

The Awareness towards Sustainable Development of Construction Industry in Kuala Lumpur, Malaysia

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Abstract- Sustainable development has become an important aspect of the construction industries. There are many ways sustainability elements can be incorporated in the design, construction, operation and deconstruction of a building. Importantly sustainability represents the link between society and built environment professionals. In relation to that, this study involves a look at the construction industry in their awareness towards sustainable development. The focus is on the role of the Local Governments and how the stakeholders perceived it. Therefore, this study intend to look into the sustainable development and the understanding of the Sustainable Development using the interview with selected stakeholders. This study is to contribute to the enrichment of knowledge on the role of Local Governments in Sustainable Development. Hence, this research find out that Malaysian Local Governments need to improve the ways knowledge towards Sustainable Development are transferred.

Keywords: awareness, sustainable development, stakeholders

1. Introduction

Local government takes responsibility for the environment, social and economic development of the country (Milutinovic, 2010; Mohamed, Wee, & Chen, 2014). The local government through the policy, programs, plans, and strategies are for the people to be aware and implement sustainable development. However, sustainable development cannot develop without an appropriate knowledge in local government. Hence, knowledge transfer can be thought of as a cycle where knowledge is communicated around in the organization and to the public by the use of a variety of methods. Although knowledge transfer varies greatly between fields, there are several factors which are needed to make any knowledge transfer practices successful (Donate & Guadamillas, 2010; Liyanage, Ballal, Elhag, & Li, 2009). It means that the organization must be able to adopt and adapt the context of any knowledge.

The concept of sustainable development in terms of knowledge transfer in local governments has become the topic discourse in academic research, business fields and governance. As suggested by (Hester, 2008; Osterloh & Frey, 2000; Yuan & Yang, 2009), Knowledge transfer describes how knowledge and ideas move between the knowledge sources to the potential users of that knowledge. In general terms, knowledge can be transferred by moving a knowledge reservoir from one unit to another or by modifying a knowledge reservoir at a recipient site. Staff members can be moved from one unit to another. Similarly, technology can be moved and routines can be transported from one organization to another. Hence, through communication and training, the knowledge transfer is existed.

Moreover, the importance of sustainability is relevance to knowledge of staff and the policy makers when the context of development for local community is concerned. Moreover, it is crucial at various levels of management to promote the sustainable development. This study aims to study the perceptions of stakeholders on sustainable development practiced by Malaysian local government.

2. Background Study

This research is conducted to study knowledge transfer practices of sustainable development in local governments. The lack of knowledge transfer in Malaysian local governments has jeopardized the overall implementation of development in local government (Mohamed, Seow, & Goh, 2014). The knowledge must both be learned and be useable in a relevant context, if both conditions do not exist, the knowledge has not been transferred (Jasimuddin, Connell, & Klein, 2010; Omar, Takim, & Nawawi, 2012; Yali & Taozhen, 2011). It means that shortage of knowledge in sustainable development may lead to the local governments' staffs unfavorable to implement it. The spreading of knowledge on the preservation of resources and protection of the environment through schools, universities and ongoing training organizations are essential (Barrutia, Aguado, & Echebarria, 2007; Cifal, 2002; Dale & Newman, 2005; Olsson, 2009). It means that supporting the development of operational training sectors and encourages transfers of skills for the benefit of all through dedicated programme such LA21 are great for knowledge transfer practice. Therefore, the knowledge transfer and management are crucial for local governments to fulfill sustainable development agenda.

Sveiby (2001) iterates that people use their capacity-to-act in order to create value in mainly two directions; by transferring and converting knowledge externally and internally to the organisation. It means that by introducing knowledge transfer practices, many organizations could improve the flows of knowledge around their organization, make it accessible when and where needed, and use it to add sustainability value, such as through planning development, improved development processes or new products and services. Thus the knowledge transfer practices of sustainable development could help stakeholders to become more effective with sustainability deliverable.

Apart from that, sustainable development requires the participation of diverse stakeholders and perspectives with ideal and subsequent coordination of mutual action to achieve multiple values (Hawkins & Wang, 2012; Segger, 2004). It means that the awareness of sustainable development is apparent, the negatives consequences could occur (Mohamed, Wee, et al., 2014; Weng, 2010). It shows that, local governments and its stakeholders must have mutual coordination in order to manage knowledge of sustainable development. Moreover, local governments are where the local community infrastructure underpins the nation's economy and provides significant support to the state and national development projects (Evans & Theobald, 2003; Sola, 2005; Sustainable & Studies, 2007). This means that local governments should be able to deliver the services and increase the stakeholders' awareness.

3. Methodology

There are good reasons for spending time and effort on a review of the literature before embarking on a research project. These reasons include; to uncover the gaps in the literature, to carry on from the point others have already reached (reviewing the field allows the research to build on the platform of existing knowledge and ideas), to identify information and ideas that may be relevant to the research, and to identify methods that are relevant to the research. The preliminary information gathering is conducted by reviewing relevant literature, which helped the researcher to understand and gain a wide view of possible research problems (Chua, 2006; Liyanage et al., 2009). Therefore, Step 1 is literature review and desk research in which information is gathered from academics journal, publication, related articles, and documentary and government reports where available. Survey data can be collected either through face-to face interview, telephone interview or postal questionnaire (Bryman, 2008; Yang, Liuyanping, & Jie, 2008; Yin, 2009). Hence, step 2 is using survey method which is interview. This study looks into the practice of Malaysian local governments through stakeholder's perception. Therefore, literature reviews inform researchers of the background to their research projects and provide their context and ideas.

This study is to get an insight from the sources such as from Public Work Department, Architect organisations, other related government agencies and private sectors that are the stakeholders of local governments. The agencies selected are based on the discussion with the Local Governments and those selected are organization that have benefits and interest with local governments. Sample is taken using the data from the planning approval committee where the organization is involved in the committee to approve the planning development at local government. It was not necessary to interview all the staff since the simple sampling strategy would be sufficient to represent the data required for the study (Doyle, 2012; Smith, 2005). Therefore, the researcher comes out with these eight agencies as shown in Table 1.1. These eight agencies have close relationship with local governments in terms of sustainable development and fit the requirement for this study. In Table 1.1, it shows the selected organisation as a subject and the respondents are selected from the organisation. The respondents are selected based on their unit/division and their post. It means that selecting people or elements from a population in such a way that each individual has an equal chance or probability of selection (Lin & Ryzin, 2011; Teddlie & Yu, 2007). Selection of the respondents was based on the position in the department and work scope.

Table 1.1 also shows that only one respondent to represent each agency and only developers are represented by 4 respondents. The 4 respondents from developer represent different company. The respondents are selected based on their unit/division and their post.

TABLE 1.1: RESPONDENT

Agencies' name	No of Respondent
1 PWD(Public Works Department)	1
2 CIDB (Construction Industry Board)	1
3 SIME DARBY	1
4 TNB(Tenaga Nasional Berhad)	1
5 PAM(Persatuan Arkitek Malaysia)	1
6 KET/THA(Kementerian Tenaga, Teknologi Hijau dan Air)	1
7 PTM(Pusat Tenaga Malaysia)	1
8 Department of Irrigation and Drainage	1
9 Developers	4
TOTAL	12

4. Result

TABLE 1.2 The Key Theme Of Ways In Terms The Distribution Of Knowledge

Key Theme	Description
Human Capital	<ol style="list-style-type: none"> 1. Need to get people involved in sustainable development. 2. Local governments, businesses and citizens need to shift their focus away from the unrestrained accumulation of goods, and toward finding ways to ensure a sustainable and better life for all. 3. Different roles in and around a planning approval should stamp their influence on adhering to sustainability principles. 4. Local governments must be the forefront of sustainable development in terms of the expertise in their organization and be the expert networking channel or link between local governments and other agencies.
Technology Application	<ol style="list-style-type: none"> 1. Refocusing the view of business and examining how to sustainably handle it as in mastering the process or matter in sustainable development. 2. Need to use and experience the latest sustainable technology 3. Need a proper training facility to facilitate the construction industry
Act/policy/rules	<ol style="list-style-type: none"> 1. Need to communicate their sustainable goals, visions and strategies, in other words need to exercise good management and be transparent about what they want to achieve. 2. Need to keep the dialogue open or public participations based on the appropriate policy. 3. The act/policy/rules exist, however the enforcement is lacking and the public need more assurance of their existence

Table 1.2 shows view of respondents in terms of how the principle of sustainable development should and can be distributed. Moreover, it is related to how to disseminate the sustainability principles in building and environment for staff as well as for the stakeholders. Respondents mention that sustainability is generally understood to mean something along the lines of not consuming resources faster than their production and not polluting the environment in an irreversible way. Respondents also mention relevant activity through numerous partnerships with local governments should be encouraged which could assists in the development of a new sustainable technologies Accordingly, The Brundtland report on definition of sustainability has open to interpretation, which probably has helped popularize sustainability but has also made it difficult for groups with different priorities to agree on a common course of action (Adams, 2012; Harris, 2012; Hopwood, Mellor, & O'Brien, 2005). Moreover, they argue that the lack of consensus has also complicated attempts to measure the effectiveness of sustainability efforts and make comparisons across programs and geographies. A growing body of knowledge on sustainable development, however, is providing the means to better understanding of current conditions and demonstrate progress as the respondents explain. Moreover, they believe that the principle of sustainable development is to overcome the growing concern over the negative impact of human activity on the environment (Abas & Wee, 2014; Weng, 2010). Relatively, the respondents mention about the deteriorating

condition of the environment that led to a widespread public awareness and in the construction industry on the need for local governments to identify solutions for the environmental issues.

Overall, the respondents mention about the lack of local governments 'role play in fostering citizen participation in the communities they serve and should considers how to promote sustainable development to public. It means that the identification of these perspectives not only allows for the accurate portrayal of the local governments' role in administration, but also to enhance the knowledge transfer practice of sustainable development through an increased understanding of local governments' staff and stakeholders. In addition, the interview reveal that sustainable development support a more networking through sharing of expertise in the planning approval process. Moreover, it is necessary to implement the sustainable solutions across the planning approval's committee to encourage the development of knowledge, the transfer of skills and innovation of sustainable development.

The spreading of knowledge on the preservation of resources and protection of the environment through schools, universities and ongoing training organizations are essential (Barrutia et al., 2007; Cifal, 2002; Dale & Newman, 2005; Olsson, 2009). It means that supporting the development of operational training sectors and encourages transfers of skills for the benefit of all through dedicated programme such LA21 are great for knowledge transfer practice. Respondents also mention relevant activity through numerous partnerships with local governments should be encouraged which could assists in the development of a new sustainable technologies.

The views of the respondent reflect the awareness in terms of the sustainable development. Their awareness on applying knowledge of sustainable development where it will sustain the communities and derive benefit from an increasingly complex future. Therefore, the resources in terms of budget, people, technology and act/policy/rules should be able to face economic viability, deteriorating infrastructure, natural disasters, environmental pollution, social disintegration, loss of community, crime and violence, urban blight, and unmanaged growth as perceived by stakeholders. Hence, the knowledge created at planning approval could support sustainability by means of knowledge transfer.

5. Conclusion

Sustainable development has added new positives dimensions in the management of Local Government. With ever increasing dependency on fossil-fuels and a diminishing supply of resources, human need innovative, cutting-edge approaches and technologies from the stakeholders to make a real difference. Malaysia is aiming to achieve sustainable urban development for its cities. Since early 2002, many efforts were carried out by various authorities at the federal, state and local levels as well as the stakeholders, such as introducing the concept of a healthy city, livable city, harmonious city and many other concepts in the planning and development of towns and cities in the country. The sustainable development concept relates the development objectives with planning that emphasis on the preservation and conservation of environmental resources without jeopardising the people's aspiration of meeting their social, cultural and economic needs. Hence, staff at Local Governments are critically needed to be aware of sustainable development in their practices for the construction industry to follow.

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