

ROAD DEVELOPMENT IN FIVE MALAYSIAN PLAN, 1966-1990

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Abstract

The road network is an important factor in the development especially for developing countries. This article examines the road development in the Malaysian Plan from 1966 until 1990. Malaysia implements the development plan through various five year short plans known as the First Malaysia Plan, Second Malaysia Plan, Third Malaysia Plan, Fourth Malaysia Plan and Fifth Malaysia Plan. Road development reach a new insight and connects more people across the country. Malaysia's achievement in developing the road infrastructure include a road numbering system, privatisation roads and the length of road where it can reach more destinations in Malaysia. This article uses a qualitative approach in writing and analysing the document sources obtained from the National Archives of Malaysia such as official files of the Malaysia Plan, General Transport/Railway Study for Peninsular Malaysia, newspapers and other secondary sources. The finding shows that road network in Malaysia grew about 63 445 km in 1990 from 13 505 miles (approximately 21 734.19 km) in 1970. This figure shows that Malaysian government constructed more road infrastructure for a good system of transportation for the people.

Keywords: *Road, Development, Transportation, Malaysia Plan, Infrastructure*

Introduction

A road network is a crucial infrastructure that powers various real-life applications such as transportation, mobility, logistics, and urban development.¹ It consists of interconnected roads represented as a network of edges (road segments) and nodes (junctions) in major cities and metropolises worldwide.² Nowadays, it can be seen that Malaysia's infrastructure is improving every day due to the growth and economic development that has been accelerated in recent times.³ The Malaysian government has been committed to the development of road infrastructure since achieving independence. Various policies have been established to improve road infrastructure in Malaysia. The Government has embarked on various initiatives to improve connectivity and accessibility of roads across the country. Therefore, this study discusses road developments in the Five Malaysian Plan that was established starting with the First Malaysia Plan (1966-1970), the Second Malaysia Plan (1971-1975), the Third Malaysia Plan (1976-1980), the Fourth Malaysia Plan (1981-1985) and the Fifth Malaysia Plan (1986-1990).

Background of Road Development

During the British rule in Malaya, the Public Works Department (PWD) was established in 1872 as a responsible body to build and develop infrastructure for economic and social development including improvement of road infrastructure in Malaysia. The first officer appointed to head the PWD was the former Colonial Engineer of the Straits Settlements,

Major J. FA McNair.⁴ PWD functions as a Technical Agency by providing technical advisory services to the government at the Federal, State and District levels. The third responsibility is to plan, design, manage and supervise infrastructure such as roads, government buildings, airports and jetties. The PWD is also a government body that implements infrastructure development and maintenance projects for various Ministries of departments, statutory bodies and state governments. Last but not least, to be a leader in the areas of asset management, project management and engineering excellence.⁵ Based on this function, it is clear that the establishment of the PWD has an important responsibility in the development of the road network in Malaysia.

From the role played by PWD, the government took the initiative and provided support for infrastructure development in the Five Malaysian Plans in Malaysia from 1966 to 1990. These initiatives include investments in transport networks, communication systems, and public utilities. Government efforts to develop infrastructure aimed at improving connectivity, facilitating trade and investment, and improving overall economic productivity. These infrastructure development projects create jobs, stimulate economic growth, and improve the living conditions of the population. Moreover, the development of the road can improve connectivity, reduce congestion, facilitate the transportation of goods, and support economic growth.

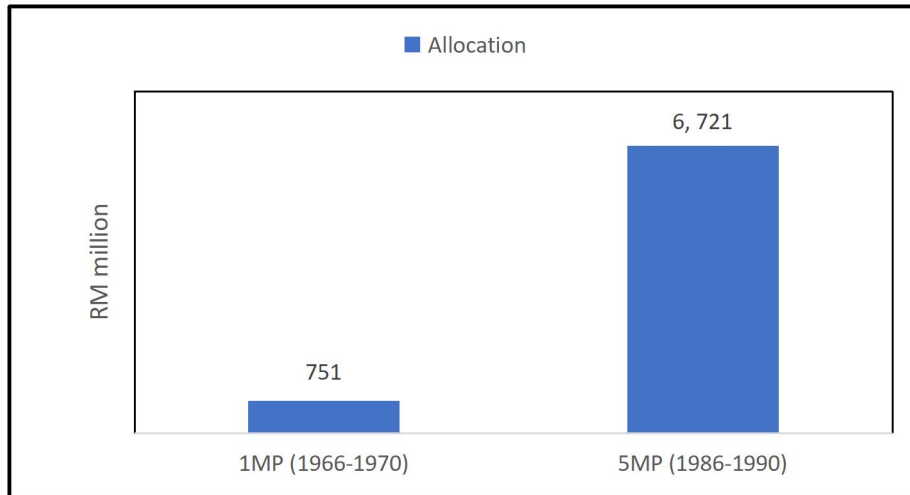
The two main motives have shaped the scale and pattern of the Malaysian Government's infrastructure development strategy.⁶ The first is the recognition that infrastructure is important for the development of the country's economy. In this regard, the objective of the Government of Malaysia is to expand infrastructure facilities to keep up with the growing demand for infrastructure as a result of economic growth and transformation. Therefore, avoiding infrastructure shortages is the Government's main goal. The second goal is to develop infrastructure to meet socio-economic needs. The government's focus on infrastructure development is also aimed at bridging the gap between urban and rural areas by improving transport and communication networks in rural areas. This support for infrastructure development plays an important role in driving economic growth and promoting national unity. It helps create fairer economic opportunities and benefits, especially for rural and disadvantaged communities with the opening of new areas to implement land development projects. Several major infrastructure projects have been initiated to support economic development.

Among them are four projects outlined to extract expenditure for the development of infrastructure in the planning⁷ 1) The construction of new roads will provide connectivity to the areas where the land will be developed and the settlers will be located, 2) Improving roads, especially roads that connect important production areas to ports, markets and sources of raw material supply, 3) The development of ports, airports and related facilities as well as plans to increase the number of ships belonging to the national shipping company and, 4) Improving the efficiency of the railway system to meet the expected increase in traffic needs especially the transportation of bulk charcoal.

This planning shows that infrastructure development plays vital role as one of the country's development projects. Malaysia launched various road construction projects. These projects not only increase accessibility between urban and rural, but also facilitate the trade and travel of residents. Areas with better access to major roads have higher levels of consumption expenditure per person and lower levels of poverty. Therefore, some allocations of expenditure were given by the government to develop road infrastructure. These

infrastructure expenditures are issued to carry out construction, repair, and development of road, port, airport, and railway infrastructure projects. This infrastructure development expenditure increased as the growth of the road network in Malaysia from the First Malaysia Plan (1MP) to the Fifth Malaysia Plan (5MP).

Chart 1: Allocation of Road Development in 1MP and 5MP



Source: Taken and adjust from *The First Malaysia Plan 1966-1970*, <https://www.pmo.gov.my/dokumenattached/RMK/RMK1.pdf> (date accessed 29 January 2024) and The National Archives of Malaysia, *Malaysian Roads – General Information 1995*.

Based on Chart 1, there has been a significant increase in the allocation of road development under the Road Development Plan in the 1MP to 5MP by the federal government. In the 1MP, the approved allocation was RM 751 million, and it increased to RM 6, 721 million in the 5MP.⁸ This is a clear sign of the government's commitment to developing road infrastructure in the country. A large increase in the fund allows the implementation of large and extensive projects, including the construction of new roads, the improvement of existing roads, as well as the development of more complex junctions and intersections.

The Federal Government also conducts studies for the construction of new roads by identifying road capacity, terrain and more. For example, Yusoff Ibrahim Sehu is the engineer responsible for researching and providing reports on the construction of Federal Road 1 from Ayer Hitam to Tampoi. The findings of this study cover the study area, the economy that can be developed around the study area, road traffic and the use of the road.⁹ Apart from various road construction projects, the government also introduced a road numbering system for the convenience of road users.

Road Numbering

The Federal Road is divided into 7 categories according to the road numbering system launched in 1989 by General Tan Sri Talha Mohamed Hashim, Director of JKR at that time.¹⁰ The numbering system was developed to avoid confusion for road users, making it easier for users to get to know the road more easily. The spokesmen of JKR said that with the system it was less likely that motorists would get lost or be confused by road signs. “Instead of having

to remember the names of towns along the way, they only have to refer to the route number shown on the signboards to ensure that they are on the right track.”¹¹

A total of RM3 million was spent in 1989 to introduce the numbering system by raising signage along the Federal Road.¹² The route number is displayed on the destination signage (i.e. the initial sign to the exit or the next junction in front), direction sign (at intersections or multi-storey intersections), distance signs, information signs (informing road users of the name of the river, town and village, availability of facilities or services, etc.) and post kilometre markers.

At the initial stage, a numbering system is implemented on the Main Federal Road with numbers ranging from one to ten. Route One covers Jalan Bukit Kayu Hitam, Kedah to Johor Bharu. Route Two starts from Port Klang to Kuantan and route three from Johor Bharu (along the east coast) to Kota Bharu, Kelantan. The East-West Expressway from Grik, Perak to Gong Kedah in Kelantan is route four. Taking route five, road users can get from Ipoh (along the west coast) via Setiawan, Kuala Selangor, Port Dickson, Melaka and Muar to Johor Bharu. Route six is the Penang Road, while route seven starts from Alor Star to Padang Besar. Route eight passes through Bentong to Kota Bharu. Route nine involves road users from Tampin, Negeri Sembilan via Kuala Pilah and Simpang Pertang to Karak, Pahang. Route ten starts from Gemas, Negeri Sembilan via Rompin and Bahau to Temerloh, Pahang.¹³ This route one to ten was then known as Federal Road 1 to Federal Road 10.

First Malaysia Plan (1MP) 1966-1970

By 1966, Malaysia was experiencing remarkable development as a result of the implementation of the First Malaya Plan (1956-1960) and the Second Malaya Plan (1961-1965). Despite having achieved independence, efforts to close the poverty gap and advance the nation's economy continued with the next Five-Year Development Plan, which was the First Malaysia Plan (1MP) 1966-1970. The 1MP was a development plan involving all states in Malaya, including Sabah and Sarawak, which had joined to form Malaysia.

The 1MP was Malaysia's effort to achieve modernization and rapid infrastructure development. The aim of the 1MP was to address economic and social problems existing in Malaysia.¹⁴ The ten outlined objectives of the 1MP covered various aspects such as economic progress, economic diversification, racial harmony, population and family planning, employment opportunities, rural development, public education, the opening of new industrial areas, infrastructure development, and social welfare. The 1MP would consolidate past advancements and initiate new efforts toward these objectives.

One of the main focuses of the 1MP was the development of physical infrastructure, including roads, railways, airports, and public transportation systems. Two measures were taken to ensure that the development of the transportation system could be coordinated to meet long-term objectives. The first measure was to conduct a survey on transportation resources, particularly the main modes of transportation, which were roads and railways. The second measure addressed the development of resources and transportation in the Bornean states. The results of this survey would form the basis for more effective transportation planning in the future.¹⁵

In 1968, the Malaysian Transport Study (MTS) became the basis for transportation policy for the remaining two years of the plan (1969-1970) and for the formation of the

Second Malaysia Plan. The study would address all aspects of transportation development for the next seven years. The draft MTS report for the period under review called for more consistent policies in the transportation sector aimed at providing transportation for the country at the lowest possible economic cost. It recommended an ambitious investment program, policy changes, and improvements in fact-finding, research, analysis, and planning.¹⁶

Through this Five-Year Development Plan, the Public Works Department (PWD) successfully completed a large number of public infrastructure projects by the end of the IMP. Among PWD's achievements in 1966 were the completion of 740 classrooms and 201 teachers' quarters, as well as the maintenance of bridges, hospitals, government buildings, police stations, Kuala Lumpur airport, and others.¹⁷ JKR also fully opened the Pekan/Batu Balek Road for public use after the final works were completed in 1966. Additionally, road construction and maintenance projects under the Federal Land Development Authority (FELDA) were carried out, covering areas such as Lubok Merbau, Ulu Tebrau, Kulai, the road leading to Kulai Complex, Teloi Kanan, Bukit Jaler, Sungai Kelamah, Kemaman, and Cherlok.¹⁸

Table 1: Malaysia: Public Development Expenses for Transport and Communications, 1961-1970 (RM million)

	1961-1965 (budget)	1966-1970 (target)	% change
Total	877	751	-14
Main components			
Transport	747	546	-27
Transportation	130	205	+58
Regional Components			
Malay Peninsula	702	522	-26
Negeri Borneo	175	229	+31

Source: Table 9.1 in *The First Malaysia Plan 1966-1970*,
<https://www.pmo.gov.my/dokumenattached/RMK/RMK1.pdf> (date accessed 29 January 2024)

Based on Table 1, the Federal Government allocated a total expenditure for public development for the transportation and communication systems under the Five-Year Development Plan. The total expenditure for the transportation component of RM 546 million for 1966-1970 was reduced by 27% compared to the expenditure of RM 747 million for 1961-1965. The reduction in transportation expenditure, which included road systems, railways, and airports in Malaysia, was due to facilities that were already well built and maintained. Meanwhile, the communication component experienced an increase of 58% from RM 130 million to RM 205 million, as the communication systems in Sabah and Sarawak, which had newly joined Malaysia, did not develop as rapidly compared to the transportation system.

The current road network system is centered around three main corridors consisting of the following roads: Route I spans Peninsular Malaysia along the West Coast from the north-south direction from the Thailand border at Bukit Kayu Hitam to the border with Singapore at Johor Bahru. The Klang Port-Kuala Lumpur-Kuantan Highway or Route II, operating from

the east-west direction, provides transportation links between the East Coast and the West Coast of Peninsular Malaysia. Route III runs along the East Coast from the north-south direction from the Thailand border at Rantau Panjang through Kota Bharu to Johor. These three roads are the main transportation routes that integrate the states in Peninsular Malaysia.¹⁹

The rapid construction of roads in Peninsular Malaysia was influenced by a significant increase in the registration of motor vehicles. By the end of 1965, there were approximately 400,000 motor vehicles in Malaya, including more than 160,000 passenger cars, 3,700 buses, 42,000 lorries, and 175,000 motorcycles. Over the past five years, motorcycles and other vehicles increased at annual rates of about 30% and 10%, respectively.²⁰ The road network increased during 1MP to 13 505 miles in both West and East Malaysia in 1970 from 11 240 miles in 1965. This increased show that the relationship between the number of vehicles and road development is closely related. The more vehicles used by residents and businesses in an area, the higher the demand for good and safe roads. This means that as the number of vehicles increases, the pressure to develop and maintain better roads also increases. This enabled Malaysia to continue making improvements to its road network system.

The 1MP was a significant milestone in Malaysia's history, emphasizing the development of infrastructure, economy, education, and health. Through substantial investments in development projects, Malaysia succeeded in enhancing modernization and economic growth. The construction of roads, ports, airports, and improvements in the agricultural and industrial sectors spurred economic growth. This also created job opportunities and improved the standard of living for the people. The 1MP provided a strong foundation for the nation's development in the coming decades and set the stage for subsequent Malaysia plans. It demonstrated the Malaysian government's commitment to propelling the country to a higher level in terms of economy, infrastructure, and the standard of living for its people. Former Malaysian Prime Minister Tun Dr. Mahathir Mohamad stated that:

“I truly believe that a developed nation is not just about having a strong economy but also providing accessible and affordable transport services that will make real differences to people’s lives.”²¹

Reflecting on the speech delivered by Tun Dr. Mahathir Mohamad, developing countries need good infrastructure that is easily accessible to all citizens. Infrastructure facilities can transform the lives of people, especially those who cannot afford to buy private vehicles but can use public amenities such as bus services, rental cars, and other public transportation to travel from one place to another on the build road network.

Second Malaysia Plan (2MP) 1971-1975

The Second Malaysia Plan (hereafter 2MP), which spanned from 1971 to 1975, was an important phase in Malaysia's development. As far as the 2MP is concerned, development in Malaysia is on the right track. The rapid progress was made as a result of the planning of the First Malaya Plan, the Second Malaya Plan and the First Malaysia Plan. Through the previous plan, the growth of output and high production power managed to improve the standard of living with the increase in employment and labour opportunities.

Thus, during the 2MP period, the focus shifted to infrastructure development, aimed at eradicating poverty and bridging the gap between rural and urban areas. The 2MP emphasizes the importance of economic growth and social development to improve the standard of living of the people. The plan aims to enhance various sectors such as agriculture, rural development, housing, industry, education, healthcare and other services as well as promote the growth of transport and connectivity networks. Under the 2MP, significant investments were made in developing infrastructure to support industrialisation and manufacturing. These include the construction of highways, ports, airports, and communication networks to facilitate trade and economic growth.

The development of new economic areas in Peninsular Malaysia is important in stimulating economic growth and reducing regional gaps. This economic centre not only attracts investment and industrial activities but also provides employment opportunities to the rural population, thus contributing to the eradication of poverty. The 2MP, implemented from 1971 to 1975, has a strong emphasis on infrastructure development as a way to eradicate poverty and bridge the gap between rural and urban areas. In Peninsular Malaysia, a basic transportation and connectivity system is in place but with the increasing population, these facilities need to be expanded and improved to meet the growing demand.

In the 2MP, a review of the progress from the implementation of the 1MP was carried out to see the effectiveness and success of the implementation of the 1MP in the development of road infrastructure in Peninsular Malaysia. A total of RM 515.4 million of actual expenditure was incurred for the improvement and public development for transportation and connectivity where this expenditure consumed 98.8% of the allocation funds presented in the 1MP which is RM 521.9. In the road transport sector, an expenditure of RM 161.3 million was used against an allocation of RM 245.5 million.²² Based on the amount presented, the actual expenditure is somewhat less than the allocation issued. This is because there are some inescapable things such as lack of skilled manpower in carrying out the project, poor preparation before implementing the project, major projects that require a thorough study need to be presented in advance and the delay of deliberate implementation as it awaits the results of the Malaysian Transport Survey.²³

The 1MP recorded an impressive road development. At the end of the 1MP, 1970, a length of 10 832 miles equivalent to 17 432.41 km of road network in West Malaysia was recorded, with a percentage of 47% of roads repaired. An increase of 14% of the road network system from 1965 to 1970 was achieved. The number of vehicles also increased by 69% with 395 100 vehicles in 1965 increasing to 669 100 total vehicles registered in 1970. These vehicles include private motorcycles, motorcars, taxis and rental cars, buses, trucks, vans and others.

However, this growth still has room to be improved and further boost the economy of the people in Malaysia. Roads have an important role in the transportation system in Malaysia. The increase in vehicles indicates an increase in economic activity leading to the demand for better transport infrastructure. Therefore, it is estimated that in the 2MP, 9% to 12% of road improvements and improvements will be implemented for the years 1971 to 1975.²⁴ In addition, the Malaysian Transport Survey provides data that approximately 30% of the federal road network system is still at a low quality level in terms of road building materials, road area and direction. The damaged road surface is also affected during major floods which cause damage to the road infrastructure.

Based on the data released by the Malaysian Transport Survey, maintenance and improvement efforts are actively undertaken. The Public Works Department (JKR) Kelantan has carried out road improvement projects including Jalan Pengkalan Chepa Batu 2, Jalan Pengkalan Chepa Batu 3, Jalan Kota Bharu/ Pasir Puteh, Jalan Kota Bharu/ Kuala Krai, Jalan Tanah Merah/ Batu Melintang and Jalan Pasir Puteh/ Machang.²⁵ These areas are among the road maintenance projects approved for implementation within the 2MP period. Expenditure for road maintenance in Kelantan in 1971 was recorded at RM 1 462 582.47 with maintenance of 151.43 miles of Federal Road, 365.90 miles of State Road and 696 miles of Jalan Felda.²⁶

The East-West Road (now known as the East Coast Highway) is one of the largest road infrastructure projects in Malaysia especially during the 2MP. The East-West Highway connects the West Coast and the East Coast of Peninsular Malaysia. The project is implemented to improve the road of inter-regional linkages in Malaysia, enhance regional economic growth, and increase accessibility and mobility of people and goods. In addition, this link is an infrastructure development effort in the hope of accelerating development efforts in the East Coast area, and the interior of the region. The main plan in the early stages of the construction of the East Coast Road was to connect Jeli in Kelantan with Kampung Kuala Rui in Perak.²⁷ Thus, the Transport and Communication sector was one of the key sectors in Malaysia's five-year plan, the 2MP and continued to be implemented in the Third Malaysia Plan (3MP) from 1976 until 1980.

Third Malaysia Plan (3MP) 1976-1980

The Third Malaya Plan (hereafter 3MP), which spanned from 1976 to 1980, is an important chapter in the history of Malaysia's development journey. During this period, the Malaysian government, under the leadership of the Second Prime Minister, Tun Haji Abdul Razak bin Hussein and the Third Prime Minister, Tun Hussein Onn, outlined a comprehensive action plan aimed at driving the country into a new era of progress and prosperity. After its independence in 1957, Malaysia faced many challenges that required strategic planning and wise economic policies. The 3MP emerged as a robust response to these challenges, steering the country towards socioeconomic stability and sustainable growth. The 3MP is committed to diversifying the economy, reducing reliance on petroleum and gas revenues. This plan emphasises on the development of key sectors such as agriculture, industry and services, fostering a more resilient and balanced economic landscape. By investing in infrastructure development, including roads, airports, and ports, the government aims to improve connectivity, and facilitate efficient transportation and trade.

The objective of the transportation and communication development programme under the 3MP is to consolidate and improvise existing facilities and services to meet the needs of social and economic development.²⁸ The capacity of transport and communication facilities in the West Coast of Peninsular Malaysia, although well developed, will be enhanced and upgraded, to meet traffic requirements. On the other hand, in the East Coast States, the rapid pace of land development and the expansion of urban and industrial growth projects will require good road construction and upgrading of transportation facilities. Compared to the 2MP which has four main goals in infrastructure development, the 3MP lists seven programmes that are important in the overall development strategy.²⁹

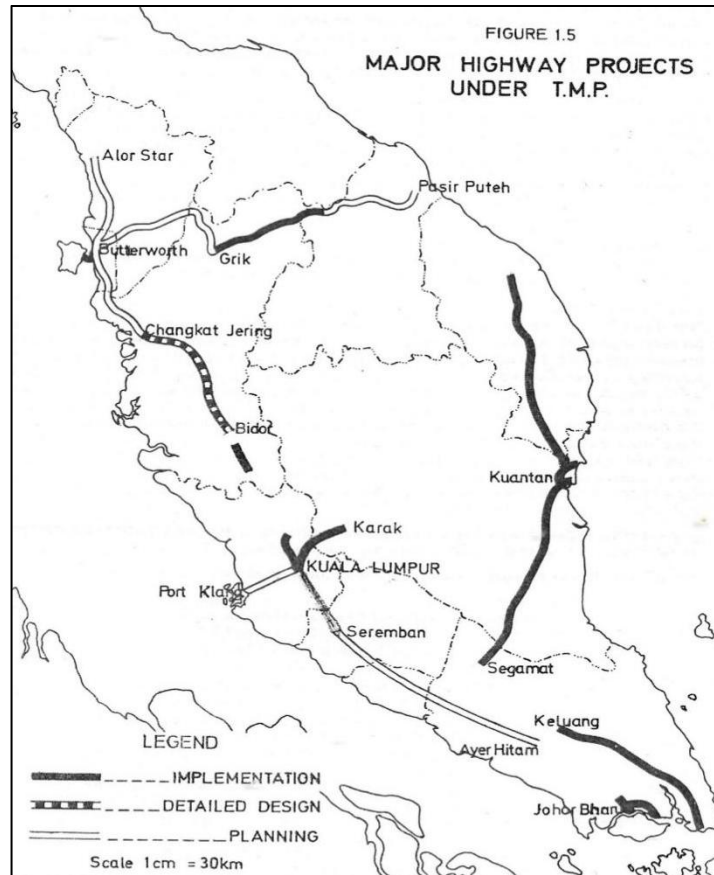
Infrastructure development is the third most important programme outlined in Malaysia's economic development, namely the construction of development infrastructure and support roads in new land openings and new settlements. Therefore, through the above planning, infrastructure development can be implemented more broadly covering land, air and water transportation that enables the community to connect more efficiently and safely. In addition, developments in telecommunications, postal, meteorological, and broadcasting facilities can improve access to information and connectivity, support the growth of the digital economy and support effective communication in various situations.

In the 3MP, emphasis was also placed on the development of public transport when the first major public transport programme was implemented in the Kuala Lumpur metropolitan area. The standard of public transportation services in Kuala Lumpur and its surrounding areas needs to be improved due to the large and crowded bus passengers. The minibus public transport service was introduced in 1975 and terminated in 1998 and is one of the cheapest public transportation at the moment making it the people's choice as a medium of transportation.³⁰ The main objective of this program is to increase the cost-effectiveness of the transport system by improving the efficiency of public transport. Investments in physical facilities include road improvements to break down the flow of congested downtown traffic. Improvements in traffic and control in major traffic can help people's movement and reduce congestion.

In the 3MP, a total of RM 205.9 million was provided for the improvement and construction of rural roads including a grant of RM 107 million by the Federal Government.³¹ About RM 80 million or 75% of the programs directly funded by the Federal Government are for rural roads in less developed states namely Kedah, Perlis, Kelantan, Terengganu and Pahang. The expenditure for the Federal Road programme in 1976 to 1980 included the expansion of the Federal Road, Jalan Kuantan – Segamat of RM 60.6 million, Kuala Lumpur – Karak Road of RM 110.6 million. Total expenditure for various road development programmes reached RM 1 277.7 million. This allocation is given to implement rural road programmes, federal roads, FELDA roads, public transport and other road programs.³²

Figure 1 below shows the main road projects under consideration in the 3MP. Most of the proposed highway improvements and new construction are in progress and need to be completed by 1980. The proposed construction of the Kuala Krai-Gua Musang- Kuala Lipis highway is still under government consideration and awaits approval in 1978.³³ The new highway will improve the standard of transportation services to the people in the areas concerned and reduce travel time. Residents in Kelantan will have the opportunity to reach the Western and Northern parts of Peninsular Malaysia via the East-West highway and to the Kuala Lumpur city area. The improvement of this infrastructure can enhance the economic development of this area which has limited access to the whole of Peninsular Malaysia.

Figure 1: Major Highway Project under 3MP



Source: The National Archives of the Malaysia, General Transport/Railway Study for Peninsular Malaysia, Final Report Volume 2, Analysis of Transport Modes and Modal Split- March 1978.

Detailed studies were also carried out on several road projects that will be implemented during the 3MP. This includes the study of the East-West Expressway with its link to the West Coast and the East Coast road network as well as the study of the Kuala Krai-Gua Musang-Kuala Lipis road. This study is important for developments such as the development of the integrated territory of Kuala Lipis and Ulu Kelantan which at that time was only accessible by train and, sampan during certain seasons. Road construction can connect FELDA settlement south of Kuala Krai and east of Gua Musang where 36 000 acres of new land will be developed for rubber smallholders.³⁴ It will also serve to exploit timber resources and help promote the growth of timber-based industries in the Gua Musang and Kuala Lipis areas. With a good road network system, heavy vehicles can access the area to take the timber resources and generate a timber-based economy.

Fourth Malaysia Plan (4MP) 1981-1985

The period from 1971 to 1980 represented the first decade of the Perspective Plan Framework or Long-Term Plan 1971-1990. The year 1971 to 1980 was a period of rapid economic

growth and changes in the economic structure in Malaysia. It is also a period in which the global economic environment undergoes a huge transformation but in the last decade of this planning, the world economy has suffered a downturn due to inflation and slow growth.³⁵ Therefore, an effort and plan should be introduced to prevent the economic downturn from affecting Malaysians.

The Fourth Malaysia Plan (hereafter 4MP) 1981-1985 was an extension to the short-term five-year plan and entered the second phase of the Long-Term Plan 1971-1990. The 4MP marks an important phase in the history of economic development in Malaysia. Against the backdrop of a rapidly changing global landscape and internal challenges, Prime Minister Tun Dr. Mahathir Mohamad has drawn up a plan to steer the country towards sustainable economic growth, social progress, and technological advancement. This plan emerges as a testament to Malaysia's resilience, adaptability, and strategic foresight, seeking to address emerging challenges and take advantage of new opportunities.

The formation of the 4MP was made by refining the measures, policies and programmes contained in the Second and Third Malaysia Plans to ensure that the socio-economic objectives of eradicating poverty regardless of race and reorganizing society to eliminate racial identification with economic functions are achieved. The 4MP emphasises on the five main aspects that form the basis of its planning. These five aspects include the development aspect, the use of own resources to finance development, the development of industrial development and export of goods, the development of new territories and the latter are the policies and programs put forward to control inflation and reduce its impact on the poor.

Based on the above five aspects, the government devotes most of its resources to development.³⁶ Infrastructure development remains a basic development plan with large investments aimed at transport, energy, and communications networks. About 8% of GDP was devoted to development expenditure in the period 1971-1975 and this increased to over 10% in the period 1976-1980. About 14.2% of development expenditure is spent on social services such as education, health, transport and connectivity systems as well as housing that can benefit mainly the poor in rural and urban areas.³⁷

Emphasis is placed on infrastructure and communication development, particularly on the east coast of Peninsular Malaysia as well as Sabah and Sarawak, to help strengthen inter-regional ties. The strengthening of such relations, in addition to fostering closer integration between regions, also paved the way for greater mobility of production factors, such as machinery, equipment and skilled labour. This is important to accelerate the development of agriculture and industrialization in these areas. Investments for road development still use three main objectives, namely the expansion of the road network, the construction of new roads in new areas and the improvement of village roads and rural roads to support rural agriculture programmes.³⁸

Several major highway and road projects started at the beginning of the implementation of the 2MP including the East-West highway, Kuantan-Segamat highway, and the Kuala Krai-Gua Musang-Kuala Lipis-Bentong highway continued. The East-West Highway and Kuantan-Segamat highway are nearing completion by the 4MP. The Kuantan-Segamat highway will support development efforts in the southern and eastern regions of Peninsular Malaysia.³⁹ Apart from the ongoing construction projects, the Penang and Mainland connectivity projects were implemented. The intercity highway project or better

known as the North-South Expressway which starts from Johor Bharu to Bukit Kayu Hitam. This highway is the backbone of the road network in the West Coast area of Peninsular Malaysia. The construction and maintenance of this road is taken over by the Malaysian Highway Authority (hereafter LLM).

In accordance with Act 231 (Corporation 1980), the Malaysian Highway Authority (LLM) was established on 24 October 1980. The purpose of the establishment of the LLM is to supervise and implement the design, construction, control, operation and maintenance of highways, impose and collect tolls, draw up contracts and provisions in relation related to highways.⁴⁰ However, after the national privatisation policy was implemented in 1983, the responsibility of the LLM has changed from being fully responsible for toll highways to overseeing the development and management of toll highways in Malaysia. It is done to ensure that highway concessionaires always provide high-quality, safe and comfortable services to highway users.

The privatisation policy was introduced in the Fourth Malaysia Plan as a policy in the country in 1983. This policy represents a new approach to the country's development policy and it complements other national policies, such as the Malaysian Privatisation policy, which is designed to emphasise the importance of the private sector in contributing to Malaysia's economic development. The policy is aimed at facilitating the economic growth of the country, reducing the financial and administrative burden of the government, reducing government intervention in the economy, and lowering the level and scope of public spending. It also enables the market to control economic activities and increase productivity and effectiveness in accordance with the National Development Policy.⁴¹

Therefore, the Ministry of Works Malaysia (hereafter KKR) appointed LLM as the statutory body in the policy of privatisation of highways in Malaysia. KKR and Jabatan Kerja Raya (hereafter JKR) Malaysia are responsible for the construction and maintenance of Federal roads only. The State Roads are placed under the administrative authority of the state JKR and the highways in Malaysia are placed under the Highway Concession Company based on the National Privatisation Policy.⁴² A total of 13.2% of the distribution of private projects in the transport and communication categories was recorded from 1983 to 2003.⁴³

In order to effectively implement the Privatisation policy, a Privatisation Agreement Document⁴⁴ must be signed between private companies and the Federal Government on the privatisation of road projects. Permission to make maintenance, execution of construction works and toll collection is work that must be carried out by a private company on the basis of the agreement.⁴⁵ The agreement for the 15 km North Klang Straits Road is among the road projects submitted to the private sector. In addition, the project to maintain and construct a multi-storey interchange at the Jalan Kepong – Jalan Kuching – Jalan Batu roundabout, the construction of a new 41 km Klang Valley Highway and a four-lane widening project to six lanes on the Federal highway started from Subang Jaya to Klang among the initial projects submitted to the private sector after the enactment of the Privatisation Policy in the context of road privatisation.⁴⁶

Improvements to existing roads were also implemented in the 4MP. Road repair projects were carried out on the Kuala Lumpur-Seremban Highway involving the construction of eight new interchanges, the six-lane twin road connection of Kuala Lumpur - Petaling Jaya to Kuala Lumpur International Airport, the improvement and expansion of the Grik – Kuala Kangsar road, the improvement of the Ipoh – Lumut road and Jalan Kuantan –

Kemaman - Dungun, the construction of a dual carriageway from Senai to Johor Bharu Airport and the construction of access roads to Johor Port.⁴⁷

Fifth Malaysia Plan (5MP) 1986-1990

The Fifth Malaysia Plan (hereafter 5MP) is a five-year short-term plan from 1986 to 1990. The 5MP was produced under the leadership of the Fourth Prime Minister, Tun Dr. Mahathir Mohamad, this plan continues Malaysia's efforts to increase economic diversification and modernization. During this period, Malaysia aims to consolidate the gains made in the previous plan and further transform its economy into an export-oriented industrial power. The 5MP places emphasis on the development of high-tech industries, infrastructure projects, and human capital. Investments are channelled into sectors such as manufacturing, electronics, and technology-driven industries, fostering innovation and enhancing Malaysia's competitiveness in the global market. Human capital development is the main focus. Investments in education and training programmes are provided to create a skilled and knowledgeable workforce that is essential in industrial development.⁴⁸

In addition, the 5MP continues the government's commitment to balance the development of the territory. Particular attention is paid to rural development programs, agriculture, and poverty eradication, aimed at improving the standard of living of the population in rural areas. Infrastructure development remains a priority, with significant investments in the transportation, energy, and communications sectors. These initiatives are important in improving connectivity, facilitating trade, and ensuring efficient energy supply across the country. In 1985, the contribution of the transportation, storage, and communications sectors to the Gross Domestic Product (GDP) was six percent⁴⁹

Growth in the transport and connectivity sector achieved a rate of 8.6 percent above the original goal estimated at 7.6 percent during the implementation period of the 5MP.⁵⁰ A total of RM 7 615 million of public sector investment was recorded and almost 21 percent was the total Federal allocation in the 5MP in the development of the transport and communications sectors. Of the above volumes, road transport accounts for about 90 percent of the total transportation of passengers and goods.⁵¹ Therefore, the implementation of the road network construction and expansion program continues more progressively.

During the 5MP, the main thrust of the transportation sector is the completion of ongoing programmes and projects as well as road improvement programmes including road facilities. The main problems that emerged during the 5MP in the development of the road network are the heavy load of commercial vehicles and road congestion due to the large increase in vehicles is one of the main factors causing road damage. Jalan Port Dickson, Jalan Batu Pahat - Sri Gading – Pontian, Jalan Kampar – Ipoh, Jalan Kuala Terengganu, Jalan Bentong - Karak and Jalan Ayer Hitam – Batu Pahat are among the roads listed as "The Killer Stretches" due to the numerous road accidents recorded on those roads.⁵² Therefore, Datuk Ramon V. Navaratnam, Secretary of the Ministry of Transport issued a statement "The National Road Safety Council will undergo non-legislative revision to overcome serious problems in ensuring road safety."⁵³

Therefore, road improvement and maintenance are the main focus of the 5MP for the development of road infrastructure in Malaysia. A total of RM600 million was issued to repair about 33 damaged roads.⁵⁴ In total, the road sector received an allocation of three-quarters of the total allocation for the transport and communication sector of RM 6 billion.

The expansion of the road network also showed an encouraging figure, with the Federal and State number increasing from 43 415 km in 1985 to 63 445 km in 1990 with a growth of 46 percent.⁵⁵

Federal road development recorded an increase of 129 per cent compared to the State's roads which recorded only 33 per cent in the 1986 to 1990 progress. Emphasis is also given to road pavement conditions where only 74 percent of the roads were paved in 1990. This number represents an increase of five percent compared to 1985 with a 69 percent percentage of roads paved. The improvement of road pavement is the result of a research and testing programme in implementing the use of concrete road surface technology to produce a more stable and safe road structure. This improvement is important to give a safe road network for people to use.

Conclusion

In conclusion, this study found that during the Five Malaysia Plan, the road network has been constructed and maintained increased from 11 240 miles (approximately 18089.027 km) in 1965 to 63 445 km in 1990. From the beginning of 1MP, road development has already been one of the main sectors in development projects to improve connectivity in Malaysia. Furthermore, the efforts to improve access to various areas, develop transport networks, and improve connectivity play an important role in achieving economic growth, reducing poverty, and attracting investment to previously underdeveloped areas. Malaysia needs to learn from the experience of other countries and continue to improve its road development strategy. The allocation of budget for road development also saw a great increase where in 1MP, the allocation only about RM 751 million increased to RM 1 277.7 million in 3MP and in 5MP the allocation recorded about RM 6 billion. From this allocation, many great facilities, new and maintained roads were developed to give a great experience to the road user. The Five Malaysia Plan focuses on improving the quality and access to road infrastructure such as maintaining and repairing existing roads as well as expanding the network of highways to previously marginalised areas, including in rural areas. One of the main achievements was the construction of a wider highway reach range aimed at reducing congestion and accelerating intercity mobility. The safety of road users is also a priority with the increase in traffic signs, signage and road traffic lights. In addition, better integration between highways, railways, and water transportation was introduced to improve efficiency in distribution and logistics. However, it is important to continue to address the challenges faced in road development, such as limited funding and environmental impacts, while exploring opportunities for public-private partnerships and stakeholder engagement to continue to drive progress in the road development sector.

Acknowledgment

The author would like to extend the gratitude to Universiti Pendidikan Sultan Idris (UPSI) that helped managed the grants were this research is funded by Ministry of Higher Education under Fundamental Research Grant Scheme – FRGS/1/2021/WAB01/UPSI/02/2.

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Received: 4 March 2024

Reviewed: 28 May 2024

Accepted: 30 June 2024

Notes

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