

CHAPTER 3

THRUST 1 DYNAMIC URBAN AND RURAL GROWTH

Continuity of urban and rural growth will stimulate more dynamic and balanced economic and social development.

Dynamic Urban and Rural Growth is an indispensable requirement for achieving high-income and developed nation status by 2020 and to ensure continued growth until 2040. It will strengthen the role of urban areas as a major catalyst and could help improve rural areas' capabilities and competitiveness in the nation's economic development.

Cities are at the heart of national development with their high population and by virtue of being focal points of economic activities. The focus, therefore, will be on spurring dynamic urban economic growth.

Rural development will also be given attention through the provision of basic amenities such as roads, electricity and water as well as social, educational and health services in the effort to improve rural residents' quality of life and economic well-being. Both development strategies aim to ensure balanced economic growth and bridge the urban-rural development gap.

In addition, the development of a road network, public transportation and infrastructure as well as human capital will be given priority in the identified growth areas. Such development could serve as the main enablers that support dynamic and strong economic growth in the future.

The thrust has three (3) strategic directions in shaping dynamic urban and rural growth



Petronas Twin

Balanced urban growth, integrated rural development and enhanced linkages and access are essential in ensuring dynamic and continuous economic growth

The Dynamic Urban and Rural Growth thrust comprises of three (3) strategic directions, namely:

DG1: Balanced Urban Growth

Strengthening the role of cities as the main catalyst for the nation's economic growth and promoting development in medium and small-sized towns to ensure balanced development.

DG2: Integrated Rural Development

Promoting integrated development in rural areas to spur rural economic growth and enhance rural residents' capabilities and competitiveness.

DG3: Enhanced Connectivity and Access

Developing comprehensive transport and communication networks to improve accessibility and mobility in support of economic growth.



Box 3.1 Nation's goal of achieving developed and high-income status in 2020



**Developed
Nation Status
(Vision 2020)**

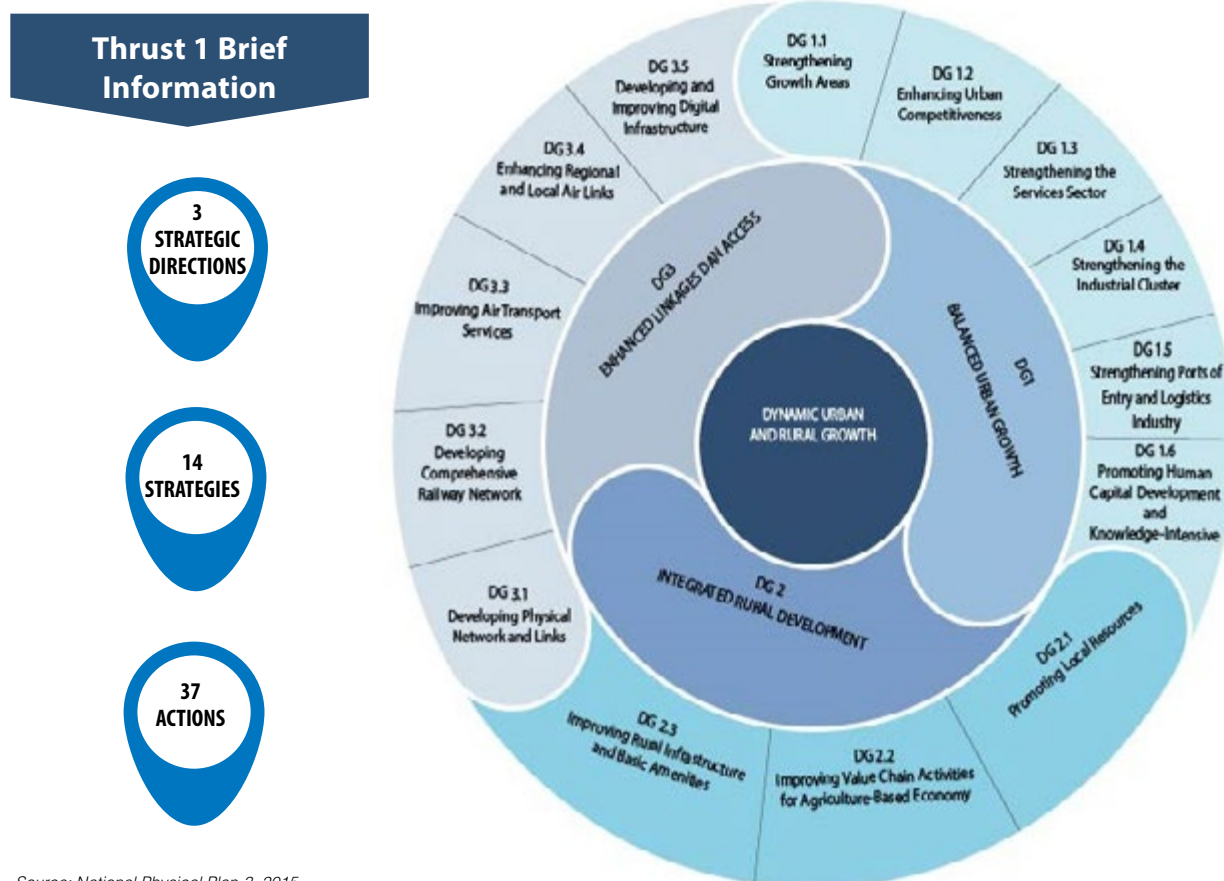
Vision 2020, introduced in 1991, involves three (3) implementation phases. The final phase which was launched in 2010 under the New Economic Model (NEM) gives emphasis on improving the people's quality of life through three (3) dimensions namely high income, sustainability and inclusivity of the bottom 40% household income group (B40).

**USD15,000
Gross National
Income**

**High-Income Nation
(Eleventh Malaysia Plan)**

Eleventh Malaysia Plan (11MP) is the final phase of strategic development plan towards achieving high-income developed nation status by the year 2020

Figure 3.1 Urban and Rural Development Thrust



Source: National Physical Plan-3, 2015

Box 3.2 Malaysia's Global Competitiveness Rankings

1 Malaysia was ranked 18th out of 140 countries in the Global Competitiveness Index 2015-2016.

The Global Competitiveness Index is a comprehensive indicator of a country's basic microeconomic and macroeconomic competitiveness at the international level.

2014-2015



2015-2016



2. Kuala Lumpur is in the 47th spot out of 84 major cities in the Global Cities Index 2015.

The Global Cities Index assesses the performance of cities' economic growth and human capital development in five main dimensions: business activity, human capital, information exchange, culture and political engagement.



Ranked 47th
(Global Cities Index 2015)

DG1

Balanced Urban Growth

Strengthening urban growth and development to spur strong and balanced economic growth

Cities are a main engine of dynamic economic growth and are focal points of population and economic growth. Cities' services and industrial sectors are major contributors to the Gross Domestic Product (GDP). This Strategic Direction will enhance the value added of these sectors, while development of the knowledge-intensive sectors could improve urban economies' competitiveness.

Apart from putting emphasis on the conurbations and main economic corridors, development focus will also be channeled towards medium and small towns where they are encouraged to grow with their existing economic potentials. As such, several growth areas have been identified for a more comprehensive, robust and dynamic growth nationwide.



Historical City of Melaka

Box 3.3 Definition of Town and Its Roles

A. Definition of Town



A gazetted area with built-up areas bordering it, with a combined population of 10,000 or more, or a district administrative centre with a population of less than 10,000.

* A specific development area is an identifiable area that is not gazetted, and is located at least five kilometres from any built-up area. Such an area has a population of at least 10,000 with 60% of the residents aged 15 years and above engaged in non-agricultural activities.

1. A built-up area is defined as an area that is adjacent to a gazetted area and has at least 60% of its residents aged 15 years and above engaging in non-agricultural activities;
2. Settlements and committed areas that have been approved;
3. Urban facilities are provided; and
4. Administrative centre of a district (for a population of less than 10,000).

Source: Second National Urbanisation Policy (NUP2)

B. Towns as focal points for population and economic growth



Malaysia's urban population in 2010 stood at 20.29 million (71% of the total population) and is estimated to increase to 27.3 million (79.6%) in 2025.

Source: Second National Urbanisation Policy (NUP2)

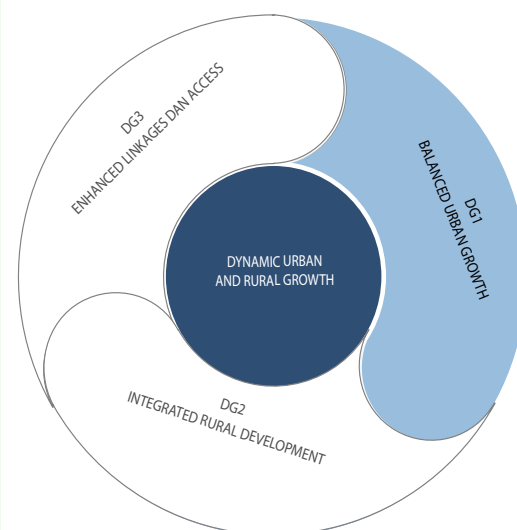


The urban economy contributed more than RM700 billion (or equivalent to more than 80% share) to the Gross Domestic Product (GDP) in 2014.

Source: National Physical Plan-3, 2015



The services, manufacturing and construction sectors are the main components of the urban economy.



STRATEGIC DIRECTION DG1 BALANCED URBAN GROWTH

DG1.1 Strengthening Growth Areas

DG1.2 Enhancing Urban Competitiveness

DG1.3 Strengthening the Services Sector

DG1.4 Strengthening the Industrial Cluster

DG1.5 Strengthening Ports of Entry and Logistics Industry

DG1.6 Enhancing Human Capital Development and Knowledge Intensive Sector

DG1.1: Strengthening Growth Areas

Urban growth and development will focus on other towns including medium and small towns in Peninsular Malaysia, Federal Territory of Labuan and Sabah to expand from existing major cities such as Kuala Lumpur City, Johor Bahru City and George Town City. The aim is to ensure dynamic urban development as well as to spur urban economy by creating investment and trade opportunities around the country. The implementation of Thrust 1 through the strategic direction of Strengthening Growth Areas is based on three (3) implementable actions namely:

Action DG1.1A

Accelerating urban development in current growth areas

Identified growth areas are conurbations, Development Promotion Zones and Catalyst Centres, including medium and small-sized towns. These growth areas are the catalyst hubs of economic growth by providing business and employment opportunities in services sector, manufacturing and other economic activities. Development and investment will be expanded and concentrated in Promoted Development Zones and Catalyst Centres in order to stimulate growth. The role of conurbations as the main engine of national development will be enhanced, in the interest of balanced growth.

Table 3.1 Identified Growth Areas

Conurbations	Promoted Development Zones (PDZs)	Catalyst Centres	
6 Conurbations <ul style="list-style-type: none"> Four (4) conurbations in Peninsular Malaysia Two (2) conurbations in Sabah and Sarawak 	17 PDZs <ul style="list-style-type: none"> 12 PDZs in Peninsular Malaysia Five (5) PDZs in Sabah and Labuan 	48 Catalyst Centres <ul style="list-style-type: none"> 37 Catalyst Centres in Peninsular Malaysia 11 Catalyst Centres in Sabah and Labuan 	
<ol style="list-style-type: none"> National Conurbation (Klang Valley including Kuala Lumpur, Putrajaya and parts of Selangor) Southern Conurbation (around Johor Bahru including Iskandar Puteri, Senai, Kulai, Skudai, Pasir Gudang, Tanjung Pelepas, Pontian, Kota Tinggi, Desaru and Pengerang) Northern Conurbation (Penang and around Seberang Perai) Eastern Conurbation (around Kuantan, Pekan and Gambang) Kota Kinabalu Conurbation (around Kota Kinabalu City, Tuaran, Putatan and Papar) Kuching Conurbation (around Kuching City) 	<ol style="list-style-type: none"> Padang Besar-Chuping Valley Kangar-Arau-Kuala Perlis Alor Setar-Jitra Sungai Petani Ipoh Lumut-Sitiawan-Seri Manjung Kota Bharu Kuala Terengganu Seremban-Nilai-Port Dickson (Malaysia Vision Valley) Historical City of Melaka Royal Town of Bandar Maharani Penggaram-Kluang Town <p>Sabah and Labuan</p> <ol style="list-style-type: none"> Keningau Sandakan Lahad Datu Tawau Labuan 	<ol style="list-style-type: none"> Kaki Bukit-Wang Kelian Beseri Pauh Putra Kuah Bukit Kayu Hitam Kulim Parit Buntar Kamunting-Taiping Gerik Lenggong Teluk Intan Tanjung Malim Tumpat Rantau Panjang Tok Bali Jeli Machang Gua Musang Jerteh Kerteh Chukai Jerantut Bandar Tun Abdul Razak (Jengka) Bentong Bandar Muadzam Shah Temerloh-Mentakab 	<ol style="list-style-type: none"> Sungai Besar Kuala Selangor Kuala Kubu Bharu Seri Jempol Gemas Tampin Pulau Sebang Kuala Linggi Sungai Rambai Segamat Mersing <p>Sabah</p> <ol style="list-style-type: none"> Kudat Kota Belud Kota Marudu Ranau Kimanis Beaufort Tenom Sipitang Kota Kinabatangan Tongod Semporna

Sumber: Rancangan Fizikal Negara Ke-3, 2015

Measures to be taken to strengthen the role of Conurbations, Development Promotion Zones and Catalyst Centres are as follows:

1. Conurbations: The focus is on strengthening and sustaining growth as well as enhancing the value added of economic sectors

- Development and investment initiatives, especially those aimed at developing the services sector and tourism industry in order to improve the performance of the urban economy;
- Expanding the public transport network throughout the conurbation to facilitate residents' mobility;
- Broader provision of ICT facilities and connectivity conurbation-wide in order to enhance the value chain in the region; and
- Development and planning initiatives to encourage redevelopment in old urban areas in order to create new growth areas.

2. Promoted Development Zones (PDZs): The focus is on generating growth

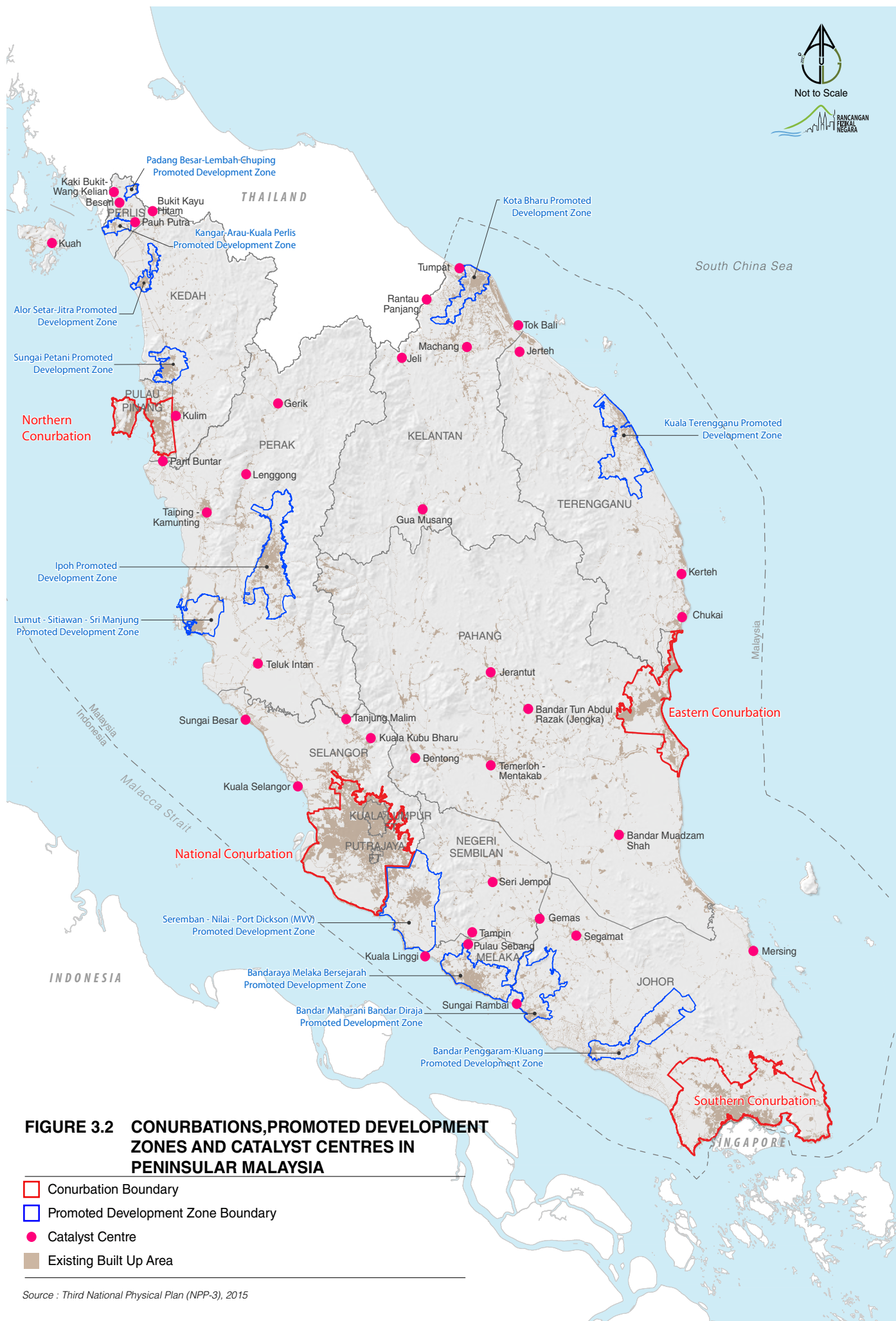
- Development initiatives in the services, agriculture and tourism sectors aimed at creating new development opportunities;
- Provision of ICT facilities, communication networks and appropriate infrastructure aimed at stimulating growth and accelerating integration and its impact on the DPZs;
- Development and planning initiatives designed to encourage redevelopment in old urban areas to meet the demand for development; and
- Encouraging economical, efficient, inclusive and environmentally sensitive land use patterns.

3. Catalyst Centres: The focus is on generating growth

- Development initiatives to enhance value-added in the services, industrial, agricultural and tourism sectors aimed at creating new development opportunities;
- Resource-based industries, value-added agricultural activities, ecotourism and service activities that could potentially be supported by public infrastructure investment needed for such development;
- Provision of ICT facilities, communication networks and appropriate infrastructure in order to stimulate growth and accelerate integration and its impact throughout the growth area;
- Provision of public facilities in accordance with local residents' needs; and
- Urban redevelopment to catalyse growth by reviving blighted areas through the promotion of new activities.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agencies	Support Agencies	Support Agencies
<ul style="list-style-type: none"> • Ministry of Urban Wellbeing, Housing and Local Government • State Governments 	<ul style="list-style-type: none"> • State Economic Planning Units • Regional Authorities • Local Authorities 	<ul style="list-style-type: none"> • Sabah Ministry of Local Government and Housing • Sabah Economic Development and Investment Authority (SEDIA) • Sabah Town and Regional Planning Department • Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> • Town and Country Planning Department of Peninsular Malaysia 		



Source : Third National Physical Plan (NPP-3), 2015

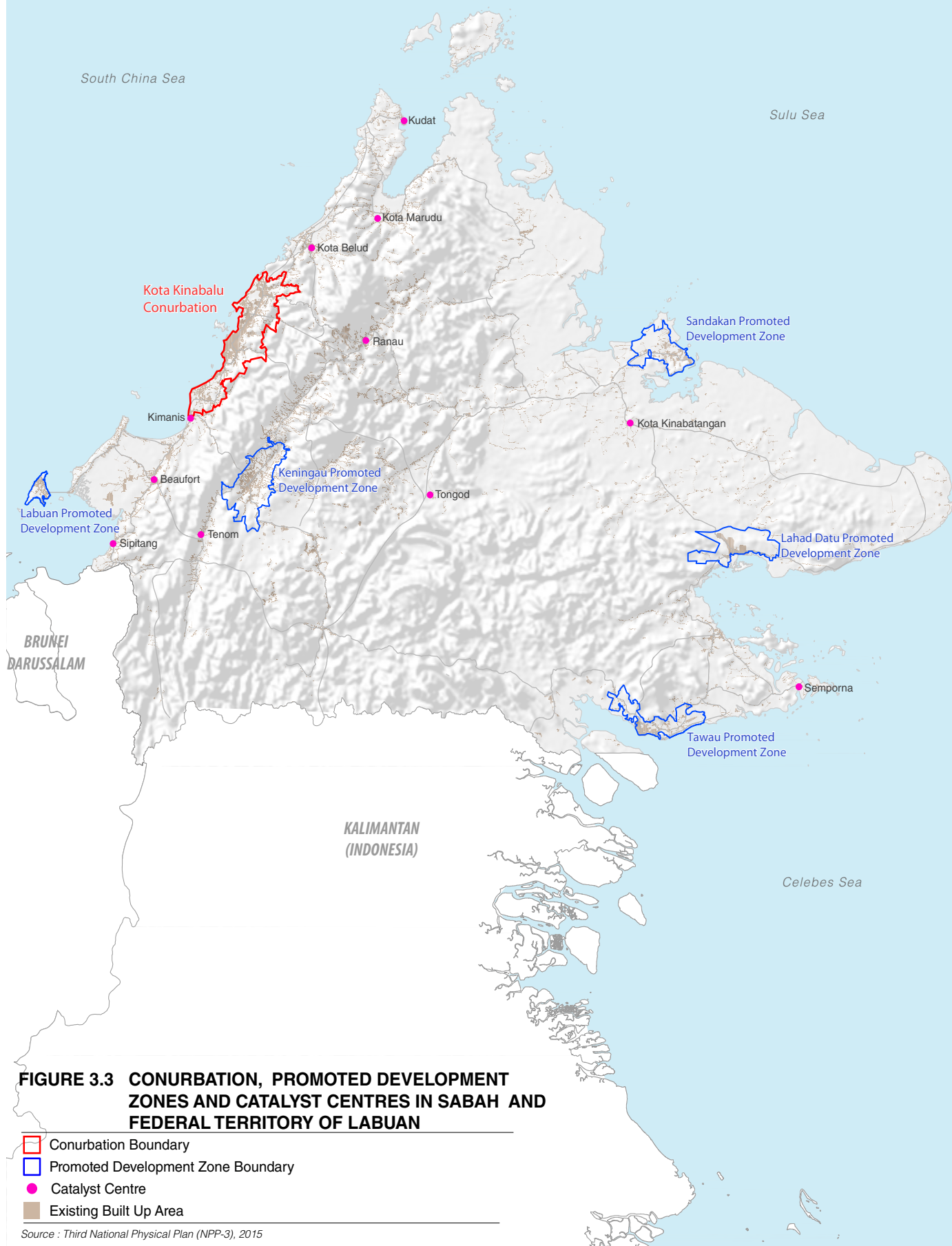


FIGURE 3.3 CONURBATION, PROMOTED DEVELOPMENT ZONES AND CATALYST CENTRES IN SABAH AND FEDERAL TERRITORY OF LABUAN

- Conurbation Boundary
- Promoted Development Zone Boundary
- Catalyst Centre
- Existing Built Up Area

Source : Third National Physical Plan (NPP-3), 2015

Action DG1.1B

Enhancing the role of regional economic corridors in regional economic development

Since the establishment of the Northern Corridor Economic Region (NCER), Malaysia has managed to attract investments that benefit local residents. The role of Regional Economic Corridors will continue to be strengthened as a key catalyst by means of intensified investment as well as infrastructure and human capital development. This will ensure a more balanced distribution of Malaysia's social, economic and physical development opportunities.

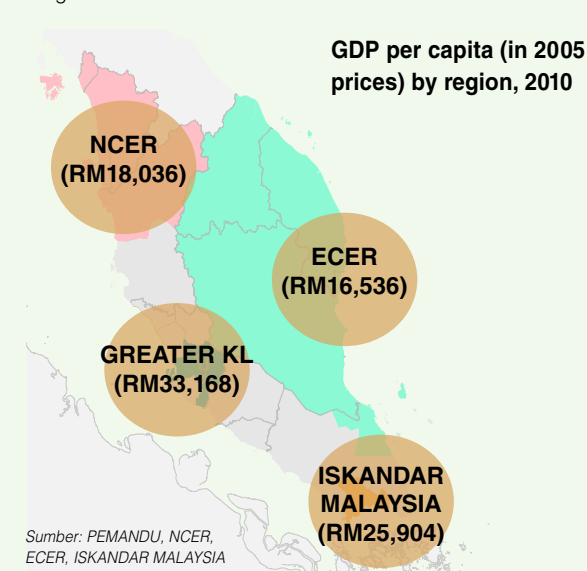
Malaysia has six (6) Regional Economic Corridors aimed at promoting balanced growth and improving residents' living standards, namely:

1. Greater Kuala Lumpur (GKL);
2. Northern Corridor Economic Region (NCER);
3. East Coast Economic Region (ECER);
4. Iskandar Malaysia Development Region;
5. Sabah Development Corridor (SDC); and
6. Sarawak Corridor of Renewable Energy (SCORE).

To strengthen regional economic growth, the following steps should be taken:

1. Promoting development and investment in key sectors that have been identified in order to improve the regions' economic ecosystem;
2. Carrying out development initiatives, particularly in catalyst, industrial, agriculture and tourism projects in selected locations;
3. Strengthening the transport network, ICT infrastructure and urban services;
4. Identifying the potential and strengthening the special industrial zones as well as agricultural and tourism areas to accelerate their integration into the modern economy; and
5. Integrating the Regional Development Corridor Master Plan with the State Structure Plan and Local Plan.

Box 1.4 Achievement Status of Regional Economic Corridors during the 2010-2014 Period



**RM174.5
Billion**

Total investment in the major sectors for the 2011-2014 period

Source: Eleventh Malaysia Plan, 2016-2020

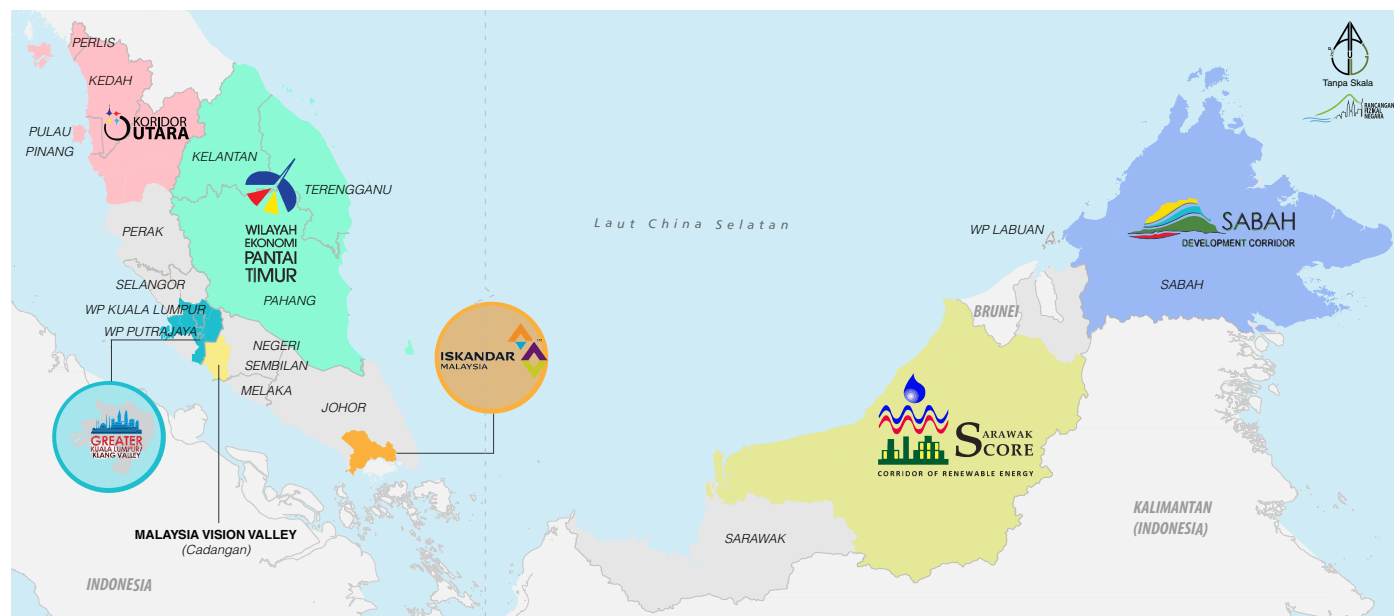
427,100

Number of jobs created during the 2011-2014 period

Source: Eleventh Malaysia Plan, 2016-2020

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agencies	Support Agencies
<ul style="list-style-type: none"> State Governments 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units Local Authorities 	<ul style="list-style-type: none"> Sabah Economic Development and Investment Authority (SEDIA) Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Ministry of Local Government and Housing Sabah Ministry of Rural Development Sabah Town and Regional Planning Department
Implementing Agency		
<ul style="list-style-type: none"> Regional Authorities 		

Figure 3.4: Regional Economic Corridors


Economic Region	Main Focus Areas	Key sectors	
Northern Corridor Economic Region (NCER)	Perlis, Kedah, Penang and parts of northern Perak	<ul style="list-style-type: none"> • Agriculture • Manufacturing • Tourism • Logistics • Education and human capital 	
Eastern Corridor Economic Region (ECER)	Kelantan, Terengganu, Pahang and district of Mersing, Johor	<ul style="list-style-type: none"> • Manufacturing • Oil, gas and petroleum • Tourism • Agriculture • Human capital development 	
Iskandar Malaysia Development Region	Around Johor Bahru including Iskandar Puteri, Senai, Kulai, Skudai, Pasir Gudang and Tanjung Pelepas	<ul style="list-style-type: none"> • Electrical and Electronics • Food and Agro-Food • Logistics • Tourism • Education 	<ul style="list-style-type: none"> • Health • Creative • Finance • Petroleum, Oil and Gas
Sabah Development Corridor (SDC)	Parts of Sabah	<ul style="list-style-type: none"> • Agriculture • Tourism • Logistics • Manufacturing 	<ul style="list-style-type: none"> • Oil, Gas and Energy • Higher Education • Oil Palm
Sarawak Corridor of Renewable Energy (SCORE)	Entire Sarawak	<ul style="list-style-type: none"> • Aluminium • Glass • Iron • Oil Palm • Fisheries and Aquaculture 	<ul style="list-style-type: none"> • Livestock Rearing • Wood-based Industry • Marine • Tourism
NKRA-Greater Kuala Lumpur	Klang Valley including Kuala Lumpur, Putrajaya, Cyberjaya and parts of Selangor	<ul style="list-style-type: none"> • Tourism • Human capital development • Trade and Finance • Public Transport 	
Proposed Malaysia Vision Valley (MVV)	Seremban, Nilai and Port Dickson	<ul style="list-style-type: none"> • Clean Technology • Education • Perindustrian • Tourism 	

Source: Economic Planning Unit, PEMANDU, ECER, Iskandar Malaysia, SCORE and SDC, 2014

DG1.2: Enhancing Urban Competitiveness

Cities spur the nation's economic growth. The high population in urban areas will generate urban economic activities, particularly in the industrial and commercial sectors, that boost the Gross Domestic Product (GDP). As major cities, especially Kuala Lumpur, face global competition for investments and skills, there is a need to identify the economic strengths and advantages of each city to guarantee its future growth.

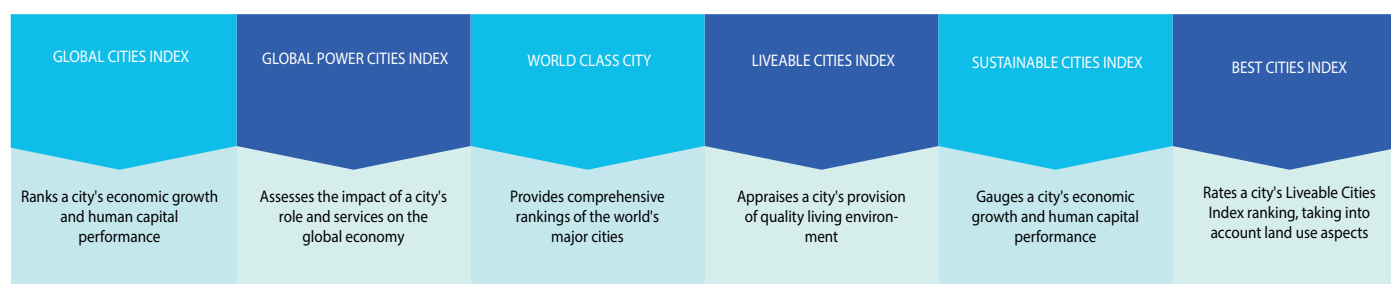
Appropriate urban investment would strengthen the knowledge-based cluster in an effort to enhance innovation, and major cities such as Kuala Lumpur, Putrajaya, Johor Bahru, George Town, Kuantan, Kuching and Kota Kinabalu will undergo agglomeration. In addition, a settlement system based on roles and functions will be implemented under the Second National Urban Policy (NUP2) to ensure more efficient urban management and development. This would improve the urban competitiveness locally and globally.

Action DG1.2A

Strengthening global urban competitiveness

To improve the country's competitiveness, the roles of major cities in Malaysia should be enhanced to make them more globally competitive. Major cities like Kuala Lumpur, Putrajaya, Johor Bahru, George Town, Kuantan, Kuching and Kota Kinabalu need to formulate their own master plan and promote innovation, investment and expertise. In line with Malaysia's aspiration to be a competitive nation, the cities should make the Global City Competitiveness Index a point of reference.

Figure 3.5 Proposed Global City Competitiveness Index components for benchmarking by major cities in Malaysia



Source: National Physical Plan-3, 2015

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Urban Wellbeing, Housing and Local Government 	<ul style="list-style-type: none"> Economic Planning Units Town and Country Planning Department of Peninsular Malaysia Regional Authorities State Governments 	<ul style="list-style-type: none"> Sabah Ministry of Local Government and Housing Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Local Authorities 		

Action DG1.2B

Enhancing the functions of settlements

A settlement system is a hierarchy based on a settlement's roles and functions. This hierarchy aims to optimise the provision of quality and competitive urban infrastructure and to help achieve balanced regional development. A city's strategic planning and physical development should be based on these local strengths, character and values. Local residents should be given more opportunities to be involved in developing and promoting their area's unique characteristics and values, which can spur local economic growth and establish vibrant local communities.

Cities with a distinctive characters should be given appropriate infrastructure allocations and development initiatives in order to spur growth based on their existing economic potentials. Seven (7) settlement hierarchies and 11 urban characteristics have been identified and translated into the Second National Urbanisation Policy (NUP2), and National Rural Physical Planning Policy, 2030..

Figure 3.6 List of settlement hierarchies and urban characteristics

7 SETTLEMENT HIERARCHIES		URBAN CHARACTERISTICS	
1. Global City		1. Border City	3. Special Role Centre
2. Regional City		2. Tourist Towns	• Aeropolis
3. State Capital	6. Small Towns	• Administrative Towns	• Military Towns
4. Major Towns	7. Village	• Industrial Towns	• High Technology/ICT City
5. Local Towns		• Nature Based/Ecotourism	4. Special Industrial Towns
		• Historical/Heritage Towns	5. Port City
		• Royal Towns	6. Education City

Source: National Physical Plan-3, 2015

Referring to the urban hierarchy and function, development of an urban area must take into consideration the characteristics and uniqueness of the area as its personal strength and further strengthen its growth based on those characteristics, uniqueness and function.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Urban Wellbeing, Housing and Local Government Ministry of Federal Territories 	<ul style="list-style-type: none"> Economy Planning Units Town and Country Planning Department of Peninsular Malaysia Regional Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Local Government and Housing Sabah Town and Regional Planning Department Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Local Authorities 		

Figure 3.7 Hierarchy of Settlements



Characteristics of Global City

- 1** PA wide range of international financial services, particularly in finance, insurance, real estate, banking, accounting, and marketing
- 2** Hosts headquarters of multinational companies
- 3** Hosts headquarters of finance, stock exchange and major financial institutions
- 4** Dominates trade and economy of surrounding areas, extending beyond regional borders
- 5** Is the main manufacturing centre, and has port facilities
- 6** A place where important decisions affecting the nation and the world are made
- 7** A centre for new ideas and innovations in business, economics, culture and politics
- 8** A global media and communications centre
- 9** Influences internationally significant countries
- 10** High percentage of population working in services and information sectors
- 11** High quality institutions of higher education, including renowned universities with international student enrolment and research facilities
- 12** Multifunctional infrastructure offers some of the country's best legal and medical services and entertainment
- 13** Extensive international sea and air network

Figure 3.8 Special City - Classification and Definition



Source: Second National Urbanisation Policy (NUP2)



Cyberjaya

Box 3.5 Development model based on local potential

There is a number of city, town and settlement that has successfully applied local function and strength as development catalyst

1. Sekinchan

Sekinchan, or 'village suitable for plants' in Chinese, is a settlement known for its vast rice fields, which are some of the most productive in the country with yields of at least 10 tonnes per hectare.

The rice fields with their panoramic views are also a tourist attraction, and more tourist accommodations such as homestays are springing up around them. Sekinchan's other draws include its jetties, fresh sea food, rice museum, Sekinchan mango, and small and medium industries (SMIs). Most of the tourism ventures are locally owned and operated.

Muzium Padi Sekinchan



Sekinchan Padi Box



Sekinchan Rice Fields

2. Lenggong

The Lenggong Valley archaeological site was gazetted by UNESCO as a World Heritage Site in 2012, and important archaeological sites include Kota Tampan and Bukit Jawa.

The most famous archaeological discovery in Lenggong is Perak Man, whose 11,000-year-old skeletal remains were found in 1990. Since becoming a World Heritage Site, monthly tourist numbers at the Lenggong Archaeological Gallery have jumped from 2,000 to about 5,000 (in 2013).



Rancangan
Kawasan Khas
Tapak Warisan
Dunia Lembang
Lenggong

Lenggong Archaeological Site



Raban Lake, Lenggong



Action DG1.2C

Strengthening economic agglomerations and improve urban networks

Strong urban growth and linkages could lead to economic agglomerations with the cities engaged in mutually supportive economic and social activities. Such group activities facilitate knowledge sharing and create job opportunities in various industries ranging from manufacturing to services.

Nearby cities and towns will benefit from urban agglomerations, which encourage the exchange of knowledge, services and manpower, and benefit sectors such as tourism, health, education, logistics, industry and agriculture. This will spur the growth of high-impact economic sectors.

Measures to be taken to improve innovation and agglomeration:

1. Improving economic density to raise efficiency and optimising resources use;
2. Enhancing connectivity and integrating infrastructure development to improve inter-urban mobility;
3. Strengthening development based on economic clusters to promote industrial clustering and talent concentration in a particular field; and
4. Promoting investments in infrastructure improvement and talent and skill development.



Commercial activities in Kuala Lumpur

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> State Governments 	<ul style="list-style-type: none"> Economic Planning Units Town and Country Planning Department of Peninsular Malaysia Regional Authorities 	<ul style="list-style-type: none"> Sabah Town and Regional Planning Department Sabah Chief Minister's Department (Sabah Economic Planning Unit) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Local Authorities 		

DG1.3: Strengthening the Services Sector

According to the Statistics Department, the services sector accounted for 53.5% of Gross Domestic Product (GDP) in 2014. In addition, the services sector employed 8.1 million workers, or 58.63% of the total workforce, in 2014. The sector is expected to continue to be a key contributor to the national economy in the future where, it is projected to account for more than 60% of GDP in 2040.

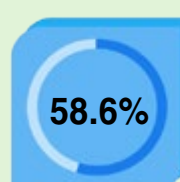
Box 1.6 Performance of Services Sector

A. Performance of Services Sector



Accounted for 53.5% of GDP in 2014

Source: Department of Statistics, 2014

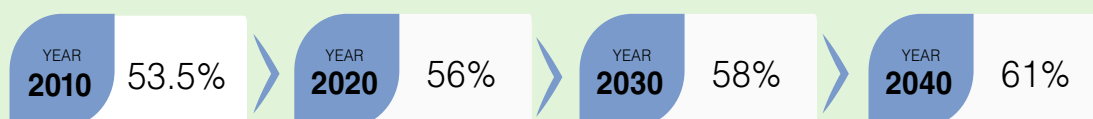


58.6% (8.1 million workers) in 2014

Source: Department of Statistics, 2014

B. Expected contribution of services sector to GDP, 2014-2040

The contribution of the services sector to GDP is expected to increase from 53.5% in 2010 to 61% in 2040.



Source: National Physical Plan-3, 2015



Commercial Activities in Kuala Lumpur

Action DG1.3A

Venturing into modern services sector

The services sector encompasses a wide range of activities including utilities, wholesale and retail trade, accommodation and restaurants, transport, storage and communications, finance, insurance and real estate, as well as business, government and other services. The world economy is shifting towards high value-added and knowledge-intensive services sectors such as e-commerce and creative industries as well as financial, business and professional services.

1. E-Commerce

Rapid technological development in wireless communications, mobile phones and applications is expected to change the nature of existing traditional services. This has prompted growing online retailer activity via e-Commerce. This shift will change people's lifestyles and use of urban space. Logistics support facilities for e-Commerce such as warehouse facilities, good transport networks and ICT facilities will be provided in growth areas to improve online retailers' efficiency and productivity.

These facilities will offer warehousing services, order processing and delivery to support online retailers. Development of urban logistics services will be given priority to speed up the distribution of goods purchased online as well as improve the distribution facilities. This will spur small and medium enterprises (SMEs) to adopt online services, giving them access to a wider market and further develop their business operations.

Box 3.7 e-Commerce

- e-Commerce is defined as any commercial transaction conducted via electronic networks, including the provision of information, promotion, marketing, supply or delivery of goods or services, even though the payment and delivery of related transactions may be carried out offline;
- Successful e-Commerce businesses include Amazon, eBay and Alibaba; and
- Their business success is due to the presence of online transaction systems conducted by banks and Internet payment companies such as PayPal and Webcash.



2. Creative Industries

Cities and towns will be planned to accommodate a wide range of modern services such as creative industries. Creative industries incorporate a broad spectrum of services focusing on the arts and human talent in various forms. Facilities to support the creative industries include exhibition halls, trade fairs and markets for the exchange of goods, services and skills to a wider market. The provision of such services will be given priority in urban planning and private investment in order to promote the growth of the creative industries in growth areas.

Box 3.8 Pinewood Iskandar Malaysia Studios

11,300 JOBS

Number of jobs offered by Pinewood Iskandar Malaysia Studios in between 2013 and 2020

Sumber: <http://iskandarmalaysia.com.my/news-20141116-6/>

- Pinewood Iskandar Malaysia Studios is an integrated media production studio facility in Iskandar Malaysia which was developed through a strategic agreement with the Malaysian Government through Khazanah Nasional Berhad.
- Creative Cluster in Iskandar Malaysia, which initially only focused on multimedia software development activities on a small scale, grew after the opening of Pinewood Iskandar Malaysia Studios.
- Facilities provided by Pinewood Iskandar Malaysia Studios include:
 - a. 100,000 square feet of filming stage (from 15,000 to 30,000 square feet)
 - b. 24,000 square feet television studio
 - c. A range of post-production services
 - d. Workshop and office space for publishing activities
 - e. Area for outdoor shooting with 30 acres of natural forest
 - f. Water tank for underwater and outdoor filming
- Pinewood Iskandar Malaysia Studios now offers not only filming facilities but also the whole ecosystem, from make-up to costume services and the like.

3. Finance, Business and Professional Services

Other services such as finance, insurance, business and professional services need to undergo rapid modernisation in order to reach a wider and higher value market, promoting the urban economy and employment. The provision of a conducive environment with quality services and conducive office buildings will be given priority to stimulate the growth of this sector in the growth areas.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agencies	Support Agencies
<ul style="list-style-type: none"> Ministry of International Trade and Industry 	<ul style="list-style-type: none"> Ministry of Science, Technology and Innovation Malaysian Investment Development Authority (MIDA) State Economic Planning Units (EPUs) 	<ul style="list-style-type: none"> aboh Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agencies		
<ul style="list-style-type: none"> State Governments Regional Authorities 		

Action DG1.3B

Enhancing value-added activities in tourism sector

The tourism sector will be enhanced to make it more viable, ensuring it becomes one of the main contributors to the national economy. The tourism sector will be developed through the equitable distribution of socio-economic benefits, especially the provision of stable jobs, income-generating opportunities and social services to the community as well as promoting poverty eradication efforts in the growth areas.

Box 3.9 Performance of Tourism Sector

With 27 million arrivals, the tourism sector accounted for 15% of GDP in 2014.

27 Million

Tourist Arrivals, 2014

RM161 Billion

15% contribution of GDP in the year 2014

RM72 Billion

Income derived from tourism sector, 2014



Source: Tourism Malaysia, 2014 dan World Travel and Tourism Council, 2015



Main Tourist Area in Historical City of Melaka

Tourism product development should be based on the potentials of location and existing local resources to maximise the economic and social benefits. The following measures should be taken into consideration:

1. Developing tourism products based on respective locational advantages:
 - Enhancing the development of health tourism, well-being, sports and events at growth centres with the availability of supporting infrastructure facilities;
 - Enhancing medical tourism around the Conurbation areas by improving the health facility and services level at existing hospitals and healthcare centres;
 - Enhancing the education tourism development through the development of higher learning institutions around Conurbations and Development Promotion Zones. These areas will be developed to create conducive environment for students' development and will be equipped with suitable facilities;
 - Strengthening Malaysia's importance as Meeting, Incentive, Conference and Exhibition (MICE) destination with support from suitable infrastructure development around Conurbations and Development Promotion Zones;
 - Sustainable development of tourism resources and products related to cultural diversity and historical heritage, to be preserved and promoted effectively in heritage cities and sites;
 - Sustainable development of nature-based eco-tourism and to be promoted in areas with natural attractions; and
 - Enhancing shopping centres in the main cities, border cities and duty-free zones to maximise the economic benefits from tourists arrivals.
2. Strengthening the transformation of tourism sector from high productivity to high revenue to promote competitive and innovative businesses as well as raising marketing targets for specific tourism sector;
3. Developing and encouraging dynamic tourism cluster to ease connectivity and sharing as well as creating creativity- and innovation-based competition among tourism industry players;
4. Improving the competitiveness of Malaysia tourism sector in the development of tourism products and provision of quality services; and
5. Providing suitable and sustainable tourism infrastructure and facilities in tourism locations to enhance tourists' comfort and service efficiency.

Implementation and monitoring responsibilities

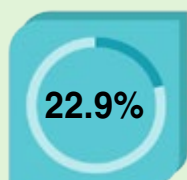
Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Tourism and Culture Malaysia 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia Department of Local Government 	<ul style="list-style-type: none"> Sabah Ministry of Tourism, Culture and Environment Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agencies		
<ul style="list-style-type: none"> State Governments Regional Authorities Local Authorities 		

DG1.4: Strengthening the Industrial Cluster

The manufacturing sector is one of the main economic drivers, contributing substantially to GDP and creating jobs in the country. According to the Department of Statistics Malaysia, electrical and electronics products, transport equipment and petroleum products accounted for more than 50% of the total investment in the manufacturing sector in 2014. In 2040, this sector's share of GDP is projected to rise to 27%.

Box 3.10 Manufacturing Sector Performance

A. Performance of manufacturing sector



Accounted for 22.9% of GDP in 2014
Source: Department of Statistics, 2014



Employed 1.8 million workers (26% of total workforce) in 2010
Source: Department of Statistics, 2010

B. Manufacturing sector's projected share of GDP (2014-2040)

The manufacturing sector's share of GDP is expected to increase from 24.6% in 2014 to 27% in 2040.



Source: National Physical Plan-3, 2015



An industrial area in the Klang Valley

Action PD1.4A

Promoting the development of major industrial clusters

Industrial areas are more likely to be built near cities and ports. The location of industries near urban areas will strengthen growth over time and encourage the development of industrial clusters.

Many industrial clusters have now grown especially activities of the food and beverage, textile and clothing, paper and printing, chemicals, rubber and plastics, basic metals and fabricated products, non-metallic mineral products, electrical and electronics (E&E) products, machinery and equipment, furniture, transport and other industries.

Promoting the growth of industrial clusters such as for the chemical, E&E, machinery and equipment sectors will be given emphasis as these have contributed a lot to value-added manufacturing. The clustering of the manufacturing activities of these sectors will be strengthened by improving the value added chain and stimulating the growth of other supporting industries, particularly in the growth areas.

Figure 3.9: Development of Major Industrial Clusters



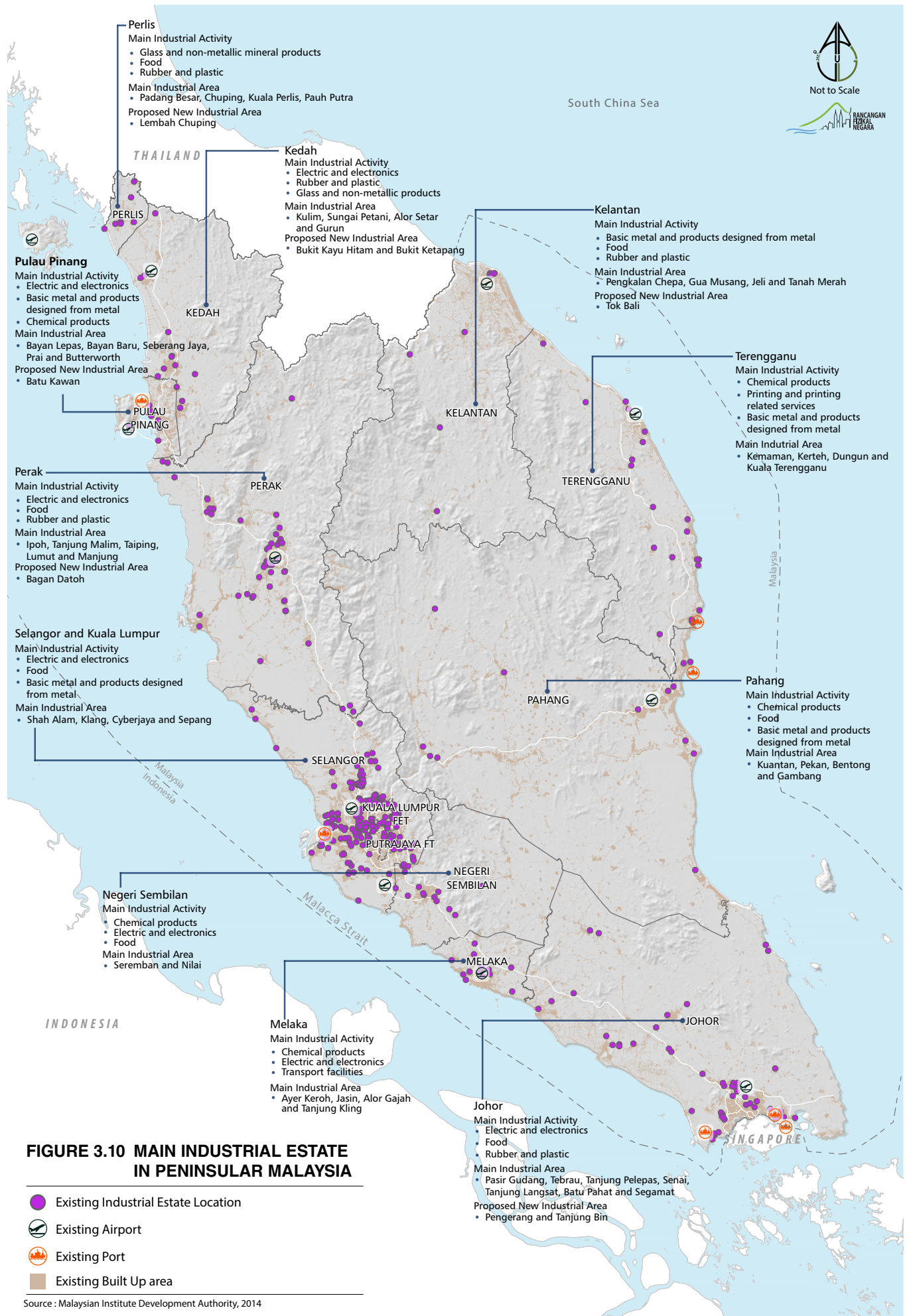
Source: National Physical Plan-3, 2015

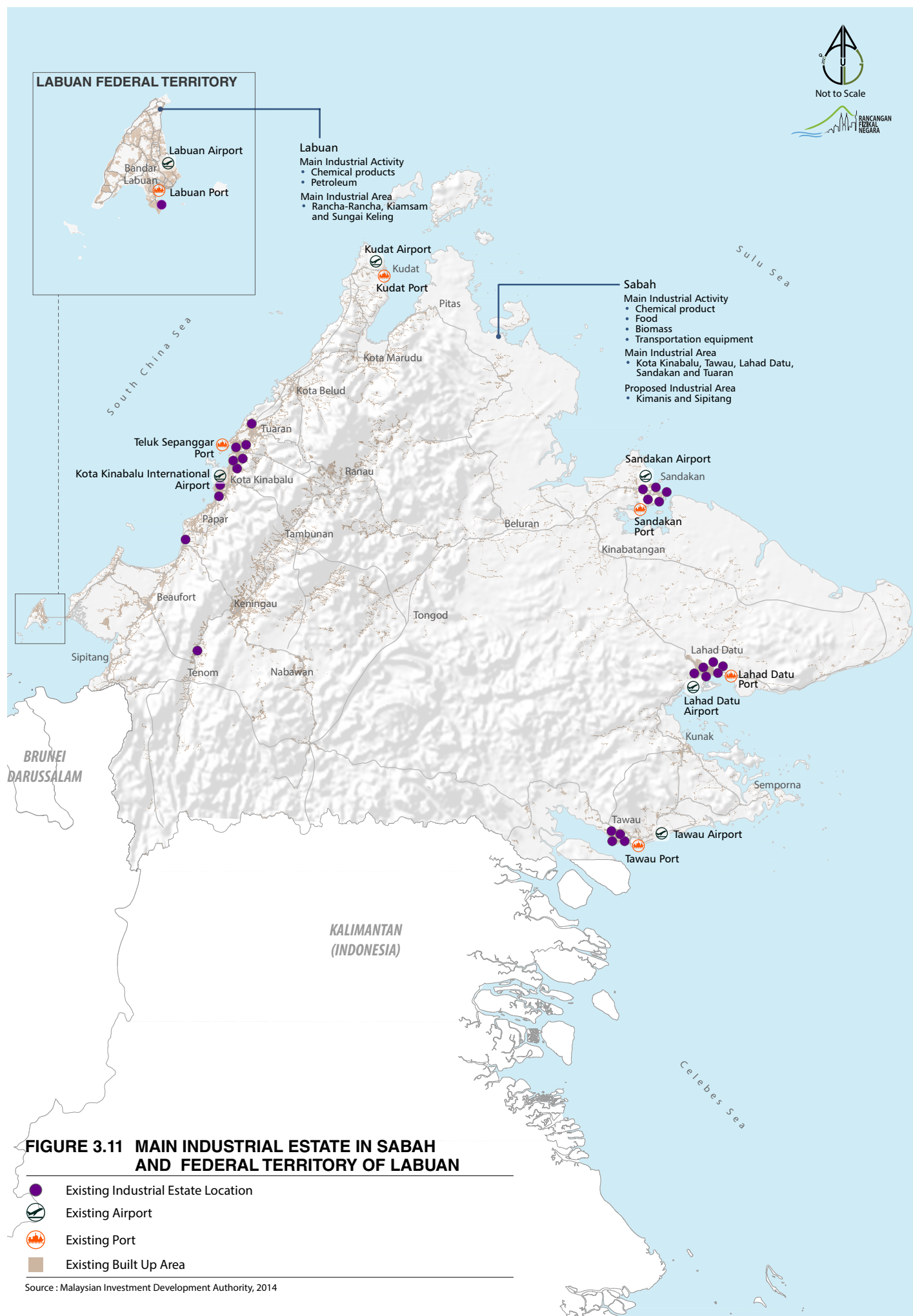


Industrial area in Pasir Gudang,

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agencies	Support Agencies
<ul style="list-style-type: none"> Ministry of International Trade and Industry 	<ul style="list-style-type: none"> Malaysian Investment Development Authority (MIDA) Town and Country Planning Department of Peninsular Malaysia 	<ul style="list-style-type: none"> Sabah Ministry of Industrial Development Sabah Ministry of Local Government and Housing Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Sabah Economic Development and
Implementing Agencies		
<ul style="list-style-type: none"> State Governments Regional Authorities Local Authorities 		





Action DG1.4B

Upgrading of physical environment and infrastructure level at existing industrial

Existing industrial areas play an important role in providing job opportunities for population in growth areas, urban/sub-urban and rural areas. Most of them are established industrial areas and in need of infrastructure upgrading and improvement of environment quality. The following actions need to be taken to transform existing industrial areas into modern industrial park in line with the transformation of industrial activities:

1. Physical environment upgrading in terms of landscape, image and related industrial facilities;
2. Infrastructure and utility upgrading to provide services that meet the requirement of modern industry including ICT and communication;
3. Improving environmental standard in terms of waste and effluent disposal to transform existing industrial areas into green industrial area; and
4. Promoting specific management mechanism (managed industrial park) for every industrial area

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of International Trade and Industry 	<ul style="list-style-type: none"> Malaysian Investment Development Authority (MIDA) Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units (EPU) 	<ul style="list-style-type: none"> Sabah Ministry of Industrial Development Sabah Ministry of Local Government and Housing Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agencies		
<ul style="list-style-type: none"> State Governments Regional Authorities Local Authorities 		

Box 3.11 Industrial Area Management Incentive



The new incentive package is aimed towards better management of industrial parks in Malaysia. This incentive offers 100% tax exemption on statutory income for five years from the company commencement date.

Services included under this incentive are as follows

- Building maintenance and repair (example: roof, structure, electricity, water, sewerage, HVAC, leak detection and telecommunication);
- Occupational safety (example: security guard, car parking access and CCTV);
- Related consultancy services (example: lease related matter and design/ building/ plant consultation);
- Facility rental (example: warehouse and car park);
- Premise/ hostel rental for factory workers;
- Environmental management (example: air pollution, waste water, water treatment and noise pollution);
- Major supporting infrastructure development (example: electric substation and water reservoir);
- Housekeeper/ house cleaning services;
- IT infrastructure (example: network operation centre, IT infrastructure network, network security centre, and computerised training lab);
- Recreational area for tenants and workers; and
- Any suitable facility required by tenants.

Box 3.12 Example of Managed Industrial Park

Managed Industrial Park is a well-planned industrial area with an authorised body or authority handling matters related to an industrial area. There are two (2) examples of managed industrial park in Malaysia:

1. Kulim Hi-Tech Park (KHTP)

Kulim Hi-Tech Park (KHTP) is one of the best developed and managed integrated industrial park in Malaysia and among the best in Asia Pacific. KHTP is the first integrated hi-tech industrial park in Malaysia. It is developed through the collaboration of federal government and the state of Kedah.

To effectively managed KHTP, Local Authority Kulim Hi-Tech Industrial Park (PBT TPHTK) is established on 1st April 1995 under Section 7, Local Government Act 1976 (Act 171). The organisation structure of PBT TPHTK is based on 'Modified Local Authority Model'. The main functions of PBT TPHTK are:

- To check, approve building plans, planning, charge the fees for preparation of the plans, and give the Certificate of Fitness, license and related permits.
- Maintenance at the whole area of KHTP inclusive of garbage collections job, lawn mowing, road and drainage clean-up, lamp posts, traffic lights, logy cleanouts and others.
- Supervision and enforcement of the acts and subsidiary legislations.
- Manage all property taxation in the area of KHTP.
- Supervise the safety and maintenance of the entire public infrastructure such as community centre, sports complex, public transportation stops and others.



Sumber: <http://www.khtp.com.my/>

2. Southern Industrial and Logistics Cluster (SiLC) Nusajaya

Southern Industrial and Logistics Cluster (SiLC) Nusajaya is envisioned to be a world-class managed, clean and green industrial park designed and planned to meet the current demand for environmentally sustainable development. The 1,300 acres industrial zone with a unique green industrial park concept, focused on developing the value-chain of integrated 'clean' industrial clusters in three (3) major areas – Advanced Technologies, Nutrition and Health, and Logistics. SiLC offers services such as science and R&D park, commercial centre, training centre, CCTV surveillance, guard house and security checks at the main entrance, community residence and workers' housing.

Its One-Stop Customer Support facilitates the various processes involved in setting up and operating such as business license and building plan approval, workers' management such as visas, work permits and housing, and centre staffing such as recruitment, training and support.



All The Right Business Reasons



Action DG1.4C

Promoting planning for new integrated industrial areas

Planning for industrial areas will take into account the emergence of new technologies arising from innovation and research efforts as well as global market demand. These changes have altered manufacturing operations. Development and planning for industrial areas will take into account global manufacturing trends, which have the potential to change the pattern of industrial development in Malaysia. Sustainable, high-tech and environmentally-friendly infrastructure will be provided in the new industrial areas to cater to these new development patterns, including:

1. The shift from complex manufacturing to advanced manufacturing techniques
2. Innovations and new technologies;
3. Sustainable manufacturing and circular economy; and
4. Human-centric manufacturing.

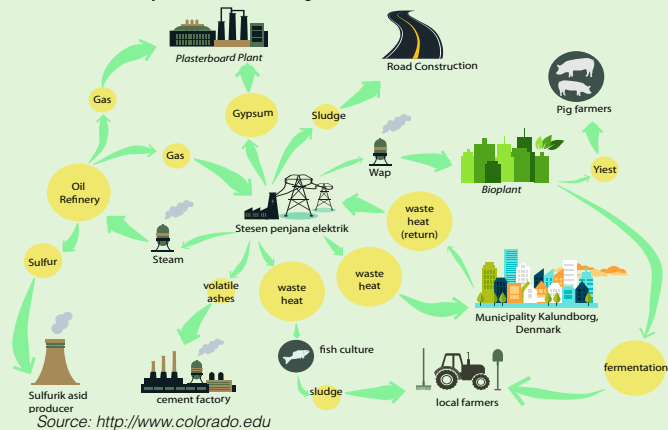
In addition, eco-industrial parks (EIPs) will be encouraged in the planning for new industrial areas. An EIP is an industrial park that promotes business cooperation with local communities in order to reduce pollution, promote efficient sharing of resources (such as information, materials, water, energy, infrastructure and natural resources). The aim is to achieve sustainable development and economic growth and improve environmental quality. Planning for EIPs prioritises environmental management and development of green industries and industries with high value chain.

Box 3.13 Kalundborg Eco-Industrial Park, Denmark

- Famous for its closed cycle economic system known as the Kalundborg Symbiosis.
- The Kalundborg Symbiosis features local industrial collaboration in which public and private enterprises buy and sell waste products from the local community to be reprocessed. In Kalundborg, this industry has great potential to be sustainable and energy-efficient.
- The waste-to-energy partnership between public and private enterprises results in mutual economic and environmental benefits

Source: www.symbiosis.dk/en/system

Industrial Ecosystem in Kalundborg



Source: <http://www.colorado.edu>

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of International Trade and Industry 	<ul style="list-style-type: none"> Malaysian Investment Development Authority (MIDA) State Economic Planning Units (EPUs) Town and Country Planning Department of Peninsular Malaysia 	<ul style="list-style-type: none"> Sabah Ministry of Industrial Development Sabah Ministry of Local Government and Housing Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Town and Regional Planning Department Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agencies		
<ul style="list-style-type: none"> State Governments Regional Authorities Local Authorities 		

DG1.5: Strengthening Ports of Entry and Logistics Industry

According to the Logistics and Trade Facilitation Master Plan (2015), Malaysia has lofty aspirations to become the gateway of choice for logistics in Asia and to improve its ranking in the World Bank's Logistics Performance Index from 25th in 2014 to the top 10 by 2020. The logistics industry is the backbone of the supply chain and is regarded as a key to stimulating trade, facilitating business and spurring economic growth. Efficient management and movement of goods and services between industrial clusters and ports of entry is the main determinant of the logistics sector's performance.

Ports of entry comprises airports, sea ports and land ports which not only serves as hubs for the transport of goods but also act as catalysts for a city's development and economic growth. Ports of entry can promote agglomeration of nearby industrial activities and services with airports, sea ports and land ports, and enhance the growth of the logistics industry and tourism in the city.

This situation will generate investments, jobs and infrastructure that in turn will stimulate strong and dynamic growth in urban areas. Integration between industrial clusters and ports of entry will be enhanced by improving the connectivity and infrastructure. Ports of entry require support from local industry to strengthen the performance of airports and sea ports.

Box 3.14 Logistics Sector Performance

Malaysia was ranked 25th in the World Bank's Logistics Performance Index in 2014

Global Ranking of Malaysian Ports and Airports



WORLD PORT RANKING 2014

TOP 20

Container Traffic:

12th - Port Klang

18th - Port of Tanjung Pelepas

Source: World Shipping Council, 2014



WORLD AIRPORT RANKING 2014

TOP 30

Kuala Lumpur International Airport (KLIA):

20th - Passenger Traffic

28th - Total Cargo

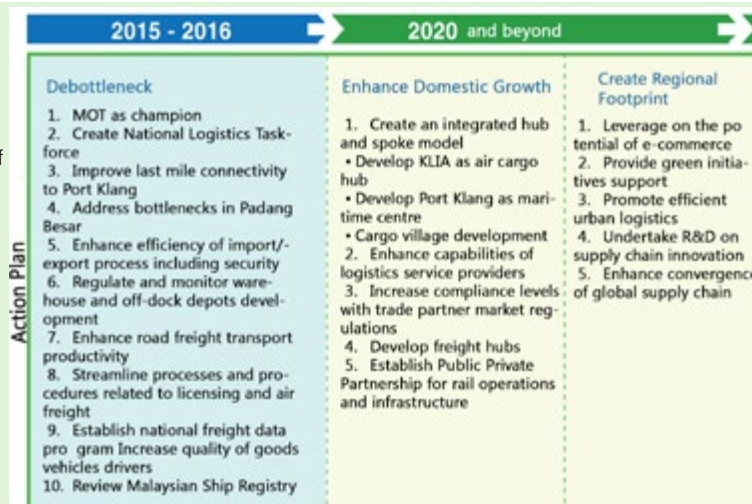
Source: Airports Council International (ACI), 2014

Box 3.15 The Logistics and Trade Facilitation Master Plan (2015)

The Logistics and Trade Facilitation Master Plan is designed to provide guidelines and strategies to enhance the efficiency and the effectiveness of the transport and trade facilitation mechanisms, to improve productivity of the freight logistics industry and to provide a better environment for the logistics industry in the domestic and international market.

The Master Plan is supported by policies, strategies and action plans as follows:

Source: Ministry of Transportation Malaysia, 2015



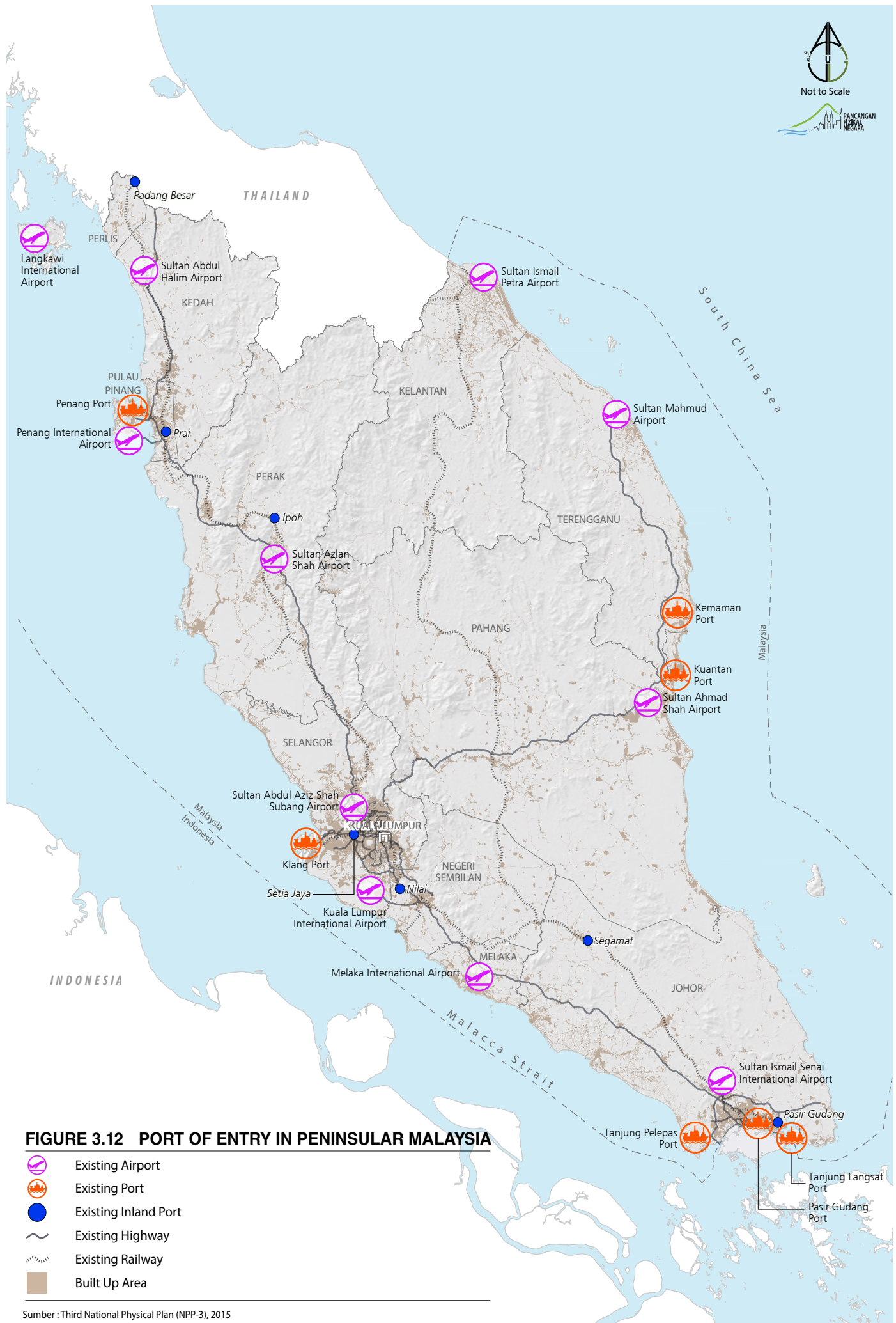



FIGURE 3.12 PORT OF ENTRY IN PENINSULAR MALAYSIA

-  Existing Airport
-  Existing Port
-  Existing Inland Port
-  Existing Highway
-  Existing Railway
-  Built Up Area

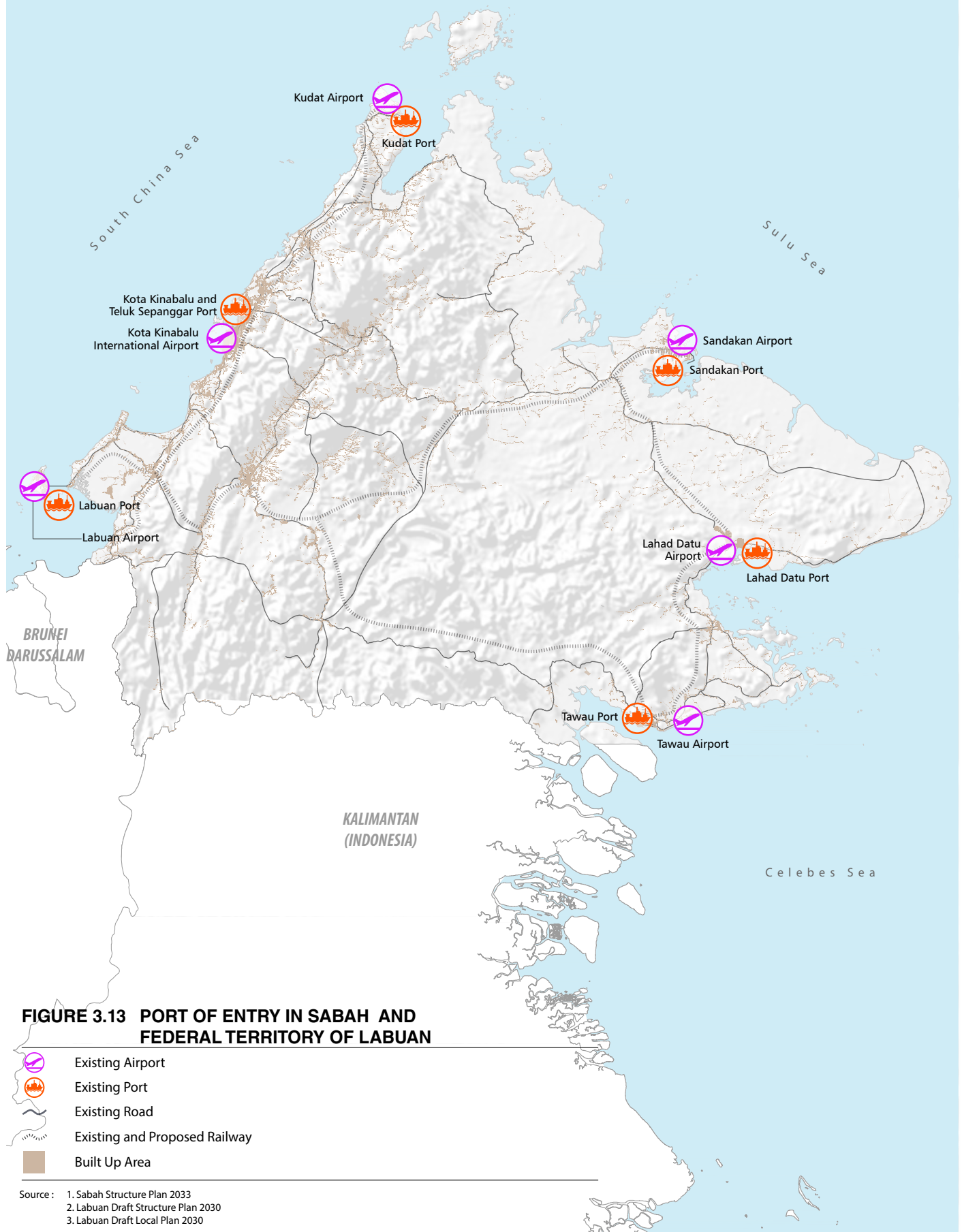







FIGURE 3.13 PORT OF ENTRY IN SABAH AND FEDERAL TERRITORY OF LABUAN

-  Existing Airport
-  Existing Port
-  Existing Road
-  Existing and Proposed Railway
-  Built Up Area

Source :
 1. Sabah Structure Plan 2033
 2. Labuan Draft Structure Plan 2030
 3. Labuan Draft Local Plan 2030

Action DG1.5A

Enhancing the role of airports

Planning and development need to support and enhance the role of airports as a major catalyst in strengthening the urban economy in growth areas. The following measures should be taken:

1. Kuala Lumpur International Airport (KLIA)

KLIA, the main international entry point, functions as an aviation, Aeropolis and logistics hub in addition to being the engine of growth for the tourism sector. Development of the KLIA Aeropolis encompasses cargo and logistics, centre for business and aerospace industry as well as MICE, leisure and support;

2. Sultan Abdul Aziz Shah Airport, Subang (LTSAAS)

The LTSAAS is a maintenance, helicopter and general aviation, aerospace training and technology centre, with commercial support facilities;

3. Kota Kinabalu International Airport, Penang International Airport and Kuching International Airport

These serve as major hubs, providing services that cater to the needs of industry, trade and tourism at regional and local level;

4. Langkawi International Airport

Serves as the main entry point for tourists and supports Langkawi Island's role as a prime destination for exhibitions, conventions and tourism;

5. Sultan Ismail International Airport, Senai

Serves as a major cargo hub for the Southern Region and supports the functions of the Port of Tanjung Pelepas, Pasir Gudang and Port of Tanjung Langsat;

6. Sultan Ismail Petra Airport, Sultan Mahmud Airport and Sultan Haji Ahmad Shah Airport

Serve as tourism gateways and provide services that cater to the needs of industry, trade and tourism in the East Coast Region;

7. Sultan Abdul Halim Airport, Sultan Azlan Shah Airport, Labuan Airport and Melaka Airport

Serve as major hubs, providing services that cater to the needs of trade and tourism at state level; and

8. Proposed New Airport

Develop a new airport to meet the future demand in the Northern Region in compliance with the policies adopted by the Ministry of Transport.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport Malaysia 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units (EPUs) Regional Authorities 	<ul style="list-style-type: none"> Ministry of Transport Malaysia Malaysia Airport Berhad Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agency		
<ul style="list-style-type: none"> Malaysia Airport Berhad 		

Action DG1.5B

Enhancing the role of sea ports

Planning and development of sea ports should support and be linked to urban economic activities, particularly in the logistics and industrial sectors. Sea ports will complement and catalyse dynamic growth in growth areas. Sea ports need to be upgraded to enhance the efficient movement of goods and act as intermodal and multimodal hubs. Measures to strengthen the role of sea ports are as follows:

1. Port Klang

Serves as a regional deep sea port, providing land-bridging services to Asian countries. As the country's main port, its role as the national collection centre for international cargo movement should be maintained;

2. Port of Tanjung Pelepas

Serves as an international and regional container transshipment hub for the Asia Pacific region;

3. Kuantan Port

Kuantan Port is the main port for the East Coast Economic Region and East Asia region;

4. Port of Penang

Focusing on intra-Asia shipping, it is the main port for the Northern Region;

5. Port of Kemaman

Serves as an industrial port, specifically serving the oil, gas and petrochemical sector;

6. Pasir Gudang Port and Tanjung Langsat Port

Pasir Gudang Port is the port for general and bulk cargo for the Southern Region. Tanjung Langsat Port is one of the main specialised ports in Southeast Asia;

7. Ports in Sabah, Sarawak and Federal Territory of Labuan

Serve as industrial ports that support the oil, gas and petrochemical sector as well as Palm Oil Industrial Clusters, and as freight hubs for the BIMP-EAGA region and Asia; and

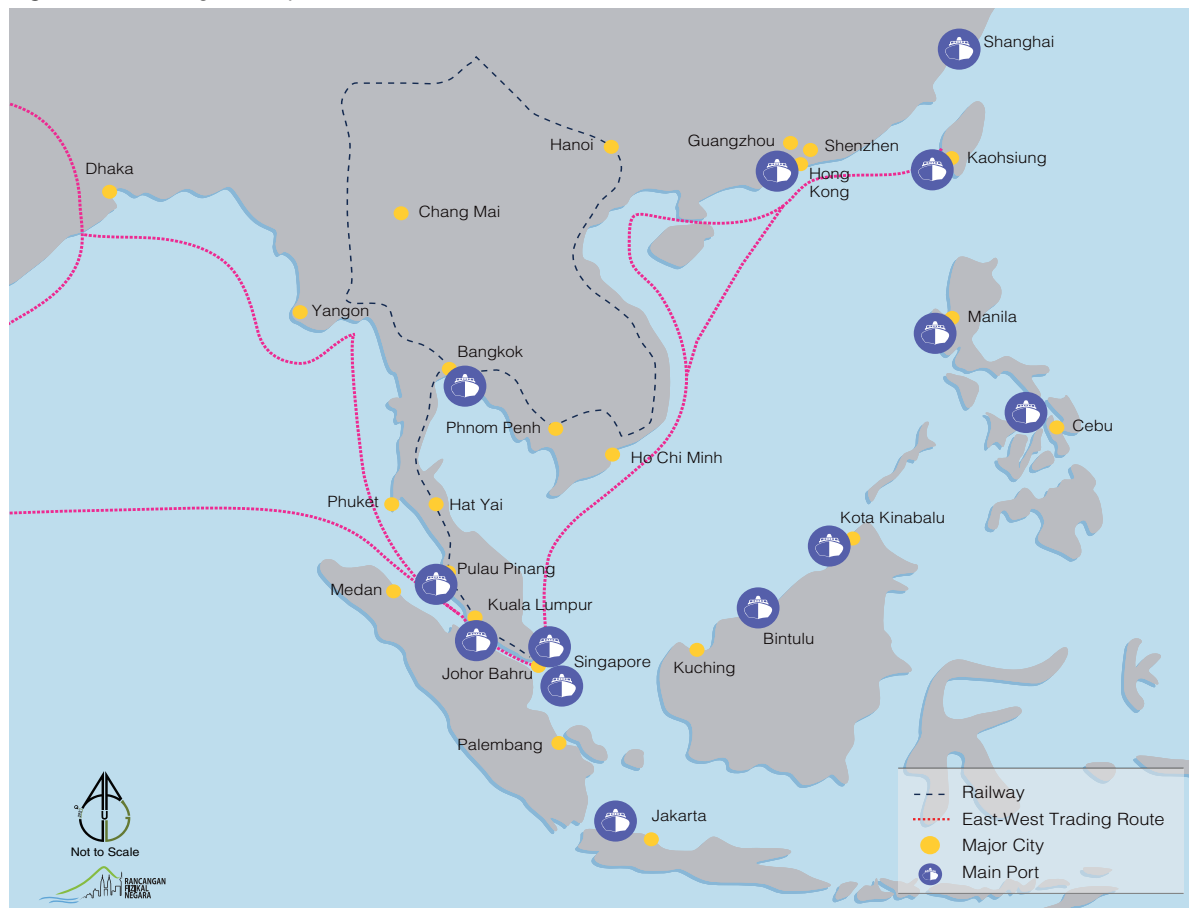
8. Proposed New Ports/Terminals

Proposals for new ports/terminals should be referred to the National Port Strategy prepared by the Economic Planning Unit and the policies adopted by the Ministry of Transport.

Implementation and monitoring responsibilities

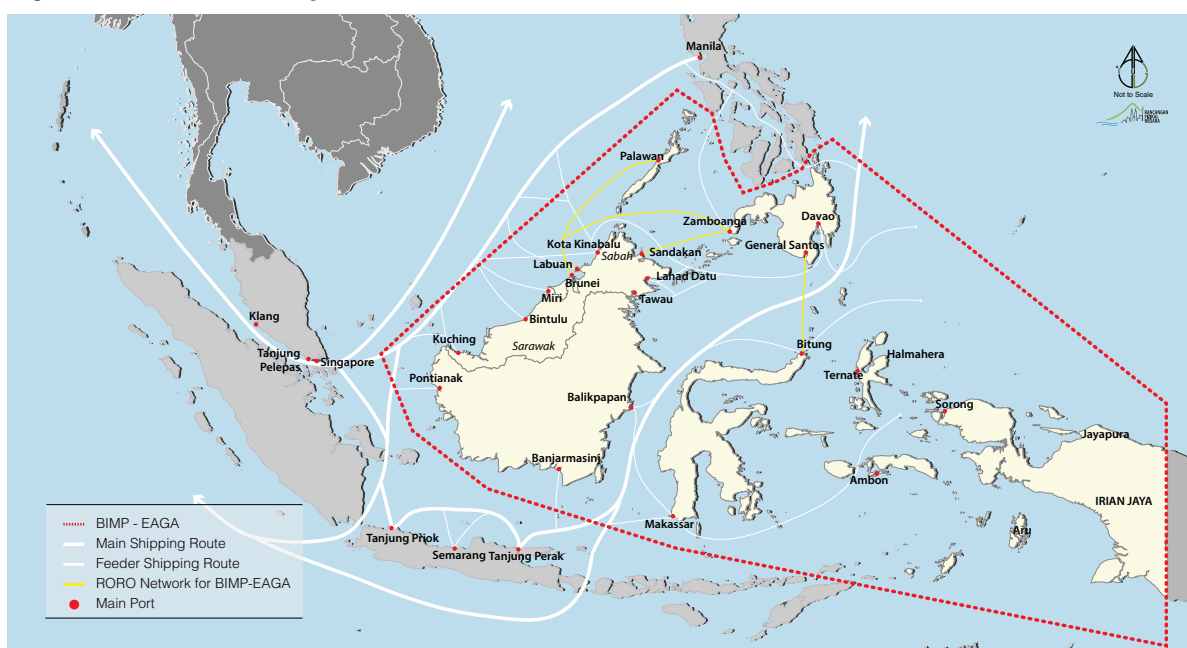
Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport Malaysia 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units (EPUs) State Economic Planning Unit (UPEN) Regional Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Infrastructure Development Malaysia Airport Berhad Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Economic Development and Investment Authority (SEDIA) Sabah Department of Ports and Harbors Sabah Ports Authority
Implementing Agency		
<ul style="list-style-type: none"> Port Authority 		

Figure 3.14 Ranking of Malaysian Ports in East-West Trade Route



Source: National Physical Plan-3, 2015

Figure 3.15 : BIMP-EAGA Rangkaian RORO Network



Source: BIMP-EAGA, 2012

Action DG1.5C

Enhancing the role of inland ports

Inland ports play a key role in supporting logistics and industrial activities. They serve as the main railway transportation and logistic hubs for the manufacturing, transportation, shipping and port sectors.

Inland port terminals will be upgraded by expanding container yards to create additional storage space, thus providing space for unloading containers and increasing the frequency and the competitiveness of rail services. The final layer of connectivity between inland ports and sea ports and airports through the road and railway networks will be improved to make it easier for manufacturers to deliver their goods and support local economic growth. The following measures should be taken:

1. Padang Besar Inland Port

To be developed as a regional rail freight consolidation centre in order to expand the container handling capacity and attract container flow from southern Thailand and other ASEAN locations;

2. Ipoh and Prai Inland Ports

To be developed as hubs for transshipment of goods in order to support logistics services in the Northern Region;

3. Setia Jaya and Nilai Inland Ports

To be developed as freight transshipment hubs in order to support logistic services at Port Klang, Kuala Lumpur International Airport and Sultan Abdul Aziz Shah Airport Subang (LTSAAS);

4. Segamat and Pasir Gudang Inland Ports

To be developed as freight transshipment hubs in order to support logistic services at Port of Tanjung Pelepas, Pasir Gudang Port and Sultan Ismail International Airport, Senai; and

5. Proposed New Inland Ports

Develop new inland ports to support logistic services in the East Coast of Peninsular Malaysia as well as in the northern part of the state of Kedah in the future. The proposals should be referred to the Logistics and Trade Facilitation Master Plan provided by the Economic Planning Unit and the policies adopted by the Ministry of Transport.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan

Monitoring Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport Malaysia 	<ul style="list-style-type: none"> Keretapi Tanah Melayu Berhad Town and Country Planning Federal Department of Peninsular Malaysia State Economic Planning Units (EPUs)
Implementing Agency	<ul style="list-style-type: none"> Land Public Transport Commission (SPAD)
<ul style="list-style-type: none"> State Governments Regional Authorities 	

Action DG1.5D

Improving logistics and supply chain management

The aim is to strengthen end-user connectivity at ports of entry and also improve the logistics and supply chain management. This can be done through:

1. Improving end-user connectivity at sea ports, inland ports and airports by:

- Building a railway bypass on the Serendah-Seremban-Port Klang route to improve the efficiency of logistics and delivery of goods;
- Upgrading the railway line from Pasir Gudang Port to Port of Tanjung Pelepas in support of industrial and logistics activities in the Iskandar Malaysia Development Region; and
- Ensuring the smooth movement of goods and services from urban to rural areas by developing a comprehensive communications network.

2. Enhancing freight infrastructure capacity and capabilities of sea ports, inland ports and airports in order to improve cargo handling:

- Identifying suitable locations for logistics hubs close to airports and sea ports with good road or rail connections.

3. Strengthening e-Commerce logistics:

- Adopt online logistics tools by developing virtual sales platforms and logistics infrastructure to support e-Commerce;
- Develop fulfilment centres at strategic locations to boost online retailers' efficiency and productivity. A fulfilment centre offers warehousing, order processing and delivery services, providing a platform for outsourcing services to online retailers; and
- Giving priority to develop urban logistics services in order to improve fleet management, hub and spoke distribution and night logistics.

Example of Fulfilment Centre managed by amazon.com, Inc.



Sumber: <https://www.amazon.com>

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> • Ministry of Transport Malaysia 	<ul style="list-style-type: none"> • Economic Planning Units • Ministry of Urban Wellbeing, Housing and Local Government 	<ul style="list-style-type: none"> • Sabah Ministry of Infrastructure Development • Sabah Ministry of Industrial Development • Sabah Ministry of Local Government and Housing • Sabah Chief Minister's Department (Sabah Economic Planning Unit)
Implementing Agency		
<ul style="list-style-type: none"> • State Governments • Regional Authorities 		

DG1.6: Enhancing Human Capital Development and Knowledge Intensive Sector

Human capital development is the prime mover in developing a country's economy. Human capital includes aspects such as the working population, labour force participation, skilled workers, education and training. However, globalisation has improved relations among countries, accelerating the flow of labour, ideas and services. In addition, the economic transformation globally and in Malaysia has been promoting a shift to higher value chains, increasing the demand for a highly skilled and educated labour force.

Malaysia, which aims to become a developed and high-income nation by the year 2020, urgently needs highly educated human capital to spur dynamic economic growth. In 2040, Malaysia is expected to require a skilled and knowledgeable labour force that constitutes 90% of the total national labour force. Semi-skilled, skilled and highly skilled workers are all needed to ensure strong and continued economic growth.

The need for skilled and knowledgeable human capital is in line with the New Economic Model (NEM) and the current strategic direction of the country's development. Investors today take into consideration not just operating costs but also the capacity and skills of employees in driving their business operations. Accordingly, human capital development aims to ensure sufficient capacity through the provision of adequate facilities and infrastructure to improve the labour market efficiency.

Box 3.13 Expected manpower demand by skills, 2010-2040

In 2040, Malaysia is expected to require a skilled and knowledgeable labour force that constitutes 90% of the total national labour force. A skilled and educated labour force comprises highly-skilled, skilled and semi-skilled workers.



Source: National Physical Plan-3, 2015

Action DG1.6A

Developing skilled and knowledge-based society

To become a competitive and progressive nation, Malaysia needs to develop a knowledge-based and skilled society. To ensure balanced regional economic growth, the skilled and knowledgeable labour force needs to be more evenly distributed. For this reason, human capital development in existing regional economic corridors will be enhanced to address the imbalance in the distribution of knowledge workers at state and regional levels. The following measures to ensure balanced distribution should be taken:

1. Providing educational facilities, particularly institutions of higher learning, skills training centres and colleges in conurbations, Development Promotion Zones and Catalyst Centres;
2. Developing education hubs in regional economic corridors to attract private investment in the education sector and enhance higher education and skills training opportunities. Efforts by the Iskandar Malaysia Development Region to develop an education hub such as Educity should be emulated by other Regional Economic Corridors;
3. Building educational institutions, skills training centres and colleges that can contribute to local economic growth through the provision of specific programmes that are relevant to local economic activities;
4. Creating more high-skilled job opportunities through investment in knowledge-intensive activities in the services, manufacturing and agriculture sectors; and
5. Expanding the ICT facilities and connectivity in rural areas to bridge the urban-rural information and skills gap. The ratio of skilled workers will increase, encouraging worker mobility through the provision of support systems such as information dissemination, transportation and settlements.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Education Malaysia Ministry of Higher Education Ministry of Human Resources 	<ul style="list-style-type: none"> Manpower Department Pembangunan Sumber Manusia Berhad Skills Development Fund Corporation 	<ul style="list-style-type: none"> Sabah Chief Minister's Department Sabah Ministry of Resource Development and Information Technology
Implementing Agency		
<ul style="list-style-type: none"> Malaysia Education Ministry Ministry of Higher Education Ministry of Human Resources 		

Figure 3.16 Percentage of Knowledge Workers in 2010

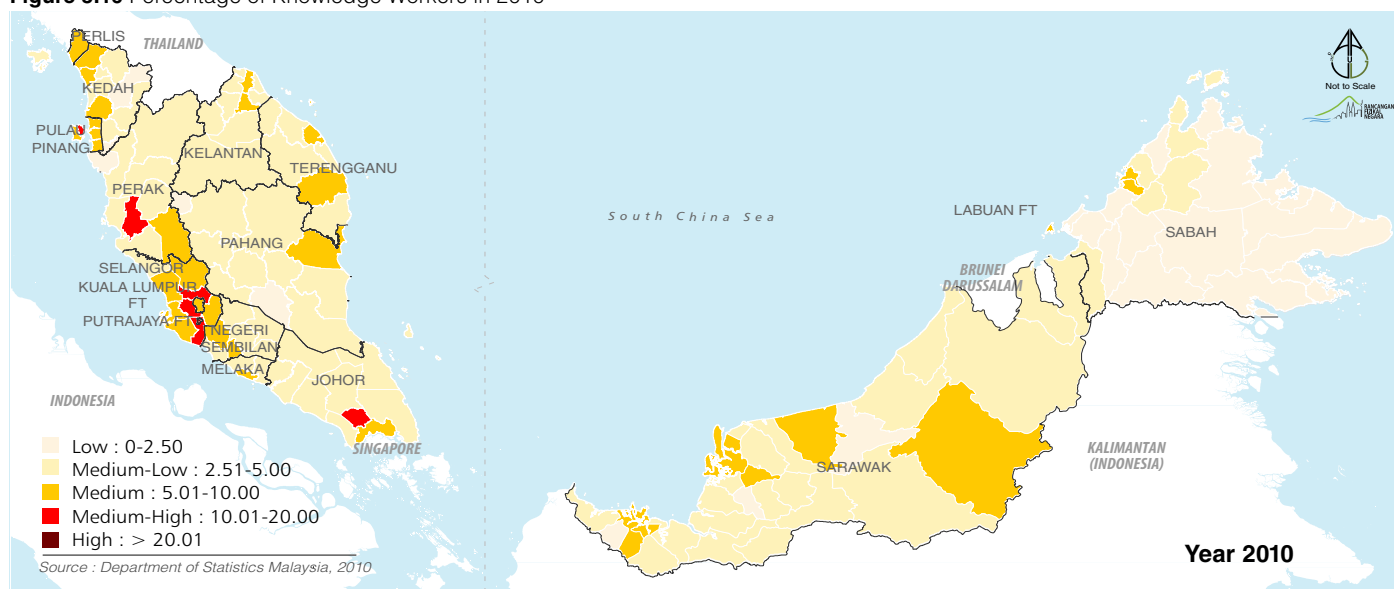
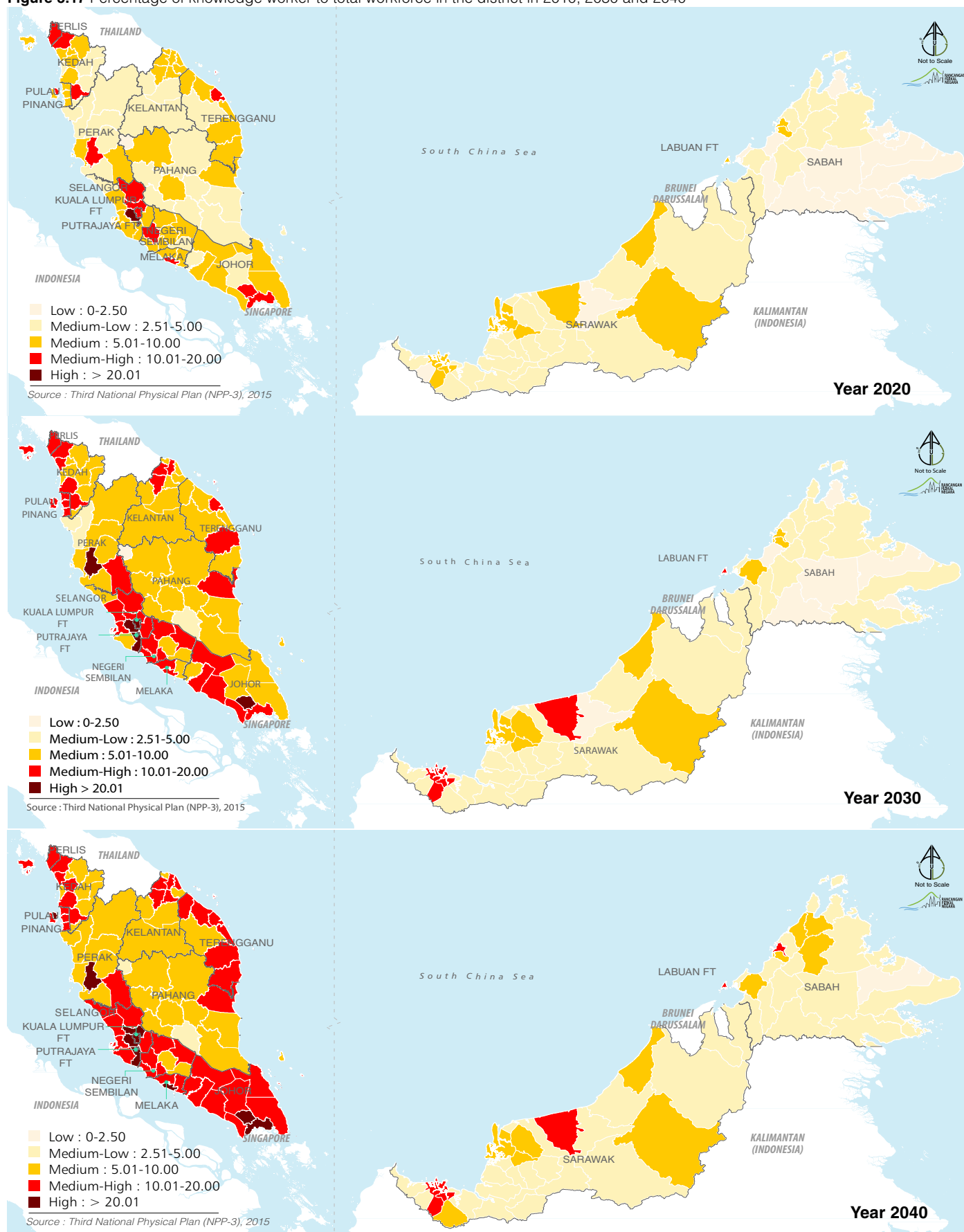


Figure 3.17 Percentage of knowledge worker to total workforce in the district in 2010, 2030 and 2040



Action DG1.6B

Creating research and innovation centres

To enhance the competitiveness of the labour market, Malaysia needs to increase its investment in education, science and technology. Investment in human capital will improve productivity, manpower efficiency and job opportunities. This situation could promote cooperation between Institutions of Higher Learning and industry and lead to the development of research and development (R&D) and innovation centres in the conurbations. In industrial areas, for instance, leading universities are encouraged to set up R&D institutions that could create new innovations.

The following steps should be taken:

1. Developing skilled and talented human capital to increase productivity, competitiveness and technological innovativeness as well as create a knowledge-friendly ecosystem;
2. Establishing a R&D and innovation centre in every conurbation and Development Promotion Zone; and
3. Strengthening cooperation between industry and institutions of higher learning to provide R&D programmes to cater to industry and market needs.

Figure 3.18 Distribution of Universities



Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Higher Education 	<ul style="list-style-type: none"> Ministry of Science, Technology and Innovation (MOSTI) Ministry of Human Resources 	<ul style="list-style-type: none"> Sabah Chief Minister's Department Sabah Ministry of Resource Development and Information Technology
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Higher Education 		

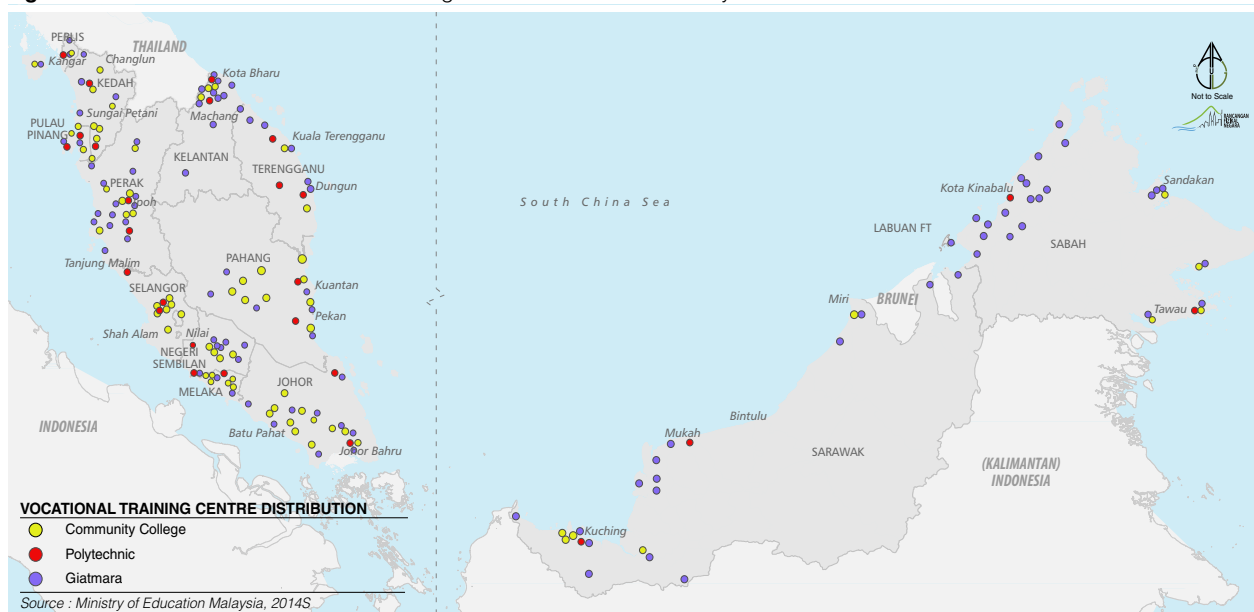
Action DG1.6C

Strengthening vocational and industrial training facilities

By providing encouragement and incentives to the private sector, vocational training will be expanded in conurbations, Development Promotion Zones, Catalyst Centres and rural areas. This situation could encourage worker mobility through the provision of support systems such as information dissemination and transportation. Enhanced workforce skills will add value to products and services in the country and promote productivity and higher wages. These initiatives will involve widespread use of ICT to collect, analyse, and disseminate knowledge and information. ICT solutions offer obvious efficiency and productivity advantages to Small and Medium Industries (SMIs), enabling their operations to be more cost-effective. Providing employees with the right tools and accurate information will enable companies to foster a more competitive, adaptive and creative mindset in their organisation. The following steps should be taken:

1. Strengthening cooperation between industry and vocational and technical education institutions by providing courses and training to cater to industry and market needs;
2. Ensuring prospective graduates attend courses provided by training providers to equip them with knowledge about the equipment before being appointed as full-time employees in the company;
3. Utilising current Competency Development Programme at training institutions to improve the skills of existing employees; and
4. Ensuring that the private sector gets adequate support in formulating skills development programmes in order to meet current industry demand.

Figure 3.19 Distribution of Vocational Training Centres in Peninsular Malaysia



Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Human Resources 	<ul style="list-style-type: none"> Manpower Department Pembangunan Sumber Manusia Berhad Skills Development Fund Corporation 	<ul style="list-style-type: none"> Sabah Chief Minister's Department Sabah Ministry of Resource Development and Information Technology
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Human Resources 		

DG2

Integrated Rural Development

Developing and promoting economic development in rural areas to achieve balanced and strong economic growth

Improving the competitiveness of the rural economy will be given priority to ensure balanced growth across geographical locations. Efforts will be undertaken in cooperation with the relevant parties to provide a more conducive business and development environment in order to attract high-value investment in rural areas. This will indirectly make rural areas viable and competitive.

This strategic direction will place a major emphasis on the utilisation of local resources through the development of Agropolitan Centres and developing local economies based on their existing economic potential. This situation could improve value chain activities in an agriculture-based economy to create high-paying jobs and encourage rural entrepreneurship.

Infrastructure, basic amenities and linkages between rural and urban areas will be strengthened to bridge the urban-rural gap and improve connectivity and mobility to foster economic integration. This will make rural industries more competitive through the marketing of goods and services to urban areas and urban fringes. This in turn will strengthen rural-urban economic linkages.



A village in the East Coast Region

Box 3.17 Rural Areas - Definition and Roles

1. Definition of rural areas

Areas other than urban areas, comprising all types of settlements including villages, towns and other small settlements with less than 10,000 inhabitants, characterised by agriculture and rich in natural resources.

Source: National Rural Physical Planning Policy 2030

2. Rural economic activities will continue to be an important influence in the country's rural economy and social development.



8.2 million Malaysians (29% of population) in rural areas in 2010

Source: Department of Statistics, 2014

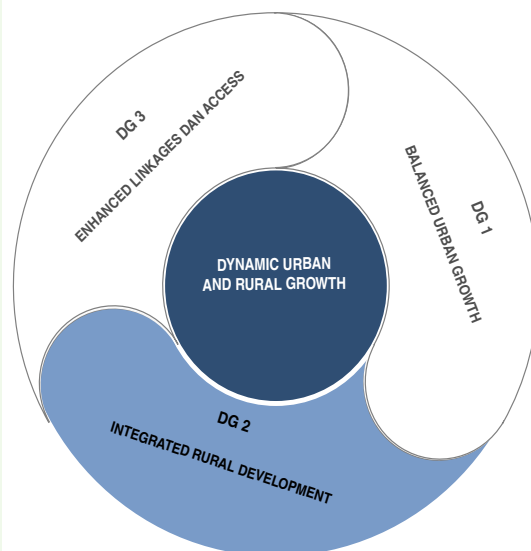


The agricultural sector contributed RM56.1 billion (7%) to Gross Domestic Product (GDP) in 2013



Mining and quarrying, agriculture and eco-tourism are the major components of the rural economy.

Source: Department of Statistics, 2014



STRATEGIC DIRECTION DG2 INTEGRATED RURAL DEVELOPMENT

DG2.1 Utilising Local Resources

DG2.2 Enhancing value chain activities in agriculture-based economy

DG2.3 Improving Basic Rural Infrastructure and Amenities



An Orang Asli Village

DG2.1: Exploiting Local Resources

In recent years, rural economic development has shifted from agricultural to non-agricultural activities, especially eco-tourism and agro-tourism. This situation aims to take advantage of existing local resources to promote new economic activities and diversifying economic activities in rural areas. This development will be promoted as a major catalyst for improvement and employment opportunities in rural areas. This in turn could eradicate rural poverty and promote economic competitiveness.

Action DG2.1A

Developing rural settlements based on economic potentials of rural areas

Rural development will exploit the economic potential and existing resources to promote specialisation and complementarity between rural and urban settlements. Rural economic activities will focus on resource-based development or a rural settlement's unique features and strengths. Public investment and infrastructure will be provided to support resource, handicraft, rural tourism and downstream agricultural and forestry activities. The homestay programme has great potential to be expanded to generate income and employment for rural communities.

Figure 3.20 Potentials of rural economy



Source: National Physical Plan-3, 2015

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Agriculture and Agro-based Industry 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units (EPUs) Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Ministry of Local Government Sabah Ministry of Rural Development
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Agriculture and Agro-based Industry 		

Action DG2.1B

Developing Agropolitan Centres

Agropolitan centres, which feature agricultural, agro-based and basic rural industry activities, are an integrated approach to rural development. The main goal of rural development is to eradicate poverty by raising incomes in addition to promoting the development of backward and remote areas through the development of Agropolitan Centres. These centres are rural settlements with the potential for higher value agricultural development activities.

Holistic planning for agropolitan projects encompass the provision of physical infrastructure, human capital development and participation in economic activities. Areas to be given priority are those with high economic potential, such as agriculture, animal husbandry, tourism and industries that can boost development in the area.

Economic regeneration can be executed through cultivation of commodity crops such as palm oil and rubber as well as other agricultural activities including fruit farming, fisheries, livestock rearing and forest produce particularly in interior areas of Sabah, to create jobs in Agropolitan Centres.

Figure 3.21: List of Agropolitan Centres

<div> <div>22 Agropolitan Centres</div> <ul style="list-style-type: none"> 14 Agropolitan Centres in Peninsular Malaysia 8 Agropolitan Centres in Sabah </div>		
Peninsular Malaysia		
1. Sik		
2. Selama		
3. Manong	9. Kuala Lipis	
4. Trolak	10. Raub	
5. Tanah Merah	11. Kuala Rompin	
6. Kuala Krai	12. Sekinchan	
7. Lojing	13. Kuala Klawang	
8. Setiu	14. Bandar Tenggara	
		Sabah
		1. Karakit
		2. Pitas
		3. Abuan
		4. Lalampas
		5. Sapulut
		6. Kemabong
		7. Kalabakan
		8. Long Pasia

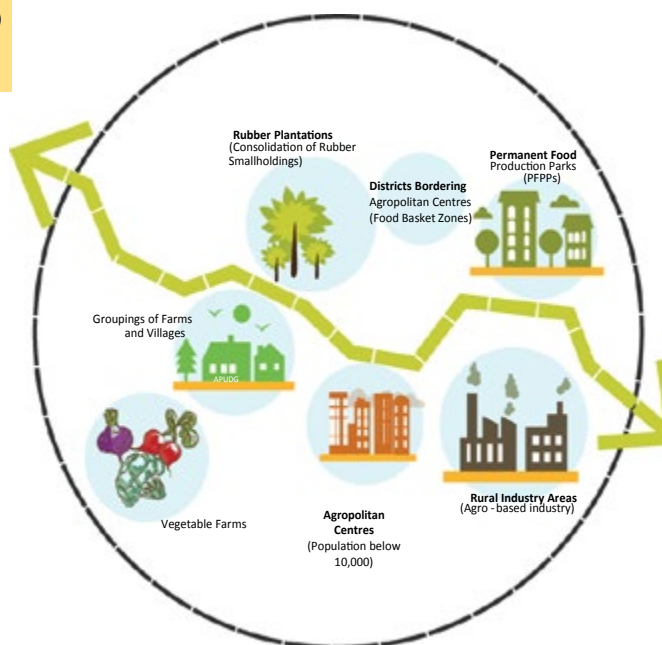
Source: National Physical Plan-3, 2015

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Agriculture and Agro-based Industry 	<ul style="list-style-type: none"> State Economic Planning Units (EPUs) Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Ministry of Rural Development Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Rural and Regional Development State Governments 		

Figure 3.22 Concept of Agropolitan Centres

Linkage to Growth Centres
(Population 10,000-100,000)

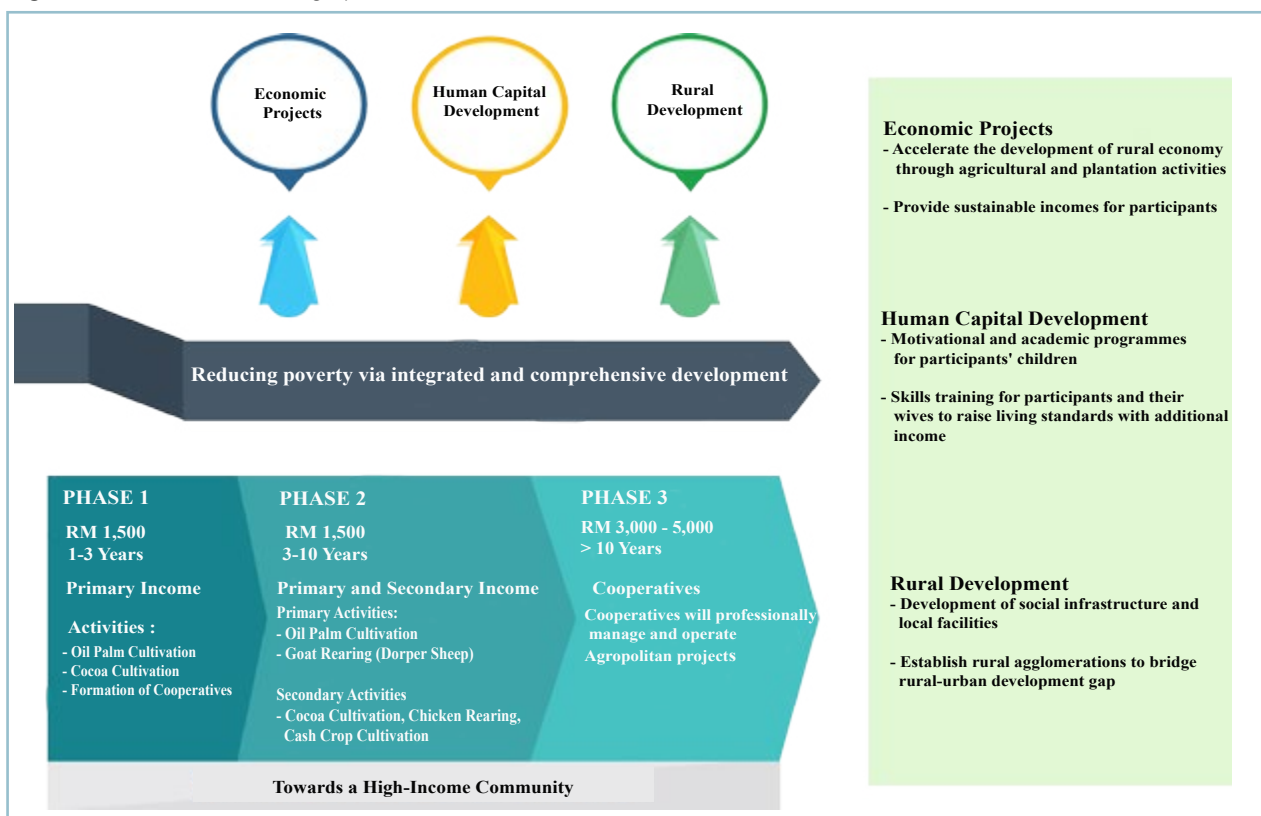


Agropolitan Centres

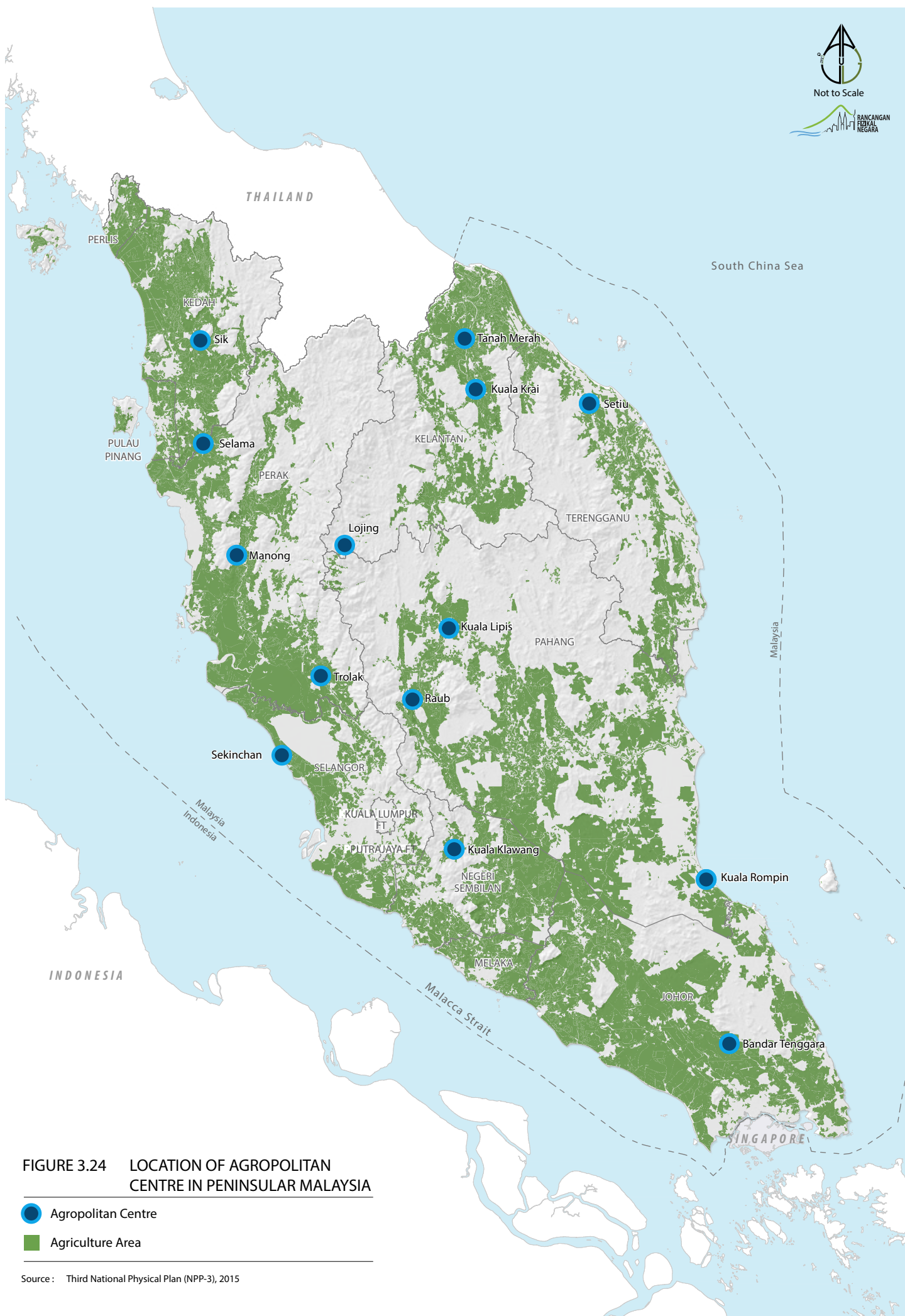
- Grocery stores, business centres, schools, clinics, community halls etc.
- Collection, Processing and Packaging Centres (CPCs)

Source: National Physical Plan-3, 2015

Figure 3.23 Model of ECER Agropolitan Centres



Source: ECER, 2015



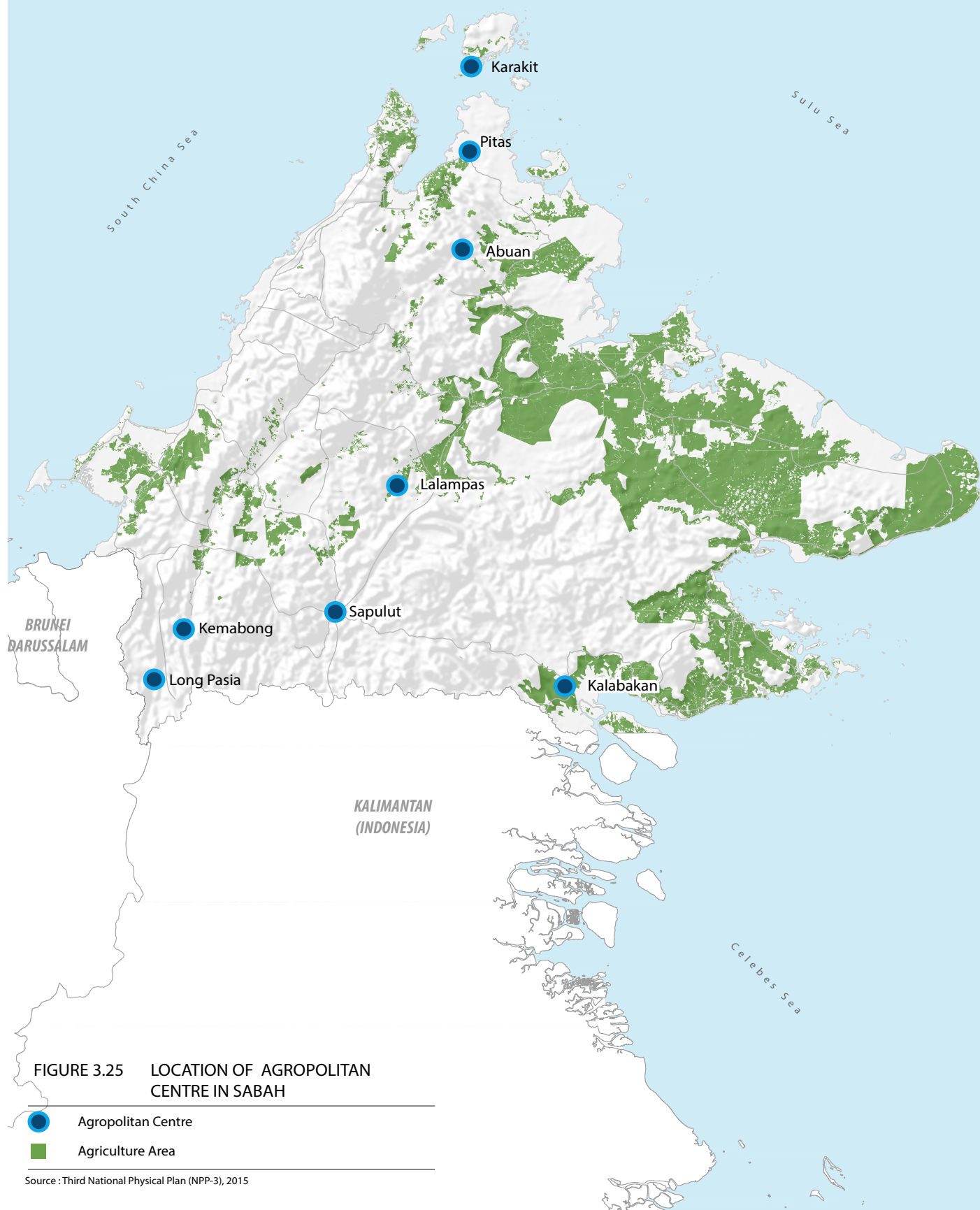




FIGURE 3.25 LOCATION OF AGROPOLITAN CENTRE IN SABAH

-  Agropolitan Centre
-  Agriculture Area

Source : Third National Physical Plan (NPP-3), 2015

DG2.2: Enhancing Value Chain Activities for Agriculture-Based Economy

Agriculture is one of the sectors that contribute to exports and GDP, and also promotes the economic well-being of smallholders. The country's main commodity crops include palm oil, rubber, cocoa, pepper, tobacco and sago. In 2010, agriculture and agro-based industries contributed RM121.9 billion or nearly 15% to the country's GDP, and the figure is expected to rise to RM168 billion (or 11.7%) in 2020. Although the percentage will decrease, the value of commodities is increasing, especially in the form of revenue from downstream agricultural industries.

Box 3.18: Performance of Agricultural Sector

A. Performance of agriculture sector and agro-based industry in 2010



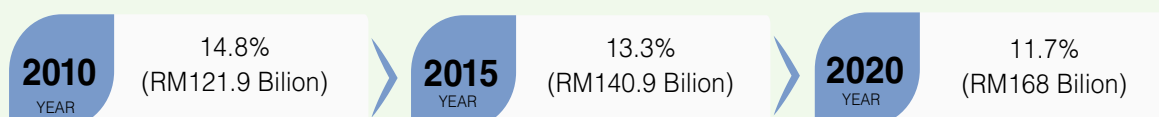
Accounted for 13.3% of GDP in 2014
Source: Department of Statistics, 2014



Employed 16 million workers (12% of total workforce) in 2010
Source: Department of Statistics, 2010

B. Projected contribution of agricultural and agro-based industry to GDP in the future

The contribution of the agricultural sector to GDP is expected to increase by RM46.1 billion from RM121.9 billion in 2010 to RM168 billion in 2020.



Source: 11th Malaysia Plan, 2016-2020



Harvesting Palm Oil Fruits in a Palm Oil Plantation

Action DG2.2A

Enhancing value-added activities in palm oil industry

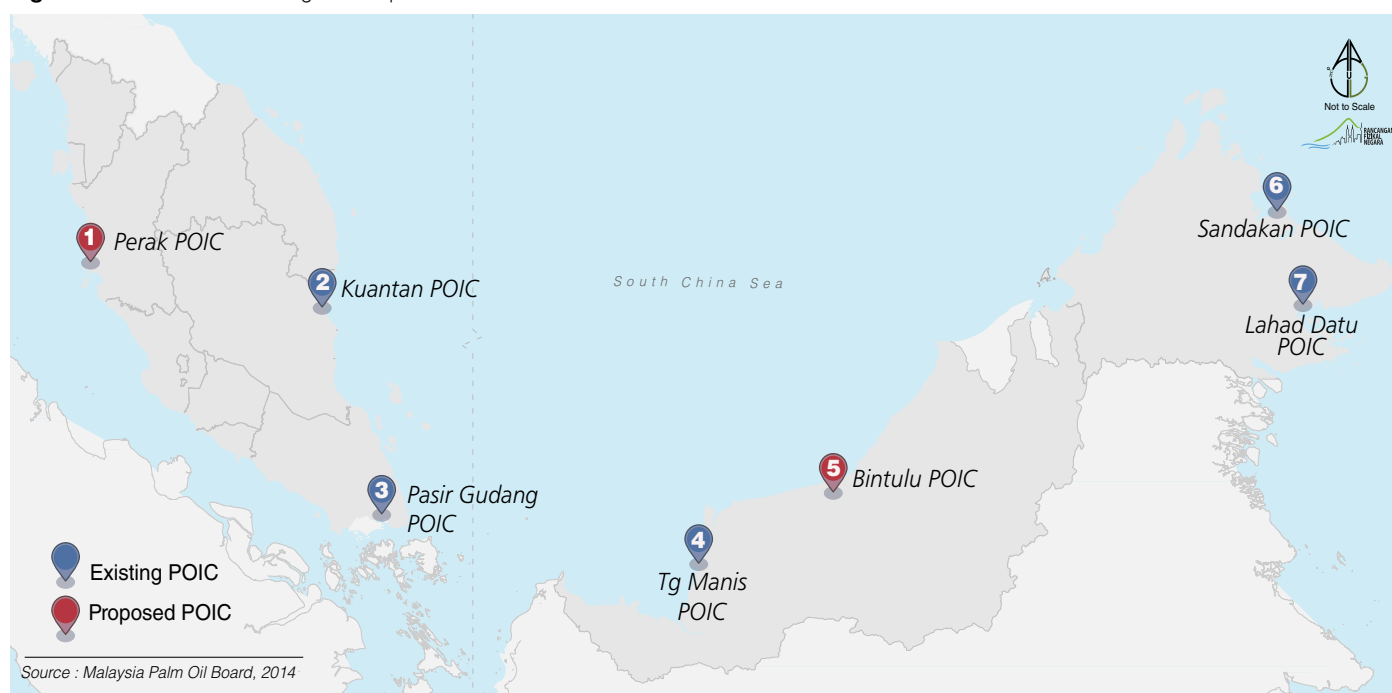
Palm oil industry development will focus on increasing the productivity of existing areas through more efficient farm management, replanting of unproductive areas, and integrated livestock breeding in palm oil plantations. The emphasis will be on developing downstream industries through value-added activities of palm oil and biomass in Palm Oil Industrial Clusters (POIC) established in the main palm oil growing areas.

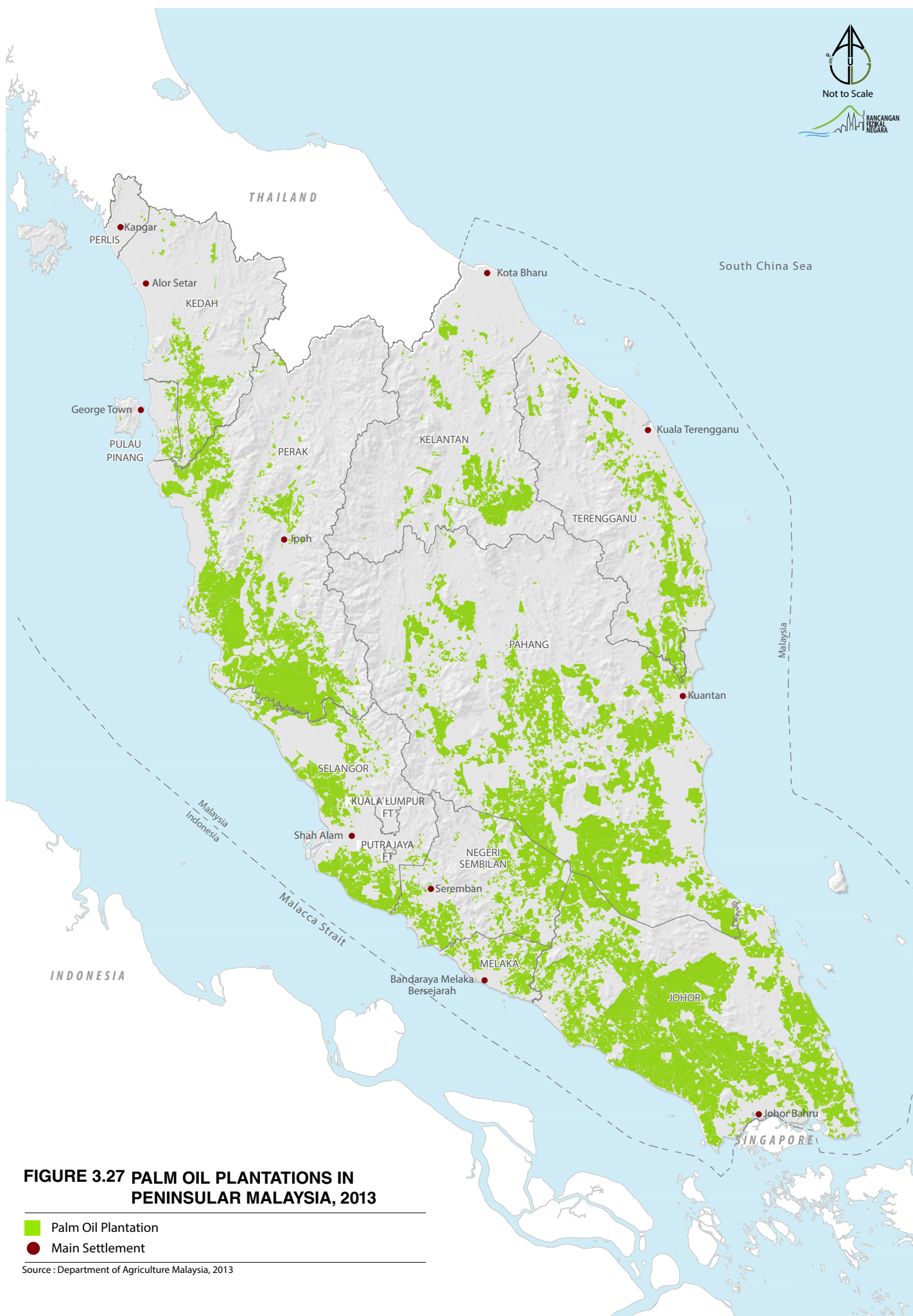
The main goal is for the POICs to have facilities and support services managed by the Special Industrial Park Manager, in parallel with the development and management of industrial parks. POIC components include manufacturing and processing zones, R&D centre, administration and management of SME industrial parks, and bulking and warehousing facilities. Some POICs will be gazetted as free trade zones.

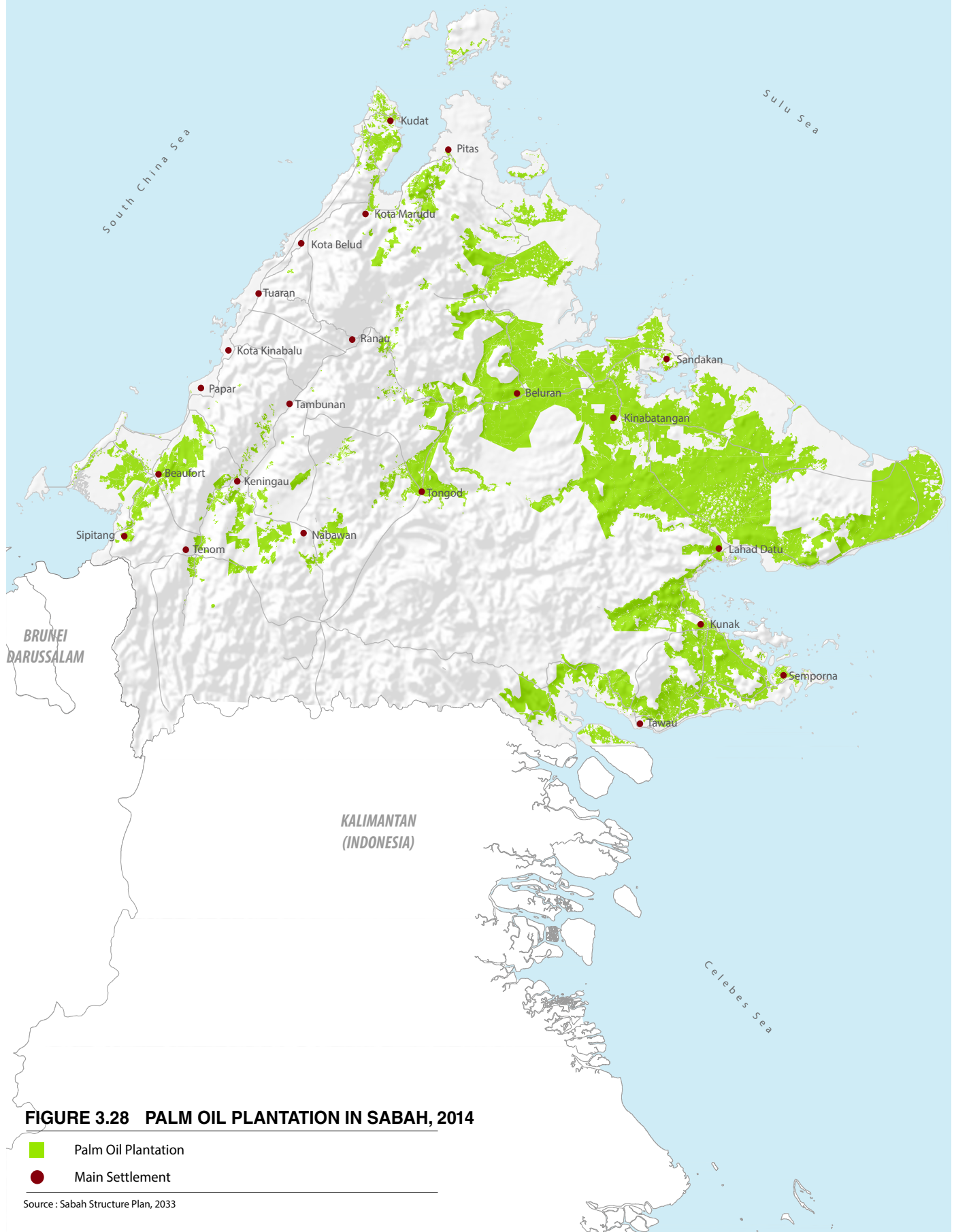
Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Plantation Industries and Commodities Ministry of Rural and Regional Development Ministry of Agriculture and Agro-based Industry 	<ul style="list-style-type: none"> State Economic Planning Units (EPUs) Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Ministry of Rural Development Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Plantation Industries and Commodities 		

Figure 3.26 Location of Existing and Proposed POICs







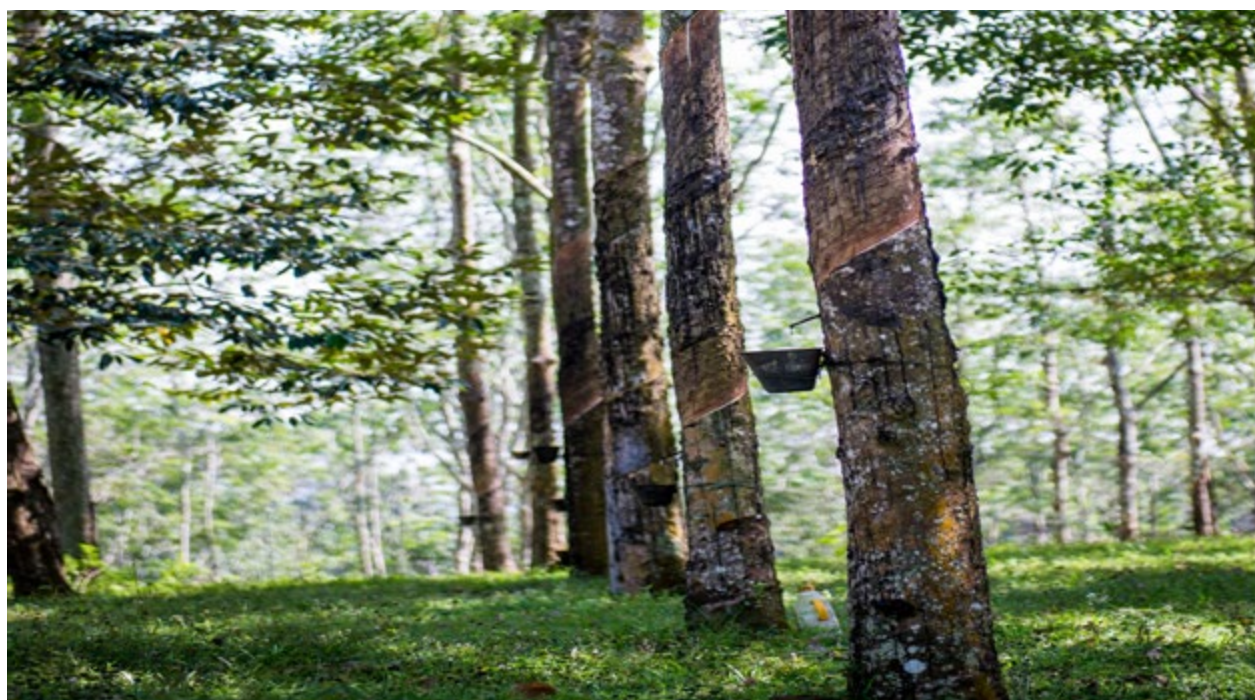
Action DG2.2B

Improving productivity and role of rubber

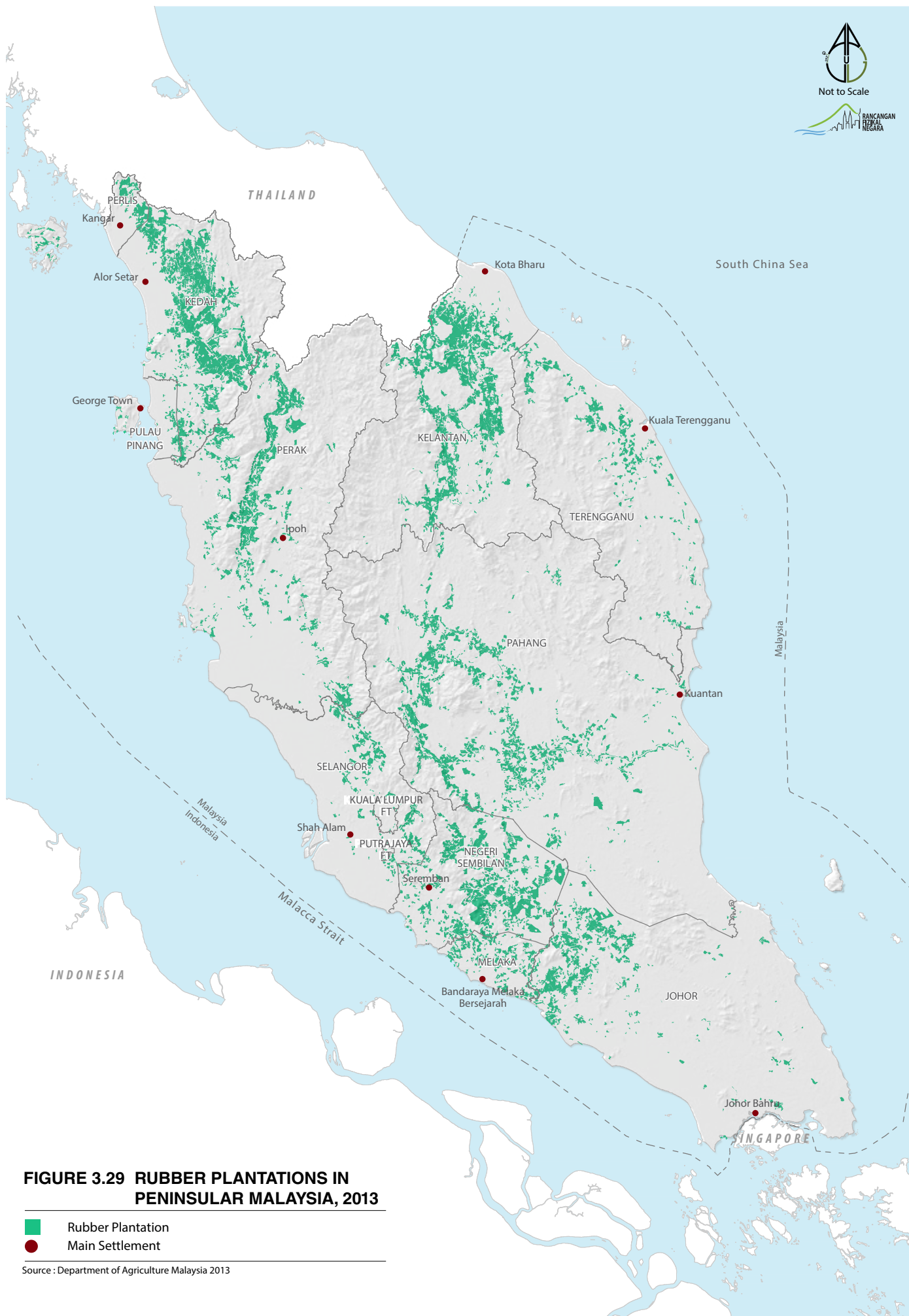
Rubber cultivation will be concentrated in suitable areas to raise the rubber productivity and incomes of rubber smallholders through schemes that consolidate their smallholdings, led by RISDA, FELCRA or the private sector. In addition, the agropolitan concept will be adopted in rubber growing areas to improve the incomes of rubber smallholders and generate economic and employment opportunities in rural areas. The programme includes consolidating rubber smallholdings into plantations, integrating crops and livestock, promoting high-value-added downstream activities, and developing supporting infrastructure including the services sector.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Plantation Industries and Commodities Ministry of Rural and Regional Development 	<ul style="list-style-type: none"> Department of Agriculture RISDA FELCRA FELDA Malaysian Rubber Board 	<ul style="list-style-type: none"> Sabah Ministry of Agriculture and Food Industry Sabah Rubber Industry Board
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Plantation Industries and Commodities 		



A Typical Rubber Plantation, showing cups that collect the latex



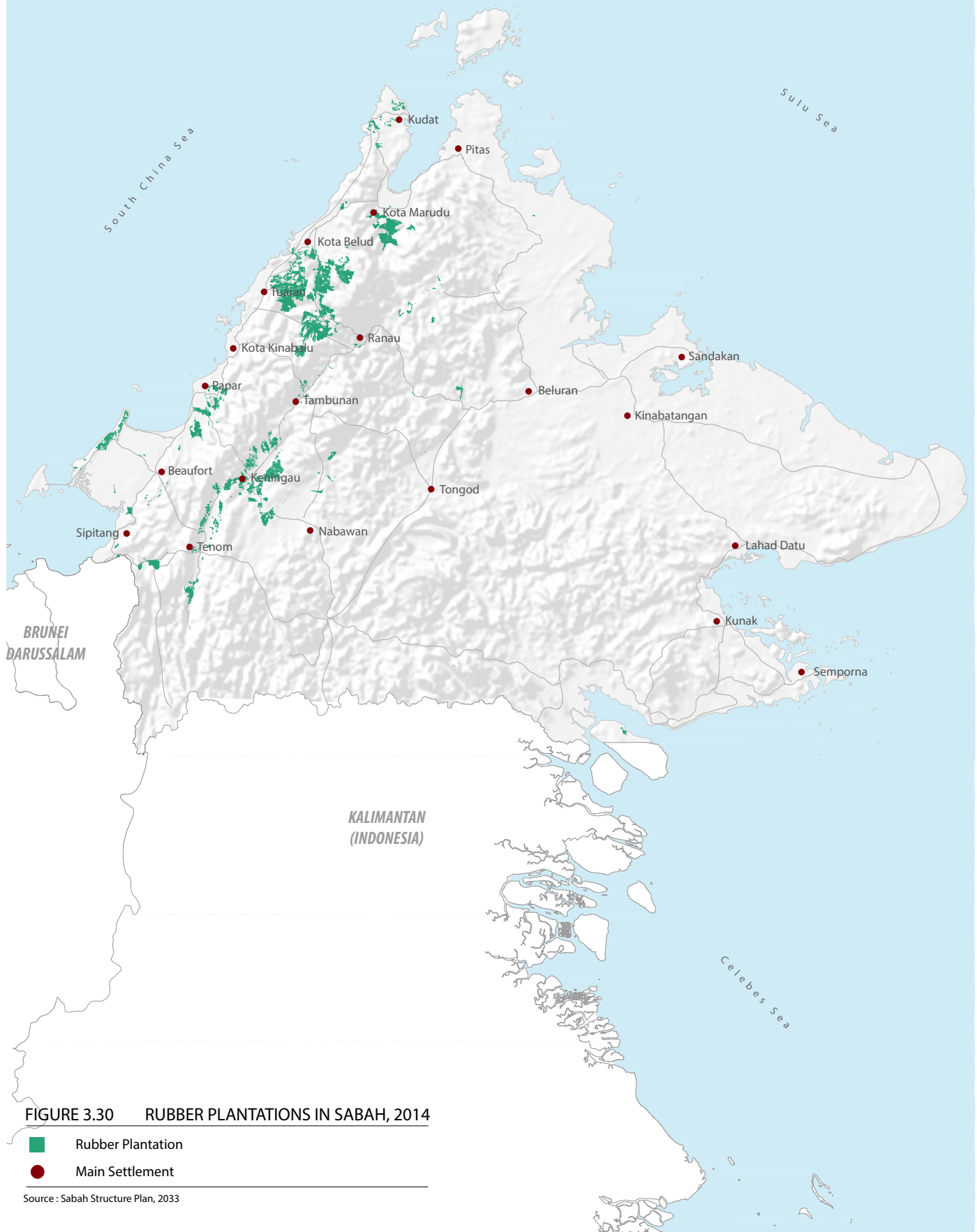


FIGURE 3.30 RUBBER PLANTATIONS IN SABAH, 2014

- Rubber Plantation
- Main Settlement

Source : Sabah Structure Plan, 2033

Action DG2.2C

Promoting fisheries and aquaculture activities

The role of fisheries and aquaculture as food sources should be strengthened as concerns grow over worsening global food security. The following steps should be taken:

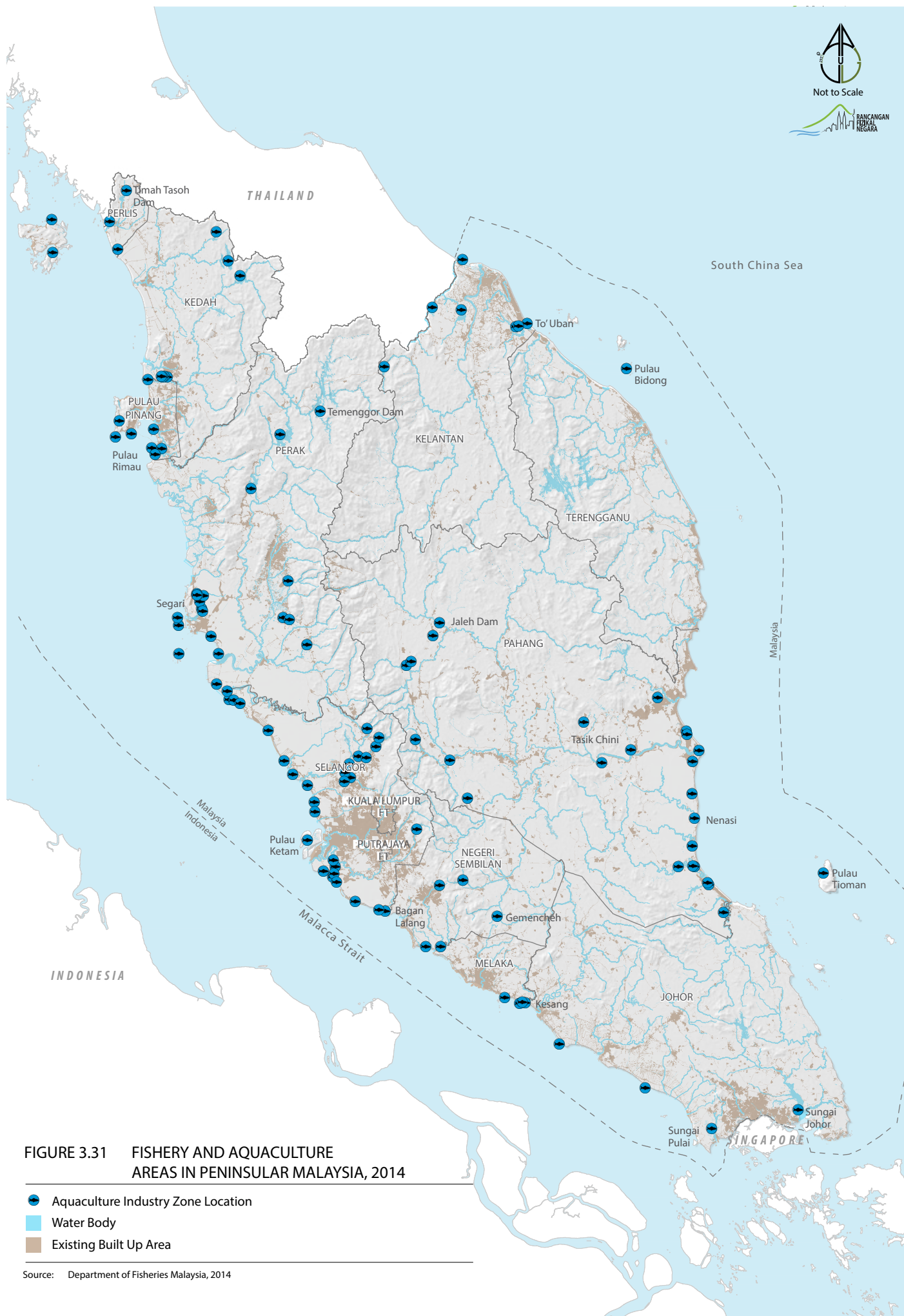
1. Attracting more private investment, particularly in the Aquaculture Industrial Zones (AIZs), in order to increase the production of fishery products and promote value-added fishing and aquaculture downstream activities
2. Improving the provision of basic infrastructure and facilities to support the growth of the sector;
3. Establishing efficient aquaculture fish production chain by involving the private sector and relevant government agencies; and
4. Improving market access and logistical support for the collection, distribution and marketing of fishery and aquaculture products.

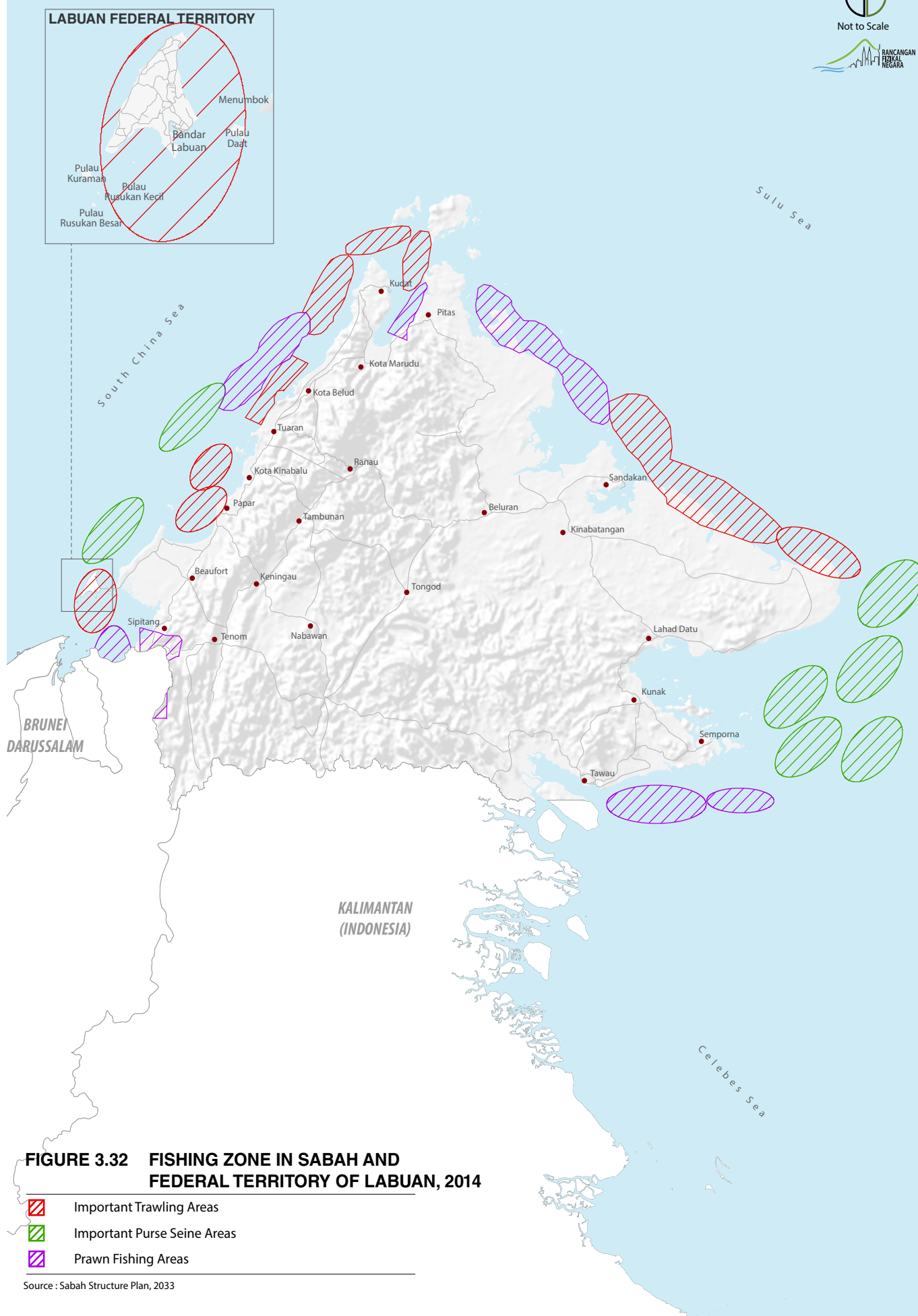
Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Agriculture and Agro-based Industry 	<ul style="list-style-type: none"> Fisheries Development Authority of Malaysia 	<ul style="list-style-type: none"> Sabah Ministry of Agriculture and Food Industry Sabah Department of Fisheries
Implementing Agency		
<ul style="list-style-type: none"> Department of Fisheries Malaysia 		



Fish harvesting from aquaculture pond





Action DG2.2D

Promoting modern agriculture to generate higher incomes

Food production is expected to increase with the use of modern agricultural technology, thus increasing the domestic food supply. Modern agriculture, which emphasises the use of the latest and suitable technologies, aims to achieve higher yields and higher quality products. Economic growth in the agriculture sector can enhance employment and business opportunities.

In addition, a high level of awareness in green or eco-friendly agriculture promotes sustainable farm management. Measures that should be implemented are as follows:

1. Increasing the value added of modern agriculture by enhancing the value chain, providing incentives for new products and intensifying research and development (R&D). Enhancing the value chain can encourage the processing of raw materials into finished products which can then be marketed to consumers; and
2. Promoting new product incentive programmes to enable rural residents to venture into new income-generating economic activities in agriculture, fisheries and livestock breeding.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Agriculture and Agro-based Industry 	<ul style="list-style-type: none"> Ministry of Rural and Regional Development (MRRD) Malaysian Rubber Board Malaysian Palm Oil Board RISDA FELDA KETENGAH KESEDAR KEJORA POIC Offices 	<ul style="list-style-type: none"> Ministry of Agriculture and Food Industry Sabah Department of Agriculture
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Agriculture and Agro-based Industry 		



Chillies harvesting

Action DG2.2E

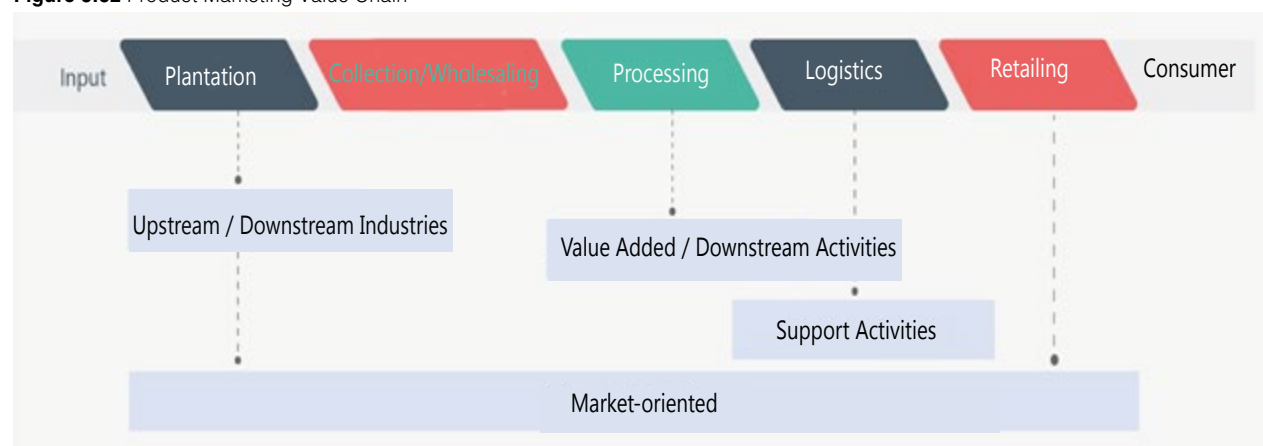
Strengthening rural-urban economic linkages

Rural-urban industrial linkages should be reinforced as this can promote entrepreneurial activities in rural communities. These linkages create opportunities for entrepreneurs to develop products which can then be marketed in urban areas to boost productivity. Effective linkages can help rural entrepreneurs to expand their markets in urban areas, obtain supplies and inputs at more competitive prices, and ensure continued demand in rural areas.

Measures that need to be implemented are as follows:

1. Developing rural-urban industrial linkages through the feeder industry concept, whereby rural enterprises provide inputs to industries in urban areas, whether for marketing or processing. Retail chain stores or mini supermarkets selling agricultural products from rural areas should be set up in urban areas; and
2. Improving market access and logistics by strengthening logistics support and rural-urban connectivity.

Figure 3:32 Product Marketing Value Chain



Source: Rural Development Master Plan, 2010

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Agriculture and Agro-based Industry Ministry of Plantation Industries and Commodities 	<ul style="list-style-type: none"> Federal Agricultural Marketing Authority (FAMA) State Economic Planning Units (EPUs) Department of Agriculture Malaysia Department of Fisheries Malaysia Regional Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Rural Development Ministry of Agriculture and Food Industry Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agency		
<ul style="list-style-type: none"> State Governments Ministry of Rural and Regional Development 		

DG2.3: Improving Rural Infrastructure and Basic Amenities

The infrastructure and basic amenities in rural settlements need to be upgraded in order for Malaysia to achieve the target of 15% of the population living in rural areas by the year 2040. In addition, modern infrastructure is needed to improve the competitiveness of the rural economy. To improve rural infrastructure and facilities, the following actions should be implemented:

Action DG2.3A

Enhancing rural infrastructure

Developing the rural infrastructure is crucial in the development and growth of rural areas. A good and conducive infrastructure can boost the nation's economic growth and narrow the urban-rural development gap. Rural infrastructure that should be enhanced includes:

1. ICT Facilities

Enhanced ICT facilities and appropriate software packages will continue to be provided for rural residents. ICT facilities should be strengthened and reoriented so as to become an instrument that can generate new income opportunities in rural areas. They will be used to market rural products and expand business networks and information dissemination activities.

2. Electricity

Access to electricity in rural areas should be extended to the remotest areas, including longhouses in the interior of Sabah and Sarawak, Orang Asli settlements in Peninsular Malaysia, and island settlements. Rural electricity coverage will be expanded through a grid system and alternative systems such as mini-hydro and solar hybrid.

3. Water Supply

Efforts to improve the coverage of clean and treated water in rural areas will be implemented by upgrading or providing new pipelines and water treatment plants, in accordance with the 11th Malaysia Plan target of 99% clean and treated water coverage in 2020.

4. Sewerage System and Services

Continuous sewerage services will be extended to rural areas to improve the quality of rural settlements. Appropriate technologies for sewage treatment should be adopted in rural areas, especially in the traditional villages and Orang Asli settlements in remote areas, as well as island settlements.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Energy, Green Technology and Water Ministry of Communications and Multimedia 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia State Economic Planning Units (EPUs) Department of Orang Asli Development (JAKOA) Tenaga Nasional Berhad State Water Authorities Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Ministry of Rural Development Sabah Ministry of Infrastructure Development Sabah Economic Development and Investment Authority (SEDIA) Sabah Public Works Department
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Rural and Regional Development State Governments 		

Action DG2.3B

Improving access to basic amenities and services

Improving access to basic facilities should focus on the provision of basic facilities and services such as social amenities as well as financing, education, health and recreational facilities to rural residents in order to improve their quality of life. The development of infrastructure and provision of comprehensive and efficient public facilities may be carried out in three steps:

1. Repair basic rural facilities or add new ones;
2. Assess the need for infrastructure and public facilities in order to enhance services and access in rural areas; and
3. Increase cooperation among implementing agencies in the effort to enhance basic rural services.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development State Economic Planning Units (EPUs) 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Ministry of Rural Development Sabah Ministry of Local Government and Housing Sabah Department of Town and Regional Planning Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Rural and Regional Development State Governments 		



A village in Terengganu

Action DG2.3C

Improving rural networks and connectivity

The construction of new roads and upgrading of existing rural roads will improve the connectivity in rural and urban fringe areas, particularly in interior areas of Sabah and Sarawak as well as Orang Asli settlements in Peninsular Malaysia. Technology, soil stabilisation techniques and concrete pavement should be utilised in order to produce quality roads and reduce maintenance costs. The roads should be able to accommodate heavy and commercial vehicles as well as improve accessibility between rural areas and urban economic centres. In addition, an efficient and conducive rural public transportation system should be established to improve urban-rural accessibility.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Rural and Regional Development Ministry of Public Works 	<ul style="list-style-type: none"> Town and Country Planning Department of Peninsular Malaysia Public Works Department State Economic Planning Units (EPUs) Regional Authorities Local Authorities Land and District Offices 	<ul style="list-style-type: none"> Sabah Ministry of Rural Development Sabah Ministry of Infrastructure Development Sabah Public Works Department Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Public Works State Governments 		



A Rural Road in Sabah

DG3

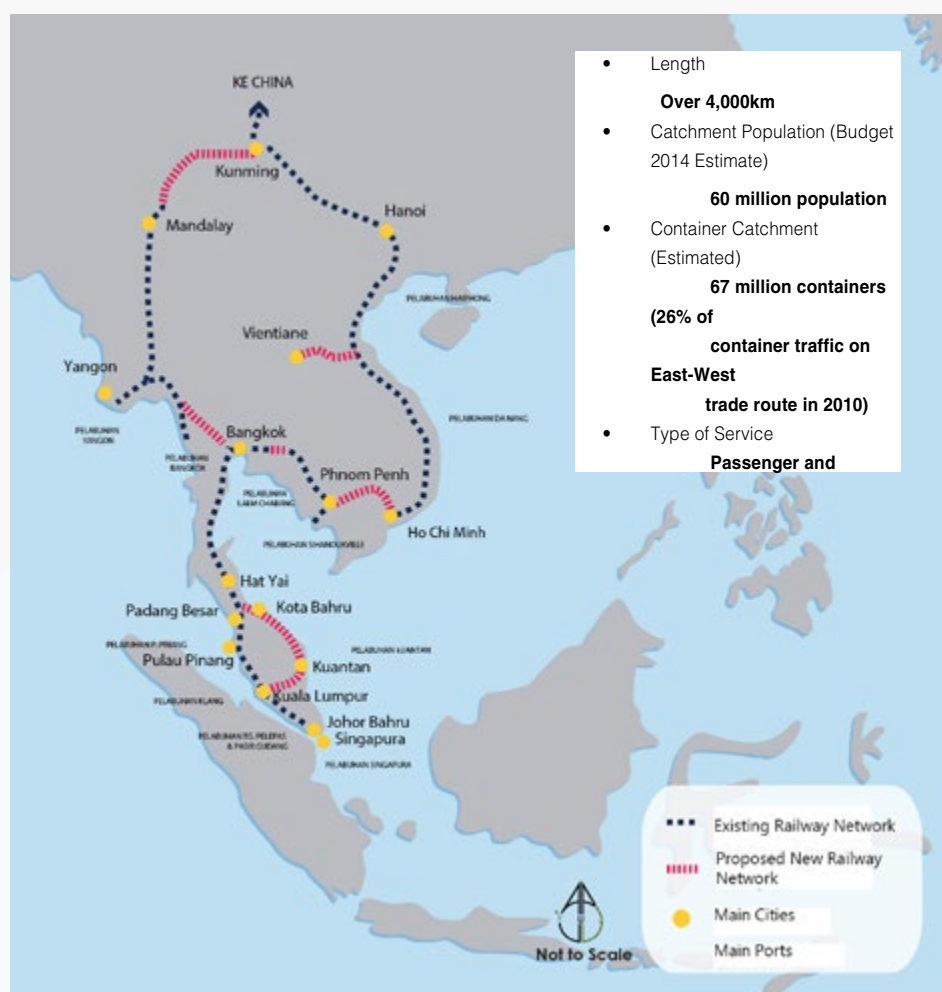
Enhanced Connectivity and Access

Developing a comprehensive communication system and enhanced access to meet the needs of national development and to stimulate local economic growth

Efficient and comprehensive communication is at the heart of the country's economic development. This strategic direction gives primary emphasis on developing physical networks and communications as well as digital infrastructure such as high-speed broadband, in the effort to improve regional linkages and access to global markets, information and knowledge.

Increased physical communication and access also help to improve Malaysians' well-being by enhancing economic opportunities and promoting community inclusiveness. A comprehensive communication system comprises a digital connection system as well as road, rail, water and air transportation, which are vital in stimulating social, physical and economic development.

Box 3.18 Kunming-Singapore Rail Project



The project, to be implemented by ASEAN, will have an impact on regional economic and infrastructure development.

Malaysia's benefits from the project will come mainly from the communication and logistics sector (Cargo and Container).

The infrastructure and train services should therefore be enhanced in preparation for the project.

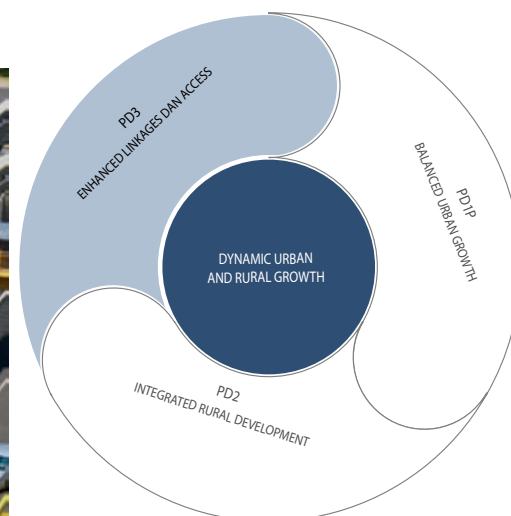
Source: Master Plan on ASEAN Connectivity, 2012



The KL Monorail, a public transit monorail system in Kuala Lumpur

Box 3:20 Pan Borneo Highway Project

Over 1,236 km of roads in Sabah will be upgraded under the Pan Borneo Highway project. The transport network will be improved to enhance connectivity and mobility in Sabah and Sarawak. The road upgrading will benefit the residents of Sipitang, Beaufort, Papar, Penampang, Kota Kinabalu, Tuaran, Kota Belud, Kudat, Tamparuli, Ranau, Telupid, Sandakan, Lahad Datu, Tawau, Kalabakan, Sapulut, Nabawan, Keningau and Kimanis.



STRATEGIC DIRECTION DG3 ENHANCED CONNECTIVITY AND ACCESS

DG3.1

Developing Physical
Network and Links

DG3.2

Developing
Comprehensive Railway
Network System

DG3.3

Improving Water
Transport Services

DG3.4

Enhancing Regional and
Local Air Links

DG3.5

Developing and
Improving Digital
Infrastructure

DG3.1: Developing Physical Networks and Linkages

Roads play an important role in economic and urban development in Malaysia. A good road network will enhance an area's economic activity by improving accessibility. In addition, it also ensures smooth communication and urban-rural and interstate population mobility. As of 2014, a total of 16,438km of highways and federal roads have been constructed, forming a comprehensive road network in Peninsular Malaysia, while in Sabah and Labuan Federal Territory, 1,600km of federal roads have been built. To date, more than 19,000 km of highways and federal roads have been built throughout the country, including in Sabah and Sarawak.

Box 3:21 Brief Information on Road and Highway



16,438 km

Highways and Federal Roads

PENINSULAR
MALAYSIA

Source: Ministry of Works, 2014

1,600 km

Federal Roads

SABAH AND LABUAN
FEDERAL TERRITORY

Source: Ministry of Works, 2014

Action DG3.1A

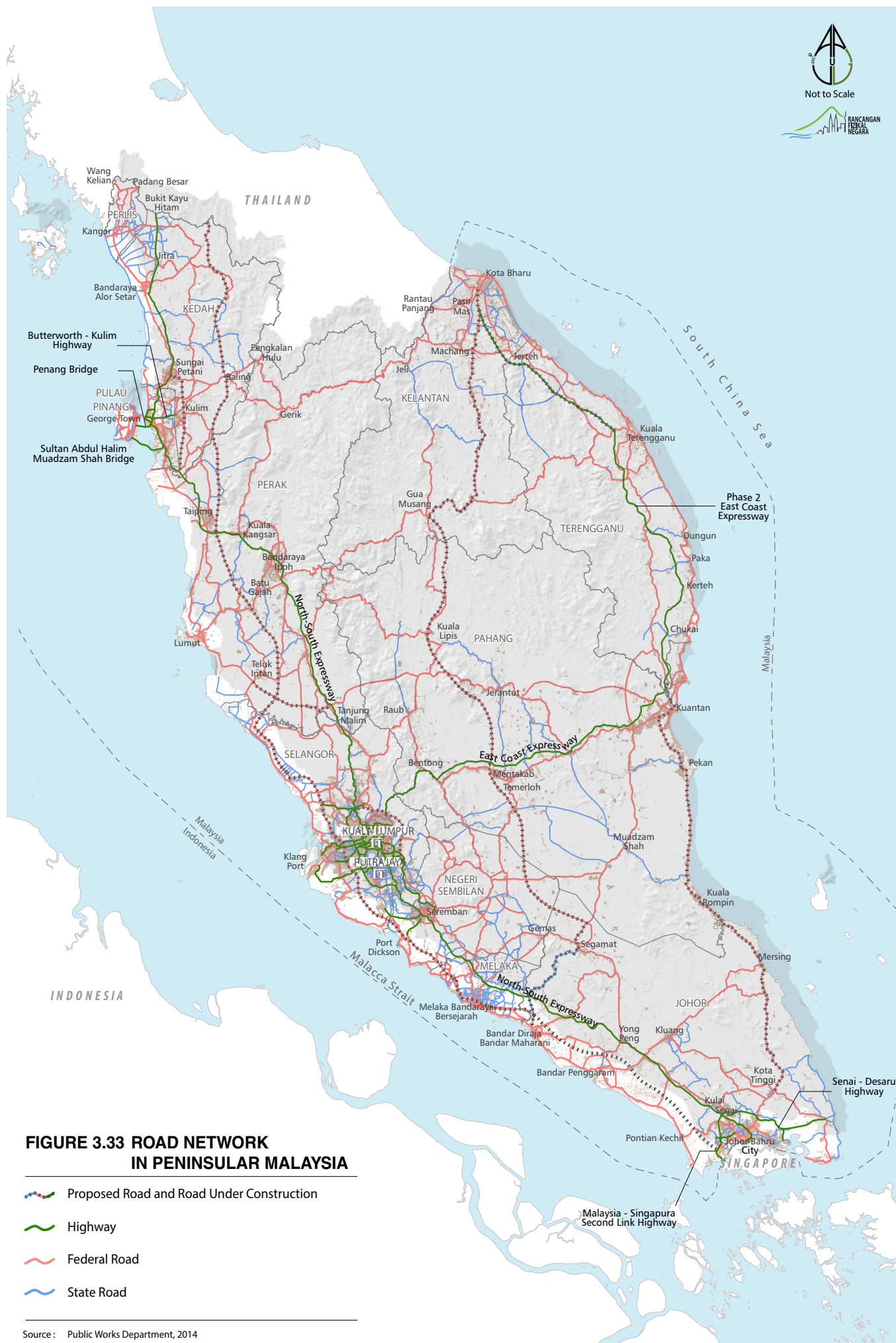
Prioritising regional connectivity

Highway development will be concentrated outside National Conurbations to expand connectivity and reduce travel times at the regional level. Construction of new highways will focus on enhancing urban-rural connectivity as well as on the East Coast Region, Sabah and Sarawak, to catalyse growth in those regions. The Highway Network Development Plan (NDP) prepared by the Ministry of Works will serve as the main reference for the implementation of the project. The main highway projects include:

1. Pan Borneo Highway project to improve connectivity in Sabah and Sarawak;
2. Central Spine Road, Kota Bharu-Kuala Krai Highway;
3. East Coast Highway 3 (LPT3) and road linking Kuantan with the southern part of Johor to improve connectivity in the East Coast of Peninsular Malaysia; and
4. Coastal highway connecting Malacca and Johor to improve access for residents of the west coast of Peninsular Malaysia.

Implementation and monitoring responsibilities

Peninsular Malaysia and Federal Territory of Labuan		Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Public Works 	<ul style="list-style-type: none"> State Governments Regional Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Local Government and Housing Sabah Ministry of Infrastructure Development Sabah Public Works Department Sabah Chief Minister's Department (Sabah Economic Planning Unit) Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Public Works Department 		



LABUAN FEDERAL TERRITORY

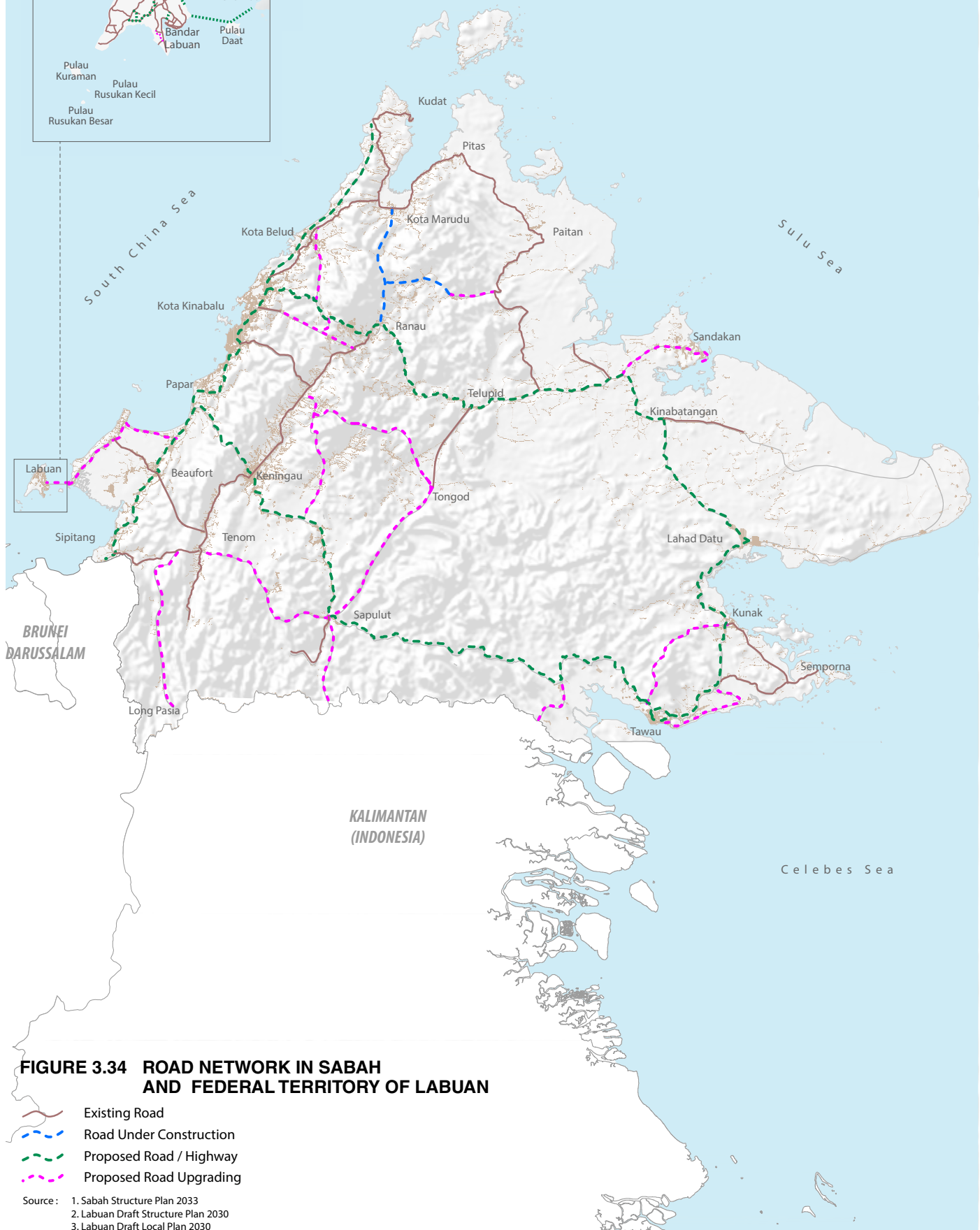
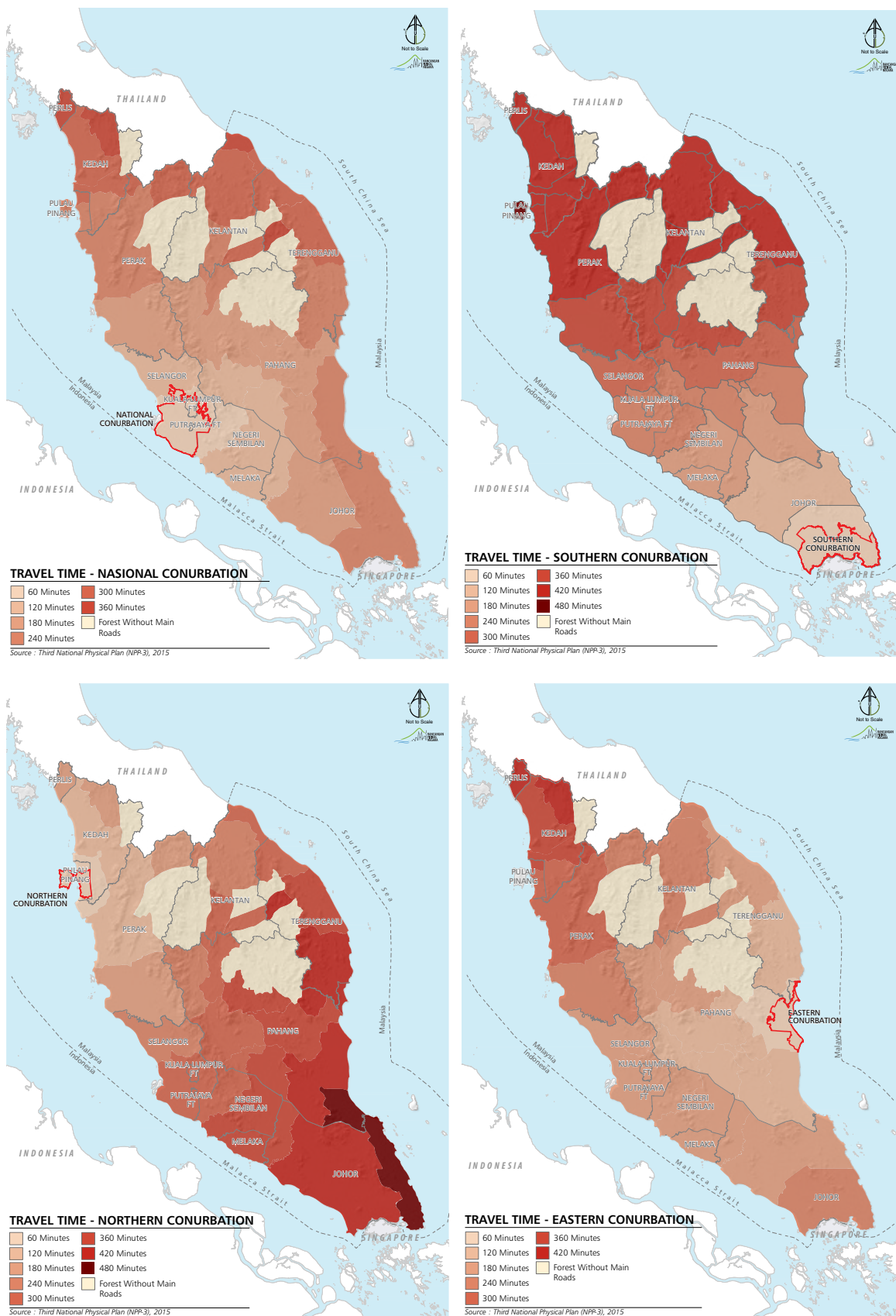


FIGURE 3.34 ROAD NETWORK IN SABAH AND FEDERAL TERRITORY OF LABUAN

- Existing Road
- - - Road Under Construction
- - - Proposed Road / Highway
- - - Proposed Road Upgrading

Source :
 1. Sabah Structure Plan 2033
 2. Labuan Draft Structure Plan 2030
 3. Labuan Draft Local Plan 2030

Figure 3.35 Travelling Time for Four (4) Conurbations in Peninsular Malaysia



DG3.2 : Developing Comprehensive Railway Network System

Malaysia has to move towards comprehensive railway network system as a support to national economic transformation plan and respond to current needs. Railway network development will become the transportation spine in Malaysia. This network system includes development of High Speed Rail (HSR), Electric Train Service (ETS) and urban public transportation. With that, the connectivity between regions and towns will be shortened, with a safe and efficient service that will stimulate local economic growth. Railway network development must also take into advantage the Kunming-Singapore Railway Construction Project which will be implemented to complete the railway network connecting Singapore and Thailand. The proposed Singapore-Thailand Railway Network will developed a more comprehensive regional connection system as well as stimulating regional economy and infrastructure development.

Action DG3.2A

Encouraging High Speed Rail as Main Regional Rail in the Comprehensive Transportation System

In future, the High Speed Rail (HSR) should be extended from Kuala Lumpur to Johor Bahru and Butterworth to complete the railway network system and allowing easy mobility in between conurbations and major towns in the Peninsular Malaysia. The main objective is to shortened travelling time to 90 minutes in between northern and southern region. The following steps will be taken into consideration:

1. **Short Term: Executing HSR route from Kuala Lumpur to Singapore; and**
2. **Long Term: Identifying HSR corridor from Kuala Lumpur to Ipoh and Butterworth.**

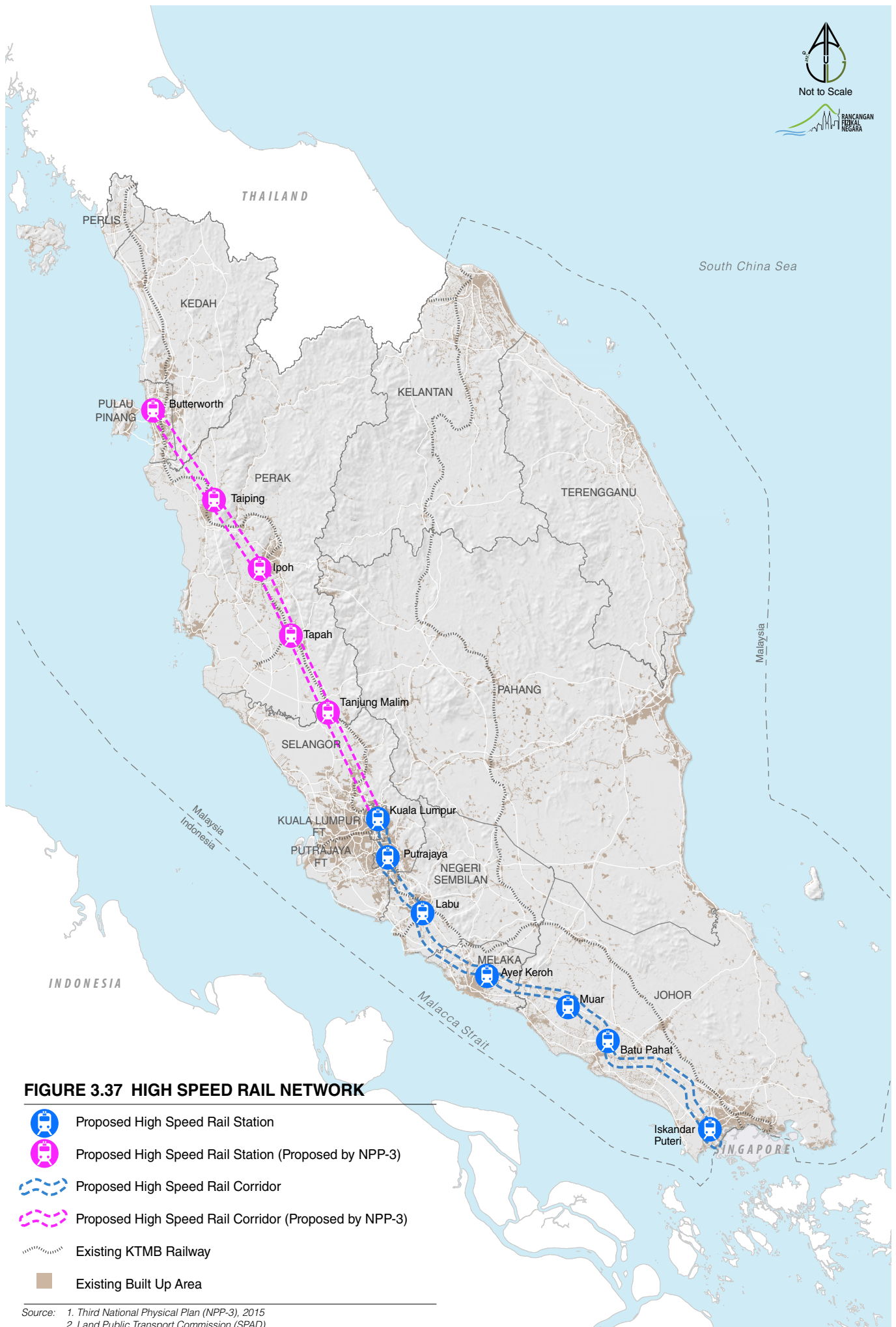
Figure 3.36 Proposed High Speed Rail Development



Implementation and Monitoring Responsibilities

Peninsular Malaysia and the Federal Territory of Labuan

Monitoring Agency	Supporting Agency
<ul style="list-style-type: none"> Ministry of Transport Malaysia (MOT) Land Public Transport Commission (SPAD) 	<ul style="list-style-type: none"> State Government Regional Authority Local Authority
Implementing Agency	
<ul style="list-style-type: none"> Land Public Transport Commission (SPAD) 	



Action DG3.2B

Broadening Electric Train Service (ETS) and Other Train Services

Intercity train services are strengthened through improvement projects and services expansion to other regions to complete the comprehensive railway network system in Malaysia. The network will then be integrated with Thailand Railway Network System. The following steps will be implemented to broaden the train services:

1. Encouraging the use of Electric Train Service (ETS) as main intercity train in the comprehensive regional transport system

Electric Train Service (ETS) is one of the intercity passenger train services provided by Keretapi Tanah Melayu Berhad (KTMB). ETS can reach its maximum speed of 160kmph and functioned as core commuter system in between conurbations through KTMB railway network. The following steps will be taken to broaden the ETS service:

a. Short Term

- To expand ETS operation and coverage by completing the infrastructure and double track from Gemas to Johor Bahru; and
- To integrate ETS service with efficient urban transit system and shuttle bus system in the growth areas.

b. Long Term

- To expand ETS operation and coverage to the eastern region of the Peninsular Malaysia; and
- Proposed railway network system (with speed equivalent to ETS in Peninsular Malaysia) to connect main cities in the state of Sabah.

2. Broadening train development in other cities to complete the comprehensive railway network system in Malaysia

The proposed railway development projects are as follows:

a. Short Term

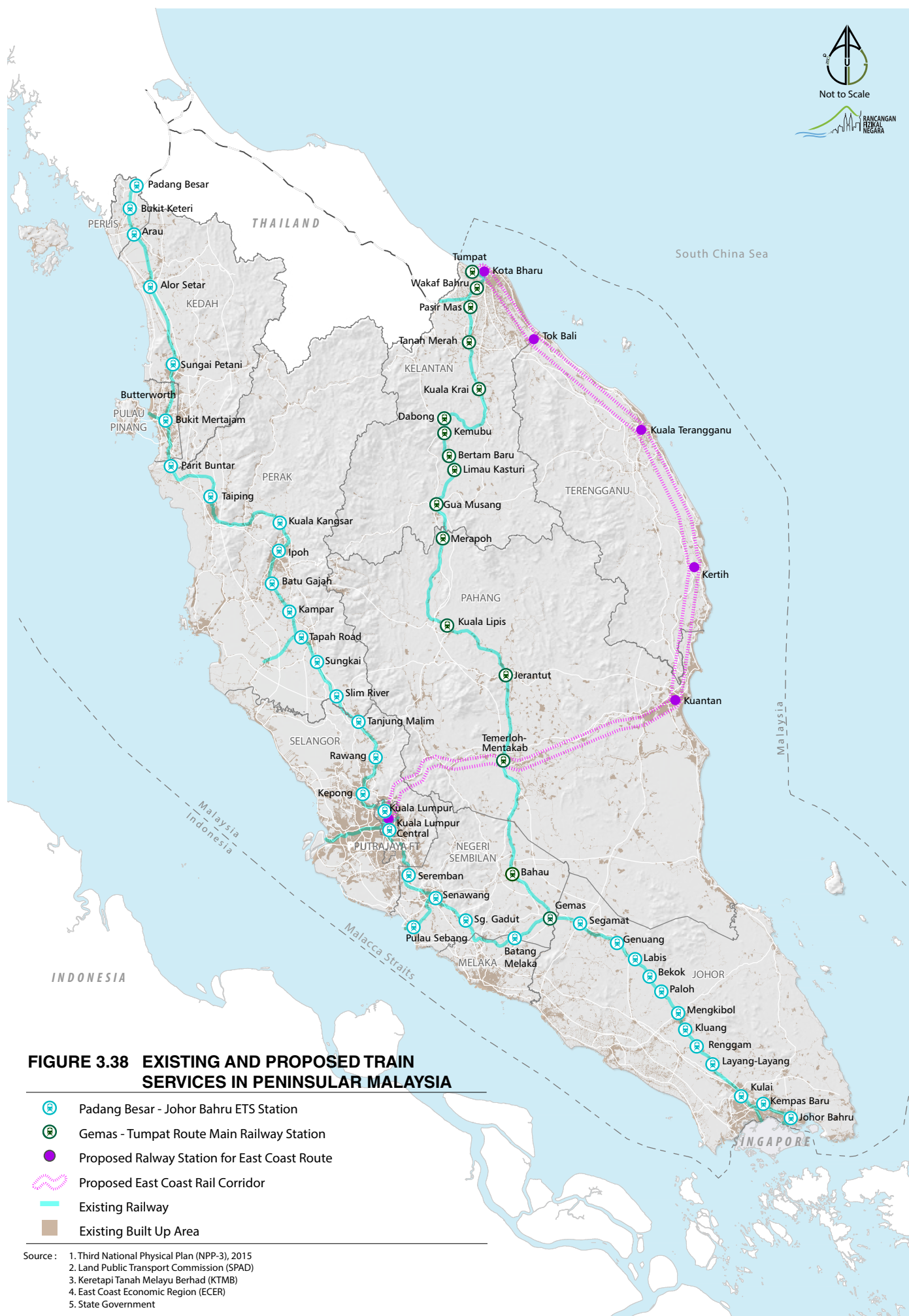
- Recovery of existing KTMB single track line from Gemas to Tumpat

b. Long Term

- Proposed restoration of existing Tapah – Teluk Intan track and proposed new track from Teluk Intan to Bagan Datoh to support industrial development and sea terminals around Bagan Datoh;
- Proposed new track from Ipoh to Lumut;
- Proposed restoration of existing Seremban – Port Dickson track; and
- Proposed connecting railway network in between states of Sabah and Sarawak.

Implementation and Monitoring Responsibilities

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Supporting Agency	Supporting Agency
<ul style="list-style-type: none"> • Ministry of Transport (MOT) 	<ul style="list-style-type: none"> • Land Public Transport Commission (SPAD) • Regional Authority • Railway Assets Corporation (RAC) 	<ul style="list-style-type: none"> • Sabah Ministry of Infrastructure Development • Sabah State Railway Department • Chief Minister's Department of Sabah (Sabah State Economic Planning Unit) • Sabah Economic Development and Investment Authority (SEDIA)
Implementing Agency		
<ul style="list-style-type: none"> • Keretapi Tanah Melayu Berhad (KTMB) 		





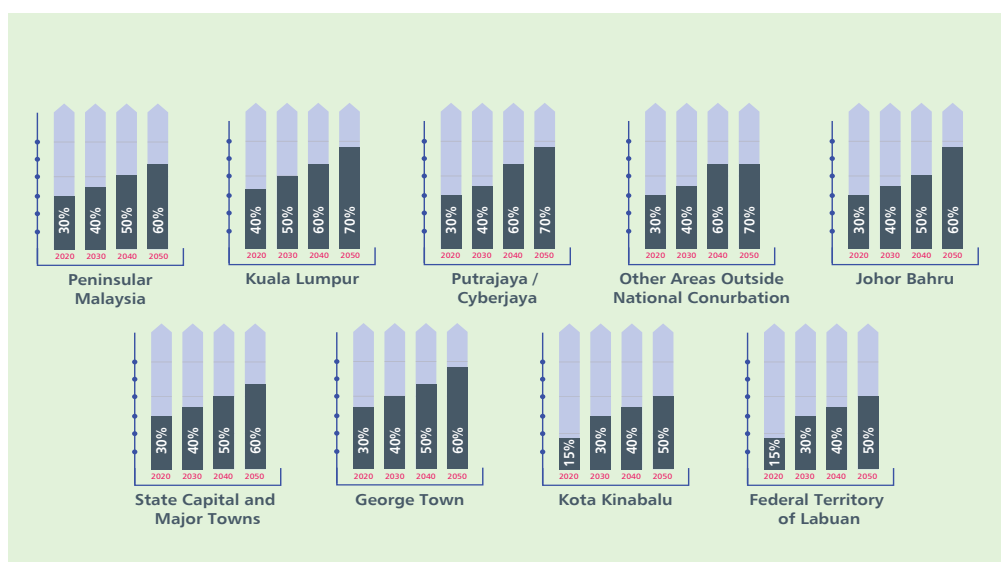
Action DG3.2C

Enhancing Urban Public Transportation

A more efficient and sustainable urban public transportation network needs to be developed in the growth area. This is to achieve the target of 40% public transport usage by the year 2030 and 50% usage by the year 2040. The use of land public transport in urban centres and urban railway network system will become the comprehensive urban transportation solution with the implementation of Transit Oriented Development (TOD) at strategic locations/ stations. To complete the urban railway network system, the interstate High Speed Rail (HSR) and Electric Train Service (ETS) are to be integrated with the light rail transit system and the high capacity (LRT and MRT) as well as the Bus Rapid Transit (BRT) in urban areas. The implementation of the transit system and improvement of bus services in urban areas will be based on these plans:

- To implement the National Land Public Transport Master Plan:
 - Klang Valley Mass Rapid Transit (around Klang Valley area)
 - LRT 3 (Bandar Utama – Klang)
 - Putrajaya – Cyberjaya Monorail Line;
 - BRT line for Klang Valley, Johor Bahru, Penang, Kuching and Kota Kinabalu as well as other major towns
- To develop Comprehensive Transportation Master Plan in major urban areas especially in Conurbations, Promoted Development Zones and Catalyst Centres;
- To expand Stage Bus Service Transformation (SBST) to other towns; and
- To broaden KTM shuttle train service and coverage to other growth areas.

Figure 3.40 Proposed Modal Split for Land Public Transportation

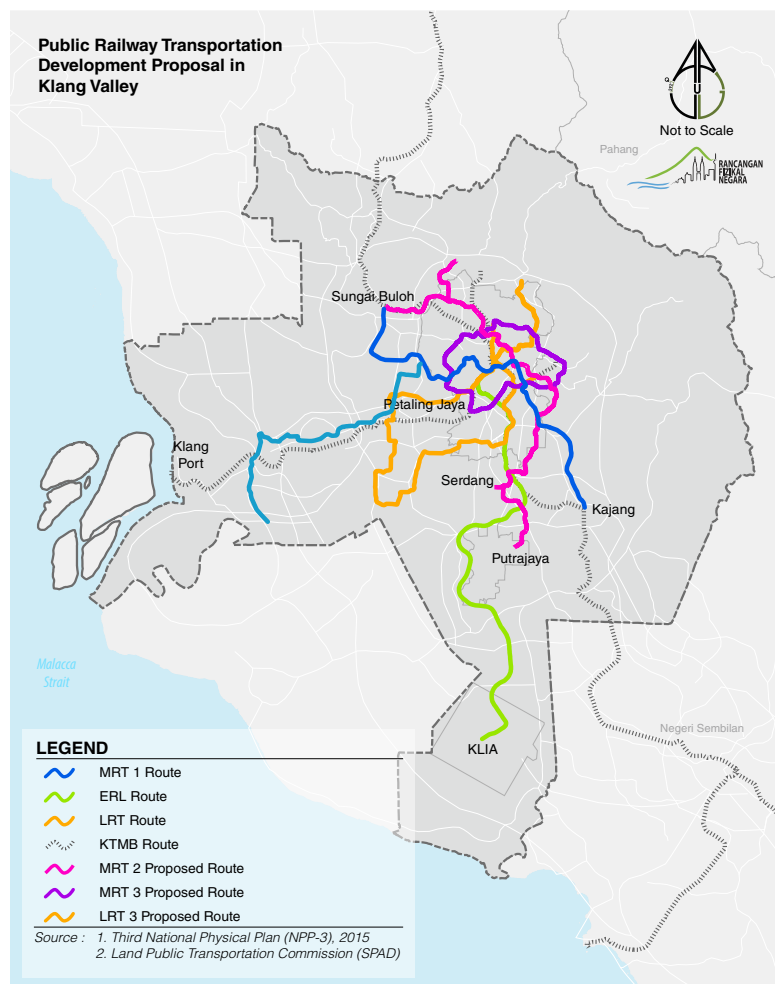


Source: National Physical Plan -3, 2015

Implementation and Monitoring Responsibilities

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Land Public Transport Commission (SPAD) 	<ul style="list-style-type: none"> Local Authority 	<ul style="list-style-type: none"> Sabah Ministry of Local Government and Housing Sabah Commercial Vehicle Licensing Board Sabah Economic Development and Investment Authority (SEDIA) Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> State Governments Regional Authorities 		

Figure 3.41 Proposed Public Transportation Developments in Klang Valley and Iskandar Malaysia



Box 3.22 Bus Rapid Transit (BRT)

Bus Rapid Transit (BRT) is a high quality bus transit system with rapid, comfortable and cost-effective service. The transit system provides a special lane for busses with connecting stations along the corridor to ensure effective, rapid and frequent operations.

BRT has a similar characteristics to other light transit system such as MRT and LRT, thus it is more reliable, easier and faster than normal bus services. BRT is able to eliminate delay factors normally associated with bus services namely caught in traffic jammed and unsatisfactory frequency level.

In Malaysia, the BRT initiative is aimed towards improving connectivity of existing bus services while speeding up bus travelling time for passengers. The first BRT system in Malaysia is completed and launched in June 2015 in Sunway City.

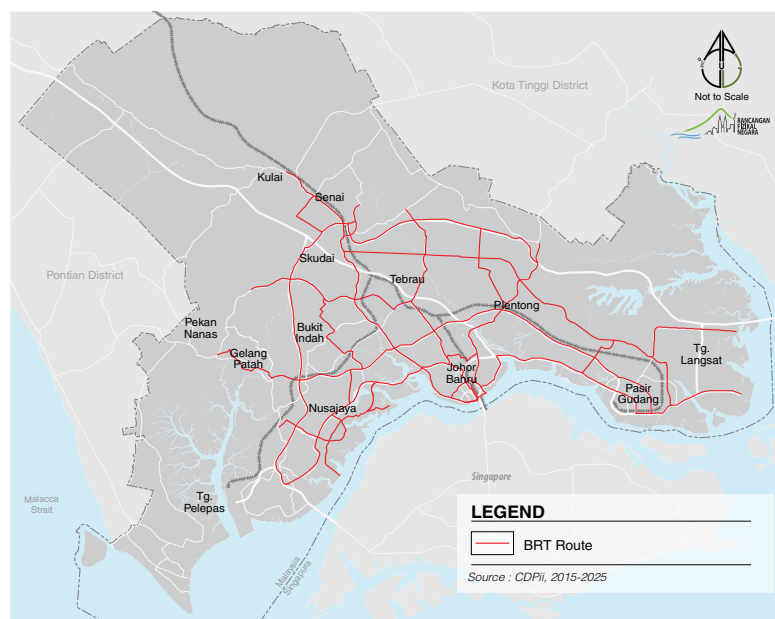
Example of BRT Facility in Sunway City

Example of BRT facility Bandar Sunway City



Source: www.myrapid.com.my

Proposed BRT Development in Iskandar Malaysia



DG3.3: Enhancing Water Transportation

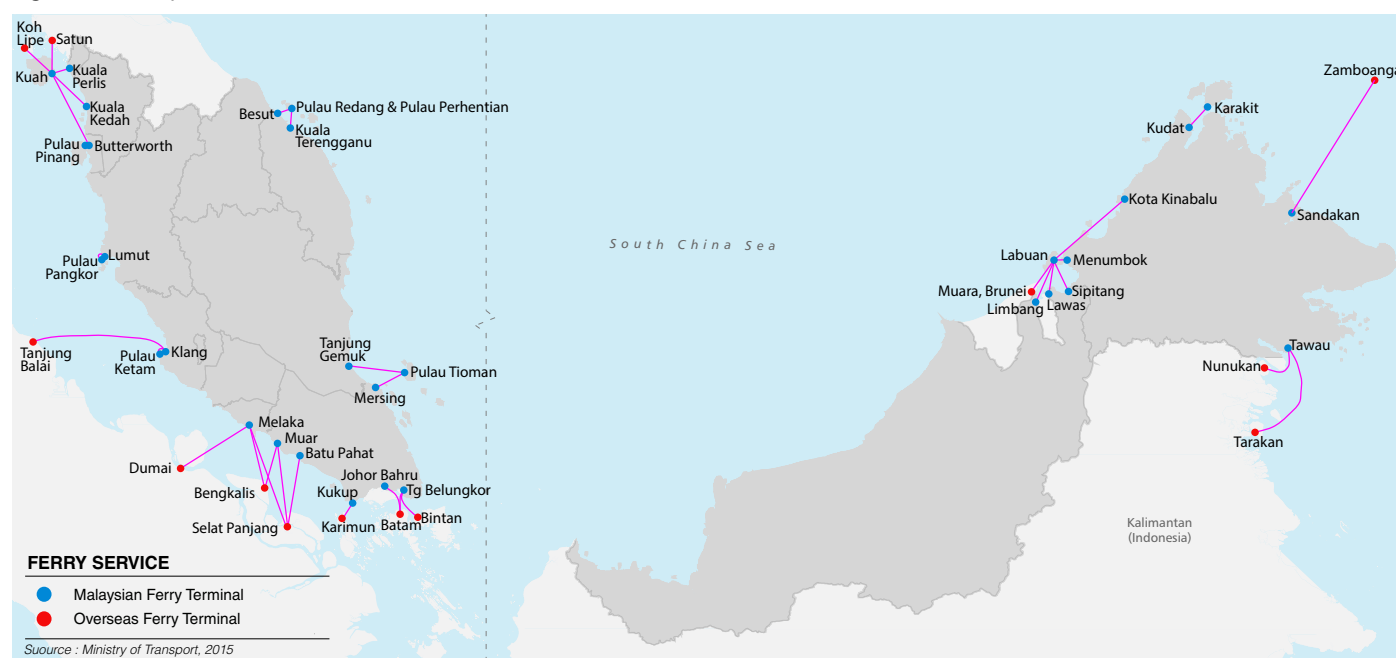
Water transportation is an alternative mode of transportation that should be encouraged to fulfil the national development needs. The emphasis is aimed towards improving water transportation performance, connectivity and mobility in between nearby islands and coastlines. Improving ferry service and developing water taxi service are among actions implementable towards broadening the water transportation services

Action DG3.3A Improving Ferry Service

There are more than 50 terminals and jetties offering ferry service and connecting more than 50 destinations including 14 international destinations and eight (8) island destinations. Ferry service plays an important role to ensure connectivity to nearby islands and inlands while contributing to the tourism sector. As such, ferry service upgrading project is important to improve efficiency level and quality of service. The upgrading project will cover the following aspects:

1. Immigration facility;
2. Security facility;
3. Jetty;
4. Accessibility; and
5. Parking bays

Figure 3.42 Ferry Services



Implementation and Monitoring Responsibilities

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport (MOT) 	<ul style="list-style-type: none"> State Governments and Local Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Infrastructure Development Sabah Ports and Harbour Department Sabah Ports Authority Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Transport (MOT) 		

Action DG3.3B

Developing Water Taxi Services

Water taxi service will be encouraged as an alternative public transportation system to enable mobility from a destination to another. Water taxi service will become an added value to eco-marine tourism products especially in tourism towns and unique islands located nearby coastlines and rivers. Areas encouraged for water taxi development are as follows:

1. Georgetown and Seberang Perai;
2. Johor Bahru;
3. Putrajaya;
4. Melaka;
5. Kuala Terengganu;
6. Langkawi;
7. Kota Kinabalu; and
8. Labuan.

Implementation and Monitoring Responsibilities

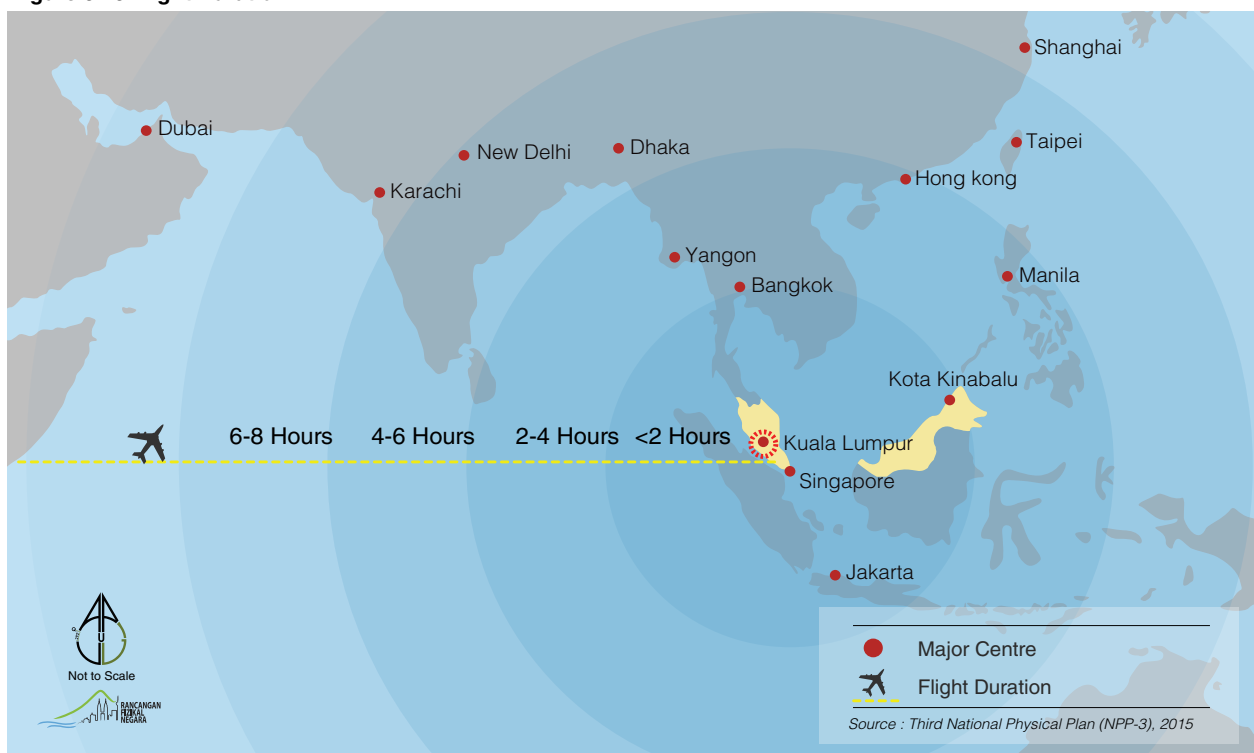
Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport (MOT) 	<ul style="list-style-type: none"> Local Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Infrastructure Development Sabah Ports and Harbour Department Sabah Ports Authority Local Authorities
Implementing Agency		
<ul style="list-style-type: none"> State Governments 		

DG3.4: Enhancing Regional and Local Air Links

The ASEAN-SAM (Single Aviation Market) or ASEAN Open Sky Agreement is an agreement between ASEAN countries towards the development of a unified and single aviation market among ASEAN members. The two-way aviation services agreement is based on Open Sky Policy which allows Malaysia and foreign aviation companies to fly without any restriction in terms of service frequency, flight capacity, aircraft types, routes and multiple designations.

Aviation service with open sky characteristics will facilitate aviation companies from participating countries to explore aviation market and to fly with commercially viable frequency and routes between both countries. This situation will encourage the growth of national aviation service and tourism sector as well as increasing our mobility to other countries and likewise. On the other hand, Malaysia will continue to improve local air links especially to inland areas to ensure the smooth transportation of people and goods.

Figure 3.43 Flight Duration



Source: Third National Physical Plan (NPP-3), 2015

Action DG3.4A

Enhancing Existing Airport Facilities and Infrastructures

The implementation of open sky policy is an opportunity for Malaysia Aviation Industry to improve competitiveness and explore new market in regional economic growth. Existing airports facilities and infrastructures need to be upgraded as an early preparation for open sky implementation as well as ensuring efficiency of airports operations and handlings to support local economic activities. The upgrading works include:

1. Immigration facility;
2. Security facility;
3. Air traffic control centre;
4. Commercial areas;
5. Cargo terminals;
6. Accessibility; and
7. Apron.

In future, any proposal for new airports will be based on economic demands and local needs. Feasibility study will be conducted by the authorised agency before obtaining approval from the Federal Government.

Implementation and Monitoring Responsibilities

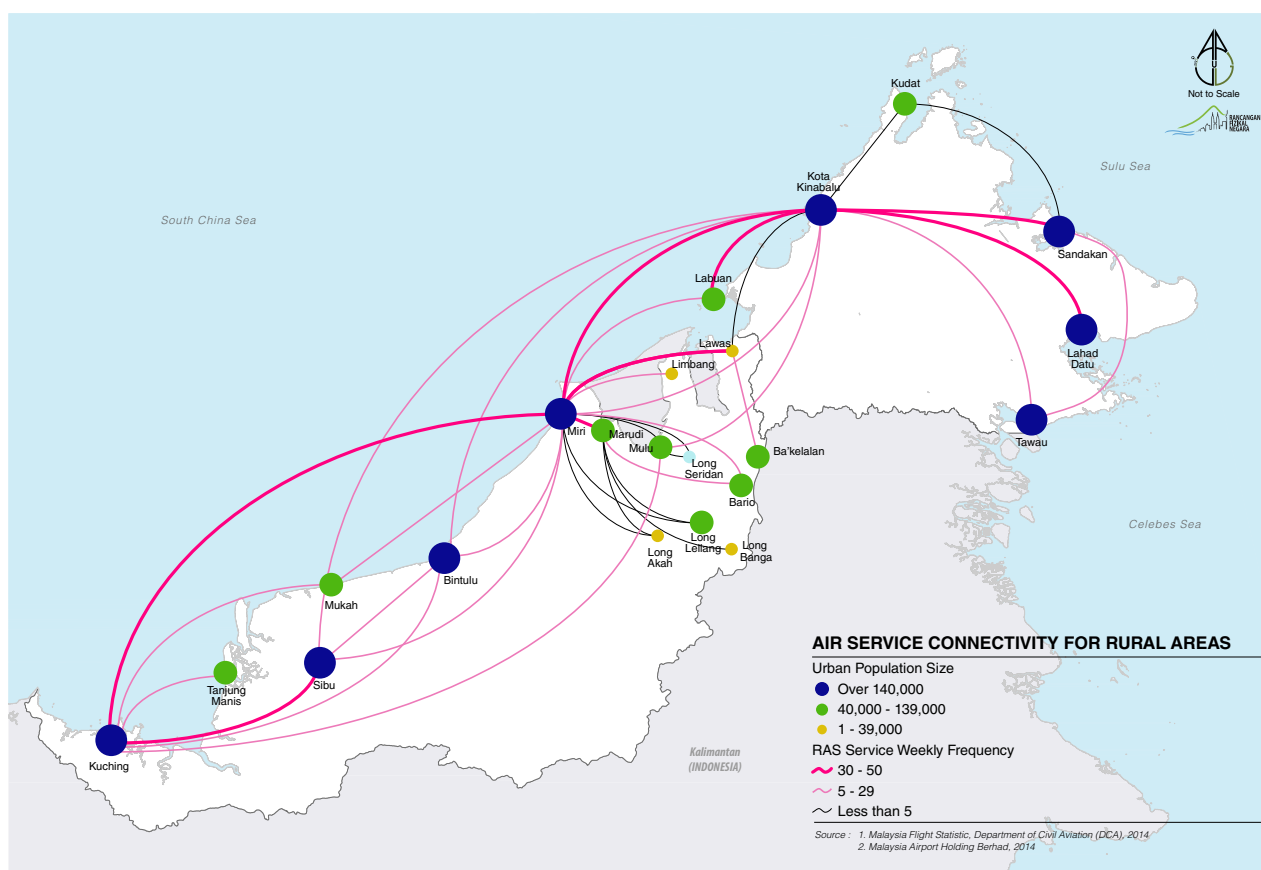
Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Transport (MOT) 	<ul style="list-style-type: none"> Economic Planning Unit (EPU) 	<ul style="list-style-type: none"> Ministry of Transport (MOT) Malaysia Airports Holdings Berhad (MAHB)
Implementing Agency <ul style="list-style-type: none"> Malaysia Airports Holdings Berhad (MAHB) 		

Action DG3.4B

Improving Rural Air Services (RAS)

Rural air services (RAS) is a main transportation mode connecting rural communities in Sabah and Sarawak. RAS plays an important role to ensure smooth delivery of health and security services to the rural settlements which are not yet accessible by land transportation. MASWings as single RAS operator in Sabah and Sarawak provides 49 service routes using aircraft types ATR 72-500 and Twin Otter Viking DHC6-400. These routes involved 10 airports and 14 airstrips in Sabah and Sarawak. Rural air transportation will be enhanced through improvement of facilities and infrastructures at existing airstrips. This includes airstrips at Long Pasia, Pegalungan, Tongod, Sook, Ranau, Semporna, Bandar Sahabat, Temenggong, Sapulut and Karakit in Sabah.

Figure 3.44 Rural Air Services



Implementation and Monitoring Responsibility

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Supporting Agency	Supporting Agency
<ul style="list-style-type: none"> Ministry of Transport (MOT) 	<ul style="list-style-type: none"> Economic Planning Unit (EPU) 	<ul style="list-style-type: none"> Ministry of Transport (MOT) Malaysia Airports Holdings Berhad (MAHB) Sabah Chief Minister's Department Sabah Ministry of Infrastructure Development
Implementation Agency		
<ul style="list-style-type: none"> Malaysia Airports Holdings Berhad (MAHB) 		

DG3.5: Developing and Enhancing Digital Infrastructures

Malaysia must ensure that the national economic development is progressing along with global digital economic development. Rapid development of information technology has moulded the lifestyle pattern and economic growth, especially in ensuring continuous relationship and communication as well as sustaining national economic activities. The following actions need to be taken to develop more efficient digital infrastructures:

Action DG3.5A

Enhancing and Expanding Broadband Coverage

Strong and wide broadband service emphasises on bandwidth continuity and reducing the needs for physical movement to enhance urban and rural population productivity. Smooth broadband service will enable businesses to expand with the help of e-commerce services, people's connectivity, knowledge enhancement as well as the birth of knowledgeable community. The nation's creative industry will be able to expand with the help of smooth broadband usage.

The following actions need to be taken to ensure smooth bandwidth continuity:

1. To increase international bandwidth capacity to fulfil the expected demand of 41 terabyte by the year 2020;
2. To review monitoring framework and to create conducive environment for promoting the installation of international submarine cables in Malaysia; and
3. To implement Second High Speed Broadband (HSBB 2) and Sub-urban Broadband (SUBB) Initiatives. HSBB 2 Initiative will ensure bandwidth continuity up to 100 megabytes per second (Mbps) in state capitals and selected high impact growth areas. SUBB Initiative, on the other hand, will provide broadband access up to 20 Mbps to more than 50% sub-urban and rural households.

Box 3.23 National Digital Continuity Rate 2015 (Fourth Quarter)

A) Broadband

- For every 100 population: 100.4
- For every 100 households: 77.3

B) Cellular

- For every 100 population: 143.8

C) Community Internet Access

- 1Malaysia Internet Centre – 657 centres
- Mini Community Broadband Centre – 120 centres
- Community Wi-Fi – 2,978 areas

Source: Communications and multimedia : Pocket Book of Statistics, Q4 2015

Implementation and Monitoring Responsibilities

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Support Agency	Support Agency
<ul style="list-style-type: none"> Ministry of Communications and Multimedia Malaysia 	<ul style="list-style-type: none"> Malaysia Communications and Multimedia Commission 	<ul style="list-style-type: none"> Sabah Ministry of Resource Development and Information Technology Malaysia Communications and Multimedia Commission
Implementing Agency		
<ul style="list-style-type: none"> Ministry of Communications and Multimedia Malaysia 		

Action DG3.5B

Strengthening Infrastructure for Smart City

Smart City is an urban management approach which provides solution for municipal issues and improving quality of living. Smart City depends on wide application of ICT facilities for planning and resource sharing in economic, environment and social development towards quality and sustainable living.

The actions to be taken are as follows

1. To develop smart city by attracting more investments;
2. To focus on broadband development as well as widening of sensor and application network;
3. To provide open data in order to support analysing and planning as well as creating opportunity for open innovation by businesses and individuals;
4. To implement smart community programme at local level; and
5. To support green lifestyle/ green city through application and technology that will reduce burden on water and energy resources.

Box 3.24 Iskandar Malaysia Smart City Example



Smart City Iskandar Malaysia is an added-value-enabler, and an initiative aimed at providing ease of doing business, as well as to improve living quality in Iskandar Malaysia. The framework focuses on three (3) areas namely Economy, Environment and Social, and promotes six (6) dimensions namely Smart Economy, Smart Governance, Smart Environment, Smart Mobility, Smart people and Smart Living.

A total of 35 programs have been identified that fit into the six (6) dimensions. These programs are guidance for Iskandar Regional Development Authority (IRDA) to work with potential investors and players to identify suitable projects for Smart City Iskandar

Malaysia

- Encourage economic growth multiplier effects and create more job opportunities nationwide towards better lifestyle;
- In line with Iskandar Malaysia's 24 Action Plans (Blueprint) that has been approved and endorsed;
- In line with other initiatives and projects that are currently developed in Iskandar Malaysia;
- Create business lifestyle and environment that is based on a more efficient technology; and
- Create higher motivation towards achieving Iskandar Malaysia's vision to be 'A Strong and Sustainable Metropolis of International Standing'.

Source: Iskandar Regional Development Authority (IRDA)

Implementation and Monitoring Responsibility

Peninsular Malaysia and Federal Territory of Labuan		State of Sabah
Monitoring Agency	Supporting Agency	Supporting Agency
<ul style="list-style-type: none"> Ministry of Communications and Multimedia Malaysia 	<ul style="list-style-type: none"> Malaysia Communications and Multimedia Commission State Governments Local Authorities 	<ul style="list-style-type: none"> Sabah Ministry of Resource Development and Information Technology Malaysia Communications and Multimedia Commission
Implementation Agency		
<ul style="list-style-type: none"> Ministry of Communications and Multimedia Malaysia 		

Thrust 1 Implementation Indicators

14 strategies in Thrust 1 will be evaluated by identified indicators. These indicators are the main instrument used in monitoring the effectiveness of implementation actions towards ensuring a dynamic and progressive economic growth. Implementation and monitoring agencies will provide data to Federal Department of Town and Country Planning for monitoring purposes

Strategy	Indicator
BALANCED URBAN GROWTH	
DG1.1 Strengthening Growth Areas	<ul style="list-style-type: none"> Regional corridor GDP growth rate Regional corridor GDP percentage distribution to the national GDP Number of jobs generated
DG1.2 Enhancing Urban Competitiveness	<ul style="list-style-type: none"> World performance index ranking of Malaysia major cities Economic sustainability rate (based on MURNInets indicators)
DG1.3 Strengthening the Services Sector	<ul style="list-style-type: none"> Service sector performance through GDP growth Service sector GDP percentage distribution to the national GDP
DG1.4 Strengthening the Industrial Cluster	<ul style="list-style-type: none"> Industrial sector performance through GDP growth Industrial sector GDP percentage distribution to the national GDP
DG1.5 Strengthening Ports of Entry and Logistic Industry	<ul style="list-style-type: none"> World rankings (World Airports Ranking and World Port Ranking) Contribution percentage to the GNI/ GDP
DG1.6 Promoting Knowledge-Intensive Human Capital Development	<ul style="list-style-type: none"> Percentage of skilled and intensive-knowledge workers to the workforce Percentage of sponsorship from industries for research, scholarship and commercialisation of universities' R&D outputs Percentage of jobs requiring TVET related skills
INTEGRATED RURAL DEVELOPMENT	
DG2.1 Utilising Local Resources	<ul style="list-style-type: none"> Contribution to Gross National Income (GNI) Number of jobs generated in rural areas Increase of rural household income
DG2.2 Enhancing Value Chain Activities for Agriculture-based Economy	<ul style="list-style-type: none"> Agriculture sector export value Agriculture sector contribution to GDP
DG2.3 Improving Basic Rural Infrastructure and Amenities	<ul style="list-style-type: none"> Coverage percentage of rural settlements/ village within rural facilities Increment percentage of paved roads in rural areas
ENHANCED LINKAGES AND ACCESS	
DG3.1 Developing Physical Network and Links	<ul style="list-style-type: none"> Road development index (national and state level) Percentage of population enjoying two (2) hours travelling time from state capitals.
DG3.2 Developing Comprehensive Railway Network System	<ul style="list-style-type: none"> Project implementation level (planning, building and operating) Increment rate of train passengers Modal split
DG3.3 Enhancing Water Transportation	<ul style="list-style-type: none"> Increment/ decrement rate of ferry/ water taxi passengers Frequency rate (ferry/ water taxi)
DG3.4 Enhancing Regional and Local Air Links	<ul style="list-style-type: none"> Increment/ decrement rate of air service passengers (domestic and regional)
DG3.5 Developing and Enhancing Digital Infrastructure	<ul style="list-style-type: none"> Equality of digital coverage