

## ARTICLE

# MALAYSIA'S LOCAL AGENDA 21: IMPLEMENTATION AND APPROACH IN KUALA LUMPUR, SELANGOR AND JOHOR BAHRU

Nur IzieAdiana Abidin<sup>1</sup>, Rozana Zakaria<sup>1\*</sup>, Eeydzah Aminuddin<sup>1</sup>, Chai Chang Saar<sup>1</sup>,  
Vikneswaran Munikanan<sup>2</sup>, Irina Safitri Zin<sup>3</sup>, Masilah Bandi<sup>4</sup>

<sup>1</sup>Faculty of Civil Engineering, Universiti Teknologi Malaysia, UTM Johor, 81310, Skudai, MALAYSIA

<sup>2</sup>Faculty of Engineering, Universiti Pertahanan Nasional Malaysia, Kem Sungai Besi, Kuala Lumpur, 57000, MALAYSIA

<sup>3</sup>Faculty of Built Environment, Universiti Teknologi Malaysia, UTM Johor, 81310, Skudai, MALAYSIA

<sup>4</sup>Office of Asset Management, Universiti Teknologi Malaysia, UTM Johor, 81310, Skudai, MALAYSIA

## ABSTRACT

**Background:** Local Agenda 21 (LA 21) has been adopted in a holistic approach to facilitate the economic development, with a manner of protecting and preserving the environment, and a goal to achieve the sustainable living in an equitable society. Kuala Lumpur, Selangor, and Johor Bahru are one of the urbanized State and city in Malaysia for which many initiatives have been taken to integrate the economic, social and environmental solutions into its urban development. This paper amasses the LA 21 implementation which performed by Kuala Lumpur City Hall, Iskandar Malaysia Johor and the pioneer in the state of Selangor which is Shah Alam and Petaling Jaya in order to comprehend their commitments given in the program. In addition, the implementation of LA 21 is summarized with the framework of initiatives taken by the local government to embrace the local community involvement. **Methods:** The methodology relies on the document analysis related to the LA 21 activities conducted by these cities in summary tabulation of practices. **Results:** Based on the results of the analysis, it indicates that each of the state and city has created their own sustainable approaches by carrying out impressive programs and plans such as clearing and cleaning up areas, recycling programs, cultural and heritage activities, develop the neighbourhood action plan, implementation green building project and others. Whilst, the initiatives taken by the local government to establish the commitment from communities vary from awareness campaign, seminar, general meeting with focus group and develop a strategy to deliver effective information such as focusing on the interest group, region, age and gender. **Conclusion:** Through this program, the committee, the Local Authority, and the private sector are actively contributing in building up the LA 21 through having an active participation and voluntarily involvement. In conclusion, LA 21 implementation in Selangor, Kuala Lumpur and Johor Bahru continues as a program that able to generate the present and future development exemplar to the other City Councils and States in Malaysia. It is a program to forge a partnership between various stakeholders to show the commitment to the sustainable development.

## INTRODUCTION

**KEY WORDS**  
Local Agenda 21,  
Malaysia, Sustainable  
Development,  
Sustainable Cities

Sustainable development is defined in various ways and the most common definition is "The development that meets the needs of the present without compromising the ability of future generations" [1]. While, [2], defined sustainable development is "improving the quality of human life while living within the carrying capacity of supporting ecosystem". Sustainable development measures three major components which are economic, social and environmental systems in order to provide the generation with healthy and meaningful life [3].

The unsustainable urban development has impacted vastly in the urban neighbourhood which led to negative impact on the environment and urban quality of living. Sustainable development has become the foundation of planning and design of building structures and infrastructures. The land use development for neighbourhood should be protected and saved for the use of generation [4]. In the new millennium, the sustainability agenda has the potential of ensuring country in developing its economies with minimal or no irreversible damage to the environment and adverse impact on the health of its citizens [5]. As world had recognized that the present sustainable development is not dominant in fulfil the needs for the current and future generations, an integral approach is needed in order to achieve these three components. Thus, LA 21 was accepted as an indicator to be used by all the countries to determine and measure the sustainable development progress [6].

## PROFILE OF MALAYSIA SUSTAINABLE DEVELOPMENT

The Malaysia intention towards sustainability was first established during the Third Malaysian Plan (1976-1980). It focuses on the natural heritage preservation by concern on the impact of the growth of industrialization and population. Then, during the Fifth Malaysian Plan (1986-1990), the effort towards environmental protection has been part of the main factor in national development plan. These include to minimize the deforestation, tourism and urbanization, make a preventive measure through conservation instead of curative and incorporation environmental planning in project development [7].

During Eight Malaysian Plan, it was further intensified to incorporate environmental solutions into planning and development. Thus, the planning tools were developed, the regulatory framework and capacity from

\*Corresponding Author  
Email: rozana@utm.my  
Tel.: +60137791810

Received: 13 Oct 2016  
Accepted: 16 Nov 2016  
Published: 6 Dec 2016

institutional level was strengthened. It has resulted Malaysia was ranked 38 out of 146 countries worldwide and also ranked in 2<sup>nd</sup> place in Asia which concern on the environmental sustainability. Malaysia also has been ranked 9<sup>th</sup> from 133 countries in Environmental Performance Index Study due to the effort to protect the vitality of ecosystems. The environmental stewardship is continuing to Ninth Malaysian Plan (2006-2010) by ensuring for balancing between the needs of development and to maintain the environment. It greatly emphasizes on the efforts to intensify the conservation, natural resources management and mitigate the negative effects on the environment by developing the environmental planning tools [8]. The current 11<sup>th</sup> Malaysian Plan also encourage to pursue the green growth for sustainability and resilience to ensure the development is committed with sustainable manner since the beginning. It is to conserve and protect the precious environment and natural resource for the benefits of present a future generation [9]. Basically, the Malaysia sustainable development concern on three objectives, firstly is to promote the economic force to achieve a high standard of living, secondly is to promote cohesion and social justice and lastly is monitoring and protecting the environment for degradation prevention. Therefore, the incorporation of the objectives is included in the national planning strategies mainly in the five-year Malaysian Plans. Besides, the LA21 adoption and implementation is another effort for the connection and to strengthen between environment and development towards sustainability achievement [10].

## LOCAL AGENDA 21

In June 1992, LA 21 has been introduced during the United Nations Conference on Environment and Development which was held in Rio de Janeiro. There are 178 countries including Malaysia who have attended for the conference and it is a global action plan for the sustainable development ([11]. During the conference, a mandate has been stated where Local Agenda 21 should be achieved in each country by the year 1996. The mandate also encourages the Local Authorities to have dialogues within the community towards achieving the development and consensus on the LA 21 Action Plan. Besides, the Local Authorities should also work together and play an important role with all the local community of the sector [12]. Since the LA 21 was introduced, a process of sustainability actions has been planned by the Local Authorities and the action pursued by implementing various programs [13]. Therefore, at the Council level, the requirement of unique approach is crucial in order to deliver the service that could facilitate mediation between the pressure of competing for economic development, environmental protection and more equitable society [14]. The LA 21 represents a major innovation in local planning for sustainable development. They have an international identity and an international network, but are locally driven and implemented [15].

## THE CITY OF KUALA LUMPUR LA 21 IMPLEMENTATION

From a small town, Kuala Lumpur became the capital city and the largest city in Malaysia. Kuala Lumpur has become an important and play a role in various fields including business, finance, administration, education, religion, culture and sports. Kuala Lumpur municipal affairs are administered by a single corporation (corporation sole), since 1 April 1961 which is Commissioner of Capital. It was then converted into Mayor of Kuala Lumpur when awarded as a City status on February 1, 1972. Kuala Lumpur LA 21 (LA 21 KL) is a program that emphasizes the involvement of third parties, local authorities (City all), public and private sectors to work together in planning and managing their environment towards the achievement of sustainable development and higher quality of life. LA 21 KL is implemented in line with the Kuala Lumpur Structure Plan 2020 which is to create the role of Kuala Lumpur as an international commercial and financial center, create a city structure which is efficient and balanced, to enhance the living environment, forming a distinctive identity and image of the city and to have efficient and effective governance. Overall, the vision and goals for Kuala Lumpur have been formulated to create a sustainable city planning in ensuring that the City can achieve a balance between physical, economic, social and environment [16].

## THE STATE OF SELANGOR AND LA21 IMPLEMENTATION

Selangor is located in the right and west Peninsular Malaysia with their total area of 7930km<sup>2</sup>. The State of Selangor consists of nine (9) districts and their rate of population is the highest in Malaysia where in 1991 to 2000 their estimate population growth is 6.02%. In terms of development, Selangor is the most developed State in Malaysia because they had grown in almost every aspect of development. Selangor also has been considered as a State that contributes to the growth of country development and thus it is known as a house of economic power. In fact, Selangor is the state where their population enjoying their high standard living and having an excellent infrastructure. Furthermore, Selangor has their some distinctive developments which are not apparent in other 13 States in Malaysia. This means that, Selangor was having their development rapidly in terms of economy, socio-economic structure as well as environmental impacts [17]. Besides, in Malaysia, Selangor also is the first state who developed an approach of sustainability by incorporating comprehensive strategies of sustainability to all the level of governance. In order to bring their environmental consideration into social policy and economic mainstream, Selangor has incorporated a vision framed of their sustainable development into their process of political at both national and global levels. Undoubtedly, the state of Selangor is among the successful state with respect to their social-economic development. In order to embark the comprehensive

program of LA 21 in Malaysia, Selangor has been chosen as the first state in incorporating the strategies of sustainability to all the level of governance [18]. 'Agenda 21 Selangor' is also implemented as to develop the LA 21 plans by having a pilot project in Petaling Jaya Municipal Council and Shah Alam City Council. With the various consultations given by the stakeholders within the State such as public, private, Non-governmental Organisation and communities, the LA21 in Selangor was developed by having 103 initial set of indicators. The indicators consist of 14 economic sustainability, 16 environmental sustainability, 11 natural resource sustainability and 52 indicators of social sustainability [19]. Their commitment has started since June 1999 and they are producing the blueprints for sustainable development under the three years project development namely as "Environmentally Sensitive Areas of Selangor, Agenda 21 Selangor and Guidelines for Implementation of Agenda 21 Selangor. This shows that Selangor is an active state in implementing the LA 21 [20].

## THE ISKANDAR MALAYSIA JOHOR AND BLUEPRINTS AGENDA

Iskandar Malaysia located in the South East Asia and southern Peninsular Malaysia. The total area of Iskandar Malaysia is 2216.3 km<sup>2</sup> which is three times from the Singapore size and two times from the Hong Kong Island size. The Planning Area consists of five local authorities namely as Johor Bahru City Council, Johor Bahru Tengah Municipal Council, Pasir Gudang Local Authority, Kulai Municipal Council and Pontian District Council [21].

Iskandar Malaysia has developed its Comprehensive Development Plan (CDP) which needs support, cooperation, commitment, active participation and sustained involvement of various stakeholders, players and agencies from all levels. These include the local governments, federal, states, communities, local leaders, global players of industry and business communities. Through the CDP, several blueprints agenda were developed such as Low Carbon Society, human capital and safety and security. The blueprints are concerned about the strategies or policies such as environment, land use, infrastructure and economic. From 32 planned blueprints agenda, 24 has been completed. The action plans and framework of the blueprint is based on the benchmark with other world or city best practice which act as a guide to implement the strategy, project or programs [22].

## STAKEHOLDERS/PARTNERSHIP IN LOCAL AGENDA 21

In planning sustainable communities, the participatory approach becomes an important tool to ensure a meaningful participatory. It is because; a broad participation in sustainable development is to identify problems, formulating plans and to implement the decisions. Participatory approach consists of focus group discussion, meetings and site visit in order to come out with an action plan and actual implementation. Participatory means different people and organizations, different things and settings. The involvement of communities during the planning stage would be much more beneficial in bringing the transparency in the decision making process. It is because the input gain from the citizens creates a useful solution and broader range of perspective to overcome the problems facing in the communities [23].

As to determine and implement the vision for the sustainable city or town, the involvement of stakeholders is significantly important. Stakeholders are based on partnership group which they will jointly together in making their own decision [24]. The involvement of the local community and Local Authorities also crucially needed because Agenda 21 offers the involvement in a holistic approach. It encourages the Local Authorities and communities to build a relationship by having a partnership with other stakeholders, the government and non-government organization [25].

Basically, in Local Agenda 21, there are three (3) important parties involve which are private sector, Local Authority and Community [26]. According to [207], the participation by the stakeholders has a great implication towards the effectiveness of this program. In Malaysia, the involvements of stakeholders in local Agenda 21 are among the public sector such as Government, Local Authorities, Federal Government and statutory bodies such as Tenaga Nasional Berhad (Electricity Board), Telekom Malaysia, Alam Flora (the company who manage and reduce waste) and etc. Besides, the private sector, Non-governmental agencies and communities also had shown their interest in Local Agenda 21 by giving their own contribution to the program. The participation of these entire groups could influence and empower the decision making process.

In addition, the involvement of stakeholders and partnerships also important to plan and manage the environment towards sustainable development with the intention to improve the quality of life to be more comfortable [28].

## METHODS

A comprehensive literature review was used with a thorough study of record review to gather the detailed information of the LA 21 implementation in Kuala Lumpur, Selangor and Johor Bahru. All sets of data information relies on the exploration of books, articles, published journals and website. The LA 21 initiatives was listed by doing a summary tabulation of practices.

## INITIATIVES OF LOCAL AGENDA 21 IN KUALA LUMPUR

The Kuala Lumpur LA21 showed a good progress and positive development in the effort to achieve the vision to make Kuala Lumpur “ a world-class city’ by 2020. Kuala Lumpur LA 21 is a continuing program for Kuala Lumpur City Hall as a local authorities in engaging society, the private sector, non-governmental organizations (NGOs), community-based organizations (CBOs), citizens of the city and other interested parties in implementing programs and activities in accordance with local requirements. In fact, the local community is encouraged to cooperate to reach a consensus to reduce or deal with specific issues in their respective areas and to act managing and increasing the quality of their environment. The effort taken by Kuala Lumpur City Hall in the implementation of LA 21 as tabulated in [Table 1].

**Table 1:** Kuala lumpur city hall agenda 21 actions

Programs / Activities	Action by	
Launching of ‘ Green Generation Campaign and Exhibition	Clean City Committee	
Tree planting program in		
Eco Kids Day-Earth Day		
Launching a campaign of ‘ No Plastic Bag’ with AEON JUSCO ‘Let’s Go Green		
Cleaning and clearing area at Bukit Bintang Central		
Eco-community project: Recovery of Penchala river in conjunction with the “World Rivers Day’		
‘10,000 Green Expression’ to raise awareness and preserve about environmental issues		
Eco Kids Day as an exposure and awareness of environmental issue		
Meeting ‘Basic Use of Plastic Bags’		
Recycling Project		
‘Keep Planting Trees’ program		
Camping on “ Waste Management Reduction Program”		
Briefing on recycling awareness program		
Camp introduction program on ‘Greening for a Sustainable Future’		
Environment art camp		
Environmental Eco art camp for community		
Waste management project		Prosperous and Safe Committee
Seminar and workshop on recycling		
Herb Garden Project		
Food waste composting project		
An awards ceremony for continuing the implementation of the LA21 program		
EDC camp to educate people on environmental, health, social welfare and the arts		
Excellence identity camp for parents and students		
Examination workshop for primary school assessment test		
Parenting education seminar		
Lower secondary assessment seminar		
Neighbourhood cleaning program		
School Assessment Report		
Smart workshop for primary school assessment test		
Safe city programs		
Briefing and Dialogue with the society		
Briefing on the blueprints cleanliness		
Sports clinic and workshop (badminton)		
Clinical Arts: Theater		
Crime prevention seminar		

## INITIATIVES OF LOCAL AGENDA 21 IN SELANGOR

The Selangor commitment towards the sustainable development was underpinned by having a realization of ‘Agenda 21 Selangor’. There are various Councils exist in the state of Selangor which adopt the Local Agenda 21, however, in this paper, the discussion is only highlights on the implementation in two Councils which are Petaling Jaya Municipal Council and Shah Alam City Council. These two Councils were selected because they are among the earliest and active Council implementing the LA21 in Selangor.

### Shah alam city council

Shah Alam City Council was chosen as the LA21 pilot project in 2000. The sustainable development was created in Shah Alam City Council as an agenda for the social, economic and physical development. In order to consolidate the Local Agenda 21 implementation, there are three committees has been established which are Environmental Committee, Social Committee and Economy Committee. An effort as per [Table 2], given by the Shah Alam City Council was received a good response from the residents in creating more green area in their town.

**Table 2:** Shah alam city council agenda 21 actions

Programs / Activities	Action by
Medical Checking by Johor Medical Group	Environmental Committee
Program of 'Loving our trees'	
Farming and gardening program in residents area	
Learning program on the technique of composting the food waste	
Children's day and World Environment Day celebration	
Cleaning and clearing program in residents area	
Recycling campaign program to the community and schools in Shah Alam	
A visit to Solid Waste Management Integrated	
Seminar on controlling aedes on construction site	
Campaign on minimize the paper and polystyrene usage	
Local Agenda 21 exhibition	
Clean zone briefing day to ensure the residents are clean	
Inspection and spot check in food premises	
Family day by having various of activities to the residents	
Malaysia Local Enforcement seminar	Social Committee
Vandalism prevention program	
Aerobic and extreme games program for youth and communities	
Colouring contest, cooking competition and collection of used cooking coil	
Environmental day celebration and tree planting event	
Medical checking by Johor Medical Group	Economy Committee
Le tour de Langkawi program	
Installation of white LED project on every street light	
Green building project in section 14 Shah Alam	Social Committee
Family day by having various of activities to the residents	
Malaysia Local Enforcement seminar	
Vandalism prevention program	
Aerobic and extreme games program for youth and communities	
Colouring contest, cooking competition and collection of used cooking coil	
Environmental day celebration and tree planting event	
Medical checking by Johor Medical Group	
Le tour de Langkawi program	
Installation of white LED project on every street light	
Green building project in section 14 Shah Alam	Economy Committee

**Petaling jaya city council**

In 1999, Ministry of Housing and Local Government has elected Petaling Jaya Municipal Council to become among the pioneer project of LA21. Petaling Jaya Municipal Council, communities and local authorities were committed to participate of LA21 program in order to develop a comfortable, safe, harmony and peaceful city. There are also three committees has been established which were Environmental Committee, Social Committee and Safety Committee to further develop the implementation approach of LA 21. The establishment these committees is based on the identification of issues faced by Petaling Jaya which is in the area of safety, social integration and environment. The following [Table 3] shows the program implemented.

**Table 3:** Petaling jaya city council agenda 21 actions

Programs / Activities	Action by
Briefing session regarding on Local Agenda 21 at Petaling Jaya school	Environmental Committee
Demonstration on composting the kitchen waste	
Printing and distribution of leaflets on awareness of recycling	
Establishment of recycling center	
Awareness program on the important of Local Agenda 21 program to teachers and students	
Implementation of pilot project "River basin Management"	
"Harmonizing National Environmental health Action Plans in the local government" program	
Natural and organic food product carnival	
An action plan for Domestic Solid Waste Management	
Best neighbourhood competition	
Family day with Petaling Jaya communities	Social Committee
Competition of "Neighbourhood of the year"	
Career fair festival	
Organizing competition designing the park	
Consultation with disabled people to develop a draft of action plan which could help to ease their burden	
Chinese new year celebration	

Develop an action plan for neighbourhood to strengthen the spirit among themselves	Safety committee
Safety and security handbook printing for distribution	
Neighbourhood cautionary scheme	
Exhibition on vandalism prevention and develop and action plan to prevent the vandalism	
Fire safety program	
Installation of street light in business premises	
Providing the security guard service at residents area	

### INITIATIVES OF BLUEPRINTS AGENDA IN ISKANDAR MALAYSIA, JOHOR

From the approved of blueprints, it is identified that there are 649 initiatives developed. However, the initiatives are divided into 11 main categories to facilitate the implementation and monitoring. The 11 categories consists of transportation, economy, green, tourism, heritage culture, land use & physical development, information & communication technology, safety and security, utility, infrastructure & asset management, creative and social. The summary of the agenda as shown in [Table 4]. Most of the Iskandar Malaysia blueprints agenda has successfully implemented and part of the agenda is in progress stage.

**Table 4:** Iskandar Malaysia Johor Blueprints agenda

Programs / Activities	Action by
Pinewood Iskandar Malaysia Studios as a hub for creativity	Creative
Media@Medini for film production and media	
Iskandar Malaysia Digital Centre of Excellence	
Iskandar Malaysia Creative Talent Development Program	
Johor Bahru City Centre to develop economic activities in cultural, urban tourism and finance	Economic
Nusajaya development which focus on education, entertainment, recreation, state administration, biotechnology, finance, and tourism	
Western Gate Development: developed as a manufacturing hub	
Preparation of integrated climate change action plan through green economy, green community and green environment	Green
Promoting integrated river basin management	
Capacity building: public awareness, school programs, training and education program, inculcation through culture	
Low carbon action in Felda Taib Andakvillage	
School Eco-life challenge	
Inauguration on the environmental declaration.	
Masterplan on heritage conservation	Heritage and Culture
Street signage installation by having an information of its origins name	
Projects on model restoration for royal museum and Bukit Serene palace	
Workshop for contractors on how to make renovation and repairs with heritage building	

**Table 4:** Iskandar Malaysia Johor Blueprints agenda (cont'd)

Programs / Activities	Action by
Developed web-based application as a platform to promote Iskandar Malaysia	Information and Communication Technology
Training and educational programs on information technology in rural areas as an opportunity to enhance networking among the communities who involve in business	
Smart and connected city project in Nusajaya to improve the public and social service	
Improvement with current infrastructure especially in the	
Improvement with the public and social services	
River restoration programs in urban areas	Land Use and Physical Development
Local plan review by integrating the developed blueprints to the existing local plan	
In-fill development incentives for flagship zones	
Urban design framework formulation and city centre guideline	Safety and Security
Establishment of crime and disorder reduction partnership	
Developed strategies to increase and augment the security with the establishment of 942 auxiliary police.	
Implementation of integrated CCTV surveillance	

Implementation of management model for foreign worker enclaves	<b>Social</b>	
Established the talent development initiatives for youth		
Income generating activities for fisherman		
Squatter relocation with construction of 2,720 units		
Constructed the Iskandar Malaysia house		
Established new affordable policy for housing		
Annual festivals and exhibition such as art festival and Eco-tourism		
Development of Johor Bahru Central district urban tourism		
Development of causeway link and 2 <sup>nd</sup> link to improve the tourist access via roads		
Create the heritage trail	<b>Tourism</b>	
Improve the transportation service for tourist by constructing the ferry terminal		
Developed for more package of tourism that related to nature		
Promoting the river basin as to support the Eco-tourism potential to connect visitors with culture, nature and community		
Provide bus services (feeder bus) to cater the passenger especially for low and medium income citizen and in rural areas.	<b>Transportation</b>	
Provide bus services with limited stops that cover on main trunk routes		
Provision to provide information for bus routes and timetable		
Engagement program between stakeholders and public through awareness campaign of road safety		
Study in detail regarding on the alignment and pre-engineering for bus rapid transit		
Develop an online platform known as Mobility Management System to allow visitors and citizens to access their travelling modes		
Improving connections between Malaysia and Singapore through Rapid Transit System		
Improve the taxi coverage through service coordination, training and development		
Provision to upgrade the bridge lanes for pedestrian walkway		<b>Utility, Infrastructure and Asset Management</b>
Upgrading the existing number of lanes		

### SUMMARY FRAMEWORK OF INITIATIVES TAKEN BY THE LOCAL GOVERNMENT TO REACH THE LOCAL COMMUNITY

From the LA21 approaches adopted in each state and cities, it can be summarized that there are several initiatives taken by the local government to embrace the local community involvement. The initiatives are summarized in [Fig 1].

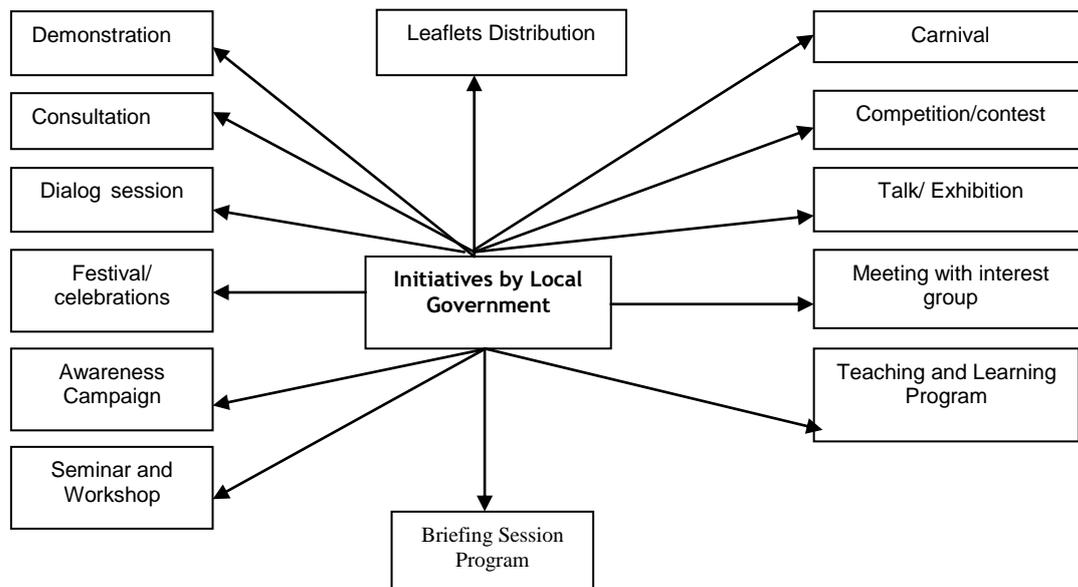


Fig. 1: Summary of initiatives taken by local government

The initiatives taken is the means for realizing the vision for the future of the community and also to gain their support which is the key successful of the LA 21 implementation. In addition, the local community involvement assists to measure the progress of the developed agendas vision. In fact, the encouragement of local community participation has been widely practiced in activities implemented in many organizations as a way to prevent public outcry. Besides, it is encouraged to have greater interaction with the local community in order to allow the public opinion to be included in the agendas provision based on the issue that has been encountered or may be crucial to do with an improvement. With this effort, the local community will have a broader perspective towards the importance of the agendas which have significant contribution to their quality of life. It gives the community to have a sense of ownership throughout the involvement and helps the government and other stakeholders to benefit the experience and knowledge of the local community in order to make for better decision in future.

## CONCLUSION

The Local Agenda 21 implementation is a strategic implementation program in order to attain the aim for sustainability. The support and effort from various stakeholders such as Government, Non-Government Organization, committee, communities and the Council has made the Local Agenda 21 program in Selangor, Kuala Lumpur and Johor Bahru successfully implemented. The used of participatory techniques or engagement such as discussion with a focus group, having dialogues with communities had assisted in establishing collaborative relationships among the parties involved. Furthermore, it is also assisting in contributing realistic ideas for the development of their state and cities. Besides, the activities such as cleaning and clearing up the area, beautifying river, clean zone competition and many other activities had brought a significant impact to the people because it gives them knowledge on the importance of preservation of the environment and the effect of their current activities against the future generation. All of these approaches is hopefully would give guidance and inspiration to other states in developing and implementing the Local Agenda 21. As the country is expected to continually grow and the involvement of LA 21 is a continuous effort, undoubtedly the initiatives adopted in the state and city would contribute to the development and sustainability in the aspects of economy, social and environment. As for Malaysia, by implementing the LA 21 stage by stage throughout the nation, this can help to create the awareness among Malaysian and at the same time helps to develop an environmental responsive nation.

### CONFLICT OF INTEREST

There is no conflict of interest.

### ACKNOWLEDGEMENTS

None

### FINANCIAL DISCLOSURE

This work was financially supported by Universiti Teknologi Malaysia, Research University Grant (Vot no:14H36).

## REFERENCES

- [1] Plessis CD [2002] Agenda 21 for Sustainable Construction in Developing Countries. South Africa: CSIR Building and Construction Technology.
- [2] Shafii F, Zahry Othman ZAA.[2006] *Proceedings of the 6<sup>th</sup> Asia-Pacific Structural Engineering and Construction Conference*. Kuala Lumpur: Malaysia.
- [3] Hashim H, Shuib, KB.[2012] Comparing Economic and Social Indicators Towards Sustainable Development in Selangor, Malaysia. *International Journal of Sustainable Development*, 3(12), 39-47.
- [4] Rozana Z, Vikneswaran M, Mohd. Ismid MS, Abd. Latif S, Mushairry M. [2012] Sustainable Neighbourhood Planning and Design in Malaysia Perspective, Applied Mechanic and Materials –Sustainable Cities Development and Environment, Vols. 209-211, pp. 1690-1693.
- [5] Zakaria R, Yang J. [2004]. Smart and Sustainable Inhabitation in Residential-industrial Neighbourhood, Proceedings of the IEEE International Engineering Management Conference, October, Singapore, 1: 209 – 213.
- [6] Singh B. [2004] *ASEAN Environmental Seminar "Sustainable Development and Environment: ASEAN's Role and Challenges*. Singapore.
- [7] Profile on Sustainable Development: Malaysia [1997]. Information Provided by the Government of Malaysia to the United Nations Commission on Sustainable Development Fifth Session, 7-25 April 1997, New York. Retrieved From [http://www.un.org/jsummit/html/prep\\_process/national\\_reports/malaysia\\_natl\\_assess.pdf](http://www.un.org/jsummit/html/prep_process/national_reports/malaysia_natl_assess.pdf)
- [8] Malaysian Plan [2006] *Ninth Malaysian Plan 2006 – 2010*. Speech by the Prime Minister in the Dewan Rakyat. Government of Malaysia. The Economic Planning Unit, Prime Ministers Department, Putrajaya. Retrieved From [http://www.parlimen.gov.my/news/eng-ucapan\\_rmk9.pdf](http://www.parlimen.gov.my/news/eng-ucapan_rmk9.pdf) and <http://www.epu.jpm.my/rm9/html/english.htm>
- [9] Economic Planning Unit. [2015] *Strengthening Infrastructure to Support Economic Expansion. Rancangan Malaysia Kesebelas (Eleventh Malaysia Plan): 2016-2020*. Retrieved from <http://rmk11.epu.gov.my/book/eng/Elevent-Malaysia-Plan/RMKe-11 Book.pdf>
- [10] Profile on Sustainable Development: Malaysia [1997] Information Provided by the Government of Malaysia to the United Nations Commission on Sustainable Development Fifth Session, 7-25 April 1997, New York. Retrieved From [http://www.un.org/jsummit/html/prep\\_process/national\\_reports/malaysia\\_natl\\_assess.pdf](http://www.un.org/jsummit/html/prep_process/national_reports/malaysia_natl_assess.pdf)
- [11] Abu Bakar AA, Khalil MK. [2006] Children Environmental Awareness- Local Agenda 21. *JURUTERA*, 36-41.
- [12] Ismail R, Saat SA [2004] Engendering Environmental Political Awareness for Supporting the Sustainable Development Agenda: A contribution of Local Authorities in Terengganu. *Malaysia Journal of Social Administration*, 3(1), 39-52.
- [13] Plessis, CD [2002] Agenda 21 for Sustainable Construction in Developing Countries. South Africa: CSIR Building and Construction Technology.

- [14] Mehta P. [1996] Local Agenda 21: Practical Experiences and Emerging Issues from the South. *International Council for Local Environmental Initiatives*, 16, 309-320.
- [15] Dalal Clayton B, Bass S. [2002] *Sustainable Development Strategies*. 1<sup>st</sup> Edition. London: Earthscan Publication Ltd.
- [16] Kuala Lumpur City Hall. [2012] Retrieved From [http://www.dbkl.gov.my/la21kl/index.php?menu=1&pg=pengenalannya/la21\\_kl/latarbelakang](http://www.dbkl.gov.my/la21kl/index.php?menu=1&pg=pengenalannya/la21_kl/latarbelakang)
- [17] Hezri AA, Hasan MN. [2004]. Management Framework for Sustainable development indicators in the State of Selangor, Malaysia. *Journal of Ecological Indicators*, 4, 287-304.
- [18] Pereira JP, Komoo I, Hasan, MN, Hashim, MN. [2005] Refocusing Development Towards Sustainability-The case of Selangor, Malaysia. *Malaysian Journal of Environmental Management*, 6, 125-135.
- [19] Zan, Z. M., Ngah. K. [2012] Local Agenda 21 Program Effectiveness in Seberang Perai Municipal Council, Penang, Malaysia. *International Journal of Sustainable Development*, 4 (6), 25-30.
- [20] Hashim H, Shuib KB. [2012] Comparing Economic and Social Indicators Towards Sustainable Development in Selangor, Malaysia. *International Journal of Sustainable Development*, 3(12), 39-47.
- [21] Ho WS, Hashim H, Lim JS. [2014] Integrated Biomass and Solar Town Concept for a Smart Eco-Village in Iskandar Malaysia (IM). *Renewable Energy*. 69, 190-201.
- [22] Iskandar Malaysia [2016]. *Development Plan*. Retrieved From <http://iskandarmalaysia.com.my/our-development-plan/>
- [23] Ibrahim Ngah, Zulkifli AS. [2014] Participatory Approach in Planning for Low Carbon and Eco-Village: A case of Felda Taib Andak. *International Symposium of the Digital Earth*. 1-6.
- [24] Mehta P. [1996] Local Agenda 21: Practical Experiences and Emerging Issues from the South. *International Council for Local Environmental Initiatives*, 16, 309-320.
- [25] Pereira JP, Komoo I, Hasan MN, Hashim MN. [2005]. Refocusing Development Towards Sustainability-The case of Selangor, Malaysia. *Malaysian Journal of Environmental Management*, 6, 125-135.
- [26] Ismail R, Saat SA. [2004] Engendering Environmental Political Awareness for Supporting the Sustainable Development Agenda: A contribution of Local Authorities in Terengganu. *Malaysia Journal of Social Administration*, 3(1), 39-52.
- [27] Selman P. [1996]. *Local sustainability, Managing and Planning Ecologically Sound Places*, St. Martin's Press, A SAGE Publications. New York.
- [28] Abdul Halim A, Mohammad Sukeri K, Yusuf P. [2013] Ke Arah Pembangunan Mampan Setempat: Pelaksanaan Local Agenda 21 oleh Pihak Berkuasa Tempatan di Malaysia. *Jurnal Pendidikan Sains Sosial Dan Kemanusiaan*. 6(2): 209-222.