

Participation in Acquiring Knowledge towards Sustainable Development at Malaysian Local Government

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Abstract

Sustainable development has become an important aspect in the local governments' planning development for the last 20 years. There are many ways sustainability elements can be incorporated in the design, construction, operation and deconstruction of buildings. Hence, the knowledge towards sustainable development should be first acquired and understood. Importantly sustainability represents the link between society and built environment professionals. In this study, the focus is aimed at the role of the Local Governments and how they play their roles towards sustainable development. Therefore, this study involved distributing questionnaire to 55 Local Governments. The result shows that Local Governments' staffs need better understanding and awareness in Sustainable Development in terms of acquiring knowledge towards sustainable development. This study is to contribute to the enrichment of knowledge transfer practices on the role of Local Governments in Sustainable Development. Therefore, this research shows that sustainable development is low in percentage of being practiced.

Key Words: *Sustainable Development, Local Government, Staff's Practices.*

Introduction

Local Governments today faced with a very demanding and dynamic situation in development agenda. They are now experiencing continuous challenges in term of implementation of sustainable development as in the environmental, economical and social aspect (Hawkins & Wang, 2011; Tooley, Hooks, & Basnan, 2009). Over the past decade, those aspects are discussed comprehensively and nowadays, as a result of this development, the interests in sustainable development are increasing. In this study, the objective will be aimed at the Malaysian local governments and it practices of sustainable development. In relation to that, the intended study is to provide an in-depth and better understanding of the influencing factors in the implementation the sustainable development. Moreover, this study is to contribute to the enhancement of current practices of the local government in sustainable development.

As the concept of sustainability is gaining popularity, this means knowledge of environmental issues, social scales and economic responsibility must be known accordingly for local governments (Endut, Mustapa, & Peng, 2011; Richards, Hons, & Cook, 2010; Tàbara & Pahl-wostl, 2007). However, public perception of local government performance on waste is poor because of the increasing environmental degradation and visibility of waste. This means that staff at local governments must be aware of these issues.

Moreover, local government takes responsibility for the environment, social and economic development of the country (Milutinovic, 2010; Streib & Willoughby, 2005). Seow (2012) mentioned that the good governance should have proper top to down approach knowledge transfer process. The local government through the policy, programs, plans, and strategies oriented people to choose sustainable development. However, sustainable development cannot develop without an appropriate knowledge in government. Hence, knowledge transfer can be thought of as a cycle where knowledge is communicated around in the organization and to the community via a variety of methods. Although knowledge transfer differs greatly between fields, there are several factors which are needed to make any knowledge transfer practices successful (Bender & Fish, 2000; Donate & Guadamillas, 2010; Liyanage, Ballal, Elhag, & Li, 2009). It means that the organization must understand the context of the new knowledge generated. For example, the importance of sustainability takes on increased relevance to knowledge of the staff as well as the policy makers when viewed in the context of development and as a solution for next generation. Moreover, it is crucial working at various levels of management to promote the sustainable development of local government. This study aims to study the perceptions of stakeholders of sustainable development at Malaysian Local Government practices.

Literature Review

The concept of sustainable development was first proposed by the Brundtland Commission in 1972. This definition has evolved since the United Nations Earth Summit held by the United Nations Environment Programme (UNEP) in Rio de Janeiro (1992). The characterization on the impact of economic, social and environmental development was later formally adopted universally (Amundsen & Asheim, 1991; Drexhage & Murphy, 2012). Accordingly, those aspects are a major concern in local governments globally when dealing with development of a country. Essentially, the sustainability in local government's practices needs to be shown in providing the services to the public.

The pillar in which sustainability stand for in the development agenda are for the economic, social and environmental aspect to be recognized and put as priority (Adams, 2012; Hawkins & Wang, 2011). Those three are to be reckoned with in order for any development to be viewed as sustainable development. Hence, the current established concept of sustainable development gives rise to many issues regarding the physical resources required for human existence and overall quality of life for both present and future generations. Moreover, many issues are driven to guide local governments in their practices of sustainable development, as in Local Agenda 21 and Malaysia's Green Building Index (GBI) (Mohamed, Goh and Seow, 2013). More importantly, how can local governments become an effective machinery to facilitate national growth and enhance the sustainable development? In essence, local governments must now play a more effective role in urban planning, development control and managing the urban system and its environment. It is particularly in the practices of local governments in sustainable development.

However, a clear definition of sustainable development has still not been devised even though the Brundtland Report's definition is widely-quoted (Drexhage & Murphy, 2012; Redclift, 2005; Tovey, 2009). When looking at the definition "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs", there are two issues here namely needs and generation. Hence, effective management in the implementation of sustainable development has become crucial issue for local governments (Dale & Newman, 2005; Norhaidah & Idros, 2005). The challenge is to solve matter regarding the needs of citizen in a sustainable manner, so as to generate continuing development and activities that meet the needs of the enterprise and its stakeholders

today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future (Goh & Yang, 2013). Hence the knowledge in sustainable development is crucial in evaluating all associated planning phase.

In addition, the lack of knowledge transfer in Malaysian local governments has jeopardized the overall implementation of development in local government. 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 (Trauth, 2012; Van Kerkhoff & Lebel, 2006). 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. 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. Therefore, the knowledge transfer and management are crucial for local governments to fulfill sustainable development agenda.

Moreover, the needs to manage knowledge is essential in minimizing resource consumption while enhancing economic development (Alavi & Leidner, 1999; Ndlela, 2010). The developed countries paid a high price when growing their economies and only realized it when the damage is already been done. In addition, when the activities are not properly managed by the local governments, the negatives impact as flooding are imminent and it will cause hazards to society, economy and environment (Adams, 2007; Development & Authorities, 1997). Public and local governments should be able to understand this and the awareness is important to minimize the hazardous environment to earth.

The local governments' function involves large resources and variety of mechanisms (Hussai, 2006; Meadowcroft, 2009). To make additional investments in human resources (expertise) and equipment are very often unable to comply with standards and practices of local governments. As a result, implementation and enforcement are not under great obligation to reflect sustainability deliverables. Hence, the knowledge of sustainable development should be inculcated as in training and encouragement from management. Therefore, local governments should not view sustainability as a luxury addition to normal practice or a necessity to drive business and development decisions. It should motivate local governments as well as stakeholders to equip its staff member with adequate knowledge of sustainable development.

Research Questions

What is the current practice of sustainable development in local governments?

Analysis

The purposive sampling is used to get the target sample selection of individuals/groups based on specific questions/purposes of the research in lieu of random sampling and on the basis of information available about these individuals/groups (Brandimarte, 2011; Creswell, 2003).

Hence, the subjects of this study are selected based on:

1. Local Government that promotes sustainable development. City - called City Hall or City Council (eg. Kuala Lumpur City Hall), Municipality - called Municipal Council (eg. Ampang Jaya Municipal Council) Special and modified local authority - called Corporation, Development Board, Development Authority or simply Pihak Berkuasa Tempatan.

2. Respondent selected at Local Authority based on the department that related to the issues or agenda of sustainable development which revolve around the issues or agenda in building. The department involved:
 1. The Department of Regional Planning
 2. The Department of Architecture
 3. The Department of Engineering
 4. The Department of Building and Maintenance

The department may vary at different Local Government; however the functions are fundamentally the same with different name being used. For example, some Local Authority uses The Department of Development Planning instead of Regional Planning.

3. Respondent in the selected Local Government that his/her work related to the management/policy/implementation or enforcement of sustainable development which revolve around the issues or agenda in building. The respondent chosen:
 - I. Manager/Head of unit
 - II. Engineer/Architect/Planner
 - III. Technician/related staff
 - IV. Enforcement officer
4. Respondent in the selected department at the Local Government being studied was send questionnaire. A simple sampling strategy was used to identify those staff in these departments that were to answer the questionnaire. It was not necessary to send all the staff since the simple sampling strategy would be sufficient to represent the data required for the study. Each Local Government is allocated 10 set of questionnaires each. Consideration was made that those selected to answer the questionnaire would represent a fair distribution of appropriate employees in these departments. 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 (Bryman, 2008b; Lin & Ryzin, 2011). Selection of the respondents was based on the position in the department and work scope.

Study shows that municipal councils represented by 209 respondents out of 291 respondents (71.8% out of 100%). The organization here is categorized into three, namely City Halls, Municipal Councils and Modified Local Authority. Based on questionnaire's question on the level of education of the respondent, it shows that 59.1% with Diploma education and 18.9% with Bachelor Degree holder. It shows that this study is represented by 3 different groups in terms of level of education. Study also shows that on the area of study in education background, science/technology/management related fields and architecture represent the highest percentage, while in mechanical engineering represent only 1.7% from the overall respondent. Although the percentage depicts various values, the respondents participated in the research were from various education background (Area of Study). With respect to respondent qualifications, study demonstrates that the majority of the respondents have higher qualifications. This results show the backgrounds come from all the major disciplines that can relate to sustainable development. This is important to ensure that the responses received were from appropriate respondents and can respond to the questions accordingly. Study shows that the respondents are inclining to high percentage of 51.9% to participate in recycle program. Interestingly, the education background and level of education of respondents implied that they are well educated (more than 50% have diploma and higher level of education), the respondents have high in participating in activities, eg recycle program but rather have low in percentage in engaging with activities related to SD, eg SD academic seminar. Study also shows that the respondents are mainly responded to very low percentage of more than 60% to participate in seminar related to sustainable development.

Moreover, it shows that the respondents are less in participating at sustainable development seminar and mean also suggests the same. It means that this is contributing to the lack in knowledge transfer practices at local governments as to promote knowledge transfer, communities of practices and ensure local partners (community and local government).

Furthermore, it also shows that the respondent are incline to low percentage of 41.9% to participate in courses such as green building courses. It also shows that more than 50% of the respondents are low in participation for courses such as green building courses. Based on these figures, it means that the knowledge transfers on training in sustainable development are least practiced at local governments.

In Table 1, mean shows that the respondent are highly participating in activities related to sustainable development eg recycle program. The rest are inclining to low participation in courses such as green building courses. It also shows that more than 50% of the respondents are low in participation for courses such as green building courses. Based on these figures, it means that the knowledge transfers on training in sustainable development are should be practiced at local governments as literature shows that training to develop awareness is essential. Zainul Abidin (2010) suggests that training is important to create awareness as in participating in seminar. The seminar could be organised and create greater awareness of the various enabling factors and obstacles that can affect of sustainable development (Dale & Newman, 2005; Minbaeva, 2005; Places, 2012). It means that the exchange of knowledge and experiences was expected to lead to greater networking among local governments and private concerned with sustainable development.

Table 1. Mean in participating.

	Participate in activities related to SD, eg recycle program	Participate in seminars related to SD, eg SD academic seminar	Participate in seminars related to SD, eg Green Building courses/training
Mean	4.14	2.19	2.07

On how staffs acquire knowledge related to sustainable development, study shows more than 60% of low percentage in staff acquire knowledge of sustainable development through stakeholders contact related to sustainable development, eg training and also shows low percentage through government networking related to sustainable development, eg project development collaboration (briefing). Moreover, it shows that more than 50% choose low and very low when comes to how they acquire knowledge on sustainable development. This means that the respondents don't use these types of ways in acquiring knowledge with regards to sustainable development.

In view of this, it doesn't necessary imply that the respondents are less knowledgeable or inactive in search of sustainable development's issues. However, lack of understanding and awareness in sustainable development has become the main hindrance to pursuing sustainability (Executive, 2006; Galvin, 1999; Shafii, Ali, & Othman, 2006; Zeemering, 2009). It means that the concerns are in the promotion of sustainable development among staff as a means of knowledge transfer practice.well both on screen and on a black-and-white hardcopy.

Overall, study demonstrates that staffs have low percentage in acquiring knowledge on sustainable development. Table 2 shows that this is the mean of the current practice of Local Governments in sustainable development in how they acquire knowledge on sustainable development. As results show, they are still lacking in acquiring the knowledge of sustainable development where awareness and knowledge must be conquered first (N.Zainul, 2010; Shafii & Othman, 2007). The means suggest that the acquiring knowledge from staff is low and this need to be looked into in order for the sustainability deliverances at the stage of planning approval.

Table 2. Mean in acquiring knowledge.

	Acquire knowledge related to SD : through stakeholders contact related to SD, eg (training)	Acquire knowledge related to SD : through government networking related to SD, eg project development collaboration (briefing)	Acquire knowledge related to SD : through expert advice related to SD, eg consultation for planning approval
Mean	3.04	2.71	3.00

On how and where the organizations send their staff to learn or further their understanding of sustainable development, study shows of more than 60% of low in percentage and it seems that the organizations need to take up steps to send staff to sustainable development related activities/seminar/courses as one of the knowledge transfer practices. The seminar could demonstrate the considerable potential of partners to cooperate in the sustainable development, although some partners were not aware of the knowledge and skills of one-another prior to the seminar (Barrutia et al., 2007; Rowe, 2000). Hence, the seminar can be an effective vehicle to disseminate and exchange information on the topic of sustainable development.

Moreover, the direction of investments, the orientation of technological developments and institutional are all in harmony and enhance current and future potential to meet human needs and aspirations (Brandon, Lombardi, & Bentivegna, 1997; Nathan & Sudhakara, 2012; Stoner, 2009). Accordingly, organization should initiate their staff to understand and learn more about sustainable development. Additionally, the concern for sustainable development in Malaysia has been shown by subsequence five year plans (Ahmad, 2002; Hezri, 2004). It means that local governments should have encourage and promote sustainable development from within. Study indicates that more than half are less than moderate in question relating to organisation sending them for activities, seminar and courses related to sustainable development. Overall, it shows that the respondent agree that their organisation has low or less frequent in sending them for activities, seminar and courses related to sustainable development.

The aspiration of businesses to attain a “greater good” reflects their own awareness to the environment and the need to promote environmentally conscious behaviors (Newell & Moore, 2010; Norhaidah & Idros, 2005; Yashiro, 2009). It means that steps should be taken by local governments in efforts to reflect their environmental, social and economy’s concerns and will therefore support the sustainability deliverables by continuing to send their staff to activities, seminar and courses related to sustainable development.

Table 3 shows that organizations are low in mean to send their staff to participate in sustainable development related activities, seminars and courses except where the recycle program is high in mean (3.92). Supposedly, the role of local governments are to govern the local community and moreover to properly manage and plan for sustainable development agenda as in Agenda 21 (Milutinovic, 2010; Rowe, 2000). Such activities include recycle program and river management have focused on building the capacity of staff as well as systems and procedures for sustainable development. However, local governments did not have such an opportunity in sending their staff for academic seminar and course/training, thus, their capacity is comparatively low. If capitalized skillfully, local governments could obtain the much-needed technical, expertise and capacity development, as well as greater sustainability deliverance.

Table 3. Mean for sending staff.

	Organization send staff to participate in activities related to SD, eg recycle program	Organization send respondent to participate in seminars related to SD, eg SD academic seminar	Organization send respondent to courses related to SD, eg Green related course/training
Mean	3.92	2.47	2.66

Discussion

The result demonstrates that staffs have low percentage in acquiring and participating in activities related to sustainable development. In view to that, it contributes to the lack of knowledge in the practice of Local Governments in sustainable development. However, the method in participating and acquiring knowledge is not extensively discussed and this study mention several method such as recycle programme, sustainable development seminar, green building course, governmental networking with other agencies and supplier and expert consultation/advice.

Over the past decade in particular, sustainable development has become an important aspect and local government must have the proper knowledge transfer practices in managing planning approval of issues related to sustainability. There are many ways in which sustainability issues can be integrated into the practice of local government where this study finds it still averaging low in participating and acquiring knowledge of sustainable development. In particular, organizational knowledge depends on how human resources are managed and it is interconnected. Human resources absorb, transfer and create knowledge fostering the achievement of a competitive advantage of the organization. In order to fulfill that objective, it is necessary to create a feasible environment to knowledge communication. Therefore, factors that can generate and influence the implementation of sustainable development in Malaysian local governments as in the theoretical framework are seek to enhance the sustainability deliverables in planning approval at local governments. Therefore, important issues such as the factors that influence the sustainable development should be addressed.

Conclusion

Over the past decade in particular, sustainable development has become an important aspect and local government must have the proper knowledge transfer practices in managing planning approval of issues related to sustainability. There are many ways in which sustainability issues can be integrated into the practice of local government where this study finds it still averaging low in participating and acquiring knowledge of sustainable development. In particular, organizational knowledge depends on how human resources are managed and it is interconnected (Goh, 2013; Qin & Yang, 2008; Vagnoni & Bracci, 1998). Human resources absorb, transfer and create knowledge fostering the achievement of a competitive advantage of the organization. In order to fulfill that objective, it is necessary to create a feasible environment to knowledge communication. Therefore, factors that can influence the implementation of sustainable development in Malaysian local governments are needed.

Acknowledgement

The authors would like to thank the Ministry of Higher Education, Malaysia (KPT), Research and Innovation Centre, Universiti Tun Hussein Onn Malaysia for financially supporting this research under the Multi Disciplinary Research Grant Scheme (MDR) grant No. V1316.

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