

# ENVIRONMENTAL GOVERNANCE AND SUSTAINABILITY IN LOCAL PLAN: THE CASE OF PENINSULAR MALAYSIA

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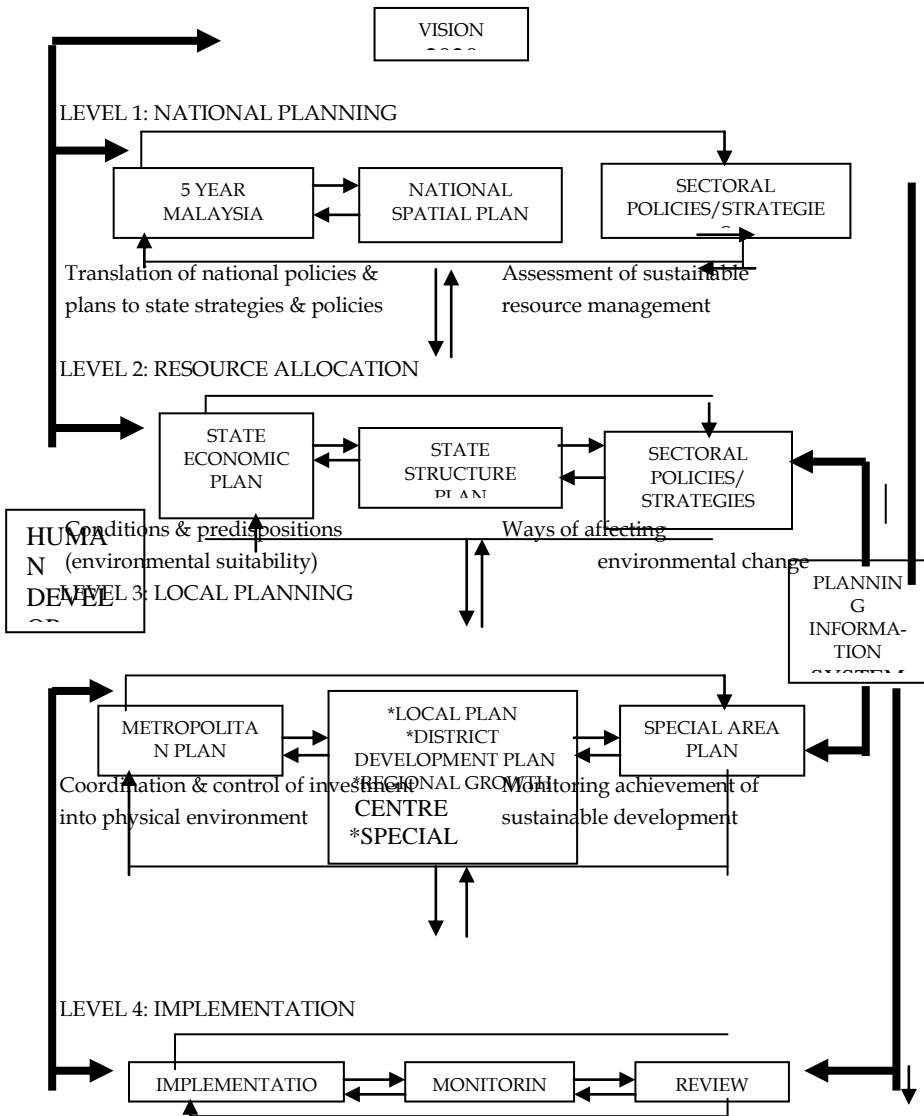
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## **Introduction**

Malaysian planning system consists of several layers: at the national level, The Malaysian Vision 2020, 5-year National Plan and Spatial Plan, including policy formation, are prepared. At the state level, allocation of resource is planned in the forms economic planning, structure plan and policy/ strategic planning. At the lowest level, the local, various plans are prepared and implemented based on local interpretations of national policies. The planning system is illustrated in the Figure 1.

The call for sustainable development has been incorporated in the Malaysian Third National Plan (1976~1980). Since then various efforts and programmes have been devised and launched. These efforts seem to be intensified after 1990's when the government actively involved in international environmental pact. However, actions to inculcate the concept at the local level have not been encouraging. To date, only six local authorities have formally embarked into Local Agenda 21 concept to operationalise sustainability in their development programs.

**Figure 1. Integrated Planning And Resource Management System**



Source: Zainuddin Muhammad (2000).

There are several types of plans prepared for land use planning such as development control plan and development plans that can be considered as important in protecting the environment. This paper will only focus on local plan since it is considered as most vital in operationalising the sustainable development concept.

The term governance refers to the process of government, and more broadly the systemic framework of social, economic, legal and political structures – both fluid and institutionalized – within which humanity chooses, and/ or accepts, to manage its affairs. It thus includes governments themselves, the market economy and the ways in which a society manages its collective interest. UNDP defines governance as the exercise of political, economic and administrative authority in the management of a country's affairs at all levels. In light of this paper, environmental governance comprises the complex mechanisms, processes and institutions through which citizens and groups articulate their interests, mediate their differences and exercise their legal rights and obligations for environmental cause through local plans. This involves a comprehensive view of the government decision making process in local plans.

## **Methodology**

Several selected local plans and documents related to them were chosen to justify current practices of environmental governance for environmental protection. Case study method was used includes observation of local plan preparation process, interviews and document analysis. The plans' content were analyzed based on criteria selected from literature on sustainable development appraisal, content analysis of development plan and Local Agenda 21 (see Gibbs et. al., 1998; Carrant et al, 1998; Counsell, 1997; Cartwright, 1997; Selman, 1995; Punter and Carmona, 1994). Criteria identified were those that considered suit the local situation and needs. In brief, content analysis is to qualitatively appraise the general trend of policy

coverage, policy expression and interpretation, in light with sustainable development concepts.

Interviews were carried out with several practitioners (consultants, local councilors and planners) and public including NGOs, in order to identify hindering and motivating factors in the governance to include sustainable development concepts in local plan.

Since this paper seeks to analyze environmental governance for local plan preparation in Malaysia, it is first necessary to look into key forces in the environmental governance. These are the legal/ institutional arrangements and implementation capacity, decision-making processes and information flows and the nature of the relationship between the government and the affected parties. Finally, discussion will focus on existing barriers that hinder effective and efficient environmental governance as well as potential prospects to enhance cooperation for better environmental protection.

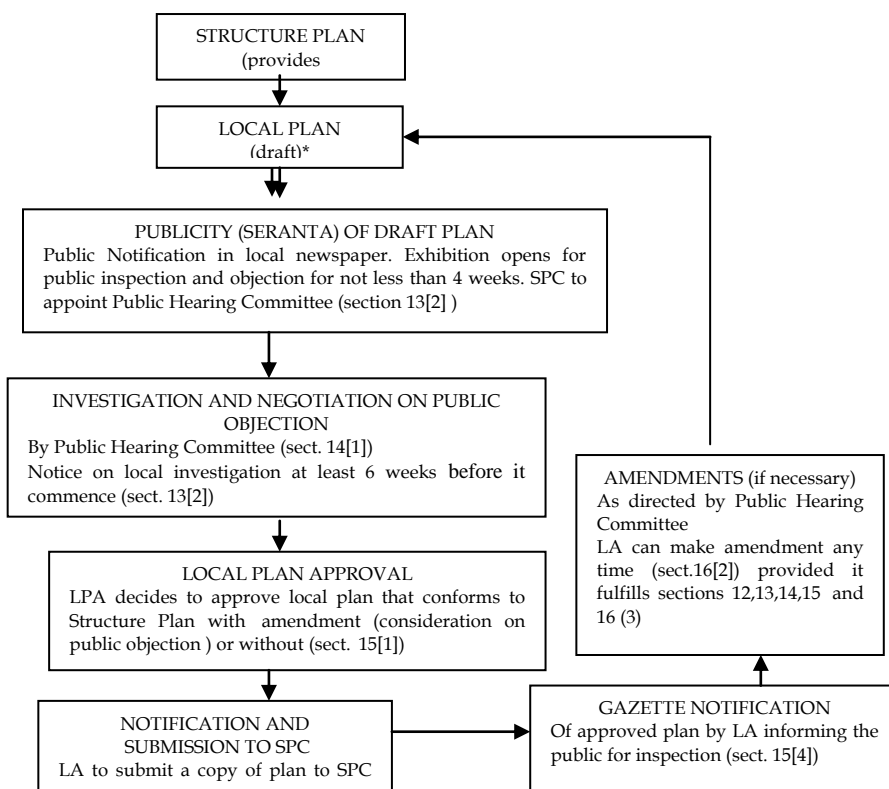
For better understanding of the Malaysian Local Planning process, it is necessary to explain the process. The next section will discuss the plan preparation process, followed by legal and institutional arrangements for the process.

## **Local Plan Preparation Process**

As illustrated in the diagram above, local plan begins with preparation of draft and must confirm with the structure plan of the area, which in turn contains policy interpreted from the national policies. Preparation of draft local plan is based on surveys done in several sectors such as housing, transportation and environment. Each of these sectors will have their own data and usually being carried out by different consultants who are experts in the areas. Information will be presented first in inception report, then technical report. Based on these reports, policies and strategies are devised by the local authority. With the assistance from the planning department, a draft local plan will be published. Public are invited to inspect and provide opinion or objection on the draft local plan within four weeks. Written objections will

be brought forward to special Public Hearing Committee. A local plan will go to the process of approval by Local Planning Authority, with or without amendment after public hearing. A copy of approved plan will be submitted to SPC for gazettment and Local Authority may make amendment any time if considered necessary.

**Figure 2. Local plan preparation according to Town and Country Planning Act 1976 (Act 172)**



Source: Local Plan preparation Manual, Peninsular Malaysia Town and Country Planning Department.

## **Legal Arrangements**

Neither the word 'pollution' nor the term 'environment' is found in the Constitution, yet, it has provided a sufficient basis for Malaysia to enact laws and regulation for environmental purposes (Sham Sani, 1993). Malaysian early environmental related legislation was described to be curative in nature (Sham Sani, 1993). Others described it as heritage from the colonial legacy, containing hostile attitude towards nature, to facilitate exploitation for profit accumulation.

To date, there are about 46 environmental-related legislation in Malaysia which enforcement powers distributed among different Ministries and Departments. Among those related to land use planning are; Irrigation Areas Ordinance, 1953; Drainage Works Ordinance, 1954; The Road Traffic Ordinance, 1958; Land Conservation Act, 1960; National Land Code, 1965; Housing Development Act (Licensing and Control), 1965; Forest Enactment, 1935; Environmental Quality Act, 1974; Street, Drainage and Building Act, 1974; Local Government Act, 1976 and Town and Country Planning Act, 1976. To a certain extend, the constitution has effected a far-reaching and comprehensive coverage of environmental aspects (Jamaluddin Md Jahi, 1993; Sham Sani, 1993). The responsibility to administer these laws rests with a number of federal, state and local government agencies. From these, Local Government Act, 1976 and Town and Country Planning Act, 1976 are two most important legal statements that shape the physical planning system.

## **Institutional Arrangement**

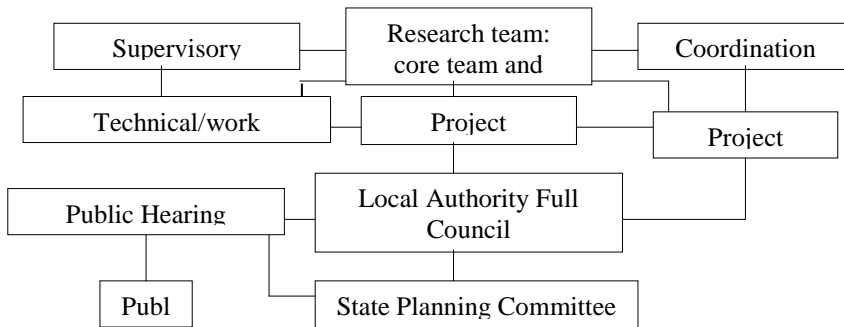
Malaysia practices a federal system of government in which federal and state powers and functions are clearly defined in the Constitution. The balance between powers of the national, state and local governments is defined by the Constitution. The power of the federal government are constitutionally constrained, but its economic dominance, provide the capacity in practice to have greater influence. The local governments, under

certain constitution have to be relegated to a subordinate role to the higher governments. Matters of federal responsibility include the development of mineral resources, marine and estuarine fisheries, pest control, medicine, water supplies and industrial and infrastructural activities. Federal government has the right to practice Environmental Quality Act 1974 (EQA) and the Environmental Quality (Amendment) Act 1985 through the Department Of Environment (DOE). On the other hand, basic resource management (land and water) is within the power of states. State mainly responsible for land, agriculture and forestry, state works and water and riverine fisheries. Other areas where the federal and the state share responsibility include wildlife, town and country planning, public health, rehabilitation of eroded and mined land, drainage and irrigation. The extension of power has sometimes been accommodated by a cooperative response from the states, but commonly has been resisted as an intrusion into their rights and responsibilities. In extending power on environmental matters, however, there are instances where conflict occurs between state and federal authorities. For example, the state government had, in the past, degazetted large areas of forest reserves to permit logging and agriculture.

The role, responsibilities and relationship of these agencies are clearly stated in the local plan preparation manual. For example, Public investigation and hearing committee has the responsibility to conduct investigation and hearing on objections or appeal forwarded regarding draft local plan. Local Authority Full Council is established to administer the local government as well as to ensure suggestions forwarded in local plan draft, local plan and by Public investigation and hearing committee conforms with local needs, Council policies and Structure plan policies. The public, consists of local people, developer, NGOs, and local political groups can exercise their roles in providing information for technical report, participating in exhibition and to provide feedback on draft local plan. It can be deduced from the above statement and the table below that although the local authority has been given the mandate to prepare local plan, much of this responsibility is shared with other agencies and committees. This is due to the lack of expertise in many of local authorities and the need to standardise the process to avoid

bias. The table below provides a list of a technical committee involved in providing technical information related to their areas of expertise.

**Figure 3. Interagency relationships in local plan preparation**



In local plan preparation, these agencies act as technical experts to provide advise on matters under their sphere of authority. In general, the main responsibility on environment falls on the Department of the Environment (DOE), but this is shared with the state and local authorities. Through Local Government Act 1976 and Town and Planning Act 1976, the local authority mainly responsible towards control and conservation of the environment, sanitation and public health, prevention of epidemic diseases, and the general welfare of the residents within the local authority area. These include managing sewage, garbage collection and disposal, planning for project development and approval and to act against polluters.

Through EQA, DOE shouldered the responsibility to address most environmental issues. Under the Act, EIA must be undertaken for all prescribed activities, and projects will not be pursued without DOE approval. In addition, the Town and Country Planning Act (Act 172) also prescribed certain standards to be fulfilled and mitigation measures to be carried out for proposed projects. After certain checking procedures to reconfirm with development plans and standards by related agencies, these EIA and



planning proposals must be submitted to State Planning Committee for final approval. However, sharing responsibility among agencies has not comprehensively protected the environment as a whole. Inefficiencies arise due to limited manpower, fund and expertise. There are some loopholes and sometimes overlapping responsibility raised the issues of who should be more responsible. The governing regime on environmental matters is highly fragmented and dispersed over many agencies. This inevitably results in inefficiencies, conflict and sluggish response to environmental crises.

**Table 1. Agencies (technical committee) directly involved in environmental matters in local planning**

Environment-related Subject Matter	Agency
1. Coastal Erosion Protection	Drainage and Irrigation Department
2. Energy	Ministry of Energy, Post & Telecom.
3. Fisheries and Marine Parks	Fisheries Department
4. Forest	Forestry Department
5. General Cleanliness/ Streets/ Buildings/ Drainage	Local Government
6. Geology & Hydrology	Geological Survey Department
7. Industrial Pollution Control & Prevention through Environmental Impact Assessment (EIA)	Department of Environment
8. Land and Mines	Department of Land and Mines
9. Mining	Department of Mines
10. Pesticides	Department of Agriculture
11. Physical Planning	Town & Country Planning Department
12. Planning	Economic Planning Unit
13. Public and Occupational Health	Health Services Department
14. Road Vehicles	Road Transport Department
15. Social-Economy	Socio-Economic Research Unit
16. Soil Conservation	Department of Agriculture
17. Water	District Office
18. Water Irrigation	Drainage and Irrigation Department
19. Wildlife Reserve & National Parks	Parks

## **Public awareness and participation**

In general, the Malaysian public may participate in minimizing destruction to the environment legally through many ways. They may actively involved in NGO and consequently express their dissatisfaction through these organizations. Public may seek political intervention or voice their opinions through elected politicians. In local plan preparation, they may participate under the Town and Country Planning Act 1976 through SERANTA where they can voice their opinion or objections to certain issues. However, current findings show that these rights have not been fully utilized. The Malaysian public was regarded as passive when it comes to exercising their rights in development plans.

Studies in Malaysian local participation often reveal poor participation when it comes to planning. Some of the reasons for this low response are; methods used to inform the public about the exhibition were not effective. In addition, place of exhibition not strategic or not accessible to all. Some commented on technical jargon used which may not easily be understood by a layman, materials and type of displays are too rigid, outdated and not interesting (Discussion with planners, 24<sup>th</sup> May 2000).

Beside the poor turnout, poor response to give comment is another issue. Reasons for this are poor understanding of the local plan, the feeling that the process to was tedious (they have to attend another public hearing meeting with the Hearing Committee), not enough manpower to cater public inquiry during exhibition, low education level and incapability to express their view. In addition, the public themselves regard their opinion may not be taken seriously and the process was a mere formality to fulfill the planning procedure (Public Survey, 1999~2000). Apart from this, findings from the survey reveal that environmental issues receive less attention from the public as compared to other issues that they considered most pressing (employment, land use etc.). Thus it is not surprising that environmental issues has not always been in the priority level in local plan.

Despite this, there is a positive trend in the past years through increasing number of participation and responses on environmental-related problems. In

addition the increase in media coverage on environmental issues has successfully increased the public awareness on environmental issues surrounding them. This increase in complaints was evidence in the DOE's annual Environmental Quality Report.

## **Environmental Consideration in Local Plans Preparation**

All local plans contain similarities in their presentation and basically employ sectoral approaches as they were based on the manual of local plan preparation. Analysis on local plans reveals that although there is a lack of definitive guidance to pursue sustainable development from the federal level, some positive indicators submerge. Local land use planning in Malaysia is slowly progressing towards applying the concept of sustainable development. To explore the extend of environmental consideration in local plan resulting from the current system, this paper will discuss the issue in sectors, Policy, objectives and strategy set by local planning authority, Environmental information and Sustainability indicators in other sectors.

### **Policy, objectives and strategy set by local planning authority**

Overall, policies and objectives presented in local plans clearly reflected those at the national and regional level and confirm with structure plans established for the areas. Since it is apparent that national policy put great stress on economic development while policies on sustainable development seems to be vague, majority of local authority tends to follow suit in their local plans. Policies that integrate economic and social development programmes such as poverty eradication, employment, education, health care have always been central in all local plans. Despite a strong emphasis future social and economic development, the focus on future environment received less attention. This is apparent in local plans produced where there seems to be little attempts to combine economic development and environmental policies within formal policy documents.

Interviews with practitioners reveal that this pattern partly stemmed from the national trend and partly from the environmental attitude of local councilors who made the decisions. As a result, although there were attempts to conserve and enhance natural and built environment, these always coincided with economic purposes such as to promote the unique feature of the area for tourist destination.

### **Environmental information**

Although there are assessments and studies conducted during early preparation, they do not include proper assessment on carrying capacity for the area, especially on environmental capacity. Proposals presented in local plan generally to fulfill the requirement in the manual. For example, majority of local plans provides information on proper sewage, waste management system and infrastructure to suit the projected population and new development and proposals to restore grossly polluted area and to reclaim derelict lands and buildings. The requirement to provide ten percent of the area for open space was clearly stressed but it is unclear how local authorities or developers may translate this requirement in their practices. Except for health reason, the local plan contents also do not highlight ways to increase safety and sense of security in the area.

The current trend in local plans shows that consideration on environment was only limited to exploit the resources to be put into economic use. Since many of the projects proposed for development in local plan are economically focused, much of the environmental study done reflected these economic purposes. Since there is no requirement to do the carrying capacity studies, consideration to limit development within capacity thresholds and the maintenance of constant stock of substitutable natural stock still not covered. A bulk of the environmental sector only discusses on the level of environmental quality and ways to reduce pollution for highly polluted areas. Except for few sectors, no guideline was given in the local plan on how to prevent pollution from different sectors. Also missing was the report on how

much damage will incur from the proposed projects or how to maintain, monitor and enhance the future state of environment.

As indicated above, the need to conservation of natural beauty and amenity of land always carry double objectives, which are the objectives to conserve and to promote the place as a potential income generator or tourist attraction. Unique to the Malaysian situation, efforts to alleviate squatter problems especially those that expose to hazards such as near railways or riverbed, around disuse mines or near unstable hill slopes have always been included, through provision of legal ownership and affordable low-cost housings. Ways to safeguarding soil quality and soil retention during construction was also stressed but the practice of monitoring and assessing environmental damage after development was not mentioned.

### **Overall sustainability approach in other sectors**

Since local plan still employs sectoral approach, often issues addressed are fragmented, do not relate with other sectors causing redundancies and overlapping of information. This disintegration, has been claimed to fail to support the sustainable development concepts. Except for standard current guideline for technical purposes such as height and density, local plan has yet to provide design guidelines that support the concept of sustainability such as clear agencies' roles and responsibilities.

All local plans highlighted the need to conserve and enhance the environment but how these are achieved through environmental governance depends on local creativity and commitment. Often, there are conflicting objectives since majority of local authorities favour economic development to generate more income. For example, majority of proposal for transportation focus to ease current congestion and to cater future needs but at the same time there were efforts to attract more people and businesses into the city centre area through developing more malls and access to parking facilities.

## **Administration and Finance**

Although there seems to be full support from the top to initiate sustainable development activities, the extent to which it has been adopted by various local authorities varies. Due to lack of definitive guideline, Some local authorities are more advance than others, depending on its financial capabilities and commitment from the top people. Most local plans were subsidized in the process of preparing local plans. It is unclear whether they could provide adequate staff and funding to carry out projects for sustainable development. In addition, a majority of the local authorities still lack of staff, planner or environmental specialist. Therefore, developing environmental schemes to support sustainable development such as environmental audit, environmental indicators or standard may seem difficult at the moment.

Most local authorities obtained their revenue from taxes, rents, rates, licenses, charges such as from commercial, services and entrepreneurships and interests from their investment, movable or unmovable assets. While revenue collected may increase steadily in time, increasing development expenses may exceeds their capacity. An increasing number of population will also lead to an upsurge in social needs as well as problems that would require the provision of more services, recreational areas and other community related activities. This results in many local authorities favour to income generation development to cater this expansion.

Often, constraints such as the lack of finance and manpower, poor public image and politics hamper local authorities' efforts in fulfilling their role in facilitating sustainable development. This has led some authorities to overrule planning guidelines and welcome development in spite of their threat to the environment, as a source to increase their income (Perancang, August 1999; Interviews with planners). There are cases where authorities competing with their neighbors for investors which in turn may lead to unplanned development.

## Discussion and Conclusion

Perhaps, one of the most challenging aspects in operationalising sustainable development concept is to translate it into action, in particular into practical environmental governance in land use planning. Many agreed that land use planning is crucial to facilitate sustainable development. Yet, to operate this concept, effective and efficient governance is not easy to materialized.

Some restraining factors to develop efficient governance include, environment perceived as barrier to development by local authorities, decision making bias towards development, unawareness of the sustainable development concept, and the sectoral approach in land use planning that does not fully integrate social, economic and ecological needs. For example, most of the environmental problems and finding solutions were left to environmental sector and DOE, while other sectors or agencies regard their activities are isolated from environmental effect. This 'do not to cross other people's border' attitude as well as certain cultural barriers (Boyle, 1998) indirectly prevent democratic and open discussion for innovation and cooperation.

Since the decisions made on policy and objectives reflect those from national level, supported by local judgements over the relative importance of issues such as economic development, social enhancement and ecological conservation, it is inevitable that certain factors such as ignorance, uncertainty, political and personal bias might influence decisions made.

Radical changes to the traditional planning approaches in term of approaches, roles and responsibilities, structure, information sharing and flow, knowledge, attitudes and actions are suggested. Integrative holistic approach, and responsibility sharing, instead of the current sectoral practice could assist a smooth journey towards sustainable development. Majority of planners agreed that less political intervention, flexibility and continuous research and innovation in line with current needs could yield some long term benefits. This statement could find support from researches elsewhere (Cassell, 1999; Borri et al, 1997; May et al, 1996; Healey and Shaw, 1993). For

example, instead of heavy premium put on rigid fulfillment of technical aspects, equal emphasis should be given to free interaction among key players, flexibility and sharing of information to encourage proactive and innovative approach.

Institutional arrangement needs to be revised to present those that truly support sustainable development concept Agencies involved should come out with innovative environmental-friendly manuals to replace their outdated guidelines to reduce bureaucratic red tapes and too many meetings. Clear roles and responsibilities of agencies involved on how to support sustainable development, may facilitate the process. This could also be made possible through revising the current legislation and benchmarking the experiences and good practices in other places. Recent, clear, accurate and effective information sharing systems could be conducive.

More importantly, a majority of public and some practitioners in local plan preparation also tend to be passive of their roles and rights to participate in local plans. Awareness and education programs could raise their involvement to a higher step in the participation ladder. It is worth to note here that although some of the respondents seemed to be unfamiliar with the concept of sustainable development, their willingness to emulate best practices was encouraging. This could be considered as a potential prospect for sustainable development. Continuous awareness or education programs may assist them in providing support and quality input in local plan as well as to conserve the environment in general.

The aim of this paper has been to assess the strength and weaknesses of environmental governance in promoting sustainability of local plans. Attempts to make sustainability work in local plans were slowly but surely. The content analysis reveals that responses and actions towards applying sustainable development concept in local plan have been encouraging but not explicit. The process can be facilitated through major changes in the forms of integrated approach, clear and persistent commitment to sustainable development, political will and a greater participation from all sectors.

Despite the popular believe that sustainable development concepts is best implemented from radical actions at the community level, it is found that in



Malaysia, the concepts will be best inculcated through both ways. This is because of cultural, political and local background. The public participation level is still at the very base of the ladder and pulling factor from the top people is much needed. From the root level, awareness and acceptance can be injected gradually through environmental education. Public should be made aware of their rights to voice their opinions to live in a safe and healthy environment. Environmental education should also be extended to the top people who made decisions. Political will and strong commitment towards environment from the top could ensure continuous progress in environmental protection.

Increasing number of good practices on sustainable development indicate it is not impossible to balance development with economic, social and environmental dimensions. Thus, it is a challenge to planners and practitioners to find ways to make it become operational in Malaysia.

## References

- Beatley, T. (1995) "Planning and Sustainability: The Elements of a New (Improved?) Paradigm." *Journal of Planning Literature*. May 95 9 (4) p.383.
- Berke, P. R. (1994) "Evaluating Environmental Plan Quality: The Case of Planning for Sustainable Development in New Zealand." *Journal of Environmental Planning & Management*, 37 (2) March 155, p.15.
- Blowers A. (ed), (1993) "Planning For a Sustainable Environment," A Report by the Town and Country Planning Association, London: Earthscan Publications Ltd.
- Boyle, John (1998) "Cultural influences on implementing environmental impact assessment: Insights from Thailand, Indonesia, and Malaysia." *Environmental Impact Assessment Review* 18. pp.95~115.
- Cartwright, L. (1997) "The Implementation of sustainable development by Local Authorities in The South East of England". *Planning Practice and Research* 12 (4) pp.337~348.

- Cassell, D. (1999) "Attitudes to Sustainable Development in Planning." *Local Environment* 4 (1).
- Consumer Association of Penang (1996) "State of The Environment In Malaysia." Penang: CAP.
- Consumer Association of Penang (1982) "Development and Environmental crisis: A Malaysian Case." Penang: CAP.
- Counsell, David (1997) " Making Sustainable Development Operational" *Town and Country Planning*. April 1997. pp.131~134.
- Currant, J M, Wood, C, and Hilton, M, (1998) "Environmental appraisal of UK development plans: current practice and future directions", *Environment and Planning B: Planning and Design*. 25. pp.411~433.
- Gibbs, DC., Longhurst, J. and Braithwaite, C. (1998) "Struggling with Sustainability: weak and strong interpretations of sustainable development within local authority policy." *Environment and Planning A*, 30. pp.1351~1365.
- Healey P. and Shaw, T. (1993) "The Treatment of Environment by Planners: Evolving concepts And policies in development plans." Working paper no. 31, Centre for Research in European Urban Environments, Department of Town and Country Planning, University of Newcastle Upon Tyne.
- Jamaluddin Md. Jahi (1993) "Local Authorities and Environmental Management in Peninsular Malaysia." *Akademika* 42&43. 205~22.
- JPBD (January 1998) "Local Plan Preparation Manual." Pejabat Projek Alor Setar.
- May, P. J., Burby, R. J., Erikson, N. J., Handmer, J. W., Dixon, J. E., Michaels, S., and Smith, D. I. (1996) "Environmental Management and Governance: Intergovernmental Approaches to hazards and Sustainability." London: Routledge.
- Punter, J. and Carmona, M. (1994) "The Design content of Development Plans". *Planning Practice and Research* 9 (3) p.199.
- Selman, P. (1995) "Local Sustainability: Can the planning system help get us from here to there?" *Town Planning Review* 66 (3) pp.287~301.
- Sham Sani, (1993) "Environment and Development in Malaysia: Changing Concerns and Approaches." Malaysia: ISIS.
- Stirling, Andrew (1999) "The Appraisal of Sustainability: Some Problems and Possible Responses". *Local Environment*, June99 4 (2) pp.111~136.

Zainuddin Muhammad (2000) "Environmental Impact of Physical Development of Cities: Trends in Overcoming Related Urban Issues". Paper presented at Seminar titled Urban Issues and Challenges: Developing Solution for the Cities of the 21<sup>st</sup> Century. 8-9<sup>th</sup> May, 2000, UPM.