



MACRO-FRAMEWORK OF THE THIRD INDUSTRIAL MASTER PLAN



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STRATEGIES AND POLICIES

OVERALL PLANNING CONTEXT

1.01 The implementation period of the IMP3 coincides with the implementation period of the National Mission, which was introduced in the RMK-9. The National Mission, with its five key thrusts, will shape and drive the planning and implementation of economic development policies and programmes to achieve high performance and optimum impact from national development efforts. The five major thrusts of the National Mission are to:

- move the economy up the value chain;
- raise the capacity for knowledge and innovation and nurture 'first class mentality';
- address persistent socio-economic inequalities constructively and productively;
- improve the standard and sustainability of the quality of life; and
- strengthen the institutional and implementation capacity.

1.02 The IMP3 has been formulated, after having taken into consideration the development direction and strategic thrusts of the National Mission, as well as the relevant policies and economic projections in the RMK-9. The IMP3, with its focus on industrial development, is a key policy instrument to drive and implement the development goals of the National Mission to enable Malaysia to achieve the objective of developed nation status by 2020, in line with Vision 2020.

THEME

1.03 The theme for the IMP3 is '**MALAYSIA - TOWARDS GLOBAL COMPETITIVENESS**'. This theme is important to ensure that the country is able to sustain a high level of performance in competitiveness, against the backdrop of a global trade and investment environment, which is increasingly influenced by the rising trend in liberalisation and globalisation.

1.04 In striving towards global competitiveness, Malaysia will need to enhance its industrial capabilities to meet global challenges. It is envisaged that, during the IMP3 period, Malaysia's competitiveness position will be further improved.

In the World Competitiveness Yearbook 2006, Malaysia was ranked 8th among 30 economies in the category of populations above 20 million. In the Global Competitiveness Index of the Global Competitiveness Report 2005-2006, Malaysia was ranked 25th among 117 countries.

STRATEGIC THRUSTS

- 1.05 To facilitate the achievement of the macro-targets of the IMP3, ten overall strategic thrusts have been set. The thrusts have been broadly categorised under development initiatives, promotion of growth areas and enhancing the enabling environment:

Development Initiatives

- (1) enhancing Malaysia's position as a major trading nation;
- (2) generating investments in targeted growth areas;
- (3) integrating Malaysian companies into the regional and global networks; and
- (4) ensuring industrial growth contributes towards equitable distribution and more balanced regional development; and

Promotion of Growth Areas

- (5) sustaining the manufacturing sector's contribution to growth; and
- (6) positioning the services sector as a major source of growth; and

Enhancing the Enabling Environment

- (7) facilitating the development and application of knowledge-intensive technologies;
- (8) developing innovative and creative human capital;
- (9) strengthening the role of private sector institutions, including trade and industry associations; and
- (10) creating a more competitive business operating environment through effective institutional support and efficient Government delivery system.

(1) ENHANCING MALAYSIA'S POSITION AS A MAJOR TRADING NATION

- 1.06 Strategies to be undertaken to position Malaysia as a major trading nation and address the challenges in international trade include:

- intensifying exports of products of the targeted growth areas. The products include:
 - electrical products and electronics parts and components;

- chemicals and chemical products;
 - machinery and equipment;
 - automotive parts and components;
 - ICT and multimedia products;
 - biotechnology products;
 - optical and scientific products;
 - medical devices; and
 - agro-based products;
- developing and promoting Malaysian brands;
 - supporting outsourcing activities;
 - enhancing exports through compliance to international standards;
 - nurturing domestic companies, including GLCs and SMEs, to become globally competitive;
 - enhancing the policy framework to facilitate trade; and
 - strengthening and expanding the institutional support for the exporting community.

(2) GENERATING INVESTMENTS IN THE TARGETED GROWTH AREAS

1.07 The targeted growth areas in the manufacturing and services sectors are expected to become significant contributors to economic growth. Strategies to generate investments in the targeted growth areas include:

- promoting investments and exports of products and services with growth potential;
- assisting and facilitating domestic companies, including GLCs, which have the capacity to expand into the potential growth areas;
- developing specialised high technology parks, with the requisite physical infrastructure, workforce and support industries, to cater for the needs of high technology and capital-intensive industries and R&D activities;
- encouraging multinational corporations (MNCs) to establish and expand their operations in Malaysia;
- providing greater support to companies in the targeted growth areas; and
- ensuring that the investment environment remains conducive, particularly in terms of infrastructure, costs of doing business, availability of a skilled workforce and an efficient public service delivery system.

(3) INTEGRATING MALAYSIAN COMPANIES INTO REGIONAL AND GLOBAL NETWORKS

1.08 Strategies to assist and facilitate Malaysian industries to take advantage of opportunities, arising from the growing trend towards economic integration at the regional and global levels, include:

- encouraging companies to focus on their core competencies and strengths within the regional and global networks;
- facilitating collaborations between Malaysian firms (including SMEs) with GLCs and MNCs in Malaysia, and Malaysian firms with MNCs operating outside Malaysia;
- encouraging outsourcing, off-shoring and other forms of business practices;
- promoting outward investments to gain market access and improve competitiveness;
- encouraging the formation of regional conglomerates;
- encouraging local port operators and those involved in providing related services to participate as global operators; and
- developing Malaysia as the regional hub for selected products and services, including *halal* products and services, biotechnology and automotive products.

(4) ENSURING INDUSTRIAL GROWTH CONTRIBUTES TOWARDS EQUITABLE DISTRIBUTION AND BALANCED REGIONAL DEVELOPMENT

(a) EQUITABLE DISTRIBUTION

1.09 The strategies and policies for a more equitable distribution have been formulated within the overall strategies and policies of the IMP3. The growth which will be generated by industrial development will provide opportunities for the further alleviation of absolute poverty and raising the incomes of the lower income groups through employment, as well as contributing towards more equitable ownership and control of industrial wealth.

1.10 Nine major strategies have been set in the pursuit of growth with equitable distribution:

- (i) taking advantage of growth opportunities arising from global integration;
- (ii) taking advantage of increasing opportunities from the integration of domestic industries into the regional and global production networks;
- (iii) encouraging the Bumiputera Commercial and Industrial Community (BCIC) to take advantage of increasing opportunities from outward investments;

- (iv) taking advantage of opportunities from the new sources of growth in the manufacturing sector;
- (v) taking advantage of opportunities from the new sources of growth in the services sector;
- (vi) enhancing the development of Bumiputera human capital;
- (vii) utilising technology to enhance the total factor productivity (TFP) and competitiveness of Bumiputera enterprises;
- (viii) enhancing the growth and increasing the ownership of the BCIC through the development of small and medium enterprises (SMEs); and
- (ix) mobilising the potential growth of the BCIC through balanced regional development and the development of regional corridors.

1.11 These strategies cover the key areas of growth opportunities which arise from regional and global integration, including international production networks and cross border investments. These are the international dimensions of distribution for an open economy characteristic of Malaysia. The strategies for distribution also focus on the new sources of growth arising from the restructuring of the economy, as it moves up the manufacturing value chain and increasingly transforms into a services-based economy.

1.12 While the strategies provide the general framework for reducing inequalities, they will be supplemented by policy measures and instruments. Features of the key policy measures and instruments which are in place, and which will continue to be refined, are:

- recognition that Malaysia is an open economy which is undergoing progressive liberalisation;
- pursuance of a growth approach which takes into consideration the needs of the poor;
- application of supply-side and demand-side measures for the development and promotion of the BCIC;
- development of Bumiputera human capital and entrepreneurship;
- pursuance of measures in government procurement and other areas to attain distribution targets;
- utilisation of incentives and support;
- integration of Bumiputera into the industrial community in an effective and productive manner and raising their competitiveness; and
- encouraging joint-ventures and strategic alliances.

- 1.13 Policy measures and instruments will be continuously monitored, reviewed, refined and strengthened, taking into account new conditions, challenges and priorities. The effectiveness of the policy measures and instruments in promoting a more equitable distribution and reducing inequalities in the manufacturing and services sectors will be given greater focus.

(i) Taking Advantage of Growth Opportunities Arising from Global Integration

- 1.14 The overall strategy to enhance Malaysia's position as a major trading nation will provide new growth opportunities, as well as new challenges, for reducing inequalities arising from increasing integration and international commitments. Integration will be accelerated through international trade and capital flows. The economy is expected to become more integrated with the faster growing economies of East Asia. The process of integration into the regional and global economies will be enhanced during the period of the IMP3.
- 1.15 Historically, international trade has been an engine of growth, which in turn, has contributed to poverty alleviation. Greater openness has been associated with a falling level of absolute poverty. International trade has dynamic benefits through the provision of inputs into the production process and the knowledge spillovers which come from international trade. Poor households can benefit from international trade, if trade reforms lower the prices of imported products and if their wages rise, relative to the prices of the goods they consume.
- 1.16 The progressive liberalisation of the economy during the IMP3 period will take into consideration the impact of liberalisation on distribution within the economy. Progressive liberalisation will allow Malaysia to undertake a more structured and pragmatic approach which can minimise the costs of adjustments, including implications on low income groups. The impact of regional and global integration on the level of poverty and the distribution of incomes will be monitored and evaluated.

(ii) Taking Advantage of Increasing Opportunities from the Integration of Domestic Industries into the Regional and Global Production Networks

- 1.17 The strategies which will facilitate Malaysian industries to become more integrated into the regional and global production networks will open up growth opportunities and increase the participation of Malaysian, including Bumiputera, enterprises in the networks. The regional and global production networks will influence, as well as expand, trade and capital flows. In Asia, the development of global production networks has been largely driven by the MNCs in a number of key industries, especially E&E products and automobiles. The increase in the number of MNCs and their affiliates has been linked to the increase in international production. The competitive pressure to attract the MNCs and be integrated into the global production networks will create demands on human capital

resources. The impact of this development on distribution and the opportunities which are created will be taken into consideration for increasing Malaysian, including Bumiputera, participation in the regional and global production networks.

(iii) Encouraging the Bumiputera Commercial and Industrial Community to Take Advantage of Increasing Opportunities from Outward Investments

- 1.18 To remain competitive and take advantage of growth opportunities regionally and globally, Malaysian, including Bumiputera, enterprises need to undertake greater outward investments. As the more labour-intensive activities have become less cost competitive, such activities need to be relocated offshore. Malaysia's outward stock of investments has been rising. As a share of the GDP, it has increased from 6.1 per cent in 1990 to 11.7 per cent in 2004. The Bumiputera outward stock, as a share of the GDP, will need to be increased, as a measure for the Bumiputera companies to remain competitive. In addition, Bumiputera outward investments will need to be diversified. Presently, outward investments which involve Bumiputera participation are mainly in oil and gas and services. Bumiputera outward investments in manufacturing will also need to be further increased.

(iv) Taking Advantage of Opportunities from the New Sources of Growth in the Manufacturing Sector

- 1.19 The IMP3 has identified opportunities for growth and increasing Bumiputera participation in the manufacturing sector, as well as poverty alleviation. The IMP3 has targeted total investments of RM412.2 billion in the sector for the entire Plan period. Therefore, the opportunities for Bumiputera investments are substantial. A share of 30 per cent of Bumiputera investments in the sector will require RM123.7 billion. The IMP3 has targeted 12 resource and non-resource based industries for further development and promotion, which will require total investments of RM362.5 billion. A share of 30 per cent of the investments in the targeted industries by Bumiputera will involve RM108.7 billion (Table 1.1). Bumiputera entrepreneurs will need to equip themselves to invest and be involved in the targeted industries. There is a need to mobilise Bumiputera financial resources to take advantage of these investment opportunities. The financing of these investments, which will include equity capital, will enhance Bumiputera ownership and control in the manufacturing industries.

(v) Taking Advantage of Opportunities from the New Sources of Growth in the Services Sector

- 1.20 The development and promotion of the non-Government services sector, as a source of growth in the IMP3, will provide opportunities for greater Bumiputera participation in the economy. The non-Government services sector, not including construction services, is targeted to grow at an average annual rate of 7.5 per cent. Construction services are estimated to grow at 5.7 per cent. Total private

investments in the non-Government services are targeted to amount to RM687.7 billion during the Plan period. Based on a Bumiputera share of 30 per cent of the total investments, the amount required will be RM206.3 billion, which is 1.7 times more than the size of the required Bumiputera investments in the manufacturing sector. The IMP3 has identified eight sub-sectors in services for further development, namely, business and professional services, logistics, ICT services, distributive trade, construction, education and training, healthcare services and tourism services. Bumiputera enterprises are expected to increase their participation in the targeted services, including being involved in the higher value-added services, such as innovative tourism services, outsourcing of business and professional services through shared service providers and the development of a new range of environmental services. Bumiputera service providers will be encouraged to collaborate with foreign investors in services through joint-ventures, franchising, management contracts and other forms of collaboration.

TABLE 1.1

**ESTIMATED TOTAL INVESTMENTS BY BUMIPUTERA
IN THE TARGETED MANUFACTURING INDUSTRIES, 2006-2020**

<i>Industry</i>	<i>Total (RM billion)</i>	<i>30% Bumiputera Share (RM billion)</i>
Total	362.5	108.7
Non-resource based industries	232.8	69.8
Electrical and electronics	82.4	24.7
Medical devices	19.4	5.8
Textiles and apparel	13.7	4.1
Machinery and equipment	30.8	9.2
Metals	44.2	13.3
Transport equipment	42.3	12.7
Resource based industries	129.7	38.9
Petrochemicals	34.0	10.2
Pharmaceuticals	6.7	2.0
Wood-based products	25.4	7.6
Rubber-based products	12.9	3.9
Oil palm-based products	26.1	7.8
Food processing	24.6	7.4

Source: Ministry of International Trade and Industry

(vi) Enhancing the Development of Bumiputera Human Capital

- 1.21 The effectiveness of the efforts in increasing Bumiputera participation in the modern industrial sector, enhancing their competitiveness and raising their incomes depends, to a large extent, on the continuing development of the Bumiputera human capital. The progress in reducing the disparity in average incomes between the Bumiputera and non-Bumiputera will depend, on a significant degree, on accelerating the growth of Bumiputera employment in the high productivity manufacturing industries and services. Income from wage employment, on average, accounts for a much higher share of the total household income. Therefore, strategies to raise the income of Bumiputera need to focus on increasing the supply of highly trained and highly skilled Bumiputera and ensuring their gainful employment in high-productivity and high-income activities of the economy.
- 1.22 The development of Bumiputera human capital for industrial development can be approached from the demand and supply side. On the demand side, structural changes in the economy and the increasing reliance on the application of high technology have increased the demand for more highly skilled, and flexible and adaptable knowledge workers. On the supply side, the overall educational attainment of Bumiputera, compared with the non-Bumiputera, is lower, including enrolment in the science and technical disciplines. There is a need to review the present educational system, to take into account the changing needs of a rapidly industrialising economy, including the need to create a greater number of qualified Bumiputera in the relevant disciplines.
- 1.23 By 2010, there will be a demand for 12 million workers. Of this total, the services sector will require 6.2 million workers (52.2 per cent) and the manufacturing sector, 3.6 million (30 per cent). There is a need for more concerted efforts by private sector employers in the manufacturing and services sectors to increase the employment of Bumiputera at all occupational levels to reflect the ethnic composition of the population. Assistance will be provided to encourage employers to increase the employment of Bumiputera at all occupational levels.

(vii) Utilising Technology to Enhance the Total Factor Productivity and Competitiveness of Bumiputera Enterprises

- 1.24 Bumiputera enterprises will be encouraged to utilise more advanced technology and invest in R&D to enhance their TFP and competitiveness. Support will be provided for the acquisition of technologies such as biotechnology, nanotechnology and photonics. Emphasis has been given in the IMP3 and RMK-9 to raise the contribution of TFP to economic growth, particularly in the manufacturing and services sectors. Studies have indicated that Bumiputera enterprises have lower TFP. The Bumiputera enterprises will be encouraged to increase their level of TFP, through greater utilisation of the various incentives available for investing in R&D and applying advanced technology in their business operations.

(viii) Enhancing the Growth of the Bumiputera Commercial and Industrial Community through the Development of Small and Medium Enterprises

1.25 Most Bumiputera enterprises in the manufacturing and services sectors are SMEs. Therefore, a focus on developing more competitive SMEs will significantly increase Bumiputera participation in industry and commerce. A range of institutional support has been provided for the development of SMEs, including Bumiputera SMEs, to address their limitations in various areas, including technical, professional and managerial expertise, entrepreneurial skills and capabilities in exporting their products and services. The strategies and policies on the development of SMEs in the IMP3 are applicable to Bumiputera SMEs. The five strategic thrusts which have been set are:

- enhancing the competitiveness of SMEs;
- capitalising on outward investment opportunities;
- driving the growth of SMEs through technology, knowledge and innovation;
- instituting a more cohesive policy and supportive regulatory and institutional framework; and
- enhancing the growth and contribution of SMEs in the services sector.

(ix) Mobilising the Potential Growth of the Bumiputera Commercial and Industrial Community through Balanced Regional Development

1.26 While the country has been able to achieve overall progress in its industrial development efforts, there is a need for more balanced regional development. This approach will be able to sustain the country's industrialisation drive in the long-term and mobilise, to a greater extent, the potential Bumiputera resources, including their capabilities and entrepreneurship, which will contribute towards the further development of the BCIC. A more attractive and conducive environment will be created for investments and business activities in the lesser developed states, with a focus on promoting and enhancing the growth of the BCIC.

(b) BALANCED REGIONAL DEVELOPMENT

1.27 More efforts will be undertaken to achieve greater regional balance in industrial development. While programmes and incentives to encourage industrial activities are applicable to all states, special incentives have also been provided for the Eastern Corridor of Peninsular Malaysia, covering Kelantan, Terengganu, Pahang, as well as Mersing in Johor, and Sabah and Sarawak. In the past, these states have not been able to attract the required investments to generate the critical mass of industrial activities and stimulate progressively higher levels of industrial development.

1.28 Strategies towards more balanced regional industrial development and sustainable industrialisation include:

- improving the existing infrastructure in the lesser developed states, including growth centres and trans-border areas involving two or more states, and enhancing support to encourage industries to invest in those areas. Two transborder areas have been identified for development:
 - the Northern Terengganu-Southern Kelantan-Western Pahang Zone, which will be a new focus area of development for the Eastern Corridor states; and
 - the Northern Peninsular Development Zone of Kedah, Perlis, Seberang Prai in Pulau Pinang and northern Perak, which will accelerate the development of the food processing industry, including *halal* products.

Major development projects will also be undertaken in the Southern Johor Economic Region, encompassing a triangle which stretches from Kulai in the north to Johor Bahru in the south. This triangle incorporates Johor's logistics hub, which includes two international seaports and an international airport. Major projects in the development region will be largely driven by the private sector;

- encouraging the logistics industry to develop in the direction which will result in the country being served comprehensively and efficiently by the logistics providers in all the major modes;
- encouraging industries to adopt cleaner and environment-friendly technologies and practices;
- ensuring compliance by industries to standards, rules and regulations related to the conservation and protection of the environment; and
- encouraging industries and service providers to internalise Corporate Social Responsibility in their operations.

(5) SUSTAINING THE CONTRIBUTION OF THE MANUFACTURING SECTOR TO GROWTH

1.29 The manufacturing sector will continue to be a major source of growth. Strategies to further develop the sector include:

- accelerating the shift towards higher value-added products and activities, and high technology and capital-intensive activities, through encouraging greater investments in those areas;
- encouraging the development and promotion of the growth areas in the targeted industries:

Non-resource based industries

- E&E;
- medical devices;
- textiles and apparel;
- machinery and equipment;
- metals; and
- transport equipment;

Resource based industries

- petrochemicals;
- pharmaceuticals;
- wood-based;
- rubber-based;
- oil palm-based; and
- food processing.

Selected products within the targeted industries will be identified for development and promotion as *halal* products, in line with the development and promotion of Malaysia as the international hub for *halal* products;

- facilitating and encouraging the development of domestic and regional clusters;
- supporting the application of advanced technologies by industry, including biotechnology, nanotechnology, radio frequency identification, wireless technology, micro-electro-mechanical systems, photonics, laser technology and fuel cells;
- enhancing the contribution of TFP to the growth of the sector;
- promoting knowledge-based activities, including research and design and development (D&D), in the sector; and
- encouraging mergers and acquisitions, consolidations and strategic partnerships among firms in the targeted industries to strengthen their capabilities and competitiveness.

(6) POSITIONING THE SERVICES SECTOR AS A MAJOR SOURCE OF GROWTH

1.30 The non-Government services sector is targeted to assume a major role in contributing to economic growth. In developing and promoting the sector, areas of focus include:

- strengthening the efficiency and competitiveness of the sector;
- intensifying the development and promotion of selected services sub-sectors. A major focus of development is the promotion of exports, including positioning Malaysia to become a regional centre for selected services. The targeted sub-sectors are:
 - business and professional services;
 - integrated logistics services;
 - ICT services;
 - distributive trade;
 - construction services;
 - education and training;
 - health services; and
 - tourism services.

Of the eight targeted services sub-sectors, four have the potential to be developed as regional centres:

- tourism services;
- education;
- distribution; and
- health services;
- undertaking progressive liberalisation of the sector to promote competitiveness;
- creating greater linkages between the manufacturing sector and related support services to achieve higher levels of efficiency, productivity and competitiveness;
- encouraging collaborations with major foreign service providers;
- enhancing TFP and the application of technologies in the sector;
- promoting outsourcing activities in the sector; and
- promoting investments in the sector, including outward investments.

(7) FACILITATING THE DEVELOPMENT AND APPLICATION OF KNOWLEDGE-INTENSIVE TECHNOLOGIES

1.31 Strategies to facilitate the development and application of knowledge-intensive technologies include:

- fostering collaborations among Government research institutes, institutions of higher learning, science and technology parks, GLCs and industries in developing higher technologies and higher value-added products and services;
- promoting research-based industrial cluster development;
- promoting the greater utilisation of ICT and other technologies in all areas along the value chain;
- improving the access to knowledge on ICT and other enabling technologies;
- promoting commercially-oriented R&D and innovation activities; and
- encouraging the growth of R&D activities by the private sector.

(8) DEVELOPING INNOVATIVE AND CREATIVE HUMAN CAPITAL

1.32 The availability of the required talents and expertise by both the manufacturing and services sectors will become important, as industries and services move towards a more knowledge-based operating environment. Strategies to meet the required talents and expertise include:

- matching the supply of talents and expertise with market requirements;
- increasing the supply of technically-skilled, knowledge-intensive and ICT-trained workforce;
- encouraging greater collaboration between training institutes and industry to optimise the utilisation of available resources and facilities;
- emphasising on a higher level of creativity, innovation and other enabling skills in the educational, and technical and vocational training systems;
- creating a critical mass of local experts in scientific and engineering fields to meet R&D requirement; and
- rationalising laws and regulations to provide greater flexibility and mobility in employment.

(9) STRENGTHENING THE ROLE OF PRIVATE SECTOR INSTITUTIONS

1.33 Strategies to strengthen the role of private sector institutions include:

- encouraging companies to become members of trade and industry associations;
- establishing Malaysian trade and industry associations overseas; and
- encouraging private sector institutions to undertake capacity building, and trade and investment promotion, and provide common-user facilities for members.

(10) CREATING A MORE COMPETITIVE BUSINESS OPERATING ENVIRONMENT

1.34 The creation of a more conducive institutional support and business operating environment, including the Government delivery system, will contribute towards the overall competitiveness of the manufacturing and services sectors. Efforts in this area include:

- reviewing rules and regulations to facilitate the growth and expansion of existing and potential industries and services;
- ensuring greater transparency of policies, rules and regulations, as well as administrative procedures and decisions, affecting business operations;
- promoting greater observance of corporate governance practices;
- ensuring the efficiency and effectiveness of the delivery system, including the quality of services rendered, through measures such as simplification of rules and procedures, and timely decision making processes;
- instituting measures to ensure that utility providers adhere to standards to be set on performance, including quality, costs and reliability;
- instituting a more attractive and competitive incentive regime;
- improving the administration of registration and enforcement of intellectual property rights (IPRs);
- implementing an effective and paperless trade facilitation system;
- creating an efficient and competitive logistics industry to support Malaysia's industrialisation efforts;
- strengthening the institutional support, through inter-ministry/agency coordination, in the planning, implementation and monitoring of policies affecting the logistics industry; and
- improving the logistics services in the lesser developed states through measures such as the liberalisation of policies and the provision of adequate logistics support facilities and infrastructure.