CHAPTER 8

POLICIES FOR SUSTAINABLE URBAN GROWTH

THE POLICY FRAMEWORK

The future of cities is not necessarily as bleak as common fatalism might suggest. Just as they have a past, there is a future to large cities. The problems faced by cities in coming to terms with the radically new world to which they must accommodate are indeed awesome. But there are many steps that public policy could take to make the transition less traumatic and less problematic. We need to be more aware of the issues and hence of the unintended effects that policy decisions can have and also to develop urban policy frameworks which are more consistent and longer term.

One of the problem of policy formulation - caused in part by the compartmental structure of central government departments - is the tendency to look at economic and social issues too much in isolation. We are paralysed by our inability to solve the big macro-economic questions; but the prominence which is given to tackling these economic issues leads us to the wholly unjustified belief that social progress will automatically follow economic growth.

The basic element of a policy framework should include a high awareness of the need for greater coordination both across agencies and across the spatial scales of local, urban and regional dimensions. There should be recognition of the role that infrastructural investment can play in leading the development process. In addition, due consideration should be given to the importance of developing more effective channelling of the resources available to the people most in need.

The policies dictating urban development are not exempted from national policies governing general national development. Hence, standards, implementation procedures and pricing, for instance, are part and parcel of larger national issues. To add to this quagmire, urban pollution problems such as air pollution are also part of international issues as they pertain to the haze, greenhouse gases and the depletion of the ozone layer.

What is vital is that we develop a sensitive, long-term apolitical approach aimed ultimately at establishing the foundation for a stable and law-abiding civil society.

KEY POLICY ISSUES FOR URBAN ENVIRONMENTAL MANAGEMENT

In formulating a strategic approach to urban environmental planning and management we are guided by policy considerations expounded by the United Nations Urban Management Programme (Bartone *et al.* 1994). Here, the approach was formulated in response to the need for specific actions pertaining to urban issues raised in Agenda 21. The key policy messages that surround this approach are (i) **mobilising public support and participation**, (ii) **planning strategically**, (iii) **improving policy interventions** (iv) **strengthening service delivery** (v) **building institutional capacity** and (vi) **closing the knowledge gap**. Each of this policy message is dealt with in the following sections.

PUBLIC SUPPORT AND PARTICIPATION

One persistent issue which has caused concern among environmental observers is the lack of public awareness and commitment towards environmental causes. This is true for the Klang Valley as it is for the country. The increase in the number of public complaints on environment-related problems and the increase in media coverage of environmental issues suggest an increased awareness. However, based on the nature and extent of environmental degradation today, one wonders if the level of awareness is sufficient to ensure a healthy future for the environment. Furthermore, awareness alone is not likely to be effective unless it is also accompanied by a commitment to environmental improvement. The bottom line is that no conservation programme, however well it may be designed, could be completely successful without public support. The latter could only come from well-informed citizens who are aware and fully committed. This includes all sections of the community from administrators, politicians, and the private sector, right down to the ordinary people in the street and school children.

Obviously, one important policy consideration with respect to environmental strategies is the need to increase the level of public awareness and commitment to the environmental cause. While legislation and institutions that administer policies and programmes of environmental management are important, public support is equally essential in order to ensure their success. At both the federal and state levels and, indeed, even at the local level, efforts to educate the public and disseminate environmental information must be intensified.

In urban areas like Kuala Lumpur and the Klang Valley where people from all strata of society converge, it is all the more important to make everyone recognise that environmental management and conservation are a shared responsibility. While the environment is a common concern, its intensity and extent of usage vary from one group of the community to another. Some use it more than others and, in the process, destroy it; some benefit excessively from it. In view of the different contribution to environmental degradation and benefits derived from environmental resources, the "shared responsibility" should somehow be differentiated, in line with the spirit embodied in Principle 7 of the Rio Declaration in 1992. This is important in that it lays the basis for the equitable sharing of responsibilities. While every member of the community is expected to assist in environmental protection, conservation and management, the more endowed sections of the community, especially the private sector, will need to shoulder greater responsibility and contribute more substantially to environmental cause. This is particularly relevant in urban areas where the pressure for facilities and upkeep of the environment becomes more urgent. The private sector can collaborate with DBKL or the municipalities, for example, by contributing to an upkeep of specific facilities or certain streets within the city limits. Such efforts have actually been undertaken on a limited scale but these could be expanded further both in terms of the number of participating companies and the areas covered.

Because environmental education is basically aimed at engendering community actions, a varied approach involving government institutions, the media, the private sector, and the NGOs is needed to reach the different target groups.

The NGOs

The role of the NGOs in environmental education and promoting public participation has long been acknowledged. Their activities are aimed at effecting changes and shaping attitudes. Both directly and indirectly, they are involved in environmental education. Of great significance is the role of the NGOs in providing a mechanism for feedback to the government and its regulatory agencies on negative side-effects of programme implementation. In many respects, NGOs are the public watch-dogs for the proper use of natural resources, conservation, professional practices and other activities of the government and the private sectors which adversely impinge on the environment. The government, on the other hand, should be willing to listen to alternative views without prejudice. In some cases, this can be difficult as the environment and development are very often closely linked and environmental NGOs may easily be dismissed as being anti-development or trouble makers.

Support for environmental NGOs in Malaysia generally and in the Klang Valley particularly could be better. If size of membership is anything to go by, NGOs in this

country could definitely do with more support. Table 8.1 lists some of the major environment-related NGOs in Malaysia, their dates of establishment and size of membership. Many of these NGOs have their headquarters in the Klang Valley. It will be observed that apart from the Malayan Nature Society (MNS), which was established in 1940, the rest of the NGOs are relatively small. Obviously, more support is needed from the public in order to create strong NGOs. However, despite these constraints the NGOs, with support from the government and the private sector, have successfully undertaken several long-term conservation projects that are open to the public. The MNS, for example, is particularly active and has several education field centres such as the Kuala Selangor Nature Park, the Endau-Rompin Reserve, and the education centre at the Forest Research Institute in Kepong near Kuala Lumpur. Many of these centres are run in collaboration with a government agency, the state government, or the private sector. Apart from this, the NGOs also have regular organised programmes in the form of seminars, training, environmental campaigns and projects in order to enhance public awareness and understanding about the environment and its conservation.

Public Participation for a Green City

Public participation is crucial for the success of the greening plan. Society's attitude and value towards green areas in an urbanising environment differ greatly according to ethnic groups and the social level of the community. To the expatriates and the educated populations, the value of green areas lie in their beauty and hospitality, not to mention their scientific interest. However, most of the city dwellers are willing to compromise and they are willing to accept isolated trees in place of a forest. Most of them are willing to pay the price of losing some of their feelings for the natural surroundings in order to gain the sophistication and material benefits of an urban environment. There are also people who view forests and other green areas in the city as filled with dangers and discomforts. They fear venomous snakes and insects, monkeys and other wild animals. Of course there are also people who inherently dislike trees, forests, green areas and wildlife, in particular. Worst of all there are those who are apathetic about the natural environment. All these different attitudes make public participation uncertain.

Table 8.1: Some major environment-related NGOs in Malaysia

Organisation	Date Established	Membership (approx.)
MNS (Malayan Nature Society)	1940	3000
FOMCA (Federation of Malaysian Consumer ASSN)	1973	-
EPSM (Environment Protection Society Malaysia)	1974	140
WWF (Malaysia) (World Wide Fund for Nature)	1972	-
CETDAM (Centre for Environment, Technology) and Development)	1985	50
ENSEARCH (Environmental Management and Research Association of Malaysia)	1984	600
CAP (Consumer Association of Penang)	1969	-
SAM (Sahabat Alam Malaysia)	1977	500+
CETEC (Centre for Environment and Technology)	1992	-
APPEN (Asia Pacific People's Environment Network)	1983	-
PEM (Persatuan Ekologi Malaysia)	1992	-

Public Participation in Waste Management

A very important area where public support and participation are necessary are in the aspect of solid waste management. The first problem faced by DBKL is the lack of public cooperation in maintaining the cleanliness of the city. Among the problems that have to be grappled with include open burning, vandalism and theft of public collection facilities. This has resulted in large financial losses and contributed to the inefficiency of the waste collection services provided to the city (DBKL 1992). The second problem faced by DBKL is the lack of public support in securing land for new landfill sites. A plan for a new landfill site that was identified in the early 1990's had to be shelved due to public protest. As a result DBKL has been forced to consider other options of waste disposal and

promote waste reduction in the city.

Realising the need to mobilise public support for its solid waste management programme, DBKL is now making the effort to raise awareness among city dwellers, using informal mechanisms. This is accomplished through the involvement of non-governmental organisations (NGOs), community based organisations (CBOs), the private sector and the media.

An example of the effort to enhance public cooperation in maintaining the cleanliness of the city is the clean-up campaign to commemorate *Clean-up the World Day*. The event was jointly organised by the CBO, Bangsar Greenspurs, and the NGO, Treat Every Environment Special (TrEES), with the cooperation of DBKL (NST 1997). Apart from cleaning up the Bangsar area, the campaign also involved the collection of items for recycling. The proceeds from the sale of these items were given to charities.

To promote waste reduction in the city, recycling campaigns have been encouraged since the early 1990's. TrEES is working with DBKL and Alam Flora to help educate Malaysians on proper garbage disposal. TrEES also runs 11 ecycling centres which collect glass, paper, plastic and aluminium cans with the support of the private sector (NST 1997). This is a small scale operation collecting about 30 tonnes of material a month. It is anticipated that 30 recycling centres will be set up in the Klang Valley by the end of 1998.

A major daily newspaper, the New Straits Times (NST), has also been encouraging recycling of newspapers in schools over the past few years, as part of the *Newspaper in Education* programme. The programme is carried out in conjunction with the Ministry of Education and sees the active participation of many schools in Kuala Lumpur. It basically involves the collection of old newspapers by schools, where the payment and transportation cost of the paper are borne by the NST. The schools that participate are given media coverage to encourage nation-wide participation.

The measures taken so far to improve resource conservation and promote the 3Rs (reuse, reduce and recycle) have been on an *ad hoc* basis rather than part of a long term comprehensive programme. DBKL and Alam Flora, with strong support from the media, should make a concerted effort to involve more CBOs in the city to participate in a waste reduction programme. In addition, a regular published award should be established for the

best waste reduction programme at the community level. This would go a long way in mobilising public support and increasing environmental awareness in Kuala Lumpur.

STRATEGIC PLANNING AND POLICY INTERVENTIONS: THE CASE OF KUALA LUMPUR

DBKL has established broad goals and objectives and formulated strategies and policies to achieve these goals. The Kuala Lumpur Structure Plan (1984) presents the main planning issues and provides a framework for the preparation of local plans in the context of the policies of the plan.

In their plan to build a dynamic, efficient and commodious city DBKL has adopted ten broad goals, all of which will eventually have a bearing on the quality of the city environment:

- Goal 1: To promote and regulate development to facilitate the implementation of the new economic policy
- Goal 2: To maintain and enhance the role of Kuala Lumpur as the administrative and political centre of the nation
- Goal 3: To facilitate the establishment of Kuala Lumpur as the centre for the promotion of national culture and religion and for the projection of the desired image of Malaysia.
- Goal 4: To maintain and enhance the role of Kuala Lumpur as the commercial and financial centre for regional and international activities.
- Goal 5: To maintain and enhance the city's economy and ensure that economically active residents of all community groups are given opportunities for gainful employment
- Goal 6: To facilitate and encourage the provision of adequate housing of acceptable standards for all income levels
- Goal 7: To provide adequate amenities and facilities for the social and physiological well-being of the city's population taking into cognisance the need to socially integrate the various community groups.
- Goal 8: To achieve the best possible physical structure and arrangement for Kuala Lumpur and to be supported by an efficient transportation system
- Goal 9: To secure the most feasible environmental standards through a judicious balance between development, ecology and national heritage
- Goal 10: To ensure that future development, re-development and growth of the city is adaptable to changing circumstances in the long term.

The policies that have been put forward may be classified according to the following:

- (i) Landscape and Conservation
- (ii) Transportation and Public Utilities
- (iii) Commerce and Industry, and
- (iv) Socio-economic Development

As DBKL has not categorised the policies according to primary and secondary importance, they are presented as they appear in the Structure Plan. It is believed that after more than ten years of implementation DBKL is well poised to review their policies and rank them according to priority.

Landscape and Conservation Policies

Landuse, landscape and conservation policies form an important part of the Kuala Lumpur Structure Plan. With rapid development there is a need to protect and improve the natural features and their intrinsic beauty, landscape and the overall cityscape. At present, the natural features such as the rivers, highlands and mining areas are under constant pressures for development.

Very little attempt has been made to landscape and improve the built environment even in new development projects. The development of major roads and highways has also not taken into consideration the importance of the streetscape and roadside landscaping.

Almost all of the land in Kuala Lumpur has been affected by development. The natural physical environment has been transformed by building and infrastructure developments, mining operations and agricultural development. The remainder consists of vacant land, open spaces, parks, cemeteries and tiny pockets of forest reserves which constitute less than 2.5% of the total land area in the Federal Territory.

The Kuala Lumpur Structure Plan has stated that the overall goal with respect to conservation is 'to secure the most feasible environmental standards through maintaining a judicious balance between development, ecology and natural heritage. The policies promulgated are general in nature to allow a certain amount of flexibility, discretion and ingenuity of the implementation agencies. Table 8.2 shows these policies in relation to the various functions.

Table 8.2. Kuala Lumpur Structure Plan: Landscapes and Conservation Policies

Landscape	POLICY
	<u>Landuse Policies</u>
LCP-1	The authority shall ensure the physical segregation of incompatible
	landuses.
LCP-2	The authority shall promote beautification programmes in residential,
	commercial and industrial areas.
LCP-3	The authority shall ensure high standard of architectural designs for buildings.
	<u>Townscape Policies</u>
LCP-4	The authority shall ensure provision of adequate landscaped buffer
	areas between highways and other built-up areas.
LCP-5	The authority shall intensify the programme of roadside and streetside
	plantings and landscaping of open spaces and recreational areas.
	Environmental Improvement Policies
LCP-6	The authority shall ensure the provision of proper landscaping of
	existing private open spaces and other vacant areas.
LCP-7	The authority shall ensure the landscaping of river reserves and the
	rehabilitation of ex-mining areas.
LCP-8	The authority shall encourage the redevelopment of dilapidated areas in
	the city through urban renewal.
LCP-9	The authority shall ensure that the grouping of incompatible landuses
	or space uses is avoided.
	Natural Environment Policies
LCP-10	Further mining activities in the Federal Territory shall be discouraged.
LCP-11	Provisions shall be made to ensure the preservation of forest reserves,
	other natural vegetated areas and other prominent natural features in the
	Federal Territory.
LCP-12	Developments on land above 120 metres average mean sea-level shall
	be discouraged.
LCP-13	The authority shall consolidate the functions and powers of all agencies
	which are directly concerned with beautification and landscaping of the
	city.
	Built Environment Policies Provisions are made for the process of places and atmosphere of
LPC-14	Provisions are made for the preservation of places and structures of
	historical and architectural significance as well as for the maintenance
	of the spaces and features, that would maintain the character of such
L DC 15	places and structures.
LPC-15	Developments shall be in sympathy to the preserved buildings in their
	proximity.

	Pollution Control Policies
LCP-16	The authority shall discourage and relocate heavy and offensive
	industries in the Federal Territory.
LCP-17	Atmospheric pollution from motor vehicles shall be controlled and
	reduced.
LCP-18	The authority shall ensure that there will be no further discharge of
	untreated domestic waste into the rivers.
	The authority shall ensure the control of sediment discharge into the
LCP-19	rivers and the environment as a whole from mining and earth moving
	operations.
LCP-20	The authority shall ensure the protection of residential areas from noise
	pollution.

Recreation	POLICY
	Quantity Recreational Facility
RF-1	The authority shall ensure that adequate open spaced and lands for
	recreational purposed be provided.
RF-2	Wherever possible the authority shall look into the possibility of
	developing the recreational potential of the river reserves, ex-mining
	lands, the National Electricity Board transmission line reserves and
	areas above 120 metres (approximately 400 feet) mean sea level.
	Quality Recreational Facility
RF-3	The authority shall ensure that the existing open spaces in the
	residential areas be immediately improved and maintained.
RF-4	The authority shall ensure that open space lands be provided in
	conformity with a range of functional requirements.
RF-5	The authority shall provide a continuous network of open space system.

Conservation

All areas of Kuala Lumpur are protected by a series of laws, some formulated decades ago to ensure that small hills and forest reserves in the city are conserved and protected from soil erosion and that the water catchment areas remained undisturbed. Some were enacted to protect and conserve old buildings as national heritage.

Among the laws are Land Conservation Act 1960, Environmental Quality Act 1974, Town and Country Planning Act 1976 and National Forestry Act 1984, which are federal. The Federal Territory Planning Act 1982 is solely for Kuala Lumpur. The Land Conservation Act 1960 was meant to consolidate the law relating to conservation of hill land and protection of soil from erosion. It also covers the mitigating processes involved in land clearing during land conversion. The National Forestry Act 1984 was a legal

instrument to administer, manage and conserve forests. Under Section 12, where any land is excised as a permanent forest reserve, the authority is supposed to constitute an approximately equal area of land as a permanent forest if it is satisfied that the forest is necessary for soil and water conservation and for other environmental considerations. Of course, for Kuala Lumpur it is impossible to reconstitute any forest for the excised forest. What the authority can do now is just to minimise the remaining forest excision. In all circumstances, excision of lands from the status of permanent reserved forest can only be done in the following ways:

- i) if the forest is no longer required for the purpose it was classified; and
- ii) if the land is required for economic use higher that that for which it is being utilised.

The declassification or reclassification of such areas has been done in many instances. The second option is considered very detrimental to the urban green because it is very easy to justify that all other landuses can yield economic returns.

The Environmental Quality Act 1974 was amended in 1986 to introduce a new section, i.e. Section 34A, which requires an Environmental Impact Assessment to be carried out for certain prescribed activities. The activities specified include logging or conversion of forest land to other land use, hotel development covering an area of 50 ha or more and housing development covering an area of 50 ha or more. Despite this, the Sungai Putih Forest Reserve, which is a wildlife reserve near Cheras was cleared without the appropriate approval of the authorities concerned.

One of the pertinent question asked is: does the depletion of urban green in Kuala Lumpur decrease the quality of life of its population? The answers vary from one community to another. To the city squatters a more reasonable type of dwellings such as high rise flats are more important than any form urban greens while to the developers urban green are considered uneconomic. On the other hand, many urban dwellers regard high rise buildings as an eye sore. It is here that DBKL will have to balance the landuse patterns and utilisation so as to reflect the desire to make Kuala Lumpur a garden city for all. At present there are many idle plots of land which are kept by their owners for future property speculation. It is desirable for DBKL to convert all these idle lands into parks to compensate for the depleted urban green.

In the light of the ever-increasing depletion of the urban green it is appropriate that all

the forest reserves, nature parks and theme parks in Kuala Lumpur be put under one board for conservation and management. While implementing the high-rise building projects DBKL should strictly implement the rule to set aside 40% of the land of a given unit area as open space of lungs area for landscaping and tree planting as this is required in the Federal Territory Planning Act 1982.

Environmental Quality

The policies clearly recognise the problem of atmospheric, noise and water pollution. For example, in terms of air pollution the policy calls for control and reduction of vehicle emission. However, as this is actually determined by a national policy which is not yet in place, its implementation is dependent on external factors and the practicability of the policy is questionable. Meanwhile, it has been stated in the chapter on management that air pollution can be reduced by traffic limitations techniques and it appears that some of these are incorporated in the policies under transportation. Hence, some amount of success of the policies from the Structure Plan in curbing air pollution expected.

What should not be forgotten is that part of the pollution problem in Kuala Lumpur is the haze which is a regional problem. International cooperation has been initiated to mitigate the problem. Due to the nature of the problem which directly impacted on the public, the haze received almost immediate attention. National and regional initiatives particularly by the three most affected countries --- Malaysia, Indonesia and Singapore --- were formally instituted in December, 1997 through ASEAN. Three objectives were identified:

- (1) To prevent land and forest fires through better management policies and enforcement:
- (2) To establish operational mechanisms to monitor land and forest fires; and
- (3) To strengthen regional land and forest-fire fighting capability and other mitigating measures.

In addition, preventive measures were also defined to help ASEAN countries to develop national plans to prevent and mitigate forest fires including curbing activities leading to land and forest fires, controlling emissions from mobile and stationary sources, and prohibiting open burning and strict control of slash-and-burn practices. This is, of course, *a plan* and *a commitment* made by three ASEAN countries that were badly affected by the haze in 1997.

It is not legally binding. The earnestness of the commitment to implement the action plan will be crucial in determining whether the plan can actually work in practice.

Water pollution is addressed by the reference to prohibition of discharge of untreated domestic waste and control of sediment discharge. The policy also calls for protection against noise pollution.

Transportation and Public Utility Policies

Public utilities have a great impact on city life. The major power failure in the Peninsula in 1993 impacted the urban areas far worse that the rural areas which are less dependent on air-conditioning, manufacturing and recreational activities etc.

Transport is also a vital ingredient of city life. When transportation services stop, city activities will come to a grinding halt. Maintaining the smooth running of all the transportation sectors, public and private included, entail comprehensive public policies. Table 8.3 lists the transportation and utilities policies adopted by DBKL.

Transportation

With regard to public transportation, Barter (The Star 1998) has said that the traffic congestion in Kuala Lumpur has created a vicious cycle for public transportation. With buses stuck in traffic and a poor cycling environment, the worse the congestion gets, the less attractive public transport and cycling become. So more people try to switch to private transport if they can. The problem can only be solved by implementing policies which discourage peak hour travel by car, such as high cost of parking. Because such measures are unpopular, revenue from this should ideally go into improving public transportation so that there is justification for the extra charges added.

Despite the construction of new roads and infrastructure, traffic will certainly get worse unless private vehicle ownership slows down. Many cities have stopped building new expressways because new roads do not relieve congestion and after a few years, they actually cause more traffic.

Public Utilities and Services

With respect to waste management, a successful waste management policy must include recycling (Wolbeck 1983). Other important considerations which should be included are all the processes related to waste generation on top of utilisation and disposal of primary

and secondary materials. Only a comprehensive approach will serve to avoid inadequate coordination of individual measures, the occurrence of undesirable problem shifting and disputable economic allocations of public and private investments and initiatives. The essential prerequisites for effective waste management system include the formulation of a comprehensive legislation, allowing for stringent control of waste disposal practices, strong competent authorities and proper cost allocation, the utilisation of reliable organisational and technical concepts, sound financial arrangements involving collection of fees and levies, revenue from resource recycling and subsidies, public awareness and participation as well as robust infrastructure (Metzger 1983).

At the moment such a comprehensive waste management policy is absent in Malaysia and this issue has to be addressed first to strengthen municipal solid waste management. Incidents of defective buildings sited over formerly reclaimed waste disposal sites, which posed a serious hazard to its occupants (Tan 1986), highlight the need for a waste management policy that also monitors the reclamation of former dump-sites. Such sites are ill-suited for the conventional type of development, unless proper geotechnical measures are taken.

In 1979, the Committee on the Management of Solid Waste and Hazardous Material was formed to advise the Director-General of the DOE regarding waste management aspects. There were three task forces formed under this committee whose work focused on the development of a recommended code of practice for disposal of solid waste on land, evaluating the suitability of existing technology on treatment of solid waste and hazardous material with reference to the Malaysian context, as well as other aspects of solid waste management. An outcome of this effort was a decision to treat the issues of municipal solid waste separately from that of toxic and hazardous waste.

In the case of toxic and hazardous waste disposal, at least two subsequent studies were carried out on the management and policy guidelines for disposal of hazardous wastes in Malaysia. For solid waste disposal, DBKL invited a Japanese firm to study the state of solid waste disposal in Kuala Lumpur and to propose a treatment plant for the city in 1982. Unfortunately the cost of setting up an incinerator for Kuala Lumpur was too prohibitive. Other strategic studies carried out by the government recommended the privatisation of the municipal solid waste and sewerage services and the setting up of a privatised facility for toxic and hazardous waste to improve environmental management and generate the amount of investment required (GOM 1996). The various studies that

were carried out shaped the management and policies that are in existence today.

Table 8.3: Transportation and Public Utility Policies

Transportation	POLICY
	Overall Transport Policy
TP-1	A bus and LRT system shall be the major future public transport
	system to handle future traffic demands in the Federal Territory and
	its urban conurbation
	Public Transport Policies
TP-2	A physical and financial study on the feasibility of the LRT system
	shall be undertaken.
TP-3	Bus-only lanes, bus-only right turns and clearway zones shall be
	provided in the congested corridors and road within the central
	planning area.
TP-4	Bus services shall be developed with maximum penetration into new
	growth centres. It shall also be developed to be the principal means
	of servicing the internal circulation of the new growth centres, and to
	play an important feeder role to the LRT.
TP-5	Provision shall be made for proper modal interchange facilities in
	the new growth centres.
TP-6	Metropolitan Kuala Lumpur urban bus services shall be separated
	from inter-city rural services.
TP-7	Short-term actions to improve public transport, i.e. route coverage
	improvement, better service frequency, higher capacity stages buses
	etc. shall be carried out.
TP-8	Mini buses shall serve on routes where demand entails small
	capacity buses and provide feeder services to the LRT.
TP-9	A single body under The Ministry of Federal Territory shall be set
	up to administer, regulate and plan for public transport in the Federal
	Territory and its urban conurbation.
TP-10	Consolidation of the existing eight stage bus companies into smaller
	number of operating groups shall be carried out.

	Traffic Management Policies
TP-11	A private vehicle restraint programme shall be undertaken to
	improve the central planning area traffic circulation.
TP-12	The total supply of parking facilities in the central planning area
	shall be controlled by DBKL.
TP-13	The rates charged on all parking facilities in the central planning
	area whether public or private shall be controlled by DBKL.
TP-14	All-day parking shall be discouraged through the imposition of high
	parking charges. A pricing structure shall be formulated so as to
	encourage short-term use of the parking facilities.
TP-15	The area licensing scheme shall be held in abeyance.
	Highway and Road Development Policies
TP-16	A clearly defined hierarchy of roads shall be developed for the
11 10	Federal Territory.
TP-17	Major road improvements to facilitate traffic circulation in the
	Federal Territory shall be carried out.
TP-18	New roads shall be constructed to serve new growth centres.

Public	POLICY
Utilities	
	General Public Utility Policies
PUP-1	The authority shall advise and cooperate with the National Electricity
	Board, Telecommunications Departments, Waterworks Department,
	Drainage and Irrigation Department in City Hall to ensure that public
	utility services are adequately provided for in the federal territory.
PUP-2	In new growth centres, the authority shall advise and cooperate with the
	various public utility agencies to ensure that public utility services are
	properly planned, programmed and implemented.
PUP-3	The authority shall ensure that all public utility programmes in the
	federal territory are implemented and constructed with minimum
	disruptions and inconveniences to the general public
	Water Supply and Sewerage Policies
PUP-4	The authority shall liaise closely with the Selangor state government
	and other agencies concerned, with regard to the provision of adequate
	supply of treated water for the federal territory.
PUP-5	Adequate water supply shall be provided for fire-fighting purposes.
	All domestic effluents shall be suitably treated before discharge into the
	rivers.
PUP-6	Night soil buckets system shall be eliminated by 1990.

Drainage and Flood Mitigation Policies

PUP-7	The risk of flash and river flooding shall be minimised.
PUP-8	The authority shall look into the possibility of introducing other uses
	for the drainage reserves.
PUP-9	Provision shall be made to use some of the former ex-mining ponds as
	retention ponds to alleviate flooding in the federal territory.
PUP-10	The authority shall work closely with the Selangor state government
	and the Drainage and Irrigation Department with regard to the
	implementation of major river improvement works in the federal
	territory
	Solid Waste Policies
PUP-11	An efficient solid waste collection and disposal service shall be
	provided
PUP-12	The authority shall look into the feasibility of using the incinerator as a
	mean of refuse disposal in the federal territory.

Commerce and Industry Policies

Essential to the survival of any city are its commerce and industry, the two main attractions of the city. The rural-urban migration to Kuala Lumpur is motivated by the prospect of employment and the attainment of wealth. With the call for greater involvement of the private sector in its development of the city, commercial needs and interests must be adequately met. DBKL has outlined its policies, according to Commercial Services, Central Planning Area and Industry, all of which are contained in Table 8.4.

The commercial aspects pertain to providing for the "diverse needs of a wide variety of commercial and service activities and to facilitate the availability of such services and facilities in convenient locations for the residential population". The goal is also to provide adequate spaces both in the central area and its surrounds for business activities, in line with the projected use and employment in these sectors.

The wholesale/retail floorspace has increased from 3 million square metre in 1990 to 4.5 million square metres by the year 2000, office floorspace is close reaching a glut and many office buildings remain empty. With the move of the central government to the new administration centre at Putrajaya in Sepang, the situation will worsen.

Industry is the largest employer in Kuala Lumpur. This sector requires land which needs to be properly zoned to avoid adverse environmental impacts. Licenses and permits as well as environmental policies as outlined under land and conservation are amongst the other policy interventions to mitigate environmental degradation.

Table 8.4 Commerce and Industry Policies

Commerce	POLICY
	<u>Overall Policy</u>
CSP-1	The authority shall ensure that facilities and space for commerce,
	shopping and service activities are adequately provided to cater for the
	needs of the population and employment.
CSP-2	The facilities and spaced shall be dispersed to the sub-centres according
	to the hierarchy which has been established in the selected strategy.
	Shopping and Retail
CSP-3	The authority shall encourage a comprehensive approach towards
	commercial developments in the central planning area and the other
	urban centres
CSP-4	"Ribbon" shophouse developments along major trunk roads shall be
	discouraged.
CSP-5	The authority shall undertake the review of the traditional shophouse
	developments to allow for new design concepts for shopping premises
	such as "Pedestrian Oriented Planning", and mixed commercial and
	residential complexes.
CSP-6	The authority shall make provisions for the establishment of regulated
	hawker areas in residential areas and urban centres.
CSP-7	Possible sites in existing built-up areas particularly in the city centre
	shall be identified and developed by the authority for hawkers.
CSP-8	New areas for hawking shall be encouraged in private commercial
	complex developments in the city centre and other urban centres.
CSP-9	Areas for hawkers shall be provided for residential developments.
CSP-10	The authority shall monitor the availability of hawker premises and
	control the expansion of itinerant and unlicensed hawkers.
	Office and Hotel Development
CSP-11	The authority shall promote the establishment of sub-regional offices
	for private businesses and public administration in the urban centres.
CSP-12	The authority shall maintain the role of the city centre in
	accommodating international class hotels.
	<u>Miscellaneous</u>
CSP-13	The authority shall ensure that the establishment of the various service
	activities will not be compatible with one another.
CSP-14	The authority shall assist all government agencies which are involved
	in the promotion of the Bumiputera participation in the urban economic
	and business activities.
CSP-15	The authority shall ensure at least 30% participation of Bumiputera in
	major commercial developments in Kuala Lumpur.

Central	
Planning	POLICY
Area	
THOU	City Centre Development
CDD 1	
CPP-1	The authority shall regulate development so as to strike a desirable
	balance of developments between the city centre and other urban
	centres in the Federal Territory and the Klang Valley region.
	National Economy Policy
CPP-2	The authority shall give priority to developments which facilitate the
	implementation of the New Economic Policy.
CPP-3	The authority shall ensure at least 30% Bumiputera participation not
	only in development of commercial premises but also in the ownership
	of and the activities carried out at the premises.
CPP-4	Programmes for the development of more Bumiputera Entrepreneurs
	and Developers shall be intensified.
CPP-5	In the overall development of the city central consideration shall be
	given to facilitate the development of Kampung Baharu
	Size and Function
CPP-6	The development of the central planning area shall be monitored to
CPP-0	ensure the development of other urban centres.
CDD 7	The authority shall encourage the establishment of special precincts for
CPP-7	1 1
	banking, financial and exclusive office establishments in the central
	planning area.
GDD 0	Social and Cultural
CPP-8	The development of places for civic and cultural uses in the city centre
	shall be intensified.
CPP-9	The promotion of culture, arts and crafts in the city centre shall be
	encouraged.
	Hotel and Residential Development
CPP-10	The development of first class international hotels be encouraged in the
	city centre to support Kuala Lumpur as an international business centre
	and promotion of tourism.
CPP-11	The authority shall encourage more residential development in the
	central planning areas.
CPP-12	The role of the private and public sector in the provision of low-cost
	housing in the central planning area shall be intensified.
	Residential community facilities shall be provided in the central
	planning area.
	<u>Environmental</u>
CPP-13	Aspects of townscape and effects on the overall urban character shall
	be taken into consideration.
CPP-14	The authority shall give priority to the development of a
	comprehensive pedestrian network system in the city.
CPP-15	The existing natural features in the city centre shall be protected.
C11-1J	simble similar similar only control ordination protection.

Industry	POLICY
	National Economic Policy
IP-1	The authority shall ensure at least 30% of the industrial lots and spaced
	developed by the private sectors as allocated to the Bumiputera
	entrepreneurs.
IP-2	The public sectors shall develop new industrial areas in the new growth
	centres to allow more opportunities for the Bumiputera entrepreneurs.
IP-3	The authority shall provide for the growth of labour intensive, repair
	and service industries.
	<u>Industrial Land Policies</u>
IP-4	The authority shall rationalise the "unclassified" industrial land with a
	view to relocating or upgrading the industrial establishments.
IP-5	The authority shall regulate the expansion of industrial developments in
	the federal authority.
IP-6	The authority shall encourage a variety of types of industrial premises
	to promote diversity and to maximise the use of land.

Socio-Economic Development Policies

The ultimate aim of commerce and industry as well as landscape and conservation policies is to advance the development of the city dweller. Policies pertaining specifically to ensuring the health, safety and comfort of the city population are essential in maintaining the vitality of the city. DBKL addressees this concern in their Housing, Squatters and Community services policies. These are found in Table 8.5.

The major socio-economic issues identified in the Plan are rapid population increase and inadequate housing. These, together with shortcomings in public and private transport and piecemeal development, have led to a declining quality of the environment and life, and exacerbated by inadequate facilities for leisure and recreation.

A growing young population also requires the city planners to seriously look into housing and, an otherwise less important, the issue of leisure and recreation.

Table 8.5: Socio-economic Development Policies

Squatters	POLICY
	Squatters Housing Policy
SP-1	The authority shall provide housing to squatter households.
SP-2	Studies on individual squatter settlements shall be carried out.
SP-3	Development plans, implementation programmes and schedules for the
	development of selected squatter areas shall be prepared.
SP-4	Squatter improvement exercise shall be carried out in areas not targeted
	for immediate development.
SP-5	The authority shall continuously take action to eliminate squatter
	landlords.
	Income Policy
SP-6	The authority shall intensify efforts to increase the real income of the
	squatters.
SP-7	The authority shall set up a permanent squatter department to deal with
	all squatter related problems and to co-ordinate programmes for
	squatters.
SP-8	Existing social and community programmes shall be intensified.

Community	POLICY
Services	
	Poverty eradication
CS-1	The authority shall facilitate the training of skills of the new migrants
	and low income groups.
CS-2	The authority shall facilitate and foster community development
	projects in the federal territory.
CS-3	The authority shall provide subsidies and facilitate its provision to the
	lower income group.
	<u>Racial Unity</u>
CS-4	The authority shall ensure that there is a balanced and ethnic mix in the
	residential areas.
CS-5	The authority shall ensure that the design of residential areas promote
	closer interaction among residents and the provision of physical
	facilities to promote such interactions.
	Community Facilities
CS-6	The authority shall ensure that the distribution of community facilities
	and services reflect the local needs and demands.
CS-7	The authority shall ensure social services are being adequately and
	effectively delivered to the population served.
CS-8	The authority shall co-ordinate and integrate the provision of the social
	facilities and services in the federal territory.
CS-9	The authority shall assist to locate facilities in convenient locations.

Housing	Policy
	<u>Overall Policy</u>
HP-1	The authority shall develop and maintain a comprehensive and
	coordinated housing development programme aimed at balancing
	housing supply and demand.
HP-2	The authority shall ensure that the range of housing in terms of type,
	size and cost reflects the needs and affordability of the population.
HP-3	The authority shall ensure that sufficient land be zoned for residential
HP-4	use.
	The authority shall ensure that all developments that have been given
	approvals are implemented within a reasonable time period.
	Low Cost Housing
HP-5	The authority shall ensure that 30% to 50% of the total residential units
	developed by the private sector be low-cost units.
HP-6	The authority shall determine the types of low-cost houses to be built
	by the private sectors.
HP-7	The sales and transfers of low-cost houses built by the private sector
	shall be undertaken by a central agency managed by the authority.
	<u>Redevelopment</u>
HP-8	The authority shall continue to provide housing for rental at subsidised
HP-9	rate.
	The authority shall encourage the improvement and re-development of
	dilapidated housing.
	<u>Environment</u>
HP-10	The authority shall promote and encourage a high standard of
	residential environment.
HP-11	The authority shall ensure that residential areas be free from
	incompatible uses.

BUILDING INSTITUTIONAL CAPACITY

Capacity building and the human research development that goes with it are among the essential steps that need to be taken to ensure there is a learned and growing capacity to effectively and efficiently manage the urban environment. Policy efforts should focus on upgrading local technical and management capabilities and on establishing cooperative arrangements for dealing with the environmental spillovers that cities generate. In particular, attention should be given to upgrading the operational management. Capacity should also be improved in the areas of strategic planning, municipal finance, housing finance, land management, and poverty alleviation.

CLOSING THE KNOWLEDGE GAP

Policies in this area emphasise routine collection, assessment, use, and dissemination of critical (and usually scarce) data. Informed environmental analysis based on adequate data serves several functions. Used by government officials, such knowledge improves policy making and the management of urban environmental services. It also informs political consensus-building and institutional strengthening efforts. Both public and private actors involved in managing the urban environment, therefore, should strengthen their ability to routinely collect, assess, use, and disseminate the various types of data required for carrying out their environmental management responsibilities. Improving information and understanding also means expanding curricula on the scientific, technical, and managerial aspects of urban environmental services and land management.

In the early 1970's a study was carried out to solve social and economic problems that prevailed in the Klang Valley during that period (GOM 1973) where an extensive amount of data was obtained. This data was used in the attempt to improve and extend public services, especially drainage and sewerage, promote greater collaboration between State and Federal agencies in guiding and implementing development, and create an effective process of continuing planning activities capable of directing and responding to social and economic changes. One of the main recommendations in the report was the establishment of a planning and coordinating organisation for the development of the Klang Valley as a whole, to improve the decision-making process.

Another detailed study carried out in the mid-1980's focused on the environment, looking at the overall management, legislation, responsibility of the authorities (GOM 1986). The study also identified gaps that were causing environmental problems in the Klang Valley and sought comprehensive solutions to overcome them. A recommendation was made to set up a Klang Valley Secretariat to improve the overall planning and environmental management. Since then, a Klang Valley Planning Council was set up, assisted by a secretariat based in the Prime Ministers Department, to formulate policies and strategies for the overall development of this region. In 1997, the Klang Valley Planning Secretariat (KVPS) was combined with the Federal territory Development Division, as part of the civil service trimming exercise. This led to the establishment of a new organisation, the Federal Territory Development and Klang Valley Planning Division (FTDKVPD) in the Prime Minister's Department. The basic objectives and functions of the KVPS and FTDD has now become that of the FTDKVPD. The objective of the FTDKVPD is to ensure the efficient development of the Federal territory of Kuala Lumpur

and the Federal territory of Labuan in line with the government's policies and aspiration, as well as to plan, evaluate and coordinate regional development in the Klang Valley.

IMPLICATIONS FOR APEC COOPERATION

The joint statement of the Eighth APEC Ministerial Meeting declared several APEC Action Programmes, one of them being the Economic and Technical Cooperation Programme. The Ministers agreed that activities and technical cooperation in APEC must be goal-oriented and that activities have specific milestones and performance criteria. They gave priority to joint cooperative activities which (1) develop human capital, (2) develop stable, safe and efficient capital market, (3) strengthen economic infrastructure, (4) harness technologies for the future, (5) safeguard the quality of life through environmentally-sound growth, and (6) develop and strengthen the dynamism of SMEs. Ministers also emphasised the need for collaborative efforts between the private/business sector and the public sector in the development and implementation of economic and technical cooperation activities in APEC. These resolutions are useful as the basis of cooperation in APEC.

Economic and Technical Cooperation

Several subjects covered by various Working Groups under the Economic and Technical Cooperation Programme are relevant:

Human Resource Development

This is essential for building institutional capacity in managing the urban environment.

Industrial Science and Technology

With many industries still sited in Kuala Lumpur and Klang Valley the development of clean technologies can be usefully applied to our industries.

Small and Medium Enterprises

Making up the backbone of industry in Klang Valley, they are the major industrial contributor to pollution in the valley but also provide employment.

Energy

As energy utilisation leads to many economic, social and environmental issues, strategies developed by the Working Group to reduce the impacts of such utilisation in an urban area will be of relevance. Such issues include the reduction of the use of fossil fuel for vehicles,

energy saving in buildings etc.

Transportation

Given the severe traffic congestion problems in Kuala Lumpur, the work of the Working Group will assist in the Kuala Lumpur urban transport management system.

Tourism

The Klang Valley enjoys a high rate of tourism and still contains some areas suitable for ecotourism. The findings of the Working Group will be of relevance.

Trade and Investment Data and Trade Promotion

As Kuala Lumpur is the hub of commercial activities, the Working Groups' efforts towards development of the database system will be of great value.

Sustainable Development

Of particular interest is the Canadian proposal for an APEC Sustainable Cities Detailed Programme of Action (June 11, 1997). The details as proposed offer an attractive and usable framework for viewing the problems of a growing city.

Also under the Economic and Technical Cooperation is the work on Food, Energy, Environment, Economic Growth, and Population (FEEEP). The APEC FEEEP discussion paper (October 17, 1996) offers a framework for analysis similar to that of Brundtland Commission. Within this framework development is not measured in terms of GDP alone. A country's stock of renewable and non-renewable resources as well as its social harmony are considered 'assets' that underpin long-term welfare. Steps that were suggested which include cleaning the environment and broadening the basis for prosperity as a means of creating welfare gains are all part of the Malaysian Vision 2020.

THE NATIONAL POLICY FRAMEWORK

This chapter draws attention to the complexity of environmental policies in an urban setting. In Kuala Lumpur, and as elsewhere, these are closely linked to the socio-economic and population factors. Any attempt to draw up effective planning and management policies for urban areas will have to first of all understand the city as an interacting system. However, it is also important to appreciate its linkages with the outside, hence some policies need to be vested at the national level.

Such understanding provides a basis for developing an explicit National

Urbanisation Policy (and Strategy) within which innovative and effective local solutions can evolve. A National Urbanisation Policy could provide a set of goals and priorities for the development of an acceptable urban system network in which the large, intermediate, and small centres can be planned. Within such a framework, the traditional tools of urban strategy including land use planning and pollution control could stand a better chance of being effective.

Also within the context of national linkages is the need to address the geohazard problem of the city from a national standpoint. The multi-sectoral and multi-disciplinary nature of the events require an integrated policy for management and control. The several disasters that have occurred have shown that the systems in place are inadequate in handling them, particularly in the Klang Valley. For this purpose, a National Policy on Disaster Management is necessary. Such a policy will have to look into the setting up of a national disaster management body which has the primary task of looking at all disasters in terms of research, prediction, management and control. The primary aim should not be to respond to an event but rather to prevent it.

As stated earlier, air pollution problems in the city are the result of automobiles. A policy to reduce vehicular emissions requires national commitment and can only be handled at that level. Similarly, the alleviation of the regional haze problem is only possible through international cooperation.

CONCLUDING REMARKS

A city council does not have an infinite amount of resources to combat the multitude of problems it faces. But solve them it must and this can be done through political will, public support and judicious balance of priorities in the economic, environmental and social sectors. We can and should save our city. President John F. Kennedy once said "We will neglect our cities to our peril. For in neglecting them we neglect the nation."

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