

Chapter 7: Infrastructure Development in Malaysia

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Abstract

At independence Malaysia inherited a reasonably well-developed set of infrastructure facilities. The Government built on the initial stock of infrastructure and all categories of infrastructure have since expanded manifold and facilities have also been modernised. By and large the Malaysian Government has succeeded in meeting the growing demand for infrastructure. The Government has also made considerable progress in making infrastructure available in the less developed parts of the country. The development of infrastructure has required very large investments. The infrastructure sector has received the largest share of public sector development expenditure in every one of the Malaysia Plans. However from the early 1990s because of resource constraints faced by the public sector, among other reasons, the Government has encouraged and facilitated private sector participation in infrastructure development. In the more recent period the private sector has been investing more in infrastructure than the public sector. In spite of the success achieved in the development of infrastructure there are many areas where policy formulation and implementation can be improved. The formulation of medium-term plans for all segments of the infrastructure sector is one area where the Government needs to act. Such plans will help avoid ad hoc project selection. There should also be a clearer specification of the areas for private sector participation in infrastructure development and all privatisation exercises should be through an open tender bidding process. Also more rigorous project evaluation is necessary to avoid

costly project failures. Other areas for improvement include better monitoring of performance of service providers. A new policy also needs to be formulated to promote public transport in urban areas. Finally, the development of infrastructure in the less developed parts of the country should be accorded higher priority.

1. INTRODUCTION

This report contains a summary of the main findings on infrastructure development in Malaysia. It also provides a set of recommendations on how infrastructure planning and development in Malaysia can be improved.

2. SUMMARY OF FINDINGS

This section summarises the important aspects of the development of infrastructure in Malaysia. The discussion covers the period 1966-2005 which coincides with the three decades from the First Malaysia Plan (1966-70) to the Eighth Malaysia Plan (2001-2005).

2.1. Background

Three aspects to the Malaysian economy continue to have an important influence on infrastructure development in the country, these being the growth performance of the economy, the physical make-up of the country and the socio-economic disparities between the different parts of the country. These three matters have had to be taken into

consideration in the formulation of infrastructure policies and allocation of resources for infrastructure development.

2.1.1. Growth performance

Since independence the Malaysian economy has been growing at a fairly rapid pace. In most years the growth rate has ranged between 5-9 per cent a year. As a result per capita income in the country in 2005 had risen to RM18, 040 from RM960 in 1966. The present average income in Malaysia, equal to about USD5154, places it in the category of middle-income countries of the world. The structure of the economy has also changed from being heavily dependent on the primary sectors, of agriculture and mining, to one in which manufacturing and services are the main contributors to national output, employment and export earnings. An important feature of the Malaysian economy is its heavy dependence on external trade. The country's economic well-being is to a large extent tied to the performance of its exports in international markets.

Massive investments for the development and modernisation of infrastructure facilities were clearly required not only to cope with the demands of a rapidly expanding economy but also to ensure that the country's competitiveness in global markets was not compromised for lack of good quality infrastructure.

2.1.2. Physical components

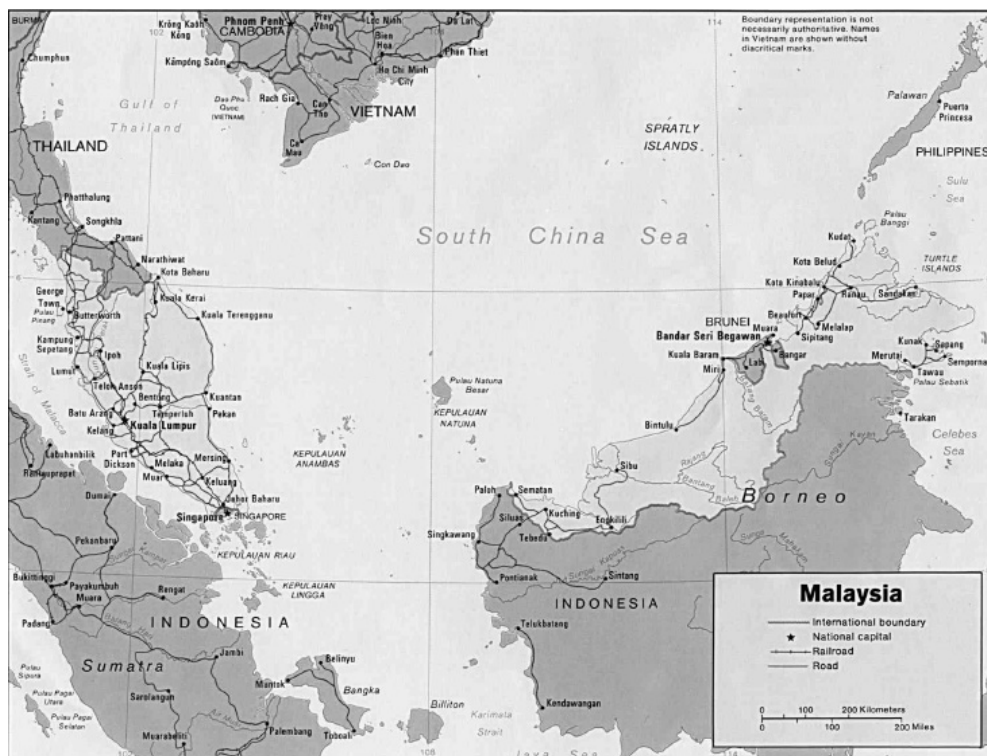
Malaysia consists of two physical components, these being Peninsular Malaysia and Sabah/Sarawak. The latter two states are on the island of Borneo. (Figure 1) Because

there is no contiguity between Peninsular Malaysia and the two states of Sabah and Sarawak, from the perspective of infrastructure planning Malaysia does not constitute a single entity. Each component part thus has to be treated as a separate physical entity, which complicates transport planning and development.

2.1.3. Socio-economic disparities

There are wide disparities between the levels of development of the different parts of the country. The west coast of Peninsular Malaysia has been and remains much more developed than the other parts of the country. The west coast states of Peninsular Malaysia are also more densely populated than the east coast states and Sabah and Sarawak.

Figure 1: The Map of Malaysia



The socio-economic differences have had to be considered by the Government in formulating its infrastructure development policy

2.2. Objectives in infrastructure development

Two motives have shaped the scale and pattern of the infrastructure development strategies of the Malaysian Government. The first is the recognition that infrastructure is vital for the economic development of the country. In this regard the objective of the Malaysian Government is to expand infrastructure facilities to keep abreast of the growing demand for infrastructure arising from the growth and transformation of the economy. The avoidance of infrastructure shortages is thus a paramount aim of the Government. Meeting the growing demand for infrastructure from the modern sectors of the economy, including the external sector, is not the only objective driving the Malaysian Government's infrastructure policy. A second aim is to develop infrastructure to serve socio-economic ends. Here the focus is on providing infrastructure to promote the development of the less developed regions of the country, including rural areas. Improving the accessibility of these regions to markets is intended to bring about a more balanced development of the country and redress economic disparities.

2.3. Investment in infrastructure facilities

At independence Malaysia had a reasonably good set of infrastructure facilities. The distribution of facilities, however, was uneven with some parts of the country better endowed than others. The Malaysian Government built on the initial stock of

infrastructure, expanding and modernising infrastructure facilities and at the same time addressing the infrastructure inadequacies of the less developed regions of the country.

Because of the importance of infrastructure for economic development and for alleviating poverty, the Government of Malaysia continues to give the highest priority to infrastructure development. This is evident from the following:

(i) Infrastructure has received the largest share of public sector development expenditure in the Malaysia Plans. The amount of resources earmarked for infrastructure development has generally increased from one Malaysia Plan to the next and often by very significant amounts. By way of illustration, in the First Malaysia Plan (1966-70) the amount spent on infrastructure was RM1,387.9 million. In the eighth Malaysia Plan the corresponding amount was forty-six times higher at RM RM64,128.2 million

(ii) Total investment by the Malaysian Government on infrastructure development over the last thirty years (1966-2005) was RM209,696 million, which at the current exchange rate is equal to USD63,627 million.

(iii) From the early 1990s public sector investment in infrastructure has been supplemented by investment from the private sector. The Government's privatisation policy has facilitated private participation in infrastructure development and management. Under the policy there has been divestiture in the equity of state-owned enterprises such as Klang Port, Telecom Malaysia and the electricity utility company,

Tenaga Nasional. Greenfield projects under various types of contractual arrangements between the Government and private sector have also been sanctioned. (The North-South Expressway and Tanjung Pelepas Port are examples of numerous BOT projects in the infrastructure sector). Over the period of the last few Malaysia Plans, the private sector, including Government-linked companies, have been investing more in infrastructure than the Government.

(iv) As a proportion of GDP investment in infrastructure has been very high, ranging between a low of 1.9 per cent in the Second Malaysia Plan and a high ratio of 9.4 in the Seventh Malaysia Plan.

(v) Transport has been the biggest recipient of investment in infrastructure. Within the transport sector most of the investment has gone into the construction of roads. Other infrastructure segments have also received sizeable investments in capacity expansion and modernisation. More recently the electricity and telecommunications industries have seen massive increases in investments.

(vi) While most of the investment in infrastructure has gone into meeting the demand for infrastructure from the modern economic sectors of the economy, mostly located in the west coast states of Peninsular Malaysia, growing amounts are also being invested in the less developed parts of the country to achieve socio-economic objectives of poverty eradication and balanced regional development. The rural roads programme and the pursuit of universal service provision in the supply of electricity and

telecommunications services are examples of developing infrastructure in the rural areas and less developed regions of the country.

2.4. Growth of infrastructure stock and capacities

The resources invested in physical infrastructure in Malaysia have contributed to the growth and modernisation of various categories of infrastructure in the country. (Table 1) The following illustrate the rapid expansion of infrastructure facilities in the country.

2.4.1. Roads

In 1966 the network of roads in Malaysia was 15 thousand km. By 2005 the total length of roads in the country had increased almost six-fold to over 85 thousand km. The main inter-city roads in Peninsular Malaysia are now mostly two or multiple-lane dual carriageways. The 869 km North-South Expressway from Johor Baru in the south of Peninsular Malaysia to Padang Besar on the Thai border in the north is a multi-lane dual carriageway road and is an example of the huge improvements to the road network of the country. Many of the inter-city highways and also urban roads have been developed by the private sector as BOT projects and are toll roads.

2.4.2. Rail

Rail transport is a very minor mode of transport in Malaysia. With the size of the inter-city rail network only about two per cent of the road system the small share of rail

in the transport of freight and passengers is not unexpected. However, the role of rail in the country's transport system is set to grow. In the latest Malaysia Plans the Government has indicated its intention to develop rail transport to play a larger role in both inter-city and urban transport. The main inter-city rail line of KTMB, from Johor Baru in the south to Padang Besar on the Thai border in the north, is now being double-tracked and electrified. The urban rail system in Kuala Lumpur is in the process of being expanded and new urban railways will be constructed in other towns in the country.

2.4.3. Ports

Because of the development of new ports (such as Port of Tanjung Pelepas and West Port) and the construction of additional berths at existing terminals, the ports sector of the country has undergone a massive expansion in capacity. The terminals have also been modernised to handle new cargo types and bigger vessels. The expansion of port facilities is evident from the fact that total cargo handling capacity of Malaysian ports rose from 25.5 million tonnes in 1980 to 443.3 million tonnes in 2005. In the past two decades the development of the ports sector has been largely financed by the private sector.

Table 1: Malaysia infrastructure growth, 1965-2005

Infrastructure Sub-Sector	1965	2005
Roads		
Total Length of Roads (km)	15,256	87,025
Paved	12,464	67,851
Gravel	2,107	15,989
Earth	785	3,185
Distribution of Roads (%)		
Peninsular Malaysia	79.8	68.6
Sabah	12.1	18.8
Sarawak	8.1	12.6
Railways		
Length of Railway Tracks (km)		
KTMB	1,600	1,667
Sabah Railways	131	131
Urban Railways	-	121.6
Ports		
Number of Major Ports	2	8
Number of Dry Cargo Berths	19	233
Telecommunications		
Number of Telephone Subscribers	107,000	4,400,000
Telephones per 100 population	1	16.6
Electricity		
Electricity Generation Capacity (MW)	336	19,217

2.4.4. Telecommunications

The physical expansion of the telecommunications sector has been very rapid. The penetration rate of fixed lines went up from 1 per cent of population to 16.6 per cent between 1966 and 2005. Cellular phone penetration rate went up from 21.8 per cent in 2000 to 74.1 per cent in 2005. Internet subscriptions have also risen sharply. Internet dial-up subscriptions went up from 1.7 million in year 2000 to 3.7 million in 2005. In the case of broadband in 2005 there were about 0.5 million subscribers. In the more recent period, the development of basic telecommunications and the introduction of new products have been largely financed by the private sector.

2.4.5. Electricity

In the electricity industry too there has been substantial expansion. Generation capacity increased from 336 MW in 1966 to 19 thousand MW in 2005. Private sector IPPs are now the main sources of the increase in generation capacity. Transmission and distribution capacities have also risen substantially. An important indicator of the growth of the electricity is the big increase in the rural electrification coverage in Peninsular Malaysia as well as in Sabah and Sarawak. This is part of the Government's policy to extend infrastructure to the rural areas of the country.

2.5. Infrastructure expansion plans

The current horizon for the development of infrastructure in Malaysia is the Ninth Malaysia Plan period of 2006-2010. There are no development plans for infrastructure

beyond 2010. During the Ninth Malaysia Plan public sector investment in infrastructure is projected to be RM41.6 billion, an increase of about 15 per cent over the RM36.2 billion invested during the Eighth Malaysia Plan. Private sector resources will supplement public sector investment in infrastructure. How much the private sector will invest in infrastructure during the Ninth Plan period up to 2010 cannot be ascertained but going by past experience the amount of private sector investment in infrastructure will almost certainly exceed the RM41.6 billion to be spent by the Government.

Even though the total investment in infrastructure up to 2010, inclusive of investment by the private sector, is not known, indications are that capacity expansion and sector modernisation will continue unabated. There will also be some important changes in priorities. The following highlight the expected growth and development of infrastructure up to 2010.

2.5.1. Roads

Roads are the primary mode of domestic transport, accounting for well over nine-tenths of all passenger and freight traffic in the country. Although no details are available on the road expansion plans of the Government up to 2010 the road network will, as during other Plans, grow substantially in the course of the Ninth Malaysia Plan. The inter-urban roads in the more developed parts of the country would, wherever it is deemed financially feasible, be developed by the private sector. The Government in turn will concentrate on the development of rural roads and construct roads to link the less developed parts of the country to the main network of inter urban highways.

2.5.2. Rail

After a long period of limited investment in KTMB, the inter-city railway operator in Peninsular Malaysia, its infrastructure is now being expanded and modernised. Specifically, a programme to double-track and electrify the entire west coast line of KTMB is underway. Upon completion KTMB will be in a much better position to compete for passenger and freight traffic along the most important transport corridor in the country. Similarly, the improvements underway to the small Sabah Railways will allow it to play a bigger role in its hinterland. The introduction of rail systems in the capital city of Kuala Lumpur in the 1990s and the planned expansion of the network as well as new systems in other urban conurbations in the country suggest an important shift in the Government's urban transport policy. In an area long dominated by road transport, there are now clear indications that rail will play a more important role in the development of public transport facilities in the larger cities in the country.

2.5.3. Ports

No new ports are being planned in the country under the Ninth Plan. The focus will be on the expansion and modernisation of existing ports, especially those catering to the country's foreign trade and mainline operators. There will be substantial investment in the expansion of terminals, most of which will be financed by the private sector. The cargo handling capacity of Malaysian ports is expected to increase from 443.3 million tonnes in 2005 to 570.0 million tonnes at the end of the Ninth Malaysia Plan in 2010. This is a 28.6 per cent increase within a five-year period. The importance of the external

sector to the economy is clearly reflected in the projected growth of the ports sector.

2.5.4. Telecommunications

The growth in the telecommunications sector will be in the cellular and internet segments. Cellular subscriptions are expected to increase from 19.5 million to 24.4 million between 2005 and 2010, raising the penetration rate of cellular phones in the country from 74.1 per cent to 85.0 per cent. Subscriptions to the internet are expected to increase rapidly. Dial-up subscriptions are projected to increase from 3.7 million in 2005 to 10.0 million in 2010, the penetration rate thus going up from 13.9 per cent to 35.0 per cent. Internet broadband subscriptions are forecasted to increase seven-fold within five years from 0.5 million subscriptions in 2005 to 3.7 million subscriptions in 2010.

2.5.5. Electricity

Electricity generation capacity of the country is projected to increase by 31.4 per cent from 19,217 MW in 2005 to 25,258 MW in 2010. Substantial improvements are also expected in rural electrification coverage. Nation-wide the rural electrification coverage, already high at 92.9 per cent, is forecasted to increase to 95.1 per cent. Sabah and Sarawak, which have the lowest rural electrification coverage rates, will see significant improvements. In the case of Sabah the percentage will increase from 72.8 per cent in 2005 to 80.6 per cent in 2010. In Sarawak rural coverage is planned to improve from 80.8 per cent to 89.6 per cent between 2005 and 2010.

2.5.6. Water sector

Water supply is already quite well developed in Malaysia. Water supply coverage is projected to further increase from 95.0 per cent in 2005 to 96.8 per cent in 2010. The rural areas will see big improvement in water supply coverage, from 92.0 per cent in 2005 to 95.2 per cent in 2010.

3. POLICY RECOMMENDATIONS

By and large the Malaysian Government has been quite successful in the development of infrastructure in the country. The better-developed parts of the country have seen their infrastructure facilities expanded and upgraded continuously and they have seldom had to contend with infrastructure shortages. Economic development of the country has not been impaired for lack of infrastructure. The country's external sector too has benefited from the availability of modern infrastructure facilities. Also in the context of the physical make-up of the country and the inequalities between its different components, the Government has also made considerable progress in extending infrastructure to the poorer sections of society and the less developed parts of the country.

Notwithstanding the successes in the development and modernisation of infrastructure, there are a number of shortcomings in the Government's infrastructure development policy and in its implementation. The following highlight the areas of concern and suggest how the shortcoming in the Malaysia Government's infrastructure policy could be rectified.

3.1. Planning for infrastructure development

The Economic Planning Unit (EPU) of the Prime Minister's Department is the central agency largely responsible for infrastructure planning. The National Implementation Task Force chaired by the Prime Minister oversees implementation of projects. In the five-year planning cycle of the Malaysia Plans, the EPU finalises infrastructure projects for inclusion in the Malaysia Plans. The projects are identified by the line ministries and prioritised by them in accordance with availability of resources and allocation of resources ascertained by the EPU. The selection of projects, however, is not done within the context of long-term sector plans. On the contrary, except for the roads sector, which has a master plan for road development, other infrastructure ministries do not have long-term or even medium-term sector plans. For this reason there is a danger that project selection is ad hoc in nature. Projects are also not subjected to rigorous evaluation. Under the conditions that obtain now it is difficult to achieve integrated infrastructure planning.

To ensure optimum and efficient utilisation of resources, the EPU should require line ministries responsible for infrastructure to develop medium-term plans of ten-year duration. Clearly these should be continuously updated to remain relevant. And the EPU should scrutinise not only the medium-term plans of the relevant ministries for consistency and integration with other infrastructure sectors, it should also evaluate all infrastructure projects proposed by the ministries in the context of the medium-term plan of the ministry concerned.

3.2. Role of public and private sectors in infrastructure

Whilst private sector participation has contributed much to the development of infrastructure in the country, the areas for private sector involvement are not clearly indicated in the Malaysia Plans or elsewhere. A clearer demarcation of the areas for public sector involvement and those segments that should be available for private participation will facilitate the development of infrastructure in a comprehensive and transparent fashion, allowing the public sector to concentrate on infrastructure facilities it is best able to develop and the private sector to build those facilities it can undertake.

Within the infrastructure plans of the ministries, the EPU, in consultation with the ministries, should classify the projects for public sector development and those for the private sector to undertake. This would also prevent dubious infrastructure project proposals by the private sector.

3.3. Improvement of efficiency

Many privatised suppliers of infrastructure services enjoy considerable market power. Ports and the privatised utility companies – Tenaga Nasional and Telekom Malaysia - are examples of service providers who possess significant monopoly power. In such cases mechanisms have to be put in place so that their considerable market power is not used to exploit consumers or to conceal operational inefficiencies.

To improve the efficiency of the suppliers of infrastructure service the Government

should create regulatory mechanisms or authorities to, among others, monitor the performance of the operators. These agencies should and also be vested with the power to impose penalties for failure to meet performance standards. The performance standards should be in the form of Key Performance Indicators (KPIs). As of now such mechanisms have not been put in place in many segments of the infrastructure sector.

3.4. Evaluation of project proposals

Infrastructure projects proposed by Government agencies and also those proposed by the private sector have often not been subjected to rigorous scrutiny and evaluation. The result has been project failures and stranded facilities. There are numerous examples to illustrate this point. First, there is the case of the branch line of KTMB to PTP whose utilisation is exceedingly low (currently about 3 trains per week compared to the projected 10 trains a day). Likewise, some BOT road projects (like the Seremban – Port Dickson Highway) were rendered financially unsustainable and were rescued by the Government. Even more glaring has been the failure of all three urban rail transit systems in KL – the STAR and PURTA lines and the KL Monorail system – that also had to be taken over by the Government and are now owned by Prasarana (the Government-owned infrastructure company) and operated by Rapid KL, a subsidiary of Prasarana. One lesson to be learnt from the failures of the private sector initiated projects and their subsequent rescue by the Government is that because the allocation of risk is highly inequitable, there is a tendency towards undertaking adventurous projects of dubious viability. The willingness of the Government to take over failed projects and compensate the private sector parties fully also raises issues of moral hazard.

Infrastructure projects, most of which are large and long lasting, must be subjected to rigorous appraisal and evaluation. This is a responsibility ultimately of the EPU

3.5. Terms and conditions of private participation in infrastructure.

The growth and modernisation of infrastructure in the country would not have occurred without the participation of the private sector. However, private participation in infrastructure has not been an unmitigated success. There are a number of issues here. First, the Government allows the private sector to initiate projects and submit unsolicited proposals. The Government also approves projects through direct negotiations with private sector parties. Private sector participation in infrastructure in Malaysia has seldom been through a tender exercise from which the best candidate to develop and manage the infrastructure facility is selected. Second, there is no assurance in the contracting process that project development costs are minimised. For these reasons the efficacy of many privatised projects has been compromised. One consequence is that user fees on infrastructure have often been higher than they need have been. Development costs also would have been lower had the awards been made via a tender exercise. Many privatised road projects in Malaysia have been criticised on account of this and the Government has been accused of ignoring user interests in the award of contracts. Similar criticisms have been levelled at the IPP licences where the Power Purchase Agreements (PPAs) have included “take or pay” clauses and purchase prices were much higher than if the IPPs were awarded on a tender bid basis. The manner in which the private sector is inducted into the infrastructure sector also allows

for political favouritism and “cronyism”.

Unless infrastructure projects to the private sector – be it sale of equity of SOEs or development of greenfield projects – are awarded through a transparent open tender process there is always a high probability of large scale efficiency losses.

3.6. Infrastructure for socio-economic development

The more developed parts of the country, the west coast of Peninsular Malaysia being the prime example, have been the biggest beneficiaries of infrastructure development. It is also true that the less developed parts of the country have not been ignored. In fact considerable progress has been made in the development of infrastructure for the less developed regions of the country. But many shortcomings still prevail in the supply of infrastructure for the poorer parts of the country. The supply of electricity to rural households, for example, ought to be much higher than it is now, even though considerable progress has been made. Another area of concern is water supply. Although the coverage on the whole is quite high, there are still many households without potable water supply. Likewise, sewerage service coverage should be much higher than it is now. Roads are another category of infrastructure that could be better developed in the less developed parts of the country. For one thing, too high a percentage of roads in the rural areas are unpaved and are instead gravel and earth roads. A more serious failure is the absence of a good inter-urban network of roads in both Sabah and Sarawak. The major road networks in both the states are still two-lane single carriageways and therefore of limited capacities.

With the private sector willing to finance those infrastructure facilities that are able to pay their way, such as urban roads and ports, the Government should concentrate its resources and make a concerted effort on developing the infrastructure for the less developed regions of the country.

3.7. Role of rail and public transport

Rail is now a very small player in the transport markets of the country. Concerns about the environment, fuel efficiency and safety have, however, have combined to create new opportunities for rail transport in both the inter-city transport markets and in urban areas. The small size of the country and the fact that most traffic markets are unlikely to generate large traffic flows mean that rail may not be financially viable in many of the country's transport markets. But while rail operations may not be financially sustainable it does not obviate the case for rail. What is required is that competition between rail and road transport is on a level playing field. This situation does not now obtain in the country. The appropriate policy response is to ensure that road users are made to pay the full social cost of road transport, including the cost of all negative externalities. This will improve the prospects for rail transport. In the event, and for whatever reason, it is not possible to charge road users full social cost then a subsidy for rail operations is justified.

Subsidies for rail transport, if economically justified, should be provided. Subsidies should, however, be made available in a transparent manner and properly targeted and

its administration should not undermine firm level efficiency. In the urban transport markets, rail should be integrated with other modes of public transport.

3.8. Urban infrastructure development policy.

Cities in Malaysia experience serious levels of congestion and high levels of pollution from the emissions of road vehicles. Government policy has been slow to respond to these challenges. The Government has continued to cater for the growing volume of journeys by private vehicles by building new roads, expanding existing ones and constructing ring roads. This policy of continuously accommodating ever-increasing volumes of traffic is no longer tenable and a new urban transport policy is imperative. This policy must recognise the limited space for road infrastructure in urban areas. In any event the private car should be made to adjust to the city and not vice versa.

The Government needs to focus on the development of public transport infrastructure and services. Also land use decisions in cities should take into account the implications on the transport sector. Finally, road users must be required to pay the full marginal social cost of travel on urban roads through a system of congestion prices. If the latter option is not possible or feasible, then properly tailored subsidies to public transport are justified.

3.9. Reduce wastages and excess capacity

In some infrastructure segments there is a great deal of wastage. An example is in the water sector where the level of non-revenue water is very high. Old and leaking pipes

are one reason whilst water theft is another explanation. In the electricity sector the problem is an uneconomically high level of reserve margin. There is also theft in the electricity industry. In both these examples the losses are serious. Some roads, including some privatised ones, too have turned out to be in excess of needs. Part of the explanation for the excess capacity and wastage is poor planning on the part of the Government and also lack of enforcement.

Better planning and modern technology can reduce the resource wastage. Also more stringent enforcement can help minimise losses from theft of water and electricity.

3.10. User fees for infrastructure

Currently the Government regulates user fees for many infrastructure services. Even where there are contractual arrangements for upward revision of user fees, such as in the case of toll roads, the Government has often stopped the operators from raising toll rates on the due dates, compensating them for the delay in the revision of toll rates. In the electricity sector there are “pass through” provisions but the Government has often compelled Tenaga Nasional, a Government-linked company, to delay the imposition of higher tariffs. The reasons for the control of user fees are both political and economic. In the latter case the impact of high user fees on price levels remains a concern of the Government. However, the failure to allow prices to be adjusted to take into account increases in input costs can in the long run force service providers to cut back on maintenance and delay expansion and modernisation of facilities. At the extreme, their entire operations may be rendered unsustainable.

The Government needs to formulate a rational policy on the issue of prices for the use of infrastructure services. A mechanism needs to be put in place to assess, in a scientific manner, all requests from service providers for tariff increases. The mechanism should also allow for the views of consumer groups to be heard. The policy should encompass all infrastructure sectors, from the transport industries to the utilities.