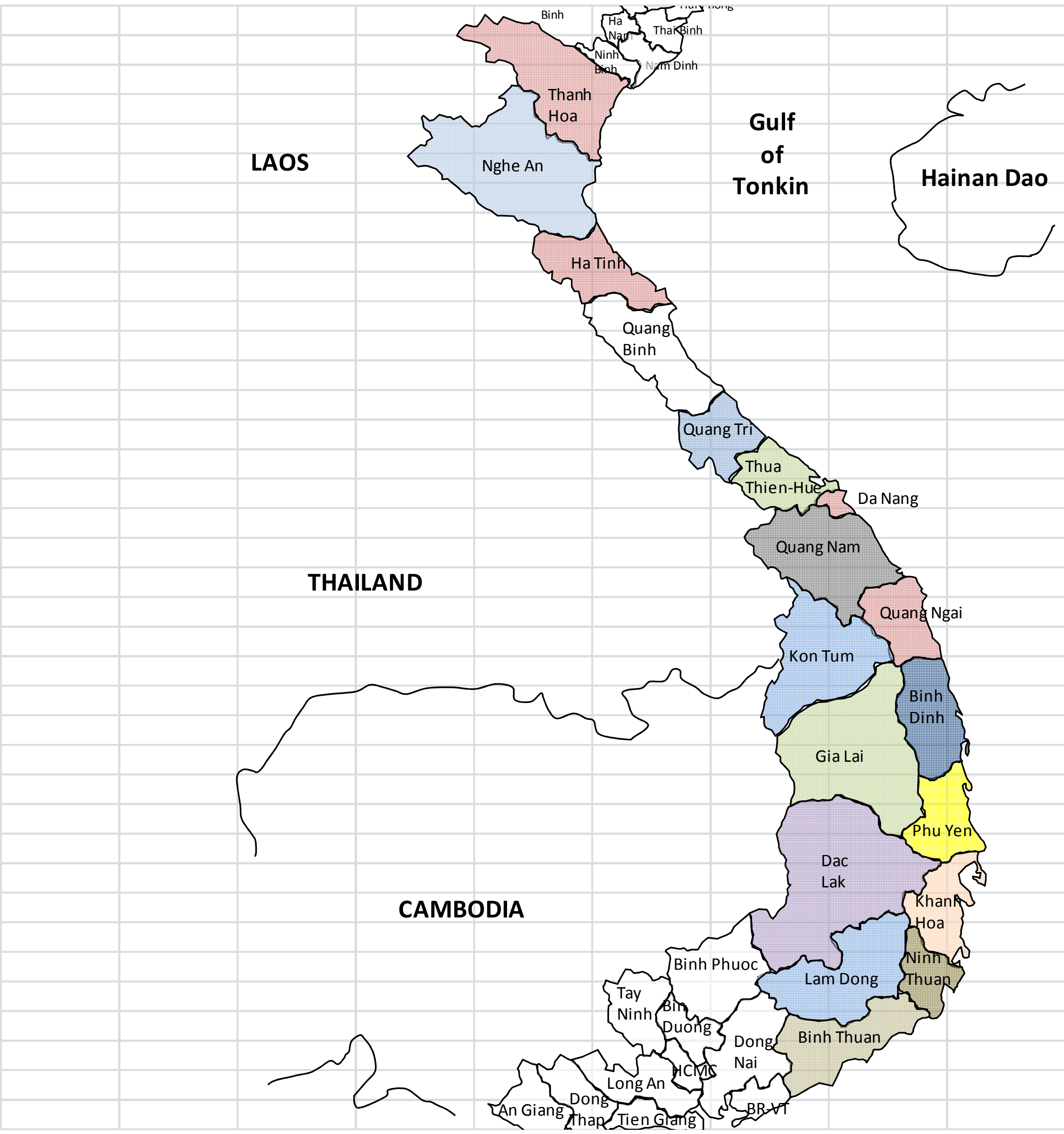
Chapter6. Growth Pole in the Central Region of Viet Nam

6.1 Current Situation and Trend of Economy and Industry in Central Region

(1) Target Areas of the Central Region in This Study

1) Scope of the Central Region

The Central Region covers the North Central and Central Coastal Region with the provinces and cities of Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, Thua Thien-Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Phu Yen, Khanh Hoa, Ninh Thuan, and Binh Thuan, as well as the Central Highlands Region with Kon Tum, Gia Lai, Dak Lak, Dak Nong and Lam Dong, consisting a total of 19 provinces and cities. (Figure 6.1-1)

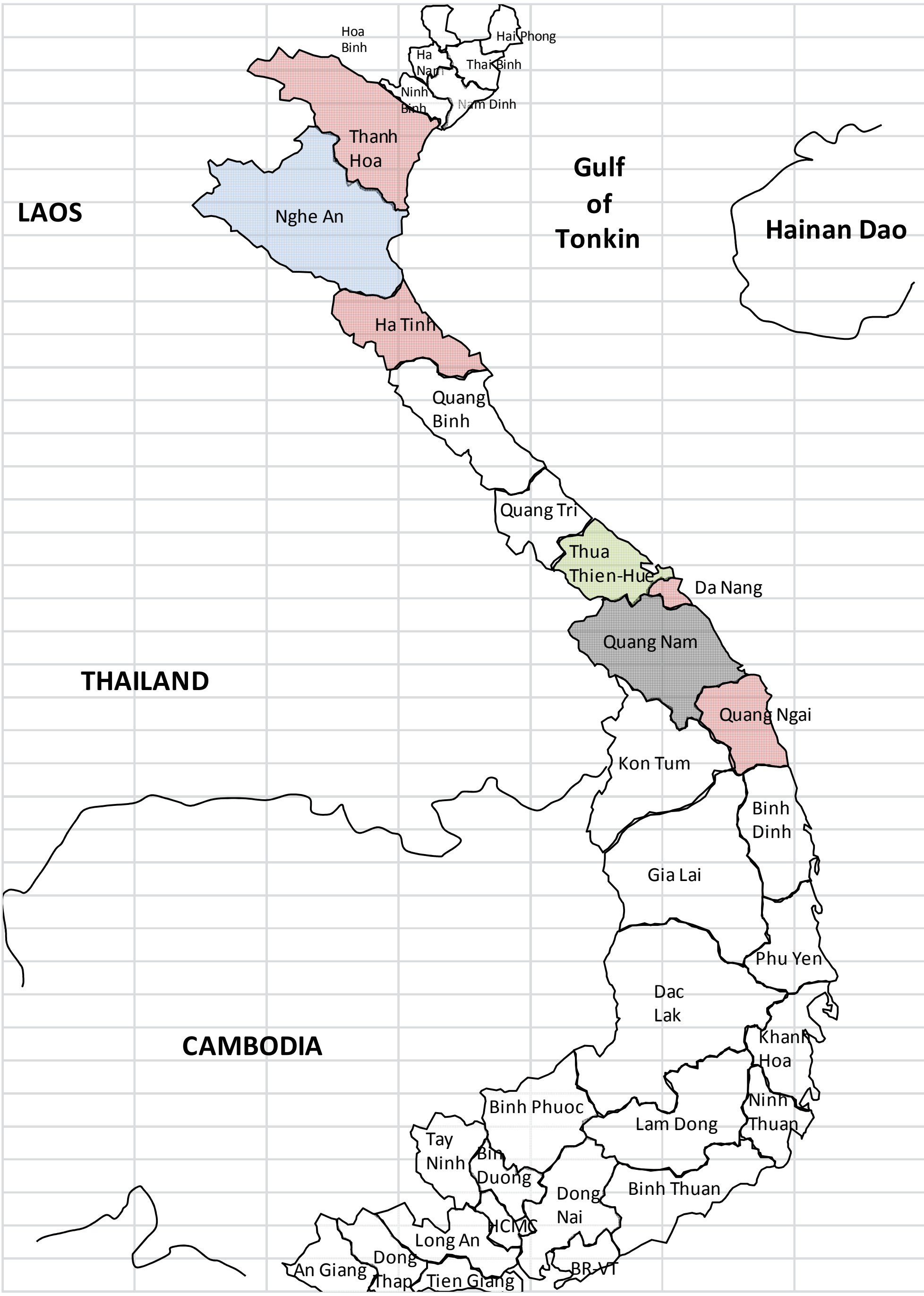


Source: Made by JICA Study Team based on the map and information officially published in Viet Nam

Figure 6.1-1 Map of 19 Provinces and Cities in the Central Region of Viet Nam

2) Target Areas of the Central Region in This Study

In this study, 7 provinces and cities of the above-mentioned North Central and Central Coastal Region are chosen as the target areas with regard to the Central Region. (Figure 6.1-2)



Source: Made by JICA Study Team based on the map and information officially published in Viet Nam

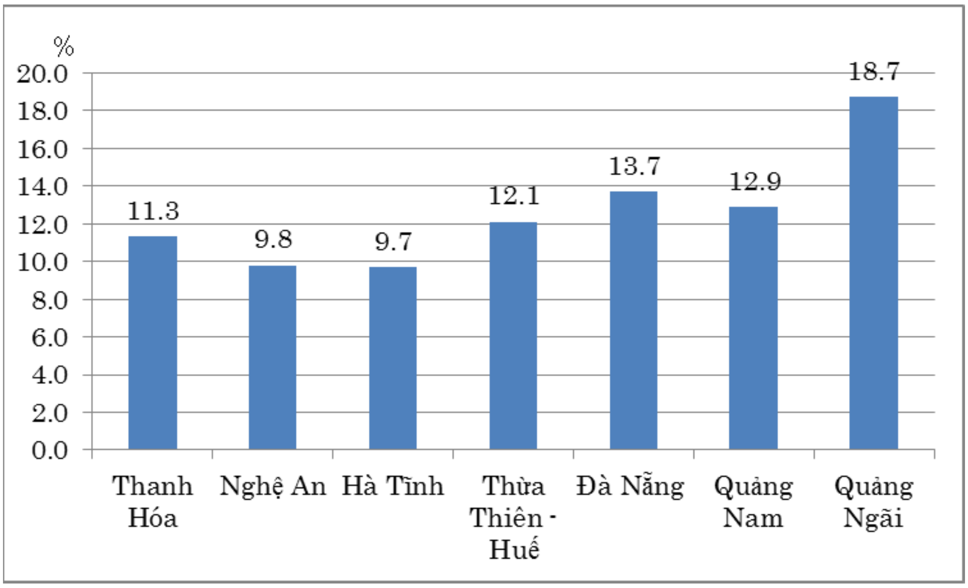
Figure 6.1-2 Map of the 7 Provinces and Cities of the Central Region of Viet Nam as the Target Areas of This Study

(2) Current Situation and Trend of Economy in the Target Areas

The relevant indicators with regard to the 7 provinces and cities proposed as the target areas covered by the Central Region are illustrated as follows.

1) GDP Growth Rate of the Provinces and Cities Targeted

Owing to the reason already mentioned in the chapter regarding the Northern Region, the discussion concerning GDP growth rate of the target provinces and cities of Central Region here aims at understanding the relative situation of respective provincies by comparing their trends of annual growth rate in the past few years instead of paying attention to the absolute value of a specific year. The comparative situation of average annual growth rate of the 7 target provincies and cities in the period of 5 years from 2005 to 2010 is indicated by Figure 6.1-3. The order of respective provinces and cities in terms of annual growth rate from top to bottom is as follows: Quang Ngai, Da Nang, Quang Nam, Tua Tien-Hue, Thanh Hoa, Nghe An, and Ha Tinh. It is noteworthy that Quang Ngai tops the others and exceeds Da Nang the No.2 by a great margin, which owes a lot to the investment and operation of the petroleum refining business in this province.



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Note: The values of Ha Tinh is annual average of 2007-2010.

Figure 6.1-3 Annual Average GDP Growth Rate of Target Provincies and Cities of Central Region (2005-2010)

2) GDP in Total Quantity and GDP Per Capita of Target Provinces and Cities

When looking at the values of GDP in total quantity at current price of the above-mentioned 7 provinces and cities in 2010, the order from the top goes like the following: Thanh Hoa (VDN 51.8 billions), Nghe An (VDN 41.6 billions), Da Nang (VDN 30.8 billions), Quang Ngai (VDN 29.3 billions), Quang Nam (VDN 24.6 billions), Tua Tien-Hue (VDN 20.2 billions), and Ha Tinh (VDN 16.8 billions). The major factors underpinning Thanh Hoa’s top position in GDP are its scale of production in the sectors of agriculture, manufacturing and construction, which are overwhelmingly larger than the neighboring regions. Its agriculture ranks No.2 across the country, next only to Ha Noi, while with regard to manufacturing, its other non-metallic mineral products (mainly building materials), wood & wood products and printing & recorded media also rank at relatively higher level. In addition, it is ranked No.3 in the construction sector, next only to Ho Chi Minh City and Ha Noi, and even its tertiary industry gets No.5 in the whole country. Nghe An with its GDP scale ranking No.2 in the Central Region is similar to Thanh Hoa in that its agriculture and construction sectors are relatively strong, though there is nothing worthy of noting in its manufacturing sector. Da Nang, on the other hand, though it is No.3 in total quantity of GDP, its tertiary industry is relatively large thanks to its position as a tourism city. Besides, as far as manufacturing is concerned, it also acquires comparatively higher ranking among the whole country in the subsectors of wearing apparel, printing and recorded media, pharmaceuticals, medicinal chemical & botanical products, and other manufacturing.

However, when it comes to the indicator of GDP per capita, the ranking changes to the following: Da Nang (VND 33.21 millions), Quang Ngai (VND 24.02 millions), Tua Tien-Hue (VND 18.56 millions), Quang Nam (VND 17.25 millions), Thanh Hoa (VND 15.20 millions), Nghe An (VND 14.2 millions), and Ha Tinh (VND 13.65 millions), with Da Nang ascending to the top spot and Thanh Hoa declining to No. 5. (Table 6.1-1）

Tble 6.1-1 GDP in Total Quantity and GDP Per Capita of Target Provinces and Cities in Central Region (2010)

Target Areas in Northern Region	GDP	GDP Per Capita	
	(billion VND)	(1,000VND)	($)
Thanh Hóa	51,770	15,200	779
Nghệ An	41,576	14,196	728
Hà Tĩnh	16,766	13,653	700
Thừa Thiên - Huế	20,243	18,556	951
Đà Nẵng	30,755	33,213	1,702
Quảng Nam	24,611	17,245	884
Quảng Ngãi	29,275	24,023	1,231

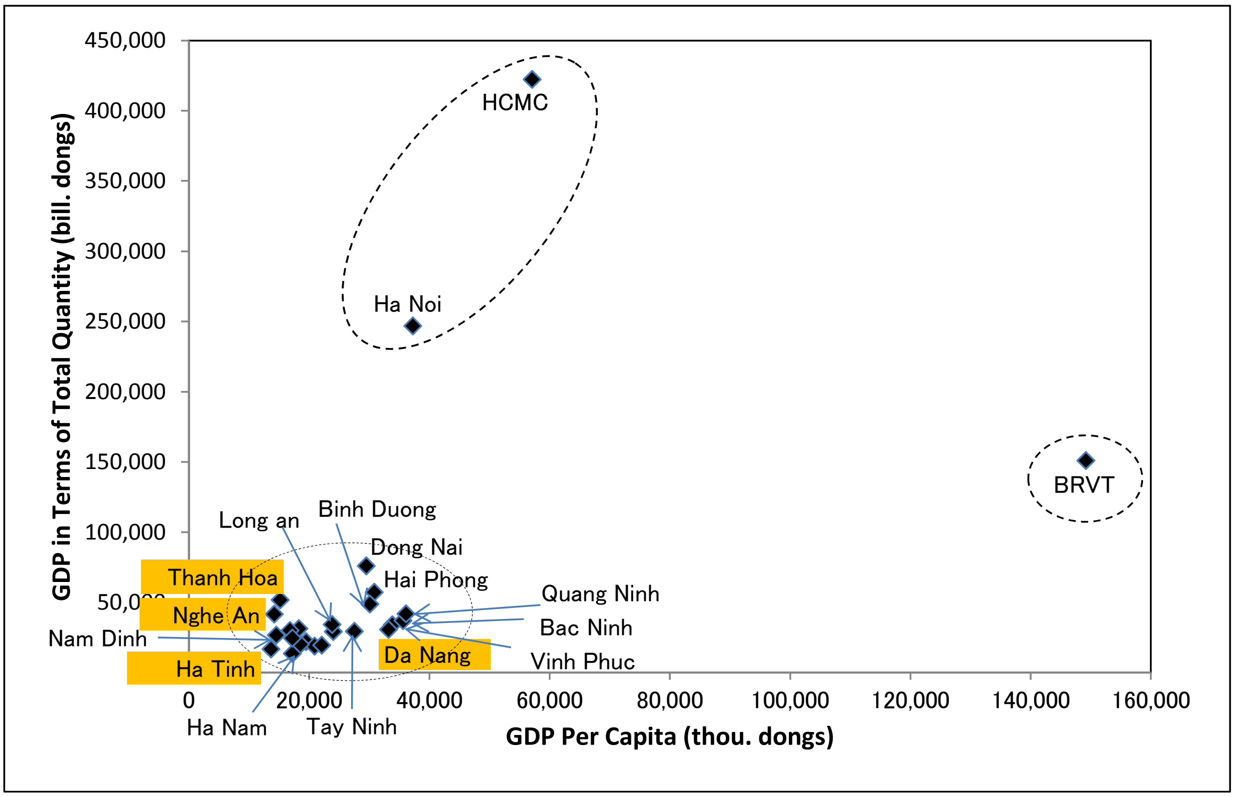
Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

3) Positions of Target Provinces and Cities of Northern Region among All the Target Areas

The following is to look at the relative positions of respective provinces and cities of Central Region among all the target areas including the Northern Region and the Southern Region by comparison.

As far as GDP in terms of total quantity is concerned, Thanh Hoa, as the top of the Central Region, is ranked at No.6 among the 25 provinces and cities, next to Ha Noi, while Nghe An, the No.2 in the Central Region, is at No.9 next to Quang Ninh. As for the others, Da Nang is at No.14, Quang Ngai at No.17, Tua Tien-Hue at No.21, and Ha Tinh at No.24. Generally speaking, the Central Region is inferior rto the Northern Region and the Souther Region in total quantity of GDP.

However, the gap between the Central Region and the Northern and Southern Region is further enlarged in the case of GDP per capita indicator. Da Nang, though ranking No.1 in the Central Region, is placed at No.7 in the context of the whole country. As for the others, Quang Ngai is at No.12, Tua Tien-Hue at No.17, Quang Nam at No.19, Thanh Hoa at No.22, Nghe An at No.24, and Ha Tinh at No.25, basically centering on the low ranking zone. (Table 6.1-4)



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Figure 6.1-4 Positions of Target Provinces and Cities of Central Region among All the Target Areas in Terms of GDP and GDP Per Capita

(3) Current Situation and Trend of Industry in the Target Areas

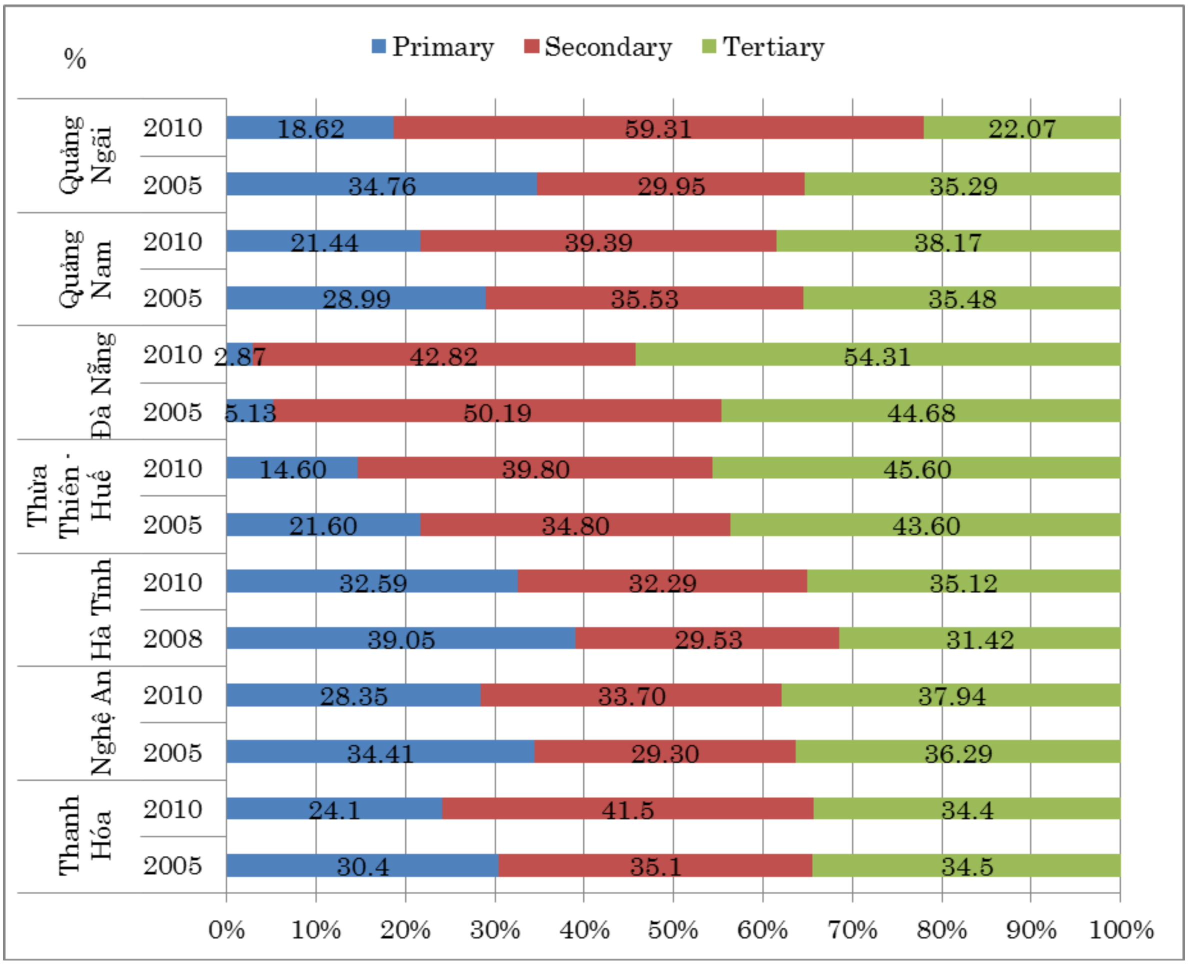
1) Change of Industrial Structure

With regard to the composition of GDP by primary industry, secondary industry and tertiary industry in respective provincies and cities of the Central Region and their change over the period of 2005-2010, there is almost the same tendency as that of the Northern Region described previously in that, with the exception of Da Nang, nearly all of the 7 target provinces and cities have witnessed the deline of their respective proportion of the primary industry dominated by agriculture. However, as far as which sector has expanded its proportion as a result of the relative decline of the primary industry, the answer differs with different provinces, as there is either the case with the secondary industry expanding its proportion, or the case in which the tertiary industry has become relatively larger. Among the 7 provinces and cities of the Central Region, the 4 provinces where the proportions of both the secondary and tertiary industry have increased are Nghe An, Ha Tinh, Ttua Tien-Hue and Quang Nam, while the 2 provinces where the proportion of secondary industry has increased with the decrease of tertiary industry are Thanh Hoa and Quang Ngai. Da Nang is the only case where the tertiary industry has increased with the decrease of both the primary industry and the secondary industry. As the desiination for the transfer of the factors of production from the primary industry due to change in the industrial structure, the secondary industry is larger than the tertiary industry, which is the same as what has been seen in the case of the Northern Region.

The radical change of industrial structure over the 5 years of 2005-2010 in the case of Quang Ngai is especially noteworthy, in which the proportion of primary industry decreased from 34.8% in 2005 to 18.6%, down 16.2 percentage points, and the tertiary industry also decreased from 35.2% to 22.1%, down 13.2 points, while the secondary industry went up 29.3 points from 30% to 59.3% over the same period.

A glance at the industrial structure of respective provinces and cities in 2010 shows that the provice with the highest proportion of secondry industry to the local GDP is Quang Ngai (59.3%), while the others in order from top to bottom are, Da Nang (42.8%), Thanh Hoa (41.5%), Tua Tien-Hue (39.8%), Quang Nam (39.4%), Nghe An (33.7%), and Ha Tinh (32.3%).

On the other hand, those with the tertiary industry surpassing the secondary industry and thus occupying the largest proportion to local GDP are Da Nang (54.3%), Tua Tien-Hue (45.6%), Nghe An (37.9%), and Ha Tinh (35.1%). (Table 6.1-5)



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

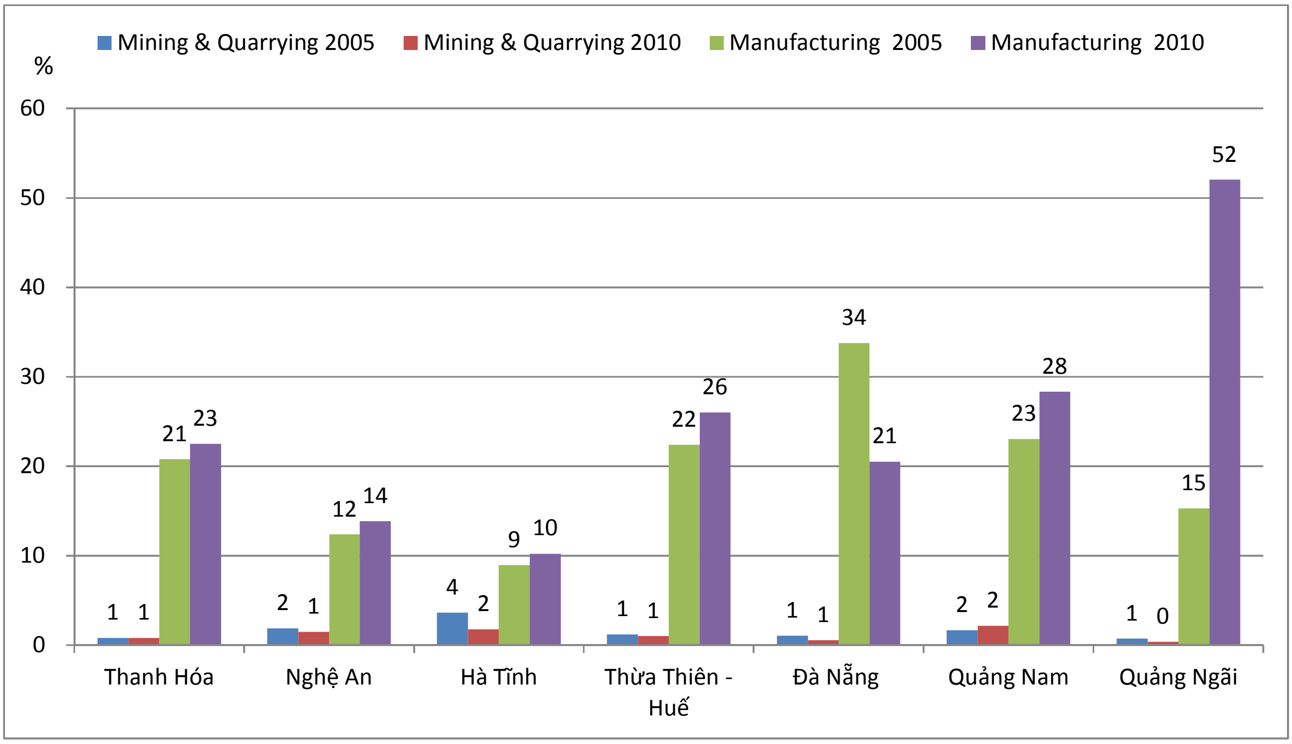
Figure 6.1-5 Change of Proportions of the Primary, Secondary and Tertiary Industry to GDP in the Target Provinces and Cities of the Central Region

2) Change of the Weight of Mining & Quarrying and Manufacturing under the Secondary Industry

As illustrated by Figure 6.1-6, the proportion of mining and quarrying to GDP is very low for all the 7 target provinces and cities, with the value of both Quang Nam and Ha Tinh as of 2010 standing at 2%, and the others at 1% or 0%.

With regard to the proportion of manufacturing sector to local GDP, it is worth noting that Quang Ngai significantly exceeded the others with the value of 52%. As far as the value added of manufacturing industry in 2010 is concerned, Quang Ngai topped the others in the Central Region with the value of VND 15.2 trillions, while the values of the othes are as follows: Thanh Hoa stands at VND 11.7 trillions, Quang Nam at VND 7 trillions, Da Nang at VND 6.3 Trillions, Nghe An at VND 5.8 Trillions, Tua Tien-Hue at VND 5.3 trillions, and Ha Tinh at VND 1.7 Trillions.

When comparing value of 2010 with that of 2005 in terms of manufacturing's proportion to local GDP, with the exception of Da Nang where the value declined by a great margin from 34% in 2005 to 21% in 2010, all the provinces saw their respective values increasing. Among them, the province with the largest increase in this value is Quang Ngai, which registered an increase of 37 percentage points from 15% to 52%, while the range of increase in the cases of other provinces were from 1 point to 5 points respectively



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Note: The values of Ha Tinh are of 2008 and 2010.

Figure 6.1-6 Change of Proportions of Mining & Quarrying and Manufacturing Sector to GDP in the Target Provinces and Cities of the Central Region

3) Situation of Major Subsectors of Manufacturing in the Target Areas of Northern Region

In the following passage, the ranking of respective target provinces and cities of the Central Region (among all the 25 target provinces and cities) is to be examined by dividng the 20 subsectors under manufacturing into the 3 groups of light industry, mineral and heavy industry, and electronics and machinery according to the official data published by the Viet Namese government.

Regarding the group of light industry, special attention needs to be paid on Thanh Hoa, Quang Nam and Da Nang. Thanh Hoa's subsectors of pringting & recorded media, furniture and wood and wood products respectively stand at No.4, No.5 and No.6, with its furniture toppeding the others in the Central Region. Quang Nam gains No.4 and No.5 in the subsectors of leather & related products and wood &wood products among all the target areas, while both of the subsectors top the other areas in the Central Region. Da Nang, on the other hand, stands at No.3 and No.5 among all the target areas with respect to the subsectoros printing & recorded media and wearing apparel, while both of them rank No.1 in the Central Region. Besides, although Da Nang's subsector of rubber & plastic products accounts is placed at No.7 among all the target areas, it position among the Central Region is No.1. Generally speaking, the rankings of other provinces in the Central Region concerning the field of light industry are all comparatively low.

Tble 6.1-2 Rankings of the Target Provinces and Cities of Central Region among All Target Areas in Light Industry as of 2010

Target Provinces and Cities	Food & Beverage	Textiles	Wearing Apparel	Leather & Related Products	Wood & Wooden Products	Paper & Paper Products	Printing & Recorded Media	Rubber & Plastics	Furniture
Thanh Hóa	10	21	12	9	6	11	4	18	5
Nghệ An	17	14	20	23	7	10	18	22	18
Hà Tĩnh	24	23	24		10	24	19	24	23
Thừa Thiên - Huế	16	10	16	19	13	19	12	21	13
Đà Nẵng	21	12	5	14	17	12	3	7	17
Quảng Nam	18	11	11	4	5	17	9	15	10
Quảng Ngãi	15		23	21	24	21	24	23	20

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

As for the group of mineral & heavy industry, those subsectors where the provinces and cities of Central Region rank at relatively higher positions are coke and petroleum products, pharmaceuticals, medicinal chemical & botanical products, and other non-metallic mineral products. With respect to the subsector of coke and petroleum products, although Quang Ngai secures the top spot among the whole country, as this is the only vital subsector underpinning the manufacturing sector, or even the whole of secondary industry, its rankings among the whole country in terms of the other subsectors are very low. Regarding the subsector of pharmaceuticals, medicinal chemical & botanical products, Da Nang is placed at No.4 among all the target areas, and is the No.1 of the Central Region. What's more, there is the subsector of other non-metallic mineral products where Thanh Hoa gains No.2 among all the target areas while topping the Central Region. As this subsector is mainly composed of construction materials, this province is comparatively competitive in the field of construction materials such as cement product aoong the whole country.

Tble 6.1-3 Rankings of the Target Provinces and Cities of Central Region among All Target Areas in Mineral and Heavy Industry as of 2010

Target Provinces and Cities	Coke & Petroleum Products	Chemicals & Chemical Products	Pharmaceuticals, Medicinal Chemical & Botanical Products	Other Non-metalic Mineral Products	Basic Metals	Fabricated Metal Products
Thanh Hóa		9		2	19	13
Nghệ An		16		13	15	19
Hà Tĩnh		19	9	24	22	23
Thừa Thiên - Huế		17		16	21	22
Đà Nẵng	8	18	4	17	10	9
Quảng Nam		22		15	16	17
Quảng Ngãi	1	21		25	23	25

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

As for the group of electronics and machinery, it seems that there is hardly any field where the Central Region can boast of its competitiveness. That Da Nang ranks at No.3 among all the targe areas in the subsector of other manufacturing wihich consists of activities of recycling and repair & installation of machinery equipment is the only thing worthy of mentioning. However, it should not be forgotten that the above conclusion is based on the statistical data up to the year of 2010. As to be described later in this chapter, the development of automobile started from 2007 and its significant growth has been seen since 2010 with the concentration of the automobile sector progressing steadily even now, while this real situation was not reflected in the statistical data up to 2010. Moreover, even if it is only based on the data up to 2010, the rapid grow of automobile sector in Quang Nam is also apparent as to be seen later. These are the two points to be borne in mind when discussing about the issue of industry in the Central Region.

Tble 6.1-4 Rankings of the Target Provinces and Cities of Central Region among All Target Areas in Mineral and Heavy Industry as of 2010

Target Provinces and Cities	Electronic, Optical & Electrical Products	Machinery & Equipment	Motor Vehicles	Other Transport Equipment	Other Manufacturing
Thanh Hóa		19	9	15	10
Nghệ An	18	22	13	17	9
Hà Tĩnh				18	17
Thừa Thiên - Huế	16	21	14	21	
Đà Nẵng	9	14	7	19	3
Quảng Nam	13	20	8	16	15
Quảng Ngãi	20	11	21	12	

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

4) Comparison Regarding the Proportions and Growth Rates by Subsectors under Manufacturing in the Three Major Provinces and City

A) Da Nang

The total amount of manufacturing gross output of Da Nang registered an average annual growth rate of 7.2% over the period of 5 years between 2005 and 2010. A glance at the average annual growth rates of respective subsectors reveals that those with the growth rate exceeding the average level of the whole manufacturing sector are wearing apparel (16.1%), paper& paper products (7.6%), printing & recorded media (16.2%), rubber & plastic products (10.3%), basic metal (32.3%), fabricated metal products (17.2%), electronic, optical & electrical products (18.8%), and motor vehicles (39.8%). Among them, the growth rates of motor vehicles and basic metal are exceptionary high. In addition, it is worth mentioning that, as the gross output of the 3 subsectors, i.e. coke and petroleum products, pharmaceuticals, medicinal chemical & botanical products and other manufacturing were zero in the year of 2005, it is not possible to calculate the average annual growth rate with the year of 2005 as the base year with respect to these 3 subsectors. Nevertheless, as the newly emerging subsectors of Da Nang, they need to be paid more attention to

On the contrary, those with an annual growth rate lower than the average level of the manufacturing sector are food & beverage (-4.3%), tabacco (-24.7%), textile (4.1%), leather & related products (-15.3%), wood & wood products (5.4%), chemical & chemical products (-25%), other non-metallic mineral products (6.4%), other machinery & equipment (-9.3%), other transport equipment (-45.7%) and furniture (-23.5%), altogether 10 subsectors. Among them, 7 subsectors, i.e. food & beverage, tabacco, leather & related products, chemical & chemical products, other machinery & equipment, other transoport equipment and furniture slipped to negative growth.

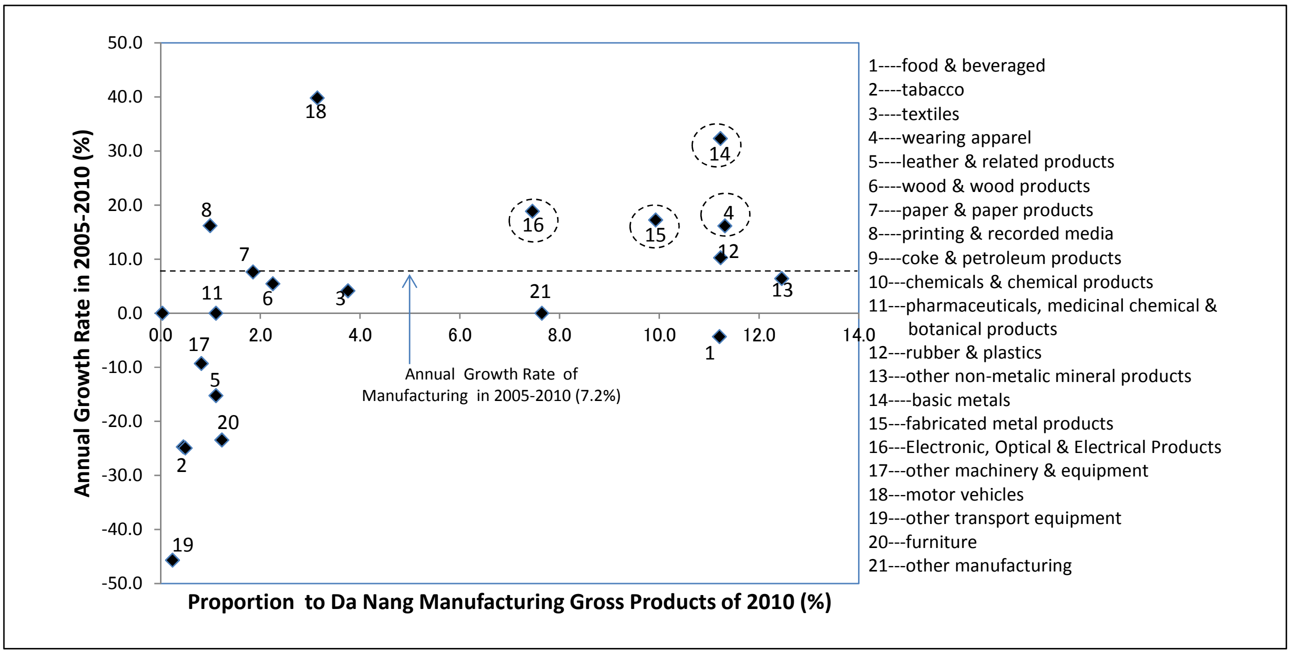
Table 6.1-5 Trend of Gross Output of Subsectors under Manufacturing of Da Nang

（Unit: VND billion）

Subsectors under Manufacturing	2005	2010	Share (2010) (%)	Annual Growth (2005-2010) (%)
Total of Manufacturing	7,673	10,877	100.0	7.2
food & beverage	1,520	1,219	11.2	-4.3
tobacco	207	50	0.5	-24.7
textiles	334	409	3.8	4.1
wearing apparel	583	1,231	11.3	16.1
leather & related products	277	121	1.1	-15.3
wood & wooden products	188	245	2.3	5.4
paper & paper products	140	202	1.9	7.6
Printing & f recorded media	51	108	1.0	16.2
coke & petroleum products	0	4	0.0	0.0
chemicals & chemical products	227	54	0.5	-25.0
pharmaceuticals, medicinal,chemical & botanical products	0	121	1.1	-
rubber & plastics products	750	1,222	11.2	10.3
other non-metallic mineral products	994	1,355	12.5	6.4
basic metals	301	1,221	11.2	32.3
fabricated metal products	488	1,080	9.9	17.2
electronic, optical & electrical products	342	811	7.5	18.8
other machinery & equipment	145	89	0.8	-9.3
motor vehicles	64	342	3.1	39.8
other transport equipment	551	26	0.2	-45.7
furniture	510	134	1.2	-23.5
Other manufacturing	0	832	7.6	-

Source: Da Nang Statistical Yearbooks of 2011 edition

As for the proportions of respective subsectors to the total of Da Nang’s manufacturing gross output as of 2010, the subsector of other non-metallic mineral products ranks at the top (12.5%), while the others are, in order from the top, wearing apparel (11.3%), rubber & plastic products (11.2%), basic metal (11.2%), food & beverage (11.2%), fabricated metal (9.9%), electronic, optical & electrical products (7.5%) and so on.



Source: Da Nang Statistical Yearbooks of 2011 edition

Figure 6.1-7 Scattering Diagram of Weights and Growth Rates by Subsectors under Manufacturing of Da Nang

By putting the above-mentioned values of proportion to manufacturing together with that of growth rate, it is clear that the 4 subsectors of basic metals, wearing apparel, fabricated metal products and electronic, optical & electrical products are comparatively higher in both the values.

B) Quang Nam

The total amount of manufacturing gross output of Quang Nam registered an average annual growth rate of 24.5% over the period of 4 years between 2006 and 2010. A glance at the average annual growth rates of respective subsectors reveals that those with the growth rate exceeding the average level of the whole manufacturing sector are wearing apparel (37.1%), leather & related products (69.9%), paper& paper products (37.1%), chemical & chemical products (47%), other non-metallic mineral products (24.9%), basic metal (26.2%), fabricated metal products (37.1%), motor vehicles (64.1%) and furniture (39.1%). Among them, the growth rates of leather & related products, motor vehicles, chemical & chemical products and fabricated metal products are exceptionary high.

Contrasting to the above-mentioned are the 7 subsectors with an annual growth rate lower than the average level of manufacturing sector, which are food & beverage (12.8%), textile (12.9%), wood & wood products (14.4%), printing & recorded media (13.1%), rubber & plastic products (9.8%), electronic, optical & electrical products (4.2%), and other machinery & equipment (4.8%),

As for the proportion of respective subsectors to the total gross output of the local manufacturing sector as of 2010, the subsector of other non-metallic mineral products ranks at the top (22.1%), while the others are, in order from the top, food & beverage (20.9%), leather & related products (16.1%), wood & wood products

(10.2%) and so on.

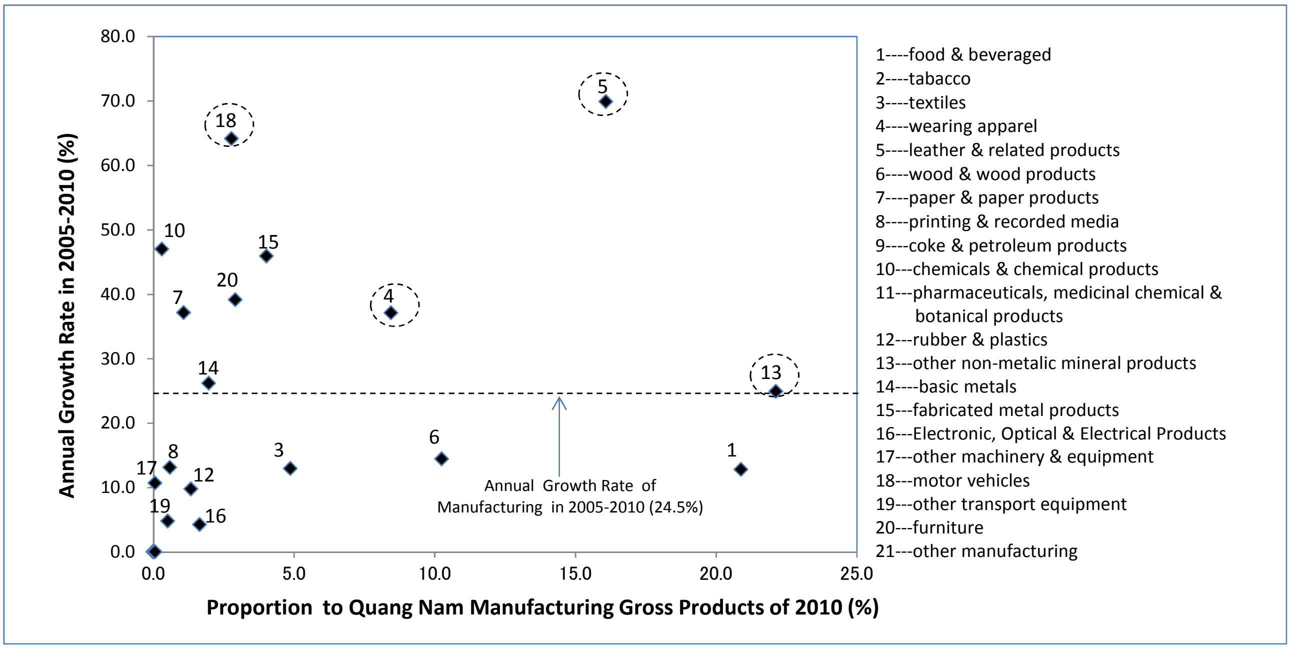
By putting the above-mentioned values of proportion to manufacturing together with that of growth rate, it can be seen that the 3 subsectors, leather & related products, other non-metallic mineral products and wearing apparel, fabricated metal products and electronic, optical & electrical products are comparatively higher in both the values. In addition, considering the high growth rate of automobile up to 2010 and the latest information showing its even more vigorous growth after 2010, the proportion of this subsector is expected to further increase.

Table 6.1-6 Trend of Gross Output of Subsectors under Manufacturing of Quang Nam

（Unit: VND billion）

Subsectors under Manufacturing	2005	2010	Share (2010) (%)	Annual Growth (2005-2010) (%)
Total of Manufacturing	3,795	9,113	100.0	24.5
food & beverage	1,176	1,904	20.9	12.8
tobacco	0-	0	0.0	-
textiles	273	444	4.9	12.9
wearing apparel	218	770	8.4	37.1
leather & related products	176	1,466	16.1	69.9
wood & wooden products	545	934	10.2	14.4
paper & paper products	28	99	1.1	37.1
Printing & f recorded media	33	54	0.6	13.1
coke & petroleum products	0	0	0.0	0.0
chemicals & chemical products	6	28	0.3	47.0
pharmaceuticals, medicinal,chemical & botanical products	0	0	0.0	-
rubber & plastics products	84	122	1.3	9.8
other non-metallic mineral products	829	2,017	22.1	24.9
basic metals	71	180	2.0	26.2
fabricated metal products	81	367	4.0	45.9
electronic, optical & electrical products	127	150	1.6	4.2
other machinery & equipment	4	6	0.1	10.7
motor vehicles	35	254	2.8	64.1
other transport equipment	39	47	0.5	4.8
furniture	71	266	2.9	39.1
Other manufacturing	0	6	0.1	-

Source: Quang Nam Statistical Yearbooks of 2011 edition



Source: Quang Nam Statistical Yearbooks of 2011 edition

Figure 6.1-8 Scattering Diagram of Weights and Growth Rates by Subsectors under Manufacturing of Quang Nam

a) Accumulation of Automobile Industry in Quang Nam Province

In Quang Nam Province of the Central Region, the accumulation of automobile industry is in progress. This can be seen particularly in Troung Hai Industrial Zone (IZ), where a group of automobile assembly factories have been built and operated by the Vietnamese invested company TACHO though cooperation with foreigh companies like HUNDA, KIA, and MAZDA either by way of capital joit-venture or by way of technological tie-up.

- **TACHO-BUS**

TACHO-BUS is a joit-venture between the Vietnamese invested company TACHO and HUNDAI, with its assembly factory of motorcoach in Truong Hai IZ. This is a newly established factory where the operation has just been started since 2011 and the annual output of motorcoach has reached 3,000 vehicles. Its ammarket is 100% inside Viet Nam.

- **TACHO-KIA**

This is a joit-venture with the Korean company KIA, with a passenger car assembly factory set up within Tuong Hai IZ to produce cars with KIA's brand name. It has been operated since 2007, and the annual passenger car output nowadays is 25,000 vehicles with the annual amount of sales reaching $175,000. At present, the factory in Truong Hai is simply an a assembly factory, with the body of car and major components depended on import from Kore. Although the market is 100% domestic at the moment, a plan has been formulated to target the market of the neighboring ASEA countries, especially Thailand and Laos, which is to be started next year. Besides, as some of the components, such as horn, tyre, battery, seat and so on, have been procured from the domestic suppliers since 2009, the company is scheduled to increase the local supply rate step by step.

- **VINA-MAZDA (TACHO-MAZDA)**

This is a company set up through cooperation between TACHO and MAZDA, with a factory assembling passenger cars with MAZDA's brand name, but the way of cooperation in this case is technological tie-up instead of capital joint-venture. The annual output of passenger cars using MAZDA's brand name is now 10,000 vehicles, with the body and major components imported from Japan. Also, similar to the case of TACHO-KIA, some of the components like horn, battery and seat are procured from the domestic suppliers, but the tyres are imported from Europe (Good Year). Moreover, although the market at present is purely domestic, the nearby market of Thailand and Laos will be targeted starting from next year.

C) Quang Ngai

The total amount of manufacturing gross output of Quang Ngai achieved an astonishingly high annual growth rate of 42.7% over the period of 5 years between 2005 and 2010. A glance at the average annual growth rates of respective subsectors gives an impression that only two sectors with a growth rate exceeding the average level of the whole manufacturing sector, which are other machinery & equipment (137.8%) and other transport equipment. In effect, however, the most important subsector that underpinning the high growth rate of Quang Ngai's mamufacturing sector is the subsector of coke & petroleum products. As the gross output of this subsector was zero in the year of 2005, it is impossible to calculate the average annual growth rate with the year of 2005 as the base year. As a result, its growth rate cannot be reflected in the table and diagram below.

On the other hand, all the subsectors apart from the above-mentioned registered their respective annual growth rates lower than the average level of manufacturing sector. Among them, 9 subsectors slipped to negative growth, which are wearing apparel (-4.4%), leather & related products (-10.9%), wood & wood products (-9.6%), paper & paper products (-23.5%), printing & recorded media (-12.9%), chemical & chemical products (-10.7%), fabricated metal products (-1.6%), motor vehicles (-41.8%) and furniture (-8.2%).

When looking at the proportion of respective subsectors to the local manufacturing gross output as of 2010, coke & petroleum products tops the others at 83.1%, while the other only subsector with relatively high proportion is food & beverage (12%).

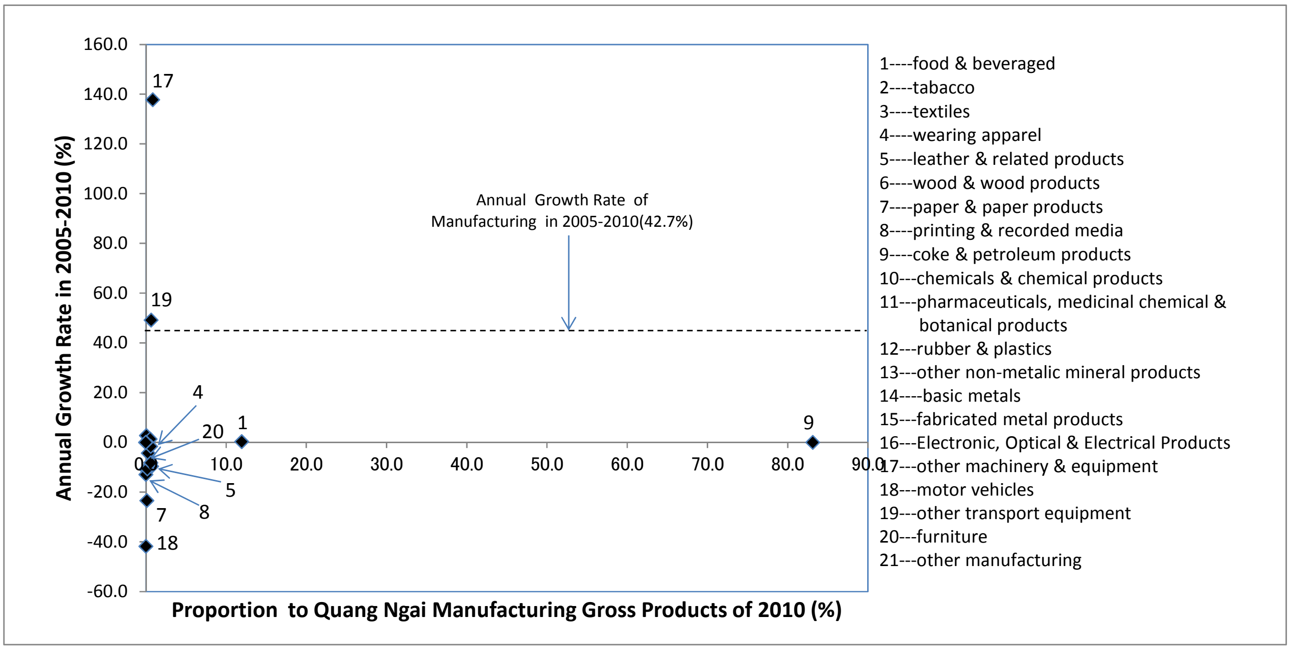
By putting the above-mentioned values of proportion to manufacturing together with that of growth rate, the 3 subsectors i.e. coke & petroleum products, other machinery & equipment and other transport equipment could be considered the most important subsectors for Quang Ngai.

Table 6.1-7 Trend of Gross Output of Subsectors under Manufacturing of Quang Ngai
（Unit: VND billion）

Subsectors under Manufacturing	2005	2010	Share (2010) (%)	Annual Growth (2005-2010) (%)
Total of Manufacturing	2,970	17,588	100.0	42.7
food & beverage	2,079	2,103	12.0	0.2
tobacco	-	-	0.0	-
textiles	1	1	0.0	0.0
wearing apparel	70	56	0.3	-4.4
leather & related products	16	9	0.1	-10.9

Subsectors under Manufacturing	2005	2010	Share (2010) (%)	Annual Growth (2005-2010) (%)
wood & wooden products	214	129	0.7	-9.6
paper & paper products	99	26	0.1	-23.5
Printing & f recorded media	4	2	0.0	-12.9
coke & petroleum products	-	14,623	83.1	-
chemicals & chemical products	58	33	0.2	-10.7
pharmaceuticals, medicinal,chemical & botanical products	-	-	0.0	-
rubber & plastics products	-	-	0.1	2.7
other non-metallic mineral products	88	94	0.5	1.3
basic metals	7	7	0.0	0.0
fabricated metal products	113	104	0.6	-1.6
electronic, optical & electrical products	-	1	0.0	-
other machinery & equipment	2	152	0.9	137.8
motor vehicles	15	1	0.0	-41.8
other transport equipment	16	118	0.7	49.1
furniture	172	112	0.6	-8.2
Other manufacturing	-	-	0.0	-

Source: Quang Ngai Statistical Yearbooks of 2011 edition



Source: Quang Ngai Statistical Yearbooks of 2011 edition

Figure 6.1-9 Scattering Diagram of Weights and Growth Rates by Subsectors under Manufacturing of Quang Ngai

6.2 Natural Environment and Population Distribution Trend in Central Region

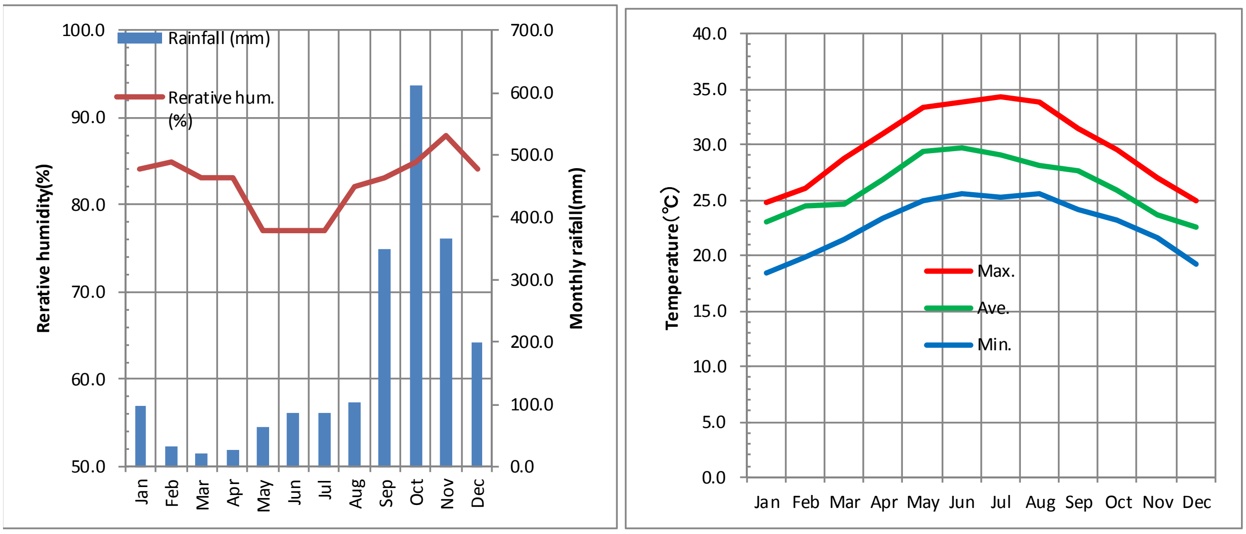
6.2.1 Natural Environment of Central Region

Meteorology

Da Nang city is located at typical tropical monsoon climate zone and strongly influenced 2 climates of North and South Vietnam. There are 2 seasons in Da Nang as dry season from January to July and wet season as from August to December. In Wet season sometimes there is a cold days of 15℃ continued, but it is not too cold and only short days. Annual average temperature is 26.3℃, maximum high and low temperature area 29.9℃ and 22.7℃. Annual day of rain is 144, and rain days from September to December is 76 days.

Da Nang

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave./Total
Temper aature (℃)	Max.	24.8	26.1	28.7	31.0	33.4	33.9	34.3	33.9	31.5	29.6	27.0	24.9	29.9
	Ave.	23.1	24.4	24.6	26.9	29.4	29.7	29.1	28.1	27.7	25.9	23.7	22.5	26.3
	Min.	18.5	19.8	21.5	23.3	24.9	25.5	25.3	25.5	24.1	23.2	21.6	19.3	22.7
Rainfall (mm)		96.2	33.0	22.4	26.9	62.6	87.1	85.6	103.0	349.7	612.8	366.2	199.0	1680.0
Rerative hum. (%)		84.0	85.0	83.0	83.0	77.0	77.0	77.0	82.0	83.0	85.0	88.0	84.0	82.3



Reference: World Weather Information Service 1947-1990

Figure 6.2-1 Climatic condition of Da Nang

Flood

According to the Study on integrated Development Strategy for Da Nang City and Its Neighboring Area in the Socialist Republic of Vietnam (DaCRISS), flood condition of Da Nang city vicinity is shown in the following figure.

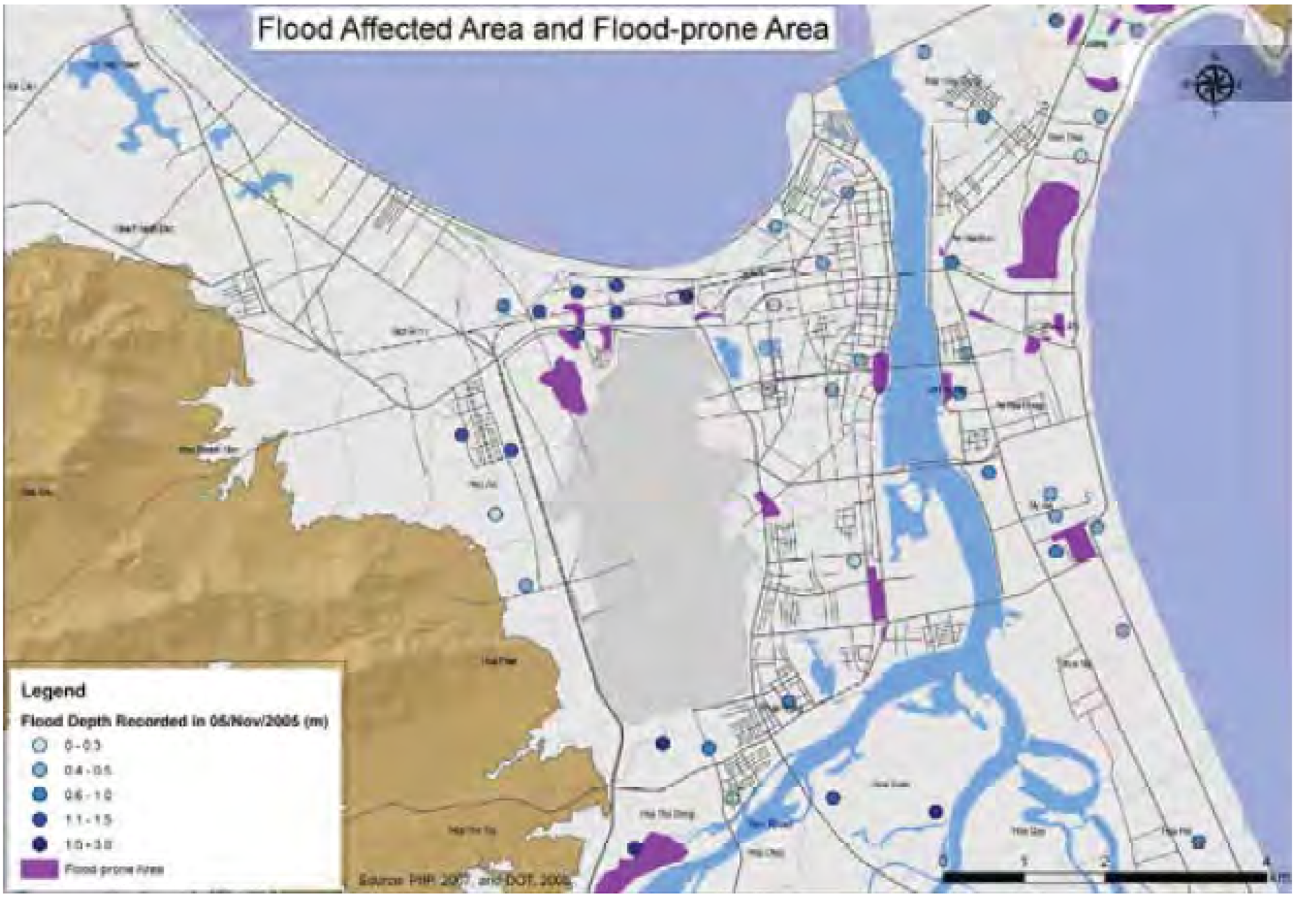


Figure 6.2-2 Flood inundation area

Earthquake

There is less possibility on large damage of Tsunami hit to Vietnam by UN report (24 March, 2011). However no large damage of Tsunami has been recorded by this time, It is indicated an anxiety of Tsunami at central coast region of Vietnam. It is threaten that an occurrence of Tsunami at Manila trench as an earthquake zone of Western Philippine, in case an occurrence of earthquake with more than magnitude 8 at Manila trench, it is unavoidable of Tsunami damage to the central coast area. When it occur large earthquake at Manila trench, Tsunami will reach to Vietnamese coast within 2 to 3 hours.

Also in case occurrence of an earthquake with more than magnitude 8 at areas of Northern Luzon island to Southern Taiwan, and an earthquake with more than magnitude 8.8 occurs at Ryukyu trench, then central coast of Vietnam will have influence of Tsunami.

Those influence area of Tsunami presumed and more than 270,000 peoples are living here in the area, so that some mitigation measures are to be considered. Among central coast areas such as Dong Ha in Quang Tri Province, Phan Rang in Ninh Thuan are assumed large Tsunami to be suffered.

6.2.2 Population Distribution in Central Region

Thanh Hoa Province and Nghe An Province in North-central region are province with large population after Ho Chi Minh city and Hanoi city. These Provinces are able to supply many labor force and production base as valuable labor incentive industry as sewing factory. The population is concentrated mostly to Da Nang city in central region.

Table 6.2-1 Population and it density

City. Province	Population (x1,000)	Area (km2)	Population density (Person/ km^2)
Thanh Hoa	3406.8	11133.4	306
Nghe An	2917.4	16490.7	177
Ha Tinh	1228.0	6025.6	204
Thura Thien –Hue	1090.9	5062.6	215
Da Nang	926.0	1283.4	722
Quang Nam	1425.1	10438.4	137
Quang Ngai	1218.6	5152.7	236

Note: Figure in North –central area shows in the North area map.

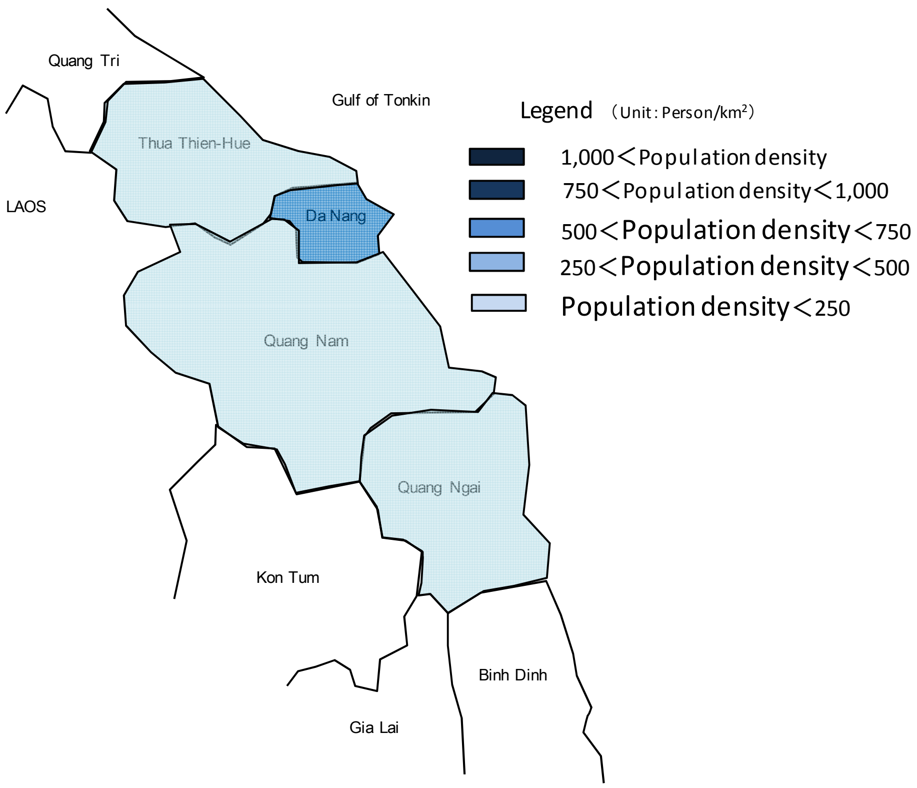


Figure 6.2-3 Population density of central region

6.3 Present Status of Transport Infrastructure Development and Plans

(1) Road Infrastructure

Road and highway network is relatively developed, and developing in surrounding area include center in Da Nang city. Hai Van pass that is located in north-side of Da Nang on NH No.1 was bottleneck for read traffic, however Hai Van Tunnel has been developed in 2005 and travel time to pass the Hai Van Pass is drastically reduced from one hour to 10 minutes.

From the viewpoint of logistics, Da Nang is good location to connect Laos, Thailand and Myanmar. East- West Economic Corridor of 1,500 km length is developing from Da Nang to Myanmar via Laos and Thailand by ADB fund. Inside Vietnam of the corridor, the main route from Da Nang is goes to north-side on NH No.1 and NH No.9 via Dong Ha and connects to Savannakhet in Laos and Mukdahan in Thailand. Second Mekong Bridge that crosses Mekong River has developed in 2006 and the corridor is connected smoothly. Logistic trucks of three countries can be access to each country directly. Da Distance from Savannakhet to Da Nang Seaport is 500 km and close compere with Thailand, however road condition in Vietnam is bad than in Tailand and main route from Laos is to Thailand.

Regarding expressway development, Da Nang – Quang Ngai Expressway is ongoing for design and construction by JICA and ADB funds. After completed the expressway, developing oil industrial complex in Quang Ngai can be connected to Da Nang by expressway and contribute to economic development in central Vietna,.

(2) Seaport infrastructure

Main seaport in central Vietnam is Da Nang Port. Da Nang Port is composed of Song Han Port, Tien Sa Port and Lien Chien Port. Song Han Port is located along Han River and developed in 1902 of French colony. Tien Sa Port has developed in 1965 during time of Vietnamese war. Lien Chien Port is planning at foot of Hai Van Pass. Tien Sa Port is expected for main deep seaport of beginning of East-West Economic Corridor to connect with Vietnam, Laos, Thailand and Myanmar that total length is 1,450 km.

In addition, Dung Quat port, which is jointly managed by Quang Nam province and Quang Ngai province, are planned to a joint use and management, and serves as an important port supporting the heavy industries. There is an integrated oil refinery industry. In addition, in a joint venture with Taiwan companies, JFE Steel is considering an advance into Dung Quat economic zone.

(3) Airport infrastructure

Major airport in central Vietnam is Da Nang International Airport. Da Nang Airport is located at 5 minute from city center and total area is 150ha and has two runway of 3,050m length. Passenger per year is 200 million and new passenger terminal is operated from 2007. International fright is operated to Bangkok, Singapore and Taipei. Fright to Osaka is planned. In addition, Chu Lai International Airport in Quang Nam province, which was under repair work, was reopened in March 2005.

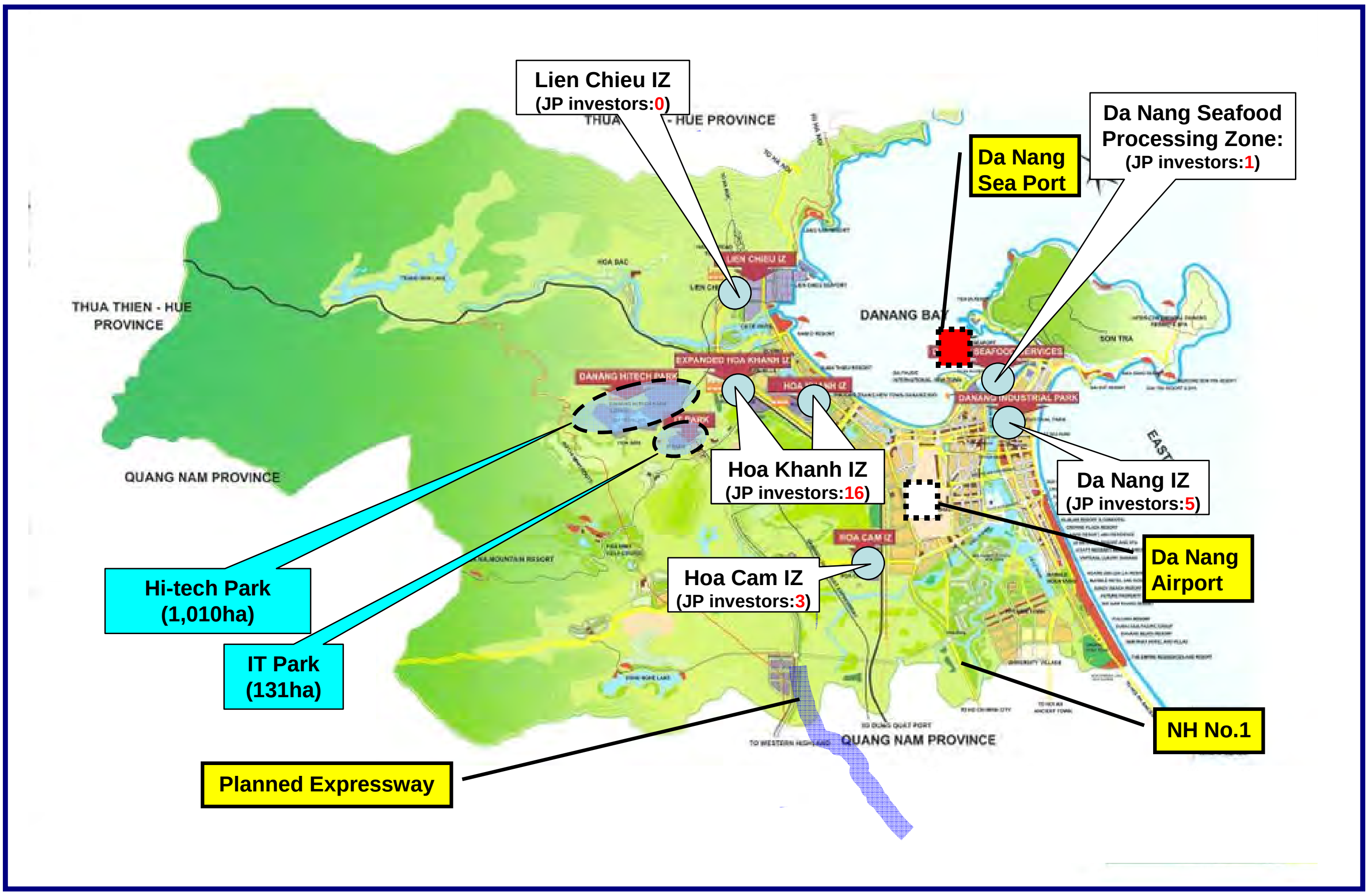


Figure 6.3-1 Transport infrastructure in city of Da Nang

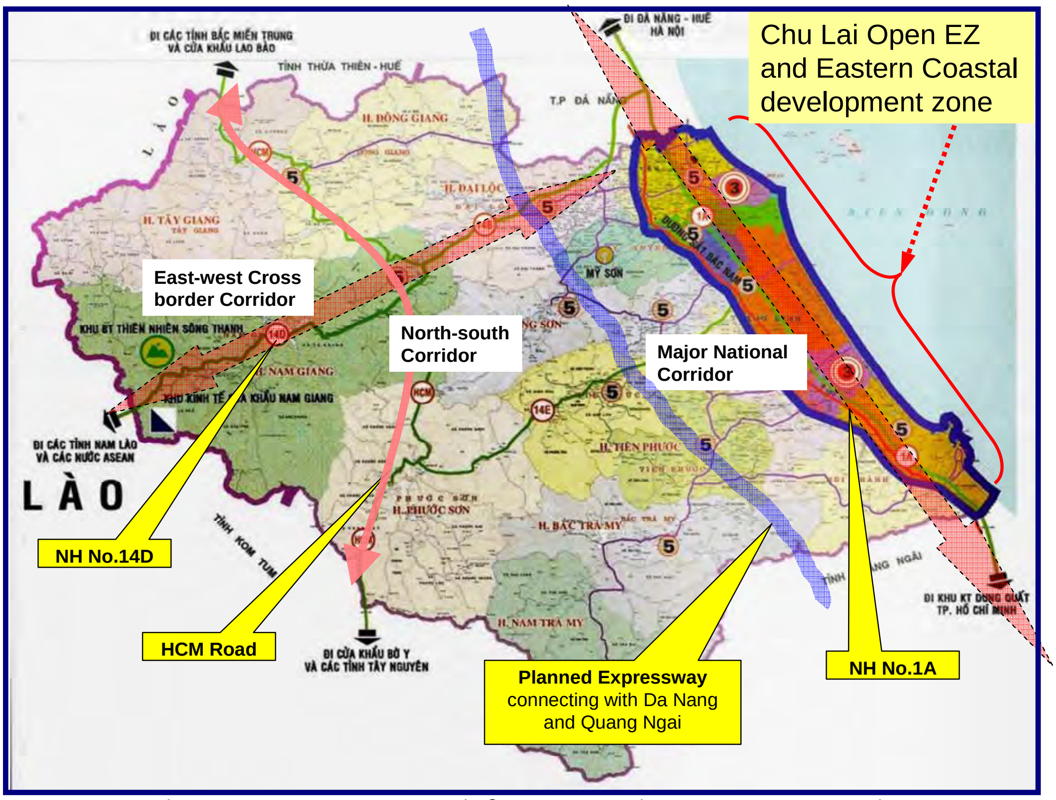


Figure 6.3-2 Transport infrastructure in Quang Nam province

Figure 6.3-3 Transport infrastructure in Quang Ngai province

6.4 Review of Economic Zones and Industrial Zones in Central Region

6.4.1 Overview of Economic Zones in Central Region

The Central Region has 10 Economic Zones among 15 in the nationwide. The reason is that development of basic infrastructure for industries such as port, airport and roads is in behind in the Central Region, compared with the Northern and Southern regions and the Government regarded that is to be obstacle to undertake economic development by investment of industrial zones led by private sector. Thus the Government took basic measures to reduce economic disparities among the provinces and support in order to raise the level of the local economic development by the designation of the Economic Zones.

Table 6.4-1 Economic Zones in Central Region

No.	Districts	Names of Economic Zones	Designated Area	Approved	Area【ha】
1	North Central	Nghi Son	Thanh Hoa	2006	18,611
2	North Central	Dong Nam Nghe An	Nghe An	2007	18,826
3	North Central	Vung Ang	Ha Tinh	2006	22,781
4	North Central	Hon La	Quang Binh	2008	10,000
5	North Central	Chang May - Lang Co	Thua Thien Hue	2006	27,108
6	South Central	Chu Lai	Quang Nam	2003	27,040
7	South Central	Dung Quat	Quang Ngai	2005	10,300
8	South Central	Nhon Hoi	Binh Dinh	2005	12,000
9	South Central	Nam Phu Yen	Phou Yen	2008	20,730
10	South Central	Van Phong	Khanh Hoa	2006	150,000

Source : Survey by the Study Team

(1) Nghi Son (Thanh Hoa province)

1) Background

The General Plan of Nghi Son Economic Zone, targeted 2025, was officially issued on October 23 2007, by the decision of the Prime Minister's Decision N0.1364/CD-TTg October 10, 2007. According to the General Plan, Economic Zone has 18,611.8 ha of area of which the 10,498ha is taxable area.

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The Central Government attach great importance to the development of Nghi Son Economic Zone and intend to develop accumulation of manufacturing industries, And the Provincial government of Thanh Hoa is leading the Nghi Son Economic Zone Development Management Committee to formulate Development Plan and Project Plan consistent with relating laws based on the general Plan of Nghi Son Economic Zone,.

In this Development Plan, attraction of investments by following types of industries are centered in order to achieve multiple industrial development.

－ Heavy industry and related industries

－ Petrochemical industry

- Steel and polishing industry
- Machinery industry
- Automobile assembly
- Shipbuilding and ship repairing industry
- Manufacturing of consumer goods
- Export processing industry
- Port facility development

2) Current Status and Development Projects

In May 2008, land preparation for the construction of petroleum refinery and chemical plant financed by yen loan of JBIC, and its construction work, for which 70% of the total construction costs was in yen loans of JBIC, is being under construction expecting to be completed in 2013. The Economic Zone has land of 103 ha for residential area, business hotel for business trippers, resort hotel with 3-4 stars, bungalows, recreation areas, convention center, restaurant and cafes bars second house for wealthy Vietnamese other than industrial area..

When the Japanese ambassador met Mr. Mai Van Ninh, Secretary of the Committee of the Communist Party and Mr. Chin Van Chien, Head of Peoples Committee of Thanh Hoa province, on April 13, 2011, construction of thermal power plant and oil refinery plant, support for registration of building (castle wall) constructed during Ho Dynasty to the World Heritage.

(2) Dong Nam - Nghe An Economic Zone (Nghe An province)

1) Background

Establishment of Don' Nam - Nghe An Economic Zone was started by the approval by the Decision of Prime Minister No.1150/QD-TTg on August 30, 2007. The site of the Economic Zone has more than 18,846.47 hectare, and extend over three provinces of Girokku, Jienchau, of Kuaro and consists of tax-free (tax-exempt) zone and taxable zone. The taxable zone includes development plans for industrial zones, export processing zones, urban development zones and tourism services zones. The Economic Zone Management Committee has started activities to attract investments for 6,000 ha for tourism, 2,500 ha for industrial zones and 16 construction projects including water purification plant with the goal of 2010.

2) Current Status and Development Projects

The current land use has 650 ha of tax-free zone is composed of 525 ha of area A and 125 ha of area B, The taxable zone has 8,527 ha for urban residential zone and composed of the following elements : ,.

- An 1,440 ha land for housing and relocation
- 117 ha urban public center
- 358 ha for special land use for public
- 1,451 ha land for city park
- 1,417 ha land for tourism and related services
- 2,894 ha land for industrial and high-tech industry

- 289 ha for transportation facilities (roads, parking) in the economic zone
- 382 ha for traffic projects
- 96 ha for infrastructure and cemetery
- 6 ha for historical and cultural heritage
- 68 ha for military
- Others

(3) Vung An Economic Zone (Ha-Tinh province)

1) Background

Vung An Economic Zone has been established by the decision No.72/2006/QD-TTg by the Prime Minister and associated laws have been provided on April 3, 2006. It has the area of 22,781 ha, including nine communes of Ky Anh district in the southern area of Ha Tinh province

2) Current Status and Development Projects

Ha Thinh province has iron ore mines in Thach Khe and deep-sear port in So Duong where develop potential to construct international routes for export of ore and cargo to Asia, Africa, United States are expected. In the province, tourism has also development potential especially eco-tourism and beach resort and, so far, more than 100 projects were approved. The major approved investment projects are :

- Steel mill and smelter
- Development of port
- Construction of power plant
- Development of 5 star hotel
- Construction of office buildings
- Urban development
- Construction of Voi Lake Tourist Service Center

The estimated costs for those projects are 1.5 billion US $

(4) Hon La Economic Zone (Quang Binh Province)

1) Background

Hon La Economic Zone was approved by the Prime Minister with decision No.23・2010・QD・TTg was promulgated on March 3, 2010. The Economic Zone development has 10,000 ha and Quang Binh province intends to development subjected to development of industries, port, trading, tourism, urban development, agriculture, fisheries and forestry in order to establish an economic center of the province. As the development of industrial infrastructure is considered to be the driving force for investment promotion, development of the deep-sea port is considered to be advantage for economic development of the surrounding provinces as well. The population is considered as the core factor of the economic development, the population of the Economic Zone is expected to be 58,000 in 2020 and 58,000, in 2030,

2) Current Status and Development Projects

As the Economic Zone is the newly approved in 2010, operation of the Economic Zone is not yet started, although Petrovietnam has been operating the piers of the deep sea port of Hon La to anchor the ships of 10,000 tons since 2009. The Petrovietnam has a project to construct 2,400 MW thermal power plant using coal with budget of US $ 15 billion, however, the completion time is not yet announced.

(5) Chang May - Lang Co Economic Zone (Thua Tin Hue province)

1) Background

Development of Chang My - Lang Co Economic Zone was approved by the decision of the Prime Minister No.04/2006/QD-TTg in April 2006. Development area of the Economic Zone is 27,108 ha and the province of Hue has invested more than 1.6 Trill.VND for development of public infrastructure such as transportation, power supply, water supply and communication network. The province has attracted 33 investments since its opening, of which 10 of them were FDI and received US$ 1.4 Billion.

2) Current Status and Development Projects

Chang Mai – Lang Co Economic Zone has been designated by the decision of the Prime Minister No.148/2004/QD-TTg dated August 13, 2004, for development of kernel of an economic development in the Central Region in order to raise the economic level of the entire Central Region as well as Da Nang City, Quang Nam Province, Quang Ngai Province and Binh Ding Province. The proposal for the development was emphasized to carry out the development using potential factor such as local resources, geographic characteristics and peculiarity of the region.

Chang Mai is on the north side of Hai Van Pass.Beautiful coves with white sand beach area is very impressive beautiful resource of Rang Co district. Therefore Management Committee Economic Zone Ministry of Thua Tin Hue (Economic Management Authority) has rejected seven proposals of investment projects of heavy industry and changed the development direction of the region into green industry and eco-friendly tourist resort. The Economic Zone has accepted 14 tourism development investment, with 886 Bill.VND within the first six months of 2012. It is 136% of investments compared to the amount accepted within same period of 2011,which is more than 34% of the 260 Bill. VND investment receipts are anticipated by the end of 2012. In addition, there were 5 domestic investment projects including development of urban infrastructure, construction of industrial zone, the tax-free area, investments for tourism-related business. Management Committee of Chang May-Lang Co Economic Zone is considering that it is desirable to promote economic development by the tourism utilizing the Hue ancient city designated as the world heritage, seaside landscape and rich natural assets such as mountains and forests, however, on the other hand, the provincial government is undertaking public investments in infrastructure, such as expansion of petroleum bases, ports and roads.

In March 2008, Singapore's Banyan Tree Group has formally submitted the application of investment for Angasana luxury resort hotel of 280 ha with 18-hole golf course with amount of 875 Mill. US $. The province of Hue approved applications for development plan of holiday village including construction of luxury hotels with 2000 rooms and apartment complex with 1000 units..

However, absent of infrastructure and industries to support those many projects is the current critical problem in the Thua Tin Hue, Economic Zone and development of those infrastructure and supporting industries is the emergency issues.

(6) Chu Lai Economic Zone (Quang Nam Province)

1) Background

In 2003, development of Chu Lai Economic Zone was decided in order to establish the first development core to enhance the economic level of Central Vietnam Region. It was approved by Decision of the Prime Minister No. 148/2004/QD-TTg (dated on August 13, 2004). The development direction of the Economic Zone was to carry out the development by taking advantages of development potential, regional characteristics, the peculiarity of the Central Region.

At the time of application, the development area of the Economic Zone was 27,000 ha, but it was expanded to 32,700 ha on the stage of implementation stage and it was approved in 2005. The expanded are includes Free Trade Zone, (1,650 ha), Industrial Zone (3,000 ha), Coastal Tourist zone (2000 ha including 35 Km of coastal area), Urban Development Zone (10,000 ha), Chu Lai airport and Chu Lai port. In addition to the incentives for other Economic Zones, the Chu Lai Economic Zone was granted following special incentives for achieveme3nt of initial development goals. :

－Exemption of land lease fee for over, 11 - 15 years by the projects,

－Subsidy of 50 % for the fees for application and establishment of enterprises,

－Subsidy of 50 % for the costs of TV and newspapers for recruitment and employment,

¬ Subsidy of 30 % for the costs of Publicity for 1 year with TV and News paper in Quang Nam province,

－Exemption of the costs for advertising on the website in Quang Nam Province for 5 years,－Reduction of 20 - 30% for communication service charges

2) Current Status and Development Projects

Since it was opened in 2003, the Chu Lai Economic Zone has invited 68 investments during these 8 years, of which domestic capital of THACO car factory for assembling trucks, buses and passenger cars with Mazda, Hyndai and KIA, and 18 FDI such as Nam Phuoy Resort development by Gentin Cooporation of Malaysian capital, Nissan Floating Glass factory, factory of industrial soda, manufacturing factory of a solar panel are included. 1n 2012, two Japanese companies, KIZUNA and Foster Electronics Corporation, obtained approval.

Particularly, investment in the automotive industries has been increased since 2012. Assembling of cars by VINA MAZDA and Korea’s KIA, which have started their production of passenger cars, and engine production factory of Hyundai Motor is under construction by joint venture with TACHO in Chuong Hai Industrial zone. Korea’s KIA is applying to permission to construct new assembly plants for production of 100,000 passenger cars per year. Considering those accumulations of automobile industries and undertaking activities in Chu Lai Economic Zone, it is anticipated to become base of automobile industry and create opportunities to attract many related supporting industries. Its considerable reason is that THACO has already has the port for exclusive use for transport of their own cars and it is advantage in shipment of finished vehicles to other regions. According to intention of Chu Lai Economic Zone Management Committee, it is emphasized that development of those automobile companies attract automakers, parts makers and other related industries as well. Therefore, the Committee is expecting investments of supporting industries from Japan. The Committee intends to emphasize the following development projects.

- Urban development with residential area urban facilities
- Promotion of investment for industrial zones by Japan (intend to send a mission to Tokyo, Osaka and Okinawa)
- Port facilities with two burses to accommodate ship of 7,000ton - 20,000 tons,
- Upgrade of Chu Lai Airport. There are at present 4 flights to Hanoi and 8 flights to Ho Chi Minh City every week,
- Construction of a larger General Hospital with 500 beds,
- Complete the development of infrastructure and social service facilities

According to Evaluation of the 15 Economic Zones in whole nation, carried out by the Ministry of Planning in June 2012, Chu Lai and Dung Quat Economic Zones won the top notes in terms of development level on infrastructure and attractiveness in investment promotion.

Due to the previous status of Quang Nam and Quang Ngai provinces that they were one province, both provinces have cooperative relation in order to strengthen economic development, such as exchange of information and development. They are at present drafting the Memorandum for Cooperation for exchange information, coordination and operation of Chu Lai Airport and Dung Quat Port as the Gateway for import and export of materials and products for both provinces, The memorandum is expected to be signed by the end of 2012.

(7) Dung Quat Economic Zone (Quang Nghai Province)

1) Background

Before the appointment to Economic Zone, Taiwanese Tyco Ltd obtained permission to construct a steel mill in the Dung Quat area with the investment of US$ 1 billion. But later Tyco Ltd has increased investment amount to $ 3 billion in cooperation with Taiwanese E-United and started construction in October 2007. However, the development was stopped due to land acquisition and short of finance.

In 1998, development of Dung Quat Economic Zone was started based on the decision of Prime Minister N0.1231/TTg-KTTH for development of five Economic Zones in order to promote economic development in the coastal area and Dung Quat Economic Zone was one of those five. According to active promotion by The Economic Zone Development Committee during these 15 years, emphasized in investment by heavy industries such as iron and steel industry, shipbuilding, oil refineries and machine construction, the Economic Zone received 112 investments of US$ 10.6 billion including the first domestic oil refinery by the end of 2010. In 2010, the area of the Economic Zone was expanded from 10,300 ha to 45,300 ha for additional development projects for VSIP industrial zone of 1,000 ha and urban development of 3,800 ha. The modified master plan was also approved by the Prime Minister on January 20, 2011.

2) Current Status and Development projects

In 2009, ITOCHU Ltd has signed on agreement for construction of the third bio-ethanol production plant in Vietnam for production of ethanol from cassava in collaboration with PETROSETCO, affiliated of PETROVIETNAM. Construction of the bio-ethanol production plant was completed in 2011 and producing 100,000 liters of ethanol for the fuel for cars and 1,500 tons of ethanol for industrial use. Current problem is that utilization of ethanol for fuel is not legally obliged.

The following development projects in Dung Quat Economic Zone are expected to be completed by the end of 2011: Oil refinery Plant : 6.5 million tons crude oil processing volume per year, future expansion to be 10 million tons

- Dung Quat Shipbuilding yard : capacity to build 100,000 – 400,000 tons ship.
- Dosan Heavy Industry Complex : by Korea by Joint venture with Vietnam,
- Guangurian : US-based steel plants with production of 7 million tons per year:
- Gemadeputo : Dung Quat International port, in operation since 2006
- Resumption of suspended construction work of steel plants of Taiwan based company in 2012 : expected to complete in 2013
- Approval for cconstruction of underground storage facilities applied by national Petro Vietnam Underground Storage Company.
- Korean automobile industry : start production.

Currently, Memorandum for Cooperation concerning sharing information, operation of airport and port, supply and logistics of raw materials are being drafted. It is expected to be signed by the end of 2012.

(8) Nhon Hoi Economic Zone (Binh Dinh Province)

1) Background

Developmnet of Nyon Hoi Economic Zone has been approved by the Prime Minister’s decision No. 141/2005/QD-TTgo on June 14, 2005. Its master plan of 12,000 ha and construction plan were formulated in accordance with No.142/2005/QD-TTg, but it was modified by the new approval No.17/2010/QD-TTg on March 3, 2010 and come to effect from May 1, 2010.

The master plan has Industrial Zone of 600 ha, in which bonded area of 490 ha, Industrial zone of 70 ha and port area of 50 ha (annual cargo handling capacity is 300 million tons) are included, They are expected to be completed by the end of the year in 2012 and the investment amount is 4 trillion dong (US $ 200 million). Permission of earth work for infrastructure of the Economic Zone C (230 hectares) was granted to HBC Investment Service Co.,Ltd to undertake construction in three phases, such as 85 ha for phase-1 (2008 – 2009), 76 ha for phase - 2 (2009 – 2010) and 69 ha for phase – 3 (2010 – 2011)

According to the management regulation, the Nyon Hoi Economic Zone is divided into 5 zones such as tax-free zone, industrial zone, port zone, tourism zone and new urban zone, On the evaluation of industrial zones carried out by the Ministry of Planning and Investment in June 2012, the Nyon Hoi Economic Zone won 665 points of 1,000 points in terms of attraction of investments and effective management, and it was selected to one of the 6 important Economic Zones among the 15 in the whole country

2) Current Status and Development Plan

Nyon Hoi Economic Zone has their own image for attraction of investments. They regard Hi-Tech industry, petro-chemical industry, electric and electronics industry, setting industry, tourism industry, service industries for trade and shipping and deep sea port are considered to be prioritized industries.

Nyon Hoi Economic Zone is located in the Nyon Hoi district of Binh Dinh Province in the South Central region and the construction of 700 megawatt thermal power plant (first phase) is under planning with 972 million USD(19.44 Trillion VND) in 90 ha of the economic zone. Currently, FS study of the thermal plant is being conducted. The construction will be started in the second quarter of 2012 and commence the operation in 2015.STFE Group of Thailand and PTTES have contracted for construction of oil refinery which was planned to construct in the economic zone. Production capacity of the oil refinery is 6 million ton in the first phase and it is anticipated to increase to 12 million ton in the final phase. The completion of the oil refinery is expected to make Nhon Hoi Economic Zone as a new energy supply base to the domestic industries.

(9) Nam Phu Yen Economic Zone

1) Background

Nam Phu Yen Economic Zone was established by the Nam Phu Yen Economic Zone Management Committee under the Prime Ministers Decision No. 1373/QD-TTg in September 2008 and Construction of the Economic Zone was started in 2010 in accordance with the master plan targeting 2015. The area of the Economic Zone is 27,500 ha and extends from the southern part of Phu Yen province to the northern part of Khanh Hoa including 3 districts of Son Hai, Dong Hoa and Tuy Hoa of Phu Yen province and 2 districts, Vanh Ninh and Ninh Hoa in the northern part of Khanh Hoa province.

2) Current Status and Development Plan

In the master plan, Dung Quat Economic Zone took Chu Lai Economic Zone as the development model and focused on investments by large scale industries. The master plan includes construction of large scale trade center and service center in the southern Phu Yen and Van Phuon and distributions center in the urban area of Ninh Hoa, Ninh Xim and Hai Lieng. In addition, petrochemical, sea products processing, technology and tourism are considered as the possible sector for investments. In 2012, Van Lo oil refinery and several industrial zones (2,682 ha) are being constructed and development of tourism is being studied by the provincial government in accordance with the master plan.

In order to promote investment more strongly, development programs for construction of access road to Economic Zone area and sea side, reform of administrative organization, development of professional training facilities for human resource development are under preparation. The Economic Zone has succeeded in attracting 258 investment projects, of which 221 are domestic and 37 are foreign investments. Currently, 90 domestic and 18 foreign enterprises have already started their operation.

(10) Van Phuong Economic Zone (Kanh Hoa Province)

1) Background

Development of Van Phuong Economic Zone has been started by the approval of the Prime Minister in May 2006. The Economic Zone has broad area of 150,000 ha including Van Ninh district and Ninh Hoa district of Khanh Hoa province and the special tax incentives for the Economic Zone will be applied for all the invested projects.

2) Current Status and Development Projects

Due to insufficient budget provided by the central government for the development of Economic Zone,125 billion VND (6.53 million USD) during 2007 - 2009, Peoples Committee of Khanh Hoa approved to issue the local bond for the construction of infrastructure, road, land acquisition and preparation of substitute land for expropriation.

Investment to Van Phuong Economic Zone increased to 80 projects up to present, in which the following large scale development projects are included.

Van Phong international port （General Marin Transport Company）complete in 2020)、
Van Phong Bonded storage（5 million ton per year）、
Nam Van Phong Oil Refinery（10 million ton per year）、
Van Phong Petroleum Terminal (505、000m3、complete in 2012）
Van Phong 1 Thermal Power Plant （2,630 MW、complete in 2017）

6.4.2 Location of Industrial Zones in Central Region

There are 37 Industrial zones in the Central Region. They are located within the area of 600 Km, from Thua Tien Hue province, north of Hai Van pass, up to Kanh Hoa province in the South Central Region. Markets and sources of procurements of the industries in the region are located mainly enterprises in the southern regions such as Ho Chi Minh City, Dong Nai and Bin Duong.

In the Central Region, Da Nang airport is developed for air cargos and several ports, Chang Mai, Da Nang, Chu Lai, Dung Quat, Cam Lang are developed for marine transport. However, Da Nang airport has only a few international flights and the ports on the region are mostly feeder ports and cargos have to be reshipped to trans-ocean vessel at Ho Chi Minh, Hai Phong, Bangkok and Hong Kong, so that development of deep sea port is an urgent requirement for strengthen of the investment promotion.

One of the particular infrastructures in Central Region is East – West Corridor developed by international cooperation of GMS by ESCAP. It starts from Da Nang through Dong Ha, 75 Km North from Da Nang, and

Connected to Yangon in Myan Mar through Savana Khet in Laos, Korat and Pitsanolouk in Thailand. It is anticipated to become regional distribution Axes. IN addition, development of 2nd East – West corridor is being studied at present by the Ministry of Construction. It starts from Da Nang through National Road No. 14B and D and connected to Pac - Xe in Laos and Ubon Ratchatani in Thailand, and Yangon. Its completion date is not yet announced but it will be a big impact for industries in Vietnam. Therefore, selection of type of industry and investment promotion should be conducted with long term view including infrastructure development and cooperation and coordination in the region.

In the central Region, many Industrial zones are located along National Road No.1 because of convenience of domestic land transport, which is the main infrastructure for the distribution of goods to/from Industrial zones and It will be continuously used as the main transport infrastructure also in future. However, the National Road No.1 is at the same time main transport infrastructure for motorbikes and bicycles of the local residents as well, so that the mixed traffic on the same road obstructs smooth traffic flow and safety, and hindering efficient traffic of bus and truck. As it is considered that the traffic of National Road No.1 will become much heavier in accordance with the increase of location of Industrial zones, Therefore, appropriate traffic management measures shall taken in order to ensure safe and efficient traffic. Construction of by-pass roads, toll roads and neighbourhood life roads networks should be studied.

Location of the Industrial zones in the central Region is shown in the following table.

Table 6.4-2 Location of Industrial zones in the Central Region

Province / City	Number of Industrial zone	Number of Japanese Enterprizes	Access		
			Base City	Airport	Port
Nghe An	1	1	Vinh City	Hanoi Airport	Vinh Port
Thua Thien Hue	1	0	Hue City	Hue Airport	Chang Mai Port
Da Nang City	7	26	Da Nang City	Da Nang Airport	Da Nang Port
Quang Nam	7	0	Tam Ky City	Chu Lai Airport	Dung Quat Port
Quang Ngai	4	0	Quan Ngai City	Chu Lai Airport	Dung Quat Port
Binh Dinh	7	0	Quy Nion City	Ho Chi Minh Airport	Quy Nion Port
Gia Lai	1	0	Pleiku City	Da Nang Airport	Da Nang Port
Phu Yen	2	0	Tuy Hoa City	Ho Chi Minh Airport	Cam Ranh Port
Dak Lak	1	0	Buon Ma Thot	Ho Chi Minh Airport	Cam Ranh Port
Anh Hoa	5	0	Na Tran City	Ho Chi Minh Airport	Cam Ranh Port
Dak Nong	1	0	Gia Nghia	Ho Chi Minh Airport	Ho Chi Minh Port
TOTAL	37	27	-	-	-

Source：JICA Study Team

According to anticipated expansion of handling volume of cargo and traffic due to increase of investment up to 2020, strengthening of functions of the international gateways for above listed Industrial zones such as Da Nang Airport, Da Nang Port, Dung Quat Port and Cam Ranh Port is being undertaken at present. Construction of access roads, new roads and by-pass roads are regarded indispensable for strengthening and improvement of function of the ports.

Currently, development of industrial zones in Vietnam is being undertaken by provincial initiatives as real estate development and those developments of Industrial zones have been undertaken by identical ideas, so that the characteristics and attractiveness of each industrial zone are not clearly presented in the promotion documents and makes difficult for decision making for investors. Therefore, it is essential to make up promotion strategy not only by infrastructure, but advantages and synergic effects generated by cooperation and coordination with neighbouring industrial zones in accordance with needs and requirements of the investors.

6.4.3 Overview of Types and Size of Industrial Zones in Central Region

There are 37 Industrial zones in the Central region, of which 25 Japanese companies are operating in Da Nang. Area of those Industrial zones, number and types of industries of Japanese enterprises are shown in table 6.4-3 below.

Type of industry is categorized in accordance with the industrial development policy of MPI, such as strategic industry No.1, No.2 and others. Major Japanese enterprises are shown as follows:

1. Elevtric and Electronics: 6
2. Machine construction: 3
3. Automobile related: 2
4. Steel and Ifron: 2
5. Transport: 1

Among the above industries, Electric and Electronics industry and Machine construction industry are the types of industry which are the types emphasized by the Industrialization Policy of MPI. The Peoples Committee of Da Nang City has also intention emphasize to attract industries of electronics parts which are suitable for exports by air and supporting industries of automobile industries, the products of which enterprises are suitable to transport by sea from Da Nang Port. However, accumulation of technology and recruitment of skilled manpower are the tasks for the industrial development.

The Peoples Committee has a plan to develop “IT Industrial zone” and “Hi-Tech Industrial zone” bin the suburbs especially for Elevtric and Electronics Industry and preparing a “Smart City Development Plan” for establishment of IT network for Administration of City government by the support of IBM. In order to strengthen the promotion of investment, it is essential to upgrade domestic and international transport infrastructure from regional viewpoints.

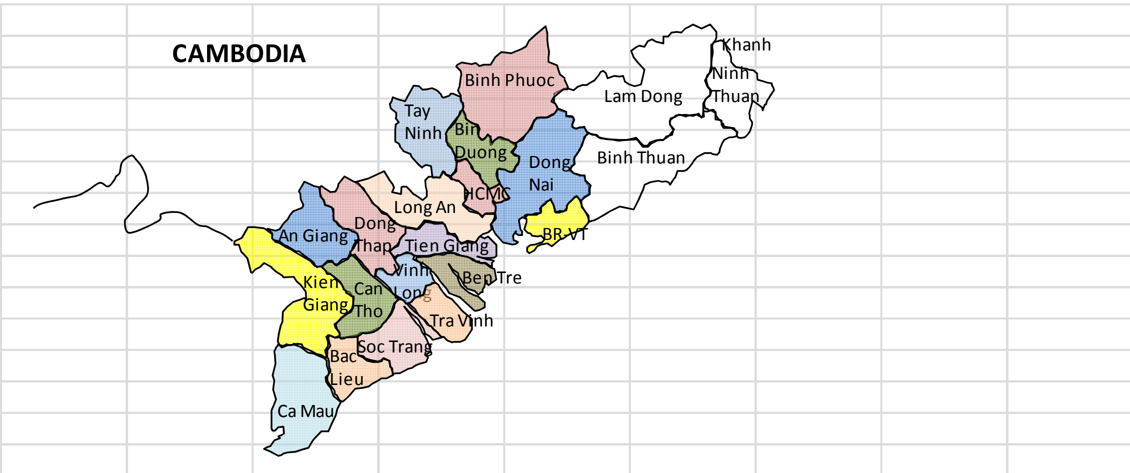
Chapter7. Growth Pole in Southern Region of Viet Nam

7.1 Current Situation and Trend of Economy and Industry in Southern Region

(1) Target Areas of the Southern Region in This Study

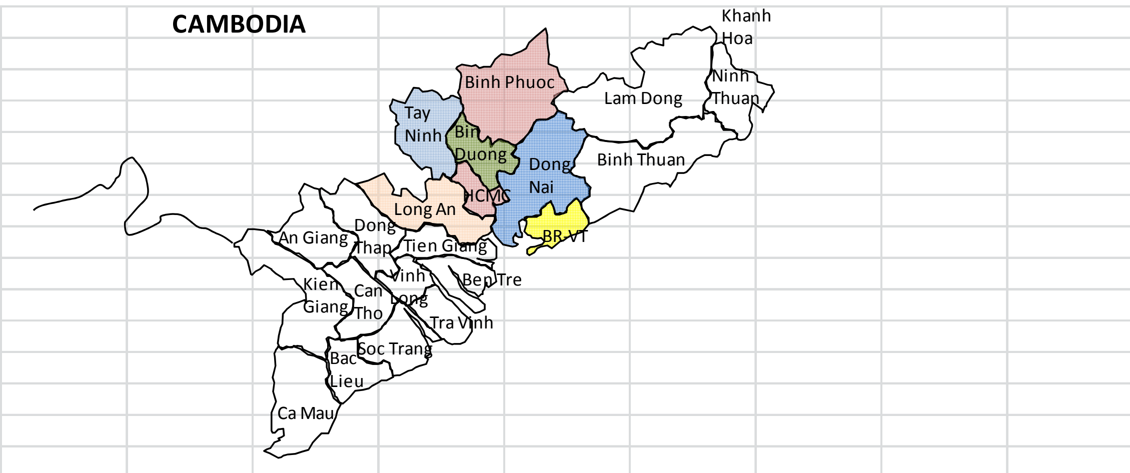
1) Scope of the Southern Region

The Southern Region covers the South East Region with Binh Phuoc, Tay Ninh, Binh Duong, Dong Nai, Ba Ria-Vung Tau, and Ho Chi Minh City, as well as the Mekong River Delta Region with Long An, Tien Giang, Ben Tre, Tra Vinh, Vinh Long, Dong Thap, An Giang, Kien Giang, Can Tho, Hau Giang, Soc Trang, Bac lieu, and Ca Mau consisting a total of 19 prvinces and cities. (Figure 7.1-1)



Source: Made by JICA Study Team based on the map and information officially published in Viet Nam

Figure 7.1-1　Map of 19 Provinces and Cities in the Southern Region of Viet Nam



Source: Made by JICA Study Team based on the map and information officially published in Viet Nam

Figure 7.1-2　Map of the 7 Provinces and Cities of the Southern Region of Viet Nam as the Target Areas of This Study

2) Target Areas of the Southern Region in This Study

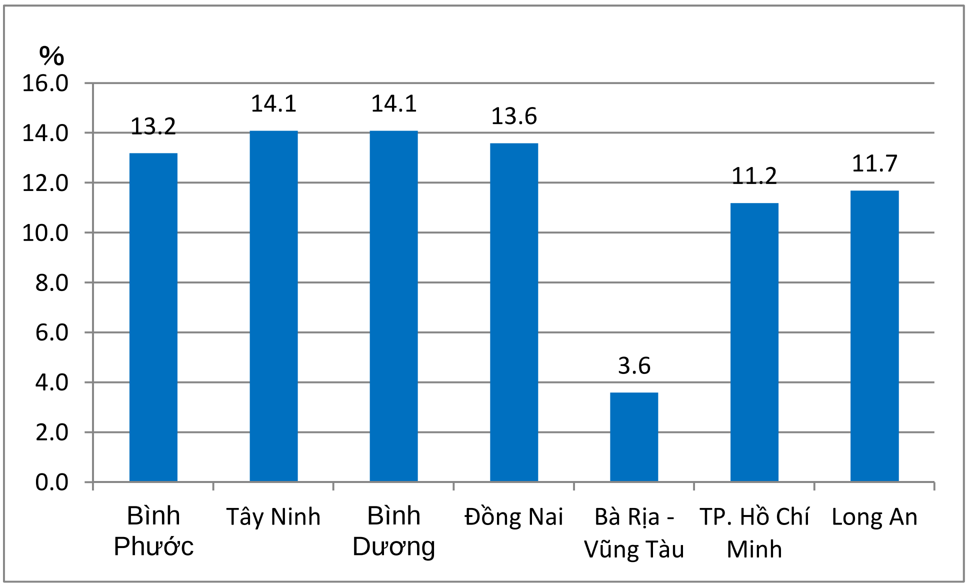
In this study, 6 provinces and cities of the above-mentioned South East Regionl together with Long An Province of the Mekong Delta Region are chosen as the target areas with regard to the Southern Region. (Figure 7.1-2)

(2) Current Situation and Trend of Economy in the Target Areas

The relevant indicators with regard to the 7 provinces and cities proposed as the target areas covered by the Southern Region are illustrated as follows.

1) GDP Growth Rate of the Provinces and Cities Targeted

The discussion below with regard to the growh rate of the target provinces and cities of the Southern Region is conducted with an eye to understanding the relative situation of respective provinces and cities by comparing their trends of average annual growth rates in the past few years. The comparative situation of the 7 target areas in terms of average anuual growth rate is reflected in Figure 7.1-3. The order of respective provinces and cities in terms of annual growth rate from top to bottom is as follows: Tay Ninh and Binh Duong, Dong Nai, Binh Phuoc, Long An, Ho Chi Minh City and Ba Ria-Vung Tau. It deserves noticing that the growth rate of Ba Ria-Vung Tau was substantially lower than the other provinces and cities. This is understood as the result of the industial structure over dependent on the mineral resouces and basic materials industry, which is to be dealt with later in this chapter.



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Note: The values of Ba Ria-Vung Tau is annual average of 2007-2010.

Figure 7.1-3 Annual Average GDP Growth Rate of Target Provincies and Cities of Southern Region (2005-2010)

2) GDP in Total Quantity and GDP Per Capita of Target Provinces and Cities

Regarding the values of GDP in total quantity at current price of the above-mentioned 7 provinces and cities in 2010, the order from top to bottom goes like the following: Ho Chi Minh City (VND 422.3 trillions), Ba Ria-Vung Tau (VND 151 trillions), Dong Nai (VND 76 trillions), Binh Duong (VND 48.8 trillions), Long An

(VND 34.4 trillions), Tay Ninh (VND 29.5 trillions), and Binh Phuoc (VND 19.6 trillions). As the largest commercial city not only in the Souther Region but also in the whole country, Ho Chi Minh City possesses the top spot in many fields of industry, which accordingly makes it the No.1 of the country in terms of total quantity of GDP. Second to it is Ba Ria-Vung Tau, a province which owes much of its income to oil extraction and iron & Steel making. A sharp contrast can be found in Dong Nai Province, which has emerged as an important presence in many fields of manufacturing though its scale of GDP is only half that of Ba Ria-Vung Tau. Binh Duong, a province resembling Dong Nai in many respects, ranks No.4 in the Southern Region in terms of GDP scale and is also placed at relatively high position in many fields of manufacturing.

When looking at the indicator of GDP per capita, the result of ranking changes to the following: Ba Ria-Vung Tau (VND 149.18 millions), Ho Chi Minh City (VND 57.09 millions), Binh Duong (VND 30.1 millions), Dong Nai (VND 29.52 millions), Tay Ninh (VND 27.55 millions), Long An (VND 23.84 millions), and Binh Phuoc (VND 22.09 millions). Ba Ria-Vung Tau ascends to the top spot, while Ho Chi Minh City and Dong Nai fall back to No.2 and No.4 respectively. (Table 7.1-1)

Table 7.1-1 GDP in Total Quantity and GDP Per Capita of Target Provinces and Cities in Southern Region (2010)

Target Areas in Northern Region	GDP	GDP Per Capita	
	(billion VND)	(1,000VND)	($)
Bình Phước	19,623	22,093	1,132
Tây Ninh	29,549	27,546	1,412
Bình Dương	48,761	30,101	1,543
Đồng Nai	76,025	29,523	1,513
Bà Rịa - Vũng Tàu	150,967	149,177	7,645
TP. Hồ Chí Minh	422,270	57,091	2,926
Long An	34,397	23,840	1,222

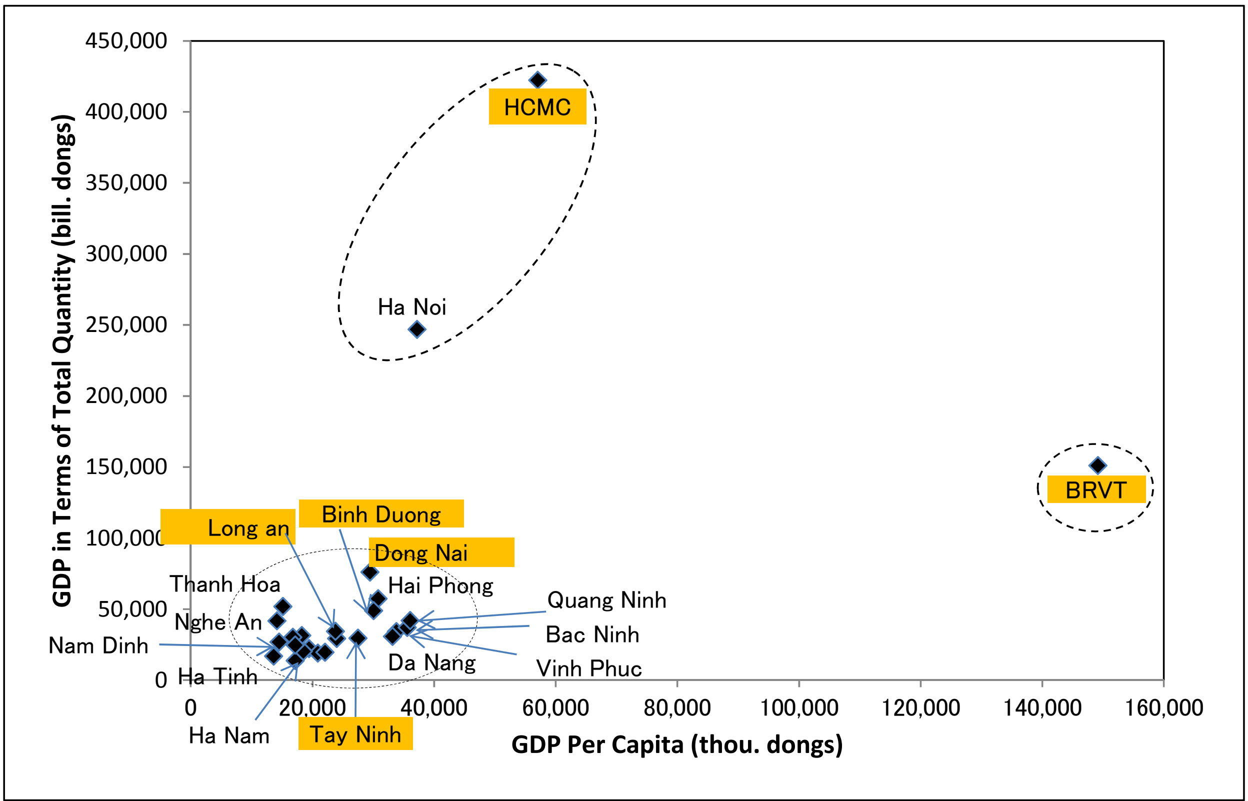
Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

3) Positions of Target Provinces and Cities of Northern Region among All the Target Areas

The passage below is meant to look at the relative positions of respective provinces and cities of the Southern Region among all the target areas including the Northern Region and the Central Region by comparison.

Concerning the indicator of GDP in terms of total quantity, Ho Chi Minh City, boasting of the largest in the Southern Region, remains the top spot and surpasses Ha Noi the No.2 by a large margin, even when placed with provices and cities of the whole country. As for Ba Ria-Vung Tau and Dong Nai, the two major provinces in the south also secure No.3 and No.4 respectively. Besides, Binh Duong is placed at No.7, next to Hai Phong and Thanh Hoa. Generally speaking, the provinces and cities of Southern Region outweigh those of the Northern region and Central Region in terms of total quantity of GDP, as substantiated by the statistical data.

However, when looking at the indicator of GDP per capita, the advantage of Southern Region over the other regions looks somewhat weaker. Whereas Ba Ria-Vung Tau and Ho Chi Minh City secure the top two places, Binh Duong and Dong Nai slip down to No.9 and No.10, while the other 3 provinces are respectively ranked at No.11, No.12 and No.14. (Table 7.1-4)



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Figure 7.1-4 Positions of Target Provinces and Cities of Southern Region among All the Target Areas in Terms of GDP and GDP Per Capita

(3) Current Situation and Trend of Industry in the Target Areas

1) Change of Industrial Structure

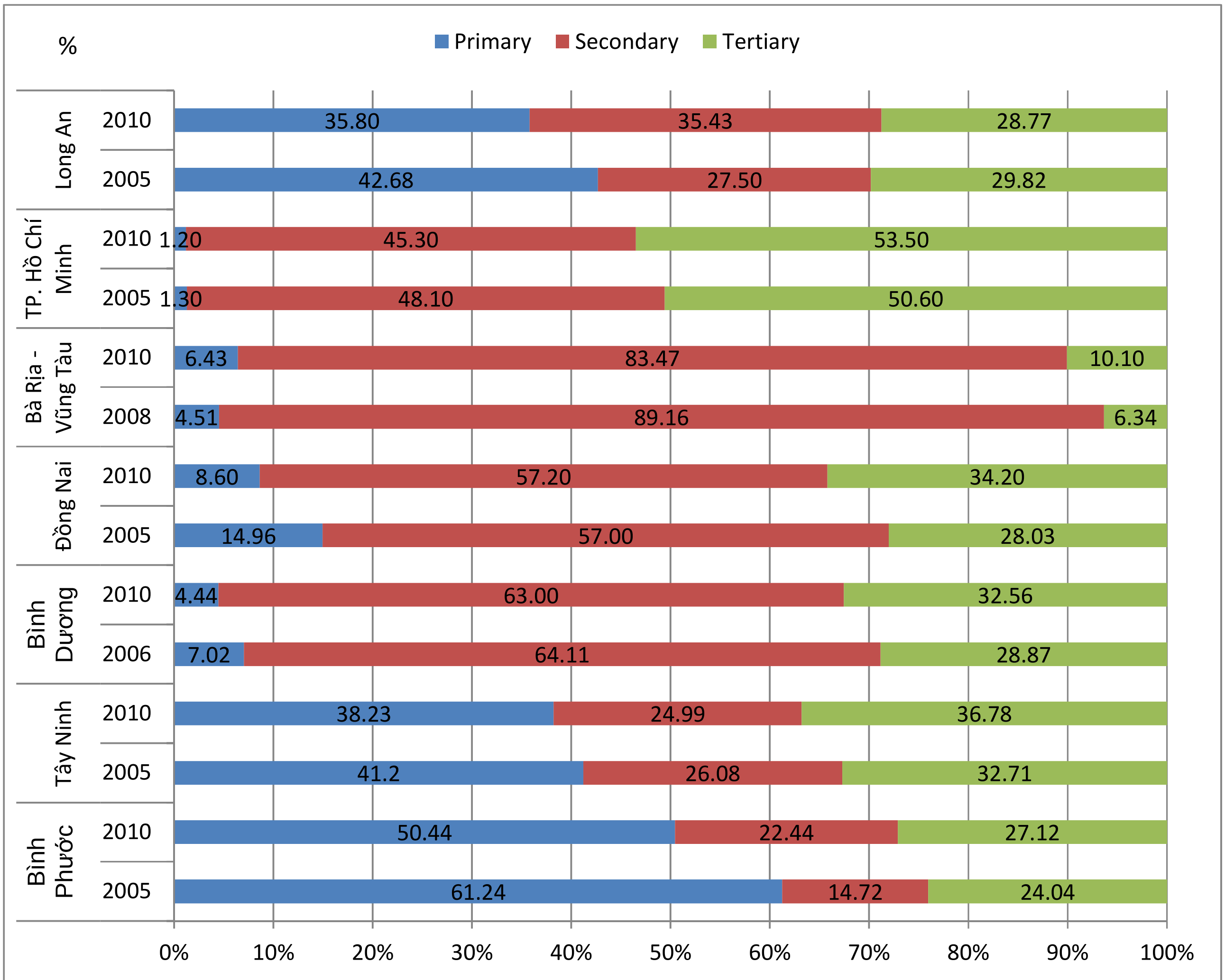
With regard to the structure of GDP composed by the primary industry, secondary industry and tertiary industry in respective provinces and cities of the Southern Region as well as their changes over the period of 2005-2010, a basic feature similar to that of the Northern Region and the Central Region can be found in nearly all the provinces and cities that the share of primary industry centering on agriculture has been reducing while that of the secondary or tertiary industry has been increasing, except for Ba Ria-Vung Tau. Among them, Binh Phuoc and Dong Nai have seen their share of both secondary and tertiary industry increasing, Long An has experienced the increase in the share of secondary industry and the decrease in that of the tertiary industry, while Tay Ninh, Binh Duong, Ba Ria-Vung Tau and Ho Chi Minh City have seen the vice versa. In addition, in the case of Ba Ria-Vung Tau, the proportion of primary industry increased from 4.5% in 2008 to 6.4% in 2010.

The drastic change of industrial structure over the 5 years from 2005 to 2010 occurred especially in Binh Phuoc, where the proportion of primary industry reduced by 10.8 percentage points from 61.2% in 2005 to 50.4% in

2010, while that of secondary industry increased by 7.7 points from 14.7% to 22.4%, and the tertiary industry also increased by 3.1 points from 24% to 27.1%.

Focusing on the composition of industrial structure as of 2010, the province with the highest proportion of the secondary industry is Ba Ria-Vung Tau (83.5%), and the other provinces and city in order from the top are Binh Duong (63%), Dong Nai (57.2%), Ho Chi Minh City (45.3%), Long An (35.4%), Tay Ninh (25%), and Binh Phuoc (22.4%).

As for the proportion of tertiary industry as of 2010, the ranking from the top goes like the following: Ho Chi Minh City (53.5%), Tay Ninh (36.8%), Dong Nai (34.2%), Binh Duong (32.6%), Long An (28.8%), Binh Phuoc (27.1%), and Ba Ria-Vung Tau (10.1%). The reason that the proportion of Ba Ria-Vung Tau is extremely low lies in the fact that its secondary industry, particularly the secors of resources and basic materials account for exceptionally high proportion. (Figure 7.1-5)



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

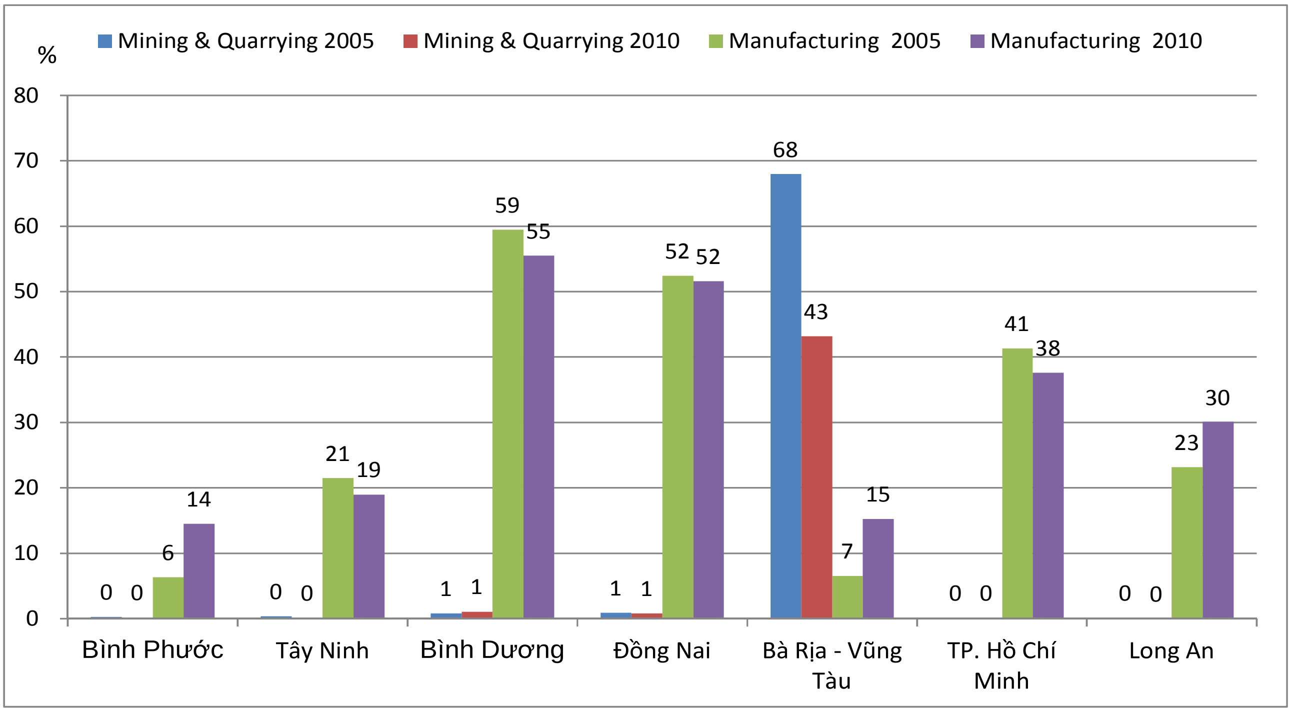
Figure 7.1-5 Change of Proportions of Primary, Secondary and Tertiary Industry to GDP in the Target Provinces and Cities of Southern Region

2) Change of the Weight of Mining & Quarrying and Manufacturing under the Secondary Industry

As illustrated by Figure 7.1-6, among the 7 target areas, there are only 3 provinces, i.e. Ba Ria-Vung Tau, Binh Duong and Dong Nai where the mining & quarrying sector exists. The proportion of this sector in both Binh Duong and Dong Nai is not more than 1%, while in the case of Ba Ria-Vung Tau, although this value has fallen down drastically from 68% in 2008 to 43% in 2010, it still stands at very high level. Regarding the trend of decreasing in the proportion of the mining & quarrying sector in Ba Ria-Vung Tau, on the one hand, it can be understood as the result of the local government's policy aimed at readjusting the industrial structure formerly over dependent on this sector, and on the other hand, it can also be interpreted as an evidence of constraint on the resource dependence model for industrial development.

Concerning the proportion of manufacturing sector to the local GDP, Binh Duong tops the others with the value of 55%, while Dong Nai ranks No.2 with 52%. The two provinces are regarded as important manufacturing basis not only in terms of the Southern Region, but also in terms of the whole country. As for the others, the proportion of manufacturing to local GDP is 38% in Ho Chi Minh City, 30% in Long An, 19% in Tay Ninh, 15% in Ba Ria-Vung Tau, and 14% in Binh Phuoc. The smaller proportion in of manufacturing in Ba Ria-Vung Tau is closely related to its exceptionally high proportion of mining & quarrying sector. Additionally, it is noteworthy that, although the value added of Ho Chi Minh City's manufacturing sector outweighs that of Binh Duong and Dong Nai in terms of absolute value, as its tertiary industry appears to be an even more, important existence, the proportion of manufacturing to local GDP looks relatively smaller.

In addition, when comparing the values of manufacturing's proportion to GDP between 2005 and 2010, it shows that, the value of Binh Phuoc increased from 6% in 2005 to 14% in 2010, that of Ba Ria-Vung Tau from 7% to 15%, and Long An from 23% to 30%, whereas the value of Tay Ninh dereased from 21% to 19% over the same period, Binh Duong from 59% to 55%, and Ho Chi Minh City from 41% to 38%, while that of Dong Nai remained at the same level of 52%.



Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Nore: The values of Ba Ria-Vung Tau are of 2008 and 2010, and the values of Binh Duong are of 2006 and 2010.

Figure 7.1-6 Change of Proportions of Mining & Quarrying Sector and Manufacturing Sector to GDP in the Target Provinces and Cities of Southern Region

3) Situation of Major Subsectors of Manufacturing in the Target Areas of Northern Region

The ranking of subsectors under manufacturing sector of respective provinces and city in the Southern Region (among all the 25 target areas) is illustrated below by dividing them into 3 groups, the light industry group, mineral & heavy industry group, and electronics and machinery group.

Table 7.1-2 Rankings of the Target Provinces and Cities of Southern Region among All Target Areas in Light Industry as of 2010

Target Provinces and Cities	Food & Beverage	Textiles	Wearing Apparel	Leather & Related Products	Wood & Wooden Products	Paper & Paper Products	Printing & Recorded Media	Rubber & Plastics	Furniture
Bình Phước	11	17	25	24	20	20	23	19	21
Tây Ninh	13	15	8	11	23	16	16	11	19
Bình Dương	4	7	19	3	4	5	10	6	2
Đồng Nai	2	1	3	2	2	2	8	2	24
Bà Rịa - Vũng Tàu	8	20	22	8	25	7	20	10	22
TP. Hồ Chí Minh	1	2	1	1	3	1	1	1	1
Long An	5	8	17	5	18	8	14	8	9

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

The light industry group is the very area with most of the subsectors where the provinces and city of Southern Region can boast of their competitiveness. Among all the 9 subsectors, the one where Ho Chi Minh City, Dong Nai and Binh Duong possess the top 3 places is that of leather & related products, aned the five subsectors where the top 2 places are possessed by the Northern Region are food & beverage, textile, paper & paper products, rubber & plastic products and furniture. As for the other subsectors, in that of wearing apparel, Chi Minh City and Dong Nai rank No.1 and No.3; in wood & wood products, Dong Nai and Ho Chi Minh City rank No.2 and No.3, while in printing & recorded media, Ho Chi Minh City occupies again the top spot. What's more, Ho Chi Minh City alone takes up the No.1 place in 7 subsectors as well as the No.2 and No.3 in textile and wood & wood products respectively.

Table 7.1-3 Rankings of the Target Provinces and Cities of Southern Region among All Target Areas in Mineral and Heavy Industry as of 2010

Target Provinces and Cities	Coke & Petroleum Products	Chemicals & Chemical Products	Pharmaceuticals, Medicinal Chemical & Botanical Products	Other Non-metalic Mineral Products	Basic Metals	Fabricated Metal Products
Bình Phước		24		20	24	24
Tây Ninh		10	11	19	18	14
Bình Dương		6		14	3	4
Đồng Nai		2		7	8	3
Bà Rịa - Vũng Tàu	6	3		8	1	10
TP. Hồ Chí Minh	2	1		1	7	1
Long An	4	7		23	12	12

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

Regarding the mineral & heavy industry group, the areas where the Southern Region has the strongest advantage are the 3 subsectors, i.e. chemical & chemical products, basic metal and fabricated metal products. In the subsector of chemical & chemical products, Ho Chi Minh City, Dong Nai and Ba Ria-Vung Tau take over the top 3 places; in basic metal, Ba Ria-Vung Tau and Binh Duong take up No.1 and No.3 respectively, while in fabricated metal products, Ho Chi Minh City, Dong Nai and Binh Duong acquire No.1, No.3 and No.4 respectively. In addition, Ho Chi Minh City and Long An rank No.2 and No.4 respecively in coke & petroleum products, and Ho Chi Minh City also takes over the top spot in the subsector of other non-metallic mineral products, As for pharmaceuticals, medicinal chemical & botanical products, this is the only area where nearly all the target provinces and city of the Southern Region leave a blank, with the exception of Tay Ninh.

Table 7.1-4 Rankings of the Target Provinces and Cities of Southern Region among All Target Areas in Electronics and Machinery as of 2010

Target Provinces and Cities	Electronic, Optical & Electrical Products	Machinery & Equipment	Motor Vehicles	Other Transport Equipment	Other Manufacturing
Bình Phước	12	16	11		20
Tây Ninh	17	15	20	24	4
Bình Dương	10	9	16	20	19
Đồng Nai	8	2	19	23	16
Bà Rịa - Vũng Tàu				8	14
TP. Hồ Chí Minh	1	1	3	3	6
Long An	7	13	15	11	

Source: Statistical Yearbooks of 2011 edition published by respective provinces and cities

With respect to the electronics and machinery group, areas where the Southern Region has relatively more advantage are electronic, optical & electrical products and machinery and equipment, the two subsectors only. In the case of the former, Ho Chi Minh City takes over the top spot, while in the case of the latter, Ho Chi Minh City and Dong Nai possess the top 2 places. In addition, Ho Chi Min City also ranks No.3 in both the subsectors of motor vehicles and other transport equipment.

(4) Present status of economic and industrial situation in Ba Ria Vung Tau province

1) Present macroscopic situation and trend of industry

- Gross regional product per capita in 2010 is 7,645 USD, it is also much higher than 1,911 USD of Hanoi, 2,926 USD of Ho Chi Minh City, and 1,580 USD of Haiphong.
- Workforce to total population of the province has become 64%. In addition, among these, a percentage of the number of skilled workers to the total working population amounted to 55%.
- Foreign investment has been actively expanding. By 2010 from 2006, 24 billion US$, and from 2006 to 2011, 293 investmets with 28 billion US$ came to the province
- The main thing is to start production in large-scale projects, such as some gas processing projects (Dinh Co), iron and steel (Posco), port (SP-SSA), iron and steel (Vina Kyoei).

Table 7.1-5 Outline of statistics of Ba Ria Vung Tau province

Statistics items	Statistics	Year
1.Population		
Size	1,012,000 people	2010
Density	509people/km^2	2010
Labor population (elder than 15 years)	531,100 people	2010
Ratio of Labor population	50.1%	2010
2.Loabor force		
Size	116,121 people	2009
Number and ratio of women workers	40,976 人(35.3%)	2009
3.Enterprise		
Number of enterprises	2,793 companies	2009
Number and ratio (more than 300workers)	73 companies（2.5%）	2009
Number and ratio (50～299workers)	266 companies（9.5%）	2009
Number and ratio (less than 50workers)	2454 companies (87.8%)	2009
Number and ratio(more than 50 billion dong capital)	228 companies（8.1%）	2009
Number and ratio(10～500billion dong capital)	2,185 companies（78.3%）	2009
Number and ratio(less than 10 billion dong capital)	380 companies（13.6%）	2009
4.FDI		
Cummulative amount of FDI in terms of US$	26.29 billion US$	Up to 2010
Cummulative number of FDI	255	Up to 2010
Average size of the project in terms of US$	0.13 billion US$	Up to 2010
5.Productivity and management of the enterprises		
Product amount	227,013 Bill. Dongs	2009
Product amount(FDI)	31,165 Bill. Dongs	2009
Ratio of FDI	15.9%	2009
Ratio of numbr of profitable enterprises	71.79%	2009
6.wage, social insutance		
Amount of wage (monthly salary and insurance)	5716,000 VND	2009
Ratio of entrprises serving social insurance	60.87%	2009

Statistics items	Statistics	Year
7.transportation		
Persons-kilo for passenger transport	1.99billion pesons-kilo	2009
Persons-kilo for passenger transport (Road)	1.98 billon persons-kilo	2009
Tons-kilo for freight transport	0.22 billion tons-kilo	2009
Tons-kilo for freight transport (Road)	0.16 billion tons-kilo	2009
Tons-kilo for freight transport (river, sea transport)	66.8000tons-kilo	2009
8.Tele communication		
Number of telephone users (land telephone,+mobile)	207,000	2010
Rate of penetration	20.5%	2010
9.Education		
Number of university staffs and population ratio	241people（1：4,199）	2010
Number of university students and population ratio	7,571people（1：134）	2010
Number of vocational school staffs and population ratio	142people（1：7,127）	2010
Number of vocational school students and population ratio	1,784people（1：567）	2010
10.Poverty ratio	6.8%	2010

Source: Statistical Yearbook of Vietnam 2010

2) Present situation of industrial sectors

a. Mining

1.5 billion tons of crude oil in the waters of Ba Ria Vung Tau province, is home to the gas reserves of 1 trillion cubic meters. 1300 to 14 million tons of crude oil, the amount of annual mining, gas is 60-70 cubic meters. In this way, it has become one of the country's leading mineral resource area of Ba Ria Vung Tau province in Vietnam. As an industrial zone for the purification of petroleum, the development of Long Son Oil and Gas Services Industrial Zone has been undertaken. Against the presence of these abundant natural resources, iron and steel industries, and related industrial gas is the main industry in the area, the device is a forest industry in the province. On the other hand, the expansion of manufacturing assembly and machining, precision machinery, electrical and electronics-related fields, the current situation has become very small compared to the nearby Dong Nai province, and Bin Duong.

b. Energy

On the basis of bove-mentioned mineral resources such as oil and gas, the amount of erectlic power supply by Ba Ria Vung Tau province is 40% of total suppy over the nation-wide Vietnam. In the province, there exists large-scale power generating facility including Phu My Power Complex

c. Agriculture, forest and fisheries

Fish species that are caught under a good marine environment having the continental shelf waters of 10 million km^2 and coastline of 305km, in the fishing port of Vung Tau City area are abundant. Namely, there are 660 species of fish, 35 species of shrimp, squid, etc. of 23 species, annual catches have amounted to about 250,000 tons. This is a number of catches # 3 in Vietnam. Amounted to about 220 companies, the number of companies involved in these processing industries, the seafood, seafood exports of manufactured goods, which amounted to 200 million dollars per year on average.

Agricultural land area is 105,247 ha, agriculture accounts for about 53 percent of the land area in the province of nature. The main agricultural products have become pork, latex rubber, rice, cashew nuts, pepper, fruits (durian, dragon eye, etc.).

d. Tourism

Ba Ria Vung Tau province has been blessed in tourism resources, tourism potential is high. Also, province has been counted as one of the central district of the seven priority tourism development in Vietnam. As a major tourism spot, Vung Tau, Long Hai, Fuchamu, Phu Quoc, Con Dao Island, and the like. In particular, virgin forest, beach, heritage is rich in history, Con Dao Island was 180km away to the southwest from the city of Vung Tau, and has a high potential tourism development.

3) Weights and Growth Rates by Subsectors under Manufacturing of Ba Ria-Vung Tau Province

Table 7.1-6 Trend of Gross Output of Subsectors under Manufacturing of Ba Ria-Vung Tau (Unit: VND billion)

Subsectors under Manufacturing	2005	2010	Share (2010) (%)	Annual Growth (2005-2010) (%)
Total of Manufacturing	14,639	27,143	100.0	13.1
food & beverage	4,369	3,629	13.4	-3.6
tobacco	0	0-	0.0	-
textiles	158	125	0.5	-4.6
wearing apparel	55	71	0.3	5.2
leather & related products	463	1,012	3.7	16.9
wood & wooden products	82	95	0.3	3.0
paper & paper products	157	794	2.9	38.3
Printing & f recorded media	34	13	0.0	-17.5
coke & petroleum products	21	41	0.2	14.3
chemicals & chemical products	3,175	5,940	21.9	13.3
pharmaceuticals, medicinal,chemical & botanical products	0	0	0.0	-
rubber & plastics products	82	1,007	3.7	65.1
other non-metallic mineral products	1,499	3,211	11.8	16.5
basic metals	3,627	9,613	35.4	21.5
fabricated metal products	760	923	3.4	4.0
electronic, optical & electrical products	0	0	0.0	-
other machinery & equipment	0	0	0.0	-
motor vehicles	0	0	0.0	-
other transport equipment	128	635	2.3	37.8
furniture	18	23	0.1	5.0
Other manufacturing	12	12	0.0	0.0

Source: Ba Ria-Vung Tau Statistical Yearbooks of 2011 edition

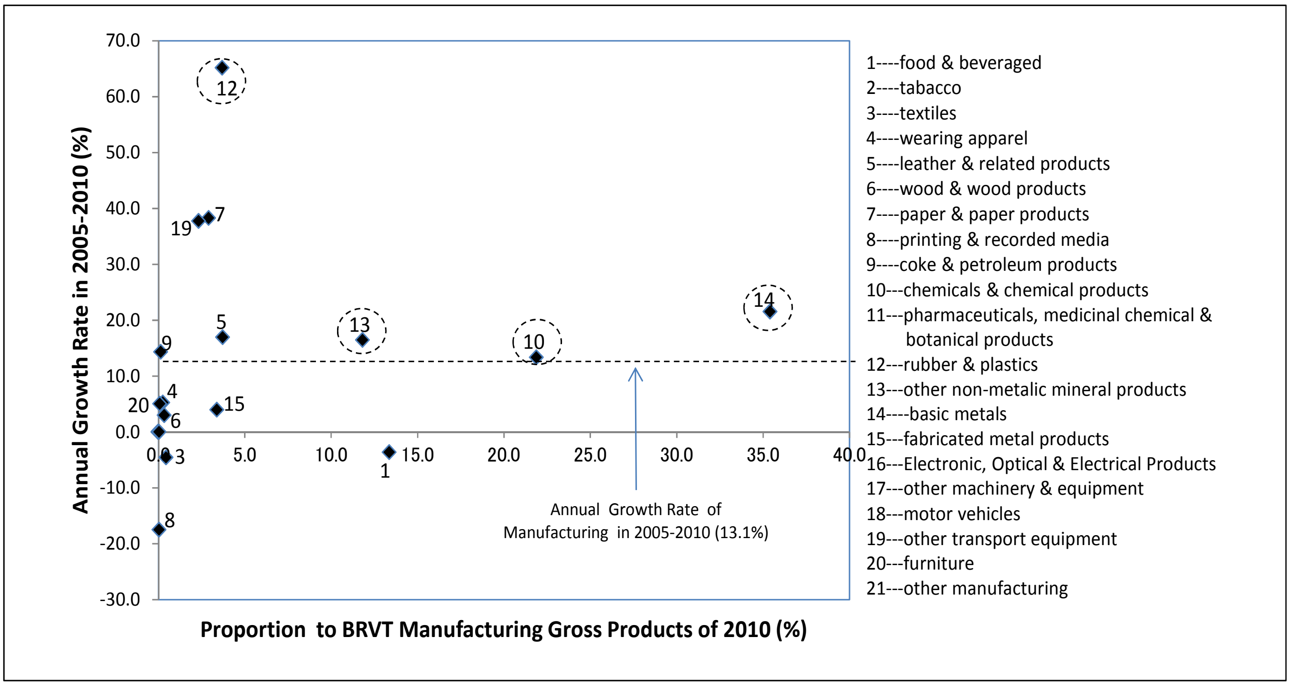
The total manufacturing production of Ba Ria-Vung Tau registered an average annual growth rate of 13.1% in the three-year period of 2007-2010. When looking at the annual growth rate of repective subsectors, those with annual growth rate exceeding the mamufacturing average are leather & related products (16.9%), paper & paper products (38.3%), coke & petroleum products (14.3%), chemicals & chemical products (13.3%), rubber &

plastic products (65.1%), other non-metallic mineral products (16.5%), basic metals (21.5%), and other transport equipment (37.8%), altogether 8 subsectors. Among them, the subsectors with particularly high growth rate are rubber & plastic products, paper & paper products and other transport equipment, which should include the field of shipbuilding.

To the contrary, those with annual growth rate below that of the manuacturing average are food & beverage (-3.6%), textiles (-4.6%), wearing apparel (5.2%), wood & wood products (3%), printing and recorded media (-17.5%), fabricated products (4%), furniture (5%) and other manufacturing (0%). Among them, food & beverage textil and printing & recorded media descended to a negative growth. As for the subsectors of tabacco, pharmaceuticals, medicinal chemical & botanical products, electronic, optical & electrical products, other machinery & equipment and motor vehicles, these are all fields of blank in Ba Ria-Vung Tau.

Regarding the proportion of respective subsectors to the manufacturing gross output of Ba Ria-Vung Tau as of 2010, basic metal stands at the top place with the value of 35.4%, while the others in order from the top are chemical & chemical products (21.9%), food & beverage (13.4%), other non-metallic mineral products (11.8%).

When putting the above-mentioned values of proportion to manufacturing together with that of growth rate, it reveals that the 3 subsectors of basic metals, chemical & chemical products and other non-metallic mineral products are comparatively higher in both the values. In addition, taking into account the astonishingly high growth rate of the subsector of rubber & plastic products in the past few years, it is expected that the weight of this field will further increase in the near future.



Source: Ba Ria-Vung Tau Statistical Yearbooks of 2011 edition

Figure 7.1-7 Scatterin Diagram of Weights and Growth Rates by Subsectors under Manufacturing of BRVT

4) Industrial policy direction

a. Basic policy direction

On the basis of the Resolution of the 5th Provincial Party Congress (period 2011-2015), Ba Ria Vung Tau provincial People's Committee is now on the process of erabolating "the Master Development Plan of Infrastructure Industry in BRVT in 2011-2020, with vision to 2025".

b. promotion of specialized industrial zone development

in addition, on the basis of Decision No. 517/QD-UBND, the people's Committee submitted "Plan on Establishing an Industrial Zone Specialized in Mechanical Engineering" to MPI and MOIT in last August. In this plan, the Peple's Committee identified the 12 prioritized industries shown in the following table.

Table 7.1-7 Prioritized industries for specialized industrial zone

No.	Products and projects
1	Molding, jigs
2	Bolt, fasteners, bearings, gears, shafts with precision and high technical requirements
3	Mechanical Components for manufacturing ships, automobiles, motorcycles, electronics
4	Mechanical projects: Casting, forging, stamping, machining, pressure, heat treatment, surface treatment
5	Components and components cluster specializing for ports, mining, oil and gas processing industries
6	Control mechanisms, actuators used for machine tools, industrial robots and industrial specialized equipments
7	Project to produce engineering plastics and rubber products (detailed plastic parts for automobiles, motorcycles, electronics, telecommunications)
8	Components and components clusters specialized for electrical and electronic equipments for consumer electronics devices, audiovisual equipment, peripherals ...
9	The projects to produce the basic electronic components
10	The projects to produce high tech digitalized-control equipments, smart sensors
11	Specialized devices
12	Manufacturers of industrial, automatic software

Source: Ba Ria Vung Tau provincial people's cCommittee, "Plan on Establishing an Industrial Zone Specialized in Mechanical Engineering", August, 2012

3) Promotion of logistics related industrial strategy

The proposal as is called "Plan on Establishing an Industrial Zone Specialized in Mechanical Engineering" says that logistics hub shall be developed by using of Cai Mep Thi Vai seaport as a core transport infrastructure.

7.2 Natural Condition, Population Distribution Trend in South Region

7.2.1 Natural Environment in Southern Region

Climate

HCM city follows typical tropical climate. There are 2 seasons as rainy season of period May to October and dry season of period November to April. Every day has rain in rainy season, it is shower with one hour period a day and there is not continuous rainfall all day long like Japanese case. Annual average temperature is 28℃ and it is often reached 40℃ as maximum temperature in early May during end of dry season to beginning of rainy season. Also it is down reached 15℃ as minimum temperature in December of dry season, in this season it is pleasant day with low relative humidity. Annual relative humidity is about 75%, annual rainfall is 1,800mm, annual rainy days count about 150days. (World Weather Information Service 1947-1990）.

Ba Ria Vung Tau Province belongs to tropical monsoon climate zone, an annual rainfall is 1,600mm and there are 2 season of rainy and dry season. Annual average temperature is 27℃ and there are not so much deference through the year. Annual hour of sunlight is 2,370 to 2,850 hours and monthly fluctuation of the hours is large. Generally the climate is stable and there are fewer influences of inundation and drought. (BR-VT PPC）

Flood

According “HCM City Adaptation to Climate Change, Volume 2, PPC, April 2009”

Tidal level

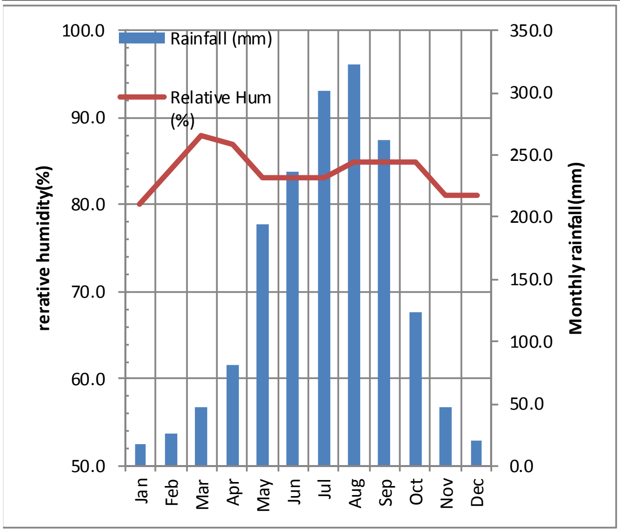
Tidal level fluctuation is 4 to 5m in Maximum.

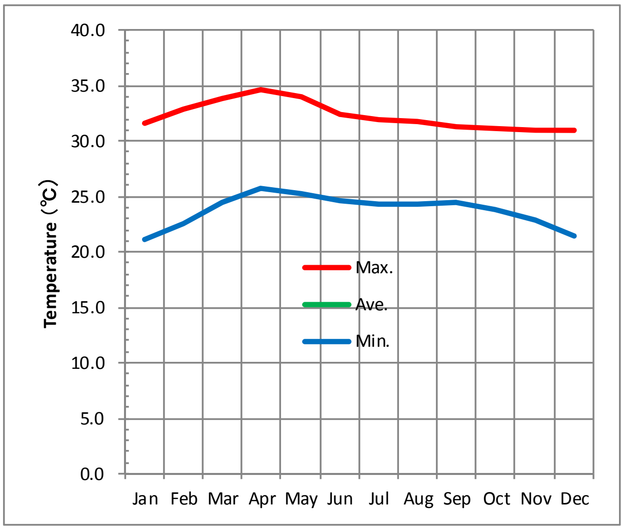
Earthquake

According to UN report (24. March,2011), Tsunami damage is not presumed in Southern region.

Ho Chi Minh City

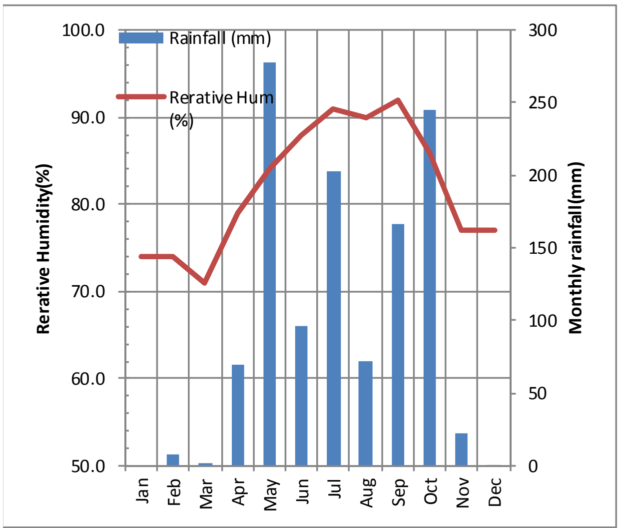
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave./Total
Temperature (℃)	Max.	31.6	32.9	33.9	34.6	34.0	32.4	32.0	31.8	31.3	31.2	31.0	30.9	32.3
	Ave.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Min.	21.1	22.5	24.4	25.8	25.2	24.6	24.3	24.3	24.4	23.9	22.8	21.4	23.7
Rainfall (mm)		18.0	26.0	48.0	81.0	194.0	236.0	302.0	323.0	262.0	123.0	47.0	20.0	1680.0
Relative Hum (%)		80.0	84.0	88.0	87.0	83.0	83.0	83.0	85.0	85.0	85.0	81.0	81.0	83.8





Ba Ria Vung Tau

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave./Total
Temperature (℃)	Max.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Ave.	25.4	26.7	28.7	29.3	28.2	28.8	27.7	28.7	27.8	27.4	27.5	26.5	27.7
	Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rainfall (mm)		0	8	1.6	70.2	277.7	96.7	203.3	71.7	165.9	244.7	22.7	0.2	1162.7
Rerative Hum (%)		74.0	74.0	71.0	79.0	84.0	88.0	91.0	90.0	92.0	86.0	77.0	77.0	81.9



Ba Ria - Vun Tau

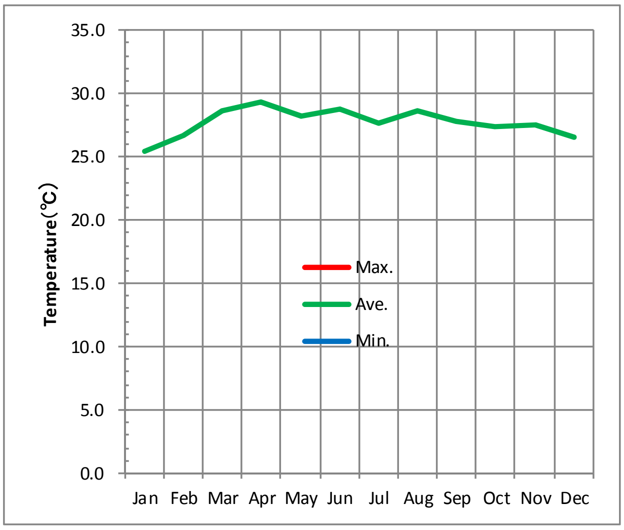


Figure 7.2-1 Climatic condition of HO Chi Minh city and Ba Ria Vung Tau

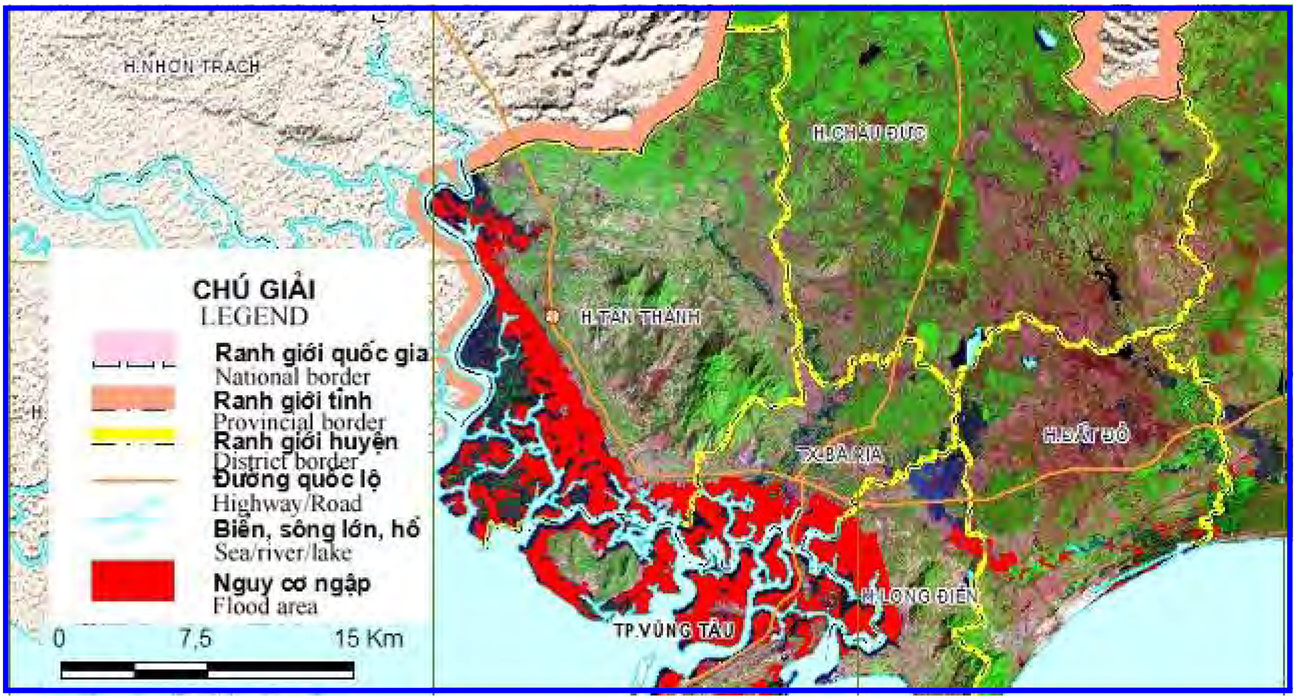


Figure 7.2-2 Presumed map of flood inundation area

7.2.2 Population Distribution in Southern Region

Population of Ba Ria Vung Tau Province has 101,200 person and the population density is 509 person/ km2. (Area: 1,987.4km)

Table 7.2-1 Population of Southern region

City ・Province	Population (x 1,000)	Area (km^2)	Population density (person/km^2)
Bin Phucc	893.4	6874.4	130
Tay Ninh	1075.3	4049.2	266
Bin Duong	1619.9	2695.2	601
Dong Nai	2569.4	5903.4	435
Ba Ria Vung Tau	1012.0	1987.4	509
TP Ho Chi Minh	7396.5	2095.5	3530
Long An	1446.2	4493.8	322

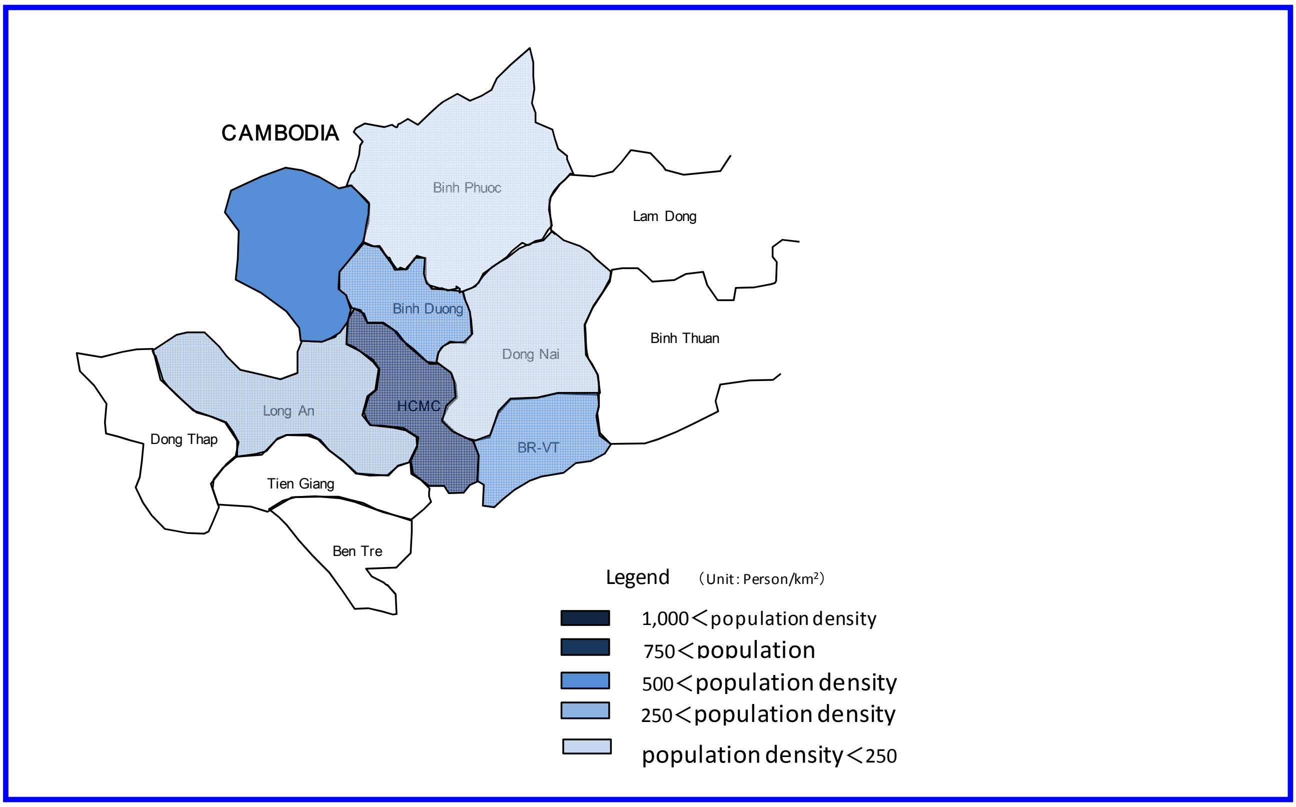


Figure 7.2-3 Population density in Southern region

7.3 Present Situation of Transport Infrastructure Development and Planning in Southern Region

(1) Road infrastructure

In Ba Ria Vung Tau province, National Highway No. 51, No. 56, have been almost the only trunk highways. Toward the near future, such expressway development plan in now on going as 1) HCMC - Long Thanh expressway, which will begin in service in 2014), 2) Bien Hoa Vung Tau expressway for Bien Hoa - Phu My section, which is scheduled to start in service in 2017, 3) Ben Luc - Long Thanh expressway which will begin in service in 2017, 4) Phuoc Hoa - Cai Mep highway. As for the place where is in service by these hihways, potential improvement of logistics service as well as passenger transport service can be expected.

(2) Seaport infrastructure

There are expansion plans for the present Cai Mep Thi Vai port. In the future, the expansion of the function as an international port can be expected. In addition, the road development between ports, which wil be 21.3km in length, 50m width, is to be completed in 2015. Further expansion of port logistics function can be expected.

(3) Airport infrastructure

Currently, Tansonnhat International Airport is in-service. However, the access time is long. In the future, Long Thanh International Airport has been scheduled for opening in 2020. The quality of the logistics and passenger transport service in the region is expected to increase dramatically by in service of this airport.

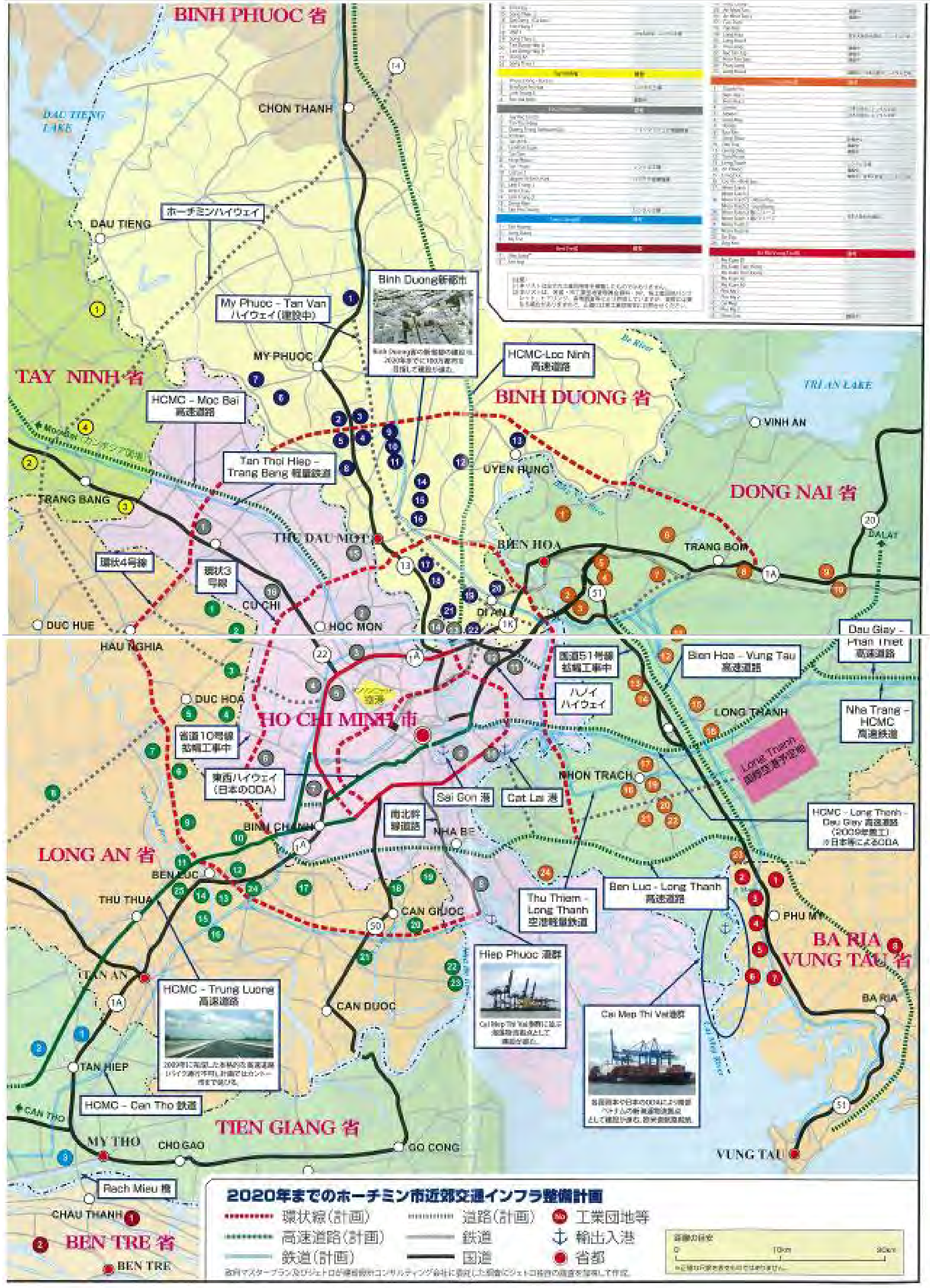


Figure 7.3-1 Outline of transport infrastructure in southern region

Source: JETRO

7.4 Review of Economic Zones and Industrial Zones in Southern Region

7.4.1 Overview of Economic Zones in Southern Region

There are 3 Economic Zones in the southern region and all of them are in the Mekong Delta area. The reason was that the economic development in the Mekong Delta area has been behind due to geographic conditions that many branch of the Mekong river divided the land area and prevented to construct effective infrastructure for transport and distribution. Development of Economic Zones is expected to play important roles in the vitalization of economy in the Mekong Delta area. Names, year of establishment and development area are shown in the following Table 7.4-1.

Table 7.4-1 Economic Zones in the Southern Resgion

	Area	Name of Economic Zone	Province	Establishment	Development Area (ha)
1	Mekong Delta	Dinh An	Tra Vinh	2009	39,020
2	Mekong Delta	Phu Quoc	Kien Gianh	2006	56,100
3	Mekong Delta	Nam Cam	Ca Mau	2010	11,000

Source : MPI

(1) Dinh AnEconomic Zone (Tra Binh Province)

１）Background

Development of Dinh An Economic Zone was started in accordance with the approval of the “Integrated Development Plan of Dinh An Economic Zone up to 2030” by the deputy Prime Minister on August 27 2012. It is located in Tra Vinh province in the Mekong Delta area as one of the proposed 15 Economic Zones in the “Economic Development Plan for coastal area up to 2020” which was approved by the Prime Minister. The Economic Zone covers 39,000 ha and extend over 2 districts, Tra Cu and Dyen Hai.

The main industries of the provinces are agriculture, forestry and fishery, manufacture industry, commerce, service and tourism, and it is expected to development of Economic zone makes Tra Vinh province as the center of economic activities and includes neighboring districts. The provincial government estimates the population of the province increases to 206,000 in 2020 and to 250,000 in 2030.

2) Present Status and Development projects

Establishment of Dinh An Economic Zone has been already approved by the Prime Minister and

The Peoples Committee has given basic agreement to Le Hai Construction Company on construction project of oil refinery plant. The costs of the development of Economic Zone was estimated to be 45 Trillion VND ‘(4.5 Billion US Dollars) and included construction of hi-Tech petro chemical oil refinery, tourism and resort development, urban development, Dyeng Hai Power station, bonded area and deep sea port in the 15,403 ha in Phase 1

(2) Phu Quoc Economic Zone (Kien Gian Province)

1) Backgroud

Phu Quoc Island is a small island in the Gulf of Thailand which is 50 Km from the North to the South and 25 Km from the West to the East. It is located on the border of Vietnam and Cambodia,12 Km to Campot of Cambodia , 40 Km to Hai Tien of Vietnam and 540 Km to Laem Chabang of Thailand. There has been a dominion dispute of the island among France, Cambodia and Vietnam. It has been the Cambodian territory during Por Pt regime, but it became Vietnamese territory since the liberation of Cambodia. A half of the island is being occupied by military installations.

2) Present Status and Development Projects

Major Industry of the island is production of Nuk Mam and Pepper. But tourism is at present taking over the dominance of those traditional industries and becoming the most important industry of the island. Recently, the island receives many visitors from HO Chi Minh City by airplane.

In 2006, an Economic Zone with 56,210 hectare in the Phu Quoc island was appointed and technical cooperation for water supply and waste water treatment was conducted by Kobe City. At present, feasibiity Study is being conducted by PPP of Nissui Con, Shinko Envieronment Solution Co., Ltd with support of the Ministry of Construction, Transport, Infrastructure and Tourism of Japan.

In June 2012, Kien Gian province announced 15 important investment projects for Socio-Economic development strategy and 131 projects, big and small, for promotion for attraction of investments. Concretely, (1) 10,000 ha for cultivation of marine products, (2) Water Supply in the Kien Luong town, (3) Infrastructure development of Tac Cau fishery port are the large scale project group of 20 billion – 1 Trillion VND.

In addition, the Kien Gian province is promoting the projects for development of special rice field to grow high value added rice for export, improvement breeding of cattle, marine products, plants and fruits. Cultivation of shrimp packaged with processing and exports were included in the announce.

The Kien Gian province attracted 15 projects up to first half of 2012 and development area was expanded to 204.3 ha. Finally 483 investments were attracted into 24,294 ha up to now, and 89 projects of them are under construction and 300 projects are on the examination stage. Finally in totall, 30 FDI projects with 30 trillion VND were attracted from 13 countries

(3) Nam Cam Economic Zone（Ca Mau Province）

1) Background

Ca Mau Province is located on the south end of Vietnam and its major industry is fishery. On March 12 in 2012, development of Economic Zone was approved by Decision of the Prime Minister No. 296/QD-TTg and the development towards 2030 was commenced. The Planning are of the Economic Zone is 11,000 ha and expected to generate 35,000 employments. It is anticipated to be increased to 40,000 – 45,000 in 2020 and 75,000 –

90,000 in 2030. In 2003, the south end area in the province was appointed to National Park by the decision of the Prime Minister and protection of natural environment for Mangrove and Swamp was carried out.

2) Present Status and Development Projects,

A construction plan based on the Master Plan is at present under preparation.

7.4.2 Location of Industrial Zones in Southern Region

There are 187 industrial zones in the southern region, of which 143 are located in the north of the Mekong river and 44 in the south. Most of the industrial zones are located within 100 – 150 Km from Ho Chi Minh City, the economic center of Vietnam and has access roads networks to the airport and ports. It suggests that the big urban area as the market, accumulation of commerce, materials, information, finance, human resources and well developed transport infrastructure are essential requirements for selection of the site for industrial zones. In the southern region, cooperation and coordination networks among the industries in Industrial zones, such as supply of parts to assemblers and supply of waste materials of industries for reuse and treatment are well established in in Dog Nai and Bing Duong province and Ho Chi Minh City.

Air port and sea ports located around Ho Chi Minh City are essential infrastructure especially for the exporting industry tenants of the industrial zones. Tan Son Nhat airport, Saigon port, Hiep Phuoc New Port constructed with new urban development and Dong Nai Port are main gateways of international trade. Recently, development of another Cai Mep Thi Bai new deep sea port was started in Phu My and My Xuan area along Cai Mep river in Ba Ria Vung Tau province and attracted heavy industries such as steel, metal and mining industries.

Another transport infrastructure are highways from Bien Hoa to Ba Aria Vung Tau and from Ho Chi Minh City to Phu My which are expected to be the trunk road for trade and distribution for the industries in the southern region. In parallel to the highway development, construction of Long Thahn new Airport, 4 times bigger than Tan So Nhat airport and located on 40 Km South-East of Ho Chi Minh City and, is decided to handle increased passengers and cargos in future.

Separation of lanes for motorbike and cars on the roads is implemented in Ho Chi Minh City and surrounding area to upgrade transport efficiency and safety. Results of it has increased speed and upgraded efficiency of cargo transport for industries, however, the volume of the cargo transport is foreseen to be increased in accordance with expansion of industries,so that the study for development of by-pass roads, toll road system and neighbourhood roads should be started in order to solve the present traffic problems. Location of Industrial zones in the southern region is shown in the following Table 7.4-2.

Table 7.4-2 Location of Industrial zones in the Southern Region

Provinces / Cities	Number. of Industrial zones	No. of Japanese Enterprises.	Accesibility		
			Base City	Airport	Sea Port
Ding Nai	31	80	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
H.C.M. City	18	77	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Binh Duong	26	96	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
BRVT	13	8	Ho. Chi. Minh City	Tan Son Nhat Airport	Cai Mep Thi Bai Port
Long An	35	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Tay Ninh	5	1	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Thien Giang	4	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Binh Phuoc	6	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Dong Thap	3	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
An Giang	5	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Bac Lieu	5	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Ben Tre	2	1	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Ca Mau	4	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Vinh Long	4	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Tra Vinh	1	0	Ho. Chi. Minh City	Tan Son Nhat Airport	Ho Chi Mihn Port
Can Tho	10	1	Can Tho City	Tan Son Nhat Airport	Ho Chi Mihn Port
Soc Tran	4	0	Can Tho City	Tan Son Nhat Airport	Ho Chi Mihn Port
Hau Gian	3	0	Can Tho City	Tan Son Nhat Airport	Ho Chi Mihn Port
Kien Gian	6	0	Can Tho City	Tan Son Nhat Airport	Ho Chi Mihn Port
T O T A L	185	26			

Source : The Study Team（「Ho Chi Minh Port : Saigon Port, Hiep Phuoc New Port, Dong Nai Port」）

The function of Tan Son Nhat airport and Saigon port have to be strengthened in order to adopt increase of cargo volume generated by the development of industrial zone s up to 2020, however. As the Saigon port was designed during French colonial period and accessibility is problematically inefficient for present cargo transport and improvement and strengthening of the function is urgently required. The access roads to Cai Mep Thi Bai port are not constructed yet other than access roads constructed by the investors for their excusive use.

7.4.3 Overview of Types and Size of Industrial Zones in Southern Region

Among 187 industrial zones located in the southern region, 269 Japanese enterprises are operating in the 26 industrial zones. Area of the industrial zones, number of Japanese enterprises and their types of industry are shown in the Table 7.4.-3 below. IClassification of type of industry in the Table is compliance with that of Industrialization program of MPI, such as “Strategic Industry 1 and 2” and “Other Industries”. Some of them are shown below in the order of their number of companies in the Industrial zones.

1. Electric and Electronics: 44
2. Machinery: 57
3. Textile: 34
4. Automobile related: 21
5. Chemical and Cosmetic: 21
6. Rubber and Plastic: 19

7. Food Processing: 15
8. Steel: 12
9. Transport: 6

The above list shows that investments by big scale heavy industries are the majority in Industrial zones in the southern region. But on the other hand, there are many supporting industries in Bing Duon and Don Nai provinces. For example, electronics parts industries provide most of their products to the Japanese assemblers in the Industrial zones in Vietnam and export some of products to Japan and China. Some automobile industries have the strategies to promote not only domestic markets, but in the neighboring countries, Middle East and Africa as well. The competition and complement with other advanced countries of automobile industries, such as Indonesia, Malaysi and Thailand, will be tasks.

Motorbike industry has long history and accumulation of technology in Vietnam, but most of them are located in the northern region. In the southern region, automobile industry is attracting the attention due to rapid increase of cars owners. The parts industries in the populated southern region will be a good parts suppliers and at the same time good market for the car industries in the Central Region.

The reasons of high ratio of food processing industries in the southern region is that cultivation of shrimp, fishery of clab, fish and production of nuk mam have been traditionally major industries in the Mekong Delta area, and geographic conditions of the Delta area have obstructed to develop manufacture industries and roads. Recently cultivation of pearl have been started to produce higher value added fishery products and distributed into the markets.

Table 7.4-3 JAPANESE INVESTORS IN INDUSTRIAL PARKS IN THE SOUTHERN REGION

Province / City	Names of Industrial Parks	Area (ha)	No. of Japanese Investors	Strategic Industry 1 and 2 Group					Other Industries				
				Electric/ Electronics	Food Processing	Textile	Steel	Automobile	Metal	Machine	Chemical/ Cosmetic	Rubber/ Plastic	Miscello nious
Dong Nai	AMATA Industrial Park	491.0	26	3	2	4	1		2	4	5	3	2
Dong Nai	Long Binh Industrial Park	47.0	10	1				2		2	2		3
Dong Nai	Long Than Industrial Park	510.0	1							1			
Dong Nai	LOTECO Industrial Park	100.0	15	4		3		2		2	2	1	1
Dong Nai	Long Duc Industrial Park	293.0	2							1			1
Dong Nai	Bien Hoa - I Industrial Park	335.0	4	2	1				1				
Dong Nai	Bien Hoa - II Industrial Park	365.0	14	4			1			4	1	1	3
Dong Nai	Ho Nai Industrial Park	497.0	2				1			1			
Dong Nai	Nyon Trac Industrial Park	430.0	2	1						1			
Ho Chi Minh	Tang Binh Industrial Park	125.7	5	1	1	1	1	1					
Ho Chi Minh	Tan Thuan Exp. Processing Zone	300.0	55	7	4	12	2	8		11	2	5	3
Ho Chi Minh	Hiep Phuoc Industrial Park	932.0	1							1			
Ho Chi Minh	Ho Chi Minh Industrial Park		3							1	1		1
Ho Chi Minh	Vinh Loc Indusatrial Park	307.0	4	1	2								1
Ho Chi Minh	Binh Chieu Industrial Park	27.3	2			1			1				
Ho Chi Minh	Tan Tao Industrial Park	443.0	1					1					
Ho Chi Minh	Linh Trung – I Industrial Park	82.0	4			1				1	2		
Ho Chi Minh	Linh Trung – II Industrial Park	62.5	8	1		1		1		2	2		1
Ho Chi Minh	Saigon Hi Tech Industrial Park	804.0	3	3									
Ho Chi Minh	Tan Tao Industrial Park	443.0	1					1					
Tay Ninh	Linh Trung Exp.Process. Zone	3,276.0	4			2						2	
Binh Duong	Moc Bai Economic Zone	21,284.0	1										1
Binh Duong	My Phuoc Industrial Park	6,200.0	16	2	1	1		1	1	6	1		4
Binh Duong	Viet Phuong Industrial Park	46.0	1										1
Binh Duong	Vietnam Sing.. Industrial Park	500.0	63	13	3	6	2	4	2	17	5	5	6
Binh Duong	Nam Tan Uyen Industrial Park	26.0	1				1						
Binh Duong	Dong An Industrial Park	133.0	4			2				2			
Binh Duong	Dong An II Industrial Park	235.0	1									1	
Binh Duong	Song Than II Industrial Park	533.0	4			1							
Ba Ria Vung Tau	Phu My I Industrial Park	954.4	3				1			1			1
Ba Ria Vung Tau	Phu My II Industrial Park	620.6	1				1						
Ba Ria Vung Tau	My Xuan A1 Industrial Park	304.0	2										2
Ba Ria Vung Tau	My Xuan A1 Industrial Park	312.8	1				1						
Ba Ria Vung Tau	My Xuan B-Thien Phung Industrial Park	200.0	1										
Long An	Phu An Thanh Industrial Park	1,002.2	1										1
Long An	Duc Hoa III – Viet Hoa Industrial Park	685.0	1		1								
Long An	Thanh Duc Industrial Park	256.0	1									1	
Long An	Long Hau Industrial Park	102.0	1										
Can Tho	Tra Noc 2 Industrial Park	135.0	1										1
Ben Tre	Giao Long Industrial Park	101.5	1	1									
	T O T A L		272	44	15	35	12	21	7	58	23	19	33

Source : Viana Finance, VIIPI, Asean Center, JETRO, Survey of Industrial Park and Investment Report by the Stdy Team

(2)The outline of industrial zones in Ba Ria Vung Tau province

1) Present status of industrial zones in Ba Ria Vung tau province

Current state of the industrial zone of Ba Ria Vung Tau province is as shown in the following table. From out of total 18 industrial zones, 7 are now in operation, 4 are under construction and 7 are under planning.

Table7.4-4 List of industrial zones in Ba Ria Vung Tau province

Name		Area (ha)	Location	Occupancy rate 【%】	Status
1	**Dong Xuyen**	160.98	Vung Tau city	97.8	in operation
2	**Phu My I**	959.38	Tan Thanh District	97.1	in operation
3	**My Xuan A**	302.40	Tan Thanh Dist.	83.6	in operation
4	**My Xuan A2**	422.22	Tan Thanh Dist.	94.4	in operation
5	**My Xuan B1-Conac**	227.14	Tan Thanh Dist.	71.7	in operation
6	**Cai Mep**	670.00	Tan Thanh Dist.	42.6	in operation
7	**Phu My II**	1,203.60	Tan Thanh Dist.	29.0	in operation
8	My Xuan B1-Tien Hung	200	Tan Thanh Dist.	-	planning
9	My Xuan B1-Dai Duong	145.70	Tan Thanh Dist.	-	planning
10	Phu My III	993.81	Tan Thanh Dist.	-	constructing
11	Long Son	1,250	Vung Tau city	-	constructing
12	Chau Duc	1,550.24	Chau Duc Dist.	-	constructing
13	Dat Do I	496.22	Dat Do Dist.	-	constructing
14	Dat Do II	-	-	-	planning
15	Dat Do III	-	-	-	planning
16	Long Huong	-	-	-	planning
17	Lang Dai-Phuoc Long Tho	-	-	-	planning
18	Da Bac	-	-	-	planning
TOTAL		**8,801.58**			

Source: Ba Ria Vung Tau Provincial DOIT

Map of industrial zones as well as relevant facilities in Ba Ria Vung Tau province is shown on the next pageina form of GIS map.

Figure7.4-1 Map of industrial zones as well as relevant facilities in Ba Ria Vung Tau province

2) Present status of Japanese tenants in industrial zones in Ba Ria Vung Tau province

As for industrial zones which have Japanese tenants, the number of Japanese tenants by each industry is shown as below. In Ba Ria Vung Tau province, industrial zones which have Japanese tenants are,Phu My I and II, My Xuan A, A2 and B1, Dong Xuyen and Cai Mep. Total number of Japanese tenants is 12 companies.

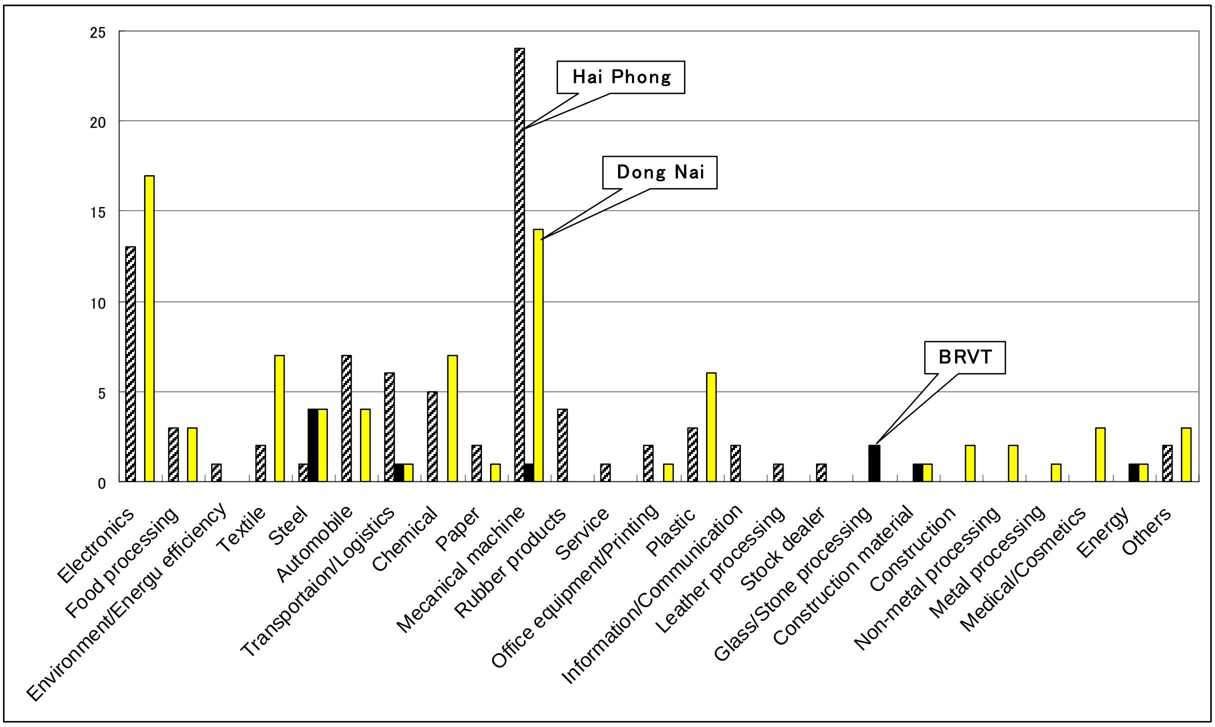


Figure 7.4-2 Distribution of number of Japanese tenants in by each industry in Ba Ria Vung Tau province (as of April in 2012)

Source: Vina finance report, JETRO

Name and industry for Japanese tenants are as follows:

Table 7.4-5 List of Japanese tenants

Name		Industry	Industrial zone
1	VINA Kyoei	Steel	Phu My I
2	SMC-Summit	Construction material	Phu My I
3	Vietnhat GAS (支社)	Gas	Phu My I
4	Nippon Steel Vietnam	Steel pipe	Phu My II
5	Vietnhat GAS	Gas	My Xuan A
6	INAX	Tile	My Xuan A
7	China Steel SUMIKIN Vietnam	Steel	My Xuan A2
8	Air Water Vietnam	Gas	My Xuan A2
9	VINA Steel Center	Steel	My Xuan B1
10	Hikosen CARA	Aparel	Dong Xuyen
11	Hoa Chat Hiem VN JSC	Non-steel metal	Cai Mep

Source: Ba Ria Vung Tau provincial DOIT, 2012

(3) Present ststus of specialized industrial zone in Ba Ria Vung Tau province

In Ba Ria Vung Tau province, 4 candidte specialized industrial zones were advocated by Ba Ria VungTau provincial People's Committee as follows:

1. Phu My3
2. My Xuan B1 – Tien Hung
3. My Xuan B1 – Dai Duong
4. Da Bac

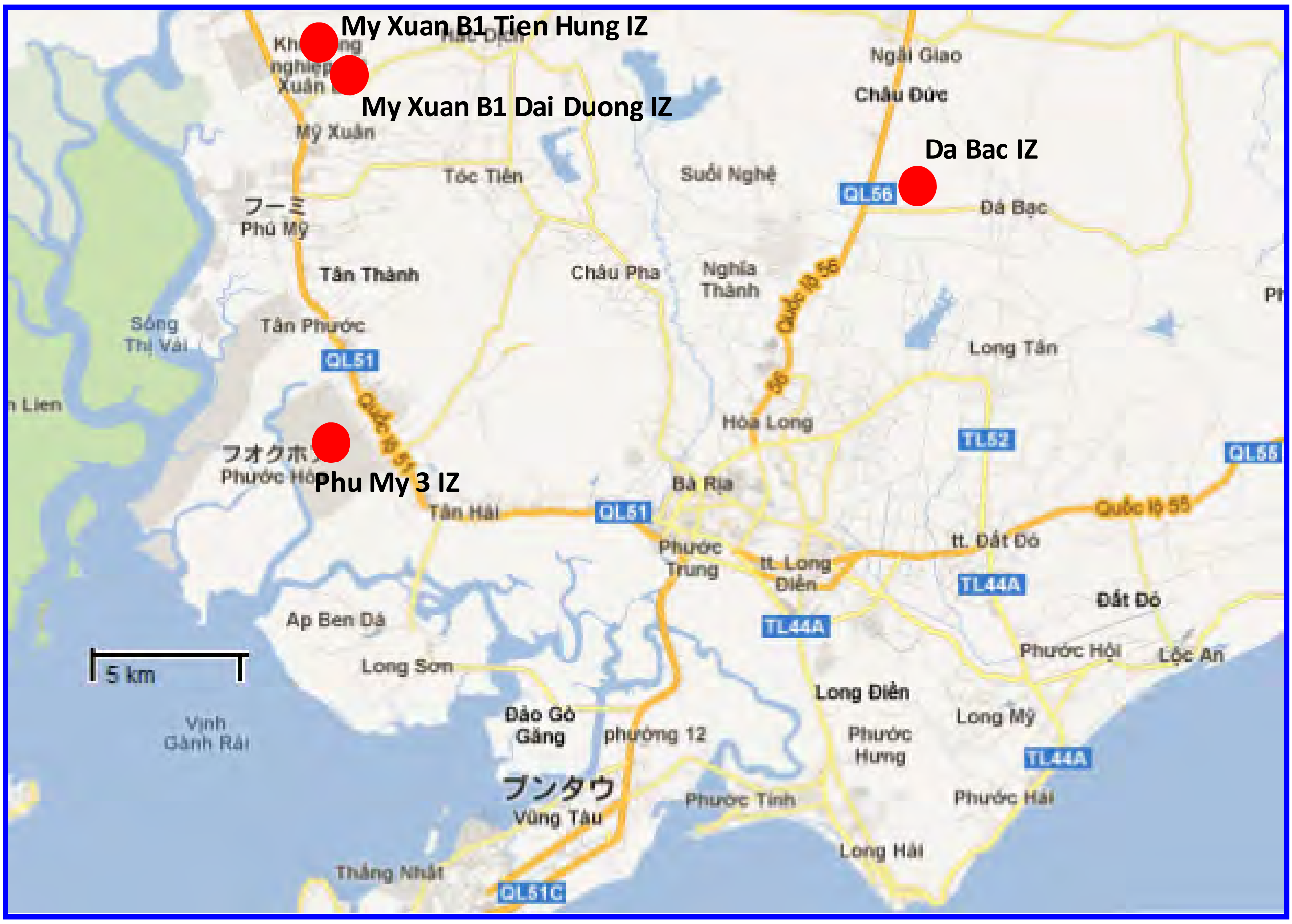


Figure 7.4-3 location map of Specialized industrial zones in Ba Ria Vung Tau province

The outline of these 4 specialized industrial zones is explained as follows:

1) Phu My 3 industrial zone

This industrial zone is located on the west side of National Highway No. 51, and the distance fron the highway is 500m. it is close to Phu My 1 Industrial zone, which is now in operation, and Phu My 2. There is an advantage that can take advantage of infrastructure of those industrial zones. In order to be able to respond flexibly to demand, it is divided into small lots of land for the plant compartment. In addition, there is a plan for providion of the lease plant.

Such facilities for the Japanese as service apartments, commercial facilities, and the construction of recreational facilities are planne to be constructed. In addition, such services are provided as workers' housing, vocational training school, Japanese school, and hospitals. The area for provision of living quarters for workers and skilled technicians and experts is 5ha. In addition, the area of 11 ha is also available ($ 10-25 Mon / rent) for residential area for unskilled general workers. Ground plan of the developed land is 2.6m in height from the ground to fill, which is same height as the National Highway No.51.

Table 7.4-6 The outline of Phu My 3 idustrial park

Name	Phu My 3 industrial zone
Location	Phuoc Hoa county、Tan Thanh District
Area	993.8ha General area: 280ha, Heavy industry area: 110ha, Port logistics area: 160ha, Residential area: 60ha, Urban utility area: 15ha、
Developer	Thanh Binh – Phu My JSC, FORVAL is a advisory partner
Investment permission	For 45years up to 2057, construction will be commenced in 2013
design	Nikken Sekkei Civil Engineering LTD (NSC)

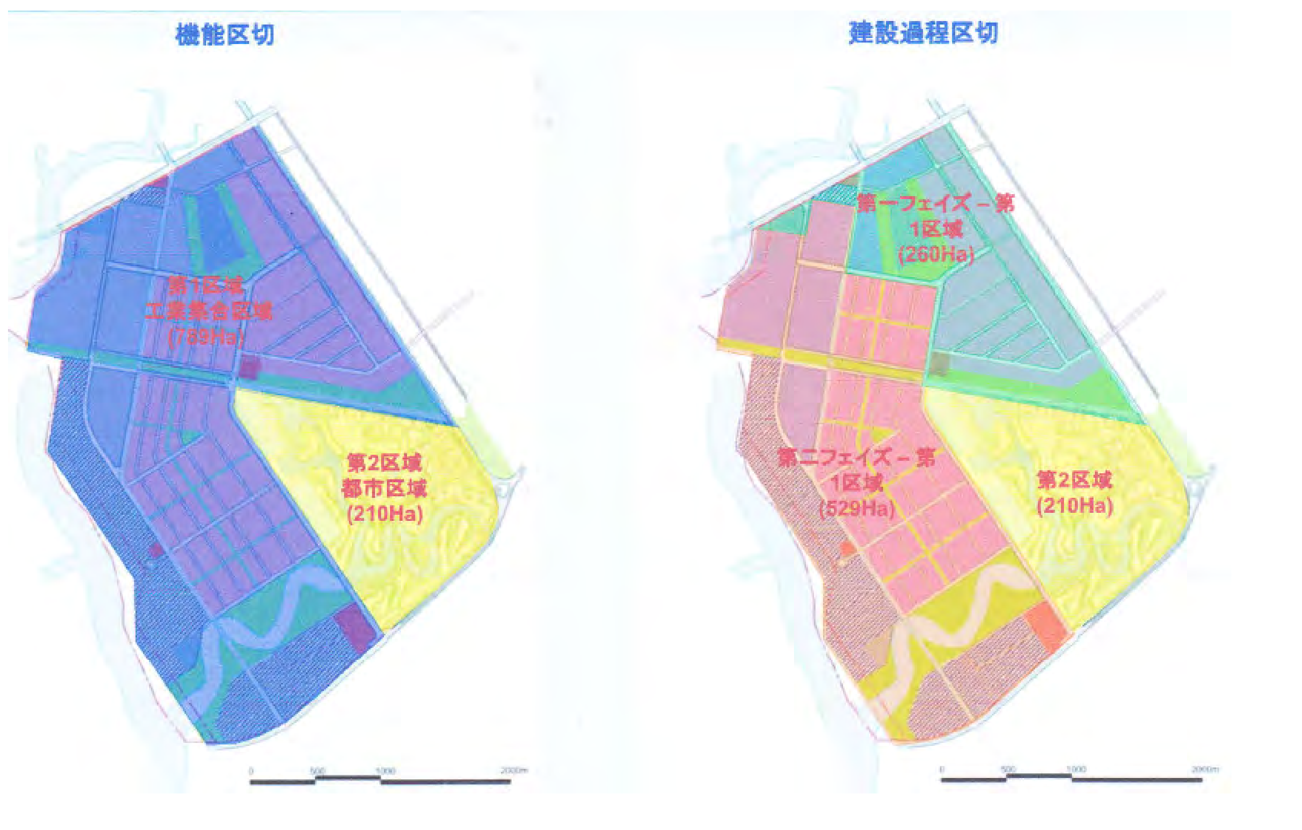


Figure 7.4-4 Lots layout in Phu My 3 industrial zone

2) My Xuan B1 – Tien Hung industrial zone

This industrial zone is located on the east side of National Highway No. 51 highway 1km. Located west of the industrial zone Dai Duong, north of the industrial zone Konaku. Is a new urban development district Phu My, here (30,000 inhabitants labor) labor force is abundant. The land with the area which is more than 2 ha per unit can be provided for Japanese SMEs. So far, there is no plan for development of land for lease. Now Vina-Kyoei, which is Japanese steel processing company, is in business. Major infrastructure in the industrial zone is planned to be constructed up to 2012.

Table7.4-7 The outline of My Xuan B1 – Tien Hung industrial zone

Name	My Xuan B1 – Tien Hung industrial zone
Location	My Xuan 区、Tan Thanh District
Area	200ha
Developer	Tien Hung Trading – Manufacturing Co., LTD 100% Vietnamese capital
Investment permission	Up to 2056
Ground condition	Ground condition is stable and it is suitable for heavy industry

注）www.tienhungcorp.com

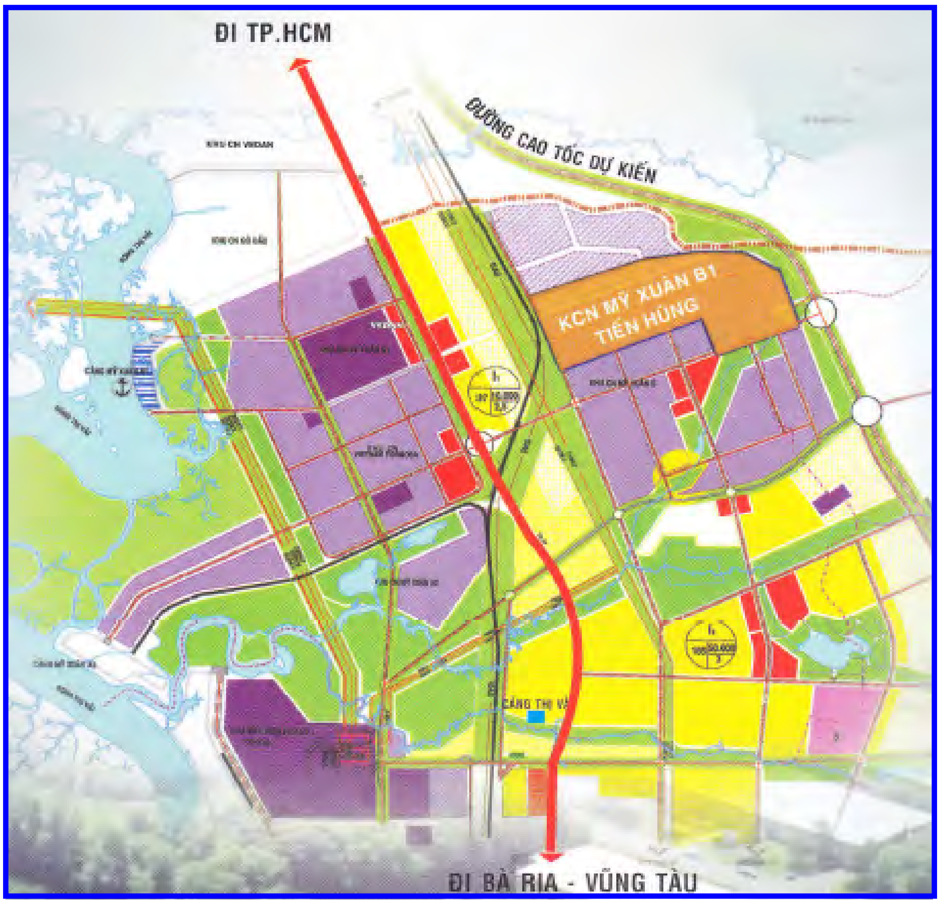


Figure 7.4-5 Lots layout in My Xuan B1 – Tien Hung industrial zone

3) My Xuan B1 – Dai Duong industrial zone

It is located adjacent to eastern 1 km side of National Highway No.51, and it is located adjacent to Tien Hung industrial zone. Construction of the infrastructure in the industrial zone will be finished in 2014.

Table 7.4-8 the outline of My Xuan B1 – Dai Duong industrial zone

Name	My Xuan B1 – Dai Duong industrial zone
Location	My Xuan 区、Tan Thanh District
Area	145.7ha
Developer	Dai Duong Co., LTD

Figure 7.4-6 Lots layout in My Xuan B1 – Dai Duong industrial zone

4) Da Bac industrial zone

It is located at eastern side of National Highway No.56. Most of the basic infrastructure has not yet been constructed. The land with the area of 1,000 ha can be served and investment permission will come from the Government soon. The present lan use is for the agricultural field for corns and potatoes. Major target of attraction of Japanese investors is Japanse SMEs in the field of mechatronics and erectronics. Some rental factories with the area of 300, 500, and 1,000m^2 will be provided. Guesthouses and staff's dormitories are planned to be constructed.

Table 7.4-9　The outline of Da Bac industrial zone

Name	Da BacIndustrial zone
Location	Da Bac 区、Chan Duc District
Area	129ha (Area-1)、121ha (Area-2)、107ha (Area-3)、137ha (Area-4)、
Developer	Dong A JSC (100% Vietnamese capital)

(4) Transport infrastructure in Ba Ria Vung Tau province

Present situation is shown in the following table.

Table 7.4-10 resent status of transport infrastructure in Ba Ria Vung Tau province

Major infrastructure		Phu My 3	My Xuan B1 – Tien Hung	My Xuan B1 – Dai Duong	Da Bac
Main roads (now in operation)	Center of HCMC Bien Hoa city Ba Ria town Vung Tau city Phu My Cai Mep	70 km 50 km 10 km 30 km 8 km 10 km	70 km 40 km 20 km 40 km 8 km 10 km	70 km 40 km 20 km 40 km 8 km 10 km	95 km 75 km 15 km 35 km
Main roads (future)	Be Luc – Long Thanh expressway HCMC – Long Thanh expressway Bien Hoa – Vung Tau expressway	60km	50 km	50 km	85 km
Sea ports (now in operation)	Cai Mep port Saigon port Vung Tau port Phu My port Dau port Thi Vai port	4 km	10 km 70 km 40 km 8 km 7 km 5 km	70 km 40 km 5 km	20km
Airports (in operation)	Tansonnhat International Airport	64 km	70 km	70 km	95 km
Airports (future)	Long Thanh International Airport	40 km	20 km	20 km	45 km

(5) Ground condition

Tien Hung and Dai Duong are located in My Xuan B1 area. The area is located in highland which is 20m inheight, and the soil condition is good. Da Bac is located at highland which is 75 to 90 m in height and soil condition is good. Phu My 3 is located in the area of which height is 1 to 3m　and piling may be necasarry.

(6) Present shools in Ba Ria Vung tau provinve

In Ba Ria Vung Tau province, there exist four high schools, four intermediate vocational schools, seven professional training centers, sixteen other school facilities. In addition, as the International School, Vietnam - American elementary school, Vietnam - National College of America exists. Working population over the age of 18 is three to four million and the vocational training school in Tan Than district has trained 6,000 workers annually. In steelmaking Kyoei of Japanese descent, we have a curriculum for worker training in Japan.

(7) Hospitals

There exis International SOS Vung Tau, Vung Tau international hospital and Viet Nam Oscat Srea hospital, which meet international standards.

(8) Residential environment

Ba Ria Vung Tau province the climate is good, less natural disasters. Also, it is a region with an international personality. 49% of the population of 1.012 million people of Ba Ria Vung Tau province is urban, 51% live in rural areas. In addition, we plan to housing for workers of 20-30ha in the province. Ba Ria Vung Tau province is Important tourist areas with9.5 million tourists (560,000 foreigners) in 2011, and Ba Ria Vung Tau province has 160 hotels including one 5 star hotel and 7 four star hotel.

According to the People's Committee of Ba Ria Vung Tau province, industrial zone with th area of more than 20-30ha is allowed to build a residential area in the industrial zone. Japanese family, some people are commuting from HCMC. Also, Vietnamese engineers etc., have been commuting by bus from HCMC and Vung commuter company.

Table 7.4-11 The outline of service apartments in Ba Ria Vung Tau province

Name	Number of rooms	Monthly room rate	Japanese residents	Remarks
Darby Park Service Residences	69 rooms	$50m^2$ - \$1,000 $50m^2$ - \$80/day $75m^2$ - \$120/day	25 residents	tennis court, convenience store, pool, fitness club
Truong Son Apartment		$50m^2$ - \$1,200	1 family	
Phu My		\$200~1,000/月		Three star class
Pestro Tower		\$18~25/day		Vung Tau city

注） www.bigbiglands.com

(9) Others

There exist some golf clubs such as Paradise Golf Club, which has 18 holes and price is 80 US$ on holidays, Long Thanh golf club and Vun Tau golf club. And one Japanese restaurant is in operation, of which name is UMI.

Chapter8. Summry and Recommendations

As discussed in above chapters, Chapter 3 of this report provided the outline of the macroeconomic trends and industry in Vietnam and the current status of the investment of Japanese companies in Vietnam. Chapter 4 provided an overview of the framework which is associated with the relevant legal framework and legal system, the industrial zone planning and management development and industrial policy in Vietnam. Chapter 5, Chapter 6, Chapter 7 discussed the basic policy of industrial zone development in northern, central, southern regions, city of Hai Phong and Ba Ria Vung Tau province on the the direction of the current state of economic and industrial base, the industrial policy initiated by the People's Committee, and other special industrial zone development policy.

Based on the results of the current status of their understanding, present industrial situation, current status of economy, and the expansion of the industrial complex situation in Hai Phong City and Ba Ria Vung Tau province are analyzed. In light of the analysis, the region's strengths, weaknesses are analyzed. In those areas, the plan of the development of special industrial zone to attract Japanese companies has been promoted. In addition, recommendations about the direction of the policies associated with them are to be proposed in this chapter.

8.1 Comparative Advantages and Future Scenarios to demonstrate towards Regional Comparative Advantages

8.1.1 Evaluation of the Comparative Advantages of City of Hai Phong

Chapter 5 of this report provided an overview of basic direction of industrial policy for city of Hai Phong and the northern region, the current status of the economy and industry, the basic policy of developing industrial zones, including specialized industrial zone initiated by Hai Phong DPI. Based on the result of the understanding of the current status, the SWOT analysis in termes of strengths, weaknesses, potential and threat analysis was conducted. On the basis of the result of the SWOT analysis, the basic direction of the industrial policy associated with them was recommended in this chapter.

(1) SWOT Analysis in city of Hai Phong

1) <u>Strength</u> of city of Hai Phong

a. Concentration of a variety of manufacturing industries

As for type of industries in the industrial zone located in the city of Hai Phong, leather production of light industrial products, textiles, paper, rubber, plastic and is thriving. In the field of heavy industry, the production of non-metallic minerals such as iron and steel products and metal processing, basic metal, others are thriving. In addition, the electrical and electronics that can be called the characteristic of the northern region, the high comparative advantage industries mechanical system also applies to Hai Phong. The city of Hai Phong has high production electronic products, optical, electronic, mechanical and automobile industry. In this way, city of Hai Phong is rich in business industries. Therefore, city of Hai Phong has relatively well balanced assemblers and parts supply industry. In addition, in the city of Hai Phong, the development of shipbuilding industry and basic metal processing industries, including the steel is in progress.

b. Port logistics infrastructure fulfilling

As outlined in Chapter 5, Hai Phong port with 6m water depth and Cai Lan port with 13m water depth is now working. In the future, the further improvement of maritime logistics functioned by Lack Huyen port can be expected. Hai Phong port with four terminals has become the largest container port in the northern region. The amount of cargo handled in 2011 was 286 million tons, and the amount together with the one handling in the port of Cai Lan amounts about 30% of the whole cargo in Vietnam. Cai Lan port has12m in water depth and the scale of the ship which can be docked is 50,000 DWT. In direct to Japan, it takes minimum of six days. ODA loans were extended by 10.3 billion JPY in the past.

There is a development plan of Lack Huyen port, as is scheduled for completion in 2015. It will have a water depth in 14m, and its possible docked vessels are vessels with 2 100,000 DWT × 2 vessels. The amount of available cargo handling will amount 855,000 TEU per year. The total project cost is estimated at approximately 160 billion yen.

c. Proximity to China which is the large-scale market (Hong Kong and Shanghai)

Strength of Hai Phong is the fact that is close to Hong Kong, and Shanghai, which are the China's large market. That is, the advantage of the proximity on the trading industry with China through the port of Hai Phong means that city of Hai Phong is rich in convenient proximity with China as a market for selling products and procuring spareparts.

2) <u>Weakness</u> of city of Hai Phong

a. Sluggish growth of high-value-added industries

At the "strengths", it touched on what variety of manufacturing industries to expand in Hai Phong. However, there is still developing the competitiveness of the manufacturing industry except shipbuilding and other industries seen quantitatively. In addition, compared with the nation-wide situation in Vietnam, production of electrical and electronics manufacturing industry is located at the upper level. However, a percentage of the total industrial production of Hai Phong in the high-value-added industry is still low. Moreover, the deployment of supporting industries has been delayed. In addition, the number of skilled workers in high-value-added industry sector has not reach the required number. There is a need for further development in the future.

b. Tight capacity of the land supply

In Hai Phong city, the city has a high population density, land use has become dense. Therefore, the constraint of facilities located in the city has become larger. Currently, including the surrounding land in Nam Din Vu Industrial zone, which is one of the special industrial zone, has been promoted by the creation of new sites for landfilling ocean. However, depending on the intensity of the ground, such as vulnerability of those coastal districts, is not rich in land supply capacity.

c. Functional paralysis of National Highway No.5, which is functioning as trunk road for freighttransport and passenger transport

Currently, the trunk road connecting the neighboring provinces and cities of Hanoi City and Hai Phong, Hai

Duong Province and Hung Yen province for freight transport and passenger transport is only National Highway No. 5. On the same highway roadside, a large number of industrial zones are located. Therefore, the demand for road transport tends to increase from year to year. Such National Highway No.5 with significant traffic congestion in recent years is causing paralysis as a function of freight transport and passenger transport. The highway has become a bottleneck of logistics. As a highway to complement the functions of the National Highway No. 5, Hanoi-Hai Phong highway expressway is now under construction. Early completion of the expressway is waiting.

d. Fear of domestic industrial hollowing brought about by the proximity with China

Convenience of proximity to the Chinese market, including Hong Kong, Shanghai, highlighted as a "Strength" in the previous section. However, it excels in competitiveness, those areas is getting turned into a sourcing base. This means that the inhibiting parts procurement from companies of the city of Hai Phong in Vietnam. At the same time, this means the hollowing out of local industry. This may also be a negative factor hindering the development of supporting industries in city of Hai Phong.

3) <u>Opportunity</u> in city of Hai Phong

a. Development of new trunk highway for freight transport and passenger transport

Hanoi-Hai Phong highway as a new artery, which is scheduled to start of operation in 2015, is now under construction. It is expected to complement the function of National Hghway No.5, of which road traffic congestion is becoming more serious. Serviced by the new trunk highway, easing traffic congestion in National Highway No.5 and a significant improvement in function of distribution of cargo and passenger flow over the northern region can be expected.

b. Enhancement of international logistics by developing large-scale international ports

As discussed in previous chapter 5, The plan of Lach Huyen port as a large international port contains 14m in water depth and a dock which can accommodate 100,000 DWT × a vessels. The amount of available cargo handling is estimated as 855,000 TEU per year, and the total project cost is estimated as approximately 160 billion yen. Basic infrastructure is built by ODA. Establishment and operation of the terminal is scheduled to be due to a joint venture VINALINES, MOL, NYK and Itochu. Service of Lach Huyen port as well as effective use of such existing ports as Hai Phong, Cai Lan port can be expected to bring about further competitiveness of logistics in city of Hai Phong.

c. Relatively higher price competitiveness in labor market comparing to neighboring countries

Raise of wages in neighboring countries such as China and Thailand in recent years is enhancing the advantage of relatively low labor costs in Vietnam. Therefore, attractively cheap labor cost can be expected and increase of investment in city of Hai phong can also be expected.

4) <u>Threat</u> in city of Hai Phong

a. Harsh competition with neighboring regions in the northern part

Promotion of supporting industries has become an issue not only in Hai Phong City but also in other local industries in Hai Duong province, Hung Yen province, and in other regions throughout Vietnam. With it, other regions also have been implementing various activities relating to attraction of Japanese investors and attraction of related supporting industries. In such a competitive environment, to miss the supporting industry development policies will lead to a serious setback in the field of industrial development policy in city of Hai Phong.

b. Adverse effects of the global economic downturn due to the globalization of the economy

In recent years, business partners have been expanding not only in Vietnam but also China's huge market including Shanghai and Hong Kong, other ASEAN countries and other Western countries. Under such circumstances, effects of economic weakness in other countries may be a factor of sluggish of the industrial activity in city of Hai Phong directly or indirectly. For example, the recent slowdown in the European economy and the reduction of investment from Europe may be cooling the entire international market and it may also lead to a reduction of industrial activity in Hai Phong.

(2) Policy recommendations based on the SWOT analysis of city of Hai Phong

1) Policy for enhancement of the Strength in city of Hai Phong

Hai Phong has a variety of integrated manufacturing industries. Hai Phong should promote the expansion and integration of the production of these existing industries. As mentioned in previous Chapter 5, as industries to target of future priority development and support, Hai Phong City People's Committee has raised the following seven industrial fields. Namely, a. supporting industries, b. Key Industry, c. High-tech, d. high value-added industry sectors, e. energy saving related industries, f. industries with low environmental impact, and d. marine industry. As for “Key Industry”, it is citing a. significantly growing industries such as electronics and information industry as well as traditional industries, which are continueing to be promoted the development, such as automobiles, metals, construction materials, chemicals and mechanical industry. It is important to promote the further enhancement of high value-added industry in the field of high-tech and IT in Hai Phong.

Also, heavy industry with core industries such as basic metal, shipbuilding industry, the iron and steel, Hai Phong should expand the above industries by leveraging the existing strengths.

2) Policy for alleviation of the Weakness of city of Hai Phong

In parallel with the implementation of measures to further strengthen the "Strengths" of the above, further functional vocational training facilities should be expanded and newly established in order to strengthen competitiveness against supply base for high-quality parts, such as Hong Kong and Shanghai. In order to secure further necessary land for development in Hai Phong with visile signs of tight supply capacity of land, it is important to apply the landfill methodology that is the state-of-the-art technology and to promote enhancement of technical capabilities of securing regional landfill. It is also important to expand and strengthen the existing logistics functions in Hai Phong, glaring Hanoi-Hai Phong highway and Lach Huyen port, which will be in service in the near future.

3) Policy for promotion of realization of Opportunity of city of Hai Phong

The following policy implementation is important, that is, introduction of a new distribution system which is incorporating the new large-scale port development plan such as Lach Huyen port development plan, and new highways such as Hanoi-Hai Phong highway development plan, and continuring efforts to expand manufacturing concrete measures that reflect above-mentioned infrastructure development plans in city of Hai Phong. It is important to cooperate closely with the central government for anticipation of the various supports including financial support and cooperation in order to realize the construction of these large-scale national infrastructure projects as soon as possible.

4) Policy for overcoming Threat of city of Hai Phong

Specialized industrial zone is an industrial zone that is intended especially to attract supporting industries. These industrial zones development as a core policy is trying to promote further development of supporting industry in all over the city of Hai Phong. To this end, taking measures to promote the industry only focused on supporting industries is not enough. It is important to take further measures to attract a wide range of industries such as processing and assembly companies to attract large companies to be subject to the supporting industries to supply spareparts and other products.

In addition, it is important to promote industrial development efforts while the northern region as a whole to cooperate with neighboring provinces and cities, utilizing the strengths and comparative advantages of each region, in order to realize the co-existence and co-prosperity in the entire region.

As a result of the above discussion and analysis, it is summarized in a table shown on the following page.

Table 8.1-1 SWOT analysis in Hai Phong

Strength	Weakness	Opportunity	Threat
· A relatively integrated and balanced industrial structure · Comparatively strong basic metal and shipbuilding sectors · Existence of the Hai Phong Port and relatively well developed logistic capacity · Vicinity to the international market and cheap production base of China · Comparatively good educational conditions	· Lack of highly competitive manufacturing products apart from shipbuilding · Relatively tight supply of land due to high population density and weak foundation of land in the coastal area · Currently over-crowded National Highway No.5 hindering efficient logistics · Vicinity to China, in turn, making it difficult to develop supporting industry	· The new National Highway being under construction · The development of Lach Huyen Port and upgrade of Hai Phong port expected to further strengthen Hai Phong's competitiveness · Strong support by the top leaders of both Japan and Viet Nam · Rising labor cost in China driving out foreign and Chinese capital to elsewhere	· Development of supporting industry becoming a hot issue in all over the country · The neighboring regions also very active in attracting FDI, especially FDI from Japanese SME. · Economic downturn in Europe hampering investment from European countries and resulting in the shrinking of the international market
↑	↑	↑	↑
>Developing a high-tech, high value-added shipbuilding sector >Fostering a supporting industry relevant to shipbuilding, fully utilizing the existing basic metal, other non-metallic mineral products and fabricated metal products	>Reinforcing vocational training consistent with the strategy stated on the left >Claiming land from the sea by introducing advanced landfilling technology >Further improving existing logistic infrastructure facilities	>Strengthening public relations and publicity with regard to the above-mentioned good news >Better prepared for the forthcoming operation of new highway and new sea port >Keeping close follow-up to the central government regarding further support	>Not exclusively sticking to the promotion of supporting industry, but rather envisioning it as an accompanying effort or a result of attracting the investment of large assemblers >Reinforcing economic cooperation with neighboring regions

8.1.2 Evaluation of the Comparative Advantages of Central Region

Chapter 6 of this report provided an overview of the current status of the economy and industry, the basic policy of developing industrial zones, including specialized industrial zone initiated by city pf Da Nang, Quang Nam province and Quang Ngai province. Based on the result of the understanding of the current status, the SWOT analysis in termes of strengths, weaknesses, potential and threat analysis was conducted. On the basis of the result of the SWOT analysis, the basic direction of the industrial policy associated with them was recommended in this chapter.

(1) City of Da Nang

1) SWOT analysis in city of Da Nang

1-1)<u>Strength</u> of city of Da Nang

a. Abundant marine resources and tourism resources

Strength of city of Da Nang is a rich marine resources and tourism resources. Against the background of abundant seafood, city of Da Nang industrial zones are specializing in seafood processing which is in operation and some Japanese companies are tenants. In addition, rich in marine tourism resources suitable for beach resort, and historic resources in Hue, and Hoi An (Quang Nam province) are close to each other as rich tourism resources.

b. Function of international gateway with plural intermational seaports and airports

City of Da Nang has plural international seaports such as Da Nang Port, Lien Chu port, and Tiensa port. These ports have been functioning as a gateway for international freight in the city of Da Nang. In addition, Da Nang airport has been functioning as an international airport for passenger and freight transport.

c. Trunk road network

In city of Da Nang, in addition to the National Highway No. 1 running through from north to south, another National Highway No.9 named as East-West Economic Corridor leading to Hue, Laos, and Thailand is serving. city of Da Nang City is located on the end point of this East-West Economic Corridor. In addition, National Highway No. 14 contacting with Laos and Quang Nam province is being granted as a function of the second East-West Economic Corridor.

1-2)<u>Weakness</u> of city of Da Nang

a. Domestic and international competitiveness of the manufacturing sector is weak

In city of Da Nang, such industries as manufacturing, food processing, construction industry and metal processing have been integrated to some extent, however, their competitiveness is insufficient comparing to other regions in internationally as well as in domestically.

c. Stringent environmental regulations has the potential to inhibit the expansion of the foreign investment

Environmental regulations of the city of Da Nang have been increasingly severe in recent year. Unless the appropriate measures to respond to these policies are taken, further foreign direct investment would be inhibited.

d. Lack of sufficient labor supply

To the needs of the labor force especially for labor-intensive industries such as supporting industries, city of Da Nang has a concern whether sufficient labor force can be supplied or not.

1-3)<u>Opportunity</u> of city of Da Nang

a. A new industrial zone development plan in the field of IT and high-tech industry

Currently, city of Da Nang has promoted development plan of high-tech industrial zone with the area of 1,000 ha and IT industrial zone with the area of 130ha. In addition, based on the concept of smart cities, urban development has been promoted to enjoy free wireless communication service which is available everywhere in the city of Da Nang.

b. Building cooperative relationship with other provinces in central region

city of Da Nang is exploring cooperation with other 6 provinces in central region including Quang Nam province and Quang Ngai province in such policy fields as 1)promotion of attracting further foreign direct investment, 2)co-management and use of transport infrastructure 3)development of eco-friendly urban areas. Currently, in order to work together in seven regions, signing for the agreement is in preparation.

1-4)<u>Threat</u> of city of Da Nang

a. Harsh Competition in attracting foreign direct investment with neighboring regions

Competition to attract foreign direct investment including Japanese investors has been intensified with other neighboring regions.

b. Western economy affects the economic situation of city of Da Nang.

With the development of economic globalization, economic conditions in international markets, such as Europe and the United States, have come to affect the economy of city of Da Nang.

2) Policy recommendations based on the SWOT analysis of city of Da Nang

2-1) Policy for enhancement of the <u>Strength</u> of city of Da Nang

It is important that city of Da Nang should continue to nurture the rich marine resources and food processing industries. It is also important to continue to promote the use of best abundant tourism resources. In addition, city of Da Nang should go forward to take full advantage of the capabilities of the port infrastructure and develop further enhanced logistics sector.

2-2) Policy for alleviation of the Weakness of city of Da Nang

In the sense of strengthening the competitiveness of the manufacturing industry, it is important to promote the development of vocational training facilities for expansion of skilled workers. In addition, it is important to develop environmentally friendly industries being applied by environmental technology, in parallel to strengthen environmental regulations.

2-3) Policy for promotion of realization of Opportunity of city of Da Nang

In order to promote an early service provision in the planning of transport infrastructure, there is a need for strengthening of public relations, the strengthening of cooperation with the central government and related agencies.

2-4) Policy for overcoming Threat of city of Da Nang

It is important to promote the industrial development of the central region as a whole to promote cooperation with neighboring provinces, by utilizing the strengths and comparative advantages of each region. It is also important to promote co-existence and co-prosperity in the entire region.

The above discussion is summarized in the table shown on the following page.

Table 8.1-2(1) SWOT analysis in Da Nang

Strength	Weakness	Opportunity	Threat
･ Relatively rich aquatic and tourism resources ･ Existence of Lien Chieu, Tien Sa, Da Nang seaport and Da Nang Airport, and vicinity to the East-West Corridor ･ Relatively higher recognition degree among foreigners	･ Lack of highly competitive manufacturing products ･ Relatively stricter environment regulations making it hard attract investment from SME of manufactures ･ Relatively smaller labor population	･ Development plan of IT industrial zone and high-tech industrial zone in place ･ Construction of the New East-West Corridor newly approved products in progress ･ Policy of Inter-provincial Cooperation with Quang Nam and Quang Ngai	･ The neighboring countries and neighboring regions also very active in attracting FDI, especially FDI from Japanese companies. ･ Economic downturn in Europe hampering investment from European countries and resulting in the shrinking of the international market

>Developing processing industries fully utilizing existing aquatic resources >Promoting tourism together with the related industries >Developing logistic sector fully utilizing existing infrastructure facilities	>Reinforcing vocational training to secure supply of qualified human resources >Developing industrial zone with pollutant treatment facilities so as to allow for investment in sectors with more industrial wastes	>Strengthening public relations and publicity with regard to the above-mentioned good news >Better prepared for the forthcoming operation of new industrial zones and new highway	>Reinforcing economic cooperation with neighboring regions based on the identifiable structural complementarity

(2) Quang Nam province

1) SWOT analysis in Quang Nam province

1-1)Strength of Quang Nam province

a. Rich marine resources, tourism resources and mineral resources

Strengths of Quang Nam province is rich mineral resources, marine resources, abundant silica which is the basis for the rise of glass production and tourism resources which include the beach and resort in Hoi An as a World Cultural Heritage.

b. Comparative advantage in the automotive industry

The automotive industry has begun to be integrated in Truong Hai industrial zone. TACHO as a Vietnamese capital made capital alliance with KIA ltd. and HYUNDAI in South Korea and perform a technical tie-up with Japan's MAZDA. TACHO has been engaged in assembling buses, trucks and passenger cars under the above-mentioned allience.

c. Transport infrastructure

As for transport infrastructure in Quang Nam, in addition to National Highway No.1, there exist Chulai Airport and Kiha port. In addition, it is close to Da Nang International Airport and Da Nang port in city of Da Nang, and Quang Nam can enjoy the benefit of the joint use of Dung Quat port in Quang Ngai province.

1-2)Weakness of Quang Nam province

a. Domestic and international competitiveness of the manufacturing sector is weak

In Quang Nam province, the integrated automotive assembly industry has begun, however, the day is still young. Future competitiveness is a challenge.

b. Lack of capacity of the National Highway No. 1

Highway to contact Quang Nam Province and other regions is only the National Highway No.1. Bridge across the river has become a bottleneck and the maintenance and repair of the road surface condition is not good. As a result, traffic capacity has been declining and traffic jam has been caused.

1-3)Opportunity of Quang Nam province

a. Integrated automotive assembly industry in Truong Hai industrial zone

As stated in previous “Strength”, the integrated automotive assembly industry has begun,

b. Building cooperative relationship with other provinces in central region

Quang Nam province is exploring cooperation with other 6 provinces in central region including city of Da Nang and Quang Ngai province in such policy fields as 1)promotion of attracting further foreign direct investment, 2)co-management and use of transport infrastructure 3)development of eco-friendly urban areas. Currently, in order to work together in seven regions, signing for the agreement is in preparation.

c. The second East-West economic corridor development plan

The second East-West Economic Corridor development plan centered on the second National Highway No. 14D is in progress.

1-4)<u>Threat</u> of Quang Nam province

a. Harsh Competition in attracting foreign direct investment with neighboring regions

Competition to attract foreign direct investment including Japanese investors has been intensified with other neighboring regions.

b. Western economy affects the economic situation of Quang Nam province

With the development of economic globalization, economic conditions in international markets, such as Europe and the United States, have come to affect the economy of Quang Nam province.

2) Policy recommendations based on the SWOT analysis of Quang Nam province

2-1) Policy for enhancement of the <u>Strength</u> of Quang Nam province

As similar to city of Da nang, it is important to continue to promote food processing by utilizing abundant marine resources, and to take full advantage of the abundant tourism resources. Also, Qung Nam province should proceed to take full advantage of the capabilities of the port infrastructure, and to promote logistics functions.

2-2) Policy for alleviation of the <u>Weakness</u> of Quang Nam province

It is important to promote the development of vocational training facilities for expansion to train skilled workers. This will contribute to strengthening the competitiveness of the automotive manufacturing sector increased accumulation is expected in the future. It is also important expansion and development of land transportation network, including the arterial National Highway No. 1, and appropriate maintenance and repair.

2-3) Policy for promotion of realization of <u>Opportunity</u> of Quang Nam province

In order to promote an early service provision in the planning of transport infrastructure, there is a need for strengthening of public relations, the strengthening of cooperation with the central government and related agencies.In addition, it should be strengthened that the development of supporting industries which are centered on the integrated automotive industry.

2-4) Policy for overcoming <u>Threat</u> of Quang Nam province

It is important to promote the industrial development of the central region as a whole to promote cooperation with neighboring provinces, by utilizing the strengths and comparative advantages of each region. It is also important to promote co-existence and co-prosperity in the entire region.

The above discussion is summarized in the table shown on the following page.

Table 8.1-2(2) SWOT analysis in Quang Nam

Strength	Weakness	Opportunity	Threat
・Relatively rich aquatic, silica and tourism resources ・Relative competitiveness in leather and wooden products ・Existence of the Chu Lai Airport, Ky Ha Port and Tam Hiep Port and vicinity to the Da Nang Airport ・Relatively lower labor cost and larger labor population	・Lack of highly competitive manufacturing products ・Relatively smaller road transportation capacity ・Relatively lower recognition degree among foreign investors	・Newly established automobile assembling lines in Trung Hai Industrial Zone providing a significant attraction for SMEs in supporting industry ・Construction of the New East-West Corridor newly approved ・Inter-provincial Cooperation Agreement with Quang Ngai	・Development of supporting industry becoming a hot issue in all over the country ・The neighboring regions also very active in attracting FDI, especially FDI from Japanese SME ・Economic downturn in Europe hampering investment from European countries and resulting in the shrinking of the international market
>Developing processing industries fully utilizing aquatic and silica resources >Promoting tourism together with the related industries >Further improving existing logistic infrastructure facilities	>Reinforcing vocational training consistent with the strategy stated on the left >Further improving road transportation facilities >More public relations and publicity activities, including follow-up activities to foreign investors once visited Quảng Nam	>Strengthening public relations and publicity with regard to the above-mentioned good news >Better prepared for the forthcoming operation of new industrial zones and new highway >Fostering supporting industry for automobile	>Reinforcing economic cooperation with neighboring regions based on the identifiable structural complementarity

(3) Quang Ngai province

1) SWOT analysis in Quang Ngai province

1-1)Strength of Quang Ngai province

a. Accumulation of heavy and chemical industry

Strength of Quang Ngai province is an accumulation of heavy industry, which is supported by the shipbuilding factory and the largest oil refinery in Dung Quat port. Another advantage is that the Economic Zone Dung Quat port as the core oil refining has been specified already.

b. Transport infrastructure

Quag Ngai province has well-developed available transport infrastructure such as National Highway No.1, Dung Quat port, and Chu Lai airport and Ky Ha port, two of which are located in Quang nam province.

1-2)Weakness of Quang Ngai province

a. Domestic and international competitiveness of the manufacturing sector is weak

In Quang Ngai province, there is competitive petroleum refining industry. However, strengthening the competitiveness of other manufacturing industries is still issue.

b. Lack of capacity of the National Highway No. 1

Highway to contact Quang Ngai Province and other regions is only the National Highway No.1. as it is similar to Quang Nam province, bridge across the river has become a bottleneck and the maintenance and repair of the road surface condition is not good. As a result, traffic capacity has been declining and traffic jam has been caused.

1-3)Opportunity of Quang Ngai province

a. Development of a new master plan of Dung Quat Economic Zone

To attract more foreign capital to Dung Quat Economic Zone, review of the master plan is being carried out.

b. Building cooperative relationship with other provinces in central region

Quang Ngai province is exploring cooperation with other 6 provinces in central region including city of Da nang and Quang Nam province in such policy fields as 1)promotion of attracting further foreign direct investment, 2)co-management and use of transport infrastructure 3)development of eco-friendly urban areas. Currently, in order to work together in seven regions, signing for the agreement is in preparation.

c. The second East-West economic corridor development plan

The second East-West Economic Corridor development plan centered on the second National Highway No. 14D is in progress via Quang Nam province.

1-4)Threat of Quang Ngai province

a. Harsh Competition in attracting foreign direct investment with neighboring regions

Competition to attract foreign direct investment including Japanese investors has been intensified with other neighboring regions.

b. Western economy affects the economic situation of Quang Ngai province

With the development of economic globalization, economic conditions in international markets, such as Europe and the United States, have come to affect the economy of Quang Ngai province.

2) Policy recommendations based on the SWOT analysis of Quang Ngai province

2-1) Policy for enhancement of the Strength of Quang Ngai province

Taking advantage of the existing integrated oil refining industry, it is important to promote development of manufacturing in the field of petroleum processing. In addition, from the viewpoint of the development of supporting industries which is a core industry, it is important to embody the industrial policy. In addition, Quang Ngai province should go forward to promote further logistics functions by taking full advantage of the capabilities of the Dung Quat port.

2-2) Policy for alleviation of the Weakness of Quang Ngai province

It is important to promote the development of vocational training facilities for expansion to train skilled workers. This will contribute to strengthening the competitiveness of the ship-building and oil refinery related manufacturing sector. It is also important expansion and development of land transportation network, including the arterial National Highway No. 1, and appropriate maintenance and repair.

2-3) Policy for promotion of realization of Opportunity of Quang Ngai province

In order to promote an early service provision in the planning of transport infrastructure, there is a need for strengthening of public relations, the strengthening of cooperation with the central government and related agencies.

2-4) Policy for overcoming Threat of Quang Ngai province

It is important to promote the industrial development of the central region as a whole to promote cooperation with neighboring provinces, by utilizing the strengths and comparative advantages of each region. It is also important to promote co-existence and co-prosperity in the entire region.

The above discussion is summarized in the table shown on the following page.

Table 8.1-2(3) SWOT analysis in Quang Ngai

Strength	Weakness	Opportunity	Threat
· Boasting of the largest oil refinery industry in Viet Nam and the authorized Dung Quat EZ · A large scale shipbuilding complex in the making · Existence of the Dung Quat seaport and vicinity to the Chu Lai Airport, Chu Lai Port and Ky Ha Port	· Lack of highly competitive manufacturing products apart from oil refinery and shipbuilding · Relatively smaller road transportation capacity · Relatively lower recognition degree among foreign investors	· Making of new MP for the further development of Dung Quat EZ in progress · Construction of the New East-West Corridor newly approved · Inter-provincial Cooperation Agreement with Quang Nam newly concluded	· Development of supporting industry becoming a hot issue in all over the country · The neighboring regions also very active in attracting FDI, especially FDI from Japanese SME · Economic downturn in Europe hampering investment from European countries and resulting in the shrinking of the international market

>Developing processing industry closely related to the existing oil refinery industry >Fostering supporting industry relevant to the existing shipbuilding industry >Developing logistic sector fully utilizing the existing infrastructure facilities	>Reinforcing vocational training consistent with the strategy stated on the left >Further improving road transportation facilities >More public relations and publicity activities, including follow-up activities to foreign investors once visited Quảng Ngai	>Strengthening public relations and publicity with regard to the above-mentioned future perspectives >Reinforcing economic cooperation with neighboring regions based on the identifiable structural complementarity	>The same as all the strategies stated on the left

8.1.3 Evaluation of the Comparative Advantages of Ba Ria Vung Tau Province

Chapter 7 of this report provided an overview of basic direction of industrial policy for Ba Ria Vung Tau province and the southern region, the current status of the economy and industry, the basic policy of developing industrial zones, including specialized industrial zone initiated by Ba Ria Vung Tau People's Committee. Based on the result of the understanding of the current status, the SWOT analysis in termes of strengths, weaknesses, potential and threat analysis was conducted. On the basis of the result of the SWOT analysis, the basic direction of the industrial policy associated with them was recommended in this chapter.

(1) SWOT analysis in Ba Ria Vung Tau province

1)<u>Strength</u> of Ba Ria Vung Tau province

a. Abundant natural resources

As strengths of Ba Ria Vung Tau province, it can be firstly mentioned that it is blessed with abundant natural resources.。 In particular, it is rich in mineral resources such as oil and gas and marine resources. As mentioned in Chapter 7, the amount of oil reserves in the waters near Ba Ria Vung Tau province has 1.5 billion tons while gas has been estimated at 1 trillion cubic meters. On the basis of these mineral resources ministry, the province has built a large-scale thermal power plant. And it has supplied 40% of electricity supply across the country Vietnam as a major energy supply base. In addition, as the industrial zone to attract industries to advance in recent years has focused on petroleum refining, the development of Long Son Oil and Gas Services Industrial Zone has been undertaken. These are the areas wherethe province will continue to exert as its strengths .

In addition, the province is blessed with a good marine environment with the 10 million km2 continental shelf of and 305km coastline. The province can serve as a supply base for rich seafood. In fact, the annual catches of the same province has risen to about 250,000 tons, and it is located in the 3rd top in Vietnam. Number of companies being involved in the seafood processing industry has amounted to approximately 220 companies. In addition, the amount of exports of processed products seafood has reached to 200 million dollars per year on average. In this way, it can be said that the province will continue to function as a supply base of marine resources.

b. Comparative advantage in the field of steel industry

Then, the province has had highly integrated steel production industry. In this respect, it can be said that highly integrated steel industry is one of the factors that have been holding the province economic power is greater than per capita GDP 5,000 US $ so far. Therefore, it must be highlighted as strengths of the province. Currently, most of the group of companies in the industrial zone being integrated into business operations is a steel-related industries. They continue to maintain a high yield. Steel industry should continue to be strengthened as the continued strength of the province.

c. Port logistics infrastructure fulfilling

Is in the northwest of Vung Tau city, Cai Mep-Thi Vai Port is partially in service. As a large-scale marine logistics infrastructure, this port is functioning today. In the future, development of international port extensions and enhancement of the same port group is planned. The province in the near future, has great potential which can function as a hub port logistics base in the southern region of Vietnam.

d. Tourism

Ba Ria Vung Tau province is counted as one of the central district of the seven priority tourism development in Vietnam. The province has a 305 km coastline and has a high potential of marine tourism In addition, Con Dao island is located in the southwestern 180km from Vung Tau city, and it has the primeval forest, beach, and its heritage is rich in history. This island has a high potential as a base for tourism development. Tourism is not only aimed to promote the single. Be considered, such as industrial development tool, which is located together with the operation of the Convention and Tourism International Conference Centre, in the hinterland of the industrial zone. In other words, the tourism industry is an industry that can be utilized in a composite manner. In the future, it is important to take measures taken as part of complex industrial development tourism. Promotion of the tourism industry can back up the activation of economic and industrial province.

e. Region to complement the industrial activities of the neighboring cities and provinces

As seen previously, Ba Ria Vung Tau province is complementary for the neighboring cities and provinces rather than competitive to, for instance, Ho Chi Min city, Dong Nai province, Binh Duong province, Long An province. That is, province may provide basic steel, energy, and services as health resort tourism. In this way, province has a high potential to demonstrate the unique features that other regions do not have, and it will play the pivot of inter-regional cooperation.

2)Weakness of Ba Ria Vung Tau province

a. Industrial structure lacking in diversity

Weakness of Ba Ria Vung Tau province is just the flip side of strengths. That is, the industrial structure lacking in diversity. Namely, the industrial structure in the province has been overly dependent on mineral resource extraction industries. As long as this industrial structure is maintained, the vision of industrial development of the province, from the perspective of the medium and long term, is not necessarily bright. The trend has emerged in such points that the production of manufacturing industry in GDP is low, and the competitiveness of the manufacturing sector is low. In the future, in order for the province to continue to adopt a policy to promote supporting industries, a wide range of assistance in the manufacturing field, and the development of business activities is essential.

b. Industrial structure excessively reliant on material supply

Ba Ria Vung Tau province is strong in the steel industry and it is rich in marine resources. However, province is only the present situation that is supplied as a raw material for these products. The province has no matured mechanism to supply the products with high value-added processing. It is essential that material processing needs integration of various industries, including manufacturing and processing technology. This is a challenge that province must tackle in the future.

c. Labor force supply

Less population, less labor force aged 15 and over and poor supply capacity of the worker is the third weakness of the province. Many manufacturing industries which belong to the supporting industry are labor-intensive industries. Therefore, capacity of the labor force can be said as the lifeblood of the industry. In the province, which ever had a higher accumulation of apparatus industry, which is capital-intensive industry, has supported the regional economy. Thus, the lack of supply of labor force did not become the urgent challenges. In the future, in order for the province to proceed on to attract supporting industries, it is essential to overcome this challenge.

d. Accessibility to big cities

Ba Ria Vung Tau province is far from the center city of Ho Chi Minh City. The province is inferior to other provinces in terms of accessibility. At present, only National Highway No. 51 has become a main trunk transportation infrastructure. As for present time from the center of Ho Chi Minh City, it takes about two to three hours. Place of consumption and business partners are integrated in the larger cities. The proximity of such major cities can be a major factor inhibiting the advancement of enterprise motivation.

3)<u>Opportunity</u> of Ba Ria Vung Tau province

a. A variety of transportation infrastructure planning

As described in "Strengths" of 1), in the field of marine resources and tourism, considerable potential can be seen in the province. Similarly, the high potential in the province can be recognized in the field of transport infrastructure planning. In particular, there are many highway development plans. Those are plans of such new highways as Ho Chi Minh - Long Thanh expressway, which is scheduled to start of operation in 2017, Vien Hoa - Vung Tau expressway, which is scheduled to start in service in 2014 and Ben Luc - Long Thanh expressway, which is scheduled to start of operation in 2017. Those highways are all expected to be developed and will be in service in 2020. In the future, it is expected that the time required from the center of Ho Chi Minh City will be reduced to about 40 minutes. By achieving these plans, a large portion of the potential weaknesses are expected to be eliminated.

b. Potential as a base for logistics hub

Realization of the expansion of the function as an international port of Cai Mep Thi Bai port is expected. Thereby, the function of the province as a base for potential logistics hub in the southern region will increase dramatically. At the same time, when the International Airport Long Thanh, which is planned to open in 2020, is in service, high value-added fresh products can be transported with high speed.

4)<u>Threat</u> of Ba Ria Vung Tau province

a. Harsh competition with neighboring city and provinces

Promotion of supporting industries is not only an issue of Ba Ria Vung Tau province now. But it is also a challenge for other regions including Dong Nai province, Binh Duong province and other provinces in nation-wide Vietnam. Along with it, other regions have carried out various activities related to attracting supporting industries. In such a competitive environment, to miss the supporting industry development policies will lead to a serious setback in the field of industrial development policy in city of Hai Phong.

b. Adverse effects of the global economic downturn due to the globalization of the economy

In recent years, business partners have been expanding not only in Vietnam but also other ASEAN countries and other Western countries. Under such circumstances, effects of economic weakness in other countries may be a factor of sluggish of the industrial activity in Ba Ria Vung Tau province directly or indirectly. For example, the recent slowdown in the European economy and the reduction of investment from Europe may be cooling the entire international market and it may also lead to a reduction of industrial activity in Ba Ria Vung Tau province.

(2) Policy recommendations based on the SWOT analysis of Ba Ria Vung Tau province

1) Policy for enhancement of the Strength of Ba Ria Vung Tau province

It is important that the province should continue to support industrial activities by taking full advantage of the rich natural resources. The industrial structure of material supply from traditional type of province should be transferred to new type of processing industries. This new type of industry can be expected to enable the supply of high-value-added products. More specifically, it is important to promote marine products such as seafood processing industries by utilization of marine resources, and to take measures for promotion of metal processing industries as industries derived from the steel industry. In addition, from the viewpoint of a combination of industrial development and the abundant tourism resources, it is important measures for promotion of tourism industry in a form of complex and cooperation, such as integration with convention and tourism, and with recreation area and manufacturing. In addition, it is important to strengthen the complementary relationship with other provinces nearby, and to seek the cooperation measures in the field of economy and tourism industry.

2) Policy for alleviation of the Weakness of Ba Ria Vung Tau province

Such industries as qQuarrying, supply of seafood, mining of mineral resources are conventional material supply type of industries. In order to make the transition from the structure of these industries, the province should promote manufacturing related to the processing industry. These industries are qualitatively different from the traditional apparatus industries, which have been integrated into the province so far. The prime point is the supply of labor force. It can be thought that lack of population of province is likely to be obstacles to the promotion of labor-intensive manufacturing. In this case, it is necessary to take measures to bring in labor fore from other areas of Ba Ria Vung Tau province. For this purpose, it is necessary to improve the living environment for improving treatment of workers. In addition, there is a need for a comfortable urban development initiative to encourage the emigration of workersFor existing logistics facilities, it is necessary to achieve storage facilities, transshipment facilities, to expand further functions such as transportation facilities.

3) Policy for promotion of realization of Opportunity of Ba Ria Vung Tau province

In order to promote an early service provision in the planning of transport infrastructure, there is a need for strengthening of public relations, the strengthening of cooperation with the central government and related agencies.

4) Policy for overcoming Threat of city of Ba Ria Vung Tau province

Specialized industrial zone is an industrial zone that is intended especially to attract supporting industries. These industrial zones development as a core policy is trying to promote further development of supporting industry in all over Ba Ria Vung Tau province. To this end, taking measures to promote the industry only focused on supporting industries is not enough. It is important to take further measures to attract a wide range of industries such as processing and assembly companies to attract large companies to be subject to the supporting industries to supply spareparts and other products.

In addition, it is important to promote industrial development efforts while the southern region as a whole to cooperate with neighboring city and provinces including Dong Nai province or Ho Chi Minh city, utilizing the strengths and comparative advantages of each region, in order to realize the co-existence and co-prosperity in the entire region.

The above discussion is summarized in the table shown on the following page.

Table 8.1-3 SWOT analysis in BRVT

Strength	Weakness	Opportunity	Threat
· Abundance of mineral and aquatic resources · High capacity in steel production · Existence of the Port of Cai Mep Thi Bai · Excellent conditions for tourism development · An industrial structure more complementary than competitive in relation with neighboring regions	· An industrial structure over-dependent on mining & quarrying · Low weight of manufacturing among GDP and Lack of competitive fields in this sector · Relatively smaller labor population above age of 15 · Relatively longer distance to HCMC	· The National Highway No.51 under construction · The new international airport to be opened by 2015 · The Port of Cai Mep-Thi Vai expected to replace the two ports in HCMC in the near future in the handling of export and import goods · Strong support by the top leaders of both Japan and Viet Nam	· Development of supporting industry becoming a hot issue in all over the country · The neighboring regions also very active in attracting FDI, especially FDI from Japanese SME · Dong Nai Province having more advantages in attracting supporting industry with its existing big assemblers
↑	↑	↑	↑
>Developing seafood and metals processing industry >Promoting tourism together with the related industries >Reinforcing economic cooperation with neighboring regions based on the identifiable structural complementarity	>Identifying new fields of manufacturing to replace the dwindling mining sector >Improving living and working conditions together with other social welfare treatment for workers >Further improving existing logistic infrastructure facilities	>Strengthening public relations and publicity with regard to the above-mentioned good news >Better prepared for the forthcoming operation of new highway and new airport >Keeping close follow-up to the central government regarding further support	>Not exclusively sticking to the promotion of supporting industry, but rather envisioning it as an accompanying effort or a result of attracting the investment of large assemblers >Development of processing industry being an immediate action followed by promotion of assembling and supporting industry

(3) Future scenarios demonstrate comparative advantage with an eye on the future development of transport infrastructure in Ba Ria Vung Tau province

Towards the further demonstration of the comparative advantage of Ria Vung Tau province, which were extracted in above (1), the future scenario based on the implementation of transport infrastructure projects will be described as below,.

1) Scenarios to help support for utilization and integration of local resources and industries in Ba Ria Vung Tau province

Regional resources in the province should be continued to take full advantage under administrative support, which include abundant mineral resources (oil, gas), tourism resources, marine resources, agricultural products by administrative support. More specifically:

- On the use of mineral resources, such industries as material supply, refining and conventional mining industries should be continued to be promoted
- In order to foster know-how in food processing, it is important to utilize marine resources, to take initiatives to contribute to the export of high value-added processing and production for an outside region. In this case, it is important for the development effort for technical capabilities to accumulate know-how in food processing
- On the use of tourism resources, it is important to take efforts to enhance the complex from the point of view of tourism with a view to cooperation convention tourism, and industry. For this it is important to accumulate know-how for the introduction of composite tourism

2) Scnario to utilize transport infrastructure in Ba ria Vung Tau province

Anticipation of the development of high-speed mass transit infrastructure highways, railways, ports international cargo, and the international airport. Measures to promote industrial development that assumes the use of these should be taken. More specifically:

- Development of logistics base international hub utilizing Cai Mep Thi Bay international port. Promote the development of harbor facilities and other facilities with a cargo handling, storage and cold storage of cargo
- Targeted to businesses of logistics-related industries, measures to attract special industrial zone
- Strengthening the promotion and development of strategies to attract more investors into specialized industrial zone utilizing the highway leading to improved proximity to Ho Chi Minh city
- Accelerate the promotion of tourism that leverages the infrastructure to facilitate mass passenger transport through highways and international airport
- In the area close to the international airport, air-front facilities should be promoted to be constructed such as large-scale accommodation, amusement facilities and the like

3) Scnario to collaborate between Ba Ria Vung Tau province and other neighboring provinces

Anticipating the development of the above-mentioned high-speed mass transit infrastructure, strengthening the relationship between cooperation and coexistence with other regions should be promoted. More specifically:

- To other areas adjacent market as the current construction materials delivery destination, it is important to develop the market in the field of manufacturing more versatile. It is important to support transition of the province's industry so that Ba Ria Vung Tau province can function as a high-value added material supply base for mechatronics, electronics and software.
- In order for Ba Ria Vung Tau province to function as a health resort tourism-base, it is important to promote regional development to attract customers from other regions adjacent visitors.

4) Habitat improvement scenario in Ba Ria Vung Tau province

Based on the above-mentioned high-speed mass transit infrastructure, laying appeal in the proximity of the city, it is important to ensure promotion of settlement of the short-and medium-term visitors and improvement of the living environment for residents. These measures are essential scenarios in order to promote to attract Japanese companies.

5) logistics hub development scenario in Ba Ria Vung Tau province

Based on the commencement of the provision of service of the motorway network, international airports and international ports, It is important to promote the regional development strategy of Ria Vung Tau province as a base for logistics hub of the southern region.

6) Scenario for promotion of further trade in Ba Ria Vung Tau province

Anticipating operation in international port and international airport, being caught as a new market in other regions adjacent, it is important to promote export-oriented manufacturing industries with a view to promote expansion of overseas markets.

8.2 Challenges for the Exercise of Comparative Advantage of Ba Ria Vung Tau Province and City of Hai Phong

In this chapter, the two regions of the Ria Vung Tau province and city of Hai Phong, two of which have special industrial zones development plan aimed at attracting Japanese companies, are extracted from among Northern, Central and Southern of regions as descussed in previous chapter. Various issues in order to demonstrate the comparative advantages of each region and required resolutions will be discussed from the viewpoints of both hardware and software in the following part.

(1) Challenges as seen from the hardware side

An overview about the various issues relating Ba Ria Vung Tau province and the Hai Phong City, in hard infrastructure development, it is as follows.

Table 8.2-1 Challenges related to hard infrastructure development and planning

	Infrastructure Items	Challenges
City of Hai Phong	Transport infrastructure (outside Industrial zone)	• National Highway No.5 capacity limitations • Improvement in the Hanoi-Haiphong highway • Lach Huyen port development plan • Cat Bi airport development plan
	Road infrastructure (access transport means)	• Insufficient port access road • Insufficient industrial zone access road
	Road infrastructure (inside Industrial zone)	• Existence of industrial zones not well developed by developers
	Eletric power supply facility	• Black-out issue
	Water supply facility	• Nothing particular
	Wast water treatment facility	• Existence of wastewater treatment facilities which are insufficient to prevent environmental pollution
Ba Ria Vung Tau province	Transport infrastructure (outside Industrial zone)	• National Highway No.51 is almost the only access road • National Highway No.51 highway widening project underway • Number of high-speed roads between cities are being planned • Cai Mep Thi Bai international port development plan • Long Thanh International Airport Development Plan
	Road infrastructure (access transport means)	• Poor feeder access road to the industrial zone from National Highway No.51
	Road infrastructure (inside Industrial zone)	• Existence of industrial zones not well developed by developers
	Eletric power supply facility	• Black-out occurs in spite of large-scale power generation facility

	Infrastructure Items	Challenges
	Water supply facility	• Nothing particular
	Wast water treatment facility	• Existence of wastewater treatment facilities which are insufficient to prevent environmental pollution

(2) Challenges as seen from thesoftware side

As for challenges as seen from thesoftware side, 1)Software issues for risk reduction investment from the point of view of Japanese investors and 2) Software issues associated with the current form of industrial zone management will be discussed.

1) Software issues for risk reduction investment from the point of view of Japanese investors

As for challenges in terms of software that is common to Ba Ria Vung Tau province and the city of Hai Phong, share of investment risk as seen from the perspective of Japanese investors, extraction, introduction and implementation of measures to reduce the risk of them. Here,the topic will be discussed by applying the method of investment risk analysis.

1-1) Framework for investment risk analysis

In general, the investment risk analysis step consists of the following three stages.

a. Investment Risk Identification

Extract the specific items of investment risk based on the results of interviews for Japanese companies that are moving into industrial zone in Vietnam

b. Investment Risk Evaluation

Risk items identified at above “a.” are evaluated based on the results of interviews about the size of the investment risk

c. Investment Risk Mitigation

The policy actions to reduce the investment risks which are identified at above “a.” will be extracted.

1-2) Investment Risk Identification

According to the interviews with Japanese companies that have already moved to the industrial zone, the main investment risks are extracted as follows.

Table 8.2-2 Challenges related to hard infrastructure development and planning

Type of the Risks	Details
a. Administrative Risk	complicated procedure / too much time consuming
b. Cost Overrun Risk	facility construction cost overrun / unexpected cost for construction delay / additional cost for insufficient infrastructure within IZs
c. Revenue Risk (Market Risk)	harsh competition in the local market / fail to develop new business relationship in Viet Nam
d. Capital Risk	capital shortage / fail to secure a bankability / difficulty of procure the capital from city banks in Viet Nam
e. Force Majeule	natural disaster / change of law / riot / confiscation by the Government
f. Communication Risk	fail to communicate with local customers
g. Cultural Gap Risk	dispute due to difference of way of business / dispute with workers due to difference of life-style
h. Dispute Resolution Risk	contract breach / fail to find out appropriate mediator or legal advisor
i. Residential Circumstance Risk	inappropriate residential facility / not suitable food / not suitable environment

3) Investment Risk Evaluation

According to the evaluation results of investment risk that has been extracted in above 2), the risk that most of the Japanese investors will feel the threat in Vietnam can be generally summarized in the following four points.

a. Administrative Risk
b. Cost Over-run Risk
c. Market Risk
d. Residential Environmet Risk

4) Investment Risk Mitigation

Based on the above consideration, aimed at promoting attracting Japanese companies, software measures for risk reduction are as follows.

Table 8.2-3 Major risk mitigation items

Type of Risks	Considerable Mitigation Measures
Administrative Risk	➢ Development of one-stop service ➢ Strengthening the support system by the local developers ➢ Provision of more information ➢ Development of partnerships with Japanese developers and Japanese private supporters
Cost Overrun Risk	➢ Development of rental factories in existing IZs ➢ Infrastructure within IZs should be properly done by developers ➢ Development of after-care system even in O&M phase ➢ Provision of more information ➢ Development of partnerships with Japanese developers and Japanese private supporters ➢ Development of special fund for specialized IZ tenants to alleviate their financial cost
Revenue Risk (Market Risk)	➢ Identify the needs of existing market. The needs are not limited to Japanese big firms in IZs, but also local firms' business connection needs. ➢ Arrange the opportunity for business matching through, for instance, holding business fair, production exhibition fair as well as investment seminar in Japan.
Residential Environmet Risk	➢ Provide workers in the industrial zone with residential area and promote the development of confortablr residential environment ➢ Develop a habitable city planning especially for Japanese with confidence under the leadership of the People's Committee,

2) Software issues associated with the current form of industrial zone management

Here, the form of the current operation of the industrial zone will be focused on. And the issues which can be a soft neck when Japanese investors are welcomed will be extracted.

As for planning, construction and operation of industrial zones, such entities are major relevant entities as a)Central government including Prime Minister's Office, Ministry of Planning and Investment, and the like, b)Local authoritiy including People's Committee, c)Industrial zone Management Committee and d) Developers. Their responsibility and relevant issues are summaryzed in the following table.

Table 8.2-4 Relevant entities of the existing industrial zonea and their issues

Relevant entities	Major responsibility	Issues
a)Central government (Prime Minister's Office, MPI etc.)	• Approval of a master plan for development of industrial zones submitted by People's Committee • Approval / acceptance of regular reports from the Industrial zone Management Committee • Fiscal measures to Industrial zone Management Committee	• It takes a long time to the approval of the People's Committee submissions • Involvement in the development plan policy guidance from the perspective of industrial zones, such as macro-regional grouping corner of another arrangement of the industrial zone feature is sparse
b) Local authoritiy (People's Committee)	• Formulate and industrial zone development master plan, Prime Minister of submission for approval • Infrastructure such as access roads outside Provincial Industrial zone, the development of infrastructure such as electricity and water supply • Sale of land acquisition and industrial zones to developers • Appointment of the chairman and vice-chairman of the Industrial zone Management Committee • Approval / acceptance of regular reports from the Industrial zone Management Committee • Support activities to attract investment of tenants	• For the management of the industrial zone after the land sold to developers involved are not given for the operation from the point of view of the public industrial zone. Consequently, the majority of the industrial zone management is left to the discretion of the developer. • •Based on the needs of Japanese companies, by public institutions such as the Chamber of Commerce, proposition of requests for improvements have been made to the People's Committee. However, People's Committee, involved policies and improving operation to the developer that takes into account the demands they are indirect, not ordered only involved in a limited range, it does not lead to improved management effectively • Development of access road infrastructure outside of the industrial zone, and promotion of the development of infrastructure and the power supply are needed
c) Industrial zone Management Committee	• Investment approval in accordance with the development of industrial zone developers • Approval of the investment and construction of facilities tenants • Monitored during operation monitoring	• Spin-simplification of licensing procedure and various political involvement for the wind-up are under the jurisdiction of the Board of Management. However, effective

Relevant entities	Major responsibility	Issues
	• Policy recommendations addressed to the needs of tenants and claims (People's Committee, report to the central government)	action could not be seen. For operation and maintenance of the industrial zone, the committee should prompt such political involvement as listening to the voice of the tenants, and guiding the developer • The function is where the exhibit as a point of contact for complaints of tenants demand is expected, at present, the function is sparse.
d)Developer	• Principal agreement with tenants • Infrastructure development, such as the development of the industrial zone section, the principal directly involved in the development of industrial zones	• For a private company, the higher the significance of public facility: Even (eg, operation and maintenance of the plant for small business loan), construction of facilities for the loss of revenue, to develop aggressive tend to hesitate some • Response to complaints about the needs of tenants are not enough to dispel the fears of tenants, and the current speed is slow

As seen in 1), the following risks can be reduced by the involvement of policy aimed at improving the management of the industrial zone, which is implemented by developers, the Management Committee and People's Committee. Such risks are, as seen in previous discussion, 1) Administrative Risk, 2) Cost Over-run Risk, 3) Residential Environmet Risk. However, at present, that there is room for fintroduction of further effective measures. However, it has not yet been clearly articulated which agency should take responsibility for mitigation of these risks.

Also, as for the reduction of Market Risk, People's Committee can be involved with improvement of current status of local industry and other support to for the development of new markets, through relevant information provision and organizing exhibitions and business fairs. However, at present, active support in this field implemented by local authorities such as People's Committee could not be seen.

As counter measures for the current status in Vietnamese side, Japanese tenants and Japanese public institutions are taking the following ones.

- Offer of requests for improvements and operation of industrial zone for the People's Committee through Japanese public institutions including government, industry associations and so forth
- Improvement measures such as recommendations and advice that takes into account the implementation of the study and its presentation to the People's Committee.
- Information collection by Japanese companies and Japanese tenants to understand the contents of the administrative procedures
- Action taken into account of the first priority for moving into Japanese developers.
- Measures to avoid administrative risk under the assistance of Japanese investment advisor

These Japanese tenants are practiced within the scope of their own efforts. Therefore, the above measures are not in systematic ones. Factors to be considered are the background of the above challenges, the following can be considered.

- Current industrial zone’s developers, which are State-owned enterprises or pure private companies, are obviously not public entities. Therefore, the direct involvement of the People's Committee with improvement of operation and management is difficult. Private developers are not actively implemented measures that worsen the profitability such measures as, for instance, industrial zone development for small and medium sized enterprises including development of rental factory, and development of small lots of compartments
- Special industrial zone planning in Ba Ria Vung Tau province and Hai Phong city is in progress. However, its infrastructure development pace is very slow. As the factor of such slow pace, there is a situation that in order to promote the development of private developers, residents demand must be actualized in advance. In other words, the infrastructure in the industrial zone at the stage, which investment companies is not certain to invest, may threaten the management foundation of private developers. However, when the candidate investment company visited the candidate site, if its infrastructure is not in place yet, then their wish of advance to that site would have been discourage. As a result, companies will not advance. This has become a vicious cycle.
- Similarly, in the case of private companies are the developers, introduction of direct public support from Japan is difficult to inject such as, for instance, financial support and technology transfer related technical cooperation in accordance with the industrial zone management and administration, direct input of experts to the site of the industrial zone management, infrastructure development in the industrial zone
- Sharing responsibility as well as authority is not clear for People's Committee and the Industrial zone Management Committee. In addition, it is not clear what kind of authority these public institutions can execute for private developers. Therefore, even if Japanese public entities request the developers to improve operation of industrial zones via People's Committee, it is not effectively done because People’s Committee is difficult to control the developer efficiently
- Simplifification and speed up of administrative procedures is a strong need for Japanese investors. On the other hand, it may lead reduction of jurisdiction for Vietnamese relevant agencies. Therefore, it is difficult to see progress. For instance, introduction of one-stop service is required to demonstrate strong initiative of the People's Committee.

8.3 Support Measures aimed at solving Challenges

For the exercise of comparative advantage in the region as mentioned in 8.1, the various issues that were extracted in 8.2 should be prompted. The support measures for solving these challenges including support for the Japanese side are discussed in this chapter.

1) The way of development of specialized industrial zones taking into account the exercise of regional comparative advantage

As software measures for investment risk mitigation required for special industrial zones in city of Hai Phong and in Ba Ria Vung Tau province, the following two points should be emphasized.

a. Special industrial zone as a base for integration of economic and industrial capabilities in the region to benefit

In the city of Hai Phong, accumulation of economic and industrial fuction lead by electric and electronic industry and mechanical system can be seen. In Ba Ria Vung Tau province, an integrated enterprise of basic material supply type industries such as petroleum, iron and steel, non-ferrous metals can be seen. By collecting above special industrial complex enterprises as the core of the industry into the said specialized industrial zones, the contribution to the further activation of local industrial activity to Ba Ria Vung Tau province and the Hai Phong City can be expected. In addition, the common characteristics of two regions cane be cited that they have a high potential as a regional logistics hub core with large seaports.

b. Special industrial zone as a base for the development of business activities that contribute to the incubator for small and medium businesses

Entry into the industrial zone involves various risks. It is a major factor that inhibits the advance especially for SMEs which is vulnerable in terms of managerial strength From the perspective of risk mitigation of these companies, special industrial zones are required to demonstrate management support, such as the development of business activities as incubation functions. Specifically, rental factory development, tax incentives and so forth targeting SMEs. However, under the current situation of management industrial zone in Vietnam, the portion of the operation is left to private developers in large. For special industrial zone to function as an incubator, it is necessary to grant a certain level of public nature.。

2) Classification of the specialized industrial zone

Classified from the point of view of the following four industrial zones are as follows. namely, 1) the principal entity for infrastructure development within industrial zone, 2) the principal entity for management of the industrial zone, 3) investment advisor to the industrial zone, 4) the principal entity for infrastructure development outside industrial zone. Currently, principal entities for infrastructure development and operation of industrial zone are all private developers consisting of 1) local developer, 2) JSC developer consisting of local and Japanese company and 3) Japanese developer. As for infrastructure development outside industrial zone, Vietnamese public authority such as People's Committee is in charge and ODA is injected to some extent. On the other hand, it is considered that the principal public type special industrial zones and public entities involved in infrastructure development and management in the industrial zone, and public-private partnerships PPP type special industrial zone.

Table 8.3-1 Classification of Industrial zone

	Entities within industrial zone			Infrastructure developer outside industrial zone
	Infrastructure developer within industrial zone	Industrial zone operator	Investment advisor	
At present	**Private (Local developer)**	**Private (Local developer)**	**Japanese advisor**	**Public＋ODA**
	Private (JSC: Japanese and Local developer)	**Private (JSC: Japanese and Local developer)**	**Japanese advisor**	
	Private (Japanese developer)	**Private (Japanese developer)**	**Japanese advisor**	
Public type	**Public＋ODA**	**Public ＋ODA(dispatch of specialists)**	-	**Public＋ODA**
PPPtype (lease type)	**Public＋ODA**	**Private**	-	**Public＋ODA**
PPPtype (BOT/BTO type)	**Public＋Private （＋ODA）**	**private**	-	**Public＋ODA**

Some of the recommendations which were discussed in 8.2, so-called as pure public type industrial zone with the public nature, and PPP type industrial zone with which private and public entities are involved, can be considered. Advantegs and disadvantages as to above recommended types are as follows:

a. Pure public type industrial zone

- **Advantages**
  - ➢ Since public entities are involved with industrial zone development, the following policy measures, which is difficult to ensure profitability in the short term but can expect great public benefit, can be introdudced, such as industrial zone development for small and medium sized enterprises including development of rental factory, and development of small lots of compartments, and 、industrial zone development proactively even under circumstances of pending a principal investment. Those

measures could be much more easily introduced comparing to other private developers' undertakings

- So far, Japan's public support has remained as offering suggestions and requests, such as the sharing of research results indirectly. For industrial zones with which public entity is involved, the following direct support measures are possible to be introduced, such as technical cooperation of industrial zone management expertise, direct input of Japanese experts or senior volunteers subject to internal management, financial support in accordance with the development of the industrial zone infrastructure, which include wastewater treatment facilities stabilization device, power supply equipment and so forth.
- To support aspects of the management of special industrial zone, the launch of the council organization is possible. To the Council, representatives of the industrial zone developers who have already successfully developed another industrial zone in another province, government officials in Viet Nam, Chamber of Commerce, and other industry organizations are to participate as members. Above-mentioned members share information with each other towards attracting investment, through the conference, which will be held on a regular basis, operational know-how as a share of public industrial zone, course correction if needed. The Conucil Organization aims at participatory management system for advanced industrial zone.
- Due to the fact that Japan's public support is turned more than ever, a significant announcement effect can be expected. This may contribute to significantly reduce the risk of investment by Japanese investors.
- Industrial zone plan, which exposes public nature, did not exist in Vietnam so far. Special characteristics of special industrial zone can be cited as such public nature. In this regard, spread effects on other industrial zones, and the possibility of development of the model industrial zone can be expected.

- **Disadvantages**
  - In Vietnam, the industrial zone has been positioned as commercial facilities. And the operational activities for industrial zones are considered revenue-generating activities. Therefore, in order for public entities, such as People's Committee, to be directly involved in the management of the industrial zone, the certification that the specialized industrial zone is a public institution that is different from the other existing industrial zones as commercial facilities, and new legislation might be required. However, such legislation usually takes a long time, and it is more likely that introduction of this measure might be unrealistic.
  - Public entities who are engaged in the management of the industrial zone as a developer may have a potential to cause the rebound of the local authorities in other provinces and other private developers, which are exposed to harsh competition with other industrial zone developers.
  - In general, the sense of the cost of public institutions is relatively poor. Therefore, direct involvement with industrial zone operation done by public institutions like this could result in failure of management of the industrial zone, and could cause such situation as inefficient management of industrial zones with accumulated deficit.

Based on the above-mentioned advantages and disadvantages, it can be said that feasibility of development of pure public industrial zones is not so high. Nextly, advantages and disadvantages for PPP type industrial zone development are shown as follows:

b. PPP type industrial zone

- **Advantages**
  - Most of the advantages of pure public type industrial zones can be expected to PPP type industrial zone similarly.
  - In addition, if Japanese developers are the principal developers incorporation with the public entities,.reduction of investment risk can beexpected significantly. Moreover, greater announcement effect can be expected and the development of investment by Japanese companies can be expected. Management know-how can be expected to be accumulated within local government agencies directly through Japanese developer. Therefore, the transfer of technical know-how relating to industrial zone management is performed reliably.

- **Disadvantages**
  - Needs to attract a Japanese developer which is interested in investment in industrial zone management as one of members of SPV (Special Purpose Vehicle).

Based on above advantages and disadvantages, it can be said that feasibility of development of PPP type industrial zone is relatively higher comparing to pure public type industrial zone.