by changing the face of the village but still taking into account to the local values of the village. The thematic village program eventually became an alternative tourist destination, which in the end is seriously managed by the government and even became icons from Malang.

From 17 Thematic Villages in Malang, the writer chose to focus on 3 thematic villages, which are 3G, 3D, and Jodipan colorful villages, whom focused on their structuring model's management. Below are portraits of the thematic village area:



Fig. 1. Kampung 3G, 3D, and Jodipan [9][10].

Ideally, management of slum area of thematic village, in urban area should bring positive impact in environmental context. Good environmental zoning is environmental management

that emphasize on sustainable or environmental sustainability principle. This plan became a part of Sustainable Development Goal (SDG's) which had to be implemented by the government. Thematic village management actually becomes one of alternate solution to reduce slum area appearance in Malang. As a way to "beautify" the urban village "appearance", which previously often identify as slum area. In the ends, it is important to observe on how far thematic village are able to implement environmental sustainability principles, especially in village near urban area, similar to urban area in Malang City. Furthermore, it also should pay attention on clean and water sanitation indicator, as targets to be achieved by the Indonesian government in 2020 is protecting and restoring ecosystems related to water resources, including mountains, forests, wetlands, rivers, groundwater and lakes (National Statistics Bureau, 2016).

In order to observe more on clean and water sanitation on thematic village, the researchers conduct several observations on sanitation, water quality and waste management system in three thematic village area, i.e.: Jodipan, 3D, dan Kampung 3G.

a) Sanitation

Based on the results of field research, it shows that environmental management problems are highly dependent on public awareness' level. For example, in 3G village sanitation management is went well. In Kampung 3G household waste is not flowed directly into the river. Residents make a reservoir to collect waste before it flows directly into the river, to avoid household waste pollution draining. Next, residents in Kampung 3G also built infiltration wells as a solution to the flood problem. But different conditions occur in Jodipan and 3D Villages, sanitation problems are still not going well. Residents still drain household waste directly into the river. In addition, not all houses are supported by the construction of adequate sewers. The sanitation problem is also exacerbated by the activities of residents who bathe and defecate in the river. Some of the residents of 3D village still loosely use water directly from Brantas river that crosses their village as a place to bathe and defecate.

b) Household Water Quality and Water River

Water quality in a 3G, 3D thematic and Jodipan village are already in good condition. Every day, residents are provided by easy access to clean water. Residents use water from the PDAM and wells for bathing and cleaning purposes. Meanwhile, for daily needs, residents use more refilled bottled water.

However, there are major problems relating to the problem of clean water quality, namely the availability of private bathrooms. In the 3D and Jodipan villages not all households have a private bathroom. Unlike the 3G village where every house has its own bathroom. Economic factors and land scarcity are the main factors for not having a bathroom in each resident's home. For example, to have a bathroom and access water they must register with the PDAM and pay for fee. The same condition occurs when they want to dig up wells for reservoir. Thus, some residents prefer to share water through public bathrooms. In addition, based on observations, researchers found that several residents still use river water for bathing and washing clothes.

c) Waste Management

The level of environmental cleanliness has improved rapidly since the three villages have become thematic villages and tourist attractions. The community began to throw garbage in the trash in order to maintain the comfort of their village visitors. In Kampung 3D and Jodipan initially there were attempts to sort wet and dry waste. But the activity only lasted for a moment and the residents returned to mixing wet and dry rubbish. In

contrast to the village of 3G residents concern for the environment is very high. Residents consistently sort organic and inorganic waste which will be transformed into compost. In the village of 3G residents also built a Garbage Bank.

### 3.2 The impact of Thematic Village Management for Environmental Sustainability

Based on the research results, it shows structured model management of thematic villages in Malang has two different models. The differences on it have an impact on environmental conditions in the village. The first model has a positive impact on the environment while the second tends not to make changes to environmental conditions.

**Table 2.** The Differences on thematic village model management

No.	Distinguishing Indicator	<i>Kampung Warna Warni</i> Jodipan and 3D Village	3G Village
1	Development Orientation	Economic Oriented	Ecology Oriented
2	Actions taken by administrator	Painting the settlements, opening tourism by creating <i>selfie</i> spot	Opened an environmental education tour Creating <i>urban farming</i> Making green fertilize Conserve the water and creating well for reservoir
3	Environmental Impact	Minimum	Maximum
4	<i>Sustainability</i>	Not <i>sustainable</i>	<i>Sustainable</i>
5	Advantage	Economy	Economy and environment
6	Natural Disaster Potential	Still suffer for flooded when rainfall intensity is high	Do not affected by flood anymore

Source: Data is processed by researcher, 2018.

a) Thematic Village Management based on economic income orientation

Jodipan and 3D villages are one example of thematic village-oriented management based on economic income. As one of the popular new alternative tours in Malang, this thematic village provides economic benefits to the community. New economic resources emerged, which is comes from ticket fees, food vendors, parking attendants, and fees from public bathrooms. Recently, the average number of visitors every day reaching 200 visitors on weekdays and will increase to 500 visitors on weekends [11]. As an effort to attract visitors, residents are assisted by the government to add new photo spots as the latest is the construction of a glass bridge that connects Jodipan village with 3D village.

On the other hand, Jodipan and 3D villages did not provide positive changes to environmental sustainability. The environmental conditions in Jodipan village began to experience problems along with the decreasing number of visitors. For example, sanitation is not as clean as it used to be, residents throw garbage into rivers, and in some spots, there is a smell of garbage.<sup>1</sup> This shows that the management of Jodipan and 3D

<sup>1</sup> Based on interview with visitors on September 15<sup>th</sup> 2019

thematic villages do not pay attention on environment sustainability. They only focus on how to develop tourism and increase community income but are ignorant of long-term environmental management issues.

This method is widely applied in other areas. Local governments take advantage on the popularity of thematic villages and transform it into thematic village areas without pay attention to environmental conditions. The goal is simply to seek economic benefits through ticket charges. But in fact, many thematic villages with models like this do not have any ecological sustainability plan.

b) Thematic Village Management based on Eco-tourism

Kampung 3G implements thematic village management based on an ecological tourism model. TIES (The International Ecotourism Society) states that "ecotourism is responsible for travel to natural areas that conserves the environment and improves the well-being of local people"<sup>2</sup>. Tourism models like this usually give birth to alternative tourism whom concerned with environmental and ecological preservation.

Kampung 3G initially experienced annual environmental problems such as flooding and slums. Then, led by RW Chairman Mr. Bambang Hirianto, residents began to carry out environmental improvement activities such as: creating infiltration wells, requiring every house to have plants by applying the urban farming model, making garbage banks and producing compost, and carrying out water conservation efforts. Eventually, environmental changes began to be felt by residents, the village appeared greener, cleaner, and healthier. This then attracted many visitors who were initially curious about the environmental conditions in the 3G village. until then the 3G village became popular and crowded with visitors. However, residents provide terms and restrictions to visitors. This tour belongs to the category of special interest tourism. Residents who visit as a tourist visit are allowed but with the condition to pay for an education package about urban farming. They will later get compost and also environmental seeds. this is one step to motivate others to preserve the environment as well.

The result, through structuring the ecological model of tourism, citizens get two benefits at once. First, improving environmental quality that supports the realization of environmental sustainability. Second, economic benefits through educational tourism.

**Table 3.** The impact of Arrangement 3D Village toward Environmental Sustainability

No.	Income Resources	Activity
1.	Tourism Package	Provides education tourism and workshop on urban farming to visitors
2.	Product Selling	Sells green fertilizers products and seeds plant

In the end, it can be concluded that management of thematic village in 3G Village succeeds to support the implementation of environmental sustainability as well as increasing economic profit for the society.

---

<sup>2</sup> Based on interview with visitors on September 15<sup>th</sup> 2019

## 4 Conclusion

Environmental sustainability in thematic villages is very dependent on the orientation of its structuring model. The thematic village structuring model based only on economic improvement does not support long-term environmental sustainability. Meanwhile the ecological thematic village-based structuring model of tourism has the opportunity to implement long-term environmental sustainability such as lowering air temperatures, conserving water, and reducing the risk of natural disasters.

From an economic perspective, the two thematic village structuring models provide economic benefits through tourism visits. However, the two tour packages have different orientation, if it being correlated with ecology benefit. The first package tends to have economic-orientation through the provision of photo spots which is favorable by visitors. The second package has more environment orientation by providing education on eco-tourism to visitors about urban farming, and selling green fertilizer. So, there is a bigger chance for visitors to replicate it and implement sustainable environmental agenda in other regions.

## References

- [1] R. Yustiningsih, "Indonesia Nomor 3 Negara Berpolusi Udara Tertinggi Dunia," *solopos*, 2019.
- [2] "5 Negara Ini Jadi Produsen Sampah Terbesar di Dunia," *Kumparan*, 2019.
- [3] "10 Problem Besar Lingkungan di Indonesia," *Sindonews*, 2018.
- [4] *Smart City Roadmap of Malang City 2017*.
- [5] K. W. Robert, T. M. Parris, and A. A. Leiserowitz, "What is sustainable development? Goals, indicators, values, and practice," *Environ. Sci. policy Sustain. Dev.*, vol. 47, no. 3, pp. 8–21, 2005.
- [6] T. Klarin, "The concept of sustainable development: From its beginning to the contemporary issues," *Zagreb Int. Rev. Econ. Bus.*, vol. 21, no. 1, pp. 67–94, 2018.
- [7] Badan Pusat Statistik, "Initial Portrait of Sustainable Development Goals in Indonesia," *Badan Pus. Stat.*, 2016.
- [8] S. Wahyunik, "Sebagai Promosi Pariwisata, Pemkot Malang Akan Bukukan 17 Kampung Tematik," 2018.
- [9] B. Susanto, "Puti Adopsi Pengelolaan Kampung 3G untuk dikembangkan di Madura," *Merdeka*, 2018.
- [10] A. J. Iswara, "Kehidupan, Jodipan dan Warna-warna," *Goodnews*, 2018.
- [11] A. W. Putri, "Kampung Tematik di Malang yang Instagrammable & Menghidupi Warga," *Tirto.id*, 2019.