

The Management Of Sustainable Development: The Practice Among Malaysian Local Government's Staff

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Abstract

Over the past decade in particular, sustainable development has become an important aspect in the local governments' planning development. There are many ways in which sustainability issues can be incorporated in to the design, construction, operation and deconstruction of buildings. 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 for sustainable development. Therefore, this study involved distributing questionnaire to 55 local governments. The result shows that local governments' staff need better understanding and awareness of Sustainable Development. This study is to contribute to the enrichment of knowledge on the role of Local Governments in Sustainable Development. Therefore, this research this study shows that sustainable development is low in percentage of being practiced.

Keywords: sustainable development, local government, staff's practices

1. 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 local governments' function involves large resources and mechanisms, staffing is a significant challenge to be effectively functioning. In one of the function in local government, RIO Declaration 92, (LA 21) mentioned about the importance of local governments to promote sustainable development. The implementation of sustainable development in local government still need to be given serious thought in tackling the issues of environmental, social and economical aspect. As the concept of sustainability is gaining popularity and this means achieving sustainability must through environmental, social scales, and also through economic responsibility. Hence, staff at local governments must be aware of these issues and subject matters.

It has been argued that lack of understanding and awareness in Sustainable Development has become the main hindrance to pursuing sustainability (Soyas & Nanayakkara 2006). To promote the sustainability, it is essential for the Local Governments to cooperate and have some understanding in order for stakeholders to follow. Therefore, this study is to study awareness/understanding level of sustainability objectives at the implementation stage.

These measure the level and provide actions that they can apply in their efforts to pursue and enhance the sustainability deliverables.

The lack of knowledge in staff leads to problems in ensuring effective implementation. Moreover, the support from top level management is lacking in influencing the staff to implement sustainable development. While the sustainability concept is being emphasised in highway infrastructure, effective financial management is crucial as highway funding at all levels of government continues to fall short of infrastructure needs. As a result, investors' decisions based on experience are not performing as well, as promised while managers are under great obligation to optimise society investments as well as sustainability deliverables at the project level.

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. 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.

In one of the function in local government, (Lafferty, 2001; MHLG, 2013) mentioned about the importance of local governments to acknowledge sustainable development especially in the planning development. While the sustainability concept is being emphasised, managing knowledge is crucial as all levels of local government continues to fall short of knowledge and experience (Bacot, McCoy, & Plagman-Galvin, 2002; Development & Authorities, 1997; Gibson, 2005; R. Planning, 2004). As a result, managing the waste in construction site, river management, public participation in ensuring safety and health of housing area and public sanitation are unsustainable (McLaren, 1998; D Saha & Paterson, 2008; Seow, 2012). Hence, the implementation of sustainable development in local government needs to be

managed where the knowledge of environmental, social and economical aspect is the utmost important.

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 et al., 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. In Canada, USA and commonly around the world, the local governments are under the jurisdiction of the Minister responsible for local government affairs where the Act for Local Government (Urban Authorities) and their amendments, the village, district and urban authorities are responsible for: planning, financing and implementing development programmes (Atkinson, 2002; Bacot et al., 2002; Barrutia et al., 2007; Hartley, Butler, & Benington, 2002). Their functions include urban planning, sanitation, parking, business, landscaping and public event. Therefore, local governments must disseminate appropriate knowledge to their staff as to improve and enhance their services.

2. Background Study

The implementation of sustainable development agenda at Local Government is progressively being executed nowadays. Good governance within each country and at the international level is essential for sustainable development. At the domestic level, sound environmental, social and economic policies, democratic institutions responsive to the needs of the people, the rule of law, anti-corruption measures, gender equality and an enabling environment for investment are the basis for sustainable development. As a result of globalization, external factors have become critical in determining the success or failure of developing countries in their national efforts. 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 (WCED, 1987). 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 Johannesburg Plan of Implementation, agreed at the Earth Summit 2002, affirmed UN commitment to Agenda 21 (Barrutia et al., 2007; Bulkeley, 2010). It functions as a fundamental guideline to define sustainability in many areas, including the housing and building development for development project. Following the United Nations World Summit for sustainable development in Johannesburg in 2002, organizations are more aware of their responsibilities toward society and the necessity for considering and paying attention to their social and environmental roles.

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; Redcliff, 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. Hence the knowledge in sustainable development is crucial in evaluating all associated planning phase.

During the United Nations Earth Summit held by the United Nations Environment Programme (UNEP) in Rio de Janeiro (1992), a sustainable development was defined as "Improving the quality of human life while living within the carrying capacity of supporting eco systems". Depending on the context in which it is used, sustainability has broad and different definitions. Often sustainable development is classified using Bruntland's definition, where development meets 'the needs of the present without compromising the ability of future generations to meet their own needs'. This definition has an impact on the economic, social and environmental development and was later formally adopted worldwide.

In order for sustainable development to achieve its objective, it must be integrated into the planning of development at any organization. Therefore, a holistic approach are essential if the full sustainability agenda is implemented (Bourdeau, 1999; Gilham, 1998; Hai, Hai, Dung, & Hens, 2009). In addition, there is a need to create increasing economic values while using natural resources sustainably and making a broader contribution to the community's social aims and objectives (K. C. Goh & Yang, 2010; McLaren, 1998). 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; McLaren, 1998). This extends beyond the traditional concern of business, which is about profitability and increasing shareholder value.

Since the 1992 Earth Summit in Rio, everyone has a role to play in developing sustainable development (Barrutia, Aguado, & Echebarria, 2007). In relation to the development of human settlement, it is mainly on housing development with the construction industry the main player. Therefore, construction industry must initiate actions to reduce the negative impacts of development and sharpen this competitive edge (N. Z. Abidin, 2009; Du Plessis, 2007). This means that Local governments must bring about changes and economic growth accordingly.

Local government should play an important role in encouraging the sustainable development. A sustainable development for the organization needs to be developed and implemented according to its concept. Currently there have been several actions in the Malaysia's sustainable development agenda. The sustainable development issues are not new and were in the Seventh Malaysian Plan (1995-2000) and the formulation of the Total Planning Doctrine indicates that the concern for one of the element in sustainable development, which is environment, begins to gain firmer ground (Hezri, 2004; Omar, 2008; Tooley, Hooks, & Basnan, 2009). The initiatives taken by Malaysia in response to the needs identified in Agenda 21 as well as those identified through its own development project, namely the five-yearly Malaysia Development Plans and the longer-term Outline Perspective Plans. It included initiatives undertaken by the Federal Government of Malaysia (the central government), by the State Government and private sectors. In 1995, amendments were made to the Town and Country Planning Act 1976 which stressed the need for better environmental protection (Dola & Mijan, 2006; Omar, 2008). It means that good governance within each country and at the international level is essential for sustainable development, where environmental, social and economic policies are responsive to the needs of the

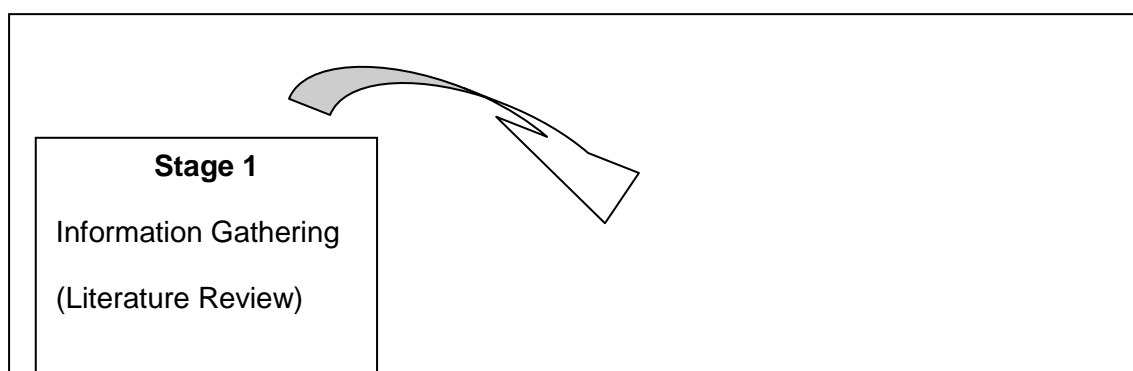
people. Therefore, in performing local governments' functions, the staff must be knowledgeable in protecting and utilizing the resources for sustainable development. Thus, knowledge in sustainable development should be an essential strategy for project development.

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 (Elkington, 1994; Adams, 2001). Those three are to be reckoned with in order for any development to be viewed as sustainable development (Koo et al, 2007). 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). 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.

3. Methodology

Step 1 involved in conducting a literature review and desk research. Information will be gathered from academics journal, publication, related articles, and documentary and government reports where available. Step 2 is implemented by means of questionnaire distribution to respondent. Survey data can be collected either through face-to face interview, telephone interview or postal questionnaire. Step 3 involved the use of quantitative method. Fellows and Liu (1997), highlight five research styles: experiment, survey, action research, ethnographic research and case study. This study used a survey research methodologies. A detailed literature review, including a Web-based search and a review of academic and industrial literature, was undertaken. As has been mentioned before, this research seeks to know what is happening in the Local Government with regards to sustainable development. Moreover, it looked into the level of implementation of sustainable development. In other words, this research is interested in knowing the factors in causation of that implementation.

From the literature findings, questionnaires are distributed to the chosen local governments and conducted for the following research purposes; to study the influencing factors of sustainable development in local governments and its relationship between implementation and influencing factors. Questionnaires require considerable effort and expense, hence developing a good questionnaire is essential, as much depends on having the right questions for analysis and asking them clearly and carefully. In order to improve the response rate, the questions were designed to be unambiguous and easy to answer by the respondents as Babbie (2010) and Neustadt et al. (2002) suggest that the questions in a questionnaire should be a necessary data; questions need to be plain, concerning specific issue only and the questions should be presented in a pleasant form appropriately for the research.



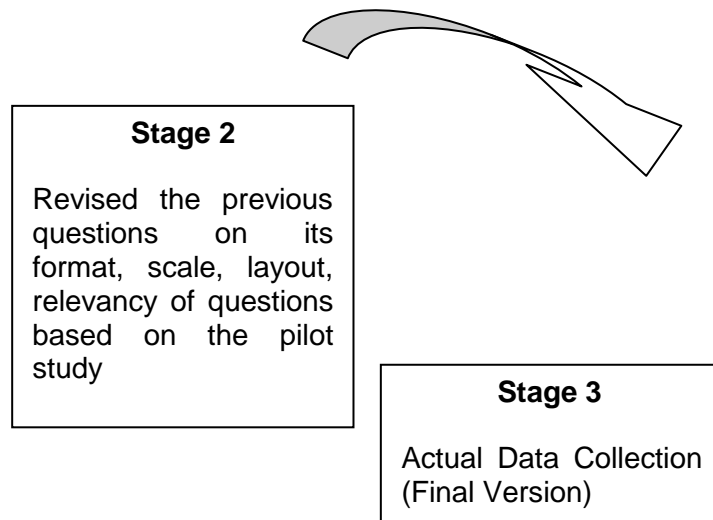


Figure 1.1: Interview and Questionnaire Development

Based on Figure 1.1, the questionnaire aims to explore the issues raised in the literature review. The design of the questions was based on those issues. The appropriateness and adequacy of the proposed questions were justified through stage 1 until the final version, which was from the literature reviews to the rectification from pilot study.

In choosing the likert scale point, the number of scale steps is increased from 2 up to 20; the increase in reliability is very rapid at first and tends to level off at about 7, and after 11 steps (De Rada, 2005; Tooley et al., 2009). However, there is little gain in reliability from increasing the number of steps as suggested by several literature reviews (Bryman, 2008b; Potbhare et al., 2009; Robinson et al., 2006). It means that it is to retain a continuum of positive and negative statements with which the respondent is likely to approve or disapprove even if the actual number of choices can be increased. This will help in avoiding the problem of bias and improves reliability. It should also be taken into account that this type of scale is not developed to provide any kind of investigative information that shows underlying issues of concern to the individual respondents. Basically, the scale should be chosen to be as a common quantifier and easily interpreted by the respondent. Therefore, a six point likert scale that ranges from 1 indicating “no” to 6 “very high” was employed to assess the current practice and others relevant elements in knowledge transfer practice of sustainable development at Malaysian local governments.

Literature reviews inform researchers of the background to their research projects and provide context and ideas for their studies. The preliminary information gathering was conducted by reviewing relevant literature, which helped the researcher to understand and gain a wide view of possible research problems (Cavana et al., 2001; Chua, 2006). 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. From the literature findings, questionnaire was distributed to the chosen local governments and conducted for the following research purposes; to review the current practice of sustainable

development in local governments and its relationship to its function and apart from that to study the relationships between implementation and influential factors influencing it.

Questionnaires require considerable effort and expense, hence it should be remembered that a poorly designed questionnaire will negate these effort (Taylor et el 2009). Therefore, developing a good questionnaire is essential, as much depends on having the right questions for analysis and asking them clearly and carefully. In order to improve the response rate, the questions were designed to be unambiguous and easy to answer by the respondents. Fellow and Liu (2003) suggest that the questions in a questionnaire should not request unnecessary data; questions need to be clear, concerning one issue only and the questions should be presented in an 'unthreatening' form appropriate to the research.

Dillman (2007) also argues that questionnaires by email or web need to have a user-friendly design because any complexity will prevent some respondents from receiving and responding to the questionnaire. A six point likert scale was employed to assess the influential factors and its elements. The scale option ranges from 1 indicating "no" to 6 "very high". The scale was chosen as it is a common quantifier and easily interpreted by the respondent (Dillman, 2000). In order to fulfill the research objectives for this research, a standard derived questionnaire was designed for the target respondent to obtain relevant information. The purposive sampling is used to get the target sample and according to Tashakkori and Teddie (1998), 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. Hence, the subjects of this study are selected based on:

In the questionnaire survey, local government officers were asked several questions pertaining to the research objectives. These questions are incorporated into the proposed conceptual framework for further development. The purposive sampling is used to get the target sample and according to (Creswell, 2003; Tashakkori & Teddie, 2003), 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.

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 were 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. Table 1.1 summarises the number of questionnaire send to each Local Government of being studied.

No	State	City Hall	Municipal Councils	Modified LA	Q(out)
1.	Perlis		1. Majlis Perbandaran Kangar		10
2.	Kedah	1.Majlis Bandaraya Alor Setar	2. Majlis Perbandaran Kulim	5.PBT Taman Perindustrian Tinggi Kulim	50
			3. Majlis Perbandaran Sg Petani		
			4. Majlis Perbandaran Langkawi		

3.	Pulau Pinang		1. Majlis Perbandaran Pulau Pinang	20
			2. Majlis Perbandaran Seberang Perai	
4.	Kelantan	1. Majlis Perbandaran Kota Bharu		10
5.	Terengganu	1. Majlis Bandaraya Kuala Terengganu	2. Majlis Perbandaran Kemaman	30
			3. Majlis Perbandaran Dungun	
6.	Perak	1. Dewan Bandaraya Ipoh	2. Majlis Perbandaran Manjung	50
			3. Majlis Perbandaran Kuala Kangsar	
			4. Majlis Perbandaran Taiping	
			5. Majlis Perbandaran Teluk Intan	
7.	Selangor	1. Majlis Bandaraya Shah Alam	3. Majlis Perbandaran Ampang Jaya	80
		2. Majlis Bandaraya Petaling Jaya	4. Majlis Perbandaran Kajang	
			5. Majlis Perbandaran Klang	
			6. Majlis Perbandaran Selayang	

			7. Majlis Perbandaran Subang Jaya		
			8. Majlis Perbandaran Sepang		
8.	Pahang		1. Majlis Perbandaran Kuantan	4. Lembaga Pembangunan Tioman	40
			2. Majlis Perbandaran Temerloh		
			3. Majlis Perbandaran Bentong		
9.	Wilayah Persekutuan	1. Dewan Bandaraya Kuala Lumpur		2. Perbadanan Labuan	30
				3. Perbadanan Putrajaya	
10.	N Sembilan		1. Majlis Perbandaran Seremban		30
			2. Majlis Perbandaran Nilai		
			3. Majlis Perbandaran Port Dickson		
11.	Melaka	1. Majlis Bandaraya Melaka Bersejarah	2. Majlis Perbandaran Alor Gajah		30
			3. Majlis Perbandaran Jasin		
12.	Johor	1. Majlis Bandaraya Johor Bahru	2. Majlis Perbandaran Johor Bahru Tengah	8. Lembaga Bandaran Johor Tenggara	80
			3. Majlis Perbandaran Batu		

			Pahat		
			4. Majlis Perbandaran Kluang		
			5. Majlis Perbandaran Kulai		
			6. Majlis Perbandaran Muar		
			7. Majlis Perbandaran Pasir Gudang		
13.	Sarawak	1. Dewan Bandaraya Kuching Utara	4. Majlis Perbandaran Padawan	6. Lembaga Kemajuan Bintulu	60
		2. Majlis Bandaraya Kuching Selatan	5. Majlis Perbandaran Sibul		
		3. Majlis Bandaraya Miri			
14.	Sabah	1. Dewan Bandaraya Kota Kinabalu	2. Majlis Perbandaran Sandakan		30
			3. Majlis Perbandaran Tawau		

4. Results

Since sustainable development is based on three elements namely social, economy and environment, this study is to achieve the following objectives:

1. To identify the current practice of local governments in sustainable development.

2. To study the relationships between implementation and influencing factors.

The respondents selected at city council/municipal/modified local government are based on the unit/division/department related to the issues or agenda in sustainable development. In this section, it is to achieve objective no.1, which is to identify the current practice of sustainable development in local governments. This study divides it into individual and organization. It is to have clear view in the practice by individual as in the staff itself and the organization as a whole. Accordingly, companies face with the need to question of what they would 'like' to do and what they 'must' do when dealing with the transition to sustainable practices (WCED, 1987; Werbach, 2007). Therefore, the individual (staff) and organization must work together in the practice of sustainable development.

INDIVIDUAL/STAFF ACTIVITIES: PARTICIPATION

Table 5.5 to 5.7 show results regarding the question to identify the current practice of Malaysian Local Governments in sustainable development, which in individual/staff activities on participation in sustainable development. This section elaborates on the practice of individual/staff in Malaysian Local Governments in sustainable development.

Table 1.1: Participate in activities, eg recycle program

Participate in activities related to SD, eg recycle program	Frequency	Percent	Cumulative Percent
No	27	9.3	9.3
Very low	225	77.3	86.6
Low	22	7.6	94.2
Moderate	14	4.8	99.0
High	2	0.7	99.7
Very high	1	0.3	100.0
Total	291	100.0	

Table 1.2: Participate in seminars, eg: SD seminar

Participate in seminars related to SD, eg SD seminar	Frequency	Percent	Cumulative Percent
No	65	22.3	22.3
Very low	185	63.6	85.9
Low	1	.3	86.3
Moderate	33	11.3	97.6
High	5	1.7	99.3
Very high	2	.7	100.0

Total	291	100.0
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Table 1.3: Participate in courses, eg: Green building course

Participate in seminars related to SD, eg Green Building courses	Frequency	Percent	Cumulative Percent
No	59	20.3	20.3
Very low	104	35.7	56.0
Low	122	41.9	97.9
Moderate	5	1.7	99.7
Very high	1	0.3	100.0
Total	291	100.0	

INDIVIDUAL/STAFF ACTIVITIES: ACQUIRE KNOWLEDGE

Table 1.4 to 1.6 show results regarding the question to identify the current practice of Malaysian Local Governments in sustainable development, which is on individual/staff activities to acquire knowledge on sustainable development. This section elaborates on the practice of individual/staff in Malaysian Local Governments in sustainable development.

Table 1.4: Acquire knowledge : through client/supplier contact related to SD, eg tendering

Acquire knowledge related to SD : through client/supplier contact related to SD, eg tendering	Frequency	Percent	Cumulative Percent
No	54	18.6	18.6
Very low	37	12.7	31.3
Low	187	64.3	95.5
Moderate	12	4.1	99.7
Very high	1	.3	100.0
Total	291	100.0	

Table 1.5: Acquire knowledge: through government networking related to SD, eg collaboration

Acquire knowledge related to SD : through government networking related to SD, eg collaboration	Frequency	Percent	Cumulative Percent
No	47	16.2	16.2
Very low	44	15.1	31.3

Low	178	61.2	92.4
Moderate	21	7.2	99.7
Very high	1	.3	100.0
Total	291	100.0	

Table 1.6: Acquire knowledge : through expert advice related to SD, eg consultation

Acquire knowledge related to SD : through expert advice related to SD, eg consultation	Frequency	Percent	Cumulative Percent
No	82	28.2	28.2
Very low	10	3.4	31.6
Low	151	51.9	83.5
Moderate	40	13.7	97.3
High	3	1.0	98.3
Very high	5	1.7	100.0
Total	291	100.0	

Overall, the Table above demonstrates that staffs have low percentage in acquiring knowledge on sustainable development. In view to objective no 1 which is, to review the current practice of Local Governments in sustainable development, shows that this is 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 (Shafiee, 2005; Abidin & Jaafar, 2010).

Correlation studies are used to look for relationships between variables. There are three possible results of a correlation study: a positive correlation, a negative correlation, and no correlation. The correlation coefficient is a measure of correlation strength and can range from -1.00 to $+1.00$. Positive Correlations: Both variables increase or decrease at the same time. A correlation coefficient close to $+1.00$ indicates a strong positive correlation. Negative Correlations: Indicates that as the amount of one variable increases, the other decreases (and vice versa). A correlation coefficient close to -1.00 indicates a strong negative correlation. No Correlation: Indicates no relationship between the two variables. A correlation coefficient of 0 indicates no correlation. There are four factors selected based on several reasons as in literature reviews, expert advice and time factors for the research. Table 5.25 shows that correlation is significant at the 0.05 level (2-tailed). It indicates that in terms of implementation of sustainable development, the respondents are more towards the development for future generation. Contrastingly, the literature reviews and preliminary interviews suggest that sustainable development is more than that as it covers wider dimensions. For this research, it uses correlation between the implementation and awareness, documentation, management and resources. Table 1.71 shows that correlation is significant at the 0.05 level (2-tailed). It indicates that in terms of implementation of sustainable development, the respondents are more towards the development for future generation. Contrastingly, the literature reviews and preliminary interviews suggest that

sustainable development is more than that as it covers wider dimensions.

Table 1.7: Correlation between level of implementation and SD according to respondent

		LI	1	2	3	4	5	6
LI	Pearson Correlation	1	-.117*	.025	-.008	-.114	.008	-.086
	Sig. (2-tailed)		.047	.675	.898	.051	.892	.143
	N	291	291	291	291	291	291	291
1	Pearson Correlation	-.117*	1	.059	-.309**	-.122*	-.086	-.258**
	Sig. (2-tailed)	.047		.313	.000	.038	.142	.000
	N	291	291	291	291	291	291	291
2	Pearson Correlation	.025	.059	1	-.035	.049	-.039	-.093
	Sig. (2-tailed)	.675	.313		.552	.404	.513	.113
	N	291	291	291	291	291	291	291
3	Pearson Correlation	-.008	-.309**	-.035	1	.211**	.048	-.029
	Sig. (2-tailed)	.898	.000	.552		.000	.413	.624
	N	291	291	291	291	291	291	291
4	Pearson Correlation	-.114	-.122*	.049	.211**	1	.062	.054
	Sig. (2-tailed)	.051	.038	.404	.000		.290	.361
	N	291	291	291	291	291	291	291
5	Pearson Correlation	.008	-.086	-.039	.048	.062	1	.027
	Sig. (2-tailed)	.892	.142	.513	.413	.290		.647
	N	291	291	291	291	291	291	291
6	Pearson Correlation	-.086	-.258**	-.093	-.029	.054	.027	1
	Sig. (2-tailed)	.143	.000	.113	.624	.361	.647	
	N	291	291	291	291	291	291	291

LEGEND:

LI –Level of Implementation

1 - SD according to respondent (1.Development for future generation)

2 - SD according to respondent (2.Development that has impact on economy)

3 - SD according to respondent (3.Development that has impact on social)

4 - SD according to respondent (4.Development for the people by the people)

5 - SD according to respondent (5.Development that has impact on environment)

6 - SD according to respondent (6.Development that can achieve the state of sustainability)

This study also show that correlation is significant at the 0.05 level (2-tailed), where it indicates that in terms of implementation of sustainable development, the respond are 0.135 for acquiring knowledge through client or supplier contact and 0.118 for acquiring knowledge through government networking. The literature reviews and preliminary interviews suggest the same but emphasize on the government networking (N. Z. Abidin, 2009; N. zainul Abidin, 2010; Barrutia et al., 2007; Shafii, Arman Ali, et al., 2006). there is increasing recognition that when the goals are translated into actions at the national levels and by active involvement of local governments. However, it can be seen from the analysis that staff need more participation in activities such recycle programme, sustainable development seminar and green building course. Moreover, they also need to improve in acquiring sustainable development such in client/supplier contact, government networking and expert advice. This in turn brought about renewed attention to planning approval for local governments, which it can give impact and linked to the knowledge transfer. Many studies, however, suggest that despite the increasing recognition and promotion of local governance for sustainable development in different parts of the world, local governments in many cases are too often unable to perform the tasks they have been delegated due to the lack of knowledge. An analysis of such situations reveals specific characteristics of challenges or achievements stemming from the particular political, historical, legal, and socioeconomic traditions of a particular country as explored in chapter 4. Importantly, this chapter represents the result and findings of objectives no.3 for this study, which is the current local governments' practices of knowledge transfer in sustainable development.

5. Conclusion

To achieve these objectives, two interrelated approaches for data acquisition are selected and adopted as follows:

1. Preliminary data gathering is conducted through a review of the literature and open ended interviews with selected respondent. The significant factors were established through a combination of both the literature review and the interviews.
2. Questionnaires formed the main survey instrument and these were distributed to Malaysian local governments (as explained in Chapter 3). This method confirmed the significant factors which influence the implementation of sustainable development in local governments.

Overall, 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. Correspondingly, this is mention in several studies (Bueren & Heuvelhof, 2005; Evans & Theobald, 2003; Executive, 2006; Galvin, 1999; Hezri, 2004; OECD, 2011; Wild River, 2005a) where lacking in acquiring the knowledge of 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.

For this research, it uses correlation between the implementation and awareness, documentation, management and resources. The study indicates that in terms of implementation of sustainable development, the respondents respond to the concept of sustainable development only when it is for future generation. Contrastingly, the literature reviews and preliminary interviews suggest that sustainable development is more than that as it covers wider dimensions. Therefore, important issues such as the factors that influence the sustainable development should be addressed especially in the planning approval.

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 (S. C. Goh, 2002; Qin & Yang, 2008; Vagnoni & Bracci, 1998; Yahya & Goh, 2002). 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.

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