

Governing Sustainable City Based on Societal Respons:

Cases Study on Social Movement to Preservation of Urban Environment in Malang City

Mohammad Nuh*

Faculty of Administrative Study
 Universitas Brawijaya
 Malang, Indonesia
 *nuh_m@ub.ac.id

Abstract—This study aims to describe and analyze social movements carried out by local communities in realizing urban environmental resilience, and also to develop social movement models as social capital (policy design) for the realization of sustainable cities in the perspective of societal governance. The research method used in this research is the case study method using a dynamic system approach. Data were analyzed using modeling methods with the System Thinking Process system and Modeling with Dynamic System from Wolstenholme, through observation, interviews, and documentation in Glintung Go Green Village and Warna Warni Jodipan village, Malang City. The results showed that social movements have cycles with indicators that start from the perspective of the community; basic ideas and action programs; stakeholder collaboration; community capacity building. The four indicators in the social movement cycle of the community develop a sustainable city system model in which aspects of leadership, community, and policy are carried out by every element in urban society as physical development actor that produces an impact on development in other regions so that a sustainable city is realized.

Keywords—social movement, sustainable city, societal governance

I. INTRODUCTION

Urban population growth has increased quite rapidly. Based on the data, the urban population growth rate reached 2.75% per year, higher than the rural population growth which only reached 1.17% per year. The attractiveness of urban areas in terms of job opportunities, infrastructure conditions and other public services makes people move from rural areas to urban areas to take advantage of these opportunities. The increased urban population growth has the consequence of increasing its consumption needs for food, energy, housing, infrastructure and clean water. The urban areas in Indonesia face some problematic situation with their population growth and economic development. The development process in urban areas is considered to have created a serious threat to environmental sustainability.

Various existing urban problems have limited an idea to carry out a sustainable urban development. A sustainable urban development or eco city first appeared in the book "Ecocity Berkeley" by Register [1] which means building a healthy future city through efficient use of energy and land, such as using compost or recycling waste. The success of making these things happen cannot be carried out by a few people, even though these people have a strong influence in the planning process. It requires the involvement of various activities, participants, fields of science, and various levels of decision and implementation. The process of participating in local scope, awareness of members, building solidarity, or creating opportunities for democracy are actions that are very influential on a situation that occurs. Organizational strength to win over social issues is built on the involvement of many people.

The hard working and collaboration are the keys to transforming the problems into blessings. Changes that occur in environment start with community awareness, unity, cooperation with all stakeholders, and initiating leadership. Such a transformation will create a better future. This research will examine How are societal respons as social movement to achieving sustainable city in Malang City. The location of this research is Sub Distrik Blimbing. The areas mentioned above was Kampung 3G and Kampung Jodipan. There is interesting thing to be analyzed about this village. This village has proven that environmental problems can actually be an opportunity for the change and revival of community innovation. From this village an example was born that the achievement of the Sustainable Development Goals (SDGs) and the development of a green economy which has become a discourse in various parts of the world can become a reality.

II. THEORY

A. Sustainable Development

The universal definition of sustainable development is given by WCED (The World Commission on Environmental and Development) 1987. Commonly known as the Brundtland Commission definition which states [2], "Sustainable

development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

There are two main concepts of this definition, namely the concept of needs which are essential for the poor and need to be prioritized, and the concept of limitation of the ability of the environment to meet current and future generations. Thus, a regulation is needed so that the environment is still able to support development activities in order to meet human needs.

B. Sustainable Urban Development

The concept of a sustainable city is a derivative of the concept of sustainable development. Munasinghe in Zulkifli [3], dividing these elements into three pillars. The economic pillar is supported by elements of change, efficiency and stability. The economic pillar is elaborated as an element of the wise use of natural resources, encouraging the use of the local economy, developing economic added value and giving priority to local resources over imports.

The social pillar is supported by empowerment, participation and institutional elements. Social pillars are elaborated according to the elements of life security, equal access to basic services, democracy and participation, positive social interactions and the development of human values for a quality life. The environmental pillar is supported by the elements of diversity, natural resources and pollution. The environmental pillar is elaborated according to the quantity and quality elements of natural resources and the environment as well as diversity.

Zulkifli [3] show the main and supporting requirement proposed in the form of a sustainable city model.

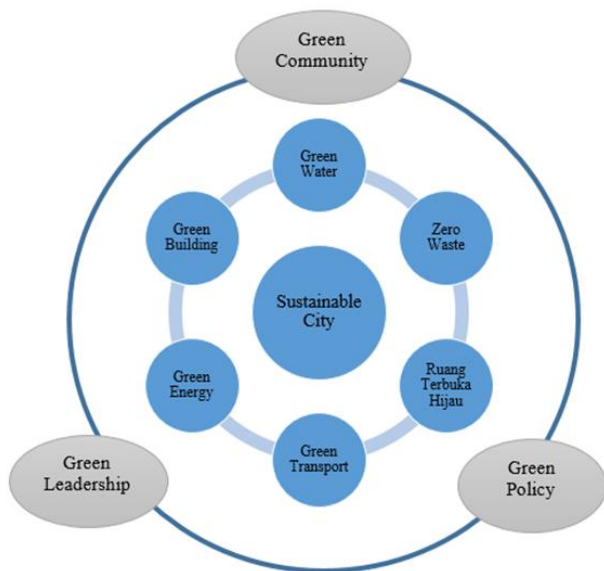


Fig. 1. Implementation model of sustainable city.

Based on the Figure 1, there are six main requirements for a sustainable city include green water, zero waste, green open space, green transport, green energy, and green building. Then three supporting requirements include green community, green policy, and green leadership.

1) *Green community*: The principle of managing a sustainable city based on community empowerment can be carried out if there is public awareness of seeing environmental damage as a problem. This awareness will raise the desire of the community to get a better environment and carry out activities to preserve the environment.

Community concern for the environment is often represented by a group of people in the form of a community. Community can consist of various elements with various interests. There are several reasons for the importance of the environmental community today and in the future, including:

- The environmental community is founded on the same vision and mission, who made the people involved in it have comfortable in doing things.
- The environmental community is a group of people who spend their time taking part in the social activity without asking much of economic benefits.
- The environmental community is able to approach the community more in an informal approach with a family atmosphere. It made, even marginalized communities can be reached.
- Some of environmental communities exist without legal entities, but due to their consistency and enthusiasm, they are able to brought big transformation to their environment.

2) *Green leadership*: The purpose of green leadership is to change the habit and mindset in system of environmental management, so, the people, government, and private sector have a desire to carry out various activities in responsible ways for environmental sustainability.

There are eleven leadership characters [3], namely: Leadership as the focal point of the process that occurs in groups; as a personality and its consequences; as an art of shaping obedience; as an use of influence; as an act or behavior; as a form of persuasion; as a power relationship; as a means to an end; as an interconnected effect; as a distinct role; and leadership as the initial driving force for work relations.

3) *Green policy*: Planning in sustainable city management aims to choose various alternatives in order to achieve an ideal city. Green policy is about to develop policies that are environmentally sound. In example, develop the Rencana Pembangunan Jangka Panjang (RPJP) and Rencana Pembangunan Jangka Menengah (RPJM) which consider the environmental aspects, environmentally friendly spatial plans, green regulations, green budgets and other environmentally sound policies.

C. Principles of Governances

Governance has at least four meanings in the According Simonis [4] that at least three major features can be identified about good governance: First, good governance is predicated upon mutually supportive and cooperative relationships between government, civil society, and the private sector. Second, good governance is defined as possession of all, or some combination of, the following elements: participation, transparency of decision-making, accountability, rule of law, predictability. Third, good governance is normative in conception.

Therefore, in promoting good governance, services are oriented to the following guiding principles:

- Human rights: The state recognizes citizens as equal partners.
- Participation: Citizens exercise their rights and are also in the position to participate in politics.
- Social negotiating processes: Actors from the state, the business sector, municipalities, and civil society cooperate in order to provide public goods and services.
- Constitutional law: The rule of law makes it possible for actors from the state, the business sector, municipalities and civil society to act in accordance with the rules.
- Pluralism: A pluralistic society is oriented to the principles of competition for people, ideas and resources (pluralistic society).
- Development orientation of government activity: The state focuses its activity on sustainable development.

III. RESEARCH METHODS

This research uses a qualitative case study method with a dynamic systems approach, using Richardson & Pugh Model [5]. This research is intended to determine and analyze about social respons as social movement to achieving sustainable city in Malang City (Case study in Kampung Glintung Go Green and Kampung Warna Warni Jodipan). Dynamic system models can be seen in Figure 2.

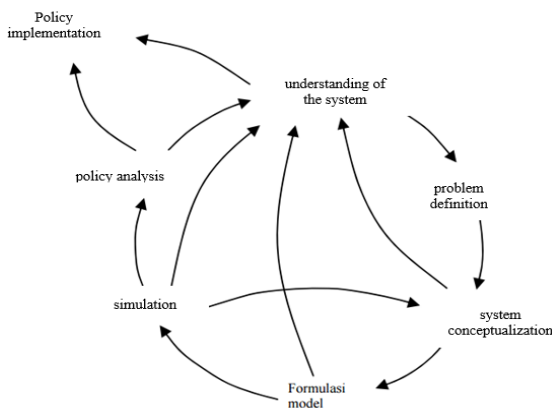


Fig. 2. Dynamic system models.

This research also used bottom-up approach. It means, the modeling starts from the operational conditions that occur in the case under study, which has interactions between system elements in the provision and needs of data sources in the field. Then transferred to a causal loops diagram and a dynamic system flow diagram (stock flow diagram). Finally, dynamic system equation formulation is made for simulation purposes. In other words, this study uses an exploratory method in the modeling process for system model simulation needs.

IV. RESULTS AND DISCUSSION

A. Community Perspective on Sustainable City

There are four components of the cycles in these social movement analysis, such as Community Perspective; Basic Ideas and Action Program; Stakeholder Collaboration; Capacity of Community. Community perspective on sustainable cities is assessed from community understanding of the desired urban environmental health conditions. The community assesses whether this condition has or has not been achieved in their environment. To realize this ideal condition, the community need to have the awareness to do or not do something related to their environment. Community perspective on sustainable city can be seen in Figure 3.

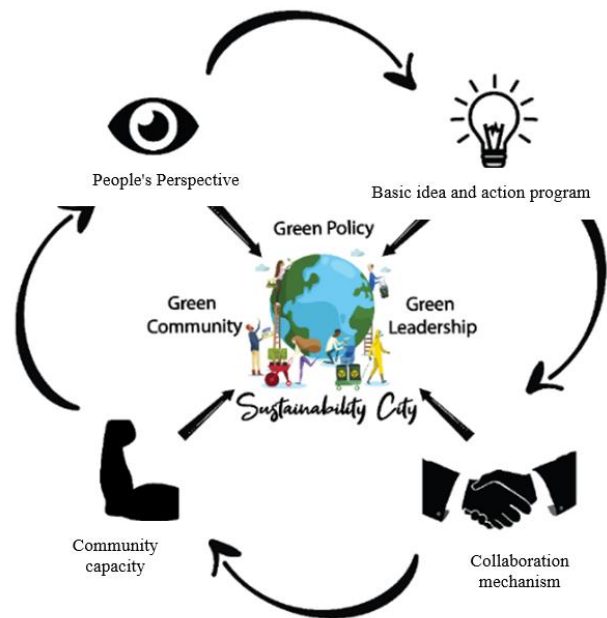


Fig. 3. Community perspective on sustainable city.

Many problems were experienced in the two research locations, namely Kampung 3G and Kampung Jodipan, starting from infrastructure, economy, social, health, and most importantly the environment. Flooding is a problem in both research locations looking at settlement conditions in basins and also close to rivers. The background of the majority of the population in these two regions is people with low economies.

Meanwhile, the environmental condition that the community wants is a healthy, comfortable and secure settlement to live in, does not cause flooding in the rainy season and does not dry out in the dry season. The community realized that this condition had not yet happened in their village.

According to BI (initial name), the initiator of Kampung 3G, building an environment cannot be instant, the process of communicating these ideas to the community requires consistency. So, during the early years he often held meetings to equalize perceptions to make a go green policy by requiring every resident's house to have green plants to obtain administration services. Various problems eventually become a point of growing public awareness of their environment. The change in the perspective of the people who are indifferent to being concerned about the environment certainly does not happen automatically. There are parties who act as the initial movers to change the way people see them through basic ideas and action programs.

B. Basic Ideas and Action Program

The basic idea and action program is the process of communicating perspectives into an urban environmental development activity. At this stage, it usually involves initiating leaders who can facilitate the community to discuss and reach consensus to realize programs or activities as well in Kampung Jodipan and Kampung 3G.

In Jodipan Village, the basic idea emerged from the role of a group of UMM students who offered a colorful village program as an initial movement to invite people to change the face of a slum village into an attractive village and care about environmental health. Meanwhile, Kampung 3G has initiators, Bambang Irianto, who initiated the environment movement, as a basic idea to change the mindset of its citizens to care about the environment. The leadership role of these figures is a supporting factor for the emergence of initial ideas and action programs. Meanwhile, difficulties in gathering the community and limited funds are inhibiting factors for the basic idea and action program. The basic ideas and action programs offered by the initiating figures in these two villages involve collaboration with other stakeholders to realize their ideas.

C. Stakeholder Collaboration

Stakeholders involved in the two villages consisted of the community, academia, government and the private sector. The difference is that in Jodipan Village, the collaboration was carried out for the first time when the basic idea of the UMM students was conveyed, namely making a colorful village by hooking up the CSR paint company PT. Decofresh. Meanwhile, Kampung 3G started the basic idea, go green environment activity through funds and movements from the community itself gathered through various discussions and policies by the head of village, Bambang Irianto. The initial movement of the 3G village then received responses from various parties outside the community to develop more diverse

environmental activities such as water conservation activities in collaboration with Universitas Brawijaya.

It can be concluded that the mechanism used in this collaborative process is in the form of transfer knowledge from academia and government; monitoring from academics and the government to empower the community as actor of physical development; Both isedental and sustainable funding are usually carried out by the private sector through CSR programs and the government through APBN funds. The existence of communication, unity of purpose, and trust are supporting factors for collaboration.

D. Capacity of Community

The collaboration will develop the community's capacity as the actor of environmental physical development. In addition, community capacity involves commitment which also determines the sustainability of existing and future programs. With the formation of these two areas, it has become one of the pilot villages that are often visited by guests and visitors, encouraging the community to develop independently. Besides protecting the environment, the residents' economy also grows through the sale of souvenirs and food and beverage for visitors.

E. Policy Design System Model Based on Social Movements

Conditions and analyzes carried out on social movements gave birth to a policy design model based on social movements in the community to create a sustainable city.

The concept of a sustainable city has three conditions that must be realized, namely green leadership, green community, and green policy as stated in the theory of the sustainable city model by Zulfikli [3]. The social movement raised in this article is a form of public awareness of sustainable urban development. The theory of the sustainable city model can be seen in Figure 4.

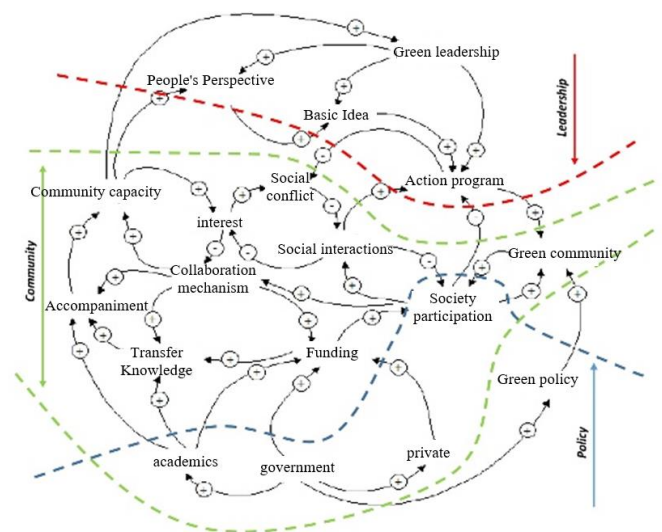


Fig. 4. The theory of the sustainable city model.

A sustainable city system model where aspects of leadership, community and policy are carried out by every element in urban society. Movement in one urban area will have an impact on development in other areas so as to create a sustainable city.

V. CONCLUSION

Based on this research, it can be concluded that the social movement has succeeded in transforming slum urban settlements into clean, comfortable settlements that pay attention to environmental aspects in their development. Although it cannot be denied that in the implementation there are several shortcomings and obstacles, such as happened in Kampung 3G, the difficulty of changing the mindset of the community, so it is necessary to issue a green policy as the requirement for administrative things. Likewise with Jodipan Village, the role of the head of neighbourhood to continuously invited the community to maintain the cleanliness of the river and their respective homes to make visitors and residents have comfortable conditions.

The model of sustainable city policy design based on this social movement of is form a cycle that starts from the

community perspective in seeing their environmental conditions. This perspective will give birth to the basic ideas and action programs, in this case the creation of the colorful village of Jodipan and the go green movement in the 3G village (Glintang Go Green). These two basic ideas develop through a process of collaboration with other parties, which ultimately depends on the capacity of the community as executors of physical development.

REFERENCES

- [1] R. Register, *Ecocity Berkeley: Building Cities for a Healthy Future*. Berkeley, California: North Atlantic Books, 1987.
- [2] WCED, *Report of the World Commission on Environment and Development: Our Common Future*. New York: UN, 1987.
- [3] A. Zulkifli, *Pengelolaan Kota Berkelanjutan*. Jakarta: Graha Ilmu, 2015.
- [4] U.E. Simonis, "Defining good governance: The conceptual competition is on", WZB Discussion Paper, No. P 2004-005. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB), 2004.
- [5] G.P. Richardson and A.L. Pugh, *Introduction to Sistem Dynamics Modelling with Dynamo*. Cambridge, Massachusete, and London, England: The MIT Press, 1986.