

## 2.0 REGIONAL STRUCTURE

### 2.1 INTRODUCTION

This chapter highlights the development planning that is related to the policy and strategy, program, procedure and related development control. The government policy and legislation were used as a reference for controlling and monitoring purposes. The development process need a lot of effort in order to make sure that every step taken is right.

#### 2.1.1 PURPOSE OF THE STUDY

- i. To identify and analyze the current policy and legislations related to the development of resources in Dungun District.
- ii. To identify the positioning of Terengganu in general and district of Dungun in particular, relation to the regional and national development context.

#### 2.1.2 POLICY AND LEGISLATION

Policy is a plan of action to guide decisions and actions. The term may apply to government, private sector organizations and groups, and individuals. The policy process includes the identification of different alternatives, such as programs or spending priorities, and choosing among them based on the impact they will have.

#### 2.1.3 POSITIONING OF TERENGGANU

The East Coast is a part of Peninsular Malaysia in Malaysia, which includes Kelantan, Terengganu and Pahang. The East's prime attractions are some of islands, featuring great beaches and excellent scuba diving. It is also the most culturally conservative part of Malaysia. The economy is largely based on agriculture. According to ECER, several corridors are identified for the development. These corridors have their focus. The purposes of these corridors are to coalesce the initiatives in the corridors and identified the main project and future potential development.



Figure 2.1: The East Coast Corridors and its division of sectors by ECER.

From the East cost Corridors map, it shows that Terengganu is the most suitable area for tourism development compare to other region. It is because of the resources in Terengganu, which contains coastal, and island, forest, agriculture, cultural and heritage. Below is the positioning of Terengganu between the other regions of East Coast of Peninsular Malaysia:

Table 2.1: The positioning of Terengganu among the region, through the planning of resources. (Source: ECER).

SECTOR CORRIDOR	POSITIONING		
	KELANTAN	TERENGGANU	PAHANG
	<ul style="list-style-type: none"> <li>• East Coast Corridor</li> <li>• East-West Corridor</li> <li>• North – South Corridor</li> <li>• Lumut - Gua Musang - Kuala Terengganu Corridor</li> </ul>	<ul style="list-style-type: none"> <li>• East Coast Corridor</li> <li>• Lumut – Gua Musang - Kuala Terengganu Corridor</li> </ul>	<ul style="list-style-type: none"> <li>• East Coast Corridor</li> <li>• East-West Corridor</li> <li>• Central Corridor</li> <li>• North-South Corridor</li> <li>• Kuantan-Segamat-Melaka Corridor</li> </ul>
<p><b>TOURISM :</b> Promoting towards island and coastal area tourism, ecotourism, and cultural and heritage tourism</p>	<ul style="list-style-type: none"> <li>• Commercial area at Kota Bharu Waterfront</li> <li>• Islamic Cultural Centre</li> </ul>	<ul style="list-style-type: none"> <li>• East Coast Tourism Hub</li> <li>• Tourism Gateway to ECER (Pusat Bandar Kuala Terengganu)</li> <li>• Observatori Penyu Marin at Rantau Abang</li> <li>• Highest Waterfall at Chemerong.</li> </ul>	<ul style="list-style-type: none"> <li>• Centre for Eco-Tourism (Taman Negara Endau – Rompin)</li> <li>• Main Elephant Sanctuary Centre at Kuala Gandah</li> </ul>
<p><b>AGRICULTURE :</b> Concentration towards commercial plantation, application of modern plantation technique and constructing global network</p>	<ul style="list-style-type: none"> <li>• Pergau Aquaculture</li> <li>• <i>Taman Kekal Pengeluaran Makanan</i> (TKPM) - Lojing</li> </ul>	<ul style="list-style-type: none"> <li>• Kenyir Aquaculture</li> <li>• Citrus Valley, Dungun</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Taman Kekal Pengeluaran Makanan</i> (TKPM) Fruits – Ulu Tembeling &amp; Lanchang</li> <li>• Pineapple Park, Pekan – Rompin</li> </ul>

<p><b>OIL, GAS AND PETROCHEMICAL:</b> Concentration towards industry <i>hiliran</i> to enhance productivity, develop plastic industry and promoting establishment of IKS</p>	–	–	Kerteh – Gebeng as a Petrochemical Hub
<p><b>MANUFACTURING:</b> promoting new industry, which can generate participation opportunity, job and income to local people.</p>	<ul style="list-style-type: none"> <li>• <i>Batik</i> and silver production at Kota Bharu</li> </ul>	<ul style="list-style-type: none"> <li>• Main centre for <i>Songket</i> production at Chendering</li> <li>• Wood engraving at Besut</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Tenun</i> at Pekan</li> <li>• Wood engraving at Temerloh</li> </ul>
<p><b>EDUCATION:</b> Concentration towards human morality and human resource development to fulfill marketing needs.</p>	<ul style="list-style-type: none"> <li>• UMK, Bachok and UiTm, Machang</li> </ul>	<ul style="list-style-type: none"> <li>• UDM Besut, UiTM Dungun, UMT K.T</li> <li>• Proposal of Taman Ilmu, Besut</li> <li>• Global Animation Centre (Kuala Terengganu)</li> <li>• International Digital Business Exchange (IDBX), Batu Rakit</li> </ul>	<ul style="list-style-type: none"> <li>• UMP, Pekan</li> </ul>

## 2.2 DUNGUN DISTRICT

Dungun is a coastal district of the Terengganu State, which contained many resources such as natural, man – made, cultural and heritage. This district has an area of 273,503 ha and has an estimation of 135,547 people. There are pockets of fishing and farming families and some people involved in small business. The main vegetation in Dungun is covered by forest and agriculture activities. The main plantations are oil palm and rubber plantation. It also has a beautiful stretch of beaches, and islands that popular with foreigners and West Coast tourists. The attraction places in Dungun include Rantau Abang, Chemerong Waterfall, Bukit Besi, Bukit Bauk, Citrus Valley, Pasir Raja Homestay and so on.

### 2.2.1 RESOURCES IN DUNGUN

Generally, there are three main resources that have been identified in Dungun district which:

#### i. Natural Resources

Natural resources are naturally occurring substances that are considered valuable in their relatively unmodified (natural) form. A natural resource's value rests in the amount of the material available and the demand for it. The potential areas in Dungun are a mainland coastal area, waterfall, wetland and agriculture. It also tends to have public environmental education or environmental research generally park – like in nature. For examples; Chemerong Waterfall, Bukit Bauk Reserve Forest, Bumbung Raja Reserve Forest and coastal area.

#### ii. Culture and Heritage Resources

This includes archaeological or geological sites, landscapes, groups of buildings, as well as scientific collections of art objects, manuscripts, books, published material, archives, audio-visual material and reproductions of any of the preceding. Historical value, as well as intangible cultural assets comprising arts, traditions, customs and skills employed in the performing arts, in applied arts and in crafts and other intangible assets, which have a historical, artistic or ethnographic value. It is also valuable for ecological habitat and heritage conservation. For examples; Ex-mining of Bukit Besi, Pasir Raja Homestay, Bandar Lama Dungun and Tarian Sabah at Kuala Jengai.

#### iii. Man – Made Resources

Man - made resources defined as those characteristics and services, facilities and activities for which man is directly responsible. It includes wastewater system, transportation, circulation, energy, and telecommunications. It also includes the committed area development. For examples; area of Sura gate, Bandar Al-Mukhtafi Billah Shah, and Paka.

### 2.2.2 ZONING OF RESOURCES

Below is a zoning of the main resources with potential spot area that found in Dungun.

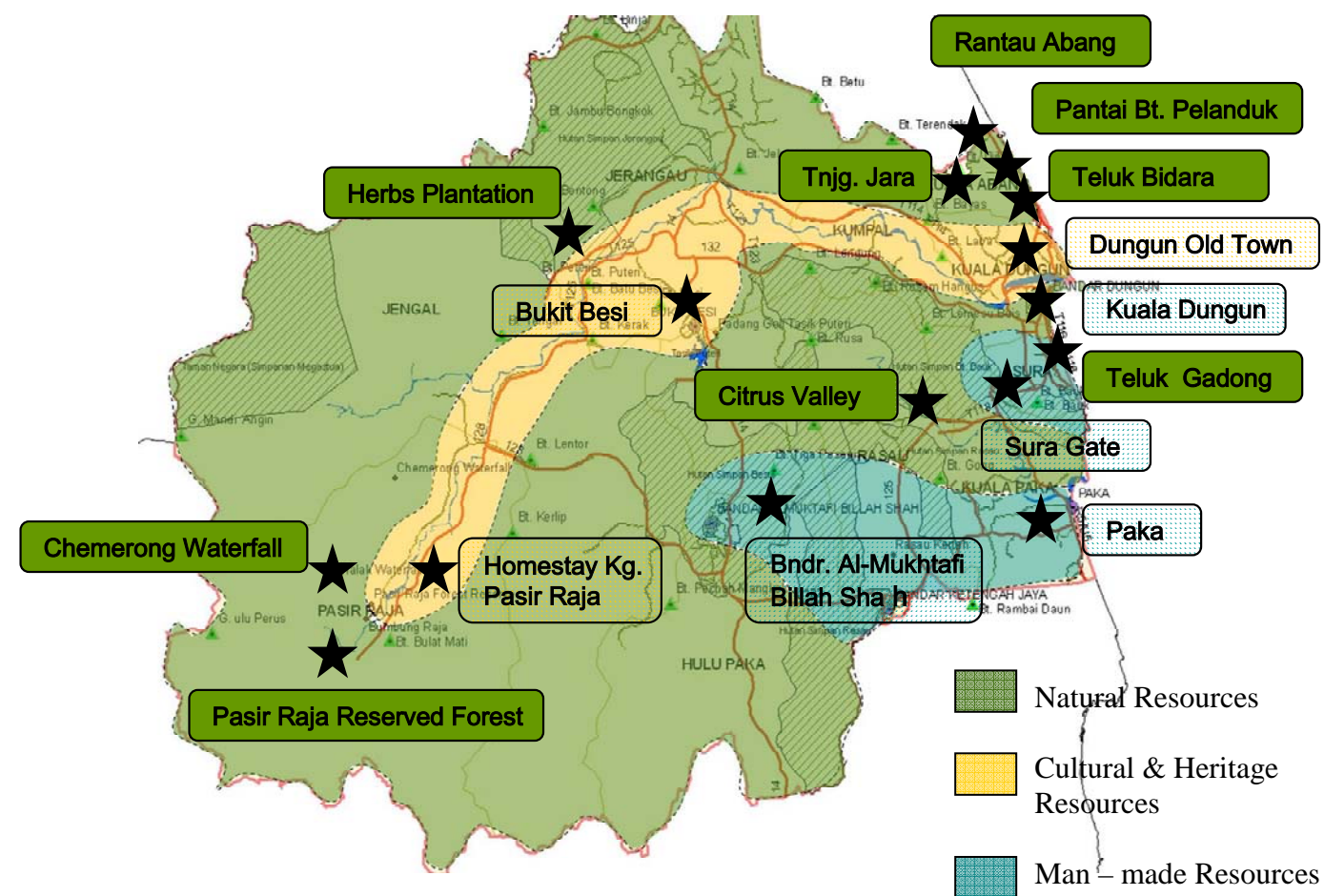


Figure 2.2: The three main resources with potential spot area.

**2.2.3 POSITIONING OF DUNGUN**

There are several regional structures highlights the position of Dungun in terms of development. This positioning actually helps the Dungun district in planning the get a sustainable development. The table below showed the positioning of Dungun district according to the sources of regional structure.

Table 2.2: The positioning of Dungun district according to the related regional structure.

SOURCE	POSITIONING OF DUNGUN DISTRICT	
Rancangan Fizikal Negara (RFN)/ National Physical Plan (NPP).	- NPP 8 The different tourism development zones shall concentrate on different packages of tourist products to maximize their resources and location advantages. - NPP 15 The development of Rural Growth Center (RGCs) shall be reinforced to rationalize the servicing of the rural population.	
Rancangan Struktur Negeri Terengganu (RSN) (2003-2020).	Terengganu State as an ‘East Coast Tourism Hub’.	- Establish ‘Taman Negeri’ at Chemerong Reserved Forest for preservation, education and ecotourism purposes. - ‘Industrial Heritage Theme Park development at Bukit Besi
	Tourism development using forestry resources.	Encourage agro forestry activities, adventure-trail, jungle-stay in Reserved Forest.
	Tourism development that highlighted East Coast Malay lifestyle as main product of cultural heritage.	Promoted IKS and Cottage industry development (ODOI programmed).
East Coast Economic	Coastal hotels & resorts developing	Along the Coastal of Dungun.

Region (ECER)	Marine turtle observatory protection	Rantau Abang.
	Develop entry gate of tourist spot	Dungun town as gateway to Pulau Tenggol
	Initiative Program Inap Desa	Kg. Pasir Raja
	Highlight natural resources	Chemerong Waterfall
	Encourage program KETENGAH	Develop Citrus Valley in Durian Mentangau, Dungun
	Developing Taman Herba (Serai wangi & halia)	Dungun as nucleus & research center
Rancangan Tempatan Daerah Dungun- Sura	- Recreational Coastal and Tourism Beach area. - Bukit Bauk Reserved Forest.	
Rancangan Tempatan Daerah Dungun- Paka	- Paka River Estuary tourism zone - West Industry Zone and IKS - Buffer zone that separate both industry and residential area	
Rancangan Tempatan Daerah Seberang Pintasan	- Recreational Zone/ Tourism Beach area ( Pantai Tg. Jaru to Teluk Bidara) - Resort for Orchard Tourism - Mangrove Forest along Paka River and Pimpin River - Pulau Serai and Kuala Abang as Neighbourhood Center	
Rancangan Tempatan Daerah Dungun- out of operation area	- ‘Industrial Heritage Theme Park at Bukit Besi - ‘Taman Negeri’ at Cemerong Reserved Forest - Pulau Tenggol	

**2.2.4 ANALYSIS OF GUIDELINE APPLICATION IN DUNGUN DISTRICT**

According to the current policies of regional structure, there are some guidelines that should followed by Dungun. Somehow, not all the guidelines had been applied in Dungun and the condition of application also different within different places. From the analysis, condition of guideline application had divided into three categories including strongly apply, moderate apply and lack of application. (Table 2.3) Only the guideline that related to Dungun and the context will be analyst.

The following are summaries of policy applications in Dungun:

i. *Teluk Gadong, Rantau Abang, Tanjung Jara, Teluk Bidara, Pantai Batu Pelanduk*

From the inventory, these areas are coastal, mangrove and swamp areas. Part of these areas had indicated as Environment Sensitive Area (ESAs) but the guideline application to preserve this area still not strong enough. Rantau Abang strongly applied with the tourism promotion but land use planning and tourism management should be improved. While the others coastal areas should give more attention on preservation guideline because they have extremely erosion problems.

ii. *Chemerong Waterfall, Pasir Raja Reserved Forest, Bukit Bauk Reserved Forest*

These areas had strongly applied the National Forestry Policy. All the recreational activities are under control and in good condition. A good example is the forestry authority had divided the forest into different planning block for effective management where logging and recreational activity will be done according to suitable period.

iii. *Herbs Plantation, Dungun Citrus Valley*

Both of these areas are based on agriculture activity and under control by KETENGAH. Unfortunately, mostly of the areas are lacks of guideline application such as lack of facilities and environment control. Most of the citrus planting attack by disease and the stakeholder broke down the rule where they replant it with oil palm.

iv. *Dungun Old Town, Bukit Besi, Homestay Kg. Pasir Raja*

Actually Dungun Old Town and Bukit Besi have high heritage and cultural value however the stakeholders did not obey the guideline. The condition of these areas is not in control and needs to have strategies to maintain these valuable products such as register under Akta Benda Purba 1976.

Table 2.3: Analysis of guideline application in Dungun District.

Current Relevant Regional Structure		Spot Areas in Dungun District												
		Teluk Gadong	Rantau Abang	Tanjung Jara	Teluk Bidara	Pantai Batu Pelanduk	Chemerong Waterfall	Pasir Raja Reserved Forest	Herbs Plantation	Dungun Citrus Valley	Dungun Old Town	Bukit Besi	Homestay Kg. Pasir Raja	Bukit Bauk Reserved Forest
RANCANGAN MALAYSIA	RMK9 To improve the standard and sustainability of quality life	Blue	Yellow	Yellow	Yellow	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Blue
	NATIONAL PHYSICAL PLAN/ NPP (RANCANGAN FIZIKAL NEGARA/RFN )	NPP 1 The NPP shall serve as the framework to achieve integrated and sustainable land use planning in the country	Blue	Blue	Yellow	Yellow	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Blue
		NPP 4 Land and natural resources of the less developed regions shall be used in a sustainable manner to increase the productivity in these regions and reduce regional imbalances	Blue	Yellow	Yellow	Yellow	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Blue
		NPP 8 The different tourism development zones shall concentrate on different packages of tourist products to maximize their resource and local advantages	Blue	Blue	Blue	Yellow	Yellow	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow
	NPP 13 Towns with special features shall be identified and the development of	Blue	Blue	Yellow	Yellow	Blue	Blue	White	Yellow	Yellow	Yellow	Yellow	Blue	



Current Relevant Regional Structure		Spot Areas in Dungun District												
		Teluk Gadong	Rantau Abang	Tanjung Jara	Teluk Bidara	Pantai Batu Pelanduk	Chemerong Waterfall	Pasir Raja Reserved Forest	Herbs Plantation	Dungun Citrus Valley	Dungun Old Town	Bukit Besi	Homestay Kg. Pasir Raja	Bukit Bauk Reserved
NATIONAL TOURISM	Marketing and Promotion – Focus on the right target group to Promote Dungun as a Malaysia’s “Truly Asia” and “Malaysia my second Home”	Yellow	Blue	Yellow	Yellow	Blue	Yellow	White	Yellow	Yellow	Yellow	Yellow	Blue	Blue
	Product development – Reflect potential and domestic demands as well as creating benefits for host communities	Blue	Blue	Yellow	Yellow	Blue	White	Yellow	Blue	Yellow	Yellow	Yellow	Blue	Blue
	Infrastructure – Demand for accommodation, transportation, roads and road signs, water and sewerage system, telecommunication, conference facilities, parks and public facilities	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Blue	Yellow	Yellow	Yellow	Yellow	Blue
	Human Resources Development – Awareness and career motivation by an effort and commitment at Federal level	Yellow	Yellow	Yellow	Yellow	Yellow	Blue	Blue	Yellow	Blue	Yellow	Yellow	Yellow	Blue
	Tourism organization – Planning, Coordination and monitoring for a sustainable development	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Blue

- Strongly Apply: most of the guidelines are apply and the development is under control and well maintenance.
- Moderate Apply: the guidelines are applied on the site and the development still under control but not for whole site.
- Lack of Application: a few of the guidelines has applied and need an attention for well maintenance, the development should be control.

### 2.2.5 THE SYNTHESIS

Most of the areas in Dungun obey the guideline but need to be improved. Critical areas like coastal area need to strengthen the environment preservation guidelines while Homestay Kg. Pasir Raja and Citrus Valley should strengthen the tourism development guidelines. More attention should be given in order to control the natural resources such as erosion and flooding. The example is created planting zone and strictly limited the development along the coastal areas. Beside that, new policies should be created to preserve the heritage elements in Bukit Besi and Dungun Old Town. Since some areas like Citrus Valley and Herbs Plantation are under KETENGAH authority, the development plans of these areas are not well record in other regional structure. In conclusion, all the stakeholders in Dungun District are recommended to have cooperation and same aim in apply and progress the policies for resources development.

### 2.3 REFERENCE STUDY

A reference study had been chosen according to the background and purpose of plan. The Brookhaven National Laboratory (BNL) has establishes the management goals and actions necessary for managing the natural resources. Some of the strategies can be applied in Dungun District to establish a sustainable natural resources management plan. The table below shows selected actions taken by BNL which can be a reference to local authority in Dungun.

Table 2.4 Aspect and actions of the Brookhaven National Laboratory (BNL) natural resource management plan.

ASPECT	ACTION
Resource Identification	<ul style="list-style-type: none"> <li>• Adapt natural resource management decisions based on up-to-date information gained collectively through cooperation with outside agencies and organizations.</li> <li>• Improve management decisions through the use of innovative tools.</li> <li>• Maintain and improve relationships between neighboring landowners, support agencies, and private environmental groups.</li> </ul>
Habitat Identification, Protection, or Enhancement	<ul style="list-style-type: none"> <li>• Ensure adequate habitat for protected species and species of special concern.</li> <li>• Maintain a healthy ecosystem that contains the proper environment for protected plants and supports habitat for protected species and species of special concern.</li> </ul>
Law Enforcement	<ul style="list-style-type: none"> <li>• The Natural Resource Manager will continue to work with BNL Safeguards</li> </ul>

	and Security and the Pine Barrens Law Enforcement Task Force to reduce illegal motorized vehicles.
Wetland and River Management	<ul style="list-style-type: none"> <li>• A monthly State Pollution Discharge and Elimination System (SPDES) sampling program is used to monitor the water quality and flow.</li> <li>• Fish Sampling was performed with NYSDEC beginning in 1999 to assess the banded sunfish habitat and populations, and reassess management strategy as needed.</li> </ul>
Vegetation Management	<ul style="list-style-type: none"> <li>• Include native grass seed mixture into applicable revegetation plans for disturbed areas. Utilize native tree and shrub species around structures.</li> </ul>
Integration of Cultural Resource Protection and Management	<ul style="list-style-type: none"> <li>• Include native grass seed mixture into applicable revegetation plans for disturbed areas. Utilize native tree and shrub species around structures.</li> </ul>
Education and Public Outreach	<ul style="list-style-type: none"> <li>• Continue to provide educational materials to staff and the public on environmental issues. Material should be updated and redistributed as necessary. Nature walks and bird watching field trips should be conducted routinely.</li> </ul>
Wildlife Oriented Recreational Access	<ul style="list-style-type: none"> <li>• Planned trails or paths should be clearly marked and maps made available to employees, to limit impact on sensitive areas, while increasing awareness of the different vegetation areas on the BNL site.</li> </ul>

## 2.5 SUMMARY

Dungun is a district that are rich with various resources including natural, man-made, cultural and heritage resources. It is important for us to identify both potentials and constraints in Dungun thus to have sustainable development. The current policies and guidelines need to be strengthening so that the land use and tourism planning will be more efficient. Besides that, new policies and strategies should be creates to preserve resources that had been ignore. All the development should be parallel with related regional structure to achieve optimum development. Lastly, all related authorities must give cooperation in implementation of policies.

## 2.4 SWOT ANALYSIS OF REGIONAL STRUCTURE

Table 2.5 Summary of regional structure SWOT analysis.

STRENGTH		WEAKNESS	
Most of the agencies which responsible to implement the policies are located in Dungun from Majlis Daerah Dungun to JKKK and even branch department of ministry.		There is lack of cooperation between the agencies.	
OPPORTUNITY		THREAT	
New guideline or policies that preserve and conserve the resources which neglected by people can be created under cooperation between local authorities.		The source of funding for each agency is different and the complex procedures to undergo cooperation will obstruct the progression.	