#### Preface

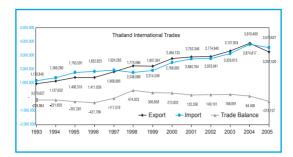
Office of the National Economic and Social Development Board (NESDB) has published Thailand in Brief for in 2003, 2004, and 2005 respectively. This is to disseminate interesting information about Thailand, particularly concepts and direction of country development. This Thailand in Brief has been widely acclaimed by the public. Therefore, Office of the NESDB has a policy to publish this book annually.

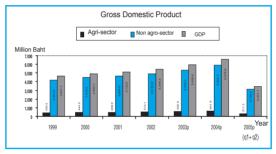
Therefore, in 2006, NESDB has also published Thailand in Brief 2006 (Thai version and English version) in the fourth consecutive year. This is to strengthen understanding, knowledge-based society among interested Thais and foreigners. In addition, the book provides information on economic and social development, statistical movement trend, and strategic issues as well as NESDB roles on country development. This is to encourage participation from stakeholders gearing up for country development process in the future.

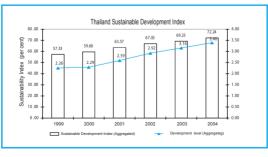
NESDB hopes that the Thailand In Brief 2006 would be helpful for interesting government agencies and the public both at domestically and internationally. The Office would like to use this opportunity to thank all agencies for their information and collaboration of all office staff.

Office of the National Economic and Social Development Board

January 2006







# Cost of business start-up in Thailand

	<b>3001 01 Buomicoo</b>	otare up iii	· · · · · · · · · · · · · · · · · · ·
		Expe	nses
		Baht	USD
1.	Visa		
	Work permit (new), 14 days	750/1,500/3,000	19/38/75
	One-year visa, 20 days	1,900	48
	Re-entry visa, 2 days	1,000*/3,800*	25*/95*
2.	Registration (Official Government Fee)		
	Company registration, 21 days	5,500/1,000,000 (*) (Max. 275,000)	US\$138 / US\$25,000 (*)(Max. US\$6.875)
	List 2 Alien Business License, 60 days	40,000-500,000	1,006-12,581
	List 3 Alien Business License, 60 days	20,000-250,000	503-6,291
	Factory license, 30 days	500-60,000	13-1,500
2a	. Registration (Typical fee charged by		
	a law firm to process) (1)		
	Company registration, 15 days	40,000	1,006
	Alien business license	200,000	5,032
	Factory license, 30 days	100,000	2,516
	Remarks: ( * ) = registered capital		
3.	Accounting and finances		
	Tax returns and VAT	20,000 per annum	503
	Translation fee/page	1,400	35
	Review/draft contracts and agreements	35,000 Baht or more	880
4.	Office achieved rents (2)	CBD	Non-CBD
	(2nd Quarter Data as of 2003)		
	(Baht/sq m/mth)		
	Grade A	477 (US\$ 12.18)	400 (US\$10.21)
	Grade B	346 (US\$ 8.83)	293 (US\$ 7.48)

Source: Board of Investment

Remarks: 1. CBD = Central Business District

2. Excluding management fees and air-conditioning expenses

# Minimum daily wage

	Baht	USD
Bangkok, Nakorn Pathom, Nonthaburi, Pathum Thani,	170	4.28
Samut Prakam and Samut Sakom		
Phuket	168	4.23
Chonburi	153	3.85
Saraburi	151	3.80
Chiangmai, Nakorn Ratchasima, Phan-nga	145	3.65
Rayong and Ranong	143	3.60
Ayutthaya	142	3.57
Chachoengsao and Krabi	140	3.52
Angthong, Chanthaburi, Karnchanaburi, Petchaburi, Ratchaburi	138	3.47
and Samut Songkram		
Chumporn, Lumphoon, Srakaew, and Sukhothai	137	3.45
Burirum, Kamphaengphet, Khon Kaen, Lopburi, Prachineburi,	136	3.42
Snghaburi, Suphanburi, and Trang		
$\textbf{Amnajcharoen,} \ \textbf{Chainart,} \ \textbf{Chaiyaphum,} \ \textbf{Kalasin,} \ \textbf{Lumpang,} \ \textbf{Loei},$	135	3.40
Mukdaham, Nakomphanom, Nakomsawan, Nakom Sri Thammarat,		
Narathivas, Nong Bualumphoo, Nongkai, Pattani, Pattalung,		
Petchaboon, Pitsanuloke, Prachuabkirikhan, Roi-et, Sakon Nakom,		
Satool, Songkla, Sri Sraket, Surat Thani, Trad, and Undon Thani		
Nakom Nayok and Phijit	134	3.37
Chiang Rai, Mae Hong Som, Mahasarakarm, Nan, Phrae,	133	3.35
Phayao, Surin, Ubon Ratchathani, and Yasothorn		

Source : Ministry of Labor

Remark: Information updated as of July 2004

# **Telephone service**

	Cost			
	Baht			
Installation fee	3,585-3,959	90-99		
Line lease per month	100, 200	2.52-5.03		
Local call/time	3 Baht/time	0.75		

Source: Telephone Organization of Thailand

Remarks: Information updated as of August 2004

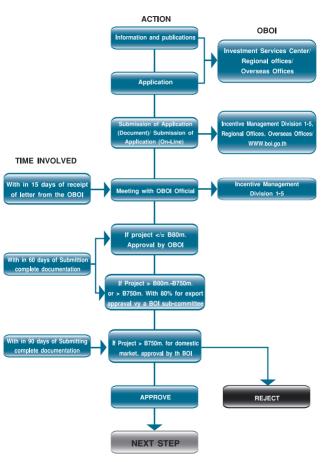
# Internet service charge/month

		_	
Service Providers	Startup Fee		Expense/Month
Fixed-line telephone			
CS Loxinfo	270	35	440 Baht
	270	70	720 Baht
	270	100	900 Baht
High-speed internet (ADSL)	Hours/	month	Expense/month
True 256/128	Unlin	Unlimited	
Pacific Internet 256/128	100 hours		3,600 Baht
Loxinfo 256/128	Unlin	nited	3,600 Baht

Source: Board of Investment

Remarks: Information updated as of July 2004

#### **BOI Promotion Procedure**



Source: Board of Investment

# Foreign investment promotion requested to BOI by foreign companies

Unit: million baht

Types	2003	2004	2005 (Jan-Apr)
Agricultural products	12,261.6	22,504.0	4,861.8
Mineral ans ceramics	18,417.9	64,467.4	3,848.4
Light industries/textiles	14,856.4	8,294.6	6,592.8
Metal products and mchineries	55,754.5	51,442.1	103,380.0
Elictrical and electronics progucts	63,161.3	79,411.1	29,546.8
Chemistry and paper	52,401.0	46,756.7	17,669.0
Services	31,839.4	34,131.7	12,471.8
Total	248,692.1	307,007.6	178,370.6

Source: Board of Investment

# Foreign investment projects approved by BOI

Unit: million baht

Types	2003	2004	2005(Jan-Apr)
Agricultural products	9,540.1	23,082.6	3,990.5
Mineral ans ceramics	16,836.9	59.464.1	6,453.0
Light industries/textiles	10,456.2	12,923.5	3,672.2
Metal products and mchineries	66,044.7	66,061.3	99,692.4
Elictrical and electronics progucts	43,190.3	89,466.3	34,984.6
Chemistry and paper	38,125.5	50,764.2	11,205.3
Services 28,394.9	15,529.4	14,039.9	
Total	212,588.6	317,291.4	174,037.9

Source: Board of Investment

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# Section 1 General Information



# 1. Historical Background

Formerly known as "Siam," the country was renamed "Thailand" on May 11, 1939. "Thai" means "freedom." Therefore Thailand means "the Land of Freedom."

# 2. Geographical Profile

#### 1. Geographical location

Slightly above the equator, Thailand locates on the Southeast Asian mainland covering landmass of 513,115 sq km. Length from north to south is 1,620 km. Longest

width measured east to west is 775 km. Northern border is adjacent to Lao PDR and Myanmar. Eastern border is next to Cambodia and the Gulf of Thailand. Western border is adjacent to Myanmar and Indian Ocean. Southern border is next to Malaysia. The country consists of four parts including North. Central Plain. Northeast, and South.

Northern Part consists of 17 provinces covering area of 169,600 sq km, 80 per cent of which are mountainous areas. These mountains are vital water sources of the country. Chiang Mai Province is a center of the upper northern part. Phitsanuloke province is the center of the lower northern part.

Northeastern Part consists of 19 provinces covering areas of 168,854 sq km., one third of the country's total area. Nong Khai Province, Mukdaharn Province, and Nakorn Phanom Province are gateways to neighbor country.

Central Plain consists of 26 provinces covering areas of 103,946 sq km. This part features abundant agricultural areas. It is physically and socio-economically divided into four sub regions including Bangkok, a country capital, and perimeter, eastern sub-region, upper central plain and western sub-region.

Southern Part consists of two longitudinal sides of this part bounded by seas. This part comprises of landmass of 70,715 sq km and of 14 provinces. On Andaman Sea, major provinces include Phuket, Phang Nga, and Krabi provinces. Major provinces on the Gulf of Thailand, for instance, are Suraj Thani Province and Songkla Province.

#### 2.Capital: Bangkok

3. Climate: Influenced by monsoon, Thailand features warm and humid climate. Average temperature is 29 Degree Celsius. In Bangkok Metropolitan, temperatures range from 35 Degree Celsius in April to 17 Degree Celsius in December. In general, there are three seasons including winter (November to February), dry season (March to May) and rain season (June to October)

4. Local time: GMT+7

# 3. Demography

#### 1. Population

Total population in Thailand were 62.38 million people, 30.80 million of which were males and 31.58 million of which were female (The Announcement made by the Ministry of Interior dated December 15, 2005). Thai people average age is 71.4 year. (67.9 years old for male and 75.0 years old for female). Most of Thais have Thai nationality. Other major ethnic groups are, for instance, Chinese, Indian and so on. Thai is an official language. Foreign language services are available in major cities. For religions, 90 per cent of population is Buddhism. The rest 10 per cent are Christian, Muslin and Hindu.

#### 2.Per capita income

#### Per capita incomes

Unit: Million Baht

Parts	2002 Per capita income	2003 Per capita income	2004 Per capita income
Bangkok and perimeter	223,078	230,997	260,195
Central plain	128,744	148,371	162,412
Northeastern Part	28,274	30,860	32,099
Northern Part	43,855	47,371	50,733
Western Part	68,527	74,545	78,961
Eastern Part	183,032	204,857	229,877
Southern Part	62,577	69,450	70,761
Total	86,249	93,164	102,447

Source: National Account Office, NESDB Remarks: 1. At 1988 constant price

2. 2003 and 2004 information are based on preliminary data

# 4. Political and Administration System

Political and administration systems in Thailand are under monarchy democracy. Parliament possesses of legal powers. Administration power is belong to the Cabinet. Jurisdiction power is belong to the Court.

Crowned in 1946, the current king is King Bhumibhol Adulyadej Rex., the Ninth King of the Chakri Dynasty. He is beloved king to all. Evidently, most of Thai citizens post his majesty the King and her majesty the queen's picture in their houses.

Supported by one-fifth of votes or more, Thai Prime Minister is primarily elected from the House of Representatives. After that his/her name is presented to the King for approval. To form the cabinet, the Prime Minister is to appoint 35 ministers or less. Basically, general election is organized, for at least, one time per four years. At present, the Prime Minister is Dr. Taksin Shinnawatra, head of Thai Rak Thai Party. He won the 2005 election, the second time for the Party.

Thai parliament consists of 500 members of the House of Representatives and 200 senators. Whilst 400 members of the House of Representatives are from single-member constituencies, the rest 100 are from proportional representation.

Thailand legal system is the mix of Thai customs and western laws. The Supreme Court is the highest court. Basically, judges rules out lawsuit cases in the name of the King.

Regarding administration system, the country is divided into 76 provinces, governed by governors. Each provincial administration is divided into district, semi-district, sub-district, and villages. Currently, there are totaling 795 districts, 81 semi-districts, 7,255 sub-districts, and 73,467 villages. For Bangkok Metropolitan, this capital city is divided into 50 districts, governed by the governor, publicly elected.



House of Representatives Statistics (MPs) Classified by Political Parties

Political parties	No. of MP from Single-member Constituencies	No. of MP from Proportional Representation	Total
Thai Rak Thai	308	67	375
Democrat	70	26	96
Chartthai	19	7	26
Mahachon	3	-	3
Total	396	100	500

**Source**: Election Commission Office **Remark**: Data as of November 1, 2005

# 5. Finance and Business

1. Currency: Baht (1 Baht = 100 Satang)

#### 2. Major currency exchange rates:

Countries	Currencies	Exchange Rete		
Countries	Ouriendes	Buying rate	Selling rate	
United States of America	US Dollar	40.6024	40.9004	
United Kingdom	Pound Sterling	71.6584	72.5084	
European Union	Euro	48.5177	49.1630	
Japan	Yen (100)	34.7296	35.2460	
Hong Kong	Hong Kong Dollar	5.2207	5.2870	
Singapore	Singapore Dollar	23.8521	24.2321	
Switzerland	France Swiss	31.3722	31.8116	
Australia	Australian Dollar	30.1314	30.7180	
Republic of China	Renminbee	4.9836	5.0634	
Canada	Canadian Dollar	34.1926	34.7769	

Remarks: Currency exchange rate of the Bank of Thailand as Of November 1, 2005

#### 3. Working hours

 Government agencies
 8.30 a.m. - 4.30 p.m.
 Mon-Fri

 Businesses
 8.00 a.m. - 5.00 p.m.
 Mon-Fri

 Banks
 9.30 a.m. - 3.30 p.m.
 Mon-Fri

 Department store
 10.00 a.m. - 9.00 p.m.
 Everyday

Remarks: Some banks operate in non working hours and holidays.

Currency exchange services are opened everyday.

#### 6. Infrastructures and utilities

#### 1. Transportations consist of five categories.

#### Land transportation

There are totaling 160,000 Km consisting of road networks in Thailand featuring highway networks and interregion, inter-provinces, and intra-province roads. These networks are composed of 52,665 Km of inter-region highway and inter-province highways, 146 Km of motorway, 175.9 Km of expressway, and of 100,000 Km of rural roads. Railroad network consists of 4,451 Km railroads covering 47 provinces.

#### Marine transportation

There are totaling 156 harbors capable of servicing ships of 1,000 GT (Gross Ton) or over, classified by types of harbors. These harbors include 94 Jetty (60%), 41 Quay (26%), and 17 Pier (11%), 4 Bouys (3%).

#### Aviation

There are totaling 36 airports, seven of which are international airports, for instance, Don Muang, Chiang Mai, Chiang Rai, Had Yai, Phuket, and U Taphao (run by Thai Royal Navy) International Airports and Suvarnabhumi International Airport (to be operated in June 2006). There are totaling 26 regional airports, 8 of which locate at the Northern Province, 9 of which located Northeastern Part, one of which locates at the Central Plain, and 8 of which locate at the Southern Part. Three private airports are being operated at Samui Island, Sukhothai Province, and Trad



Province. At this time, there are 89 international airlines flying to Thailand. There are totaling 277,427 departures and arrivals in Thailand transporting 37,341,015 passengers.

#### Pipeline petroleum transportation

At present, 32 million liters per day and 2,000 cubic feet per day are transported via pipeline networks in Thailand. The country has natural gas pipeline system in land and seawater for totaling 2.652 km.

#### Mass transportation system

There are three kinds of mass transportation systems. The first one is a 20-km BMT underground train consisting of 18 stations servicing Hua Lumphonge-Bang Sue. There are two sky-train lines including Sukhumvit line (16.8 km consisting of 17 stations linking On Nuch-Mor Chit) and Silom line (6.3 km consisting of 6 stations linking National Stadium and Taksin Bridge). Another mass

transportation is bus service of the Bangkok Mass
Transportation System-BMTS covering 106 lines servicing
Bangkok Metropolitan. In addition, there are many joinventure bus services and boat services.



2. Communication and Telecommunication consist of three kinds of services:

#### Fixed Line Services

Currently, there are totaling 8.6 million fixed line services available in Thailand, 4.5 million of which are available in Bangkok and perimeter and 4.1 million of which are available in regional areas. Telephone utilization rate per 100 populations is 10.59.

#### Cellular Mobile Services

Radical high growth rate in cellular mobile services has been observed recently as numbers have been increased from 2.8 million in 2001 to 27.5 million today. Services now cover 43.2 per cent of total population.



#### Internet Service:

Currently, there are totaling 18 internet service providers, five of which are major players. At present, there are totaling 7 million service users or 11 per cent of total population increased from 1.5 million service users in 1999

#### 3. Energy

#### Electricity

Electricity generating capacity of the EGAT as of December 2004 was totaling 26,056 MW, distributed through high-tension networks of 28,318 Circuit-KM. There are totaling 196 high-tension stations servicing the Metropolitan Electricity Authority covering 2.47 million users and the Provincial Electricity Authority servicing citizens and businesses covering 73 provinces and 13 million service users

#### Petroleum

Today, seven refineries with total capacity of 1.037 million barrel per day are being operated in Thailand. There are storage facilities located throughout the country with total capacity of 7,240.3 million liters.

#### Natural gas

Production capacity in Thailand is 2,884 cu ft./day. There are gas separation plants with total capacity of 2,158

cu ft./day. In addition, in Bangkok, there are five operating gas stations.

#### 4. Water Supply

Currently, there are three water supply organizations in Thailand:

- Bangkok Metropolitan Public Water Supply
   Authority: this organization supplies 1,538.50 million cu m.
   in 2004 servicing 1.61 million users or 7.24 million persons in Bangkok Metropolitan, Nonthaburi province, and Samutprakarn Province.
- Provincial Public Water Supply Authority: The organization supplies public water of 827.12 million cu m. in 2004 to all areas except Bangkok. Currently, there are totaling 2.13 million service users or 9.56 million persons.
- Other local administration and private enterprises with concessions supply water to local communities.
   Corporately, East Water Public Company supplies raw water to industrial plants in Eastern Seaboard.

#### 5. Education

Function literacy in Thailand (14-50 years old) in 2003 was 96.6 per cent. Years in school, by average, in 2004 were 8.1 years. Compulsory education is 9 years (grade 1 to grade 9). At present, Thai government provided free education up to grade 9 to every Thai citizen. Free nursery is also available for those of ages of 3-5 years old.

#### School Statistics Nationwide Classified by Types of Educations

Unit: Place

Year			Secondary school			College/High Vocational Degree or equivalent	Bachelor degree	Higher education	Total schools
2000	45,398	33,488	10,384	2,799	896	638	195	61	50,306
2001	45,250	33,905	10,554	2,837	898	650	203	62	50,908
2002	44,760	33,043	10,490	2,837	889	646	208	66	50,089
2003	47,496	32,689	10,313	2,864	872	839	198	88	48,973

Source: Secretary Office of Education Council, Ministry of Education.

#### 6. Healthcare

In 2005 (September 2005) 96.3 per cent of Thai citizens has accessed to healthcare insurance system. In 2003, there were totaling 1,287 public and private hospitals and healthcare facilities. Patient beds per population were 1: 469.

#### Medical personals and healthcare professionals

Unit: person

Year	Physicians	Dentists	Pharmacists	Professional Nurses	Technical Nurses
2001	1:3,277	1:14,384	1:9,054	1:794	1:2,080
2002	1:3,569	1:17,606	1:9,948	1:733	1:2,233
2003	1:3,476	1:17,182	1:8,807	1:678	1:2,625
2004	1:3,305	1:15,143	1:8,432	1:652	1:3,085

**Source :** Policy and Planning Office, Office of Permanent Secretary, Ministry of Public Health

# 7. Tourism

#### 1. Tourism Industry

Tourism industry has played significant roles to economic and social development. Thailand has been recognized

for people's hospitality, ancient cultures, and gourmet Thai cuisines. Tourists are increasing. The country has a facility servicing tourists, for instance, tourist polices and tourist service center and so on.

**Tourist Statistics** 

	2002	2003	2004	2005
Tourists (million)	10.80	10.00	12.00	13.38
Stay (days)	7.98	8.19	8.00	8.10
Revenue (million Baht)	323,484	309,269	384,000	450,000

Source: Tourism Authority of Thailand

Remark: 2004 and 2005 primary data

#### 2. Rules and regulations for international tourists

Tourists visiting Thailand are subject to hold passports and visas. Tourists from some designated countries are able to stay in Thailand for 30 days or less without visas, while others do. Transit-visa holders are able to stay in the country for 30 days or less. Tourist-visa holders are able to stay for 60 days or less. Non-immigrant visa and Diplomatic-visa holders are able to stay in Thailand for 90 days or less.

#### 3. Major tourist attraction sites

**Beach:** for instance, Patthaya, Phuket Province, Samui Island, Koh Chang Island and world-class island in Phang Ngan Province and Krabi Province.

Nature: for instance, Phu Kradueng of Loei Province,
Doi Inthanont of Chiang Mai Province, Kao Yai of Nakorn
Ratchasima Province and so on.



Culture: Lanna Culture at Chiang Rai Prvince, Phayao Province and Nan Province. Isan Foods in Nong Khai Province, Udorn Thani Provice, Khon Kaen Province and Ubon Ratchathani Province and so on.

Niche Market: (Adventure, Health, and Agriculture) for instance, long stay, cruising, marriage and Eco-tourism, adventure, and major events (for instance, Song Kran Festivity and Loi Krathong Festivity)

**Manmade tourist attraction sites:** Koh Rattanakosin of Bangkok Metropolitan, Elephant Training Center and Amusement Park and so on.

For further information, please check www.tat.go.th

# 8. Trading Information

During January-September 2005, Thailand exports were 3,257,520.4 million Baht, increased from the same period of 2004 by 15.5 per cent. Imports were 3,570,627.3, increased from the same period of 2004 by 27.1 per cent. As a result, deficit was 313,107.0 million Baht, whereas in 2004, the country has experienced trade surplus of 9,685.3 million Baht.



#### Top ten exports to ASEAN

Unit: Million Baht

Ran king	Items	2003	2004	2005 (Jan-Sept)
1.	Computers and parts	93,106.9	92,664.1.	73,143.1
2.	Vehicles, accessories and parts	33,452.5	58,713.7	59,275.8
3.	Oil products	29,207.9	54,804.8	58,454.2
4.	Chemical products	29,989.8	41,294.2	35,781.3
5.	Electronics circuits	38,168.9	42,741.1	27,430.7
6.	Plastic pellets	20,766.7	28,217.7	25,966.4
7.	Steel, iron and products	23,472.7	30,707.1	25,940.7
8.	Cylindrical internal-combustion	10,886.8	26,421.1	19,703.0
	engines and components			
9.	Rubbers	19,632.8	24,444.2	19,174.8
10.	Machinery and components	11,760.8	17,456.5	17,862.5
Subtot	al for 10 items	310,445.7	417,464.5	362,732.3
Others	i	374,501.9	435,128.5	353,785.8
Grand	total	684,947.7	852,593.1	716,518.1

Source: Office of Permanent Secretary, Ministry of Commerce

Remark: 2005 (Jan-Sept) preliminary figures

## **Top Ten Thailand Exports to APEC**

Unit: Million Baht

Ran king	Items	2003	2004	2005 (Jan-Sept)
1.	Computers and parts	269,804.3	294,050.8	274,409.5
2.	Electronics circuits	151,400.6	163,534.4	134,124.3
3.	Vehicles, accessories and parts	97,019.8	127,236.1	131,362.7
4.	Plastic pellets	73,431.1	100,540.8	93,780.7
5.	Rubbers	95,620.5	110,463.6	83,038.3
6.	TV and radio sets and parts	78,443.5	93,735.6	70,613.6
7.	Chemical products	52,460.6	67,759.2	66,892.1
8.	Steel, iron and products	57,516.0	74,519.7	63,659.7
9.	Garments	77,567.4	81,952.9	63,281.8
10.	Oil products	32,247.6	60,196.6	58,433.3
Subtota	al for 10 items	985,511.3	1,173,989.7	1,039,596.1
Others		1,433,648.5	1,621,474.0	1,313,412.8
Grand 1	total	2,419,159.8	2,795,463.7	2,353,008.9

Source: Office of Permanent Secretary, Ministry of Commerce

Remark: 2005 (Jan-Sept) preliminary figures

## **Top Ten Thailand Exports to EU**

Unit: Million Baht

Ran king	Items	2003	2004	2005 (Jan-Sept)
1.	Computers and parts	59,083.9	64,558.8	53,624.2
2.	Vehicles, accessories and parts	36,589.6	38,122.5	30,190.8
3.	Air-condition and accessories	21,566.2	34,109.0	23,682.7
4.	Gems and jewelry	26,927.6	31,719.2	23,350.3
5.	Garment	26,666.5	30,666.3	21,760.5
6.	Electronics circuit	37,761.6	31,508.2	20,388.4
7.	Appliances and components	5,839.1	16,821.4	13,704.4
8.	TV and radio sets and parts	16,606.5	21,767.8	13,280.4
9.	Rubber products	11,229.5	12,813.7	10,706.9
10.	Rubbers	10,948.3	14,280.3	10,235.4
Subtot	al for 10 items	253,218.8	296,367.1	220,924.0
Others		235,247.8	257,802.6	202,902.4
Grand	total	488,466.7	554,169.7	423,826.4

Source: Office of Permanent Secretary, Ministry of Commerce

Remark: 2005 (Jan-Sept) Preliminary figure



# Section 2 Situations and Trends on Economy, Society, Natural Resources and Environment



# 1. Overview of Country Development

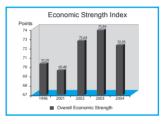
The NESDB has developed three indices including economic strength index, well-being index, and sustainable development index. This is to evaluate impacts caused by developments. Economic Strength Index measures self reliance, economic immunity, self-adjustment against global volatility, stable growth and fair distribution. Well-being index measures development impacts toward human including healthy body and mind, being educated and employed, having sufficient income living in warm family among good environment and under good governance. Sustainable Development Index measures impacts caused by conservations of natural resources and

environment in line with evaluations of economic and social developments. The key purpose is to evaluate development outcomes whether economic and social development balance with natural resources and environment. This is the desired outcome led to sustainable developments according to the Sufficiency Economy Philosophy.

#### 1. The Overview of Economic Strength

Thai economy during the last three years of the 9th

Plan has improved.
Compared to that of the last year of the 8th Plan, the Economic Strength Index has been improved from 69.48 per cent in 2001 to 72.64 per cent and



73.84 per cent in 2002 and 2003 respectively. Such trend was slightly downward in 2004. This suggests Thailand's self-sufficiency capability had been lowered because of expansions of imports of raw materials, capital goods, and energy. Yet, Thailand's stability growth results in the country's adjustment capability toward global volatility and moderate economic immunity as well as better equitable and fair development distribution. All these factors combined improved the 2003 economic strength which is the third year of the 9th economic plan from "must improve" status to "good" status. (Level 3)

#### 2. The Overview of Well-being of Thai People

Well-being of Thai people, during three years of the 9th Plan, constantly increased and was higher than that of the end of the 8th Plan. Index of wellbeing and happiness of That people was increased from 67.7 per cent in 2001 to 71.6 per cent in 2002. It was then increased to 74.3 and 76.6 per cent in 2003 and 2004 respectively. Though Thai economic strength had started slowing down in 2004. it did not affect wellbeing and happiness. This is because economic growth in 2004 was relatively high. In addition, the government has implemented grassroots policies focusing on expansion of job opportunities and expense reduction. Social development measures had heen continuously launched. These factors combined generated



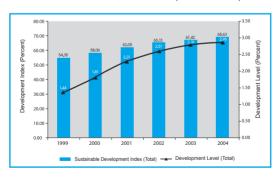
"good" index of wellbeing and happiness of Thai people or 3.66. This figure reflects improvement of employment rate that at last, reaching full-capacity. Meantime, severe poverty

has been reduced to the level that is a goal of the 9th Plan. Moreover income distribution was improved.

#### 3. The Overview of Sustainable Development

Country developments in past decades lacked of balance between economic and social developments and conservation of natural resources and environment. Yet, outcomes of developments during the latest seven years covering the 7th, 8th, and 3 years of the 9th Plans suggest that the overall sustainable development index gradually improved. The index was increased from 62.1 per cent in 2001 to 65.1, 67.4 and 68.6 per cent in 2001, 2002, and 2003 respectively. This is mainly because economic and social developments have been continuously improved. Yet, the sustainable development index still remains at 2 because there have been few concerns toward environment quality. This fact suggests that economic and social developments still affect environment development. If this situation is not diverted, it eventually affects sustainable development.

#### Sustainable Development Index (1999-2003)



Source: NESDB, 2005

## 2. Economic Situation and Trend

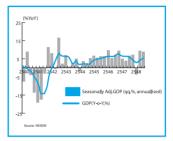
During the year 2005, Thai economy experienced impacts caused by surged oil prices and negative domestic factors including drought, tsunami, and insurgency in the deep three southern provinces. As a result, Thai economy expanded only 3.2 per cent during the first quarter. Thai economy has started recovering since the second quarter. During the third and fourth quarters, Thai economy had expanded by 4.6 per cent and 5.3 per cent respectively. Stability pressure had been reduced in the third quarter because of the current account surplus and upward trend of export during the last quarter. It was believed that Thai economy would expand well in the last quarter. In overall, Thai economy would expand by approximately 4.7 per cent. In addition, under the dual track policy, the country overall competitiveness has been improved as fundamental factors have been strongly improved and country administration are more effective

#### 1. Thai economy in 2005

During the first half of 2005, Thai economy expanded by 3.9 per cent although the country was affected by surged oil prices. Dubai crude oil price at the first half of 2004 was at 31.4 USD/barrel but later it increased by average 44.6 USD/barrel in the first half of 2005. Impacts caused by drought, tsunami and insurgency in three southern provinces are major negative factors affecting economic expansion. During the first and second quarters, Thai economy had expanded by 3.2 and 4.6 per cent.

Thai economy during the third quarter expanded by 5.3 per cent, higher than that of 3.9 per cent during the first half of the year. From the second quarter, seasonally

adjusted, Thai economy in the third quarter had expanded by 9.0 per cent per annum (Annualized rate of growth). This is because impacts from drought upon agricultural outputs had been



lessened. Evidenced by the increase of tourists, tourism industry has been improved. Industrial production supporting exports had been improved during the third quarter and according to the increased purchase orders in order to deliver goods for the last quarter. The export index suggests that new purchase orders have been increased especially in food industry, appliances, furniture and components, and rubber.



# 2 . E c o n o m i c Situations by Sectors for 2005

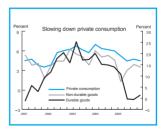
2.1 Manufacturing
Sector: Manufacturing
sector expanded by 4.4
during the first nine
months of 2005.

Agricultural sector shrunk by 3.5 per cent as compared to 6.1 per cent shrinking during the same period of the previous year. Although agricultural sectors had rebounded and expanded to 4.4 per cent in the third quarter after having shrunk consecutively for six quarters. Non-agricultural sector, during the first nine months, expanded by 5.1 per cent as compared to 7.8 per cent of the same period of 2004. Key subcategories of non-agricultural sector includes industrial sector which increased by 5.3 per cent. This growth rate is a downward trend. This is because in 2004. Industrial sector grew by 8.6 per cent. Construction sector expanded by 7.9 per cent as compared to the increase of 7.7 per cent of the same period of 2004.

#### 2.2 Private consumption expenditure and investment:

Private consumption expenditure and investment during the first nine month slowed down. Private consumption expenditure increased by 4.6 per cent as compared to 6.2 per

cent increase of the same period of 2004. Major consumption goods, for instance, beverage, appliances, service fees charged by hotels and restaurants were slowing down. Private investment increased by 11.8



per cent as compared to 17.1 per cent of 2004. Downward trend was mainly caused by construction sector investment and machineries.

#### 2.3 Foreign sectors:

- Exports: Exports shows sign of improvement. During the first nine month of 2005, export value was 80,777.5 million USD increased 16.5 per cent. Price was increased by 11.5 per cent. Export volume was increased by 4.5 per cent. Major exported goods increased include computers, rubber products, iron and steel, plastic pellet, chemical products, vehicles, parts and accessories, gems and jewelry, rubber, chicken, and shrimp and so on. On contrarily, major exported goods decreased include rice, corn, and cassava. Although prices were adjusted because of higher demands but less outputs caused by drought. Actually, this is a negative factor limited export volume and lessened exports.
- Imports: Imports have slowed down since the third quarter. During the first nine months, imports were 89,038 million USD increased by 28.7 per cent. Import volume was increased by 17.3 and 9.8 per cent respectively. Key imported goods included petroleum, raw materials, semi-finished goods, capital goods, consumption goods and commodities which increased by 67.9, 20.2, 25.2 and 11.2 per cent respectively.
- transfers of 3,204 million USD but not sufficient to compensate trade deficit. This is considered a decreased surplus as compared to that of the same period of 2004. Although surplus was mainly from services, the country experienced more income deficit. This is mainly form the increase of transfer of profits generated by foreign companies back to their homelands. As a result, during the

first nine months, **trade balance and current account balance** experienced deficits by 8,261 and 5,057 million USD respectively.

Foreign reserves as of September 2005 was 49.8 billion USD equivalent to 2.9 times of short-term foreign debts. At the end of September 2005, public debts were totaling 3.28 trillion Baht equivalent to 45.9 per cent of GDP increased from 3.21 trillion Baht of the end of the June 2005.

Balance of Payment (million USD)

				2005			
							9 months
Export	94,941	45,041	24,290	21,612	50,984	29,794	80,778
- Growth rate	21.6	22.4	23.3	22.8	13.2	22.7	16.5
- Quantity (%)	8.3	9.4	10.1	4.8	0.5	12.2	4.5
- Price (%)	12.2	11.9	11.9	13.1	12.6	9.3	11.5
Import	-93,706	-45,088	-24,111	-20,818	-59,448	-29,590	-89,038
- Growth rate	26.0	30.2	27.6	25.4	31.8	22.7	28.7
- Quantity (%)	11.3	17.0	11.1	1.4	12.4	4.5	9.8
- Price (%)	13.4	11.2	14.8	16.1	17.2	17.4	17.3
Trade balance	1,235	-47	179	794	-8,464	204	-8,261
Services income & transfers	5,405	2,739	1,000	1,668	2,255	949	3,204
Current aaccount balance	6,640	2,692	1,179	2,462	-6,209	1,153	-5,057
Net Capital Movement	-591	-1,355	242	-2,051	4,274	-121	4,153
• BOT	3,065	1,247	-532	2,152	0.0	0.0	0.0
Government	-1,504	-619	-514	138	-652	-1,042	-1,694
Banks	1,659	673	85	-1,674	-1,495	-725	-2,220
Others	-3,811	-2,656	1,203	-2,667	6,421	1,646	8,067
Balance of payment	5,735	1,851	1,083	465	1,097	1,765	2,862

Source: Bank of Thailand

- 2.4 Cash-based Financial Positions: During the first eleven months of the fiscal year (October 2004-August 2005), the country experienced cash deficit of 64.524 million Baht. In the year 2005, the government collected revenues totaling 1.255.926 million Baht higher than that estimated by 5.926 million Baht or 4.7 per cent or higher than that collected in the fiscal year of 2004 by 147.009 million Baht or 13.3 per cent. Most of taxes collected increased, for instance, personal income tax and corporate income tax increased by 9.0 per cent and 25.8 per cent respectively as compared to those of the fiscal year of 2004. This is because most of businesses had stronger performances. Value added tax collected was increased by 22.0 per cent. Key revenue taxes for instance oil tax and automobile tax were decreased by 0.7 per cent and 9.7 per cent respectively. Concerning expenses, the government disbursed budgets of 1,139,775 million Baht or 91.8 per cent of the estimated budget of 1,250,000 million Baht. (combined with additional mid-year central budget of 50,000 million Baht)
- 2.5 Increased employments and decreased unemployment rates: In the third quarter of 2005. employments were totaling 36.47 million persons increased from 34.46 million persons of the second quarter of 2005 and 36.10 million persons of the third quarter of 2004. Employment in agricultural sector was increased from the same period of the previous year by 1.97 per cent after continuously shrunk since the first quarter of 2005. This is because drought has been alleviated. Meantime. employment in industrial sector reduced from that of the same period by 1.2 per cent. In summary average

unemployment in the third quarter continuously decreased to 1.36 per cent.

- 2.6 Finances: Deposits in commercial banks expanded by 6 per cent reflecting adjustment of savings interest rate. Private debts had slowed down. This factor resulted in more stable liquidity in financial institutions. Proportion of loans and savings reduced from 95.5 per cent at the end of the second quarter to 94.4 per cent at the end of the third quarter. Yet, although liquidity in banking system is relatively high, deployments of monetary policies of the Bank of Thailand including interest adjustment to savings and loan deposits are more efficient. This is evidenced by top-five commercial banks had adjusted their policies reflecting monetary policy through increased savings and deposit rates. In addition they adjusted long-term savings interest rate exceeding short-term interest rates.
- Non-performing loans (NPLs) as of the third quarter were totaling 576.5 billion Baht or 9.93 per cent of total loans. NPLs had slightly decreased from 10.33 per cent during the second quarter. Assets on sales of commercial banks are increasing resulted from law enforcement and extensions of timeframes on asset ownerships granted by debt restructures. Such assets are considered non-performing loans.
- SET was slightly down as SET Index was closed at 667.75 point by the end of November 2005 decreased 668.10 at the end of 2004. This decrease is about 0.05 per cent. Average selling and buying was 16,640.76 million Baht decreased from average 20,507.75 million Baht of the year 2004.
  - Baht value was slightly stronger. This is

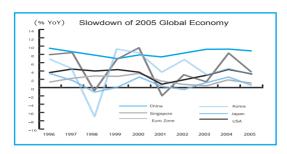
evidenced by the average exchange rate at the first eleven months of the year 2005 which was at 40.197 Baht/USD compared to 40.365 Baht/USD. This situation suggests that Baht was stronger by 0.4 per cent. Major factors contributed to exchange rates in 2005 include trade deficit and current account deficit during the first half of the year. In addition, China has adjusted her currency to be more flexible Renminbee since July 21, 2005.

#### 2.7 11-month Inflation Rates increased by 4.4

per cent: Inflation rates continuously increased from 2.8 per cent during the first quarter to 3.7 percent during the second quarter and to 5.6 per cent during the third quarter. After diesel oil prices were floated and continuous expansion of domestic demands, oil prices growingly and strongly affect price increases. (The Second Round Effect) This change has increased real inflation rates which incessantly increased since the latter half of 2004 and reached 0.7 per cent in the first quarter, 1.1 per cent in the second quarter, and 2.2 per cent in the third quarter. Eventually real inflation rates had reached 2.4 per cent in October and November.

## 3. 2005 Economic Trends

It was expected that global economy would expand by 3.6 per cent in 2005 slowing down from 5.1 per cent in 2004. This figure was from downward adjustments of economic indicators of major countries including the United States of America, Japan, Euro zone. For Asia ex-Japan, economic growths of Singapore, South Korea, Taiwan, Malaysia, and the Philippines were adjusted downward. But for the case of China, her economic growth has been remained at 9.5 per cent as that of the preceding year according to higher export growth rates.

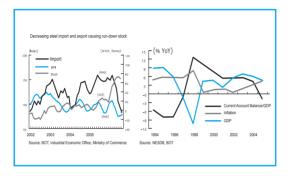


## Thai economic trends in the fourth quarter of 2005:

It was expected that economy tended to expand at the level closed to that of the third quarter. Three major reasons contributing to such growth include: (1) the upward trend in export sectors including food, electronics, crude rubber, and other goods including home items, soaps, and cosmetics; (2) more efficient import management has been slowing down imports; and (3) recovery in tourism resulting in continuous balance of services.

In addition, measures had implemented to stabilize economy during the latter half of the years contribute to such growth. Key measures include acceleration of government budget disbursement and the fund to accelerate village-level development (SML fund), the increase of wages and salaries for government employees, promotion of NGV usages, and FIX-IT centers to extend useful lives of machines, equipment, and tools for the poor. These measures saved expenditures causing reduction of imports. Government expenditure by nature promoted economic expansions as evidenced by increased expenditures and investments. In fact, such expenditures, for instance, the

increase of wages and salaries, expenditures according to the provincial development strategies, and the expenditure to develop village and community capacity, could stimulate grassroots economy



Thai economy during the first three quarter had grown more than that forecasted. Crude oil prices tend to decrease. Inflationary pressure decreased at the yearend. Tourism industry has been slightly improved. In addition, agricultural sector would be strongly improved in the last quarter. From these factors combined, it was believed that Thai economy in the year 2005 would expand by 4.7 per cent. Such increases would be mainly from expansion of exports, private expenditures and investment, public expenditure and investment with over-disbursement. It was expected that an average inflation would be 4.5 per cent. Deficit current account would be 3.2 billion USD or 1.8 per cent of GDP. Unemployment rate would reach 1.9 per cent.

#### 4. Thailand Economic Trend in 2006:

- 4.1 Assumption of 2006 Thailand Economic Forecast:
- (1) World economy tends to expand by 3.4 per cent in 2006 slightly slowing down from 3.6 per cent in 2005. Economies of major countries are slowing down: for instance, US's economy expanded by 3.3 per cent from 3.6 per cent in 2005; Japan's economy tends to increase by 1.8 per cent lower than 2.1 per cent in 2005. Euro zone tends to expand by 1.0 per cent slowing down from 1.5 per cent. Asia-ex Japan economy tends to grow higher than that of the year 2005 due to economic growth in the latter half of the year 2005 driven by export. In addition Asia economic cooperation would expand trade in this region. Yet, it was expected that China's economy would expand at slower rate or 8.5 per cent which is lower than 9.5 per cent in 2005 because of surged oil prices and raw material prices. Key issues of the global economy in 2006 would be as follows:
- Imbalance on global economy would be reflected by US trade deficit and deficit current account. Meantime, China, Japan, South Korea, and Taiwan would continuously experience surpluses. This fact is an issue or risk factor concerned by investors affecting their decisions. Confidences upon US dollars would be not improved. It was believed by many analysts that, in 2006, US dollar would be weaker than EURO and Japanese Yen.
- Affected by increases of oil prices and relatively high demands of goods and services, inflation rate would increase consecutively during the first half of the year.

Yet, inflation rates during the second half of the year is likely to decrease as compared to that of the first half of the year. This is because in 2005, oil prices were dramatically increased and subsequently prices of goods and services were escalated during the second half of the year. In addition, demands of goods and services in the second half of the year are likely to slowdown. If happened, this would reduce inflationary pressure during the second half of the year. As a result, in 2006 average inflation rate would be relatively lower than that of 2005.

- To reduce inflationary pressure, many countries would implement higher interest rate policies.
- (2) Dubai crude oil's average price was 52 USD/ barrel in 2005 slightly increased from 49.30 UDS/barrel in 2004. Many factors contribute to such increase: (1) demand of crude oil tended to increase by 1.7 million barrel/day, to 85 million barrel/day or 2 per cent. Demands of ex-OECD countries especially China and India have increased continuously; (2) crude oil supply is not sufficient. It was expected that OPEC's output would be at 30 million barrel/day. Excess capacity is 2.0-2.5 million barrel/day higher than 1.0-1.5 million barrel/day in 2005. (Historically lowest); and (3) uncertainties in weather and international politics. Yet, net long position for hedging oil prices started slowing down since the second quarter 2005. This situation suggests that oil price was at peak or started declining. Therefore many traders stopped net long position. Based on all situations above combined, it was expected that oil prices

would slightly increased from those of present. In addition, world economy started slowing down, which would reduce pressures from oil demands.

- (3) Export and import prices: It was expected that in 2006, prices in global market would be increased from 2005 average prices. This is because most of countries' economies would expand by moderate rates. As a result. they would demand more goods. Meantime, more production capacities in many countries would be utilized. This in turn would reduce excess capacity down from those of the year 2005. Exports in USD would increase by 10.9 per cent. while import prices would increase by 8.5 per cent. Oil price surge is the major contributing factor. Meantime, demands of industrial products have been increased. Agricultural products' prices tend to increase. Concerning term of trade. Thailand would gain surplus in 2006 because of oil prices and raw material prices were already relatively high in 2005.
- 4.2 2006 economic outlook: Thai economy would expand by 4.7-5.7 per cent. Inflation rates would range from 3.5 to 4.5 per cent. Current account deficit would be 2.2-2.7 per cent of GDP.
- (1) In case where economic growth would be 5.7 per cent or higher under following conditions: (1) more exports would be expedited to expand by 17-18 per cent from normal growth of 15-16 per cent. More exports in agricultural sectors including rubber, shrimp, chicken, rice, seafood and canned food would be made. In addition, there would be more exports of industrial sectors including

household, soap and cosmetics. Moreover, more exports on electronics products would be made; (2) 10 per cent more tourists compared to that of 2005 would be actually made; (3) disbursement of government budget and investment budget of state-own enterprise would be made according to schedules. This includes disbursement of the fund for potential development of communities and villages. (SML Fund) and of budget according to provincial strategy; and (4) year-round Dubai crude oil price would be at 50-52 IISD/barrel.

# (2) In case the growth rate would be lower than

4.7 per cent under conditions that year-round Dubai crude oil price, by average, would be higher than 52 USD/barrel. Global economy would slowdown at higher rate than that forecasted. This situation would affect exports. In addition, year-round average oil prices higher than 52 USD/barrel would drive inflation to be higher than 4.0 per cent. Yet, many believed that it would be difficult for Dubai crude prices to be over 52 USD/barrel. This is because slowdown economy would reduce demand pressure. Yet, other factors driving economy growth at lower than average forecasted figure of 4.7-5.7 per cent would be for instance, slower recovery of tourism industry, slower disbursement of government budget and investment of mega projects.

2005 Estimated Economic Situations 1/

		y Data	Estimated			
		2004			2006	
	2003	2004	Sept 5	Dec 6	Dec 6	
GDP (at current price: billion Baht)	5,929.0	6,503.5	7,142.4	7,101.8	7,790.7	
GDP growth rate (at constant price, %)	7.0	6.2	3.8-4.3	4.7	4.7-5.7	
Investment (at constant price, %)	12.1	13.8	11.0	11.1	12.8	
Private (at constant price, %)	17.7	16.3	9.5	11.0	12.0	
Public (at constant price, %)	-0.7	6.8	15.3	11.5	15.0	
Consumption (at constant price, %)	5.8	5.7	4.9	5.8	5.0	
Private (at constant price, %)	6.4	5.9	4.3	4.7	4.8	
Public (at constant price, %)	2.3	4.7	8.6	12.8	6.5	
Export volume of goods & services (Volume, %)	7.0	9.6	3.8	4.3	5.5	
Export Value of goods (billion USD)	78.1	94.9	110.5	110.1	127.1	
Growth rate (%)	18.2	21.6	15.0	16.0	15.5	
Growth rate (volume, %)	9.5	8.4	4.0	4.3	4.6	
Import volume of goods & services (volume, %)	8.5	13.5	8.3	8.9	8.7	
Import value of goods Import (billion USD)	74.3	93.7	118.2	117.7	138.3	
Growth rate (%)	17.4	26.0	25.2	25.6	17.5	
Growth rate (volume, %)	10.7	12.3	9.2	9.2	9.0	
Trade balance (billion USD)	3.8	1.2	-7.7	-7.6	-11.1	
Current account balance (billion USD)	8.0	6.6	-3.2	-3.2	-4.9	
Current account balance to GDP (%)	5.6	4.1	-1.9	-1.8	- (2.2 - 2.7)	
Inflation rate (%)						
Consumer Price Index	1.8	2.7	4.1	4.5	3.5-4.5	
GDP Deflator	1.6	3.3	4.5	4.5	4.5	

Source: NESDB, Dec 6, 2005

Remark: 1/2003 and 2004 are primary data adjusted backward by the National Account Office (GNP) and Bank of Thailand (import and export)

# 3. Social Situations and Trends

Thai society is unique with ancient wisdom. Thai people are peaceful. Thai society is opened for all and capable of adjusting itself to external changes. This country is ruled by monarchy. Many religions exist in harmony and are well-mixed. People in society are harmonious and hospitable, rooted in strengths of family and community values. Such unique characteristics are strong foundations meant for stable Thai society. Dynamic changes caused by external and internal environment, for instance, globalization, technology convergence, affect Thai society. Thai people are to be aware on such changes and adjust themselves to that. In addition, demographic structure is developing to aging society. There will be more and more senior citizens, such a challenging issue for the future.

# 1. Overview of Thai Social Situations

- 1.1 Human capital development: The overall quality of Thai citizens has been improved. But some groups of people are exposing to variety of health risks. Knowledge levels of Thais are insufficient to have them access to knowledge society. Major factors contribute to such risk are as follows:
- 1) Health: In overall, Thai life expectancy increased. In 2003, Thai male and female's life expectancies at birth are 67.58 and 75.08 years old respectively. In 2004, life expectancies for Thai male and female population increased to 67.93 and 74.90 years old



correspondingly, higher than those of global averages of 64 and 68 years old for male and female respectively.

Access to healthcare insurance system: Thai healthcare insurance system covers 96.25 per cent of the entire population with 60.45 million insured. This includes healthcare insurances for nurses and government employees, state-enterprise welfare, social security, and 30-Baht universal healthcare scheme. Yet most of population lack of awareness and knowledge to take care of themselves, for instance, most of them lack of exercise habits and live their lives on risky behaviors. This situation results in the increase of non-contagious diseases especially cardiovascular diseases, the number one disease. To date, cardiovascular disease increased from 451.45 persons per 100.000 populations in 2003 to 503.1 persons per 100,000 populations in 2004. As second rank, high blood pressure, diabetes, and fatness have increased in every group of population.

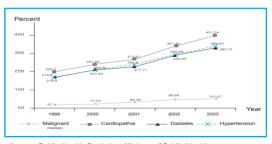
Thai healthcare insurances

Unit:v person

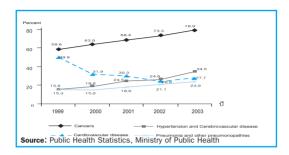
Items	Types of healthcare insurances	Dec 2003	Dec 22004	Sept 2005
1	Universal healthcare scheme	46,447,093	47,074,746	47,342,401
2	Social security	7,729,333	8,418,034	8,741,658
3	Civil Servants and state enterprise employees	4,131,080	4,275,444	4,150,924
4	Political government employees/politicians	596	660	571
5	Overseas Thai	32,090	63,791	62,713
6	Veterans	-	-	122,679
7	Private teachers	-	-	95,158
8	Aliens		259,478	274,671
9	Thai residences in the waiting lists for right			
	examination (no right)	3,910,636	2,871,428	2,356,963
	Total population	62,349,165	62,704,103	63,148,738
Health	care insurances	58,438,529	59,768,884	60,454,391
	Percentage	93.73	95.42	96.25

Source: National Healthcare Insurance Office (October 12, 2005)

# Non-contagious diseases per 100,000 populations



Source: Public Health Statistics, Ministry of Public Health



2) Education: Thai government has extended educational opportunities at every level. Educational services of both formal and informal education systems have been extended to cover every target group and areas. As the government extended basic education to 12 years, this effort resulted in the increase of years in school of Thai citizens from 7.8 years in 2003 to 8.1 years in 2004. In overall population of ages 3–21 years, students per population increased from 65.1 per cent in 1997 to 73.5 per cent in 2004. Citizens educated by informal system increased from 3.3 million persons in 2002 to 4.1 million persons in 2004. In addition, 170,000 disable and underprivileged children had accessed to informal education system in 2004.

Quantitatively, students' access to education

system had expanded continuously. Paradoxically quality development is urgently needed. This is because, GAT test results administered to grade 6, grade 9 and grade 12 student in 2003 were very poor. In addition, SAT of the grade 12 indicated that most of students in Thailand are very poor in language, mathematical and analytical skills.

Thai Functional Literacy

Unit: Percentage

Zones	2000	2001	2002	2003	2004
Urban	66.4	67.5	68.6	70.0	70.8
Rural	48.1	49.4	50.8	52.9	54.6
Nationwide	54.1	55.3	56.6	58.7	60.1
Average years in schools* (Y)	7.2	7.4	7.6	7.8	8.1

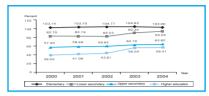
Source: Development Evalution and Communication Office NESDB, has processed from employment, 3rd round, of the National Statistics Bureau

\* National Education Commission Office

Remark: Function Literacy according to UNESCO definition is basic reading, writing, and calculation skills necessary for daily lives.

Such skills require 5-6 years of formal education or equivalent.

Percentage of students and college students per school-age population classified by education levels, as of educational vear of 2000-2004



Source: Information Technology and Communication Center, Ministry of Education

National Educational Quality Assurance on GAT of all students of grade 6, 9, and 12 on the second semester of 2003

					Grade 12		
Subjects	Average points	Students meeting evaluation criteria of "moderate" and "good" %	Average points	Students meeting evaluation criteria of "moderate" and "good" %	Average points	Students meeting evaluation criteria of "moderate" and "good" %	
Thais	45.26	60	53.98	90	44.49	74	
Mathematics	41.7	67	34.99	45	33.99	43	
English	41.14	56	37.92	58	39.14	73	
Social science	-	-	49.33	77	41.85	62	
Science	41.41	74	38.07	57	-	-	
Physical science	-	-	-	-	48.82	82	
Biological science	-	-	-	-	-	-	
Chemistry	-	-	-	-	38.65	57	
Biology	-	-	-	-	36.76	52	
Physics	-	-	-	-	32.59	49	

Source: Information Technology and Communication Center, Ministry of Education

3) Labor: Educational levels among Thai workforces are higher. Such phenomenon is resulted from government's measures on enhancement of educational opportunities of workforce. This situation Thai workforce graduating grade 6 increased from 38.0 per cent in 2003 to 38.2 per cent in 2004. But this figure is still far from the target of 50 per cent set for 2006. Ironically, enrolment of vocational colleges had been reduced from 41.5 per cent in 1996 to 32.9 per cent in 2003 while demand for this group of labor in the market is 60 per cent of average workforce production.

Workforce productivity increased from 102,324 Baht/person/year in 2003 to 109,466 Baht/person/year in 2004 or 6.98 persons. More highly educated workforces are a major factor contributing to such increase. This is evidenced by the increase of university-graduated workforce increased from 8.7 percent in 2003 to 9.3 percent in 2004.

Labor Productivity as of 2000-2004

Unit: Baht/person/year

Zones	2000	2001	2002	2003	2004p
Productivity	96,138	95,534	98,116	102,324	109,466
% Growth rate	2.64	0.63	2.7	4.29	6.98

Remarks: \* Labor productivity = GDP at 1988 constant price /employed citizens
P means primary data

Source: Social and Quality of Life Development Office, NESDB

Proportion of Employed Population Classified by Education Levels.

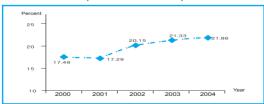
Educational levels	1998	1999	2000	2001	2002	2003	2004
Total	100	100	100	100	100	100	100
Elementary and lower	70.3	69.4	67.8	65.9	64.6	62.9	61.9
Lower Secondary	12.1	12.2	12.9	13.0	13.3	13.8	14.1
Upper Secondary	4.6	5.0	5.6	6.5	6.8	7.4	7.8
Vocational Degree	3.2	3.1	3.1	3.3	3.3	3.3	3.2
High Vocational Degree	2.6	2.8	2.9	3.2	3.7	3.8	3.8
University	7.2	7.5	7.7	8.0	8.3	8.7	9.3

Source: Survey of Employment, National Statistics Bureau

#### 1.2 Social Security

1) Social security: More Thai citizens access to job security. In 2004, social security members were 7.83 million persons or 21.86 per cent of working-age population. In fact, social security members had continuously increased since 2001. In 2001, there were totaling 5.87 million persons, which increased to 6.90 million persons or 20.15 per cent. Growth rate in this period is about 17.6 per cent. The major reason contributes to this growth is; Thai government granted coverage for enterprises having one or more employees.

Proportion of Insured People



Source: Social Security Office

- 2) Social welfare: The government has created housing security for the poor and the unprivileged through Baan Eua Arthorn Low -cost Housing Project. This project contributed to the increase of ownerships of housing and lands from 72.5 per cent in 1992 to 78.8 per cent in 2001. Social welfares organized for the poor and the underprivileged are responsible by local administration organizations. More responsibilities and budgets have been allocated to the local in accordance with decentralization process. Such process promotes communities to provide services meeting demands' of target groups aiming them to take care one another. The actual purpose is to utilize existing social capitals as much as possible.
- 3) Safety in lives and properties: Illegal drug problems have been alleviated continuously as evidenced by illegal drug lawsuits in 2003 which have been decreased from 164,878 cases to 74,121 cases in 2004 or 55 per cent. This figure is equivalent to 422.8 cases per 100,000 populations in 2002 to 116.5 cases in 2004. Major reasons contribute to such changes are clear and restricted government measures. Yet, the most concerned issue is the increase of all kinds of criminal cases. For instance, assaults against lives, physical bodies, and sexes had increased from 60.5 cases per 100,000 populations in 2002 to 71.5 cases in 2004. Meantime, assaults against properties increased from 106 cases per 100,000 populations in 2003 to 106.5 in 2004. Accidences in land transportation increased, although various countermeasures had been

implemented, from 20.98 cases per 100,000 populations in 2002 to 21.3 cases in 2004.

4) Justice process development: Justice process development at this moment has been opened for more public participation. The current justice system focuses on the balance between law enforcement and respect of human dignity. This system allows public participations from all stakeholders. In addition, the system facilitates accessibility of the poor and the underprivileged through community and community citizenship to develop stronger community leadership network and community organizations. Justice process development to resolve and decline disputes leaded to the decrease of lawsuits especially criminal cases. Compared to those of 2000-2002, criminal cases being filed to the court was decreased by 50 per cent. In addition. success rates of dispute resolution and case tended to increase. In 2003, case resolution value was about 88,783 million Baht, During the mid-vear of 2004 (Oct 2003-Mar 2004), dispute resolution was about 83,323 million Baht. This is considered economically feasible.

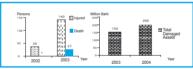
Death tolls from accidences and lawsuits during 2002-2004 Unit: 100,000 populations

Safety in Lives and Properties	2002	2003	2004	2005 Jan-Aug
Death rate from inland transportation	20.9	22.9	21.30	n.a.
Assaults on properties	109.7	106.0	106.5	77.7
Assaults on lives, physical bodies and sexes	60.5	71.5	71.5	47.9
llegal Drugs	422.8	216.4	116.5	n.a.

Source: National Crime Statistics, National Police Bureau

1.3 Environment: In overall, environment is at average but urban resident still live in polluted environment. The increase of fine particle is the major cause contributing to vascular disease. Demand of toxic chemical substance used as raw materials for production process is relatively high and not properly used. Most of users lack of awareness causing harmful accidences. Meantime, quantity of garbage tends to increase because of the increase of population. Garbage has been increased from 14.40 million tones in 2003 to 14.70 million tones in 2004. Major causes are lacking of awareness on environment issues causing dangerous environment threatening life, assets, and hygiene.

Statistics of causalities, death and damage assets from chemistry accidences in 2003 and 2004 (Jan-Nov)



Source: Pollution Control Department, Ministry of Natural Resources and Environment

Utilization of Waste in 2003 and 2004 (Jan-Nov)



**Source:** Summary of Pollution Situation in Thailand as of 2003 and 2004, Pollution Control Department, Ministry of Natural Resources and Environment

# 2. Trends and Expected Outcomes

External and internal changes, linked to both economic and social developments, impact the future country development. This is especially positively and negatively impacts quality of life and also demographic structure. Consequently, future development should be focused on following strategic issues:

- **2.1 Change of demographic structure** is a major factor contributing to human resources development, which in turn, strengthens economic development. Analysis of demographic structures in the next 15 years provides following insights:
- 1) That demographic structure is changing to aging society in the near future or 20 years. (Speed rate of aging citizen increases are based on the trend of the increase of aging citizens compared to the overall population increase or total years when senior citizens have increased from 7 per cent to 14 per cent of population caccording to UN definition) This is considered the shortest change in the world due to the success of population planning during the past 30 years. Reproduction rate decreased from 6.3 persons during 1964-1965 to 1.82 persons in 2000-2005. Ages of Thai citizens are longer. Today, life expectancy of Thai female is 74.9 years old while that of Thai male is 69.9 years old. Public health development contributes to such changes. Maternal and infant deaths have been reduced. Promotion of healthcare system improved are also contribution factors affecting demographic structure.

- **Children** (0-14 years) have reduced quickly from 40.0 per cent in 1980 to 24.3 per cent in 2000. It was believed that in 2015, children population would be reduced to 20.2 per cent.
- Working-age citizens (15-59 years old) are proportionally highest from 54.6 per cent to 65.9 per cent in 2000 and highest in 2009 or 67.1 per cent. This figure would be maintained until it started decreasing to 66.0 per cent in 2015.
- Senior citizens (60 years old or over) would increase from 5.4 per cent to 9.5 and 13.8 per cent in the same period.

Estimated Population classified by ages based on moderate reproduction rates

Year	Population/estimated (thousand persons)	0-14	15-59	60+
1970½	34,397	45.20	49.80	5.00
1980⊻	54,548	29.23	63.41	7.36
2000⊻	60,916	24.25	66.29	9.46
20052/	64,763	22.96	66.71	10.33
20072/	65,694	22.34	66.94	10.72
20112/	67,400	20.98	67.00	12.02

Source: 1/ Demographic and housing surveys, National Statistics Bureau 2/ Forecasted Thai population as of 2000-2015, Quality of Life and Social Development Office, NESDB

2) Thailand has been on the stage of demographic dividend, which would be last long until 2009. The country should fully exploit this period. In this stage, working-age population is, proportionally, the largest group of population. Concerning dependency, there are fewer children and more aging citizens. This situation resulted in low dependency rate. Historically, most countries experience one time demographic dividend. So, this would be a chance for the nation to exploit this stage. The major purpose is to accelerate economic expansion and improvement of quality of life. Meantime, this is to improve taking care of dependency population without burden. The critical condition is; such country needs high-quality working-age population. In addition, the country needs to improve productivity and supporting policies, for instance, employment policies, financial policies, investment policies, and so on.

3) Changes in demographic structures suggest many necessary development issues. Fewer children population provide chances of children development in terms of physical, mental, intellectual, emotional and social developments with more quality. Meantime, acceleration of development for productivity of workforce population which constitutes highest proportion in demographic structure is necessary. Meantime preparedness for aging society attributed to some following issues:

Dependency Ratio of children and senior citizens

Unit: Percent

Dependency Ratio	1970 <sup>1</sup> /	20001/	20072/	2009 <sup>2</sup> /	2011 <sup>2</sup> /	20202/
Chidren	90.3	46.1	33.4	32.2	31.3	29.6
Senior Citizens	10.1	11.6	16.0	16.9	17.9	26.1
Total dependency	100.4	57.7	49.4	49.1	49.3	55.7

**Source**: 1/ Demographic and housing surveys 1970 and 2000, National Statistics Bureau

2/ Forecasted Thai population as of 2000-2015, Quality of Life and Social Development Office, NESDB

- Economic growth might slowdown because of the decrease of workforce. Such decrease might result in the decrease of production especially in labor-intensive area. This situation might affect economic growth and national competitiveness.
- Existing social services including social safety nets are not sufficient and need restructuring especially medical services. This is because there are upward trends on chronic diseases and aging-related diseases while medical personnel in this area does not sufficient. In addition, social security scheme at present does not cover the entire population and, most importantly, features limited forms.
- Change of demographic structure would affect personal savings. Total savings of Thailand of both private and public sectors per GDP as of 2000 was 16.65 per cent and reduced to 15.42 per cent in 2001. Then it was increased to 17.50 per cent in 2003. Yet, savings of Thais at present in preparedness for aging society does not meet the requirement. This is because the current economic situation does not motivate savings. As a result, personal savings are relatively low and tend to decrease from 13.39 per cent in 1999 down to 5.48 per cent in 2002. Although it was slightly adjusted to 6.30 per cent in 2003. But it is considered relatively low. This situation would affect future savings which might not be sufficient for investment expansion. In addition, tied-savings cover only 27.74 per cent of working population. This might cause serious problems after their retirement.

• Future goods and services might be adjusted to meet increasing senior citizens. This is because senior citizens need high-quality and durable goods and services. Therefore, production needed adjustment to meet demand of majority of people in the society.

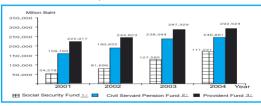
# Percentage of personal savings per income

Unit: Million Baht

Disposable Personal Income	3,056,486	3,159,391	3,243,632	3,347,327	3,645,457
Personal Savings	409,316	347,474	252,912	183,342	229,571
Percentage	13.392	10.998	7.797	5.477	6.297
Total Savinge	693,794	819,735	791,548	875,358	1,037,880
GDP	4,637,079	4,922,731	5,133,502	5,446,043	5,930,362
Percentage	14.962	16.652	15.419	16.073	17.501

Source: National Income of Thailand 2003, NESDB

# Accumulated capital of retirement mutual funds



**Source** :  $\frac{1}{2}$  / Social Security Office

- 2 / Government Employee Pension Fund
- 3 / Kasikorn Thai Research Center Co., Ltd.

- 2.2) Technological development affecting Thai society: Science and technology affect economy, manufacturing sector, service sector, and quality of lives on following issues:
- 1) Widespread and quick dissemination of information technology offers opportunities for human resources development but threats on gaps among various groups of people in the society. Flows of information, goods, and services provide more chances for human resources development. Yet, accessibility to information technology depends on various factors including knowledge, skill, data accessibility or capital acquisition. If equal opportunity does not exist, gaps among various group of people would be widen.
- 2) Technology advance affects quality of life. More and more technologies involve with ways of lives and production processes in Thailand, including plant and animal breeding, food processing, drug production and medical development and so on. In fact, such advance may generate many positive effects but threats to health and environment. In addition, advance in communication technology affects the society in term of electronic criminal, dissemination of pornography, violence from internet. Moreover, this change affects religious, philosophies and beliefs, for instance, widely controversial cloning and genetic modification.
- **2.3 Free human capital movement:** Globalization liberalizes and initiates flows of financial capital, knowledge, information, and human capital. Impacts caused by free

movement of human capital stimulate radical and widespread as well as borderless changes. Such changes are more and more sophisticated and linked to global communities. To date, there is upward trend toward human capital movement worldwide. Positively, this situation provides many countries a chance to draw potential or expert people. Such people would generate revenue and transfer sciences and technologies to Thais. Meantime, more Thai people have accesses to global labor market as more intergovernment agreements are settled. Free movements of human capitals would pressure Thai to develop counter measures for such situation.

Yet, free movements of human capitals generate many negative impacts: 1) human traffics including sexual violations against children and women; 2) security and terrorist threats include being the direct target of terrorism, places for supplying provisions and arms, and haven; 3) problems of international crimes and drug dealing include illegal drug trading, illegal migration, and theft and trading of vehicles, arms, money laundering, economic crimes and computer crimes; (4) problems of contagious diseases include both new epidemics such as SARS, and Avian Flu and repetitive epidemic such as Tuberculosis, Elephantiasis, and Malaria. This problem does not affect only economy, society and public health, but also the increase of public healthcare expenses; and (5) problems of cultures, values and materialism introduced by foreigners and international businesses, for instance, fast foods and entertainment

place. This might changes Thai consumers' behaviors, for instance, luxurious and materialism lifestyles.

Countermeasures should be more proactive. Chronic problems should be dissolved. This is to develop the country and people to meet changing environment more effectively toward the objective "Integrity, quality, and happy Thai citizens residing in hospitality, peaceful, and fair societies.

# 4. Current Situation on Natural Resources and Environment

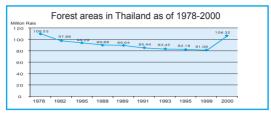
#### 1. Natural resources

## 1.1 Forests and Mangrove Forests

#### Forest situations

In the year 1961, forests in Thailand had covered 53.3 per cent of the overall country area. However, these areas were reduced to 33.15 per cent in 2000. It was found that in this year, there were totaling 106 million rais (2.5 rais = 1 acre) of forest area in the country. During 1961 and 1989, deforestation rate was about 2.9 million rais/year. However, after the government had been no longer granted concessions since 1989–1998, deforestation rate was reduced to 1 million rais/year

#### Forest areas in Thailand as of 1978-2000



Remarks: Calculation Methodology for 2000 was different from those of previous years as data was retrieved from satellite on scale of

1: 50,000 which were digitally imported.

Source: 2004 Environment Situation Report

#### Mangrove Forest

Mangrove forest decreased from 2.5 million rais in 1961 to 1,579,693 rais. Retrieved from satellite survey data, current mangrove forest areas consist of both natural and man-made forests, half of which are deteriorated forests.

#### 1.2 Water resources

In 2004, demands for water in variety of activities were approximately 67,231 million cu m. Meantime, there are 33 large-scale dams with capacity of water reservation of 67,660 million cu m. or 32 per cent of pier water. There are totaling 40 million rai capable of being developed as irrigation systems, out of this 29.5 million rai had been developed as irrigation system. Although reserved water exceeds demand, it was expected that in 2006, due to problems in management and variability of water

according to areas and seasons, there would be short supply of water by approximately of 12,560 sq m.

#### 1.3 Biodiversity

In Thailand, there are approximate 15,000 plants or 8 per cent of total plants in the world. There are totaling 25,000 animals, 7,700 algae and microorganisms. Most of areas with biodiversity are in conservation areas, for instance, national parks, animal conservation zones, island, reefs, beach, and swamp.

Data collected in 2003 revealed that six animals have been extinct. These include one mammal, two birds, and three fishes. At this moment, there are 8 animals extinct by nature, 59

Life forms	Numbers
Plants	15,000
Mammals	294
Birds	962
Reptile	325
Amphibian	141
Insect	7,000
Fish	2,000
Sea shell	2,000
Invertebrate	11.900
Algae	65
Fungi	3,000
Bacteria	800
Microorganism	3,800

Source: Environmental Policy and Planning Office, 2004

extremely endangered, 160 endangered animals, 59 animals prone to extinct and 353 animals prone to be endangered animals.

# 1.4 Energy

Based on reserved energy per energy production quantity at December 2003, it was found that there would be supply of natural resources for 43 years, condensate for 36 years, and lignite for 156 years.

Energy reserves per energy production capacity classified by types of energy as of 2003

Types of energy	Energy reserve <sup>1</sup>	Annual production quantity as of 2003 <sup>2</sup>	Years of supply (Years)
Crude oil (million barrel)	665	35.1	19
Condensate (million barrel)	832	22.9	36
Natural resources (billion cu ft)	33,091	769	43
Lignite (million tones)	2,942	18.8	156

Source: <sup>1</sup> Department of Alternative Energy Development and Efficiency, 2004
<sup>2</sup> Energy Policy and Planning Office, 2004

#### 2. Environment

#### 2.1 Water quality

Water quality of 49 major rivers and four still water sources as of the year 2003 suggest that 32 per cent have good quality, 31 per cent have moderate quality, 31 per cent are deteriorated, and 6 per cent were extremely poor. Compared to those of the 2002, overall quality had been reduced but there were more deteriorated and extremely poor water sources. This situation suggested the downward trend in water quality.

Comparison of Quality of Water Sources of 2002 and 2003 (Percentage)

	Year 2002	Year 2003
High quality water sources	40	32
Moderate quality water sources	25	31
Poor quality water sources	32	31
Very poor quality water sources	3	6

Source: Pollution Control Department, 2004.

#### 2.2 Garbage

During the past ten years, garbage discharged by communities nationwide tends to increase. Yet, good and efficient services and management still are not in place. Classified by zones, it was found that Bangkok Metropolitan generated 24 per cent of garbage discharged nationwide.

Garbage classified by zones during 2001-2003

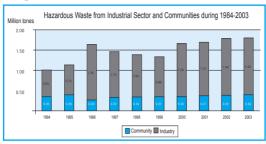
Zone	Garbaage (Metric Tone per Day)		
	Year 2001	Year 2002	Year 2003
Bangkok Metropolitan	9,317	9,617	9,340
Municipalities (1,134 Municipalitis and Muang Patthaya)	11,903	11,976	12,100
Ex-Municipalities	17,423	17,632	17,800
Total	38,643	39,225	39,240

Sources: Pollution Control Department, 2004

#### 2.3 Hazardous waste

Hazardous waste countrywide increased from 1.01 million tones in 1994 to 1.80 million tons in 2003, 75–80 per cent of which were from industrial sector. The rest were discharged from communities.

Hazardous Waste from Industrial Sector and Communities during 1984–2003



Source: Pollution Control Department 2004

# 3.Natural Resources and Environmental Management Policies

The 2005-2008 Government Administration Plan determines six strategic issues as follows:

- (1) Balancing utilization and conservation of natural resources toward sustainable developments
- (2) Protection and utilization of biodiversity on sustainable and transparent basis.
  - (3) Recovering soil resources and utilizing them.
- (4) Managing water resources to prevent and resolve water shortage, flood and water quality. This includes poverty reduction programs and community participation.
- (5) Managing natural resources and environment through participation of private sector toward sustainable utilizations of natural resources and environment.

(6) Controlling pollutions caused by garbage, wastewater, gas, smell, and sound for better quality of life and sustainable development.

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# Section 3 Major National Development Directions



- 1. Strategic Framework on Economic and Social Restructuring of the Country during the Next Four Years (2005–2008)
  - 1. Changes of five development contexts
- 1.1 Emergence of economic cooperations and changes in global financial markets

There are five changes linking to global economy and finances as factors contributing to Thailand's development: (1.1) emergences of economic cooperations at bilateral, regional, and multilateral levels and increasing economic roles of India and China; (1.2) imbalance of US

economy affecting international capital transfer and currency exposures; (1.3) international capital transfers and linkages among money markets and capital markets; (1.4) hedge funds and currency speculation and increasing prices, changes of preferences and financial innovation; and (1.5) more stringent transparency and corporate good governance of financial institutions and private corporate, for instance, Basel II and COSO2 and so on. All of above factors combined drive financial institutions and private corporate to restructure their organizations.

### 1.2 Technology context

At present, world is in the age of Molecular Technology driven by key technologies, for instance, biotechnology, material technology, and nanotechnology. These technologies have been improved dramatically and thus drive innovations. In addition, developments of information and communication technologies (ICT) would impact economic and social developments and ways of lives in the future.

Economy	Agriculture	Industrial	Information	Molecular
Energy	Muscle Power	Coal, Oil, electricity	Chemical (e.g. batteries, solar, piezoelectrical)	Molecular (e.g. ATP)
Physical Delivery	Animals, Boats	Trains, automobiles	Planes	Distributed fabrication
Information Delivery	Human contact	Mail, telegraph, telephone, radio, television	Wired and wireless data networks	Neural interface
Industrial Commodity	Seeds, land, textiles	Steel, chemicals	Silicon, software	Nanomaterials Designs
Key Product	Domesticated plant and animals	Automobile	computer	Matter compiler Personal hospital Universal mentor Experience machine Social science simulator

Source: IT'S ALIVE (Christopher Meyer & Stan Davis, 2003)

#### 1.3 Social context

Major global situations and trends include the possible increase of world population from 6.1 billion persons in 2000 to 7.8 billion persons in 2025. 95 per cent of such increase would be contributed by developing nations. Human would live longer. As a result, children population would be diminished. Senior citizens would increase. In addition, in 2025, 60 per cent of population would reside in cities, resulting in hyper-urbanization. This change would be driven by advancement in infrastructure and information technology as well as borderless

migration. All of these changes combined would affect natural resources and environmental management as well as quality of life. Meantime, threats to human quality and security would be more sophisticated.

#### 1.4 Environmental Context

Global population increase and imbalance production for consumptions deteriorate natural resources and environment. Constraints in production and ways of lives would be increased. To date global communities realize about sustainability in case where current production and consumption behaviors continue. United Nations had organized conferences to promote member countries on sustainable development. In 1972, the UN had organized the conference on environment and human at Stockholm, Sweden. In 1983, the UN has established the World Commission on Environment and Development (WCED) In 1987, the UN has published the report "Our Common Future." In 1992, the UN Conference on Environment and Development (UNCED) or Earth Summit has been organized at Rio de Janeiro, Brazil. At that time political leaders from 152 countries had approved Agenda 21, the master plan for world sustainable development. In 2002, the World Summit on Sustainable Development (WSSD) has been organized at Johannesburg, the Republic of South Africa. At this time, country members had agreed to accomplish the Millennium Development Goals (MDGs) within 2015.



#### 1.5 Consumer's behavior Trend Context

Changes in Consumers' behaviors are major factors contributing to business opportunities and competitive advantages. Businesses are to propose goods and services meeting constantly-changed consumers' needs. Therefore economic restructure must take consumers' behaviors into consideration. Strategies must be formulated prudently. Basically, factors contributing to consumers' behaviors include demographic structure, incomes, preferences, and lifestyles, for instance, extension of urbanization.

#### 2. Principle of Economic and Social Restructure

Radically changing development context in the future requires Thai economy to adapt itself for exposures on new environment. The economy should be better developed and geared toward sustainable development, as well as ready to be exposed to volatility in globalization.

Growth must create wealth to the public and be better distributed to grassroots citizens. To achieve this vision, economic and social restructure based on four following principles are crucial:



#### 2.1 Economic Stability and Sustainability

More and more vulnerability of future global economy and dramatic changes in technologies can be observed today. In addition linkages of trades and finances in the global context increase competitions and transfers of capitals. Uncertainty of social and political factors affects each country's economy. Thailand has to create economic foundation geared up for global economy volatility. Besides, lessons from the past suggest that high degree of dependency on foreign countries on trades, capitals, and technologies caused problems for economy. On contrarily, high degree of protectionism may move such country backward and experience recession.

Development to achieve active and strong economic foundation must be carried out in line with linking domestic economy to global economy and strengthening domestic economic foundation toward competitiveness. To achieve this mission, the government needs to focus on areas where they can depend on domestic input in favor of more competitiveness. For Thailand, the country must prioritize its development missions on agricultural sector, service sector, and local wisdom because Thailand has abundant agricultural areas. Thai people have special characteristics or "Thainess," which are capable of attracting foreigners. In addition, there are plenty of local wisdoms capable of being developed to be world-class goods or services.

#### 2.2 Value creation from knowledge application

Global economy is moving toward knowledge-based society where values of good and services from factors other than raw materials and labors are dramatically increasing. High-value goods and services consist of value creations by technologies, researches and developments. Such factors contribute to higher quality, better designs and stronger brand loyalty. Images in term of cultures, social responsibilities and environmental-friendly are integrated to consumers' values and preferences. Consequently, only one third added value belongs to producers using labors and materials. Basically, two third of added value is belong to

intellectual-property owners who have created values for their products, for instance, owners of trademarks, copyrights, and patents. Benefits of owners of intellectual properties may create wealth in capital market.

In the past, Thailand sold goods and services mainly through labors and raw materials. The country got only small margins from value chains. The country is to restructure production processes and services through existing competitiveness including natural resources, cultures, local wisdoms, and Thainess. This mission is to create values for goods and services meeting global demands, which can be achieved through technologies, knowledge, and modern management.

Value creation through knowledge-based demands clusters where entrepreneurs and experts in various fields are linked. Theoretically, cluster development would result in integration of skills and knowledge, driving development of advance product and upgrading competitiveness. Many factors contributes to cluster developments, for instance, designs, researches and developments of goods, production process, marketing and selling, capital raising, logistics management, productions of raw materials and components and so on. Such skills demand specialists for each particular good or service. Cluster development is integration among upstream and downstream producer, distribution and product development services, and educational institutes responsible for educating and training personnel and conducting researches and developments.

Knowledge-based value creation is a business model applicable in every field of production including agricultural, industrial, and service sectors especially SMEs, local enterprises based on local wisdoms. If these organizations were transformed to new businesses, they would be able to create values on their products and would contribute to country economic expansion in larger scale.

# 2.3 Proactive social policy to create positive externality

In the future, competition will be based on knowledge-based economy. While Thailand is moving forward aging society in the next six years, this nation needs investment to enhance labor productivity especially among youths growing to be future workforce. Creativity and lifelong learning habits must be promoted people can gain sufficient knowledge to live in the future. To achieve such vision, public and private investments will be needed. Educational system must be improved. Skill building and labor standard must be reinforced. Healthcare and preparedness for senior citizens of both formal and informal sectors must be carried out so that senior citizens can have sufficient savings.

Government expenditures on this social context are considered proactive investments. Such investment would enhance population's effectiveness, health, and knowledge. It does not only promote domestic economy, but also prevent sicknesses in the future. By

the way, proactive social investment must include prevention of epidemics. This could be achieved through economic and social measures to reduce risky behaviors and origins of social problems.



#### 2.4 Global and regional positioning

Globalization ties all communities closer because of lower tariff barriers, cheaper logistics and transportations, more advanced but cheaper information technologies. Geographical barriers are diminished. At this time, competitions are based on outsourcing. Services are oriented toward, based on information technology, countries offering cheaper prices. Many countries are highly motivated to settle free-trade agreement hurriedly. Therefore, competitiveness would be enhanced because they can import better quality but cheaper products and export more goods to counterparts which reduce tariff By the way, while Thailand needs to develop barriers. goods and services based on existing competitiveness which is raw materials and knowledge, the country needs to explore market opportunities. Meantime, Thailand needs to open domestic markets for more competition from foreign countries.

Regarding linkages to global economy, Thailand has accessed to large-scale and potential countries for instance, China, India, Japan and the US and new market such as the Republics of South Africa supplying raw materials. Thailand's neighbor countries



including Lao PDR, Cambodia, Myanmar, and southern China are also important. Basically people in these countries generate lowest incomes than those of other do but they are linked to Thailand in term of cultures and brotherhood as well as ways of lives especially at borders.

Therefore the country has policies to promote cooperation and development of neighbor countries toward more advanced economy and more lucrative. This is aimed to make Indochina as hubs for manufacturing, consumption, and investments in Asia. Capacity buildings for neighbor countries must be integrated through economic, social and environmental contexts based on Thailand's experiences.

# 2. Government Administration Plan for the Year 2005–2008

# 1. Concept and Direction of Government Administration

#### 1.1 Government Vision

The next four years would be a transformation period toward more stable and sustainable country. The governments will buildup strong foundations for the future and will restructure the country in term of economic. social, political, and administration contexts. More focuses will be made on stronger communities, recovering of natural resources and environment. decentralization. More balanced economic and social structure will be emphasized. Economic immunity will be developed. Education restructure will be geared toward knowledge-based society. All incoming developments will be based on His Majesty the King's philosophy of "Sufficiency Economy," geared toward balanced, wealth, and sustainable structure. In addition, the government still maintains its economic growth rate of 5-6 per cent through quality and stable growth. Inflation rates will be kept below 3.5 per cent. One million job opportunities would be created for the next four years.

### 1.2 Strategic goals

Strategic goals are what the government requires for achievement of each strategy. For the period

of 2005–2008, strategic goals include solid performance indicators and goals for each strategic goals. Basically, strategic goals are used for monitoring and evaluating outcomes.

#### 1.3 Key Strategy

Key strategy indicates major directions, measures, and operations necessary to achieve strategic goals. It is also conditions for assigning tasks to hotts or responsible organizations.

# 2. Strategic operation frameworks of the government

Under democracy, good government features government's high competency on administration. This means, firstly, the government is capable of making decision on public policies effectively. Secondly, the government is able to deploy its policy. Thirdly, the government is capable of resolving disputes and conflicts of interests effortlessly. Fourthly, the government is able to disclose and disseminate information and knowledge to all stakeholders.

The strategic plan is a tool reflecting the government's decision and priority to meet public demand and country development needs. This plan also reflects leaderships of the Prime Minister and of political top management.

Section 13 and 14 of the 2003 Royal Promulgation on Good Governance prescribes that the Cabinet

shall formulate the 4-year strategic. Statement addressed by the Prime Minister to the Parliament will be incorporated in the government policies in accordance with the Constitution of the Kingdom of Thailand and any relevant country development plan. At least, contents including goals, outputs and outcomes, host organizations or individual responsible for each mission, estimated revenues and expenses, resources allocated, timeframe, and monitoring mechanism must be detailed or assigned. All of strategic plans in detail must be completed in 90 days since the Prime Minister address to the Parliament.

Section 15 of the 2003 Royal Promulgation of Good Governance prescribes that after the government announces its strategic plan, it is to make legislation plan. Such legislation plan details new legislation, amendment or repeal of laws, which must correspond to the new strategic plan. In addition Section 16 prescribes that each government agency has to formulate its own 4-year strategic plan and annual plan. Such plan must correspond to national strategic plans. Furthermore, all government agencies must submit annual performance reports.

### 3. Key Strategic Issues

The aforementioned strategic plan prescribes directions and operational guidelines for the cabinet for the next four years according to the policy framework the

Prime Minister addressed to the Parliament and according to basic state policies according to the 1997 Constitution. The cabinet is responsible for all outcomes from administration. The plan for 2005–2008 contins nine strategic issues as follows:

#### 3.1 Strategic Issue 1: Poverty eradication

- a. Country level
- b. Community level
- c. Individual level

# 3.2 Strategic issue 2: Development of quality people and society

- a. Developing society of life-long Learning and people of integrity, which are prepared for country development and competitiveness.
- b. Conservation of ancient traditions and cultures. Developing people' intelligence fits to economic and social developments.
- c. Creating citizens' healthy lives based on standard and quality.
  - d. Creating securities in lives and societies
- e. Developing readiness for coming aging society to promote senior citizens as value assets of country economic system and society.
  - f. Developing Bangkok as the best living place.

# 3.3 Strategic issue 3: Economic restructuring toward balance and competitiveness

- a. Agricultural sector
- b. Industrial sector
- c. Tourism, services and trades
- d. Treasury and Financial Managements
- e. Science, Technology, Research, and

### Innovation.

- f. Logistics system development
- g. Infrastructure development
- h. State-own enterprise development
- i. Enhanciny ability for National Strategy

  Execution

# 3.4 Strategic issue 4: Natural resources and environment management

- a. Balancing between utilization and conservation toward sustainable development
- b. Protecting and utilizing biodiversity on sustainable and fairness bases
- c. Recovering and utilization soil resources fit to area conditions
  - d. Systematic water resource management
- e. Natural resources and environment management participated by private corporate and local communities
- f. Pollution controls covering waste, wastewater, fine particle, gas, smell and noise



### 3.5 Strategic issue 5: Foreign affairs and international economics

- a. Implementation of proactive foreign policies
- b. Promotion of relationships with international communities
- c. Promotion of cooperation under multilateral cooperation and Thailand's roles in global communities
  - d. International economy
  - e. Public-based diplomacy

# 3.6 Strategic issue 6: Legal development and promotion of good governance

- a. Legal improvement
- b. Justice system development
- c. Government system development
- d. Prevention and suppression of corruptions
- e. Strengthening corporate and social

governances

# 3.7 Strategic issue 7: Promotion of democracy and civil society

- a. Developing participative democracy and strengthening civil society
- b. Promoting and developing human rights toward international recognition
  - c Decentralization

### 3.8 Strategic 8: Homeland Security

- a. Sustaining monarchy
- b. Country defense
- c. Homeland security

# 3.9 Strategic issue 9: Preparedness for changes and globalization

Such country strategic planning will be used as a reference or master plan communicating major strategies down to line ministries and departments or functional-based approach at provincial clusters or provinces or area-based approach or agenda-based approach. This will be carried out through 4-year strategic plans or annual plan, which would integrate administration and resource allocation.

### 3. Mega Project Development

### 1. Overview of Mega Projects

#### 1.1 Background

On November 1, 2005, the cabinet has a resolution on approval of mega projects of fiscal years of 2005–2009 with the total budget of 1.8 trillion Baht as proposed by the Mega Project Review Committee. This committee is chaired by the Permanent Secretary of Ministry of Finance. The Public Debt Management Office is a secretary. The key purpose is to coordinate with hosts for preparing and for monitoring mega projects. Hosts are as listed below:

Champions	Fields	
* Ministry of Transportation	* Mass Transportation System	
* Ministry of Social Development	* Housings	
ans Human Security		
* Ministry of Poblic Health	* Development and imrovement	
	healthcare services of public	
* Ministry of Education	* Restructure of education systems	
* Ministry of Natural Resources,	* Water resources management	
Ministry of Agricultures and		
Cooperatives		

### 1.2 Investment budget framework

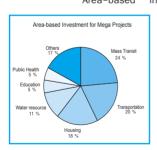
#### (1) Investment budget framework for Mega Projects

Investment of mega projects during the year 2005-2009 is based on the budget of 1,804,242 million Baht. Such mega projects cover following seven areas:

Fields	Budget	
1. Mass Transit	423,429.69	
2. Transportation	345,602.38	
3. Housing	330,360.00	
4. Water resource	203,084.24	
5. Education	96,345.41	
6. Public healthcare	94,790.00	
7. Others	310,630.14	
Total	1,804,241.86	

#### (2) Area-based investments

Area-based investment



vestment budgets of 1,804,242 million Baht were allocated for the year 2005-2009, 24 per cent of which was allocated for mass transit. Yet, only 5 per cent of the budget was allocated for education and healthcare. This

reflects that investment will heavily focus on physical infrastructure development.

#### (3) Annual investment

From investment budget in mega project of 1,804,242 million Baht, 1,251,723 million Baht will be invested by state-own enterprises or 69 per cent of the total budget. Government agencies will invest for only 552, 519 million Baht or 31 per cent of the total budget.

Regarding annual investment in accordance with the mega project disbursement plan of the year 2005-2009, there would be highest investment of 505,159 million Baht and 514,526 million Baht during the year 2007-2008. Out of this amount, state-own enterprises are biggest investors which would invest 334,280 million Baht and 369,898 million Baht respectively. Government agencies would invest 170,879 million Baht and 144,628 million Baht respectively. The government is to raise capitals for the year 2005-2009 prudently. This is to prevent burdens from budgets, public debts and import contents.

### 1.3 Key projects

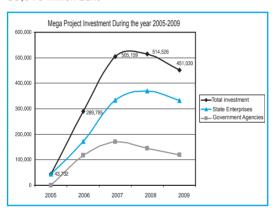
Mega Projects need investment budget of 1.8 trillion Baht. Key projects are summarized as follows:

#### Mass Transit

- Sky train, Pale Red Line or Airport Link, with the budget of 30,000 million Baht
- Sky train, Violet Line, Bangyai-Bang Sue Link, with the budget of 46,962 million

#### Transportation

- Construction Project on the Bangyai-Banponge Special Highway with the budget of 12,200 million Baht
- Sriracha-Lamchabang dual Railroad Construction with the budget of 6,709 million Baht
- Suvarnabhumi International Airport Construction Project, the 2nd Phase, with the budget of 38,516 million Baht



### **Housing Project**

 Baan Uea-arthorn Low-cost Housing Project, the 5th phase with budget of 146,588 million Baht.

#### Water Sources

 Integrated Water Resources Management for 25 rivers, with the budget of 203,084 million Baht

#### Education

 Fundamental Education with the budget of 72,839 million Baht

#### Healthcare

 Healthcare infrastructure developments and healthcare service network with the budget of 79,136 million Baht

#### Other areas

- North Bangkok Thermo Electricitygenerating Plant, the first set (with transmission system) with the budget of 17.311.87 million Baht
- Extension of fixed-line services for 565,500 numbers with the budget of 8,045 million Baht
- Public water supply renovation according to the 7/1 Master Plan with the budget of 2,550 million Raht
- Construction project for Chiang Mai International Convention Center and Exhibition Hall, with the budget of 1,900 million Baht

### 2.Preparedness and transfer of operations at Suvarnabhumi International Airport

Suvarnabhumi International Airport is scheduled to be opened for commercial uses in 2006. This airport was planned to be the new commercial airport in Thailand and the international aviation hub. Located in the area of 20,000 rai (2.5 rai = 1 acre) and 25 km. far from

Bangkok, if opened in 2006, this airport would be the most modern airport in the world. The airport is equipped with the state-of-the-art technologies, highest standard security, world-class mass transportation systems and logistics, modern facilities and most importantly, hospitality. This international airport is capable of servicing 45 million passengers /year and supporting air transportation of 3 million tones /year.

Main structures of this airport scheduled to be opened in the first phases include: (1) two runways with 60-m width each, with 3,700-m length and 4,000-m length, and 2,200-m space between two runways supporting large-scale airplanes: 2) terminals consisting of 7-storey passenger terminals with usage areas of 563,000 sq m and underground floor featuring the most modern designs of Thainess incorporated and equipped with state-of-the-art facilities. Another structures are 4storey terminals and underground floor with usage areas of 381,000 sq m: (3) 120 airplane parking pits consisting of 51 terminal pits, five of which are capable of supporting the largest airplane ever built to date, and of 69 distant parking pits; (4) a flight control tower (132m height, the tallest in the world) equipped with the state-of-the-art navigation control system. In addition, there are parking lots inside and outside terminals serving 15.000 cars. There are transportation networks comprising 5 main roads of 27 traffic lanes. There is an elevated road eight traffic lanes from Bangkok-Chonburi Roads (new) directed straight from the north to the terminal. This is a main entrance and exit.

Progress to date as of September 29, 2005 were, for instance, substantial completions of passenger terminal and installation of navigation systems. On September 29, 2005, the Thai Airport (Public Company) has performed technical tests. At that day, two Thai Airways International PCL's flights departed from Don Muang International Airport and arrived at the Suvarnabhumi International

Airport. Test results from that day were used for further improvement.

For the next phases, main tasks include Operational Readiness (OR) and Airport Transfer (AT) from Don Muang International Airport to Suvarnabhumi International Airport. These two operations combined are called "ORAT." Major ORAT include readiness



tests of 11 systems include: (1) Airport Access; (2) Passenger / Crew Handling; (3) Baggage Handling (4) Cargo Handling; (5) Ground Handling; (6) Aircraft Control; (7) Administration and Management; (8) Facility / System Management; (9) Airport Security; (10) Customer Service; and (11) Environment.

Development of Suvarnabhumi International Airport to meet airfreight demands would be a major factor contributing to Thailand's competitiveness in global market. The airport would stimulate economic development

and growth, and promote tourism industry and social development as well as improvement citizens' well-being.

Suvarnabhumi International Project is one of mega projects needing investment of 150,000 million Bath. The project concerns various responsible organizations including government agencies, state-own enterprises and private sector.

### 4. Development of Competitiveness

#### 1. Bionanotechnology

# 1.1 Roles of Bionanotechnology and applications in Thailand

- (1) Global economy is moving toward molecular economy, evidently, cooperation to develop knowledge on genome technology or Human DNAs, and application of the sixth wave technology or nanotechnology. These technologies were believed to revolve agricultural technologies, industrial technologies and information technologies would be an important factors contributing to economic expansion and wellbeing of population in counties on the edge.
- (2) Nanotechnology can be classified into three categories including nanomaterial, nanoelectronics, and bionanotechnology. Bionanotechnology incorporates high technology in the field of physical sciences, chemistry, and engineering for various applications, for

instance, testing, controlling, modifications, and synthesis of new molecules. The major purpose of this technology is to generate new molecules. This technology is believed by many experts that it is one of the most challenging and lucrative business. It was expected that in 2015, biotechnology economy would be about 180,000 million USD or 20 per cent of total value of nanotechnology of trillion USD. Most of products are medical devices, agricultural products, and food technologies and so on.



(3) Thailand is the country relying on agricultural sectors with its strengths on biodiversity. The government has designated food industries as the strategic industry under the concept of "the World Kitchen." To achieve the vision, the government has announced its plan on value creations for goods and products. Basically, value creation would be based on driving factors including sciences, technologies, and innovations to elevate country competitiveness on

sustainable basis. This mission must be carried out with knowledge creations in such particular fields to avoid non-tariff barriers such as food safety.

(4) Maximization of potentials of bionanotechnology through applications useful to ways of lives especially drugs, medicines, and healthcares would be advantage for country development in various aspects. Application of bionanotechnology in Thailand would be focused on the field Thailand already has laid foundation, driving country developments in foods, medicines, drugs, agricultures, environment conservation and pollution controls.

### 1.2 Draft bionanotechnology strategic plan

Primarily, the National Nanotechnology Strategic Formulation Committee had formulated the draft national nanotechnology master plan (for the year 2004–2013) directing bionanotechnology development for the next ten years. Four goals have been assigned: 1) developing bionanotechnology businesses; 2) promoting sustainable kitchen of the world through food safety and taste standards; 3) developing healthy society and environment through launches of newly-developed drugs for tropical diseases and biosensors for environment monitoring; and 4) developing capable human resources and knowledge-based society.

**To achieve the above mission,** four strategies must be implemented: 1) upgrading excellent centers as incubation centers for researchers and supporting four

targeted industries; 2) developing networks of research cooperation to promote researches and investments among academic institutions, research institutes, and public organizations and capacity building on technology through cluster development as well as launching investment promotion measures to develop business alliance and foreign investment; 3) developing academic human resources and career paths; and 4) disseminating knowledge on bionanotechnology to the public.

#### 1.3 Nanotechnology and business opportunities.

The draft master plan designates three phases for developments of nanotechnology and products. In short term, nanotechnology would be used for value creation of rubber as medical gloves and condoms. In medium term, it would be used for development of drugs and usages customized for each disease and specific treatment, for instance, Malaria. In long term, Biosensor would be developed for measurements in food and agricultural industries.

# 1.4 Current situation on researches and researchers

(1) To date, most of researches are conducted in five universities: Chulalongkorn University for drug design and nanosensor; Chiangmai University for flow analysis at nano level and laboratory chip; Mahidol University for nanosensor and drug delivery; Kasetsart University for drug design and rice genetic engineering; the



National Synchrotron, the Ministry of Sciences and Technology for micro/nano sensors, chip laboratory, drug delivery, and biochip.

(2) Concerning researchers and developers in nanobiotechnology and bionanotechnology are insufficient. The strategic plan aims that in ten years, the country would have 8,000 researchers and developers in nanobiotechnology and bionanotechnology.

# 1.5 Biosensors, the most lucrative bionanotechnology business

(1) Biosensors are used for specifically analyzing substances. At present, market segmentation for biosensors are medicines (including military), environment, and biotechnology. Researchers in Thailand have conducted researches in this field for 20 years. In the future, proper restructure might lead to commercialization especially those useful for agriculture and medicines.

- (2) Concerning existing knowledge and technologies in Thailand covers production of biomaterials used for devising biosensors, for instance, enzymes, microorganisms and receptors. Thai researchers are capable of producing many biomaterials and extracting many kinds of enzymes. Currently, this technology is being transformed to be biosensors. Concerning organic receptor, there is no such research in Thailand but polymer receptor do. Concerning transducers, Thai researcher already created carbon electrodes made of graphite powder and thin-film electrodes made of platinum and titanium. Concerning measurement and evaluation system, Thai researcher is able to produce electrochemical measurement system wildly applied in industries today. Currently, most potential researches for commercialization are for instance biosensor for measurements of sucrose, BOD, urea and amphetamine and so on.
- (3) However, biosensor researches in private corporate do not exist in Thailand. Therefore, academic networks and public research institutes are to be established and thus form cooperation with private sectors to commercialize biosensor researches.

### 1.6 Government supports and intellectual property right protections

(1) The government is to support newlyestablished nanotechnology companies and set the direction on investment promotion. This is to attract foreign investment and promote joint-venture between private corporate and foreign nanotechnology firms. In addition, enabling environment supporting newly-established company is to be developed through attractive financial and treasury measures, rules and regulations, and infrastructure. In addition, targeted cluster developments will be promoted, for instance, food industry, agricultural sector, healthcare and medical sectors and so on.

- (2) Concerning property rights, at present, there are many relevant laws, for instance, the Biotechnology Product Property Right, the 2002 Commercial Secret Protection Law. These laws are aimed to protect innovations including products and processes generated by biotechnology and bionanotechnology. Under the Property Right Protection Act, DNA and Gene Property Right Act are covered. The 1992 Plant Protection Act covers newly-discovered plant and indigenous plant genetically modified by researchers in accordance with liability Thailand agreed with WTO and TRIPs.
- (3) In the future, investments in nanotechnology would be risky in term of returns and investments. Meantime, researches and developments are on going. Concerning legal protection for researches for instance, patenting should be carried out if only marketing channel is established. Cross license should be taken into consideration so that the country can manufacture and market products without being barred by more competitive nations. This is because such nations have already

patented products or processes before Thailand or patented at wider scope than Thailand do. All above problems must be taken into consideration.

#### 2. Logistics Development Strategy

Logistics development is considered a national agenda. Logistics is essential for the country to elevate competitiveness. Many organizations are jointly developing logistics system in Thailand. National logistics development strategy is as follows:

#### 2.1 Infrastructure Development

Physical infrastructure is like a skeleton of logistics system delivering goods and services from upstream to downstream. Development direction includes infrastructure development to enhance efficiency of services at main trading channels and for potential trading channels linked to international market. This includes development of domestic hub & spokes of highest quality and standard. There are inter-regional lines and logistics systems on main lines linked to neighbor countries. Key projects are, for instance, Laem Chabang Harbor and Pak Bara deep-water Harbor. Other examples are development of warehouse systems at the international airport in preparedness for future logistics hub, CY (Container Yard) development project in various regions, development of alternative logistics and low-cost energy and so on.

#### 2.2 Development of data linkages and database

At present knowledge economy under globalization is experiencing fiercer competitions. To survive, logistics databases must be developed. Elogistics will be developed by linking databases among government agencies, private corporate, and service users so that concerned party can crosscheck origin of goods. In addition, information technology will be introduced for business practices including e-commerce transaction.

#### 2.3 Capacity building on logistics management

Capacity building on logistics management is essential for logistics system development. This is to equip entrepreneurs with logistics management skills. Logistics knowledge and human resources will be developed to achieve to meet quality and quantity demands.

### 2.4 Logistics Service Providers Development

Business development direction for logistics service providers include: incentives to increase Thai entrepreneurs for instance investment promotion, financial and treasury measures and standardization. Developments will be directed to expand scopes of services of private and public logistics providers to cover higher value-added services. In addition, networks among logistics service providers will be strengthened for cost sharing and knowledge transfer.

#### 2.5 Regional Linkages

Regional linkages will be achieved by developing facilities for border trades through single stop inspection and cooperation on logistics systems with neighbor countries as well as standardizing trading facilitation systems and logistics system. In addition, electronics export documents will be improved to be the same format. Furthermore, cooperation with neighbor countries will be sought to standardize goods and services.

# 2.6 Development of Legislation, Regulations, Policies, and Service Processes of Government Agencies

At present, there are plenty of logistics-related laws. Duplication of government processes among agencies result in unnecessary and time-consuming processes. Some laws are not updated and respond to current situations. Therefore, concerned legislation must be constantly updated to facilitate logistics services. Laws and regulations must be developed to achieve maximum efficiency and international standard. Law enforcement must be strengthened to support electronics commerce. Government services must be standardized. To date, key legislation that must be amended is transportation, ecommerce business promotion, and improvement of government process.



# Section 4 Country Development Strategy for the Tenth Plan



# 1. Development of Stable and Sustainable Economy

Primarily, stable and sustainable economic foundation is based on three development dimensions including economic, social, natural resources and environment contexts. Yet, experiences reflect that past country development had caused imbalance which would be a main weakness for country development in the future.

#### 1. Framework of imbalances

#### 1.1 Economic dimension

Although GDP has expanded continuously, such economic development resulted in structural imbalance of economy. Productions still depend upon industrial and service sectors as well as exports. Yet, there have been few exports for few large markets. On contrarily, there have been heavy imports of capital goods especially oils. Such economic structure exposes the country to such imbalance. To survive in globalization driving economic cooperation and changes of consumers' behaviors which might affect the country, Thailand must be prepared for such changes.

#### 1.2 Social development dimensions

Imbalance of social development does not correspond to economic development direction. This is evidenced by quality of people, most of which could not adapt themselves to changes of technology and knowledge-based economy. Few people are self-reliance. Social capitals especially cultural capitals and local wisdoms have been scarcely utilized. Limited wealth distributions have resulted in more economic and social gaps. Social imbalances can be observed at individual level, family level, community level and society level.

#### 1.3 Natural resources and environmental

#### dimensions

Although natural resources and environmental dimensions have improved, weaknesses and imbalances still exists. This is especially in the case where natural

resources are not optimally exploited because of ineffective management. There have been no cost/benefit analyses of forest conservation for future generation. Meantime, economic and social developments have affected natural resources and social developments.

# 2.Proposals to develop stable and sustainable economic foundation

#### 2.1 Fconomic dimension

Macroeconomic infrastructure should he geared up for stability and sustainability. This mission would be achieved by restructuring financial sector in line with strengthening manufacturing and service sectors. Supervision of financial institutions should be developed for more efficiency and transparency in line with transparent deployment of fiscal policies. Meantime. public savings and enhancement of risk management of loans should be promoted. Treasury position should be strengthened, through replacement of full-amount government financial guarantee by guarantee by deposits. Money market, capital market and bond market should be restructured for more balance. In addition, foreign affair policy should be moved forward in line with services through integration of agricultural sector, industrial sector and services. Such integration would balance growths in these three sectors and enhance competitiveness as well as generate more value creations. Moreover, infrastructures to strengthen manufacturing sector and service sector should be developed for competitiveness. Domestic markets should be strengthened for domestic goods and services and for reducing risk exposure caused by export dependency.

#### 2.2 Social dimension

Quality of people should be urgently developed in line with more value creation from local wisdoms and cultures. Key purposes are to develop potential goods and services and promote wealth distribution. In addition, social management perspectives will be restructured for more balance.

#### 2.3 Natural resources and environmental dimensions

The government is to balance utilization of natural resources and to recover forest, soil resources, quantity and quality of water resources. Energy conservation and recycle energy should be promoted. Efficiency of natural resources should be improved for energy-saving and less pollution. Efficiency of natural resources and environment managements should be improved.

### 2. Value Creation through Knowledge Base

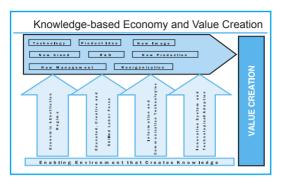
Global economy has moved forward quickly partly because of advances in sciences and technologies. As the world has evolved from industrial economy to information

technology, dynamic changes have occurred especially knowledge creation geared up for developments. Therefore, economic development at present can not only be



based on effective utilization of resources, but also capacity to transform scientific and technology knowledge to generate innovation geared toward development or "knowledge-based economic development."

Knowledge-based economy according to World Bank's definition is the economy where knowledge is created, acquired, modified, disseminated and applied to drive economic growth and social development effectively. Knowledge-based economy attributes four following components: 1) effective innovation development at every level including acquisition, dissemination, exchanges, and application geared up for local demands or economic value creation; 2) educated and skillful human resources as medium for developing, applying and disseminating knowledge to economic and social systems; 3) state-of-the-art information technology and telecommunication



systems to disseminate knowledge and utilize technologies and innovations faster and broader; 4) enabling economic environment and institutions, for instance, rules and regulations, forums, marketing channels, openminded value, and government regulations shaping people in the society to be more creative and entrepreneurial minds to develop and invest in knowledge and innovation creation.

Therefore, development toward knowledge-based economy would promote business practices and economic growth or "value creation through knowledge-based creation." This means economy will be based on intensive knowledge utilization to create innovation, which adds value or price to products. This in turn drives economic growth. On the other hand, value creation in knowledge-based economy is mainly driven by knowledge and

intensive knowledge utilization applied to production processes to transforming raw materials, labors, and natural resources to produce goods or services of values higher than those utilizing only natural resources.

Strategic direction includes value creation for goods and services through applications of knowledge, innovation, advance technology, and researches and developments, to develop, for instance, new goods and services, new processes, management, re-engineering, designs, branding, and positioning, as well as environmental-friendly products. New conditions to create new job opportunities or labor skill development are also included.

For Thailand, during the year 2005, the government has launched policies and measures for economic restructures for the next four years. (2005-2008) Such economic restructure was aimed toward wealth creation and distribution covering agricultural sector, industrial

sector, tourism sector, service sector, and trading sector. Key strategic issues are value creation through knowledge base. This means such economic



restructure will be carried out through appropriate knowledge on sciences, technologies and innovations and developments of logistics, infrastructures, as well as

strengthening state-own enterprises. Meantime, disciplines, strengths, and stability of financial and treasury sectors will be reinforced. Moreover, database will be developed to support formulation and implementation of strategy to develop country competitiveness.

- Restructure of agricultural sector: Biotechnology would be a key driving factor for value creation and creating alternative products including energy, materials, and drugs. Developments will be geared toward the entire food supply chains.
- Restructure of industrial sector: Labor-intensive industry will be transformed to knowledge-based and innovation-driven industry. Cluster development will be strengthened. Manufacturing processes will be more environmental-friendly. Competitiveness of all clusters will be improved especially for SMEs.
- Restructure of service sector: More focuses on extension of development bases and linkages in service businesses will be made to attract tourists and create value-added to service sectors of the country, new forms of services, for instance, healthcare services, education, and entertainments and so on.

## 3. Proactive Social Developments

#### 1. Current situation of Thai society

Analyses of situations impacting Thai and society suggest that healthcare and accessibility to healthcare insurance systems have been improved as evidenced by longer life expectancy. Yet, more and more Thai citizens are experiencing sicknesses caused by poor lifestyles, and chronic diseases. More children are prone to be overweight. Many studies suggest that more equal opportunity in education and development of accessibility to information are major contributors for more accessibility to education of children at every level of both formal education and informal education. However, quality of education must be improved.

Social safety net has covered more people as social security has extended to cover more employees of 21.86 per cent of the work forces. Concerning informal workforces, it is under preparation. In this regard, social safety net is community-based. To date more and more stakeholders are participating in social development. Thailand's key strength is local wisdoms and diversity of unique cultures. Ironically, family institution is relatively weak. In addition, religious institution has not played a significant role in developing integrity and morality for the public, which is radically different to people's attitudes

and values. Past development has diminished the poor. Yet, structural poverty features education, age of family head and size of family.

Social investment budget, during the past six years, has been sufficiently allocated and increased. Yet, efficiency is relatively low. Resource allocation is oriented to urban rather than rural communities. In addition, most of policymaking lacks of integration and are still bureaucratic. Policy evaluation are made for short-term and by objectives without for long-term social impacts and for negative impacts. In addition, information system is relatively weak. Performance indicators measure past actions, which are not sufficient for following-up and readjustment of plans.

Analyses of situations affecting Thais and society, factors impacting development and future development trends indicate challenges. Thailand needs to be prepared for:

- (1) Changes in demographic structure: at present, working-age population would be proportionally highest. The country is to accelerate labor productivity. Meantime preparedness for aging society must be taken to prevent economic stagnancy.
- (2) Technology development and impacts on Thai society: Advances in technologies have more and more positively and negatively occupied ways of lives. For instance, more efficient accessibility to information

facilitates development of knowledge-based society. Ironically, this development leads to electronic crimes, widespread of pornography, and inappropriate copy of misled behaviors.

(3) Free movement of workforces: Globalization results in free movement of capital, knowledge and workforce. More potential human resources have been attracted to the country, for instance, experts and tourists. These groups of people help generate incomes for the country and transfer technology. In turn, more Thai workers including skill and professional workers have been able to work abroad, generating incomes and prestige for the nation.

#### 2. Proactive social development

Based on current situations on social development, comprehensive root-cause and trend analyses, the country is in need of proactive social development in order to achieve the key strategic objective, "Decent, quality and happy Thai People residing in hospitality, peaceful, and fair society."

To achieve such strategic goals, three proactive social development frameworks should be deployed as follows:

- Balance with other development dimensions including economy and natural resources and environment.
  - (2) Paradigm shift: In the past, social development

had been considered unnecessary. More focus on fire fighting had been traditional. This value has been transformed as more social investments are prioritized. In fact social investment should be contributed in advance.

(3) Highly-effective management: This is to achieve effective outcomes and fire fighting. Execution must be based on existing mechanism and development partners as a driving force for effective social development.

#### 2.1 Key strategic issues are as follows:

- (1) Upgrading Thai people quality toward learning society: This mission would be achieved by promoting cutting-edge healthcare system and education system. Comprehensive human resources development will contribute to competitive advantage.
- (2) Developing social safety net: Social safety net should be developed to cover all Thai citizens on equal opportunity basis, for instance, social security on housings among safety environment with protected rights.
- (3) Maintaining Thai value: this would be achieved integration of social capital to develop morals and integrity and to strengthen existing capitals as well as to enhance economic value for cultural capital.
- (4) Preparing Thai society for aging society: This would be achieved through modification of Thai people's behavior, especially self-help attitude especially on healthcare. Other programs include developing savings

value and behavior for income security. Senior citizens' wisdom should be promoted for more contribution to society.

- (5) Reengineering to facilitate social development: Policymaking processes concerning development and prevention, policy deployment, developments of roles and participation of development partners, and developments of fair allocation of natural resources should be reengineered.
- 2.2 Key success factors for proactive social development through cooperation with alliances in line with effective supporting systems are as follows:
- (1) Strong people/community: This means people play key roles in initiating, making decisions, and carrying activities in communities by themselves through existing capitals.
- (2) Active participation of development partners: This would be achieved by development of cooperation networks and effective communication.
- (3) Effective management system and good governance system: This should be in line with good supporting systems, effective coordination and communication, developed knowledge management with alliances.
- (4) Solid social foundation supporting development: This includes infrastructures and effective social services in line with quality and skillful human resources and enabling environment, for instance, database, rules and regulations.

#### 4. Linking to Global and Regional Economies

Regarding linkage to global economy, Thailand has been linked to large market of high demand, for instance, China, India, Japan and the US and countries with abundant supplies of raw materials such as South Africa. Thailand has also linked to Lao PDR. Cambodia, Myanmar. and Southern China. These low-income countries have culturally and traditionally linked to Thailand, People in borders of formal and informal economies are tightly linked to one another. Thailand has launched policies to help develop neighbor countries, which advance and are quickly lucrative. The purpose is to promote Indochina as hubs of production, consumption, and investment in Asia. Developments through economic, social and environment perspectives will be entirely carried out by Thailand's neighbor countries. In this regards, Thailand would be a development model for them because Thailand has been developed from similar environment. Learning by example would make them avoid unnecessary mistakes. This would be benefits for the entire region.

In addition, as globalization is integrated causing unprecedented events, it might impact the nation and cause chain reactions regionally and globally, for instance, terrorism, natural disaster, and epidemics in human and animal and so on. It is necessary to reinforce country security through international cooperation for development of warning systems to mitigate and resolve problems. Therefore foreign economic policies must be integrated to

economic restructuring policies. This is because Thai economy is highly correlated with global economy. Strategic positioning at regional and global levels is crucial for competitiveness. International cooperation on trades, investments, politics, and society must be invigorated at bilateral, multilateral and regional levels.

Measures, for examples, should be taken are as follows:

- (1) Constructing natural disaster warning system and developing regional cooperation network.
  - (2) Strengthening international cooperation:
- by speeding up ACMECS and JDS to support border economic infrastructure covering economic and social developments and forming development partners;
- through trade negotiation and international cooperation at bilateral, multilateral and regional levels to expand market opportunities with integrated and empowered negotiation mechanism.

Industrial sector in Thailand is to be developed for value-creation through knowledge base. Promotion should cover community enterprises, small and medium enterprises, and large enterprises. Value creation through knowledge base needs cluster development with strong innovation-driven and intellectual property system. Financial and legal systems facilitating innovators to access to capital and to commercialize their products are to be developed. In addition, due to risky nature of research and development as well as commercialization of innovative products, there should be strong incentives for new entrepreneurs, for instance, incubation system. Thai

entrepreneurs are to add values to products through research and development, branding, product and process developments, product design, marketing research and consumer behavior study, market networks and distribution channels in international market.

Today, more consumers are concerned about social value and environment. Therefore, manufacturers are to improve their production systems to be more social friendly and environmental-friendly, for instance, through waste reduction and eradication, workers' welfare, and social contribution and so on.

Measures, for example, may be taken are as follows:

- (1) cluster developments;
- (2) invigorating SMEs and community enterprises and developing incubation system;
- (3) developing national innovation research and development, and intellectual property system, as well as science and technology foundations;
- (4) promoting private sector to develop brand and design, study trends and preferences of consumers in markets:
- (5) promoting utilization information technology in small and medium enterprises and developing Thailand as future technology excellence center;
- (6) developing Thailand as an regional energy hub and energy security;
  - (7) promoting green production.

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# Section 5 Highlight events of the Year 2006



#### 1. NESDB's Annual Conference 2006

#### 1. Previous NESDB Annual Conference

In 2002, for the first time, NESDB had organized its annual conference on "Well-being of Thai People: Five Years after Economic Crisis." At that time, there were totaling 1,200 participants from every part of society attending the event. In 2003, NESDB had organized its annual meeting on, "Sustainable Development," attended by 1,619 participants. In 2004, NEDB had organized its conference on, "Underground Economy and Good Governance." At this time there were totaling 1,370 participants.

In 2005, NESDB had organized the annual conference on "Country Development Strategy: Five Years of the Tenth Development Plan." This is to report outcomes of economic and social developments for three-year period of the Ninth Development Plan based on various performance indicators including well-being, economic strength, and sustainable development. In addition, progresses of development according to the Ninth Development Plan under national agendas and good governance strategies were reported. Furthermore, brainstorming concerning the Tenth Development Plan was conducted. In this time, there were totaling 2,250 participants attending the event.

Most of participants agreed with proposals of the NESDB determining the direction and country development strategies which would be integrated in the Tenth Development Plan. Key suggestions include:

- Development goals should be geared toward wealth, stability and sustainability. "Sufficiency Economy" should be a guideline for country development and administration.
- The strategy to enhance adaptation and flexibility should be implemented to reduce impacts caused by external factors effecting Thai people and the country. In other words, the country and her people should be geared toward self-actualization, being well-rounded, and globalization.
  - · Sufficiency economy should be integrated as a

guideline to develop stable and sustainable economy. Human resources should be developed to generate "smart, decent, and happy people."

 Social development, to balance and reduce social impacts, must be aligned with economic and social development

#### 2. NESDB's Annual Conference

In 2006, NESDB has scheduled to organize its annual Conference on "Formulation of the Tenth Development Plan." This is because the Ninth Plan is about to expire in 2006. On July 20, 2004, the Cabinet had a resolution assigning the NESDB to formulate the Tenth Development Plan (2007-2011). This plan will be effective on October 1, 2006. The plan is to cover all dimensions in term of in-depth data and grassroots. Execution to achieve goals and visions effectively will be emphasized. To formulate widely-accepted and valid plan, NESDB has planed to conduct a brainstorming session concerning the Tenth plan drafted by the NESDB. 2,000 participants from every part of society were invited to the meeting. The meeting is divided into two sessions as follows:

Morning session includes the report of the country's social and economic developments based on well-being, economic strength, and sustainable development indices. In addition, evaluations on 4-year period of the Ninth Plan and on government measures on economic development will be presented.

Noon session is a brainstorming session concerning "the Draft Tenth Economic and Social Development Plans." To obtain integrity, results will be integrated for during development of plan.

## 2. The 2006 Annual Meeting on Cluster Development Agents

Globalization and technological convergences have created awareness among enterprises and industries. Many have sought for cooperation to enhance competitiveness. Evidently, worldwide trend suggested that cluster development is the most popular development practice. Many believe that clustering is the most powerful development strategy, truly strengthening industries and thus enhancing country competitiveness. Yet, one of major driving forces is strong leadership. This factor demands capable and dedicated leader. This group leader is to coordinate and drive cluster development in line with guidelines mutually set by group members. He/she is to sustain harmony and focus on wealth creation of all members.

The 2006 annual meeting for Cluster Development Agent-CDA is based on major objectives, which are development of understanding and experience sharing among cluster development agents. It was believed that outcomes would lead to clustering especially among



SMEs. This would strengthen overall industry. In addition, cooperation networks between cluster development agents of both public and private sectors would be created and maintained. It was expected that there would be 100 participants or more.

#### 3. Senator General Election

#### 1. Roles of senators

As prescribed in the new 1997 Constitution, the Senate's major role and power are examination of government administration. Its minor role and power is reviewing issues. The Senate is able to select or advise appointment of persons taking positions in autonomous organizations. Such positions include Election Commission, the Ombudsman, and Human Right Commission and so on. Other roles and powers are, for instance, impeachment

persons from positions, impeachment of members of parliaments for instance, Prime Minister, Senators and Supreme Judge and so on. In addition, the Senate has the power to enhance its roles on legal consideration and government control. Aside from its constitution roles and powers, the Senate is the legislative political institution. It has a mission bringing public justices and confidence toward the Senate. In addition, the Senate is to acquire opinions and needs from the public and media. It represents itself as a medium reflecting public sufferings to the government administration and organizations for corrective and preventive actions.

Regarding foreign affairs, the Senate is a direct representative and act on behalf of representatives of Thai Parliament. Bilaterally and multilaterally, it has duties to create and strengthen relationships with foreign legislative institutions. To gain recognition in global community, missions for such goal are for example exchanges, visits, and participations with the International Senate Organization.

#### 2. Previous Senator Election

Thai Parliament consists of the House of Representative and Senate. In the past, Senators had been elected and have four-year term. Subsequently, as the new 1997 Constitution has been effective resulting in political reforms, Senators are from general election and six-year term. The Constitution prescribes that the country shall have 200 senators.

In accordance with the intent of the Constitution, the Constitution designates six-year term for senators, which are more than by those of members of the House of Representatives for two years. No organization is entitled to dismiss the Senate. Drawing to terminate senator is not permitted. The major reason why term of senator is expired before or after that of member of the House of Representative is to prevention of vacuum of power and to maintain national security. The first senator election according to the 1997 Constitution was held on March 4, 2000.

#### 3. 2006 Senate Election

Senate's term is 6 years since its election date. Term of current senators will be expired on March 4, 2006. His Majesty of the King has approved the Royal Decree designating that new senators' election shall be held as the general election within 30 days since the expiration of the term. An election date shall be the same date throughout the Kingdom. Election date this year is April 19, 2006.

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# 4. The Sixtieth Anniversary Celebrations of His Majesty's Accession to the Throne

His Majesty the King has accessed to the throne for 60 years in June 9, 2006. In this delightful occasion, the government holds a great celebration ceremony. His Majesty the King kindly names the ceremony as "The Sixtieth Anniversary Celebrations of His Majesty's Accession to the Throne"

#### **The Preparation**

The Sixtieth Anniversary Celebrations of His Majesty's Accession to the Throne started on December 1, 2005, the beginning day of the year 60th of His Majesty's throne (according to the royal calendar). The celebration ends on December 31, 2006. During the period, all Thais would decorate their houses and offices with flag of Thailand, yellow flag with His Majesty's symbol, and His majesty's symbol to reveal their love to the King.

The celebration comprises many activities. One is the royal ceremony, which is hosted by Bureau of the Royal Household. The Bureau holds an ancient royal Thai ceremony, concerning worship ceremony, Buddha statute building and other activities. Other parts of the ceremony are, for example, His Majesty gives a chance to the selected people to meet and bless him at the Chakri Throne Hall on June 9, 2006. On June 12, 2006, Kings and ambassadors from various countries take a chance to meet and bless His Majesty at the same place. On June 23, 2006, there are parades of Thai army at Ratchadamnoen Road.

#### The Usage of His Majesty's Symbol

His Majesty the King kindly gives a symbol of the Sixtieth Anniversary Celebrations of His Majesty's Accession to the Throne to the government. The celebration's host committee (appointed by the government) announces that, from December 1, 2005 – December 31, 2006, all Thais should decorate their houses and offices with flag of Thailand, yellow flag with His Majesty's symbol , and His Majesty's symbol to reveal their love to the King.

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# Section 6 Roles and Responsibilities of the NESDB and Key Government Agencies



# 1. Background of the NESDB and Information of Major Government Agencies

Formerly known as, "the National Economic Council," National Economics and Social Development Board (NESDB) has been established since February 15, 1950. Its key responsibilities are to advise the government on economics issues.

Soon after, World Bank experts proposed an idea to restructure the organization to enrich roles and responsibilities of the "National Economic Council," as well as to establish the central agency. Such central agency would be responsible for formulating country development plans.

Subsequently, in the year 1959, this organization was restructured and renamed as, "Office of the National Economic Development Board." Subsequently, the first National Economic Development Plan had been launched as the tool for country developments since 1961.

In the year 1972, social development planning has been fully integrated to economic plans. Again, the organization has renamed to the current name, "Office of the National Economic and Social Development Board." This office is under supervision of the Office of the Prime Minister.

### 2. Operational Mechanism

Operational mechanism of the NESDB according to the 1978 National Economic and Social Developments Act may be divided into two levels including the National Economic and Social Development Board and the Office of NESDB.

# 1. The National Economic and Social Development Board

The 1978 National Economic and Social Development Act prescribes that 15 board members of the NESDB shall be elected. This board consists of one chairperson and other capable board members experiencing in economic and social development. The Cabinet is eligible to appoint nine or less board members. The rest are appointed by positions including the Secretary-General of the Civil Service Commission, the Director General of the Bureau of Budget, the Director-

General of the Fiscal Policy Office, and the Governor of the Bank of Thailand. The Secretary–General of the Office of the National Economic and Social Development Board is a board member and secretary.

The NESDB has following roles and responsibilities:

- (1) Advising and recommending the Cabinet on issues of national economics and social developments;
- (2) Considering national economics and social development plans and reviewing other proposals of the office of NESDB and then proposing results to the Cabinet.
- (3) Proposing suggestions to the Prime Minister on issues of economics and social developments as requested by the Prime Minister.
- (4) Coordinating between the NESDB and relevant government agencies and state enterprises concerning planning, development projects, and executions to achieve the country economics and social development objectives.

### 2. The Office of National Economic and Social Development Board

The Office of NESDB is in the process of restructuring to meet changing development factors, for instance, country development toward knowledge-based economy, government reforms, and good governance and so on. This is to drive the organization toward its vision, "the main organization for planning and strategic formulations toward balanced and sustainable country development, geared toward public interests, and to meeting dynamic changes as well as with effectiveness."

### 3. Roles and Responsibilities

To achieve such vision, the Office of NESDB is to restructure its roles and responsibilities to meet changing through its management and prioritization based on integration and effective government resources utilization as follows:

 Existing roles and responsibilities: These are roles and responsibilities prescribed in the 1978 National Economic and Social Development Acts as follows:

#### (1) Responsibilities according to its roles:

- Formulating the National Economic and Social Development Plan and implementing it for every five years:
- Performing investment plan analyses for state-own enterprises and project analyses for development plans of government agencies and state-own enterprises (the 1978 National Economic and Social Development Board Act, the 1992 Private Enterprise's Joint-venture or Operation in Public Organization Act, the 1979 Regulation on State-own Enterprise Investment Budget, the 1985 Regulation on Country Debt Creation)
- Collecting and systemizing information for planning, for instance, gross national products and so on.
- Monitoring and evaluating development plans and developing key performance indicators.

#### (2) Responsibilities according to policies:

Crafting four national agenda including: (1)

poverty eradication and income distribution; (2) national competitiveness development; (3) social capital development; and (4) sustainable development.

- Formulating strategies according to government policies and driving major development projects including (1) Economic Cooperation Strategy (ECS), (2) Suvarnabhumi International Airport Development, (3) Government Center Structuring, (4) Ratchadumneon Road Development, (5) National Brain Bank, and (6) Sufficiency Economy.
- Urgent and special missions including Energy Strategy, Industrial Restructures, Agricultural Restructures, and Social Restructures.
- 2. New responsibilities: Considering internal and external factors challenging the Office of NESDB during the past 10 years, the Office of NESDB is to restructure and integrate all roles and responsibilities according policies. Then it must regenerate new roles and responsibilities meeting Thailand changing and dynamic economy and meeting customers' demands.

As a result, new roles and responsibilities of the Office of NESDB have been assigned. At present, the Office of NESDB is a planning agency gearing the country up for stability and sustainability through effective data, monitoring and evaluation systems and through following roles and responsibilities:

- (2.1) Being a strategic development agency capable of integrating and driving strategic and plans at all three levels including missions according to roles and responsibilities, according to government policies, and according to areas.
- (2.2) Being an organization possessing in-depth domestic and international economic and social information designed for formulation of strategies, country economic and social administration.
- (2.3) Being a knowledge-based organization staffed with high-caliber personnel capable of formulating strategies, performing analyses, and coordinating all stakeholders to drive country developments successfully.

# 4. Organization Structure

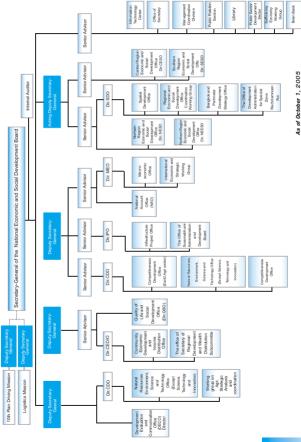
NESDB' organization comprises of 13 divisions, 2 departments, 8 sections, 5 offices, and 1 center.

Units	Tel. Fax and e-mail
1. Office of the Secretary (OS)	Tel : 0-2628-2859
	Fax : 0-2281-3938
	E-mail : os@nesdb.go.th
2. Management Coordination Division (MCD)	Tel : 0-2281-6326
	Fax : 0-2281-6637
	E-mail : mcd@nesdb.go.th
3. National Account Office (NAO)	Tel : 0-2281-6634,0-2281-6632
	Fax : 0-2281-2466,0-2281-5241
	E-mail : nao@nesdb.go.th

Units	Tel. Fax and e-mail
4. Development Evaluation and Communication	Tel : 0-2282-4840-2
Office (DECO)	Fax : 0-2281-9705
	E-mail : deco@nesdb.go.th
5.Competitiveness Development Office (CDO)	Tel : 0-2282-0811-3
	Fax : 0-2281-1821-2
	E-mail : cdo@nesdb.go.th
6. Spatial Development Office (SDO)	Tel : 0-2255-0960-4
	Fax : 0-2253-3258
	E-mail : sdo.nesdb.go.th
7. Community Economic Development and Income	Tel : 0-2281-8831, 0-2628-2842
Distribution Office (CEDIO)	Fax : 0-2281-2803
	E-mail : cedio@nesdb.go.th
8. Central Region Economic and Social	Tel : 0-2251-4019
Development Office (CESO)	Fax : 0-2251-4002
	E-mail : ceso@nesdb.go.th
9. Northeastern Region Economic and	Tel : 0-3423-6784
Social Development Office (NEESO)	Fax : 0-4323-9912
	E-mail : neeso@nesdb.go.th
10. Southern Region Economic and	Tel : 0-7431-2702
Social Development Office (SESO)	Fax : 0-7431-1594
	E-mail : seso@nesdb.go.th
11. Northern Region Economic and	Tel : 0-5389-2115, 0-5322-1155
Social Development Office (NESO)	Fax : 0-5389-2110
	E-mail : neso@nesdb.go.th
12. Quality of Life and Social Development	Tel : 0-2281-2006
Office (QSO)	Fax : 0-2282-2827,0-2282-2559
	E-mail : qso@nesdb.go.th
13. Natural Resource, Environment,	Tel : 0-2281-6129
Science and Technology Office (NESTO)	Fax : 0-2280-0892
	E-mail : nesto@nesdb.go.th

Units	Tel Fax and e-mail
14. Macroeconomic Office (MEO)	Tel : 0-2628-2837
	Fax : 0-2281-9882
	E-mail : meo@nesdb.go.th
15. Infrastructure Project Office (IPO)	Tel : 0-2281-0992
	Fax : 0-2280-1860
	E-mail : ipo@nesdb.go.th
16. Public Sector Devlopment Section	Tel : 0-2628-6127
	Fax : 0-2281-9882
	E-mail : cco@nesdb.go.th
17. Public Relation Section	Tel : 0-2628-2847
	Fax : 0-2628-2846
	E-mail : cco@nesdb.go.th

# 5. Organization Chart

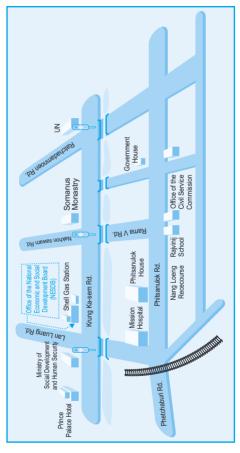


# 6. Information of Key Organization

Organization	Telephone	e-mail
1. Office of the Prime Minister	0-2280-3000	www.thaigov.go.th
2. Ministry of Defense	0-2226-3114 -6	www.mod.go.th
3. Ministry of Finance	0-2273-9021	www.mof.go.th
4. Ministry of Foreign Affairs	0-2643-5000	www.mfa.go.th
5. Ministry of Tourism and Sports	0-2283-1555	www.mots.go.th
6. Ministry of Social Development	0-2612-8888	www.m-society.go.th
and Human Security		
7. Ministry of Agriculture and Cooperatives	0-2281-5884	www.moac.go.th
8. Ministry of Transportation	0-2281-3871	www.mot.go.th
9. Ministry of Natural Resources	0-2298-5735	www.monre.go.th
and Environment		
10. Ministry of Technology and Communication	0-2505-7370	www.mict.go.th
11. Ministry of Energy	0-2223-3344	www.energy.go.th
12. Ministry of Commerce	0-2507-8000	www.moc.go.th
13. Ministry of Interior	0-2222-1141-55	www.moi.go.th
14. Ministry of Justice	0-2502-8051 - 8	www.moj.go.th
15. Ministry of Labor	0-2232-1421-22	www.mol.go.th
16. Ministry of Culture	0-2422-8888	www.m-culture.go.th
17. Ministry of Science and Technology	0-2354-4466	www.most.go.th
18. Ministry of Education	0-2628-5643 -44	www.moe.go.th
19. Ministry of Public Health	0-2590-1000	www.moph.go.th
20. Ministry of Industry	0-2202-3000	www.industry go.th
21. Tourism Authority of Thailand	0-2250-5500	www.tat.or.th
22. Bank of Thailand	0-2283-5353	www.bot.or.th
23. National Economic and Social	0-2612-9222	www.nesac.go.th
Advisory Council		
24.Board of Investment	0-2537-8111	www.boi.go.th

Organizations	Telephone	e-mail
25. National Statistical Office	0-2281-0333	www.nso.go.th
26. Thai Chamber of Commerce	0-2622-1111	www.thaiechamber.com
27. Federation of Thai Industries	0-2229-4255	www.fti.or.th
28. Thai Banker's Association	0-2264-0883-86	www.tba.or.th
29. Foreign Embassies in Thailand	0-2643-5000	www.mfa.go.th/Foreign
		Missions in Thailand
		www.atta.or.th/
		Embassy in Thailand

Map of Office of the National Economic and Social Development Board (NESDB)



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