Indonesian Community Understanding on Sustainable Design Concept Critical Analysis Regarding Sustainable Design Development in Indonesia

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Abstract . The concept of sustainable design is the answer to the issue - the issue of environmental damage caused by air pollution, greenhouse effect, and deforestation. The concept of sustainable design refers to the thinking and actions of intelligent human beings in harmony and respect for nature. Indonesia as a developing country also participated in implementing the concept of sustainable design. People's understanding of the concept of sustainable design should be supported actively by the government, related industries, and individuals. In fact the public's understanding of the concept is still not comprehensive. In addition manufacturers are also not apply precisely the concept of sustainable design, and even tended only as part of any marketing strategy. Government as regulator should be able to supervise and control the industry to continue to apply the concept of sustainable design, in addition, the government is also obliged to socialize and educate the public to cooperate with educational institutions and industry players. Socio-cultural understanding of communities in the socialization and education of sustainable design concepts so that its implementation can be targeted and appropriate. As a medium conveys regulation and education on sustainable design concepts need to be the role of communities of people who have a common sociocultural, socio-cultural similarity is required to endorse the role of the community in providing an understanding of society in accordance with the socio culture of each society.

Introduction

Environmental damage, global warming, deforestation, community's consumption capacity excess to climate change issues that give negative impact to the earth are the background of the emerging sustainable design concept. In general, sustainable design concept refers to human's mindset and action that works harmoniously with and respect the environment's ecology. In sustainable design, there are three important factors that support the concept invention, that are environment, economic and social factors.

Currently, sustainable design concept grows rapidly among global community. In industrial countries, sustainable design concept is implemented from individual to related industry actors. There are many actions can be performed by the global community to be actively participate in implementing sustainable design concept, not merely consume ecofriendly products but also directly participate by preserving environment's ecology around them, such as by processing domestic trash.

In Indonesia, it is difficult to implement and control the community's consumption level to be in accordance with sustainable design because Indonesia is not an industrial country. Indonesia does not have sufficient power to govern the community's productivity and product consumption

in the market, plus there is no association that focuses to work on these issues. The community's understanding on sustainable design concept is urgently required, not merely to educate them, but also to give individual awareness to start implementing the entire sustainable design concept.

Sustainable design

In the early 1990's eco design and green product design, which was an enterprise's strategy to reduce negative impact of its industrial production activity to the environment, emerged, until it reached 1997 UNEP announced a statement regarding eco design as follows, eco design is an agreement to create sustainable product and consumption. (UNEP,2009:15). This was the beginning of what is called sustainable design concept nowadays. During its development, when environmental damage happens to be worse, it forces the global industrial community to focus more on the environmental effect caused by their production waste. Industrial capacity that has exceeded the limit becomes one of the stories behind environmental damage. Industrial and economic rapid growths supported by technology advancement have changed developing countries into big industrial countries such as China, Brazil, and India. As the effect of this globalization, either economic growth or development does not walk together with production capacity and market demand. This condition forces enterprises to be more innovative in production process and invent better products. To help managing industrial development speed, to be balance with the environment's, groups of environmental awareness people expand their coverage by inserting social, economic and environmental issues until it comes to sustainable design concept.

Sustainable design according to McLennan (2004) is "Sustainable Design is a design philosophy that seeks to maximize the quality of the built environment, while minimizing or eliminating negative impact to the natural environment.". This sustainable design concept is the answer to the environmental damage issues arise from air pollution, greenhouse effect to deforestation. Sustainable design concept refers to human's intelligent mindset and action that work harmoniously and respect the environment. In sustainable design, there are three main factors that are environment's ecology, social, and economic factors. (Walker,2006). The three factors are interconnected in sustainable design concept implementation. So that this sustainable design implementation is not merely focus on eco-friendly design, but also responsible to the social life of the community and to create economic value or improve economic growth either local or global.

Sustainable design concept is important to solve environmental damage issue. Sustainable design concept will keep going to be developed accordingly with the technology, industry, and economic needs advancement to support human's life on earth. This concept is needed to enable human to survive harmoniously with the nature around them, sustainably. Nowadays, sustainable design concept has been developed and implemented rapidly, along with environmental damage that keeps rising as the negative effect of technology and industrial development.

In many cases we can see how sustainable design develops side by side with the community's culture, technology, economic and other reason they make themselves. Community as individual and group of people are important parts for sustainable design development. Community as the implementer acts as supervisor as well to maintain sustainable design. Therefore, it requires the community understanding on sustainable design concept, in order to have the right implementation in accordance with the sustainable design concept. The community awareness on the importance of life responsibly and harmoniously with nature is the first thing required in implementing the entire sustainable design concept from individual to global level of community.

Indonesian Community Understanding on Sustainable Design Concept

As a developing country, Indonesia needs government's involvement as the regulator in implementing sustainable design concept. Indonesia comprises of various layers of community, where most of them are in low education standard that causes low awareness to understand and implement sustainable design concept, and also a culture which those awareness and discipline will only appear when it has been clearly governed by the government as regulator. It is why at the beginning of this discussion has been mentioned that sustainable design concept understanding shall start from government, to related stakeholder such as enterprises or industries, communities, to individual level.

Difficulty in implementing sustainable design concept is caused by the absence of a stateowned association which would focus on this issue. As a regulator, government shall act as manager and supervisor in sustainable design concept implementation. Indonesia is the biggest forth country in the world with abundant resources that supposedly can give added value where the community can utilize it. But since the population is unevenly spread out, as well as in development, there are social and economic gaps happen.

In 2001, to solve regional development issues, regional autonomy was invented. This regional autonomy enables local government to manage local resources for development and improvement of the community quality and economic. Actually, regional autonomy has the same concept with sustainable design concept, which is to maximize local resources to fulfill local community's needs. Government shall have a commitment to create a sustainable development based on the sustainable design concept by dig up and maximize local resources so that all different needs in every region can be fulfilled and create the same opportunity to develop according to the regions capability. (Vivien King, 2012: 8). The commitment shall be manifested in form of regulation that is addressed to regional government, local community and stakeholder, in this case is enterprises or industry actors.

In addition to government, enterprises and industry actors shall understand and participate to implement sustainable design concept. Understanding and implementation of sustainable design concept in industry in Indonesia is difficult since most of the industries in Indonesia are not the decision makers of what is produced and marketed in Indonesia. However, it does not mean

sustainable design concept cannot be implemented. Sustainable design concept does not focus merely on material, production process to production waste process, but also on how to think intelligently to fulfill production growth and demand, as well as to reduce the negative effect towards social and environment around at the same time (Clark et al,2009).

Sustainable design concept implementation in industry in Indonesia may be started by giving education and understanding regarding product quality to the community, so that they can choose product they need. The use of local resources to make a product is an example of sustainable design concept implementation, especially because Indonesia is rich with its natural resources that can be used as products' raw materials. But unfortunately, most of enterprises and industry actors merely use the sustainable design concept as a trend and marketing strategy; by attaching green label or sustainable product on their product without fully implement the concept. Here, government shall involve making regulation that governs and controls related industry to understand and implement the sustainable design concept.

Synergy between the regulator government and industry as the actor is urgently required to implement sustainable design concept, especially nowadays small to medium business development raise. If government wishes for the advancement of industrial sector in Indonesia, government supposedly supports, governs, and protects local industries that have commitment to implement sustainable design concept.

Indonesian plural community forms various community layers. Communities are also play important role for local development, therefore the communities require to understand sustainable design concept in this community. These communities can be in many forms, for example kampung, is group of people living in a particular area which is usually located near the city. Also there are communities formed upon same vision, mission and objective, such as Bandung Berkebun, a people movement work on urban farming in Bandung.
The more communities understand and implement sustainable design concept, the more ideas can be implemented, in terms of future needs, according to the local environment condition harmoniously with local environment, economic and social culture. (Herman, 2010). These communities play an important role in developing an area, because local communities know and understand better the local community, as has been explained previously regarding maximizing local resources by the communities.

In Indonesia, communities formed by local people who aware on sustainable development emerge. For example, O2 Indonesia, which works on education and give understanding about sustainable design to Indonesian community. Communities which have sustainable design concept more focus on relationship between environment, economic and social culture as well as the actor and supervisor in sustainable design concept implementation based on regulation has been made to guarantee the integrated spread of health, education, energy consumption, economic and environmental balance in the communities (Herman, 2010). Sustainable design concept by the communities also influence the community's socio culture or habits and action which in accordance with sustainable design concept. (Shove dalam Jong& Maze, 2010: 8).

To have better understanding about the role of sustainable design concept in life, the community shall first understand how socio culture or the community's individual's habits in fulfilling and consuming their needs. (Jong& Maze,2010). Plurality of Indonesian community comprises several layers and various socio cultures; therefore this socio cultural understanding is required to be able to give understanding about sustainable design concept that suits with the socio culture of the community, where this design concept comes from western region which possibly may not suit to the Indonesian culture.

The obstacle then is facing a situation where Indonesian awareness will only appears when a clear regulation has been issued by the government, while at the other hand, such regulation regarding sustainable design concept that suits the community's socio culture has not yet exist. Further, related industry treats this sustainable design concept merely as a part of marketing strategy of its product without giving clear information and understanding to its consumer. Here, communities take an important role to give understanding to the community regarding sustainable concept. The communities are an education media of sustainable design concept that has been adjusted with the socio culture of the community inside the communities. Individual awareness is important to implement the concept, since its implementation will be easier if it starts from own self.

Giving understanding to individual can start from their daily life, for example, processing domestic trash, such as separate organic and non-organic trash, recycle non-organic trash, or make products from non-organic trash to be sold and give economic added value for their family. With these simple things, and sustainably performed, it is possible to build the community's awareness and understanding about the concept. Then, it leaves to how the individual will actively participate to implement sustainable design concept in the communities and environment. Synergy between government, industry, communities, and individuals shall be well-connected to actualize the understanding and implementation of sustainable design concept in Indonesia.

Conclusion

As the regulator, government still needs to support the community understanding on sustainable design concept. Government regulation is required to control and supervise related industries, also to give education and understanding regarding sustainable design concept to the community. Communities, which have the same socio cultural background, are also needed as the media to convey regulation and education to the community regarding the sustainable design concept. Similarity in socio cultural background is needed to support the communities' role in accordance with socio culture in each layer of the community. As suggested by Prof. Takaaki Bando from Science of Design, Musashino Art University Japan, that concept comes from external party may not be suitable with local community's socio culture, therefore it is better to dig up local wisdom and resources more to improve quality of life to be better and harmonious with sustainable design concept. When the community understanding on sustainable design concept has been

formed, the awareness to have a better and sustainable life will also follow. Synergy between government, related industry, communities, and individual are important to build a sustainable Indonesia.

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