

SUSTAINABLE DEVELOPMENT AT MALAYSIAN LOCAL GOVERNMENTS FROM MANAGEMENT'S VIEW OF THE KNOWLEDGE TRANSFER PRACTICES

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ABSTRACT

Sustainable development is for the economical, societal and environmental sustainability for humankind to develop built environment. There are a lot of ways sustainability elements can be incorporated in services at local governments. Hence, the capable staffs at local government are much needed. Importantly, sustainability represents the link between society and the built environment professionals. However, those links still unclear since the built environments are still being developed in an unsustainable way and the staff of the local governments as well as the society are still unaware with the concept of sustainability. This gives a huge impact to our environment and also human health. This paper focuses at the role of the Local Governments and how the staff plays their roles towards sustainable development. The method used in this work involved the interviews with 14 officers from 14 different Local Governments offices. The result shows that the Local Governments' staffs need a better understanding and awareness in acquiring and disseminating knowledge regarding sustainability. This study is to contribute to the enrichment of the role of Local Governments staff in understanding the sustainable development's objective and being able to disseminate the knowledge. In conclusion, the knowledge transfer practices are known and better understood.

Keywords: Awareness; Local government; Knowledge transfer practices; Sustainable development

1. INTRODUCTION & BACKGROUND OF STUDY

Local Governments are now experiencing continuous challenges in materializing sustainable development as in the environmental, economic and social aspects. Over the past decade, those aspects are discussed comprehensively and nowadays, as a result of this development, the interests in sustainable development are increasing. Sustainable development, in the broadest sense, is the ability to sustain a certain process or state at a certain rate or level, hence the term; sustainability. The concept of sustainability applies to all aspects of built environment and is commonly defined within ecological, social and economic contexts. The issues are local governments' function involve large resources and variety of mechanisms (Hawkins & Wang, 2012; Mohamed, Seow, & Goh, 2013; Zimmermann, 2007). As a result, the implementation and enforcement are not under great obligation to optimize the society investments as well as sustainability deliverables. Therefore, the staffing is a challenge in order to be effectively functioning. While the sustainability concept is being emphasized, effective

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management is crucial as all levels of local government continues to fall short of knowledge and experience (Hawkins & Wang, 2012; Mohamed, Hilmi, Wee, & Chen, 2015). The lack of knowledge in staff leads to problems in ensuring the effective implementation and this can be seen in the failure of managing the waste in construction site, river management, public participation in ensuring safety and health of housing area and public sanitation. The implementation of sustainable development in local government needs to be given a serious thought in tackling the issues of environmental, social and economic aspects. In addition, the public and local governments should be able to understand this and the awareness is important to minimize the hazardous environment in the earth. Therefore, the local governments should not view sustainability as a luxury addition to normal practice or a necessity to drive business and development decisions. The broad aim of this research is to study the management's views of the knowledge transfer practices towards sustainable development at Malaysia local governments.

2. METHODOLOGY

Research is fundamentally about understanding and explaining about “knowing” and a research methodology is a formal, systematic application of a scientific method to a study of problem and an orderly approach taken towards the collection of data. It is to study the current practice of sustainable development in local governments; in this research, the data is collected through the interview. As a research method, interviewing has been approached from a multitude of perspectives. It is beyond the scope of the present article to provide an in-depth account of literature concerning interviewing and debates concerning the use of interviews as a method of data generation. Interviewing is trying to understand what people think through their speech. There are different types of interviews, often classified by the degrees of control over the interview. There are three types of interview, namely, unstructured, semi-structured and structured types (Bryman, 2006; Chua, 2006; Indera Syahrul, Fukami, & Ahmad, 2014). The semi-structured interview was aimed to achieve the following purpose; to study the awareness on sustainable development in Malaysian local governments as well to clarify many uncertainties exposed by literature reviews. Interviewees were encouraged to propose possible solutions and considerations to deal with these sustainability-related matters. Semi-structured interviews can be conducted in many situations, such as face-to face, telephone, internet and intranet mediated interviews (Chua, 2006; Doyle, 2012; Yates, 2004). The face-to-face interview approach was employed in this study. In this case, the interviewer managed to control the pace of the interview approaches and record any data that was forthcoming.

Selection of Respondent of Interview for local governments

This interview is to get an insight from the local governments namely the City or Municipal Council. The selected City or Municipal Council is from each state (14 states) and represents more than 50% from the total of City or Municipal Council and Modified local authority in Malaysia. It was not necessary to interview all the staff since the simple random sampling strategy would be sufficient to represent the data required for the study. Hence, only one managerial staff from each state is selected as a respondent. The respondents are selected based on their unit/division and their post with regards to sustainable development.

2. RESULTS & DISCUSSION

In interview's analysis, (Omar, Takim, & Nawawi, 2012; Ridder, 2012; Yates, 2004) the followings are suggested:

- Putting information into different arrays
- Making a matrix category and placing the evidence within such categories
- Creating data displays, flowcharts and other devices, for examining the data and the tabulating the frequency of different events
- Examining the complexity of such tabulations and their relationships by calculating second-order numbers such as means and variances
- Putting information in chronological order or using some other temporal scheme

The responses are analyzed and then categorized into distinct groupings. After that, frequency counts will then be conducted. All the data from either the open ended or closed questions will be coded and frequency counts will be calculated and then converted into percentages, tables and other formats.

Awareness

In this section, it is to disclose the knowledge transfer practices of sustainable development at local governments and how it relates to the awareness of the respondents. Based on the interview, the respondents are still unaware of the importance of all three components of sustainability which are environment, social and economic aspects. Accordingly, in Malaysia there are lack of information and an effective method for providing such information (Maidin, 1997; OECD, 2011; Shafii, Arman Ali, & Othman, 2006; Zainul Abidin, 2010). Moreover, the awareness from education and training are essential in providing information as in the knowledge transfer practices. Hence, the City Hall/Municipal/Modified Local Government must be able to understand sustainable development. Therefore, education, training, expert advice and participation in various seminar are important as suggested by the respondents.

Table 1 Sustainable development according to respondents' understanding

Statement from Respondent	Key Themes		
	Economy	Social	Environment
R1,R4,R6,R7,R9 & R12		√	√
R2,R3 & R10	√	√	√
R5,R8,R11,R13&R14			√

In Table 1, collectively all respondents give variety of views on sustainable development. However, a clear definition of sustainable development among staff was still not been proven, in which only 3 out of 14 respondents give views with the consideration of social, economic and environmental goals. In contrast to that 3 respondents, all key themes of economy, social and environment must be considered for sustainable development. 6 out of 14 replied that sustainable development is to pursue sustainability in terms of social and environment. They view sustainable development is the functions of local governments in handling issues such as waste management, crime prevention, traffic congestion, river pollution, landscaping and drainage. Respondent R1 replies "...sustainable development is about development that care for community....it

involves social values and not forgetting environmental issues...environment issues must be solved...people need a clean environment to live....”. Respondent R10 views “...when sustainable development is being put into place at local governments, it is the policy of economy, social environment....deals with management that has proper resources... “.

The views on sustainable development are varies and this can give impact on the services provided by the local government when comes to the implementation of sustainable development. R1 even highlighted the concern on the heritage building. The views “...heritage buildings are sometimes being left behind...how to restore or manage the heritage building when sustainable development is being put into place...is the policy being embedded...the management should have adequate knowledge... “. Apart from that, respondents argue that only environment issues are being highlighted and the economic aspect is the least discussed. Respondent 1 gives view “...training for local governments staff is mainly on environment....sustainable development seems like taking care of natures first...”. In contrast, sustainable development covers all three elements as in economy, social and environment (Adams, 2012; Mäler, 2008). Similarly, 5 out of 14 respondents gave views that only environment is the major concern in sustainable development. However, in view of the responses of R7, “...sustainable development is on social agenda and environmental awareness”.

Respondent R10 concluded “...when sustainable development is being put into place at local governments, it is the policy of economy, social and environment are being discussed with great depth...deals with management that have proper resources... “. R10 seems to have the same view on sustainable development's concept. Sustainability is not a new concept and the issues relating to sustainable development as in environment, social and economy have started to be widely noticed, when the United Nations declared the Brundtland's report (Adams, 2012; Endut, Mustapa, & Peng, 2011; Nathan & Sudhakara, 2012). Correspondingly, the knowledge of sustainable development must be appropriately acknowledged in order for the sustainability to be deliverable.

Table 2 Acquiring and Disseminate Knowledge of Sustainable Development

Response from:	Key Themes				
	Network with stakeholders	Activities such as recycling program	Seminar on Green	On-line training	Expert advice/counsel
R4,R7&R9	√				√
R3,R10 & R12	√	√	√	√	
R1,R2,R5,R6, R8&R13	√	√		√	√
R11&R14	√	√		√	

From the interview, a total of 7 out of 14 respondents considered that local governments have the staff that equipped with necessary skill with respect to sustainable development in order to manage the process of development planning. Respondents responded that the skills involved are in terms of education background, working experience and technological know-how. However, the sustainable development is not specifically shown in the documentation or policy does not specifying the sustainability elements.

All respondents gave views that local governments have played some roles in imparting awareness in sustainable development to the private sectors. Since sustainable development issues are not new and local governments should already impart awareness with sustainable development principles (OECD, 2011; Rashid et al., 2011). From the interview, three respondents mentioned there were networks with the stakeholders and experts advice involved in the local governments to acquire and disseminate the awareness of sustainable development. Six respondents believed that the acquiring and disseminating come from network with stakeholders, activities on sustainable development, seminar, training and expert's advice. The other eight respondents believed that the advice from the expert and training are the major aspects in disseminating awareness of sustainable development. They argued that these are necessary in ensuring the transfer of knowledge in sustainable development. Respondent R4 views "...it is very important to have the staff involvement and that they must have adequate knowledge in sustainable developmentto inform correctly and precisely regarding the needs of sustainable development...". The knowledge of sustainable development is to be disseminated by the adequate capacity of local governments (Alipour, Idris, & Karimi, 2011; Ec, 1996; Evans & Theobald, 2003; Rashman, Downe, & Hartley, 2005). In Table 2, the respondents argue that local governments gave various training and activities in sustainable development even though it might not specifically incline towards the sustainability elements. 3 out of 14 respondents mentioned that training in sustainable development and expert's advice involved. Four respondents mentioned that the training came in terms of activities such as usage of technology, recycling program, seminar on Green and on-line training. However, all respondents mentioned that the networking with the stakeholders is an important aspect and exist in the acquiring and disseminating knowledge at local governments. Only two respondents mentioned the involvement of training such as in the usage of technology, recycling program and on-line training. Respondent R3 concluded that "...sustainable development is being introduced at local governments, education is the key....policy must be addressed so it can be a guide...". Yahya and Goh (2002) agree that issues relating to training is valuable for the emergence of sustainable development. Moreover, Ndlela (2010) suggests that expert advice in sharing the knowledge is important. From Table 3, the initiatives for training in sustainable development taken by Malaysia are in response to the needs identified in Agenda 21 as well as those identified through the five-yearly Malaysia Development Plans and the longer-term Outline Perspective Plans (Mohamed et al., 2014; Sahamir & Zakaria, 2014; Zainul Abidin, 2010). Thus, the knowledge transfer practices as in training, on line learning, on job training, mentoring and expert advice are essential parts for the dissemination and acquiring knowledge at local governments.

Table 3 Constraints to staff in order to be aware of issues that relate to sustainable development

Response from:	Key Themes						
	Lack of Training	Inadequate education background	Lack of seminar	expensive expert consultant	Lack of motivation	Unclear definition of sustainable development	Unclear vision from top mgent
R1,R2,R3, R9&R14	√	√	√	√	√	√	√
R4,R5 & R10					√	√	√
R6,R7,R8, R11,R12 & R13	√				√		√

Table 3 demonstrates multiples answers regarding the constraints for staff to be aware of in sustainable development concept. The responses are in terms of lacking in training, inadequate education background, lack of seminar, expensive expert consultation, lack of motivation, unclear definition of sustainable development, unclear direction from top management and no continuous efforts from appropriate agencies. 5 out of 14 respondents gave views that the constraints are lack of training, inadequate education background, lack of seminar, expensive expert consultation, lack of motivation, unclear definition of sustainable development, unclear direction from top management and no continuous efforts from appropriate agencies. 3 out of 14 replies that lack of motivation, unclear definition of sustainable development, unclear direction from top management and no continuous efforts from appropriate agencies are the constraints. 6 out of 14 respondents give views that lacks of training, lack of motivation and unclear direction from top management are the major constraints. These constraints are reflected on the awareness of the staff on sustainable development, where due to lack in awareness of sustainable development, sustainability deliverable in local governments could not be achieved. Thus, awareness and training are important (Norhaidah & Idros, 2005; Shafii & Othman, 2007; Zainul Abidin, 2009) .

In response to what changes do local governments experienced due to the introduction of sustainable development, the responses are that they still do the same practices. However, issues on environment are taken more seriously. All respondents agree that sustainable development have changed how they look on matters regarding sustainability. Respondent 3 gives view "...sustainable development have changed staff from being ignorant towards environment to being concern....the staff is concerned with environmental issues surrounding their lives and others...". Respondent 12 concluded that "...sustainable development changed people lives especially staff that can relate their job with sustainability elements....the changes can be seen through work they have done in the office as the get the valuable information on sustainable development through policy or related resources....." Relatively, these changes should spur local governments' staff in understanding and acknowledging sustainable development.

4. CONCLUSION

Important issues such as the factors that influence the sustainable development should be addressed accordingly. Over the past decade in particular, sustainable development has become an important aspect and local government must equip them with the know-how approach in handling the issues of implementing and so forth actions. In principle, sustainability is about meeting the needs of today, without adversely impacting the needs of tomorrow. However, this can only be done when they have competencies regarding the knowledge of sustainable development. The most important aspects are namely, becoming knowledgeable on sustainability, developing sustainable competences, clear and unambiguous communication about the sustainable development. Thus, when it is crossed reference and triangulates with the preliminary interviews as well as the initial literature reviews and from the pilot surveys, there are evidences of the constraints and therefore the awareness is still being upgraded. There are many ways in which sustainability issues can be integrated into the practice of local government where it can influence the staff's motivation to implement the sustainable development agenda.

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6. REFERENCES

- Adams, W. M. (2012). The Future of Sustainability: Re-thinking Environment and Development in the Twenty-First Century. In *Sustainability* (pp. 71–78).
- Alipour, F., Idris, K., & Karimi, R. (2011). Knowledge Creation and Transfer: Role of Learning Organization. *International Journal of Business Administration*, 2, 61–67.
- Bryman, A. (2006). Qualitative Research. *Qualitative Research*, 15, 66–66. doi:10.1177/1468794106058877
- Chua, L. C. (2006). Sample Size Estimation Using Krejcie And Morgan And Cohen Statistical Power Analysis: A Comparison. *Jurnal Penyelidikan IPBL*, 7, 78–86.
- Doyle, A. (2012). Behavioral Interviews. Aboutcom Job Searching.
- Ec. (1996). European sustainable cities. *Nuclear Safety* (p. 303).
- Endut, A. F., Mustapa, S. I., & Peng, L. Y. (2011). Role of knowledge institution in achieving sustainable development: UNITEN experience. In *15th International Conference on ISO & TQM (15-ICIT)*, 26--28 July.
- Evans, B. O. B., & Theobald, K. (2003). Policy and Practice LASALA : Evaluating Local Agenda 21 in Europe. *Journal of Environmental Planning and Management*, 46(September), 781–794. doi:10.1080/0964056032000138481
- Hawkins, C. V., & Wang, X. (2012). Sustainable Development Governance: Citizen Participation and Support Networks in Local Sustainability Initiatives. *Public Works Management & Policy*. doi:10.1177/1087724X11429045
- Indera Syahrul, M. R., Fukami, N., & Ahmad, Y. (2014). Cultural heritage, incentives system and the sustainable community: Lessons from Ogimachi Village, Japan. *GEOGRAFIA Online TM Malaysian Journal of Society and Space*, 10, 130–146.
- Maidin, A. J. (1997). Access to Public Participation in the Land Planning and Environmental Decision Making Process in Malaysia, 148–164.
- Mohamed, S., Hilmi, M. A. I., Wee, S. T., & Chen, G. K. (2015). Preliminary Concept of Knowledge Transfer Practices towards Sustainable Development for Local Governments, 1–10.
- Mohamed, S., Seow, T. W., & Goh, K. C. (2013). The management of sustainable development: Malaysian local government's role. In *MATRA* (pp. 1–3). USM.
- Mohamed, S., Seow, T. W., & Goh, K. C. (2014). Participation in Acquiring Knowledge towards Sustainable Development at Malaysian Local Government, 1329–1337.
- Nathan, H. S. ., & Sudhakara, R. B. (2012). Towards a conceptual framework for development of sustainable development indicators for an urban setup. *International Journal of Sustainable Development*, 15, 187–205. doi:10.1504/12.47753
- Ndlela, M. N. (2010). Knowledge Management in the Public Sector: Communication Issues and Challenges at Local Government Level. *Proceedings of the 11th European Conference on Knowledge Management Vols 1 and 2*, 711–716.

- Norhaidah, S., & Idros, S. (2005). Exploring Environmental Behaviours , Attitudes and Knowledge Among University Students : Positioning The Concept of Sustainable Development Within. *Journal of Science And Mathematics Education In Se Asia* Vol, 29, 79–97.
- OECD. (2011). State of Penang , Malaysia.
- Omar, R., Takim, R., & Nawawi, A. H. (2012). Measuring of technological capabilities in technology transfer (TT) projects. *Asian Social Science*, 8, 211–221. doi:10.5539/ass.v8n15p211
- Rashid, Y. R., Sulaiman, M. S., Aziz, A., Selamat, H., Yani, A. H. M., & Kandar, M. Z. (2011). Greening government's office buildings: PWD Malaysia experiences. *Procedia Engineering 2011 International Conference on Green Buildings and Sustainable Cities*, 21, 1056–1060. doi:10.1016/j.proeng.2011.11.2111
- Rashman, L., Downe, J., & Hartley, J. (2005). Knowledge creation and transfer in the beacon scheme: Improving services through sharing good practice. *Local Government Studies*, 31, 683–700. doi:10.1080/03003930500293732
- Ridder, H.-G. (2012). Yin , Robert K .: Case Study Research . Design and Methods. *Zeitschrift Für Personalforschung*, 26, 93–96.
- Sahamir, S. R., & Zakaria, R. (2014). Green Assessment Criteria for Public Hospital Building Development in Malaysia. *Procedia Environmental Sciences*, 20, 106–115. doi:10.1016/j.proenv.2014.03.015
- Shafii, F., Arman Ali, Z., & Othman, M. Z. (2006). Achieving sustainable construction in the developing countries of southeast Asia.
- Shafii, F., & Othman, M. Z. (2007). Sustainable Building in the Malaysian Context. Building, 601–606.
- Yahya, S., & Goh, W.-K. (2002). Managing human resources toward achieving knowledge management. *Journal of Knowledge Management*, 6, 457–468. doi:10.1108/13673270210450414
- Yates, S. J. (2004). Doing Social Science Research. *Social Science* (Vol. 1, p. 293).
- Zainul Abidin, N. (2009). Sustainable Construction in Malaysia – Developers ' Awareness, 807–814.
- Zainul Abidin, N. (2010). Investigating the awareness and application of sustainable construction concept by Malaysian developers. *Habitat International*, 34, 421–426. doi:10.1016/j.habitatint.2009.11.011
- Zimmermann, M. (2007). Local Governments and Sustainable Development. *Environmental Policy Law*, 37, 504–506.