Abstract: The United Nations General Assembly in the last month of 2002 proclaimed a programme namely the UN Decade of Education for Sustainable Development (ECD). EDC is scheduled from 2005 to 2014, to foster the concept of Sustainable Higher Education (SHE) through the medium of higher education institutions. Malaysia as a country which has ratified Kyoto Protocol and EDC is expected to be active in this realm by international Community. There is no study that shows the efforts and initiatives of sustainable development emphasizing on Malaysia policy, plan and assessment tools for the past 20 years. This paper tried to look at Malaysia policies, plans and assessment tools, employing archival method. It also proposed the lacking subject which might expedite achievement of the goals of Malaysia pertaining to sustainability. The result will be useful for the academicians and policy makers who are working on sustainability topics.

Keywords: Sustainable development; Policy, plans, Malaysia

1 Introduction

The United Nations General Assembly in the last month of 2002 proclaimed a programme namely the UN Decade of Education for Sustainable Development (ECD). EDC is scheduled between 2005 to 2014 [1] to foster the concept of Sustainable Higher Education (SHE) through the medium of higher education institutions. However, there is no study that shows the efforts and initiatives of sustainable development and SHE emphasizing on Malaysia policy, plan and assessment tools for the past 20 years [2]. This paper aims to highlight Malaysia sustainable development initiatives in two aspects of micro scale and mega scale for portraying the need of a local level assessment approach. It discusses Malaysia sustainable development efforts and initiative. It starts with Malaysia’s specifications. It additionally illustrates the specific status of Malaysia and its history, sustainable initiatives and efforts. In this regard, the paper highlights, Malaysia National Policies on biological diversity, Malaysia Vision 2020 and the Ninth Malaysia Plan (2006-2010). This study covers local sustainable assessment approaches, which assess the sustainability of micro scale and mega scale. The necessity of having a local level assessment approach for assessing Sustainability in Higher Education in Malaysia concludes this paper.

2 Background of Malaysia

Great Britain establishes colonies in part of South East Asia, which are occupied by Japan from 1942 to 1945 in the place of current Malaysia [3]. In 1948, it is converted to Federation of Malaya by Great Britain [3]. In the 1957, country announces its independence and in 1963, it is renamed to Malaysia when the
Singapore, Sabah, and Sarawak join the Federation [3]. Malaysia experiences a great development and diversifies its economy in manufacturing, services, and tourism, particularly after 1981[3]. Malaysia is regarded as one of the most popular mega diversities of the world in which has been accorded number four behind China, India, and Indonesia [4].

2.1 Geography and People of Malaysia
Malaysia is a country with two geographical regions, which one of them is the Peninsular Malaysia, and the second one is the East Malaysia or Sabah and Sarawak. It is located in Southeast Asia consisting of thirteen states [5].

Figure 1 Geography of Malaysia (Fredric, 2009)
Malaysia has many different ethnic groups. According to statistical websites and the Department of Statistics Malaysia official website [6], the population of Malaysia is 28.4 million. Based on the world fact book [7], the proportions are; Malay (50.4%), Chinese (23.7%), indigenous (11%), Indian (7.1%) and others (7.8%). The age structure in the country is 0-14 years: 31.4%, 15-64 years: 63.6%, 65 years and over: 5% [7]. This age structure indicates that a sizable population of Malaysia is young and might be potential users of Higher Educational Institutions.

3 Sustainability in Malaysia
Malaysia such as many other developing countries faces conflict between economic growth and conservation of environment [8]. However, it has recognized the concept of sustainable development and has embedded this concept in its policies, vision, mission, and plans [9]. Malaysia is also very active in international sustainability activities, which have been reflected by its participation in the 13th session of the commission on sustainable development in New York in 2005 [9]. Malaysia has also incorporated the principal of Agenda 21 as one of the important sustainable development documents in its planning process [8]. The following sections will explore some of the initiatives of sustainable development in Malaysia.

3.1 Ninth Malaysia Plan and Sustainable Development
Ninth Malaysian Plan or “Rancangan Malaysia ke-9” is a planning blueprint of Malaysia, which approves by the Malaysia government from the year 2006 to 2010. This comprehensive blue print covers the budget allocation of Malaysia in different sectors as well as main policies of Malaysia. According to 9MP [10], Malaysia is a country that has considered sustainable development in its policies. Besides, an Environmental Performance Index Study ranks Malaysia, ninth among 133 countries based on efforts taken to reduce environmental stress on human health and ecosystem protection vitality [10]. However, there are three main pressures threaten Malaysia; that is land-use change, pollution, and introduction of exotic species, which may lead to be future un-sustainability [4]. In the Ninth Malaysia Plan, in line with the Ninth Principle of Islam Hadhari environmental stewardship is going to be continued and promoted by the government to ensure that the balance between development needs and the environment exist.

3.2 Malaysia’s National Development Policy
Malaysia's National Development Policy is a main governmental policy, which focuses on programs aimed at eradicating poverty. These
programmes are integrated into the national planning process when the Sixth Malaysia Plan [11]1991-1995 was reviewed in 1993. Malaysia’s National Development Policy is to maintain economic development but implement environmental and social consideration, which roots in the philosophy of sustainable development. This policy target promoting economic, social, and cultural progress through sustainable development.

3.3 National Conservation Policy
Malaysia possesses a National Conservation Policy that has been formulated to function as a framework for natural resource development [9]. Efforts continue to be made to improve the balance between economic growth and environmental considerations. Greater emphasis is being given to incorporate environmental considerations into all aspects of planning and management. These considerations encouraged the writing of new governmental consideration with especial attention to sustainable development called Agenda 21.

3.4 Malaysia National Vision Policy
Malaysia has a National Vision Policy namely “Malaysia National Vision Policy” or “NVP”, which is processed through the Third Outline Perspective Plan and has been defined for a time period of five years from 2001 to 2010. NVP has embedded the concept of sustainable development, which has been depicted in its second, fourth and last articles as:
1. Encouraging more equitable society, 2. Sustaining economic development, 3-Pursuing environmentally protection [12].

3.5 Malaysia Vision 2020 or “Wawasan 2020”
Malaysia has another landmark-planning concept entitled Malaysia Vision 2020 or “Wawasan 2020”. This vision calls for converting Malaysia from a developing country to a developed country by 2020. The Vision 2020 calls for fully development not only in economic, but also in political, social, spiritually, psychological and cultural aspects [9].

3.6 Weakness of Malaysia in Sustainable Development Assessment
Although Malaysia has taken many initiatives and has addressed sustainable development in its policies and plans, there is a weakness in the realm of sustainable development, which has been cited frequently [13]. This shortcoming refers to intuitiveness of sustainable development definition, which makes interpretation of sustainable development and setting indicators a challenging process [13]. This weakness has been regarded as the absence of comprehensive approaches or frameworks and lack of sufficient sustainable development indicators.

4 Malaysia Sustainable Assessment Approaches
Malaysian scholars and policy makers have recognized the importance of assessment of Sustainable Development, have taken some initiatives, and have adapted some tools and frameworks [4]. Frameworks and tools are mediums, which enable different institutions and organization, assess the level of sustainable development. Some examples of those assessment approaches are as follows:

4.1 Malaysia Quality of Life Index (MQLI)
MQLI is an assessment approach that has been developed by the Economic Planning Unit of the Prime Minister in 1999 [14]. MQLI was updated in 2004 and has encompassed 14 rubrics namely: 1. Air quality index, 2. Deforestation, 3. Clean water index, 4. Income, 5. Working life, 6. Transportation and communication, 7. Health, 8. Education, 9. Housing, 10. Environment, 11. Family life, 12. Social participation, 13. Public safety, 14. Culture and leisure [15]. This approach has viewed the subject in national level or mega scope level. Since the majority of rubrics are related to social, economic, and environmental sustainable development, it is considered a sustainable development assessment approach.
4.2 Malaysia Urban Quality of Life (MUQL)
Malaysia Urban Quality of Life is another assessment approach, which has been developed by the Economic Planning Unit of the Prime Minister in 2002 [16]. MUQL is similar to MOLI but its focus is mostly on four major Malaysia cities. This approach has 19 indicators and 14 rubrics namely:

Although this assessment approach has used bar chart to compare the finding, which is more understandable, it covers limited subjects for environmental sustainability and is not comprehensive. This assessment approaches functions in city level.

4.3 Compendium of Environment Statistics
Malaysia Department of Statistics has proposed Compendium of Environment Statistics approach in 2001 aiming to present ongoing issues relevant to Sustainable Development to planners [13]. This approach embeds four rubrics namely; Air, Water, Land, Environment (inland and marine). This approach is very complicated and only focuses on environmental issues.

4.4 Malaysian Urban Indicator Network (MURNINet)

4.5 Malaysia Sustainable Development Approaches at State Level
There are some state assessment approaches, which have been developed in the state level to track the Sustainable Development in different states. Sustainable Development Indicators for Selangor, Klang Valey, Regional Sustainability Quality of Life Index, Health Cities Indicators of Johor Bharu and Sustainable Penang Initiatives are among those approaches [16].

4.6 Green Building Index (GBI)
Malaysian experts embark to develop a local assessment tool in building level, which is called Green Building Index (GBI). The objective of development of GBI is to save energy, resources, recycle materials and harmonize the building with the Malaysia climate, traditions, culture and its environment as well as maintaining the capacity of the ecosystem at local and global levels [18]. GBI contains six different rubrics, which are:

GBI as Malaysia building industry recognizes that sustainable assessment approach as an influential medium to promote Sustainable Development in the built environment. It aims to raise awareness among developers, architects, engineers, planners, designers as well as public and contractors regarding Sustainable Development issues (Green building index Sdn Bhd, 2009).

5. Malaysia universities sustainable efforts
Majority of the campus users’ needs, such as banking facilities, restaurants, swimming pool, sports complex, grocery shops, stadium, laundry, tailor shops, binding and photography services, mosque, clinic, and even petrol stations, as well as shopping malls, have been catered for inside the campus or places which can be reached in less than five minutes by cycling [11]. Even the hostels and different faculties have housed the essential needs of their users independently and it is common to see courts for various sports such as tennis, volleyball, and basketball,
football fields, as well as laundry and grocery shops, cafés and restaurants, parks, and study areas provided at these hostels [11].

These universities, by assisting students to organize different associations for foreign students, embarked to distinguish the different needs of their international students and provide them with special needs such as restaurants serving Middle Eastern food and delicacies. All these result in lesser need for transportation and lower Green Gas Emission (GGE). Transportation service has been boosted by buying new shuttles and providing comfortable bus stops. Moreover, covered sidewalks are also provided, with more green plants grown to encourage students to walk. Gardens, parks and ponds are specially designed and provided in campuses; these do not only refine the air and produce oxygen, but also provides a good habitat for different species and help biodiversity. These universities have also planted trees and plants, and this leads to the formation of a unique flora and fauna which is aimed to use indigenous plantation and sustainable landscape. Moreover, the communication between campus users is sternly done via electronic, whereas most of the communications, from students to lecturers and staff (and vice versa), are done through email. The assessment system and students’ marks are done through the electronic portal which reduces the use of a lot of paper and thus helps conserve the environment. Every university has provided other facilities such as electronic system for campus users to transfer funds, pay tuition fees, water and electricity bills, purchase their daily necessities like telephone top up, books, etc. Sustainability issues have not been neglected in research and development of Malaysia universities. However it has not been utilized in practice properly whereby despite of an abundance of renewable energy resources such as solar, wind, hydro and biomass, most of these renewable energy resources are not fully exploited [20].

Sohif and his colleagues from national university of Malaysia have proposed a sustainable campus model which looks at SHE through university vision, mission, committee, education, research etc [21]. They believe that higher education institutions should be a paradigm of excellent teaching and learning, which serve the community by promoting sustainability. For that, university need to boost partnership and collaboration with all stakeholders [21].

Sohif and his colleagues also emphasised on the role of building and landscape for satisfying SHE (see Figure 1).

Figure 1 SHE focusing in landscape and building [21]

6 Conclusion

Based on the above facts, it is observed that Malaysia has already developed comprehensive assessment approaches and indicators for national level, state level, and building level. However, there is a gap between these mega scope level (national, city) and micro level (building) level. Therefore Malaysia needs to work on developing a tool for assessing sustainability in campuses which are considered a local level.

References:


