

Preamble

The Sufficiency Economy Philosophy and the Context of National Development

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As witnessed by the world, Thais from all walks of life are deeply loyal to **“His Majesty King Bhumibol Adulyadej”**, considered the heart and soul of the nation. Uniting all Thais, **His Majesty is a religious patron who connects “patriotism” and “religious faith”**. As the symbol of national identity and tradition, His Majesty embodies the security of the regime, the hope of Thailand and an image of stability to the world.

As the longest-reigning monarch in the Thai history, **His Majesty King Bhumibol Adulyadej adheres strictly to “dharma” and is regarded as the light that guides the nation towards security and sustainable development**. Since his ascension to the throne on June 9, 1946, the King has continually expressed his will and determination to sacrifice himself for the benefit of all Thais regardless of their social status, religion or race. Considering the suffering of his subjects as his own, His Majesty has devoted himself to improving the quality of life of all Thai people as reflected in numerous royal duties, initiatives, instructions, and speeches. These remind us all of His Majesty’s initial statement on May 5, 1950: **“I will reign with righteousness for the benefit of the Siamese people.”**

1. The philosophy of a “Sufficiency Economy” as initiated by His Majesty the King

His Majesty the King has realized that Thailand is a fundamentally agricultural country and most of his subjects in the rural areas are farmers. Throughout his reign, His Majesty has visited and studied the ways of life of his subjects in every region across the country. Having witnessed barren landscapes and sufferings of people in every corner of Thailand, His Majesty the King analyzed the causes of the problems and proposed solutions that would bring about sustainable national development. Among these is the philosophy of a “Sufficiency Economy”

which aims at enhancing the quality of life of people and local communities so that they will become self-reliant, thus achieving sustainable development.

1.1 His Majesty the King's principles

His Majesty the King's principles¹, as reflected in his work with royally initiated projects throughout the six decades of his reign, are based on moderation, harmony with the surroundings and practicality. These can be summarized as follows.

The first principle is that development must focus on **“people”** and adhere to **“people's benefit”** and **“popular participation in the decision-making process”**. In the implementation of every royally initiated project, His Majesty the King has insisted that every citizen enjoys the benefits of the project and that, if necessary, the majority make sacrifices for the minority. Emphasis is on **“value for money”** rather than on cost effectiveness or **“our loss is our gain”**. That is, the acts of giving and sacrifice lead to the **“well-being”** of people, and shareholders are required to participate in decision-making processes from the beginning of each project. A **“public hearing”** is held before each project is launched in order to allow the people to make a decision before local leaders and government officials are involved in the following steps.

The second principle demands that the project account for differences in **“socio-geographical conditions”** of each region and locality. Hence, His Majesty's approach to development requires systematic study and planning that are in accordance with **“land”** or geographical conditions and **society** or sociological landscape. These account for the lifestyle of **“people”** in a given society characterized by culture, values, beliefs, religions, traditions and customs, economy, and environment. His Majesty the King accentuated **“systematic analysis of data”** and **“human development”**, which are achieved by means of educating and disseminating knowledge of the principles to the locals in conjunction with equitable distribution of development benefits. Likewise, it is imperative that government officials adhere to the **“understanding, access, and development”**; they need to have an insight into the

¹ Office of the Royal Development Projects Board “His Majesty the King's Principles” Bangkok: Century, B.E.2548

socio-geographical conditions of a given locality as well as problems and needs of the locals. This way, royal projects are planned and implemented to address the problems and needs of the local people.

The third principle expresses the idea that development must start from **“being self-reliant”** which means one needs to know his/her limits and carefully lead his/her life. **“Doing things in stages”** is the other factor or **“explosion from the inside”²** as His Majesty the King phrased it. The process should begin with assisting people and households in achieving a fairly good quality of life by means of cost effective approaches and appropriate theories. Once the people can rely on themselves, there can be collaborations between the people in a community, which will lead to forms of exchange, self-reliance of the community, and finally networking with other communities.

1.2 Human development in all dimensions

His Majesty the King has placed a great emphasis on **“human development”**, as reflected in the first phase of royal initiatives, which aimed to **enhance the health, hygiene, and education** of Thai people. It began with the establishment of the Royal Mobile Medical Unit which, thanks to His Majesty the King’s visits to all regions in the country, has expanded its network to treat a great number of people, the majority of whom are poor. In collaboration with the unit, there are training programs for volunteer local doctors in remote areas. Furthermore, His Majesty the King kindly made contributions to establish “polio funds”, the BCG vaccination center, which is under the Thai Red Cross, and many other public health projects. With regard to education, His Majesty the King made personal donations to and ordered the army to build a network of “Rom Klao” schools for the underprivileged in remote areas and graciously instituted “Chao Pho Luang Uppatham” and “Rajaprachanukro” schools for the hill tribes and orphans, respectively. Furthermore, His Majesty the King established the “Bhumibhol Scholarship” and “Ananda Mahidol Scholarship” funds to enable scholars to further their studies abroad.

² The royal speech graciously delivered to Dr. Sumet Tantivejkul on March 17, 2006 at the Chitralada Palace, Royal Projects Journal 2, vol.3 Jan-Mar 2004

Throughout the six decades of his reign, His Majesty the King has fulfilled royal duties and delivered royal speeches to his subjects stressing, in particular, **moral awareness**, so that they can know their limits, learn to save resources and stay away from greed, live an honest life, persevere, make some sacrifices when necessary and share when possible. **Therefore, the human development of His Majesty the King's approach truly covers every aspect of their life: physical, intellectual, and mental.** Because of this, Thai people are given opportunities and options to live a stable life and help the nation move towards sustainable development.

1.3 Holistic development

“Holistic development” is a distinct quality of royal projects because they are implemented in accordance with His Majesty the King's **socio-geographical principle** which makes possible an **“integration”** of every aspect under a well-connected and systematic operation. In order to enhance holistic development and to set guidelines, His Majesty the King has graciously granted support for a **“Royal Development Study Center”** where models of geographically and economically distinctive areas of each region are exhibited for study, research and development purposes. The center also functions as a **“one stop service center for farmers”**, which is considered a new dimension of administration as it integrates different types of services from authorities and directly serves communities and farmers. The services include giving consultations on irrigation and water resources, grains, marketing, training, and agricultural lifestyle. Therefore, it is **a holistic and systematic approach to problem solving and community development.**

Moreover, the Royal Development Study Center functions as a “living natural history museum” and opens to farmers, the general public and institutes who are interested in exploring the lifestyle of farmers, body of knowledge built on research and application of local intellect – an “economical, simple and cost-effective” technique which is in harmony with nature and local ways of life. The center also shows the “cooperation and collaboration” of many authorities which have brought about “love and unity” for communities. These virtues can be used as a foundation for self development, which can be further expanded into community development.

There are 6 royal development study centers, each located in a different region of Thailand. Each represents one region and its distinct geographical conditions, which have been studied in depth. The first is located in Khao Hin Son, Chachoengsao province and is responsible for research, experiments and demonstrations restoration of degraded land. The second is the Haui Sai center in Petchaburi province, which studies restoration of degraded forests. The third, the Khung Kraben Bay center in Chantaburi province, is responsible for research and development and restoration of the environment and coastal ecology as well as fishery. The fourth is the Huai Hong Khrai center in Chiang Mai province, responsible for research into deterioration of forests, development of degraded forests, development of watersheds for agricultural purposes, and conservation of soil moisture. The fifth, the Phikun Thong center in Narathiwat province, conducts research into peat soil in the South for agricultural purposes. The sixth center, the Phu Phan center in Sakon Nakhon province, is responsible for vocational training in agriculture and domestic industry as well as developing model villages.

1.4 Sustainable management of natural resources and environment

In accordance with the royally initiated approach to development for the benefit of people in local communities and rural areas, His Majesty places emphasis not only on vocational and agricultural development but also on conservation and development of natural resources and the environment. His Majesty stresses **the importance of peaceful coexistence between people, natural resources and the environment, for mutual benefit**. Although people in rural areas fundamentally depend on and utilize natural resources and the environment, the economic sector has deteriorated natural resources and the environment faster than the capacity to rehabilitate them. Therefore, His Majesty initiated natural resource management which includes water resource management, reforestation and soil conservation as these three factors form the essential food chain of every single life. Hence, it is necessary that natural resources be conserved and developed in conjunction with appropriate utilization.

His Majesty the King has an insight into nature and graciously launched projects on the use of water power. To begin with, His Majesty led research into artificial rain more generally known as **“royal rain”** in Thailand, in order to alleviate

drought. With regard to water resource development and forest conservation, His Majesty developed a “nature for nature” approach which is straightforward, effective and corresponds to the ecosystem and lifestyle of local communities. For instance, **“three types of forests with four purposes”** refers to forestation that provides woods, fruits, and raw materials for charcoal, and these help conserve soil as well as watersheds. In addition to the aforementioned projects, His Majesty the King ordered the construction of **check dams** which were modeled on the method originally used by hill tribes as a means to conserve water in the highlands. The check dams, despite their small size, can serve as insulation against forest fire and as humidity regulators which help the forests to thrive and predict rain. The **“Monkey Cheek”** project is another excellent example of His Majesty’s initiatives with respect to water management. Canals and ditches are emptied to accelerate the flow of water and provide space for water conservation during drought. Moreover, thanks to royal initiatives, water pollution has been alleviated by natural approaches: the use of clean water to flush out polluted water; the use of aquatic weeds as natural filters that absorb dirt and toxins; the use of mills to oxygenate water; and the use of mangrove forests in water treatment.

With respect to soil development and conservation, His Majesty the King ordered that water be used to add humidity to soil and improve soil quality. For instance, water is used to flush and regulate **acid soil or peat soil** so that it becomes fertile again. This method is also known as **“soil teasing”**. His Majesty also kindly suggested crop rotation to replenish soil quality and increase crop yield. **The use of vetiver grass**, which is among the many royal initiatives, has proved to be effective in conserving soil, and this made Thailand the most advanced center of this soil conservation technique.

1.5 His Majesty’s “new theory”

Later, His Majesty graciously developed a **“new theory”** which is the foundation of a new agricultural theory. The theory was demonstrated at the Mongkhon Chaipattana Temple, Huai Bong subdistrict, Muang district in Saraburi province. The theory provides guidelines for land and water management for agricultural purposes in a small plot of land in order to yield the best results. Having “self-reliance” as a foundation, the theory also encourages communities to “unite and

cooperate” and adhere to “diligence, perseverance and patience”. According to the theory, the process of development includes three phases.

Phase 1: To live at a sufficient level which allows farmers to become self-reliant and maintain their living on a frugal basis.

Phase 2: To cooperate as a group to handle the production, marketing, education, and welfare, as well as social development.

Phase 3: To build up connections within various occupation groups and to expand businesses through cooperation with the private sector, NGOs and the government in the areas of capital, marketing, production, information management, and etc. in order to reduce costs, increase the group benefits, upgrade quality of life and move towards national stability.

1.6 Summary

Throughout the six decades, more than 3,000 royal initiatives have been implemented in accordance with His Majesty the King’s principles, which focus on moderation and which go well with the Thai lifestyle and attitude of practicality. **“Human development”** is the key notion of the principles, and “benefit to people”, “socio-geographical conditions”, “involvement of people in the decision-making process”, as well as “self-reliance” are strictly adhered to. The projects have been implemented using an integrative approach to development that stresses the importance of the “unity” of all parties and “doing things in order”. These enable people and communities in rural areas who follow His Majesty the King’s principles and royal initiatives to enjoy better quality of life and rely on themselves economically and socially. The people are able to use appropriate and cost-effective technology and utilize natural resources such as soil, water and forests in a sustainable manner which will **pave the way towards a strong community and society and peaceful coexistence between man and man and between man and nature.**

Because of His Majesty the King’s insight and vision, 20 years before the economic crisis—when wealth had been generated through rapid economic growth, he was well aware of the fact that the Thai economy was at risk because it largely

depended on external factors. His Majesty therefore stressed the importance of sufficiency economy as reflected in his royal speeches since 1974. His Majesty placed, in his speeches, emphasis on **a self-reliant approach to development** incorporating **moderation, reasonableness, and self-immunity**, thus enabling the majority of people to have enough to live on and to live for. His Majesty also strongly advised his subjects to live their lives carefully and be aware of the sequential development process that involves **knowledge, morality, and perseverance**. After the economic crisis this became known as “**sufficiency economy**”, the model His Majesty adhered to in his approach to development. His Majesty the King realized the significance of a sufficiency economy, stressing that to implement half or one fourth of the sufficiency economy may be enough.

The Eighth National Economic and Social Development Plan (1997-2001) adopted His Majesty’s “sufficiency economy” in order to adjust the concept of national development, and that was an important turning point in the country’s development planning. Economic growth, formerly the focus of development, was replaced by human development which paid attention to people as an important mechanism in the process of development and as the main beneficiaries of or the ones affected by the development. Thus, it was **people-centered development** that became the main focus and economics was deployed as a tool to help people achieve greater happiness and a better quality of life. The plan switched from a segmented approach to a holistic and integrated approach and gave an opportunity for greater involvement to all sectors at every stage of the development. However, in the first year of the plan Thailand experienced a severe economic crisis which greatly impacted individuals and society, aggravating problems of unemployment and poverty. Restoring economic stability and reducing the impact of the crisis thus became a priority.

“...sufficiency economy cannot be found in textbooks. There has never been sufficiency economy. There is something else, not this term. Last year I used the term sufficiency economy because I could not find other words. And I also said that to fulfill the concept, it is enough to implement half, not all, or even just one fourth. I thought last year it was understood, but recently, last

month, a person who has long been involved with development came to me and said the sufficiency economy is very good and that he understood what it meant by implementing only one fourth. That is, if sufficiency economy is implemented in one fourth of the country, that should be enough. I did not mean one fourth of the area, but rather one fourth of the deed...”

“...the word sufficiency has another definition. It carries a broader definition. It does not mean having enough for one’s use. Rather it means having enough to live on and to live for. If anyone happened to be here, at the Pavilion, in 1974, on that day, I mentioned we should have enough to live on and to live for, which means sufficiency. If each one has enough to live on and to live for, that is good. If the whole nation reaches that status, that is even better. Thailand at that time began to have less to live on and to live for. Some had a lot. Some had none. Formerly, Thailand used to have enough to live on and to live for, but later it did not. Therefore it is necessary to have a policy to implement sufficiency economy so that every one would have enough...”

“...if people are satisfied with their needs, they will be less greedy. With less greed, they will cause less trouble to other people. If any country values this idea, not an economy—the idea of doing just to have enough, which means being satisfied at a moderate level, being honest and not being greedy, its people will be happy. Being sufficient does not restrict people from having a lot or possessing luxurious items, but it implies that one must not take advantage of others. Everything must be within

its limits. Saying what is necessary, acting just as needed, and working adequately...”

The royal speech delivered to the audience during the Royal Birthday on Friday December 4, 1998 at the Dusitalai Pavilion, Chitralada Palace

2. Unbalanced and Unsustainable Development

The economic crisis was a lesson in unbalanced and unsustainable development partly caused by an approach to economic and social development which, unlike the royally initiated approach to development, did not take into account the context of the country, its socio-geographical conditions, status of organizations, readiness of manpower or administrative system of the country. Thailand at that time depended on imported knowledge, technologies, capital, or markets without having built strong internal foundations or resilience against internal and external fluctuations. At the same time, an accumulation of unsolved problems became the structural weaknesses of the Thai economy and society, causing unfair distribution of capital, development, income and benefits, multitudes of social problems as well as a decline in morality and quality of environment and natural resources.

2.1 Causes

Unbalanced and unsustainable development was caused by strategic planning that adopted **economic liberalism** or capitalism which focused mainly on wealth and income inflow into the country and **used income per capita as a success indicator of development**. The capitalist approach strategic plan had been implemented throughout the previous four decades to meet the expectation that an increase in goods, services and employment and economic growth would have a positive impact on the majority of the Thai people, thus resolving poverty.

The paradigm and measurement of economic development placed a greater emphasis on economic growth rather than balance and sustainability despite the fact

that “**economic growth**” should not be in conflict with stability, balance and sustainability of long-term development. Economic growth should instead be a part of a short-term economic policy which is based on the hypothesis that the economy has a potential for technology development and factors associated with production can be used as resources. On the contrary, long-term and sustainable “**economic development**³” requires technological independence, human development in the aspects of intellectual capacity and all-round knowledge, adequate amount of products and services needed for the livelihood of the people, a fair share of values added in production and between the factors of production, economic and social equality among the citizens, stability and peace in society, conservation of natural resources and the environment, and most importantly, the independence and sovereignty of the nation that cannot be replaced by other things. An approach to development that covers all of these issues can encourage stable and sustainable economic growth.

2.2 Unbalanced development structure

Although Thailand has seemingly experienced a steady economic expansion, due to the liberal economic approach to development, the country’s economy still suffers from fundamental weaknesses of **technological dependence**. Technology has been imported only for production or consumption purposes despite the fact that **it is the most important factor that determines production and service**. Labor productivity and capital productivity levels have been low, and production has had to rely on external factors such as energy and raw materials. Meanwhile, due to **low national savings**, overseas capital is needed for investments in both government and private sectors. The dependence on foreign technology and capital resulted in the production of foreign goods in Thailand rather than the production of goods for domestic consumption, thus causing reliance on international markets and exposing the country to the risks of external fluctuations.

Moreover, capital raised in Thailand and abroad through financial institutes, the stock market, and investment promotion schemes led to concentration of an industrial economy and services in the urban areas, particularly Bangkok and its

³ Vichitvong Na Pombhejara: “His Majesty the King and Thailand’s economic problems”, Bangkok: Sangdoea, pp. 182-183

metropolis. As a result, wealth is distributed among selected individuals and groups of individuals. This has become a “business economy” that affects the whole nation and causes the urban economy to be more connected to the global economy rather than to the rural economy. In addition, problems of access to basic services, a decline in the quality of the environment and quality of life of urban people arise as a result of **rapid urbanization** following the expansion of the business economy.

Meanwhile, the “**people’s economy**”, which accounts for more than two-thirds of the country is in rural areas. It is the economic base for the agricultural sector and has been losing its economic, social and environmental balance throughout the past four decades. That is, **the income** of the people in rural society **is insufficient to cover their expenses** due to **deterioration of natural resources**, natural disasters, low level of education and productivity, a lack of appropriate technology, loss of local wisdoms, and reliance on external markets. Poverty has become a major problem while consumer behavior of people in rural areas has been increasingly marked by materialism, bringing about insufficient income, debts, and social unbalance. As a result, teenagers from rural communities have to leave their hometowns and work in cities or abroad, causing rural society to become more vulnerable.

The continual loss of balance results in poverty, which has been a persistent problem for rural society. It is difficult for individuals or even families to regain their equilibrium or stand on their own due to a lack of education, technological independence, capital and experience on modern business practices. To restore the stability of rural communities requires collective culture, the strength of Thai society, which values kinship, mutual dependence and assistance within a community in solving problems and developing rural communities. During the 1997 economic crisis, rural society proved to be a social safety net for people in urban society hit by the crisis, despite the unbalanced development problem.

2.3 Impact on the Thai people and society

Under the impact of globalization, the Thai economy and society face a crisis of values brought about by the borderless inflow of foreign culture with no filtering. As a result, **values, beliefs and behavior have been seriously affected**, drastically changed, **and are increasingly marked by materialism and consumerism**. Public

consciousness, generosity, human dignity and morality have begun to decline. Culture, values and traditional wisdom remain neglected and are not being passed down to new generations.

As for human development with respect to education, education attainment has increased. However, problems persist over quality of education and learning process because way of life is not integrated with the present system of education. Instead, it focuses on textbooks or subjects which are primarily concerned with external knowledge while neglecting the importance of knowing oneself or education for life. The latter enables one to behave appropriately⁴ and to apply “wisdom” that connects core knowledge with hands-on experience to everyday life. This application of knowledge brings about self-reliance and benefits to others.

2.4 Centralized administration

Although the national administration has begun to open up opportunities to the public to participate more in the process of national development, the administration has not been able to efficiently keep up with changes. **The administrative structure and system of the economy and society remains highly centralized, and popular participation remains limited in decision-making processes at the policy level and at the implementation level.** Moreover, popular participation under the constitution is rather complicated, and, therefore does not facilitate participation.

The management of national resources and legislative process which are deployed as means to rights and power mainly serves the aforementioned liberalist economic development⁵. There is also a lack of laws that support and strengthen the local economy, which is made up of the majority of the Thai people. Moreover, corruption in both government and private sectors is caused by outdated laws which provide a channel for authorities to use their judgment and the deep-seated patronage system. This results in rapid development of a business economy, highly concentrated wealth in some areas and for some individuals, unfair income and

⁴ Praves Wasee: “Culture-Centered Development”, Bangkok: Ministry of Culture Royal Institute, B.E. 2547 p.16

⁵ Bovornsak Uwanno , “Good Governance in Thai Society”, Bangkok: Vinyuchon, B.E.2542 pp. 68-69

benefits distribution among individuals and regions, and between rural and urban societies. Consequently, Thailand experiences problems of structural weaknesses in the economy, society, environment, unbalanced and unjust administration and increasing social conflicts.

2.5 Solving the economic crisis

The above review shows that the economic crisis during the first year of the Eighth National Economic and Social Development Plan was caused by an accumulation of unsolved structural problems with respect to manpower and the system. Thailand, therefore, was not able to keep up with globalization, and the complexity and rapid change of modern society. Problems of short-term loans, unproductive investments in the private business section, and speculations in the real estate sector and the stock market while effects on the overall economy were neglected aggravated the situation. Another factor was macroeconomic policies that aimed to stimulate economic growth through liberal financial policy without having effective supervisory and regulatory systems that were able to keep up with change. All of these factors adversely affected individuals and the Thai society.

During the first two years of the Eighth National Economic and Social Development Plan, the Thai economy experienced the worst recession. Restoring the economy and reducing the impact of the crisis, particularly problems of increased unemployment and poverty thus became a priority. At the same time, the structure of the economy and the administrative system of the government sector were adjusted for greater efficiency and transparency. The administration of economic policy after the crisis helped restore the economy with less pressure on economic stability and achieved progress in solving problems of financial institutes. The restoration enabled economic activities to expand, the effects of unemployment to be mitigated and the labor market to return to a normal situation. In addition, decreased poverty, expansion of health and social security services, and labor protection improved the quality of life of the Thai people.

However, at the end of the Eighth Plan, the development of the country remained unbalanced and the economy remained vulnerable due to quantity rather than quality expansion, excessive utilization of natural resources and the environment

and excessive reliance on the international economy. Problems persisted over people and society, particularly concerning income distribution and sharing of benefits obtained from the development, adjustments to keep pace with rapid change in the age of globalization, a decline of morality, and increasingly materialistic behavior.

2.6 Reviewing the royally initiated development paradigm

Thai people from all walks of life including the government, the private sector, the general public, and academia have learned a valuable lesson from the unbalanced development and are therefore reassessing their lifestyle and development strategies. Attention is now on a way of life and approach to development in accordance with His Majesty the King's **Sufficiency Economy**. This **philosophy** has been studied from theoretical and practical perspectives by people from many agencies and with a wide range of careers and levels including grassroots and the administration. Therefore, the Sufficiency Economy has been increasingly applied to everyday life.

Having realized the significance of the royal initiative, the Office of the National Economic and Social Development Board (NESDB) invited experts on different disciplines to review royal speeches related to the Sufficiency Economy and summarize them into the definition of the "**Sufficiency Economy philosophy**". With royal permission, the philosophy was disseminated for public benefit on 21st November, 1999. The Ninth National Economic and Social Development Plan (2002-2006) adopted the Sufficiency Economy philosophy to guide the development and administration of the country while continuing to drive the integrated and holistic approach to people-centered development. The Plan aimed to build an economy with strong internal structure, resilience to external changes, and increased self-reliance while placing emphasis on balanced development with respect to people, society, economy, and environment for sustainable development and the well-being of the Thai people.

The performance under the Ninth Plan can be summarized as adequately successful because the stability of the national economy improved and developed a wider economic base. Employment rate was high, income per capita increased, poverty fell, and distribution of income marginally improved. At the same time, expansion of health services, better health insurance in both quantity and quality,

covering the majority of the population, and greater accessibility of infrastructure and other social services improved the quality of life of the Thai people. Nevertheless, the aforementioned development was not, to some extent, in accordance with the Sufficiency Economy philosophy because structural problems of the economy, society, natural resources and environment persist and national administration remains unbalanced. Due to reliance on external factors, the Thai economy remains vulnerable to external instabilities under globalization while unfair income distribution and sharing of benefits obtained from the development remains a major problem. Thailand faces a decline in morality, virtuousness, ethics, and human dignity due to the inflow of consumerism. Moreover, deterioration of natural resources and environment remains an obstacle to developing the country. Therefore, the Tenth National Economic and Social Development Plan still adopts the Sufficiency Economy philosophy to guide the development of the country in conjunction with the integrated and holistic approach to people-centered development and aims for balanced, equitable, and sustainable development.

The Sufficiency Economy Philosophy

Sufficiency Economy is a philosophy that provides guidelines for living for people from all walks of life at all levels— families, communities, and the government, with an aim to orient the national development and administration towards the middle path. It is necessary for economic development, in particular, to reorient itself to keep pace with globalization. Sufficiency refers to moderation, reasonableness, and a good self-immunity system which provides resilience against internal and external changes. The application of academic disciplines in planning and implementation of plans requires all-round knowledge, extreme caution, and carefulness. At the same time, it is imperative to attend to morality and spirituality of the whole nation especially state authorities, theories, and business people at all levels so that they live their lives with integrity,

honesty, all-round knowledge, perseverance, patients, intelligence, and carefulness. These qualities create balance and resilience to cope with rapid and extensive material, social, environmental, and cultural changes brought about by the outside.

Compiled from the royal speeches on the Sufficiency Economy graciously given on different occasions. With royal permission on November 29, 1999, the compilation can be reproduced for public benefit.

The “Sufficiency Economy” is a royally initiated philosophy which His Majesty the King has graciously granted to his subjects to guide their ways of life for 30 years, even before the economic crisis. After the crisis, His Majesty placed an emphasis on solutions to problems and kindly suggested ways in which Thailand could retain its position and move towards sustainability under globalization and the impact of changes. The Tenth National Economic and Social Development Plan (2007-2011) still adopts the Sufficiency Economy to guide the development and administration of the country.

3. Sufficiency Economy Philosophy and the Context of National Development

3.1 Conceptual framework

The “Sufficiency Economy” philosophy, according to the group of thinkers⁶ who developed the theoretical framework of the philosophy, is a concept that goes beyond monist and dualist western ways of thinking. Based on the traditional lifestyle of Thai society in which all dimensions of life are interconnected, the “Sufficiency

⁶ Office of the National Economic and Social Development Board: “Economic and Philosophical Theoretical Frameworks of the Sufficiency Economy philosophy” pp. 59-61

Economy” philosophy is pluralist and allows peaceful coexistence of different things. Being integrated and holistic, the Sufficiency Economy philosophy has a dynamic and systematic perspective on the world. It is universal, accessible and practical; therefore, it is inspirational and each one can become satisfied with his/her status and with what he/she has. The philosophy is applicable to people from all walks of life, from families and communities to government. The Sufficiency Economy is up to date, able to steer the society away from crisis, and can be implemented as guidelines for the country’s planning and development in order to keep up with rapid changes in the age of globalization.

The concept of national development in accordance with the Sufficiency Economy philosophy can be divided into 4 main components⁷ as follows.

***Concept:** “Lifestyle, ways of life of people from family to community up to state levels, including national administration and development will be in the middle path, especially economic development in order to keep pace with globalization.”*

For Thailand to a place of honor and dignity in the world community and achieve “green and happiness society” under globalization, it is necessary to revise the country’s “dynamic equilibrium”⁸. Thailand, then, needs to reorient its paradigm and approach to national development towards **the middle path** so as to balance socio-economic differences between rural and urban societies. Moderation must be used to create balance between “self-reliance of people in rural communities who are the foundations of Thai society and equitable distribution of development benefits among all economic and social sectors” and between “the business sector’s competitive capacity in the global economy and development partnership with other nations under globalization.”

***Goal:** “The country achieves balance and resilience to rapid and complex changes in materials, society, environment, and culture from other countries.”*

⁷ Kasem Wattanachai: “Sufficiency” Document prepared for an oration on the occasion of opening of the Economics Club Puay Ungpakorn Institute p.17

⁸ Suwit Mesinsee: “Sufficiency Economy under Globalization”: Connecting globalization with community governance”, Matichon May 30, B.E. 2549

It is necessary, therefore, to create balance in all dimensions of the holistic approach to “people-centered development”. Economic, social, cultural, environmental, and political dimensions of development will be integrated. Moreover, balance must be created between material and mental dimensions. At the same time, domestic development and world development must be in balance. That is, Thailand has to “keep pace with globalization” and fluctuations brought about by globalization so that the country can adjust itself accordingly while being able to select what would support development and immunizing itself against material, economic, social, cultural, and environmental threats.

***Principles:** “Sufficiency means moderation, reasonableness, and a good self-immunity system which protects oneself from internal and external changes.”*

Strategic planning, national development and administration as well as operational planning at all levels must follow the **Sufficiency principles**, which consist of 3 major interrelated qualities. That is, “**reasonableness**” must be used in analyzing causes and effects while knowing “**yourself**” – the situation of the country including strengths and weaknesses in terms of development. At the same time, it is necessary to know “**your opponents**” – keeping pace with globalization and understanding opportunities, threats, advantages and disadvantages brought about by globalization in order to select what is beneficial and appropriate and counter possible threats. This logical way of thinking will lead to decision-making with regard to level of sufficiency or the use of “**moderation**” to achieve balanced development on a foundation of balance between “self-reliance and competitive capacity in the world community” and between “rural and urban society” by taking into account possibilities in the near and foreseeable future. In addition, a “**good self-immunity system**” must be available in order to have resilience to domestic and international changes and their impact on Thailand.

***Basic conditions:** “The application of academic disciplines requires all-round knowledge and carefulness in every step of planning and implementation. At the same time, the spirituality of the whole nation must be enhanced especially among authorities, theorists, and business people at all levels so that integrity, honesty, wisdom, patience, perseverance, conscience, and carefulness shall be with them.”*

In every stage of implementation of plans and development in accordance with the “**Sufficiency**” principles, “**all-round knowledge**” in terms of both academic knowledge and local wisdom, which is an accumulation of experience, must be used. Moreover, all-round knowledge must be carefully analyzed, integrated, and used in planning and implementation of development plans in accordance with the reality of the Thai way of life in order to achieve development goals. At the same time, morality and spirituality must be fostered in the whole nation, in all sectors and at all levels, particularly state authorities, academia, and business people so that they have “**integrity**”, ethics, and honesty in their careers and live their lives with “**perseverance**” which refers to patience, diligence, intelligence, wisdom, and carefulness. These qualities constitute a “good self-immunity system” that prepares families, communities, and the country for change.

3.2 Application to the development context

During the two decades after the end of the Cold War, the world has become more globalized. Advances in science, technologies and information technologies resulted in mutual dependence and connections among the world community: encouraging movement of peoples and labor, cultural exchange, change in consumer behavior, and trans-nation crimes. Democracy has placed great emphasis on popular participation, human rights, protection of children, women and the needy, natural resources and environmental conservation, reform of global governance as well as a transparent and democratic world economy. At the same time conflicts of idealism have been marginally resolved while economic and trade competitiveness has become a new form of threat to security under the world’s liberal economy. Free trade and liberal monetary policy have been competitive, resulting in regional economic groupings, new agreements, new regulations, new international investments, and leapfrog technological advances which can be considered as strengths of a country. Consequently, economic, trade, finance, and international investment competitiveness have been growing, and international relations have been increasingly essential in the new millennium.

Being a relatively small country in the world community, Thailand has been forced to follow other countries and therefore become increasingly connected to the world community with respect to economy, society, and politics. If Thailand is to

follow the trend of a liberal economy without fully being in pace with globalization or having an insight into its own context, it will be exposed to rapid and drastic changes brought about by globalization as seen in the past economic and financial crisis. Therefore, Thailand must find its own position by adopting the Sufficiency Economy philosophy to national development and administration on foundations of the middle path and coexistence between globalization and the context of Thai society. This way, Thailand will have a good self-immunity system which will safeguard the country against crisis and enable Thailand to retain its place in the world community.

The development paradigm of Thailand in the next 10-15 years in accordance with the Sufficiency Economy philosophy is a holistic approach to **people-centered development** on a foundation of **“dynamic equilibrium”** which integrates people, social and cultural, economic, environmental, and political dimensions. At the same time, the differences between the economy and society of rural and urban areas must be accepted by creating development equilibrium between “the strength in self-reliance of people and local communities who are the grassroots of the society, and equitable distribution of development benefits” and between “the competitive capacity of the business sector in urban society and the ability to form networks of development partners in the world community”. Emphasis will be placed on integrated utilization of capital that has both potential for development and uniqueness including “social capital”, “natural resource and environmental capital”, and “economic capital” and on mutual benefits of the capital. At the same time, the capital must be strengthened so that they will become pillars of sustainable and balanced development. Moreover, a system and culture of good governance and democracy must be fostered into all sectors and at all levels. **All-round knowledge, integrity, and perseverance** will be used on foundations of **moderation, reasonableness and a good self-immunity system** to prepare Thailand for changes from and impact of globalization and to help Thailand become a **“society of happy coexistence”**. **The context of national development can be summarized into 5 major points.**

(1) Human development together with development of morality and knowledge based society

Being the most important social capital, “humans” or “human capital” plays a role as developers the ones who are affected by development. Therefore, it is necessary to develop human potential in all dimensions: physical, mental and intellectual. To begin with, the “**well-being**” of people must be enhanced so that they are healthy and able to look after themselves and contribute to society. At the same time, “**mental immunity**” must also be enhanced by promoting the family institution (home), religion (temple), and educational institutions (schools) so as to instill faith and “basic moral standards⁹” into people. These include respect for human dignity, values, rights, duties and equality, awareness of integrity, ethics and honest interaction with others, selflessness, mercy, knowledge, unity, patriotism and contribution to society. In addition, “perseverance”, or patience, diligence, awareness, intelligence, and carefulness must be fostered so that everyone can live a happy life on foundations of moderation, reasonableness and carefulness. These will lead to a “society of goodness and morality” which has a balance between the “material world” and “spirituality” together with human development that aims to enhance “intelligence or all-round knowledge” based on an integration of real life and academic knowledge. Learning and networks of learning will be promoted so that knowledge and wisdom will be exchanged and transferred to the following generations. As a result, there will be more creative thinking, leading to innovation and new bodies of knowledge in accordance with potential and economic opportunities of the country as well as a “society of learning” – a self-immunity system that will enable people to keep pace with the world and be ready for possible internal and external change.

At the same time, a “knowledge based society and economy” must be systematically developed to be in line with globalization. The first priority will be given to research and development of innovation and technology that encourage self-reliance or competitive advantage of the Thai economy. Emphasis will be placed on technologies that promote manufacturing rather than consumption, particularly of luxury goods. Alternately, emphasis will be placed on technologies that utilize natural resource capital and human capital in harmony with culture and environment¹⁰ by

⁹ Praves Wasee: *ibid.*, p.10

¹⁰ Sippanondha Ketudat : “The Middle Path of the Future Thai Society: Technologies in Harmony with Culture and Environment”, Bangkok: Thai Wattana Panich, B.E. 2534 pp.40-41

means of maximizing the available science and technology capital and “culture and local wisdom” capital which is valuable and must be kept and passed on to future generations, and blending them with new bodies of knowledge to create value-added products and services. In addition, knowledge of new technologies that correspond to the potential advantages of the manufacturing of Thai products such as biotechnology, materials technology, and nanotechnology must be developed in order to enable the Thai industry to become less reliant on imported knowledge and technologies, thus **increasing Thailand’s productivity and competitive capacity** and building a self-immunity system that will safeguard Thailand from threats brought about by rapid technological changes.

(2) Strengthening local communities and building networks

In order to achieve equitable distribution of development benefits among all economic and social sectors, a “people economy” and “**rural society**” that emphasize groupings and popular participation in “**strengthening local communities**” must be developed. The holistic approach to local development will be used in order to create balance in development and sustainable and integrated use of capital. Economic, social, cultural and local wisdom, natural resource and environmental capital must be utilized in harmony with the potential of each locality which has its unique biodiversity, cultural diversity and local wisdom. As a result, there will be “happy and peaceful coexistence between man and man and sustainable coexistence between man, nature and environment” in accordance with the **principles of a Sufficiency Economy** which can “**safeguard**” local communities against possible impact of external change and globalization. The principles include “**living on a foundation of knowing oneself**”, self development, “**self-reliance and mutual dependence**” in doing activities, and “**living one’s life on a foundation of sufficiency**” which means minimizing one’s desires and contributing more to society.

The process of strengthening local communities should be in strict order, starting from “**being self-reliant**” at the family level, with respect to basic needs. Beyond this, families should be able to “**have enough to live on and live for**” by reducing expenses, increasing savings, earning more income, and solving problems within their capacity to do so. Once each family becomes strong and independent, the next step is to exchange information with others, which results in mutual dependence

and **groupings at community and locality levels** so that people can contribute to society. There must be **“knowledge management and developed learning processes in local communities”** so that people are able to find and develop their own potential, have authority and rights to access and manage natural resources, make decisions without being influenced, and effectively manage their own “capital”. These points are especially relevant in terms of local community economic development to alleviate poverty and foster good governance into the administration of local government bodies. Finally, local administrations will achieve **“self-reliance”** and able to **form a “network”** with other communities **in the form of mutual assistance.**

In addition, the government sector as well as other sectors must support the strengthening of local communities by adhering to the royally initiated principles of **“socio-geographical conditions”** and **“understanding, access and development”** in order to foster “peace, harmony and sustainable prosperity.” Mechanisms and processes must be adjusted to support local community development. Decentralization must be implemented along with educating communities and localities for greater independence in administration. Networking of community economy and community enterprise must also be supported so that local communities are able to sustainably retain their identity and honor. At the same time, **it is necessary to build networks of economic and social development at the provincial level and between groups of provinces in a mutually dependent manner for greater strength, sustainability,** in order to create more development opportunities, and more job opportunities and income in local and regional levels as well as for network expansion under globalization in accordance with the potential and opportunity available for each locality.

(3) **Thailand’s economic development on a strong production base**

In order to creatively increase the competitive capacity of the **“business economy”** so that it can reap benefits from globalization and contribute to Thailand, **economic development must be on a foundation of production, which is the strength of the country, or on long-term comparative advantages,** which are identity, uniqueness and value of social capital, natural resource capital, and economic capital. Thai people will be able to create further knowledge based on existing bodies of knowledge and create innovation that is appropriate with the country’s existing

capital. Therefore, structures of production in agricultural, industrial and service sectors must be adjusted for greater strength and competitive capacity on a basis of knowledge. Emphasis will be placed on creating added value to products and services of Thailand which feature unique cultural identity and hospitality in order to enhance “competency” under globalization.

In order to increase competitive capacity of the small and medium size businesses, it is necessary to adhere to the principle of **“mutual dependence”** by using the cluster approach to develop a network and form a chain connecting to the knowledge base and appropriate innovation, thus reducing the cost, upgrading the quality and standard, and speeding up business transactions. This will create added value to products and services with government support in the areas of human development, development of infrastructure of urban areas and logistics, policy administration for overall economic stability, effective risk management against internal and external fluctuations, promotion of savings, alternative fundraising channels, effective energy consumption and development of alternative energy, so that Thailand can avoid risks and become less reliant on other countries. Moreover, equitable distribution of income and benefits of development in all economic and social sectors must be improved in conjunction with promotion of a role as development partners with neighboring countries and other countries so that Thailand will play a more important role and have more competitive capacity in the world community.

The dynamics of change in free trade under globalization resulted in a wide diversity of and complexity in manufacturing and service sectors while bodies of knowledge, new technologies and innovation have been incessantly created. Consequently, business needs to take into consideration both domestic demand and international economic competition. It is necessary for the business sector to remain **“aware and abreast of”** the context of change when making decisions as well as managing possible **risks** as a means to achieving a **“good self-immunity in business”**. In addition, business activities must consider the **“principles of moderation and reasonableness in a business perspective”** in their development so that business can expand sustainably and **“responsibly”** without taking advantage of stakeholders, society and environment. Once business is strong, attention should be

paid to strengthening the community and society for general well-being, which in turn will strengthen the organization and help it move towards stability.

(4) Securing a natural resource base, biodiversity, and environmental quality

In order to create balance between conservation and utilization of natural resource capital, maintain ecological balance, and enhance environmental quality as the basis of livelihood for local communities in rural society, it is necessary to rehabilitate and conserve soil, water basins, forests, coastal areas, and biodiversity. It is also imperative to promote fairness and rights of communities to access and manage resources, support local wisdom and foster “**ethics**” in the public and communities with regard to conservation and utilization of resources. At the same time, **value of biodiversity must be enhanced** on foundations of knowledge, local wisdom and culture, and community management in order **to build food and health stability** which must be developed in stages so that local communities can become self-reliant. After that, they can expand their opportunity and network, upgrade local wisdom and innovation, create added value to their products and services, and become connected to the national economy and the global market in the long run.

In addition, **to build good environmental quality for better quality of life and sustainable development, “sustainable production and consumption”** must be promoted by means of adjusting production plans to be environmentally friendly and effectively utilizing resources and adjusting consumer behavior, in particular the urban society’s attitude towards “**sufficiency**”. There must also be effective pollution management and control for the sake of the environment and quality of life.

(5) Fostering a system and culture of good governance and democracy in Thai society

In order to enhance equitable economic, social and political development in all sectors, and achieve peaceful coexistence and stability in the world community, **internal structures, mechanisms and national administration processes must be strengthened** on foundations of good governance and democracy. The government, business, people, and individual and family sectors must be involved in driving development and administration of Thai society and transparency in the decision-making processes, thus making corruption more difficult. As a result, accountability will increase along with effective rules and regulations that clearly specify relations among all sectors. Moreover, “right” and acceptance among all sectors are to be fostered.

With regard to government administration, the government sector must be downsized for increased efficiency by replacing the control and command approach with supervision while supporting the role of the people’s sector and business sector in becoming development partners. **Decentralization** must be implemented by means of increasing the role and authority of local and regional government bodies while **amending mechanisms and laws concerning resource allocation to support locality and community development**. This way, provinces are able to directly handle resource allocation for development in accordance with their “socio-geographical conditions” and the needs of the locals. At the same time, **reform of the private sector is needed for transparency** and fairness. Monopolies must be reduced while fair competition and consumer protection promoted in conjunction with **strengthening social and people sectors** and increasing popular participation in national administration to balance the power of the government and private business sectors. Also, it is necessary to nurture and develop the democratic culture in the Thai way of life, especially in terms of empowering the people as this is the foundation of democracy.

To summarize, **the concept and direction of sustainable development in accordance with the Sufficiency Economy philosophy under the Tenth National Economic and Social Development Plan aim at “building a self-immunity system in families, communities, society and the country”**. It is a holistic approach to “people-centered development” on the foundation of “dynamic equilibrium” that integrates human, social and cultural, economic, environmental and

political dimensions while balance between material and mental dimensions of the whole nation is maintained. At the same time, there is development of equilibrium between the inside – “strength in self-reliance of grass-root members of society and equitable distribution of benefits in all economic and social sectors”– and the outside – “economic competitive capability and ability to form development partnerships under globalization”. As a priority, the country’s “social capital”, “economic capital”, and “natural resource and environmental capital” that have inherent advantages and potential must be utilized and enhanced in an integrated and mutually supportive manner as the main pillars of national development to achieve sustainability and balance in conjunction with fostering the system and culture of good governance and democracy in all sectors and at all levels. All-round knowledge, integrity, and perseverance in the development process on foundations of moderation, reasonableness, and a self-immunity system for economy and society must be used. This development paradigm will become the Thailand’s self-immunity system that prepares the country for change and impact of fluctuations under globalization in all aspects including in material, society, culture, environment, and the economy. This will bring about the **“well-being”** of the Thai people, and Thailand will become a “society of happy coexistence” while being able to **“retain”** its **independence, sovereignty, honor and dignity, peace, and happiness in the world community.**

Summary

The Tenth National Economic and Social Development Plan (2007–2011)

1. Introduction

The Eighth Plan (1997-2001) was an important turning point in the country's development planning. The plan represented new values and thinking in Thai society that gave importance to participation by all elements of society, and that aimed for 'people-centered development,' deploying economics as a tool to help people achieve greater happiness and a better quality of life. The plan switched from a segmented approach to a holistic and integrated approach, in order to create a balance in the development of the economy, society, and environment. However, in the first year of the plan, Thailand experienced a severe economic crisis with great impact on individuals and society, including problems of increased unemployment and poverty. Restoring economic stability and reducing the impact of the crisis thus became a priority.

The Ninth Plan (2002-2006) adopted the Sufficiency Economy philosophy to guide the development and administration of the country, at the same time as continuing the holistic approach to people-centered development from the Eighth Plan. The plan prioritized solutions to problems arising from the economic crisis in order to build an economy with strong internal foundations and resilience to external changes, while aiming for balanced development with respect to people, society, economy, and environment in order to achieve sustainable development and the well-being of the Thai people. The performance under the Ninth Plan can be summarized as adequately successful. The national economy grew steadily at an average of 5.7 per cent a year. The stability of the economy improved. Poverty fell, while the quality of life of people improved greatly as a result of expansion of health services, better health insurance in both quality and quantity covering a majority of the population, and a decline in drug problems. But the Thai economy remains vulnerable to external instabilities, while problems persist over poverty, income distribution, quality of education, security of life and property, and transparency in government administration. These remain priorities for solution.

During the period of the Tenth Plan (2007-2011) Thailand will face major changes in many contexts that will present both opportunities and constraints for national development. Both people and systems must be fully prepared to adapt to future changes and reap benefit by keeping up with globalization and building resilience in all sectors, in accordance with the Sufficiency Economy philosophy.

2. Changes in the Development Context: Thailand's Situation and the Directions of Adaptation

2.1 Changes in the development context under globalization

Many important dimensions of change at the global level will affect Thailand greatly as both opportunities and constraints for development. The five major trends of such change are as follows.

(1) Economic groupings and changes in global financial markets are increasing inter-country flows of capital, goods, services and people. The advent of the Asian Century with China and India as the major engines driving the world economy means that Thailand must take an aggressive approach to trade policy both in expanding markets and in encouraging domestic producers to improve their competitiveness on the foundations of knowledge, natural resources, and Thai-ness. In addition, imbalances in the world economy that have accumulated over a long period, and the expansion of hedge funds, are creating fluctuations in international financial markets, making it imperative to upgrade the management of inter-country capital movements and to be fully prepared for fluctuations of currency values and interest rates in the world market.

(2) Leapfrog advances in technologies including communications technology, biotechnology, materials technology, and nanotechnology, present both opportunities and threats to economy and society. It is imperative that Thailand prepares itself for the changes these technologies will bring in the future by systematic management of the existing body of knowledge, creation and development of new bodies of knowledge, as well as the application of technologies that are appropriate to Thailand's strengths. This will involve, for instance, blending technology with culture and local wisdom to create increased value-added in goods and services, management of licenses and patents, and efficient protection of intellectual property rights, along with fair distribution of the benefits with communities.

(3) Social changes. The fact that many developed countries are now becoming ageing societies presents both opportunities and threats for Thailand. On the one hand Thailand has greater opportunities to expand the market for health goods and services, health foods, local wisdom and traditional medical practitioners, tourist destinations, and long-stay residence for the aged. These are opportunities to create value-added from the intellectual capital of Thai local wisdom. On the other hand, the movement of skilled and trained labor to countries with higher returns represents a threat. At the same time, the borderless dissemination of information increases difficulties over the protection of children and youth from undesirable influences, as well as problems of terrorism, the spread of new communicable diseases, and the sale of various addictive drugs.

(4) Free movement of peoples. Globalization and advances in transport technology have increased travel for business and tourism worldwide. The development of the knowledge economy and knowledge society has made various countries realize the importance of highly knowledgeable people for the competitive capacity of the country. Bilateral and multilateral pacts aim to facilitate the movement of labor and entrepreneurs to work and invest overseas. For these reasons, Thailand must pay attention to measures that support Thai workers moving overseas, measures that attract foreigners to work in the country, and measures to deal with the consequences that may arise, especially affects on the health security of people and the safety of life and property

(5) Changes in the environment and natural resources. The increase in world population has caused deterioration in the world's environment and natural resources, with effects on climate change, the incidence of natural disasters, and the spread of new communicable diseases. As a result, international agreements and treaties have been concluded governing various aspects of the world's environment and natural resources, such as the Convention on Biological Diversity, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. In addition, there are more trade barriers related to aspects of the environment and natural resources. Hence Thailand must upgrade its standards of environmental management in order to protect the resource base and

maintain a sustainable balance in the natural environment, by developing more efficient systems for administering and managing natural resources with participatory processes. Thailand must also adjust processes of producing goods and services to become more environment-friendly, and must increase efficiency in energy usage and develop alternative energy sources to meet the domestic demand for energy.

2.2. Situation of the country

In the context of changes that Thailand must face in the future, a review of the country's situation with respect to society, economy, environment and natural resources, and national administration shows that Thailand has the opportunity to adapt and reap benefits from globalization, but must still develop the structure of its society, economy, and politics in many aspects for the well-being of the Thai people. The important points of the country's situation may be summarized as follows.

1. Society

Thailand counts among countries with medium-level human development, and shows a trend of steady improvement. The human development index of Thailand in 2005 stood at 0.778, ranked 73rd among 177 countries, above China and Vietnam but below Japan, Republic of Korea, and Singapore. As for human development with respect to education, quantity has improved rapidly with the average years of schooling having increasing steadily to 8.5 in 2005, and 60 percent of the population having critical thinking skills. There are increased opportunities for life-long learning. However the capacity to adapt and apply knowledge is still at a low level. The quality of education is still inadequate for the transition to a knowledge-based economy and society. This is a matter of priority for the future. Even though the proportion of the Thai workforce with education above the primary level has increased to 39.8 per cent in 2005, the productive efficiency of Thai labor remains low in comparison with Malaysia, Republic of Korea, Singapore, Taiwan, and Japan. The workforce with medium and high education remains deficient in both quantity and quality. Investment in research and development remains at only 0.26 per cent of GDP, a seventh of the global average. The commercial application of knowledge is still at a low level, which is a weak point for Thailand in building knowledge, innovation, and research for development, and hinders improvement of international competitiveness.

At the same time Thailand faces a crisis of values which is a result of the inflow of foreign culture through mass media and information technology with no filtering and selection of what is good, resulting in a decline of virtuousness and morality, especially among children and youth. As a result of changing lifestyles, the institutions of family, schooling, and religion have less role in raising, educating, imparting knowledge, and instilling ethical standards and values. As a result, values and behavior are increasingly marked by materialism and consumerism. Health insurance extends to 96.3 per cent of the population in 2005. Incidence of disease has fallen to 1,798.1 per thousand in 2004. However, there is a trend of steady increase in the numbers suffering from preventable diseases, including new and resurgent epidemic diseases, as a result of globalization. Social insurance still does not cover informal workers and the disadvantaged at all. Threats to the safety of life and property are on the increase.

Thailand is in transition from a rural to an urban society. As a result of the compartmentalized development of urban and rural areas, there is imbalance in the development of rural communities. However, more community participation in development and better management of knowledge have resulted in communities uniting,

collaborating, and learning together to cope with their own problems to some extent. At the same time, localities have become more capable of operating efficiently, and have mechanisms in place to take on duties under the scheme of administrative decentralization. Already 3,657 sub-districts have learnt how to compile community plans. Schemes are in place to support the work of community forums in compiling plans for districts and localities, to develop the capacity of community leaders, to create networks of community businesses, and to encourage participation in the creation of employment. Yet culture, values, and wisdom remain neglected, and are not being passed down to new generations. Public consciousness, generosity and mutual assistance have begun to decline. However, distributed throughout the country there are around 1.7 million development leaders, including community leaders and keepers of local wisdom, who play important roles as the driving force in community development. As a result, in every region there are strong communities that can serve as examples to study and emulate. Yet, the behavior of people and relationships within communities are undergoing change under the impact of materialism, resulting in greater convenience but less contentment, income insufficient to cover expenses, growing debt, and more individualistic relations within the community.

2. National economy

The Thai economy grew at an average rate of 5.7 per cent over the period 2002–2005. Thailand counts among middle-income countries, ranked 20 out of 192 countries in terms of the economy's size. The country's position in international trade has remained stable, with constant market share and growing competitiveness. The development of the knowledge-based economy has advanced. The strong point of the production structure is its diversity which reduces risks arising from fluctuations in the economic cycle. Stronger linkages among production sectors have increased value-added. However, the structural weakness of the Thai economy is its high import dependence for raw materials, components, energy, capital, and technology. As productivity is low, production relies on the resource base more than on knowledge. Wasteful usage of resources for production and consumption results in environmental problems and consequential social impacts because of the absence of appropriate preventive measures. The infrastructure of transport and logistics lack efficiency and systematic linkages, resulting in high capital cost of 16 per cent of GDP. Also the transportation sector absorbs as much as 38 per cent of commercial energy. In addition, the infrastructure for information technology and telecommunications, and for water supply and distribution, has not extended adequately into the rural areas. The infrastructure for science, technology, and innovations are all at a low level, below that of neighboring countries that are trade competitors.

However, the Thai economy has achieved a good measure of stability as a result of recovery policies after the economic crisis. At the end of 2005, unemployment stood as 2 per cent, and international reserves at US\$ 52.1 billion, considered adequate for resilience against external shocks. However the steep rise in oil prices since 2004 has resulted in increasing deficits in the balance of trade and the balance of payments, pointing up the structural weakness of excessive external dependence. In addition, savings are lower than investment, resulting in dependence on overseas capital, exposing the country to the risks of a balance-of-payments deficit and international capital movements. Hence it is necessary to increase the economy's resilience within the context of a world with free movement of people, technological knowledge, capital, goods, and services.

As for development towards a more fair economy and alleviation of poverty, the incidence of poverty has fallen steadily and the distribution of income has marginally improved. In 2007 there are 7.34 million people, 11.3 per cent of total population, still below a poverty line of 1,242 baht income per month. The Gini coefficient for income distribution improved slightly to 0.499 from 0.525 in 2000 and 0.501 in 2002. However, improvement in the distribution of income demands priority attention as Thailand still trails many countries in terms of equality.

3. Environment and natural resources

In the past, the environment and natural resources were principally used to meet the demand for economic growth. In 40 years, 67 million rai of forests were destroyed, and now forests cover only 33 per cent of the country, resulting in more frequent and more severe problems of flooding, drought, and natural disasters. Marine and coastal resources have deteriorated. Mangroves have declined from 2 million to 1.5 million rai. The seafood catch has been reduced to one third. The conditions of coral and sea grass have deteriorated. Biodiversity is rapidly being destroyed. Human activity that destroys the habitats of various living organisms is changing the ecology and increasing the incidence of extinction of species.

The main reasons for the decline in the quality of the environment are the increase in population and inappropriate lifestyles resulting in increased pollution. Air and water quality is below standard. The volumes of refuse and hazardous wastes are increasing faster than the capacity to dispose of them. Hazardous substances used in production are being imported in increasing volumes without adequate mechanisms for controlling production processes, storage, or transport. As a result, these substances have seeped into the environment, and contaminated the food chain. In addition to the complexities, deficiencies, and failures of implementation, the use of economic and legal measures has been limited.

4. Administration

The administration has begun to open up opportunities to other sectors to participate more in government, but the public still has a limited role. The political sector has become stronger and more stable, yet the administration of economy and society remains highly centralized, and the systems of checks-and-balances remain ineffective. The bureaucracy has been reformed and modernized for greater efficiency, but administrative processes remain rather closed and lack systems for popular participation. The appraisal of various aspects of bureaucratic reform has been positive, with an average score of 3.82 in 2004. The people's sector has begun to participate in development, and plays an increasing role both in politics and local development. The election turnout has steadily increased to 72.6 per cent in 2005. The private sector has a growing role in national development with more corporate governance. In the Institute for Management Development (IMD)'s rankings for good governance, Thailand advanced from 36th in 2001 to 30th in 2006, but still lacks the capacity to drive good governance in the private business sector in general, especially in unlisted firms.

Government administration still lacks good governance because it remains centralized, and denies opportunities for popular participation in decision-making. Although there has been greater progress in decentralization, local government bodies are not yet strong and lack freedom to collect adequate revenue for self-reliance. In addition, judicial and legal systems have not adjusted in step with change and are unable to provide justice for all parties. Mechanisms for monitoring the use of state power remain inefficient. Private-sector

checks-and-balances still have a limited role, and lack ability to build a network that collectively could monitor effectively. Though transparency in government administration shows a tendency to improve, and the rating by Transparency International rose to 3.8 out of 10 in 2005, this level remains rather low. The deep-seated patronage system remains an obstacle to the spread of good governance in Thailand. Coupled with a lack of quality and public consciousness, it results in an inability to separate individual benefit from public benefit, leading to more complex problems of injustice and corrupt practice.

2.3 Concept and direction of adaptation

1. Concept

The above review of the worldwide changes affecting Thailand's development in the future, and of the country's development and current situation, points to the structural problem of a pattern of development that is unbalanced, unsustainable, and vulnerable to rapid external fluctuations. Hence Thailand must reorient its development paradigm to have greater self-reliance and resilience by following the Sufficiency Economy philosophy in conjunction with a holistic approach to people-centered development. Development policy and national administration must follow a middle path which balances and integrates all dimensions of development including the human, social, economic, environmental, and political. Reasonableness and moderation must be used to create a balance between material and mental dimensions, between self-reliance and competitive capability in the world market, and between rural and urban society. A self-immunity system must be built into economic systems through risk management in order to handle the impact of changes both inside and outside the country.

Development efforts must proceed in stages, drawing on all-round knowledge, and moving forward with circumspection, in keeping with the Thai way-of-life. Stronger ethics, integrity, morality in the conduct of duty, and perseverance will build a self-immunity system to face changes that arise in family, community, society, and nation. The intentions of the Constitution of the Kingdom of Thailand 2007 must be always upheld.

2. Direction of adaptation

Under globalization in which changes are rapid and becoming more severe, development must strengthen domestic systems and structures to become more self-reliant and more resilient in accordance with the Sufficiency Economy philosophy. As a priority, those aspects of the country's social capital, economic capital, and natural resource and environmental capital that have inherent advantages and potential must be utilized and enhanced in an integrated and mutually supportive manner as the main pillars of national development. To enhance social capital, human potential must be developed in all dimensions including physical, mental, and intellectual, with warm families and strong communities combining in development networks. To enhance economic capital, so that the Thai economy grows with stability and quality, support must be given to structural changes in the economy and in investment, while at the same time enhancing the potential and resilience of the grassroots economy, so that the benefits of development will be fairly distributed. To enhance the natural resource and environmental capital, development must build on the foundations of biodiversity, and enhance community rights of access and management of resources in order to conserve the rich stock of natural resource and environmental capital as a foundation for the sustainable livelihood and happiness of the Thai people now and in the future.

At the same time, systems, structures, mechanisms, and processes for managing national development must be enhanced on foundations of good governance and democracy, by promoting the participation of all sectors and all levels to ensure development is balanced, fair, and sustainable. Administrative systems must be reformed for greater efficiency and transparency by reducing the role of the central bureaucracy and decentralizing decision-making power, administrative capacity, and control over resources to regional and local administration and communities. The role of the private sector must be enhanced, and private business reformed to become strong, honest, and transparent. Laws and regulations must be amended to achieve balanced management and distribution of the benefits of development to all, while simultaneously enhancing national security. These measures will achieve equilibrium in the country's management in all aspects including economy, society, environment and natural resources, and security for the sake of peace, happiness, and sustainability.

3. Vision and Mission

3.1 Vision for Thailand

Thailand will be a *Green and Happiness Society* in which people have integrity and knowledge of world standard; families are warm; communities are strong; society is peaceful; economy is efficient, stable, and equitable; environment is of high quality and natural resources are sustainable; administration follows good governance under the system of democracy with the king as head of state; and the country is a respected member of the world community.

3.2 Mission

So that development under the Tenth Plan pursues a Green and Happiness Society under the direction of the Sufficiency Economy philosophy, the mission is determined as follows.

1. Develop people to have quality, integrity, knowledge of world standard, good health, living in warm families and strong communities, capable of self-reliance, pursuing their lives with security and dignity, within a balanced diversity of culture, natural resources, and the environment.

2. Enhance the economy to be efficient, stable, and equitable by reforming the structure of the economy to be competitive and self-immunized in the face of risks and fluctuations in the environment of the age of globalization, on a foundation of efficient management of the overall economy, a sufficient level of savings, reform of the structure of production and services on a basis of knowledge and innovation, using the strengths of biodiversity and Thai identity, along with overseas linkages, and development of infrastructure and logistics, energy, laws and regulations, and mechanisms to support competitiveness and a fair distribution of benefits

3. Conserve biodiversity, build a secure natural resource base, and conserve the quality of the environment by creating a sustainable balance between conservation and exploitation with fair distribution and value creation, supporting communities to have knowledge and self-immunity, safeguarding the resource base, protecting rights, enhancing the role of communities in the management of resources, and adjusting the pattern of production and consumption to be environment-friendly, while maintaining the national benefit from international agreements and obligation.

4. Develop national administration to achieve good governance under democracy with the king as head of state, by building mechanisms and regulations which promote distribution of benefits of development to all parties, ensuring transparency, honesty, justice and public responsibility, decentralizing power, and providing systems for all parties to participate in decision-making, to achieve fairness in economy, society, and the use of resources.

4. Principal Objectives and Targets

To be in line with changes that Thailand must make in future, and to progress towards the desired long-term vision, development in the five years of the Tenth Plan shall pursue the following principal objectives and targets.

4.1 Objectives

1. to provide opportunities for learning combined with integrity and morality by creating linkages between families, religious institutions, and educational institutions; to enhance health services, balancing among health care, promotion, prevention, treatment and capacity rehabilitation; and to improve the security of life and property.

2. to increase the potential of communities by linking them in networks to serve as the foundation for developing the economy and quality of life; to conserve, rehabilitate, and utilize the environment and natural resources in a sustainable fashion to achieve sufficiency and reduce poverty.

3. to reform the production structure for goods and services for value creation on a foundation of knowledge and innovation; to promote linkages among production sectors to increase value-added.

4. to build safety nets and risk management systems for the sectors of finance, banking, energy, factor markets, the labor market, and investment.

5. to ensure fair competition in trade and investment for national benefit; to create mechanisms for fair distribution of the benefits of development to all segments of the population.

6. to preserve natural resources and biodiversity, along with safeguarding the quality of the environment to be a secure foundation of national development and livelihood for both current and future generations; to create mechanisms to safeguard national benefit in a fair and sustainable manner.

7. to promote good governance in government administration, the private business sector, and the people's sector; to expand the role and capacity of local government bodies; to promote mechanisms and processes of participation in development; and to nurture a culture of democracy for peaceful coexistence.

4.2 Targets

To meet the above objectives, development targets for the Tenth Plan have been set as follows.

1. Targets for human development. Provide all persons with physical and mental development, knowledge, ability, career skills, and life security, and enable all target groups to develop their own potential and strengthen family, community, and society: increase average years of schooling to 10; raise the proportion of the qualified workforce with medium-level skills to 60 per cent; raise the proportion of R&D workers to 10-in-10,000; reduce the crime rate by 10 per cent; raise life expectancy to 80 years; reduce the trend of increase in the five leading preventable diseases namely heart disorders, high blood pressure, diabetes, stroke, and cancer, in order to increase labor productivity and reduce expenditure on personal health in the long run.

2. Targets for community development and alleviation of poverty. Ensure that every community has a participatory community plan, and that local government bodies integrate community plans with their budget management, anti-crime and anti-drug measure; increase access to capital and participation in decision-making; reduce those below the poverty line to 4 per cent by 2011.

3. Targets for the economy. Reform the economic structure for balance and sustainability by increasing the ratio of the domestic economy to international trade to 75 per cent within 2011; increase the proportion of agriculture and agro-industry in GDP to 15 per cent within 2011; maintain inflation at an average of 3.0–3.5 per cent a year; maintain the ratio of public debt to GDP no higher than 50 per cent; maintain average elasticity of energy consumption no higher than 1:1 during the period of the Tenth Plan; increase renewable energy to 8 per cent of total, and reduce the ratio of energy use to GDP, and in particular reduce the usage of petroleum in the transport sector to 30 per cent of total energy usage; ensure the income of the highest 20 per cent does not exceed that of the lowest 20 per cent by more than 10 times within 2011; ensure the production of small and medium enterprises is no lower than 40 per cent of GDP during the period of the Tenth Plan.

4. Targets for safeguarding natural resources and the environment. Conserve natural resources and biodiversity by maintaining forest at no less than 33 per cent of total land area, with conservation forest no less than 18 per cent of total land area; maintain at least 31 million rai of irrigated area for agriculture; enhance environmental quality appropriate for the quality of life and safety of the ecological system, by ensuring that the proportion of river basins and natural water sources where the water quality is rated as fair or good is not lower than 85 per cent; maintain air quality above standard, in particular with micro-particles (PM₁₀) not exceeding 120 milligram per cubic meter on average across 24 hours; reduce the rate of carbon dioxide emissions per person by 5 per cent from the 2003 level, that is no higher than 3.5 tonne per person per year; limit the production of waste in urban areas no higher than 1 kilogram per person per day; ensure proper disposal of at least 80 per cent of all hazardous waste from communities and industries; and establish a complete national biodiversity database.

5. Targets for good governance. Improve good governance to achieve a transparency score of 5.0 within 2011; trim the bureaucracy to appropriate size and increase value for money of operation by reducing the workforce of government officials by 10 percent within 2011; improve good governance in the private sector; enhance capacity of localities to collect revenue and become more self-reliant; strengthen the people's sector by improving knowledge of rights and duties and increasing participation in decision-making and responsibility in national administration; compile a larger body of knowledge about democracy and good governance in the Thai context within the period of the Tenth Plan.

5. Strategies

In the context of ever faster and more complex change under globalization it is imperative to set appropriate strategies for national development in order to strengthen domestic structures for competitiveness, build a knowledge base for resilience in the face of change, spread equitable development, promote the equality of groups in society, strengthen local communities, and rehabilitate and conserve natural resources and the quality of the environment as a foundation for secure development, and as the basis of livelihood for communities and society. It is also imperative to promote good governance in national administration at all levels in order to achieve development that is secure and sustainable and to retain a place of honor and dignity in the world community. Hence the major development strategies of the Tenth Plan are as follows.

5.1 Strategies for development of human quality towards a knowledge-based and learning society will have the following emphasis.

1. To promote human development for integrity, knowledge, and resilience, learning and spirituality of all groups in all ages will be developed throughout life; children will be provided with a strong basis of knowledge including life skills, capacities, and workforce skills appropriate to demand, so they may progress towards the world of work and competition; excellence will be fostered, especially in creativity, innovation, and knowledge; life-long learning will be promoted; both local wisdom and modern learning will be nurtured from the community to the national level for benefit in the development of economy and society.

2. To promote health, both physical and mental, in a livable environment, emphasis will be given to the development of a comprehensive health system including prevention, physical and mental rehabilitation, food security, safe food consumption, and the reduction or elimination of behavior that entails risk to health.

3. To promotion peaceful coexistence in society, good relations will be nurtured among people in society on a basis of reasonableness; life security will be protected at the level of family and community; diverse and comprehensive systems of economic and social protection will be developed; opportunities of access to capital will be increased; personal safety will be enhanced on a foundation of social justice; an integrated judicial process and concerted enforcement of law will be installed; consciousness of the rights and duties of citizens, and respect for human dignity will be promoted in order to reduce conflict.

5.2 Strategies to strengthen community and society as basis of national security will have the following emphasis.

1. To create strong communities, collective action and collective thinking will be promoted in various forms, and activities arranged subject to the readiness of each community, along with systematic management of knowledge and progressive learning systems; learning networks, both inside and outside communities, will promote the capacity of communities and local government bodies to develop to their peak in the pursuit of self reliance and resilience in the face of change.

2. To build secure community economies, production will be developed in a balanced fashion on the basis of the capacity and strength of each community, with an emphasis on production for sufficient consumption within the community; communities will be supported to work together as cooperatives and enterprise groups; support will be

provided to utilize local wisdom and culture to create value in products and services; cooperation with the private sector in investment will be encouraged to create employment and income with fair benefit for communities; joint investment between networks of community organizations and local government bodies will be promoted; systems will be installed to provide training including management, marketing, and professional skills for budding community enterprises.

3. To enhance the capacity of communities to coexist peacefully with natural resources and the environment for mutual benefit, there will be support for community rights and participation in conservation, rehabilitation, development, and utilization; management will be made more efficient, and mechanisms installed for local protection of natural resources and the environment.

5.3 Strategies to reform the structure of the economy for balance and sustainability will have the following emphasis.

1. To reform the production structure to increase productivity and enhance the value of products and services on a basis of knowledge and Thai-ness, the structure of the agricultural, industrial, and service sectors will be reformed using the cluster development approach, supply chains, and community networks on foundations of modern knowledge, local wisdom, Thai culture, and biodiversity, to create products that have quality and high value, and brands that command market acceptance; a good investment atmosphere will be cultivated to attract foreign investment, and Thai overseas investment will be promoted; bodies of knowledge will be systematically managed, infrastructure and logistics developed, institutions restructured, laws and regulations amended, and various standards systems adjusted; international trade policy will be designed to support changes in the production structure and increase competitiveness.

2. To build resilience into the economy, the national economy will be managed efficiently to maintain stability; support will be provided for reform of the production structure by mobilizing capital for efficient sectors of production; the efficiency of state enterprises will be increased on good management principles so that resources are used efficiently and the country gains the maximum benefit; savings will be promoted systematically as a means to mobilize capital and as security for people's lives; efficiency of energy usage will increase, and sources of alternative energy developed to reduce dependence on energy imports and to save on foreign exchange.

3. To promote fair competition and fair distribution of the benefits of development, competition in business entrepreneurship will be fostered under free and fair conditions, and monopolies prevented; infrastructure development will be extended to the regions in a fair and balanced manner, to give people access to services everywhere, adequate and appropriate to the demands of the area; the efficiency and coverage of basic financial services will be increased in order to develop the capacity of communities and the grassroots economy, by strengthening community financial institutions; fiscal policy will be geared to support the distribution of income by decentralizing tax collection, budgeting, disbursement, and lending to local government bodies under full fiscal discipline.

5.4 Strategies for development of biodiversity and conservation of the environment and natural resources will have the following emphasis.

1. To conserve the resource base and the ecological balance, balance will be maintained between conservation and utilization by developing databases and knowledge bases, and by promoting community rights and participation in the management of resources, including cooperative management systems to conserve and rehabilitate natural resources; priority will be given to boundary definition and area management with the agreement of local communities for care of the principal natural resources of soil, water, forest, marine and coastal resources, and mineral resources; measures will be instituted for temporary bans on the utilization of major resources that are severely depleted; mechanisms will be created for solving conflicts by peaceful means, and systems developed for the management and prevention of natural disasters.

2. To create a good environment for the sake of the quality of life and sustainable development, patterns of production and consumer behavior will be modified for sustainability in order to reduce the impact on the natural resource base and environment; public policy and economic mechanisms, both fiscal and monetary, will be used to create markets for environment-friendly goods and services; pollution will be reduced and controls imposed on activities that have impact on the quality of life by instituting strategic environmental assessments, and health and social impact assessments in development projects of the government or those approved by government for private management; the capacity of local government bodies and communities to manage the environment will be improved; and mechanisms instituted to set the country's stance towards international obligations and agreements on the environment

3. To develop the value of biodiversity and local wisdom, the Sufficiency Economy philosophy will set the main direction for organizing a body of knowledge and building resilience to protect biodiversity resources from external threats, especially from international obligations; systems will be installed to protect community rights and provide for fair distribution of gains; biodiversity will be used to strengthen local and community economies; natural resources that are unique to the country will be used to create capacity and innovation.

5.5 Strategies to promote good governance aiming at social justice and sustainability will have the following emphasis.

1. To promote and develop a democratic culture and good governance as part of the way of life, learning processes will be seriously and continuously initiated to instill consciousness and core values of democratic culture and good governance among the youth and people of all levels; model democratic leadership with virtue, morality and good governance will be fostered at all levels of society; democratic processes will be given firm foundations by truly allowing popular participation; mechanisms and processes to scrutinize the use of power and politics will be made freer, stronger, and more efficient.

2. To strengthen the people's sector's participation in national administration, people will be encouraged to create strong cooperative networks; equal access to the judicial process, and participation in national administration will be promoted for the sake of justice and transparency in the country's development; networks will be created and strengthened in the people's sector to effectively monitor and scrutinize the use of power by government.

3. To create a public administration that works with efficiency and good governance emphasizing service rather than control and working in cooperation with development partners, emphasis will be given to improving efficiency and cost

effectiveness by reforming the roles, structures, and mechanisms of government administration and state enterprises to become more modern, less top-down, attentive to people's needs, and cooperative with development partners; the role of the private sector in government activities and state enterprises will be enhanced to increase the efficiency and quality of public services, and to reduce the burden of public investment; strong supervisory mechanisms will be developed to foster fair and transparent competition for the sake of national benefit and the protection of service users; state officials will be instilled with consciousness of the importance of upholding the principles of good governance, and strictly implementing the law on freedom of information.

4. To continue the decentralization of administration to the regions, localities, and communities, capacity will be developed and decision-making powers transferred to enable localities to take responsibility for public administration and public services, solve problems in response to the needs of people in the area, and promote economic and social progress in the locality; opportunities will be created for people to participate in the development of their own localities.

5. To promote strength, honesty and good governance in the private sector, measures will be instituted to encourage more listed companies and private businesses in general to adopt corporate governance; consciousness will be fostered of the importance in business practice of honesty, equity to the consumer, fair competition, social responsibility, and sharing benefits with the public; professional business institutions will be encouraged to play a greater role in building good governance in the private sector.

6. To reform law, regulations, procedures, and processes relating to economic and social development for balanced distribution of the benefits of development, opportunities will be provided for various groups and interests to participate in proposing and drafting laws to accommodate the interests of various parties with balance and equity, and to promote economic equity; the use of discretion by government officials will be reduced; mechanisms of law enforcement will be strengthened, especially laws related to business practice, for fairness towards small and medium enterprises.

7. To promote national security in administration aiming at balance and sustainability of the country, the capability of agencies involved in defense, security, and peacekeeping will be developed for efficiency and readiness in defending the country and responding to threats in all forms of emergency; cooperation with other sectors will be developed to defend and develop the country, and protect national sovereignty, the monarchy, national interests, and government under the system of democracy with the king as head of state; the safety and security of the people and society will be maintained by upholding good governance at all levels.

6. From Strategy to Implementation and Evaluation

In advancing the Tenth Plan from strategy to implementation, importance will be given to participation by all development partners from all sectors, cooperating according to their area of responsibility. The strategic directions of the plan will be converted into operational plans for practical implementation at various levels. Resources will be allocated, laws and regulations amended, and bodies of knowledge assembled to support implementation. Monitoring and evaluation will be systematically carried out. The major directions are as follows.

6.1 Ensure development partners participate at various levels in compiling operational plans which integrate the strategies of the Tenth Plan under the principles of the Sufficiency Economy philosophy. Emphasis will be placed on clearly allocating the major roles of development partners including government, private sector, various institutions, and communities for the sake of cooperation and mutual support in implementation. The understanding and implementation of the Sufficiency Economy philosophy with all development partners will form the basis for cooperation in compiling operational plans from the strategies of the Tenth Plan at various levels. Government will compile and implement a national management plan and various operational plans for specific functions, areas, and special topics. Mechanisms will be installed to integrate plans for localities, provinces, groups of provinces, regions, and the national level. Mechanism for consultation with the people's sector will be installed for the sake of cooperation at the area level

6.2 Set guidelines for major investment following the development strategies of the Tenth Plan so that development partners may implement within their area of responsibility, and draw on cooperation from various sectors. Under the concept of people-centered development and community strengthening, emphasis will be placed on the development of a comprehensive health system, life-long learning, upgrading of R&D, ongoing capacity development of communities, extension of social insurance to those in the informal economy, and an integrated approach to the alleviation of poverty. Reform of the structure of the economy will emphasize reform of savings systems, group formation, reform of innovation systems, reduction of the capital cost of transport and logistics, investments to ensure equitable access to basic services, and energy security.

Under the development of biodiversity and maintenance of the resource base and environment, emphasis will be placed on development of geographical information systems, development of water sources, prevention and alleviation of flooding, investments in building, expanding and modifying water treatment and waste disposal systems, adoption of clean technology for vehicles and clean energy, and the compiling of national-level databases and data centers on biodiversity. Under the promotion of good governance, emphasis will be placed on instilling consciousness of good governance and the cultures of democracy and peace, in people at all levels, sectors, and institutions. Opportunities will be created for the people's sector to cooperate in thinking, decision making, implementation, responsibility and evaluation of national administration. Bodies of knowledge will be compiled on the development of democratic culture and good governance.

6.3 Accelerate the development of laws to support efficient and effective implementation of the plan's strategies. Laws will be amended to support good public administration, reform of the structure of the economy, increased competitiveness of the country, alleviation of poverty, prevention of corruption, full distribution of economic benefits, and resilience to trends of change under globalization. Priority will be given to developing the knowledge and capability of legal personnel to meet the requirements of government and changes in the world. Laws relating to economy, society, environment, resources, and administration will be drafted, amended, and promulgated, including new drafts.

6.4 Study, research, bodies of knowledge, and learning processes to support implementation of the strategies of the Tenth Plan. Importance will be given to study research, creation of bodies of knowledge, learning processes, and dissemination of results, both at the operational level and at the policy level in future, that follow the five strategy points of the Tenth Plan.

6.5 Develop systems of monitoring and evaluation, and devise indicators of development outcome at all levels. Systems for monitoring and evaluation of government administration will be upgraded and extended to assess implementation. Clear standards and measurement methods will be used to monitor and compare results between agencies. All government agencies will be encouraged to develop monitoring and evaluation systems for good administration in the public sector with emphasis on cost effectiveness, transparency, and responsiveness to the diverse needs of the population. Indicators will be devised to assess development under the Tenth Plan, both at the general level and strategy level. Indicators will be devised to assess the success of achieving a *Green and Happiness Society* through a participatory process. Bodies of knowledge will be compiled on monitoring and evaluation. Reports on monitoring and evaluation will be regularly disseminated to the public.

6.6 Develop databases at all levels and data networks linking among central policy bodies, regional and local administrative bodies. Policy level agencies will develop data systems and statistical management systems to meet the needs of development under the Tenth Plan. Indicators and warning systems will be put in place to monitor the economic and social situation both in the country and the world, and monitor the progress of policy. Support will be given to the creation of data networks for planning, monitoring, and evaluation at the levels of province, locality, and community. Data networks linking between province, locality, community and the centre will be developed with easy accessibility, and speed and convenience of use.

Part II

Changes in the Development Context under Globalization

Status and Visions of Thailand

Chapter 1

Changes in the Development Context under Globalization: Thailand's Situation and Directions of Adaptation

1. From the Eighth National Economic and Social Development Plan to the Tenth National Economic and Social Development Plan

The Eighth National Economic and Social Development Plan (1997-2001) was an important turning point in the country's development planning. The plan represented new values and thinking in Thai society and was successful with regard to participation by all elements of society. A review of national development from the First to the Seventh Plans reveals that the Thai economy grew steadily but human and social development as well as rehabilitation of natural resources and environment took place more slowly, resulting in unbalanced and unsustainable development. A new development paradigm that focused on **“people-centered development”** was therefore brought into use, and the economy was employed as a tool to enhance happiness and quality of life. At the same time, the segmented approach to development was replaced by a holistic approach to development, with more opportunities for all sectors to participate in every stage of development. The new paradigm is under the principles of “Sufficiency Economy” to which His Majesty has adhered since his ascension to the throne. The philosophy is in accordance with the Thai way of life and will lead to sustainable development of the nation.

However, in the first year of the Eighth Plan, Thailand experienced a severe economic crisis which had a great impact on individuals and society including creating problems of rapidly increased unemployment and poverty. Restoring economic stability, reducing the impact of the crisis, and reengineering the administration of the public and the private sectors thus became a priority. Even

though the plan had not been fully implemented, it marked the beginning of popular participation, a fundamental concept in the drafting of the Constitution of the Kingdom of Thailand B.E.2540 (1997), a document which provides an important social infrastructure and a means to national development.

The Ninth Plan (2002-2006) adopted the “Sufficiency Economy” philosophy to guide the development of Thailand while continuing to uphold the holistic approach to “people-centered development” from the Eighth Plan. With an aim of steady economic expansion, emphasis was placed on solutions to problems arising from the economic crisis and building the country’s economic base with strong internal foundations, self-reliance, and resilience by linking with the global market. At the same time, the plan aimed to create balanced development with respect to people, society, the economy, and the environment in order to achieve sustainable development and the well-being of the Thai people.

The performance under the Ninth Plan was summarized as adequately successful. The national economy grew steadily at an average of 5.7 per cent a year. The gross national product increased from 86.3 billion baht in 2002 to 109.7 billion baht in 2005. The stability of the economy improved, achieving the goals of economic administration despite problems of new or resurgent epidemic diseases, natural disasters, and increasing oil prices. Moreover, the inflation rate remained low, within the target at 3.0 per cent a year. The ratio of public debt to GDP and overseas loan to NPL decreased significantly. Surplus in the balance of payments was at 3.1 per cent of GDP, remaining much higher than the target. International funds increased. At the same time, because of increased productivity, the production base improved in terms of variety especially the industrial sector which expanded at the rate of 8 per cent a year, a rate which was higher than the target. Nevertheless, development with respect to quality and efficiency was lower than projected as reflected in greater expansion of quantity in comparison with the improvement of quality and efficiency. The economic expansion and competitive capacity of Thailand relied heavily on raw materials, cheap labor, natural resources, and demand from export. Moreover, excessive reliance on external factors such as raw materials, capital, and technologies caused Thailand to become vulnerable to external changes and fluctuations in the world economy,

reflecting unbalanced economic structure and a lack of effective risk management which could safeguard the economy.

The quality of life of the Thai people improved. Poverty fell significantly from 15.6 per cent in 2002 to 11.3 per cent in 2004. Distribution of income slightly improved. At the same time, the employment rate was good and beyond the target because of the career promotion schemes. Health insurance extended to cover 96.3 per cent of the population because of more extensive health promotion. The majority of the Thai people had better access to infrastructure and social security. With regard to education, education attainment was lower than the projected. In 2005, the average number of schooling years was 8.5, being lower than the projected 9 years. The proportion of the Thai workforce with education above the primary level increased to 39.8 per cent which was lower than the targeted 50 per cent. At the same time, problems of drugs were tackled seriously thus reducing the impact of the problem. Nevertheless, issues of human development, poverty, income distribution, health and safety, and transparency in government administration remain priorities for future solutions.

Natural resources and environmental management has been improved, but balance between conservation and utilization was not achieved. Natural resources have been depleted in production processes, making it difficult to restore the resource. As a result, there has been a decline in the quality of natural resources and environment and the ecological system has become weaker. Conservation and rehabilitation of natural resources and environment under the Ninth Plan resulted in an increase in the mangrove area to 1.57 million rai which was higher than the targeted 1.25 million rai. However, the solution to social problems did not meet the target. Problems persist over increasing water pollution and toxic waste management. Rehabilitation and conservation of natural resources and environment remain priorities for the next plan so that they will become a foundation for secure and sustainable development.

In the first phase of the Tenth Plan, Thailand is likely to experience a steep rise in oil prices, which puts pressure on inflation and the balance of payments. But the overall situation, when compared with the Ninth Plan, is likely to support the country's development strategies. Moreover, under globalization, Thailand continues

to face significant changes in many aspects which will have a severe impact on development in many dimensions. The Tenth Plan aims to prepare Thailand to keep pace with future change and reap benefits from globalization and to build resilience to all sectors in accordance with the “Sufficiency Economy” philosophy.

2. Changes in the Development Context

Many important dimensions of change continue to affect Thailand as both opportunities and constraints for development. As a result, the next phase of development needs to make Thailand ready for change and maximize the potential of the country. The 5 major trends of such change are as follows.

2.1 Changes in global economy and finance

(1) Economic groupings and changes in global financial markets

Under globalization, inter-country flows of capital, goods and services, and peoples have been increasing. Changes in rules and regulations of world trade are becoming ever faster at bilateral, regional, and multilateral levels. Economic groupings play a more important role. Meanwhile, the US’s role as the leader of world trade has become less important due to steady deficits in the balance of payments and balance of trade. The rise of Asia powered by China and India is a new mechanism of world trade. Furthermore, expansion of monetary markets and development of new financial tools has contributed to a rapid expansion of international monetary collaboration and hedge funds. These changes, on the one hand, pose threats to the economy of each country, creating more complex rules and regulations. Hence, each country needs to adjust its economy to the changes and closely monitor capital movement from overseas to avoid fluctuations of the monetary market and exchange rates. On the other hand, the changes create more trade opportunities and increase channels for investment with greater effectiveness, flexibility and speed while supporting development of skills and technologies that increase competitive capacity under the changes. It is necessary therefore for countries including Thailand to be proactive in their trade policy, to form networks, and to be a part of global production.

(2) The connection between the Thai economy and global and regional economy and its impact

Being a member of trade agreements and free trade areas such as ASEAN and APEC, Thailand is internationally recognized in the global arena. Other collaborations include the Great Mekhong Sub-region (GMS), Bangladesh – India – Myanmar – Sri Lanka – Thailand Economic Collaboration (BIMST – EC) and the United Nations. Moreover, Thailand is a coordinator for ASEM and UNCTAD conferences as well as conferences of impartial parties. Therefore, Thailand is able to participate in drafting international rules and regulations and amend them for the sake of the country. Moreover, because of its role in the world community, Thailand has more opportunities to be proactive with regard to trade and export by paying attention to people, science and technology development, increasing productivity, adding value and upgrading goods and services on the foundations of knowledge, Thai-ness, the country's potential and natural resources. This way, Thailand is able to strengthen its economy, progress towards world competition, and promote its role as a center of many products and services. Nevertheless, Thailand has to adjust itself to changes in the rules and regulations of world trade and international financial standards. It is therefore imperative that Thailand develop strategies for attracting overseas capital and investments which would help strengthen the economy and improve economic administration. These will, in turn, create liquidity and stability especially with regard to monitoring capital movements, and upgrading the country's financial market to meet international standards so that it can effectively be linked with the international financial markets. In addition to these strategies, Thailand has to promote good governance and stability in the administration of both the private sector and the overall economy.

2.2 Leapfrog advances in technologies

(1) The new age economy as a result of advances in technologies and its impact on world development

Leapfrog advances in technologies including communications technology, biotechnology, materials technology, and nanotechnology are factors that contribute to the expansion of a new age economy which is a blend of technologies,

creativity and knowledge, thus adding economic values. This is different from the past where technology such as basic industrial machinery was used in conjunction with labor and capital. At present, technology is blended with local wisdom and innovation to create unique value-added goods and services, enhance management capacity, promote clean production, reduce the use of natural resources, and reduce waste and pollution. Meanwhile, creative use of technologies provides more learning opportunities for the Thai people, enabling them to have better access to information and knowledge and keep pace with change. As a result, technology is an asset which receives attention from many countries especially in the aspect of research and development. Investments in nanotechnology, in particular, by governments worldwide, accounted for US\$ 3 billion or approximately 122,490 million baht.

(2) Impact of advances in technologies on Thailand

Development in science and technology in Thailand remains at a low level. With regard to scientific competence, Thailand ranks far behind its competitors. The average investment in research and development was at 12 billion baht per year, accounting for only 0.26 per cent of GDP. The manufacturing and agricultural sectors mostly manufacture products that used basic production technology such as garments, consumer products, and computer parts. Furthermore, the steady increase in the amount of technology fees indicates that the expansion of the Thai economy relies on imported technologies. If manufacturing processes are not changed, learning and preparation for a knowledge-based economy is unlikely to take place. This means Thailand will remain dependent on imported technologies. Therefore, it is imperative that Thailand prepares itself for the changes these technologies will bring in the future by systematic management of the existing body of knowledge, creation and development of new bodies of knowledge, as well as the application of technologies that are appropriate to the country's strength. This will involve, for instance, blending technology with culture and local wisdom to create increased value-added goods and services, management of licenses and patents, and efficient protection of intellectual property rights, along with fair distribution of the benefits with communities.

2.3 Social changes

(1) Trend of change in the global community and its impact on Thailand

The proportion of the ageing population worldwide is expected to increase because of advances in medicine and technology. Many developed countries are now becoming ageing societies such as the USA, European countries, Japan and South Korea as well as developing countries like Thailand. As a result, there is a decline in labor productivity, savings and wealth in those countries. Moreover, an increase in public health expenditure and care given to a growing number of the older population can present both opportunities and threats to Thailand. On the one hand, Thailand has greater opportunities to expand the market for health products and services, health foods, local wisdom and traditional medical practitioners, tourist destinations, and long-stay residence for the aged. On the other hand, threats include movement of skilled and trained labor to countries with higher returns and a decrease in capital attraction from abroad.

(2) Advances in information technologies, global consumer trends and their impact on Thailand

Under globalization, advances in information technologies have brought the borderless dissemination of information which presents both advantages and disadvantages. With regard to the advantages, there will be an increase in demand for culture-related services especially of the Asian trend. Hence, as a country with a long history, Thailand has an opportunity to develop cultural goods and services which can generate more income. Moreover, the healthy and green trend of consumer behavior worldwide helps promote natural, environmentally friendly products and services as well as health goods such as spa business, herbs, alternative medicine, health foods and services. This presents an opportunity for Thailand to upgrade the local wisdom to create more value-added products and services which will become the country's intellectual property.

At the same time, Thailand faces a problem of foreign culture inflow which may result in a decline in the Thai tradition—the country's culture capital—if there is no appropriate preservation and transfer. With rapid urbanization, the lifestyles have become more hectic and convenience has become a priority. There is

an increase in the consumption of nutritionally unbalanced foods, social and economic pressure. Furthermore, due to the borderless dissemination of information, children and youth may be exposed to inappropriate information such as pornography and sexual deviation, causing problems of imitation and violence. This increases difficulties over the protection of children and youth from undesirable influences, as well as problems of terrorism, the spread of new communicable diseases, and the sale of various addictive drugs which are harmful to the economy and society.

2.4 Free movement of peoples

(1) International migratory trends

Globalization and advances in transport technologies have resulted in increasing travel for tourism and business worldwide. At the same time, rules and regulations of economic groupings facilitate migration of labor and entrepreneurs. In addition, there are two factors that contribute to an increase in migration: 1) a decline in workforce of an ageing society, leading to higher demand for migrant workers and increased registration of migrant workers and especially those of low to medium skills from developing countries; and 2) the awareness of highly competent and skilled personnel in a knowledge-based society and economy and the fact that education and human resource development take a long time to achieve. Therefore, immigration policies that attract highly knowledgeable people are a preferred strategy for the development of the competitive capacity of the country. The United States of America, for example, has grown out of competent immigrants from different parts of the world who work, teach, and create new bodies of knowledge. At present, many countries are finding measures to attract foreigners to alleviate skilled labor shortage, and it is expected that the situation is likely to be more competitive.

(2) Impact on Thailand

With free movement of peoples, policies of each country take into consideration measures that support migration of labor and attract foreigners to work in the country, and measures to deal with the consequences that may arise, especially those that affect health and the safety of life and property. For instance, Severe Acute Respiratory Syndrome or SARS is a communicable disease which can come with

travelers or immigrant workers. Moreover, terrorism and international crime have become borderless, hidden behind business transactions and tourism, thus posing threats to the global economy and peace. If the problems persist, free movement of peoples could become more difficult. There may be more safety and recruitment measures which could hinder traveling or working abroad. There may be a policy on recruitment of specific ethnic groups in some countries; however, this is not likely to happen in the foreseeable future. And if there is an increase in free movement of peoples in the near future, Thailand must seek to develop both active and passive strategies to handle the situation.

2.5 Changes in the environment and natural resources

(1) The changing trend in global affairs

The increase in world population has caused deterioration in the world's environment and natural resources, ozone depletion, increased global temperature from the greenhouse effect, changes in climate, rises in carbon dioxide level, exploitation of water resources, soil resources, forests, mangroves, marine environments as well as species of plants and animals. Human activities in the past 200 years have adversely affected the world's ecology and biodiversity. As a result, there has been an increase in epidemics and the incidence of natural disasters including floods, draughts, typhoons and hurricanes, which in turn jeopardize the economy. These pose a serious threat to productivity, the well-being of the world population and sustainable development.

(2) Impact on Thailand's management of environment and natural resources

Because of the aforementioned context, international agreements and treaties have been concluded governing various aspects of the world's environment and natural resources namely: 1) the Convention on Biological Diversity¹, in order to conserve and utilize the country's bio-resources; 2) the Convention to Combat

¹ Thailand agreed to sign the Convention on Biological Diversity during the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992.

Desertification², in order to deal with droughts and monitor desertification; 3) the Convention on Wetlands of International Importance as Waterfowl Habitat – RAMSAR, in order to conserve and utilize wetlands in a sustainable manner; 4) the Convention on International Trade in Endangered Species of Wild Fauna and Flora – CITES³; 5) the Convention Concerning the Protection of the World Cultural and Natural Heritage⁴, in order to achieve effective management of cultural and natural heritage together with appropriate use of the heritage by communities; 6) the United Nations Framework Convention on Climate Change – UNFCCC⁵; and 7) the Stockholm Convention on Persistent Organic Pollutants—POPS. All member countries including Thailand are obliged to comply with the agreements and conditions under which macro and microeconomics are administered.

Moreover, environment and natural resource issues are increasingly employed as trade barriers which may be an obstacle for a country that does not have effective management of environment and natural resources. As a result, Thailand must upgrade its standards of environmental management in order to protect the resource base and maintain a sustainable balance in the natural environment, by developing more efficient systems for administering and managing natural resources with participatory processes. Thailand must also adjust manufacturing processes to become more environmentally friendly, and must increase efficiency in energy usage with systematic recognition of the impacts on the environment sustainability, safety and country's energy security and to create balance between economic, social and environmental development.

3. Situation of the Country

In the context of changes that Thailand must face in the future, a review of the country's situation with respect to society, economy, environment and natural

² Thailand has been a member since November 9, 1996

³ After signing, Thailand's trade did not comply with the Convention as wildlife and flora trade continued in the country. At that time, there was no legal measure against the trade. Consequently, in April 1991, Thailand was banned from having wildlife trade and trade of other products with member countries. There were then amendments of relevant acts, policies, and measures to comply with the Convention. CITES therefore revoked the ban in April 1992.

⁴ Thailand has been a member since December 17, 1987.

⁵ Thailand has been a member of UNFCCC since December 28, 1994 and ratified the Kyoto Protocol which was under the Convention on 28 August, 2003.

resources, and national administration shows that Thailand has the potential and opportunities to adapt and reap benefits from globalization, but must still develop its structure in many aspects for the well-being of the Thai people. The important points of the country's situation may be summarized as follows.

3.1 Society

(1) Thailand counts among countries with medium-level human development and shows a trend of steady improvement

According to UNDP's human development index (HDI) measuring the public health, education and standard of living of a country, Thailand counts among countries with medium-level human development. In the past two decades, Thailand's HDI showed a steady increase, from 0.614 in 1975 to 0.749 in 1995. In 1995, the country's HDI stood at 0.778, ranked 73rd among 177 countries, above China (85th) and Vietnam (108th) but below Japan (11th), Republic of Korea (18th) and Singapore (25th).

Furthermore, a review by other institutes such as IMD, WEF and OECD reveals a steady increase in the average years of schooling in Thailand which was at 8.5 in 2005. But it was still lower than those of other Asian countries such as Japan, the Republic of Korea and Singapore which stood at 10-12 years. Meanwhile, the quality of education which is essential for the competitive capacity of the country is lower than those of Malaysia and India but higher than the Philippines, China, Republic of Korea and Indonesia. Thailand's productivity remains low at US\$ 6.2 per hour in comparison with those of Malaysia, Republic of Korea, Singapore, Taiwan and Japan which is more than US\$ 11. With regard to Thailand's health services which are millennium development goals, most are above the benchmark; however, the medical professional-patient ratio remains low at 30 to 100,000 while those of Japan, India and China are at 201, 51 and 164, respectively.

(2) Human development in the area of education has improved but attention must be paid to quality and life-long learning

(2.1) There is an increase in level of education and access to basic education, but the quality of education remains a pressing problem. The education attainment of Thailand measured by GPAX, or the highest level of education of the Thai people, indicates a steady increase in the average years of schooling from 6.3 in 2000 and 7.8 in 2003 to 8.5 in 2005. However, the figure is still below the level of compulsory education and is lower than those of Japan, Republic of Korea and Singapore.

With more educational opportunities, the proportion of students to population increased at all levels. The proportion of students entering secondary education went up from 49 per cent in 2001 to 71.2 in 2005. Likewise, the proportion of students going on to tertiary education (excluding the postgraduate level) in the 18-21 year old population increased from 40.3 per cent in 2001 to 44.3 per cent in 2004. Nevertheless, with respect to education attainment of Thai students at every level, the average score of four core subjects (Thai, English, mathematics, and sciences) has been below 50 per cent. That is, it stood at 43.89 per cent in 2001 and dropped to 38.61 per cent in 2004. At the same time, quality of education needed for the competitive capacity of the country was found to be lower than those of Malaysia and India; therefore, it remains a priority.

(2.2) Opportunities for life-long learning increased but the application of knowledge remains low. The government supported the setting up of community learning centers nationwide so as to broaden access to information, and the number of the centers went up from 13,688 or 20 per cent of all villages to 15,341 or 22.2 per cent in 2003 and 2005, respectively. The proportion of number of computers to population in 2005 was at 57 per cent per thousand, which was 6.4 times lower than the average. As for the Internet access, in 2004, 116.7 per thousand had access to the Internet, a 1.2 fold increase in comparison with 2003.

Nevertheless, Thai people who are above 15 and have finished grade 6 so called “functional literacy” with an ability to read and write, numerical literacy, ability to apply knowledge to everyday life and “practical and thinking skills” account for only 60 per cent of the whole population. In terms of reading skills, which are considered tools to pursue knowledge and search for information, it is found that the skills of the Thai people rank no more than 2 out of 5 on an assessment

scale. This reflects the pressing need for educational development so that Thai people could benefit from greater application of knowledge.

(3) The workforce with medium and high education remains deficient in both quantity and quality, an obstacle to the competitive capacity of the country

(3.1) There is shortage of the workforce with medium and high education even though the proportion of the Thai workforce with education above the primary level increased from 35.6 per cent in 2002 to 39.8 per cent in 2005. With the demand for the workforce with medium education in the business and industrial sectors being as high as 60 per cent, it is imperative Thailand produce a workforce, especially personnel with vocational training, in order to meet the demand and increase the country's competitive capacity. As for the workforce with high education, the shortage of science and technology professionals remains a major problem. Science and technology professionals working in design, research and development account for less than 2.0 per cent while the proportion of researchers in science and technology remains at only 6.7 per ten thousand.

(3.2) Investment in research and development remains at only 0.26 per cent of GDP, which is 7 times below the average. This restricts the creation of new bodies of knowledge and innovation as well as research for national development. Although there has been an increase in building new bodies of knowledge, their commercial application remains at a low level. Moreover, between 2002 and 2003, the patents registered in Thailand accounted for 0.4 per cent of the patents registered worldwide, and 77 per cent of the number was processed by foreigners. Most patents of Thai people were basic technological development, not being able to create much added-value. At the same time, in 2001, there were only 727 science journal articles from Thailand being published internationally, which was 2 times below average.

(4) There is a decline in virtuousness, morality, culture and values

(4.1) Thailand faces a crisis of values which is a result of the inflow of foreign culture through mass media and information technology with no

filtering and selection of what is good or appropriate, resulting in a decline in virtuousness and morality especially among children and youth. Moreover, the number of websites with pornographic content has steadily risen. A decline in ethics of mass media including television, press and electronic media resulted in dissemination of negative information. As a result, values and behavior are increasingly marked by materialism and consumerism. Public consciousness, generosity and mutual assistance have begun to decline, leading to more social problems such as juvenile delinquency, broken families, drugs and crimes.

(4.2) Social institutions responsible for instilling morality, values and discipline into children and youth have begun to decline. Family institutions, particularly the extended family, have less of a role in instilling ethical standards, raising and educating children due to a more individualistic lifestyle and economic pressure. As a result, relationships between family members have become distant and the divorce rate has increased while more than 40 per cent of families are not economically independent. At the same time, modern lifestyles result in a decline of religion and faith. More than 30,000 places of worship around the country are mainly visited by the elderly. With regard to educational institutions, such institutions used to work closely with family and religious institutions in instilling moral standards and social skills into children and youth, but the situation has changed. At present, education focuses more on memorization and certificates rather than practical application of knowledge. Moreover, it is not connected with community ways of life.

(5) The well-being of the Thai people has increased because of extension of health insurance scheme. Incidence of disease has fallen but incidence of preventable diseases has steadily increased

(5.1) The extension of health insurance has resulted in greater longevity of the Thai people. The average life expectancy of the Thai people has steadily increased to 68 years in males and 75 years in females, which is longer than the world's average (65 years in males and 69 years in females) but shorter than those of Japan (78 years in males and 85 years in females). In 2005, health insurance scheme extended to cover 96.3 per cent of the population, indicating equal distribution of health services and less health care expenses. Because of the 30 baht-

cover-all health insurance, those who never had any insurance were able to save 710.50 baht per year, a total of 10,634 million baht nationwide in 2003.

(5.2) The overall incidence of disease of the Thai people has fallen from 1,809.6 per thousand in 2002 to 1,798.1 per thousand in 2004 because the people took better care of their health. In 2001, 25.5 per cent of people aged over 6 years old exercised regularly 3 days a week, but this was only 23 per cent in 2004, which was rather low. The proportion of male and female smokers in Thailand was 39 and 2 per cent respectively in 2002 while those of other developed and developing countries were higher. That is, the proportions of male and female smokers in the USA, Japan and Indonesia were 26 and 21 per cent, 47 and 12 per cent, and 69 and 3 percent, respectively.

(5.3) There is a trend of a steady increase in the number of cases of preventable diseases. In 2004, the incidence of high blood pressure per 1,000 heads had the highest rate of increase at 18.4 per cent followed by diabetes at 14.2 per cent, heart disease at 13.4 per cent, and cancer at 4 per cent. The main causes of the illness were a lack of health awareness, and unhealthy diets and lifestyles. For example, the Thai people tend to have sugar intake as high as 16 teaspoons per person per day while the nutrition standard is 6 teaspoons per person per day. A trend of steady increase in over-nutrition is found in every age group but especially in children in the urban areas. Fifteen per cent of school children aged 6-14 in Bangkok are found to have obesity, and the percentage is 3-5 times higher than children in other regions. The condition is caused by consumption of high sugar-high fat foods and drinks.

(5.4) Incidence of new and resurgent epidemic diseases is a result of globalization. In the past 2-3 years, there were cases of SARS, bird flu, and influenza. According to a WHO report from 2003 to July 30, 2006 there have been 232 confirmed cases of bird flu and 134 deaths in 10 countries. As for Thailand, there have been 23 confirmed cases and 15 deaths. It was difficult to estimate the situation, and the scientific knowledge of the diseases with a new genetic code was inadequate to effectively cope with the epidemics. As a result, there was a resurgence of the diseases in the region, adversely affecting the quality of life of the world and Thai population.

(5.5) Investment in health in Thailand remains at a low level and is ranked 59th among 61 countries, accounting for 3.3 per cent of GDP while those of other countries are approximately 7.7 per cent of GDP. However, attempts have been made to improve medical and public health services by expanding infrastructure of health care in communities in conjunction with developing quality control. There were 134 accredited hospitals in 2005, an increase of 3.58 per cent from 2004. Moreover, the shortage of medical and public health personnel has been dealt with. At present, the ratio between medical personnel is only 30 per one hundred thousand people, and medical personnel remains concentrated in urban areas.

(6) There is an extension in social insurance, but it still does not cover informal workers and the disadvantaged.

(6.1) Social insurance does not cover informal workers. Since 2002, the government has taken measures to provide security for workers by extending insurance coverage to every enterprise that has at least 1 employee. As a result, there were 8.2 million workers under the social security system, accounting for 22.73 per cent of the total workforce. Nevertheless, social insurance covers only those in the system; informal workers, especially street vendors and those in the agricultural sector, who account for more than 70 per cent of the workforce, do not have access to social insurance.

(6.2) The government has increased access to social services for those living in poverty and the disabled but not all are covered. As a result, they may not be able to be self-reliant in the long run. Up to the present, assistance and welfare services have been given to 1.07 million ageing citizens, 6,000 HIV infected people, and 39,595 of the disabled who live in poverty. With respect to education, assistance has been given to students whose parents have financial problems so that they are able to complete basic and compulsory education at all levels. Moreover, 601,727 units of Eua-Arthorn and Mankhong housing projects have been implemented to help those with low income to own a home, and there are 29,738 households, among these, who now own their own home.

(7) The Thai people are increasingly exposed to risks of lives, property and social unrest.

(7.1) Solving problems of drugs and crime remains a priority. Even though the proportion of drug-related cases fell from 422.8 cases per hundred thousand people in 2002 to 160.3 per hundred thousand in 2005, types of drugs have changed and new forms of trafficking have emerged, such as drug trafficking via the Internet and postal service. This is due to the fact that drug trafficking is a multi-billion dollar/baht business, and the worldwide transaction between 2005 and 2006 was approximately US\$ 400,000 to 500,000 million per year. At the same time, problems persist over property attack and sexual abuse. Moreover, there is a growing trend in juvenile cases, resulting in a large amount of the budget of 36,698 million baht being set aside for crime prevention and suppression in 2005.

(7.2) There is a trend of a steady increase in the number of accidents and disasters. The rate of deaths in road accidents in 2002 was 20.9 per hundred thousand and in 2005 it was 20.6 per hundred thousand people. In 2004, the total loss caused by road accidents was as much as 1,990 million baht. Furthermore, each year, Thailand experiences great losses caused by other types of accidents and disasters due to a lack of appropriate preparation and disaster alert systems.

(7.3) Problems persist over unrest in the Thai society, especially the ongoing unrest in the South. Terrorism and transnational crimes have aggravated and expanded into South East Asia particularly illegal immigration and human trafficking, which have increased rapidly. Due to economic and political groupings in many parts of the world, approximately 4 million or more are victims of the crimes and the amount of money involved is expected to be around US\$ 5,000 – 7,000 million. With regard to their effects on Thailand, recently illegal immigrants from neighboring countries have entered Thailand to work as laborers and sex workers, and new groups of illegal immigrants such as North Koreans, Bangladeshi and Sri Lankans have been using Thailand as a passage to a third country.

(8) Thailand is in transition from a rural to urban society. As a result of the compartmentalized development of rural and urban areas, there is imbalance.

(8.1) Over a decade, rapid urban expansion has resulted in an imbalance in the development of rural communities. The ratio of urban

population to population of the whole country rose from 29.4 per cent in 1990 to 31.2 per cent in 2002 while the ratio of rural population steadily fell from 70.6 per cent to 68.8 per cent. Previous economic and social development has contributed to the growth of the industrial and service sectors in the urban areas rather than the development of the agricultural sector and rural society. The unbalanced social and economic development resulted in greater poverty, development that lags behind the urban counterpart, structural weaknesses in rural society. Economically, it is a budget deficit because, as an economic base of the agricultural sector, the rural society experiences deterioration of natural resources which was considered as a loss. Moreover, education and productivity in the rural society remain low, causing young people to leave their hometowns to work in the cities and abroad. This has brought about social imbalance and weaknesses in rural communities. In order to solve the problems and achieve self-reliance, unity and mutual assistance are needed in the development of rural communities.

(8.2) Communities have participated more in the development. Localities have become more capable of operating more efficiently in terms of administration, planning, budgeting, and finance. They also have mechanisms in place to take on duties under the scheme of administrative decentralization. Under the support of the government, already 3,657 sub-districts have learned how to compile local community development plans. Schemes are in place to support the work of community forums in compiling plans for districts and localities, to develop the capacity of community leaders, to exchange experience, and to create networks to help one another. Under the Act of Community Enterprise Promotion, B.E. 2548, there are currently 28,296 registered community enterprises and 32 networks nationwide. Village funds worth 77,508 million baht were transferred to assist in community businesses through people's participation in the creation of employment. However, because of rapid change under globalization and the fact that Thailand is becoming an ageing society, it is imperative that local communities form networks of cooperative and continuous learning in order to keep pace with the world.

(8.3) Culture, values and local wisdom remain neglected and very little being passed down to new generations. Public consciousness,

generosity, and mutual assistance have begun to decline. However, throughout the country there are around 1.7 million development leaders, including community leaders and keepers of local wisdom, who play important roles as the driving force in the development of the community and the country. There are 987,513 of them in the North East, followed by 383,792 in the North, 174,537 in the Central Region, and 131,892 in the South. Moreover, because of these development leaders, local wisdom has been developed to create value-added products and services as reflected in the sale of the One Tambon One Product produce, which has domestic and international market shares, and has helped generate more income to the grassroots sections of society. In 2004, the sale of OTOP products and services peaked at 46,276 million baht.

(8.4) The lifestyles and interactions of people within communities are undergoing change. Advances in technologies, materialism, globalization, and borderless communication resulted in greater convenience but less contentment, income insufficient to cover expenses, growing debt, and more individualistic relations within the community.

To summarize, communities that have cooperative networks and learning are, to some extent, able to cope with the impacts of change and globalization mentioned above. Community participation in development, knowledge management, and application of knowledge within the community have been supported throughout the past decade with an aim to create strong communities that will become model communities nationwide for learning purposes and further application.

3.2 Economy

(1) The Thai economy has shown a steady growth and Thailand counts among middle-income countries. The country's position in international trade has remained stable, with constant market share while global competition is growing.

Over the period of 2002-2005, the Thai economy grew at an average rate of 5.7 per cent and ranked 20 out of 192 countries in terms of the economy's size. Income per capita was at 109,573 baht. Income per capita based on purchasing power

was US\$ 8,542, ranked 72 among other middle-income countries and was higher than the average US\$7,000 but lower than the world's average income per capita (US\$ 9,239).

Export remains the main factor in the expansion of the Thai economy. With growing competitiveness in international trade, Thailand can keep its export at 1-1.1 per cent of the total world export share in comparison with Malaysia which maintains its share at 1.4-1.5 per cent. However, because of the higher share of export from China which rose from 2.9 per cent in 1995 to 7.3 in 2005, it is imperative that Thailand be proactive in terms of trade and adjust its approach to knowledge based manufacturing so as to create value added products. Furthermore, Thailand has begun to increasingly expand its export market to China instead to relying on the USA, Europe and Japan alone while its trade with the ASEAN countries remains constant. Thailand has had a trade deficit with China, Japan and the Middle East, the latter is from oil import only, while remaining a trade surplus with the other two countries. Thailand's direction of international trade depends on building competitive advantage and relocation of production base to Thailand. In terms of foreign investment, Thailand was ranked 4th in 2001 and fell to 6th in 2004 in comparison with China, India and ASEAN countries.

(2) The competitive ranking of Thailand has steadily improved since the first year of the Ninth Plan but fell in the last year of the Plan.

According to the Institute for Management Development or IMD, Thailand was ranked 31st among 61 countries in terms of competitive capacity in 2002 and 27th in 2005. However, in 2006, Thailand was ranked 32nd while the USA, Hong Kong and Singapore remained in the 1st-3rd ranks respectively, and Japan, China, Malaysia, and India were in higher ranks due to a decline in two factors: competitive advantage and efficiency of national administration. In 2005, competitive advantage and efficiency of national administration were ranked 7th and 14th respectively and both fell to 21st in 2006. Moreover, the infrastructure fell slightly from 47th to 48th while the efficiency of the private sector remained at 28th when compared with 2005.

(3) The development of a knowledge economy has improved and is at the same level as Malaysia.

With regard to the position of the knowledge economy⁶, benchmarked by the Knowledge Economy Index (KEI) which has been developed by the World Bank, Thailand went up from 4.26 in 1995 to 4.78 in 2001 as a result of the advances in information technology, telecommunication and education. Nevertheless, advances in innovation slightly improved while environment and economic institutes remained at the same level. When compared with Eastern Asian countries, the KEI of Thailand is at the same level as Malaysia. Between 1992 and 2002, Thailand was able to orient itself towards a knowledge economy at a faster rate than Malaysia but remained at a lower rank in comparison with Hong Kong (8.14), Singapore (7.69), Taiwan (6.67), and the Republic of Korea (5.80).

(4) The strength of Thailand's manufacturing structure lies in a diverse production base. Although the manufacturing sector has the highest share in the economy, most of the production is at the beginning of the value chain with low productivity but high competition.

The diversity in the production base is considered a strength of the country's manufacturing structure. In 2005, the production base was composed of the agricultural sector 8.7 per cent, the manufacturing sector 39.1 per cent including agro-industry, the construction sector 2.5 per cent, the wholesale and retail trade 12 per cent, the mining sector 2.3 per cent, the electricity and water supply 3.4 per cent, the banking sector 3.6 per cent and the services and miscellaneous sector 32 per cent. The diversity helped reduce to some extent the impact of fluctuations in the economic cycle and link up the sectors in the product bases help add more value to the production. As for the agricultural sector, the production of foods is able to meet the domestic demand and Thailand is a major world food exporter. With regard to the tourism industry, tourist destinations in conjunction with Thai culture and quality of services are comparative advantages of the industry and contribute to an increase in income in foreign currency, which accounted for 6 per cent of GDP.

⁶ Knowledge based economy is an economy that creates, searches for, modifies and disseminates knowledge as well as effectively utilizes knowledge to drive economic and social growth. There are four fundamental factors, and all are interrelated: innovation; education; information and communications technology; and environment and economic institutions.

However, the Thai economy has the structural weakness of excessive reliance on the import of raw materials, parts, energy, capital and technologies while productivity remains at a low level. As a result, Thailand is exposed to the risks of deficits in the balance of trade and the balance of payments. Moreover, there is growing competitiveness of international trade, and Thailand is pushed in between light industry countries with an advantage of low labor cost (e.g. China, India and Vietnam) and countries that have their own brands of production and upper markets for automobiles, electronics, electrical appliances, financial services, education, and public health (e.g., Republic of Korea, Taiwan, Hong Kong, Singapore, and Japan). At the time being, Thailand is unable to upgrade its standards and forms of products to compete with those of the countries in the second group. As for the evaluation of each production sector, the situation can be summarized as follows.

(4.1) The agricultural sector has the advantage of rich natural resources and appropriate geographical conditions, but productivity remains at a low level. Thailand is a world leading exporter of many agricultural products. For instance, rubber and rice are accounted for 45 per cent and 25 per cent of the total export value of each product worldwide. Agricultural products and processed agro products have a high share of added value that benefits the country. For instance, the production of rubber has the proportion of value added at 85 per cent of the total product value while the proportions of value added of rice, tapioca, and the food industry are 70, 65 and 32 per cent, respectively.

However, the production in the agricultural sector has the weakness of the water system management. As a result, productivity relies mainly on nature. Ineffective land management for agricultural purposes and limited use of technologies have resulted in low crop yields per rai. Between 2002 and 2005, the productivity of the agricultural sector decreased by 1.94 per cent while those of the industrial sector, the service sector and miscellaneous, and the overall productivity of the country went up by 4.62 per cent, 2.49 per cent, and 3.42 per cent, respectively. Moreover, the agricultural sector experiences problems of excessive and inappropriate use of chemical substances and contamination, negatively affecting the quality and safety of foods and the environment. The problems hinder the export of Thailand's agricultural products while increasing cost of production.

In terms of added value, most agricultural products remain in their original forms or undergo minimal processing as well as lack diversity, and the market system management and the distribution of products remain ineffective, resulting in oversupply and low prices. Furthermore, the world agriculture is expected to be more competitive in terms of the use of technologies to increase crop yield as well as quality and safety control that increasingly become a concern for consumers. It is imperative, therefore, that Thailand upgrade its production efficiency and product quality to meet the international standards.

(4.2) Industrial goods manufactured in Thailand are mainly at the first stage of the world value chain, and the manufacturing largely depends on imported raw materials and technologies. In 2005, the production in the industrial sector accounted for approximately 39 per cent of GDP, and more than half of the production was for export. However, due to cheap labor and lower cost of natural resources, most of the manufacturing is of basic production without much added value or Original Equipment Manufacturing (OEM), requiring labor (sweat and tear products) and exhausting natural resources. Most of the manufacturing in Thailand remains at the beginning of the world value chain. Moreover, price structure of industrial goods and services as well as the commercial application of knowledge to increase productivity remain low. Between 2002 and 2005, the increased productivity contributed to only 58 per cent of the economic expansion while the other 42 per cent came from an increase in the quantity of production factors.

(4.3) The service sector consisting of tourism, education, public health, telecommunications and financial services has a more important role in the Thai economy. Income from tourism alone accounts for around 6 per cent of GDP and has a market share of 1.4 per cent of tourists worldwide, because of many world-famous tourist destinations. But the expansion of tourism in Thailand remains resource based, resulting in environmental problems and consequential impacts of the inflow of foreign culture while the Thai society does not have appropriate self-immunity. Moreover, development in the aspects of quality and variety of tourism products and a link between tourism and other services are needed in order to create innovation and product diversity. At the same time, public health, education and financial services have begun to play a more important role in the Thai

economy and in the region; however, it is necessary to upgrade the quality and standard of services as well as extend consumer protection.

(5) Infrastructure is a factor that supports the competitive capacity of the country and upgrades the quality of life, but it lacks efficiency.

The infrastructure in the areas of transport and logistics lack efficiency and systematic linkages, resulting in high cost at 16 per cent of GDP while the cost of developed countries is at 7 – 11 per cent. Also the transportation sector consumes as much as 38 per cent of the total commercial energy. In addition, the rural society has limited access to the infrastructure in the areas of information and communications technologies and water for consumption and for use. The infrastructure in the areas of sciences, technology and innovation remains at a low level and is behind Asian counterparts. For instance, Thailand's technology absorption is lower than those of Singapore, Republic of Korea and Malaysia. Problems persist over shortages of researchers, teachers, and lecturers in science and technology in terms of both quality and quantity. In 2003, the ratio of researchers in Thailand was 6.7 to ten thousand people while that of Singapore was 47.8. Moreover, the investment in research and development remains at only 0.26 per cent of GDP which is lower than the proportion projected in the Plan (0.4 per cent of GDP). This indicates a pressing need for Thailand to invest in the development of a knowledge base, innovation, and science and technology competency in order to create wealth and upgrade the quality of life of the Thai people.

(6) The Thai economy has achieved a good measure of stability but needs to develop an economic self-immunity system under the context of free movement of peoples, bodies of knowledge, technologies, capitals, goods and services.

The implementation of economic recovery policies after the economic crisis enabled Thailand to achieve a good measure of stability. In 2005, the unemployment rate stood at 2 per cent, which was in accordance with the expansion of the economy and did not put pressure on inflation. At the end of 2005, public debt accounted for 46.4 per cent of GDP which was lower than the expected 50 per cent set in the sustainable financial framework. In comparison with other countries, the

proportion of public debt in Thailand ranks at 60th among 114 countries. Moreover, foreign exchange reserve was at US\$ 52.1 billion or 3.3 times short-term foreign debt and 5.9 months of export, an adequate level of immunity against exchange rate risks.

Nevertheless the steep rise in oil prices from late 2004 to 2006 has resulted in increasing inflation rates from 2.7 per cent in 2004 to 4.5 per cent in 2005 and increasing deficits in the balance of trade and the balance of payments in 2005 as much as US\$ 8,578 and 3,714 billion, respectively. This put pressure on the economic stability and highlighted the structural weaknesses of high dependence of the import of raw materials, components, energy (approximately 80 per cent), capital and technology, resulting in higher import value and royalty fees. The evaluation of the situation in each aspect is as follows.

(6.1) The Thai economy relies heavily on the import of raw materials, capital goods, technologies and innovation and depends on export as the driving force in the economic expansion. As a result, the Thai economy remains vulnerable to the external conditions and exposed to a risk of deficits in the balance of trade and the balance of payments. The growth of the industrial sector, particularly in the aspect of production of goods and services for export, requires a large amount of imported raw materials and capital goods. Hence, there has been a steady increase in the proportion of import of raw materials and capital goods to GDP from 36.93 per cent in 2002 to 46.24 per cent in 2005, particularly the import of oil products which caused an increase in deficit to 58.4 per cent. Moreover, the promotion and development of science and technology has not been adequate to support the expansion of the production sector, resulting in the import of technology from overseas with a steady increase in the ratio of royalty and license fees to GDP from 0.71 in 2001 to 0.87 and 1 per cent in 2002 and 2005, respectively. At the same time, Thailand's import and export make up a high proportion of the economy, making it difficult for the country to have resilience against external shocks in a fast changing world together with higher competition.

(6.2) The Thai economy relies more heavily on energy with the value of final commercial energy consumption at 16 per cent of GDP higher than many countries. Energy demand continues to rise in accordance with economic expansion. The energy consumption of the transport sector, in particular, accounts for

37.2 per cent of the country's energy consumption while the domestic supply cannot meet the demand. Hence, Thailand depends on imported energy which accounts for around 64 per cent of the total energy demand, and crude oil has the highest amount of import accounting for 90 per cent of the total crude oil used in the country. As a result, the steep rise in the oil prices has increased risks of deficits in the balance of payments and economic instability. At the same time, inefficient energy consumption in the transport, industry and household sectors remains a problem. In addition, the ratio of renewable energy to total energy consumption is expected to fall. Therefore, increasing the efficiency in energy consumption and exploring sources of alternative energy remain priorities for a future solution.

(6.3) With savings lower than investments, Thailand depends on overseas capitals in the forms of direct investments, overseas loans and foreign investments in the stock market, resulting in increasing risks in the balance of payments and from the international capital movements. The country's overall savings fell from the highest 35 per cent of GDP in 1993 to 31.2 per cent in 2004 which was insufficient for future investment if savings were not effectively promoted. The situation can become worse as the country is becoming an ageing society and the government is projected to cope with the increasing expenses in public health. Insufficient government savings is likely to lead to higher interest rates and therefore higher cost. Currently, Thailand's net international investment position (IIP) was in deficit with total overseas assets less than the total overseas debt by US\$53,254 million by the end of 2004. The reliance on overseas capital poses a threat to Thailand especially through speculative investments in the stock market which affect the stability of the stock market and the general investment atmosphere.

(6.4) Thailand's monetary structure largely depends on banking in terms of fundraising while capital market fundraising remains limited. Similarly, fundraising via the issuance of bonds by the private sector accounts for a small proportion. The structure may pose a problem where short-term loans are used in long-term projects, which can take a long time before any returns are gained. This also affects capital growth in relation to machinery, equipment, property, buildings and software. In addition, the small size of the Thai capital market is sensitive to

capital movements especially through hedge funds. However, the situation has gradually improved because of the capital market development policies.

(7) With regard to economic equality, incidence of poverty has gradually fallen and income distribution has slowly improved. In 2005, 7.34 million people, 11.3 per cent of the population, were below the poverty line of 1,242 baht per month. The distribution of income has marginally improved with the Gini coefficient improved slightly to 0.499 in 2004 from 0.525 in 2000 and 0.501 in 2002. However, improvement in the distribution of income demands priority attention as Thailand still trails many countries in terms of equality, such as Japan (0.25), Republic of Korea (0.31), Europe (0.32), India (0.33), China (0.45), and the USA (0.41). And in 2005, the income of the top 20 countries was 12.1 times higher than the income of the bottom 20 countries.

3.3 Environment and natural resources

Thailand is located in optimum geographical conditions with a rich stock of natural resources including soil, water, forests, shorelines, minerals, biodiversity, as well as ecosystems. People in communities depend on natural resources to make a living, creating a learning process and accumulation of unique local wisdom and culture. Even though the quality of natural resources and environment has been the strength of the country, they were principally used to meet the demand for economic growth resulting in over exploitation of natural resources. The economic expansion resulted in a large amount of waste and pollution that exceeded carrying capacity of the ecosystem. As a result, the country's natural resource and environmental capital for economic development and for sustainable livelihood of the Thai society have been seriously affected. The quality of natural resources and the environment has been below standard and posed a threat to the production base, services, and sustainable livelihood of both urban and rural societies. The effects of the situation are as follows.

(1) The loss of balance between usage and conservation resulted in degradation of natural resources and natural disasters.

(1.1) Forests have been destroyed and the ecosystem has lost its balance. In 40 years time, 67 million rai of forests were destroyed, and now forests cover only 33 per cent of the country area. It is still not possible to increase the forest areas to 40 per cent, a level that keeps the balance of the ecosystem. In comparison with other Asian countries, Thailand has a low proportion of forest area while Japan has a proportion of forests of 68 per cent and Vietnam 40 per cent.

(1.2) There are problems of droughts, floods and poor water quality. The average amount of fresh water in Thailand is 3,400 m³/person/year, lower than that of Laos and the average of Asia which stand at 49,090 and 3,920 m³/person/year, respectively. According to the criteria set by UNESCO, Thailand experiences a severe drought while Canada and Oceania, the average amount of water of which is approximately 17,000-18,000 m³/person/year do not. In contrast, the Middle East and North Africa experience water crisis with the average amount of water less than 1,000 m³/person/year. Moreover, Thailand experiences a problem of fresh water distribution throughout the year as 86 per cent of fresh water comes in the rainy season and only 14 per cent in summer while it is possible to retain only 34 per cent of water in the rainy season for further use during the dry season. As a result, Thailand experiences floods and droughts every year. With regard to solutions to the problems, the government sector is mainly responsible as seen in large-scale investments in water reservation and ad hoc solutions while other sectors, particularly local communities are not involved. While the amount of water consumption by the agricultural sector continues to increase at high levels, development of large reservoirs is hardly possible due to limitations of appropriate land area, and some plots of land are already occupied, or people may be against the projects. As a result, conflicts over water usage continue to escalate, having effects on the quality of life of the Thai people and the economic production in the present and in the long run.

As for water quality, in 2005, 20 per cent of water sources were of good quality, 48 per cent were of moderate quality, 27 per cent were of poor quality, and 5 per cent were of very poor quality. In the past 3-4 years, the number of good quality water sources went down by half. The sources of poor water quality are the lower Chao Phraya River, lower Tha Chin River, lower Lam Ta Khong reservoir,

and Songkhla Lake, they have the dissolved oxygen level below the standard and the fecal coliform level higher than the standard. The main causes of water pollution are untreated water released from communities, sewage from animal farms, and limitations in the administration of the government sector and local government bodies. That is, while the government sector invested in 87 water treatment systems in municipalities covering 34 per cent of the total service area, only 25 per cent of total waste water can be treated.

(1.3) Soil has been increasingly degraded due to inappropriate use. As a result, there are problems of soil erosion, inorganic soil, saline soil, and acid soil. Sixty per cent of total land areas have soil quality problems, and the problem areas keep expanding at the rate of approximately 1 million rai per year. The areas with soil erosion account for 33 per cent of the country, higher than the world and Asia average rates which are 23 per cent and 25 per cent, respectively. At the same time, there is a higher demand for agricultural land while the amount of land ownership decreased from 21 rai per person in 1993 to 19.3 rai per person in 2003. There are 770,000 landless farmers and 11.5 million rai is needed; however, only 185,000 rai of land is able to be developed due to poor soil quality, a decrease in the agricultural land, the use of chemical substances to increase crop yield, and resultant residues.

(1.4) Marine and coastal resources have deteriorated. The seafood catch has reduced to one third from 298 kilograms per hour in 1961 to 62.10 kilograms per hour in 1984 and to only 23 kilograms per hour in 2003. Mangroves have declined from 2 million to 1.5 million rai, and half of them have deteriorated. Fifty per cent of coral reefs and 30 per cent of sea grass have also deteriorated due to economic activities and natural disasters. In addition, 11 per cent of the coastal areas have been eroded.

(1.5) Thailand's biodiversity ranks in the world's top 20 with at least 15 ecological systems which are natural habitats of 2.6-10 per cent of animal and plant species on earth. There are about 15,000 plant species in Thailand which account for 8 per cent of plant species in the world. Economically important plants are also found in Thailand. For instance, there are approximately 1,000 registered herbal plants, 1,000 orchid species, 3,000 species of fungi, and 1,000

indigenous plants. At present, these species are being destroyed at an alarming rate because human activities destroy habitats of living creatures, have an adverse effect on the ecology, and rapidly endanger many species. There are 684 endangered animal and plant species.

(2) Although the quality of the environment has been marginally improved, the overall quality is poor and affects the people's health and quality of life.

(2.1) The air quality of big cities with heavy traffic, areas with open-air burning, and industrial zones is below standard. Particulate matter (PM10) tends to increase in relation to economic expansion and the accumulated number of vehicles and exceed the standard of year-round average of 50 mg/m³. Although the air quality of Bangkok is better than those of Beijing, Jakarta, New Delhi, and Manila, it is worse in comparison with those of Hong Kong, Taipei, and Tokyo. Ranked 73rd among 177 counties worldwide, Thailand's carbon dioxide emissions rose from 0.9 ton/person/year in 1980 to 3.7 ton/person/year in 2002, slightly higher than the world average in the same year which was 3.6 ton/person/year. However, in 2000, the rate of carbon dioxide emission accounted for only 0.9 per cent of the total amount worldwide.

(2.2) The volumes of refuse and hazardous waste are as much as 22 million tons a year and are increasing faster than the capacity to dispose of them. The rate of refuse and waste in urban areas particularly in Bangkok is as high as 1.3 kg/person/day, which is similar to those of Tokyo and Hong Kong. Nevertheless, only 40 per cent of refuse and waste in urban areas is effectively disposed of while recycling accounts for only 22 per cent of the total refuse and waste. Although the recycling rate is higher than those of Beijing and Manila, it is lower than those of Hong Kong, Singapore, and Republic of Korea, thus causing Thailand to lose its economic opportunity worth approximately 16,000 million baht.

(2.3) The volume of hazardous waste is 1.8 million tons each year, two thirds are from the electronic and metal industry which is rapidly expanding at a rate of 2-3 times faster than the expansion of the whole manufacturing sector ; however, less than half is properly disposed of. Production and import of dangerous

substances to be used in the agricultural and industrial sectors rose from 8.9 million tons in 1994 to 31.7 million tons in 2005, or an increase of 72 per cent. Imported chemical fertilizers accounted for 3.6 million tons and agricultural chemicals 78,000 tons. Nevertheless, a lack of effective management in the areas of production control, storage and transportation results in a higher number of accidents causing loss of life and assets, building up of chemical residues in the environment, and contamination in the food chain. These directly affect the hygiene and the livelihood of the Thai people.

Pollution is mainly caused by an increase in population which leads to higher demand of resources and volume of refuse, overconsumption as well as wasteful manufacturing processes and technologies. In addition, inappropriate use of land which exceeds carrying capacity is responsible for increasing pollutants while limitations in the areas of manpower, budget, and bodies of knowledge make it more difficult for communities to handle the increasing pollutants. At the same time, public awareness, popular participation in administration processes, and use of economic tools in pollution management remain limited. There are also gaps and redundancy in relevant laws.

(3) The weakness is in segmented administration of natural resources and environment

Thai legal mechanisms separate communities from resources, neglecting the fundamental relations between producing, livelihood, and resource management. Meanwhile, market mechanisms aim to use resources as commodities, resulting in centralized resource utilization and inequitable distribution of benefits. Moreover, a lack of integration in policy, limited community participation as well as a lack of knowledge and unified database causes conflicts of policy and practice particularly economic development and natural resource and environmental conservation policies. For example, the mono-crop agriculture policy as seen in the cases of rubber plants and palm trees was partly responsible for deterioration of soil, water and forests. Productivity acceleration without taking ecological balance into account caused forest and coastal areas to be destroyed; therefore, it had an adverse effect on the already fragile ecosystem, posed threats to sources of biodiversity, and brought about more severe natural disasters. At the same time, Thailand's industrial promotion policy that aimed at economic expansion and increased employment

allowed the inflow of polluting industries without having knowledge and careful consideration of the consequent impact on the environment. As a result, the volume of refuse and pollutants continued to increase, and this posed further problems in administration.

In addition, consumerism and shorter cycle of consumption resulted in increased waste of resources and volume of refuse such as community garbage, industrial garbage, hazardous waste, and polluted water and air, emission of carbon dioxide and toxic gases. Consequently, species are increasingly exposed to extinction, and this may cause problems and limitations under the United Nations Framework Convention on Climate Change. Urbanization, population density, and economic activities of urban society cause an increase in demand for resources and lead to competition and conflicts over resources with rural society.

However, changes in the context of globalization with economic groupings, international agreements and visions, have led to cooperation and competition which in turn will lead to joint utilization of resources within regions and calls for better standards of environmental management. Advances in technologies have helped increase the efficiency in management, promote clean manufacturing processes, reduce resource consumption and the amount of waste and pollutants. Biotechnology will open up opportunities for innovation in the areas of medical sciences, agriculture, and industry that uses bio-resources and local wisdom as valuable raw materials. Moreover, the fact that Thailand is becoming an ageing society, increased level of education, and the increasingly popular conservation and green trend have partially changed forms of commodities and services. As a result, there has been an increase in environmentally friendly and health products and services, and ecotourism has become increasingly popular. These provide opportunities for creating balance between socio-economic development and conservation of natural resources and the environment.

3.4 Administration

Globalization, advances in science, technologies and information connect the world and allow free and rapid movements as well as economic, social, cultural and value exchange across geographical locations. As a result, Thailand must adjust its

processes and mechanisms of administration to be in step with the democratic trend, human rights protection, popular participation, natural resource and environmental conservation as well as a reform of global governance and international economic management. International organizations will play a more important role in world politics and security, and there will be a reform towards increased transparency and democracy. At the same time, conflicts in idealism remain unsolved in many areas leading to violence and terrorism which pose threats to promotion of democracy and security in many countries.

The Constitution of the Kingdom of Thailand, B.E.2540 (1997) has laid the basis for change in Thai society. With regard to the political reform, the Constitution stimulated democratic processes and decentralization, allowing more popular participation. In terms of social reform, the emphasis was on human development by means of educational and public health reform, social protection, and conservation of natural resources, environment and local wisdom. During the past decade, attempts were made in implementing the strategic plans of effective administration stated in the Eighth and the Ninth National Economic and Social Development Plans. Thai society at all levels were more enthusiastic about fostering good governance in the administration of their own sectors as reflected in the bureaucratic reform and promotion of good governance in the private business sector. At the same time, the people sector became more involved in national development and monitoring mechanisms. The situation of administration can be summarized as follows.

(1) The administration has begun to open up opportunities to other sectors to participate more in government, but the public still has a limited role

(1.1) The political sector has become stronger and more stable because of the political reform and the promulgation of the 1997 Constitution. The political party system, the government, and the Parliament system have gained more stability. The elected government developed clear policies and directions of development as well as effective implementation of policies. Moreover, the government accentuated effective management of resources. Nevertheless, economic and social administration remained centralized, and mechanisms for monitoring the use of state power remained inefficient.

(1.2) Bureaucratic reform led to modernization and greater efficiency, but administration remains centralized and popular participation remains limited. Continuous reforms of the structure of ministry and department and the public administration toward a new form of public administration, the Good Governance Act, B.E.2546 has played important roles as driving forces resulting in concrete evaluation and public disclosure. The reforms helped increase the efficiency of public administration as the evaluation result of various aspects of the bureaucratic reform has been positive, together with an increase in the average overall score of 2.61 in 2003 to 3.82 in 2004.

However, government administration still lacks good governance, and it remains centralized. Policy development and planning are confined to central administration. Similarly, only ministries, departments and state enterprises are entitled to budget from the government. Authorization and budget allocation for development at the provincial level to regional authorities (Governor as CEO) deny opportunity for popular participation in decision-making with regard to policy and directions of implementation.

While local government bodies are not strong and unable to rely on their income and administration remains centralized, there has been progress in decentralization according to the plan and operational plans of decentralization. The results up until early 2005 revealed that financial decentralization was able to steadily allocate income to local government bodies, from 20.92 per cent in the 2001 fiscal year to 24.05 per cent in the 2006 fiscal year. With respect to the transfer of mission, 180 missions were transferred while 64 missions remain to be transferred. Half of the 64 missions are in the areas of education management and public health. Transfer of personnel was implemented in the 2003-2004 fiscal year, and this affected 4,559 officials: 1,378 were government officers and 3,081 were permanent staff. Most of them were involved in infrastructure and quality of life promotion.

(1.3) The people sector has begun to be involved in national development and plays a more important role in politics and local development. People have become more enthusiastic about politics and participated in electing legislative and administrative members. The election turnout has increased steadily from only 29.51 per cent in 1948 to 70.6 in 2003 and 72.6 per cent in 2005 which was

the highest rate ever. However, the role of public involvement remains limited to giving information and opinions about directions of development. That is, it did not have access to decision-making at the policy level despite the intentions of the 1997 Constitution. At present, the people sector together with other sectors increasingly participates in national administration such as participation in local development and expressing opinions about national policies/measures, proposing laws, and impeachment. Nevertheless, in practice, problems persist over complicated rules and regulations that do not support public participation.

(1.4) The private business sector plays an increasingly important role in national development and good governance in administration has marginally improved; however, it is still unable to act as a driving force in overall good governance in the sector. Since the Third and the Fourth Plans, the private sector has collaborated with the government sector in development in the forms of the Thai Chamber of Commerce, the Federation of Thai Industry, and the Thai Bankers' Association. In the Fifth Plan, the government and private sectors collaborated in the form of a steering committee with an aim to promote manufacturing and export in the business and industrial sectors which resulted in a rapid economic expansion. Nevertheless, at the same time, there were conflicts over the resource usage and an increase in unfair development. The benefits of development were restricted to business people and industries while farmers, workers and people did not have a fair share of the benefits. The situation became worse during the economic crisis in 1997, the main causes of which were a lack of corporate governance, over-investment and inappropriate investments of the private sector. The government therefore placed emphasis on fostering the corporate governance by means of introducing guidelines and criteria that promoted good governance and sustainable development to the listed firms. This became a factor that would increase value of stocks and cut the cost in loans cost, thus raising awareness in the private sector. But corporate governance is still confined to a few large organizations, making it not possible to drive good governance and promote change in an overall picture.

The corporate governance in the private sector has improved in the international community. According to the Institute for Management Development's rankings for good governance, Thailand advanced from 36th in 2001

to 32nd in 2002, 31st in 2004, 30th in 2005, and remained in the same rank in 2006, because of increased social responsibility, customer prioritization, and capacity to be in step with the changing world. However, weaknesses lie in credibility of executives, executive ability to create value for shareholders, and the relationship between executives and staff. Meanwhile, although there has been progress in transparency and fairness, abuse of internal information for stock trading remains a problem. It is also necessary for the private sector to improve trade competitiveness.

(2) Judicial and legal systems are unable to provide justice to all parties while mechanisms for monitoring the use of state power remain inefficient

(2.1) Administrative process and judicial processes have not been adjusted in step with rapid economic, social and political changes and support industry and business rather than small economies in communities.

Laws, rules and regulations which are employed as tools to allocate rights and power are largely subject to judgment of state authorities; therefore, there is a lack of transparency and explicit criteria for indicating right or wrong. Meanwhile, laws concerning economic and social development as well as taxation aim at supporting, promoting, and protecting the private business sector rather than promoting community economies—the majority of the Thai people. Therefore, large businesses enjoy more benefits than small businesses/community economies and farmers in the rural.

(2.2) Mechanisms for monitoring the use of state power remain inefficient. As a result, the operation of NGOs under the Constitution does not gain trust from society, and problems persist over violation of laws, which affects the attempt to build good governance. The systems of checks-and-balances remain inefficient and ineffective. Media, private development organizations, academia, institutions/professions have limited roles, and there are lacks of in-depth investigations and network-typed working that would help empower them.

(3) The deep-seated patronage system remains an obstacle to the spread of good governance in Thailand

Although the 1997 Constitution intends to foster transparency, accountability, and political, governmental and financial decentralization in politics and administration, the deep-seated patronage system remains a hindrance. Coupled with a lack of quality and public consciousness, it results in an inability to separate individual benefit from public benefit, leading to more complex problems of corruption.

Transparency in government administration shows a tendency to improve. The Corruption Perception Index (CPI) developed by Transparency International (TI) and Gottingen University in Germany reveals results from an annual survey of corruption perception that Thailand's TI rose from 3.2 at the end of the Eight Plan to 3.8 in 2005; this level remains rather low, however. According to an evaluation of World Economic Forum, transparency in the government sector with regard to implementation of policies between 2002 and 2005 was at 4.1-4.3 which was above the average 3.8 – 3.9 among 80-104 countries listed in the survey. When compared with other ASEAN countries, it remains in a medium level, being higher than those of the Philippines, Vietnam, and Indonesia but lower than those of Malaysia and Singapore which were in world's top ranks.

4 Concept and Direction of Adaptation

4.1 Concept

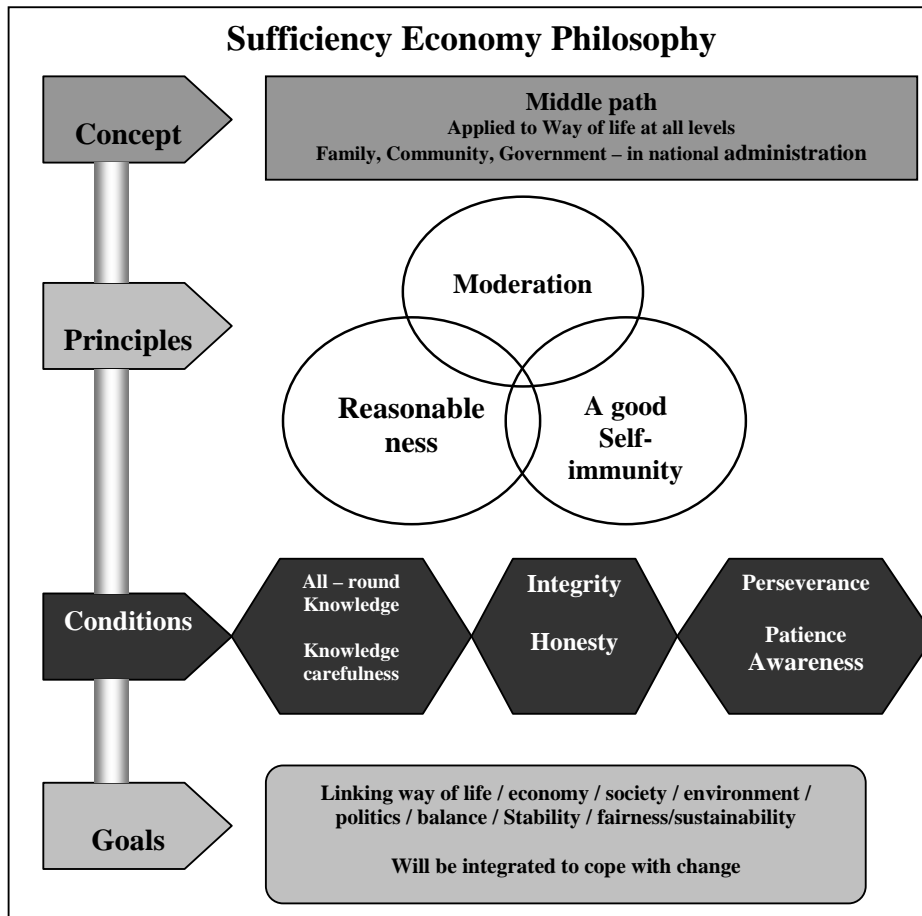
The above review of the worldwide changes affecting Thailand's development in the future, and of the country's development and current situation, points to the structural problems of the economy, society, environment and a pattern of development that is unbalanced, unsustainable, and vulnerable to rapid and complicated external fluctuations. Hence, Thailand must reorient its development paradigm to have greater self-reliance and sustainable livelihood by following the Sufficiency Economy philosophy in conjunction with a holistic approach to people-centered development under globalization and changes which are as follows

(1) Development paradigm according to the Sufficiency Economy philosophy

The direction of national development in the next 10-15 years needs to be reoriented towards the middle path on foundations of the dynamic equilibrium of development and readiness to cope with potential changes.

(1.1) The principle of “sufficiency”, which consists of three qualities must be strictly adhered to. The first quality is “reasonableness”. It must be used to analyze and make sense of the situation of the country with respect to strengths and weaknesses, threats and opportunities. This way, it is possible to select what is appropriate for national development and for coping with threats. Reasonableness leads to “moderation” which must be used in decision-making to create a balance between self-reliance and competitive capability in the world market and between rural and urban society. A self-immunity system must be built into economic systems through risks management in order to handle the impact of changes both inside and outside the country.

(1.2) Development efforts must proceed in stages, drawing on “all-round knowledge”, and moving forward with circumspection, in keeping with the Thai way-of-life so as to achieve the goals of national development. At the same time, stronger ethics, “integrity”, and morality in the conduct of duty must be instilled into everyone, especially government authorities, academia, and business people. “Perseverance” will build a self-immunity system to face changes that arise in family, community, society, and the nation.

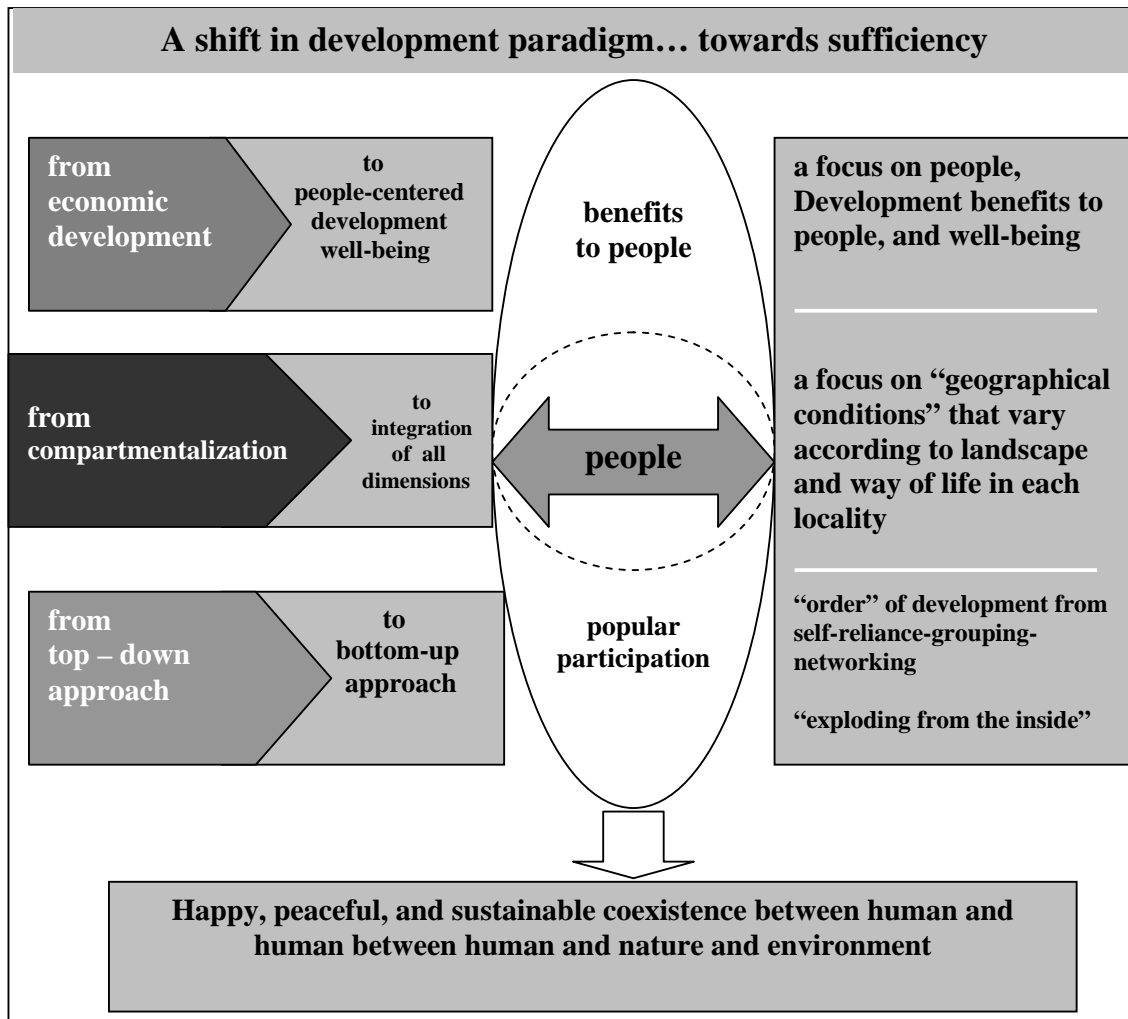


(2) Integrated and holistic development paradigm with a focus on

“people-centered development.”

A shift of development paradigm from economic growth to a holistic approach to people-centered development pays attention to benefits and the well-being of people. Economic development is used as a tool to enhance the happiness and quality of life. Segmented approach to development is replaced by a paradigm that integrates all dimensions of development with a holistic approach to people-centered development. In addition, “socio-geographical conditions” including geographical differences, natural and cultural diversity of a given locality and community are taken into consideration. A “top-down” approach to development is also replaced by a “bottom-up” approach by taking “popular participation” into account. Development efforts must proceed in stages, starting from self-reliance,

grouping and mutual dependence, to networking for happiness and further progress. In other words, this approach to development is a “people-centered development that integrates all dimensions of human dignity, happy and sustainable coexistence between people and people and people and nature”.



(3) Compatibility with the Constitution of the Kingdom of Thailand, B.E.2540

The intentions of the Constitution of the Kingdom of Thailand, B.E.2540, are always upheld with respect to rights and liberty of the Thai citizens, local administration, promotion of popular participation in policy, political decision-making, economic, social and political planning as well as monitoring of the use of

state power at all levels. Under the Constitution, people of all sectors and levels are encouraged to participate in every stage of decision-making in the process of development.

4.2 Direction of adaptation

Under globalization in which changes are rapid and becoming more severe, development must strengthen domestic systems and structures to become more self-reliant and more resilient in accordance with the Sufficiency Economy philosophy. A good self-immunity system must be built in order to handle the impact of changes by means of the following.

(1) Capital enhancement for sustainable development

As a priority, those aspects of the country's "social capital", "economic capital", and "natural resource and environmental capital" that have inherent advantages and potential must be utilized and enhanced in an integrated and mutually supportive manner as the main pillars of national development.

(1.1) To enhance social capital, human potential must be developed in all dimensions including physically, mentally, and intellectually, with happy families, economic and social stability, and strong communities combining in development networks. The well-being and knowledge of people must be enhanced to keep up with changes and to move towards a knowledge-based society while maintaining cultural diversity and local wisdoms as well as preserving natural resources and environment.

(1.2) To enhance economic capital so that the Thai economy grows with stability and quality as well as Thai-ness, support must be given to structural changes in the economy and investments in both infrastructure and logistics. Knowledge management must be improved along with efficient energy consumption and development of alternative energy/fuel sources. Moreover, the legal system, relevant rules and regulations must be improved while at the same time enhancing the potential and self-immunity of the grassroots economy to achieve fair distribution of development benefits.

(1.3) To enhance natural resource and environmental capital, development must be on the foundations of biodiversity and enhance community rights of access and management of resources. The rich stock of natural resources and environment must be conserved so that they continue to be a foundation for the sustainable livelihood and happiness of the Thai people. At the same time, the quality of the environment must be enhanced through changes in production plans and consumer behavior in order to reduce the impact on the country's natural resource and environmental base.

(2) National administration and sustainability

Systems, structures, mechanisms, and processes for managing national development must be enhanced on foundations of good governance and democracy, by promoting the participation of all sectors and all levels to ensure development is balanced, fair, and sustainable. Administrative systems must be reformed for greater efficiency and transparency by reducing the role of the central bureaucracy and decentralizing decision-making power, administrative capacity, and control over resources to regional and local administration and communities. The role of the private sector must be enhanced, and private business reformed to become strong, honest, and transparent. Laws and regulations must be amended to achieve balanced management and distribution of the benefits of development to all, while simultaneously enhancing national security. These measures will achieve equilibrium in the country's management in all aspects including economy, society, environment and natural resources, and security, and bring the country to peace, happiness, and sustainability.

5. Vision and Mission

Results from public hearings, an analysis of changes in the development context and situation of the country, and an evaluation of capital for development, helped determine the vision and mission for the development of Thailand.

5.1 Vision for Thailand

Thailand will be a **“Green and Happiness Society in which people have integrity and knowledge of world standards; families are happy; communities are strong; society is peaceful; economy is efficient, stable, and equitable; environment is of high quality and natural resources are sustainable; administration follows good governance under the democratic form of government with the King as head of state; and the country is a respected member of the world community.”**

5.2 Mission

So that development under the Tenth National Economic and Social Development Plan pursues a **Green and Happiness Society** under the direction of the Sufficiency Economy philosophy, the mission is determined as follows.

(1) Develop people to have quality, integrity, all-round knowledge, and good health, to be living in happy families and strong communities, capable of self-reliance, pursuing their lives with security and dignity, within a balanced diversity of natural resources and the environment.

(2) Enhance the economy to be efficient, stable, and equitable by reforming the structure of the economy to be competitive and self-immunized in the face of risks and fluctuations in an environment in the age of globalization, on a foundation of efficient management for the overall economy, a sufficient level of savings, reform of the structure of production and services on a basis of knowledge and innovation, using the strengths of biodiversity and Thai identity, along with overseas linkage, and development of infrastructure and logistics, energy, laws and regulations, and mechanisms to support competitiveness and a fair distribution of benefits.

(3) Conserve biodiversity, build a secure natural resource base, and conserve the quality of the environment by creating a sustainable balance between conservation and exploitation with fair distribution and value creation, supporting communities to have knowledge and self-immunity, safeguarding the resource base, protecting rights, enhancing the role of communities in the management of resources, and adjusting the pattern of production and consumption to

be environmentally friendly, while maintaining the national benefit from international agreements and obligations.

(4) Develop national administration to achieve good governance under democracy with the King as head of state, by building mechanisms and regulations which promote distribution of benefits of development to all parties, ensuring transparency, honesty, justice and public responsibility, decentralizing power, and providing systems for all parties to participate in decision-making, to achieve fairness in economy, society, and the use of resources.

6. Principal Objectives and Targets

To be in line with changes that Thailand must make in the future, and to progress towards the desired long-term vision, development in the five years of the Tenth National Economic and Social Development Plan shall pursue the following principal objectives and goals.

6.1 Objectives

(1) To provide opportunities for learning combined with integrity and morality by creating linkages between families, religious institutions, and education institutions; to enhance health services, balancing health care, promotion, prevention, treatment and capacity rehabilitation; and to improve the security of life and property.

(2) To increase the potential of communities by linking them in networks to serve as the foundation for developing the economy and quality of life; to conserve, rehabilitate, and utilize the environment and natural resources in a sustainable fashion to achieve sufficiency and reduce poverty.

(3) To reform the production structure for goods and services for value creation on a foundation of knowledge and innovation and promote linkages among production sectors to increase value-added of goods and services.

(4) To build safety nets and risk management systems for the sectors of finance, banking, energy, factor markets, the labor market, and investment.

(5) To ensure fair competition in trade and investment for the national benefit and to create mechanisms for fair distribution of the benefits of development to all segments of the population.

(6) To preserve natural resources and biodiversity, along with safeguarding the quality of the environment to be a secure foundation of national development and livelihood for both current and future generations and to create mechanisms to safeguard national benefit in a fair and sustainable manner.

(7) To promote good governance in government administration, the private business sector, and the people sector and to expand the role and capacity of local government bodies together with promotion of mechanisms and processes of participation in development and to nurture a culture of democracy for peaceful coexistence.

6.2 Targets

To meet the above objectives, development goals for the Tenth National Economic and Social Development Plan have been set as follows.

(1) Targets for human development and strong communities

(1.1) Human development

1) Provide all persons with physical and mental development, knowledge, ethics, problem-solving skills, career skills, life security, and happy coexistence.

2) Increase average years of schooling to 10; raise the proportion of the qualified workforce with medium-level skills to 60 per cent of total labor force; and raise the proportion of research and development workers to 10 per ten thousand.

3) Raise life expectancy to 80 years while reducing the trend of an increase in the five leading preventable diseases; namely, heart disease,

high blood pressure, diabetes, stroke, and cancer, in order to increase labor productivity and reduce expenditure on personal health in the long run.

(1.2) Community development and alleviation of poverty

Ensure that every community has a participatory community plan, and that local government bodies integrate community plans with their budget management, anti-crime and anti-drug measures; increase access to capital and participation in decision-making; reduce those below the poverty line to 4 per cent by 2011.

(2) Targets for the economy

(2.1) With regard to the economic structure, increase the ratio of the domestic economy to international trade to 75 per cent by 2011 and increase the proportion of agriculture and agro-industry in GDP to 15 per cent by 2011.

(2.2) With regard to economic stability, maintain inflation at an average of 3.0-3.5 per cent a year; maintain the ratio of public debt to GDP no higher than 50 per cent; maintain average elasticity of energy consumption no higher than 1:1 during the period of the Tenth National Economic and Social Development Plan.

(2.3) With regard to economic equitability, ensure the income of the highest 20 per cent group does not exceed that of the lowest 20 per cent by more than 10 times by 2011; ensure the production of small and medium enterprises is not lower than 40 per cent of GDP during the period of the Tenth National Economic and Social Development Plan.

(3) Targets for safeguarding natural resources and the environment

(3.1) Conserve natural resources and biodiversity by maintaining forest at not less than 33 percent of total land area, with conservation

forest no less than 18 of cent of total land area; and maintain at least 31 million rai of irrigated land for agriculture.

(3.2) Enhance environmental quality appropriate for the quality of life and safety of the ecological system by ensuring that the proportion of river basins and natural water sources where the water quality is rated as fair or good is not lower than 85 per cent; maintain air quality above the standard, in particular with particulate matter (PM₁₀) not exceeding 120 milligram per cubic meter on average across 24 hours; reduce the rate of carbon dioxide emissions per person by 5 per cent from the 2003 level, that is no higher than 3.5 tons per person per year; limit the production of waste in urban areas no higher than 1 kilogram per person per day; ensure proper disposal of at least 80 per cent of all hazardous waste from communities and industries; and establish a complete national biodiversity database.

(4) Targets for good governance

(4.1) Improve good governance to achieve a transparency score of 5.0 by 2011; trim the bureaucracy to appropriate size and increase value for money of operation by reducing the workforce of government officials by 10 before the end of 2011; improve good governance in the private sector; enhance capacity of localities to collect revenue and become more self-reliant; strengthen the people sector by improving knowledge of rights and duties and increasing participation in decision-making and responsibility in national administration.

(4.2) Compile a larger body of knowledge about democracy and good governance in the Thai context; support research into a culture of democracy, good governance, and peaceful means within the period of the Tenth Plan.

7. Strategies

The context of ever faster and more complex change under globalization presents Thailand with both opportunities and threats to national development. Therefore, it is necessary to be prepared and enhance the country's potential. A review of the situation of Thailand in the world community and its capital reveals

opportunities and limitations as well as strengths and weaknesses which provide guidelines for setting development strategies of the Tenth Plan.

To maximize opportunities and avoid threats under globalization, knowledge, innovation, and free trade must be used as foundations for development. Access to information, bodies of knowledge, and education must be increased by means of information technologies. At present, the quality of education is unable to keep pace with change, and Thailand is not ready to become a knowledge based economy. Creativity and innovation in the production of goods and services must be fostered on the foundations of cultural diversity and local wisdom, which are considered as strengths of the Thai society, in order to create outstanding high quality and high value products.

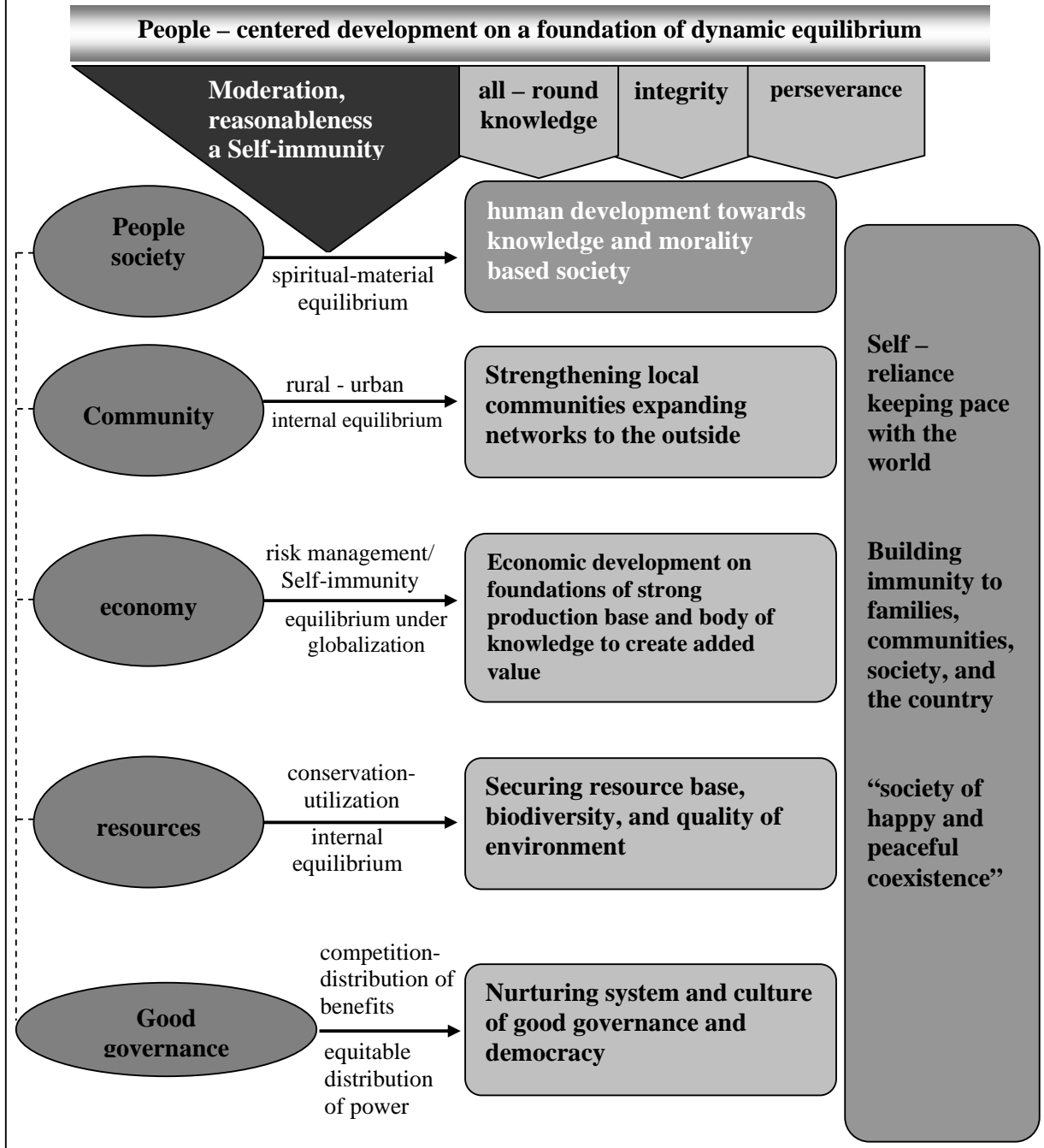
At the same time, the rich diversity of bio-resources can be utilized in conjunction with networks of strong communities under the trend of conservation and green society in order to create opportunities for the production of green and health goods and services, and intellectual property that creates value to the economy. This will bring about strong local communities, development on a foundation of biodiversity, and conservation of natural resources and an environmental base for the sake of happy coexistence between man and nature.

In addition, the diversity in the development base of Thailand including the agricultural sector, the industrial sector and the service sector as well as a good investment atmosphere can be utilized in conjunction with the free movement of capital, products and services to set guidelines for restructuring the economy so that it grows with balance and sustainability. Greater self-reliance, a good self-immunity system, competitive capacity, and a fair distribution of development must be enhanced. The capacity to drive good governance and democracy among the world community can be used in conjunction with the growing awareness of popular participation in the national development and in monitoring the use of state power in order to promote good governance in government administration and achieve sustainability.

Therefore, it is imperative for Thailand to set appropriate strategies for national development by applying the Sufficiency Economy philosophy under a

holistic approach to “people-centered development” on a foundation of “dynamic equilibrium” that integrates all dimensions of development including human, social and cultural, economic, environmental, and political dimensions. At the same time, a balance between rural and urban economy and society, between “self-reliance of the grassroots of society and equitable development” and “the competitive capacity of the urban business sector and networking of development partners in the world community” by drawing upon **all-round knowledge, integrity, and perseverance** in the process of development on foundations of **moderation, reasonableness, and a good self-immunity system**. In order to cope with changes and the impact of globalization and to compete with other countries, it is necessary to strengthen structures and systems in Thailand, build a knowledge base for resilience in the face of change, spread equitable distribution of development, promote equality in society, strengthen local communities, rehabilitate and conserve natural resources and the quality of the environment as a foundation for secure development. It is also imperative to promote good governance in national administration at all levels in order to achieve development that is secure and sustainable and to retain a place of honor and dignity in the world community. Hence the major development strategies of the Tenth Plan are as follows.

Application of the Sufficiency Economy philosophy to national development in the 10th Plan



7.1 Strategies for development of human quality towards a knowledge based and learning society will have the following emphasis.

To promote human development for integrity, knowledge, and resilience, learning and spirituality of all groups in all ages will be developed throughout life; knowledge management will be enhanced so that local wisdom and modern bodies of knowledge will be used in economic and social development. To promote health, both physical and mental, in a livable environment, emphasis will be given to the development of a comprehensive health system. To promote peaceful coexistence in society, life security will be protected at family and community levels; access to capital will be increased; personal safety will be enhanced on a foundation of social justice.

7.2 Strategies to strengthen community and society as a basis of national security will have the following emphasis.

To create strong communities, collective action and collective thinking will be promoted in various forms, and activities will be arranged depending on the readiness of each community. To build secure community economies with an emphasis on production for sufficient consumption, joint investment between networks of community organizations and local government bodies will be promoted; support will be given to provide knowledge, training, and professional skills for building community enterprises. To enhance the capacity of communities to coexist peacefully with natural resources and the environment for mutual benefit, mechanisms will be installed for local protection of natural resources and the environment.

7.3 Strategies to reform the structure of the economy for balance and sustainability will have the following emphasis.

To strengthen the production and service sectors and to enhance the value of products and services, the structures of the two sectors will be reformed on foundations of modern knowledge, local wisdom, innovation, and effective management; a good investment atmosphere will be created by developing infrastructure and logistics; institutions will be restructured, laws and regulations amended, and various standards improved; international trade policy will be designed

to increase the country's competitive capacity. To build resilience into the economy, the national economy will be managed efficiently to maintain stability; savings will be promoted; efficiency of energy usage will be increased, and sources of alternative energy will be developed. To ensure that the reform of the economic structure will alleviate poverty, fair competition and fair distribution of the benefits of development will be promoted.

7.4 Strategies for development of biodiversity and conservation of the environment and natural resources will have the following emphasis.

To conserve the resource base and the ecological balance, balance will be maintained between conservation and utilization. To create a good environment for the sake of the equality of life and sustainable development, patterns of production and consumer behavior will be modified for sustainability in order to reduce the impact on the natural resource and environmental base. To reduce pollution and control activities which affect the quality of life, management will have to be more effective. To develop the value of biodiversity and local wisdom, knowledge management will be developed and resilience will be built; biodiversity will be used to strengthen local and community economies; natural resources that are unique to the country will be used to create capacity and innovation.

7.5 Strategies to promote good governance in national administration will have the following emphasis.

To promote sustainable social justice, a democratic culture and good governance will be promoted and developed as part of the way of life; the people sector will be strengthened, and people will be encouraged to participate in national administration. To create a public administration that works with efficiency and good governance, emphasizing services rather than control and working in cooperation with development partners. Decentralization of administration to the regions, localities, and communities will be continued. Strength, honesty, and good governance will be promoted in the private sector. Laws, regulations, procedures, and processes relating to economic and social development will be reformed for fair distribution of the benefits of development. National security in administration aiming at balance and sustainability of the country will be promoted.

8. From Strategy to Implementation and Evaluation

In advancing the Tenth National Economic and Social Development Plan from strategy to implementation, importance will be given to participation by all development partners from all sectors, cooperating according to their area of responsibility. The strategic directions of the plan will be converted into operational plans for practical implementation at various levels. Resources will be allocated, laws and regulations amended, and bodies of knowledge assembled to support implementation. Monitoring and evaluation will be systematically carried out. The major directions are as follows.

8.1 Ensure development partners participate at various levels in compiling operational plans which integrate the strategies of the Tenth Plan under the principles of the Sufficiency Economy philosophy. Emphasis will be placed on clearly allocating the major roles of development partners including government, private sector, various institutions, and communities for the sake of cooperation and mutual support in the implementation. Understanding and implementation of the Sufficiency Economy philosophy with all development partners will form a basis for cooperation in compiling operational plans from the strategies of the Tenth Plan at various levels.

8.2 Set guidelines for major investment following the development strategies of the Tenth Plan so that development partners may implement them within their area of responsibility, and draw on cooperation from various sectors. The directions of investment will be under the concepts of people-centered development, community strengthening, a reform of the structure of the economy, development on a foundation of biodiversity. Build a secure natural resource and environmental base, and good governance.

8.3 Accelerate the development of laws to support efficient and effective implementation of the plan's strategies. Laws will be amended to support good public administration, reform of the structure of the economy, the competitive capacity of the country, alleviation of poverty, prevention of corruption, fair

distribution of economic benefits, and resilience to the trends of change under globalization. Priority will be given to developing the knowledge and capability of legal personnel to meet the requirements of government and changes in the world. Laws relating to economy, society, environment, resources, and administration will be drafted, amended, and promulgated, including new drafts.

8.4 Conduct studies and researches to assemble bodies of knowledge and learning processes that will be used to support the implementation of the strategies of the Tenth Plan. Importance will be given to study, research, creation of bodies of knowledge, learning processes, and dissemination of results, both at the operational level and at the policy level in the future, that follow the five strategy points of the Tenth National Economic and Social Development Plan.

8.5 Develop systems of monitoring and evaluation, and devise indicators of development outcome at all levels. Systems for monitoring and evaluation of government administration will be upgraded and extended to assess implementation. Clear standards and measurement methods will be used to monitor and compare results between agencies. All government agencies will be encouraged to develop monitoring and evaluation systems for good administration in the public sector with emphasis on cost effectiveness, transparency, and responsiveness to the diverse needs of the population. Indicators will be devised to assess development under the Tenth Plan, both at the general and strategy levels. At the same time, bodies of knowledge will be compiled on monitoring and evaluation. Reports on monitoring and evaluation will be regularly disseminated to the public.

8.6 Develop databases at all levels and data networks linking central policy bodies, regional and local administrative bodies. Policy level agencies will develop data systems and statistical management systems to meet the needs of development under the Tenth Plan. Data networks linking provinces, localities, communities and the center will be developed with easy accessibility, speed and convenience of use.

Chapter 2

Strategies for Development of Human Quality and the Thai Society towards a Knowledge Based and Learning Society

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1. Introduction

The direction of the country's development specified in the Tenth National Economic and Social Development Plan (2007-2011) is stipulated on the basis that national capitals, which include social capital, economic capital, and natural resource and environmental capital must perpetually be strengthened with the concepts of “**people-centered development**” and “**His Majesty's Philosophy of Sufficiency Economy**” taken as guiding principles towards “**society of happy coexistence**”. Strategies for development of humans and society place great emphasis on human quality. Ultimately, not only can humans benefit from or be affected by such development, but humans are also the ones who drive development towards the set goal. It is, therefore, imperative that human quality be developed in a balanced manner in every dimension namely physical strength, mental power, intellect, skill, and competence so that humans are fully equipped with “virtue” and “knowledge”. With moral and **virtuous consciousness**, they will be able to develop analytical thinking skills “**logically**” and cautiously as well as be able to see through changes and make decisions based on “**moderation**” to live their lives with morality, integrity, intelligence, and perseverance. Consequently, “**good self-immunity**” will be developed allowing humans to be prepared for future changes, live their lives with honor, earn economic and social security, and live in a healthy family and a peaceful society. Humans will concurrently be capable of driving towards a quality, stable and fair economy as well as managing natural resources and the environment as a foundation for their living and sustainable development of the country, which leads to a society of happy coexistence.

Thailand has faced a number of challenges from changing contexts especially those concerning the population structure that sees the country moving towards an

aging society within the next 20 years. The proportion of young population will decrease dramatically from 24.3 per cent in 2000 to 20.2 per cent in 2015. The number of working people rose steadily from 65.9 per cent in 2000 and will reach the highest point of 67.1 per cent in 2009 before dropping slightly to 66 per cent in 2015. There will be a steady increase in the proportion of elderly in the population, from 9.5 per cent in 2000 to 13.8 per cent in 2015. Given such challenges, Thailand has relatively little time to get their human resources and various related systems ready.

The change in the population structure in which the country is moving towards an aging society reflects a situation of which one needs to be aware as it inflicts **greater dependency burden**. People in the working group will have to bear a heavier burden of taking care of their elderly parents and relatives. Since knowledge, skill, and labor productivity of the country are little, Thailand's production will decline causing a negative impact on the country's competitiveness and economic growth. Thus, improving labor productivity during the time when a high proportion of the population is working population is a priority, before the proportion diminishes. **Social services including the management of the existing social protection system may be insufficient**. Medical services, in particular, are inadequate as chronic diseases as well as other elder-related diseases are likely to increase. However, with an increasing budget for public health service arrangements and a bigger pension sum, an opportunity the country gained from the aging population in developed countries, changing consumer behaviors towards natural products, and current popularity towards oriental cultures, Thailand is therefore in a position to make use of its strengths in culture, local wisdom and natural resources for its economic purposes.

From the assessment of the development status of Thai people and society, it is found that despite the fact that quality of life of the Thai people is improved, a number of points need to be further developed.

There is a fast quantitative growth in education development. The number of academic years of the Thai people rose steadily to an average of 8.5 years in 2005. However, it did not reach the compulsory education level and was still lower than the average of 10-12 years of other Asian countries. The ratio of students to the whole population increases at every level. The number of students who continue their education at a secondary level has risen to 71.2 per cent and to 44.3 per

cent at the undergraduate level. Yet **a strong emphasis must be put on learning quality.** Students' academic achievement in the 4 core subjects (Thai, English, mathematics, and science) has always been below 50 per cent. In addition, there is a lack of efficiency in basic knowledge and skills pertinent to the kinds of work that require thinking, analysis and creativity. **Out of 5 levels, the reading skill of the majority of students is no higher than level 2.**

Thai people **receive greater opportunity for life-long learning but they still cannot adequately apply the knowledge they have gained.** In total, 22 per cent of the villages throughout the country have community learning centers. **Access to information technology is greater.** The ratio of computer number to population is 57 to 1,000, which is lower than that of 763 to 1,000 in the United States. The ratio of people accessible to the Internet to total population is 116.7 to 1,000, six times lower than that of Iceland, the country with the highest population accessible to the Internet in the world. People who are 15 years old and over with a Matthayom 6 certificate who have **adequate basic reading and writing as well as mathematics skills** deemed to have thinking skill **accounted for merely 60 per cent** of the country's population.

There is a quality shortage as well as a quantity deficiency in both mid-level and top-end manpower, thwarting an increase of the country's competitiveness. **Although the Thai workforce who have graduated with a certificate higher than elementary level grew** from 35.6 per cent in 2002 to 39.8 per cent in 2005, need of business and industrial sectors for these workforce is as high as 60 per cent. **Thai workforce's productivity is US\$ 6.2 per person per hour, rather low** compared to that of Malaysia, Korea, Singapore and Taiwan, which is over US\$ 11. **There is an improper proportion of top-end manpower in science and the investment in research and development is minimal.** In the industrial sector, mid-level and top-end manpower are less than 20 per cent. Out of every 10,000 people, there are only 6.7 humans dedicated in scientific and technological research and development per annum. In 2003, the ratio of investment in scientific and technological research and development to GDP was at 0.26 per cent, seven times lower than the international average. **In spite of an increase in the amount of new knowledge gained from research and development, the application of the**

knowledge for commercial purposes is at a low level. The number of patents registered in Thailand accounts for 0.4 per cent of the patents worldwide, 77 per cent of which belong to foreigners.

Health services are widely available. 96.3 per cent of the Thai people have health insurance. Health infrastructure at the community level has covered all areas. Overall illnesses are down while sickness caused by a preventable disease tends to increase continuously. Life expectancy of Thai people is likely to go up with males averaging at 68 years and females at 75. Though the life expectancy of Thailand is higher than the global average, it cannot be compared to Japan, the country with the highest average life expectancy of 78 years for males and 85 for females. In 2004, the rate of **overall sickness** to 1,000 population **was down** to 1798.1. However, since the Thai's consuming and living behaviors are still risky for their health, **sickness from preventable diseases**; namely, high blood pressure, diabetes, heart disease, and cancer **has increased** by 18.4 per cent, 14.2 per cent, 13.4 per cent, and 4 per cent, respectively. Moreover, **obesity** tends to rise in every age group, particularly in children with relatively low level on intelligence. **Emerging and re-emerging diseases** such as SARS, Avian influenza, flu, and so on are other health problems that require special attention and serious prevention.

Thailand's health investment is low, accounting for 3.3 per cent of GDP, which is lower than the international average of 7.7 per cent. **The ratio of medical personnel to the population**, which is 30 to one hundred thousand, **is inadequate**, compared to 201 for Japan, 51 for India and 164 for China. In addition, in some localities, medical personnel are found to be concentrated in urban areas.

Social Security is not thoroughly provided for the informal sector and the underprivileged. In 2005, there were 8.2 million workers insuring themselves under the Social Security system, accounting for 22.73 per cent of the total workforce. The informal sector which accounts for 70 per cent does not have access to the system. Even though the informal sector and the underprivileged have more access to social services, especially in the form of welfare, assistance is far from comprehensively available.

In addition, amid the state of more urbanization, **life security and property security of the Thai population are at greater risk.** Despite a decrease in drug-related cases, Thailand must be prepared to cope with new drug developments and new patterns of drug trafficking such as via the Internet and post. Crime rates, in the meantime, tend to be higher. Of a population of 100,000, criminal offences against property tend to be more frequent, going up from 109.7 to 122.1 cases whereas criminal offences against life and body as well as sex offences have also risen from 60.5 to 73.4 cases. Children are more likely to commit crimes.

As a result of the flow of foreign cultures via media and information technology, **Thais are facing crises of value, ethics, and behavior,** which are closely related to the living, behavior, thinking, attitude, and moral principles of people in the society. Constructive media are scarce. On the other hand, threatening and illegal media are more publicized regardless of strict suppression measures. The number of websites advertising sex services has tripled. Thais, especially children and juveniles, are still incapable of appropriately screening or accepting different cultures. Moreover, social institutions such as family, religion, and education have a declining role in cultivating ethical and moral principles and developing capacity of the Thai population, particularly of the youth. **Families** are vulnerable, with the rate of divorce rising from 4.4 couples per 1,000 families in 2001 to 5 in 2005. **Educational institutions** do not put enough importance on moral development of the students. **Religious institutions** still cannot make complete use of religious places and personnel available in great abundance in a relevant manner to the present situation. Nonetheless, **Thailand possesses the Thai culture, a culture that is diverse and distinctive.** It also has the relation system which is the country's culture and serves as a foundation that helps strengthen Thai society and as a social safety net. Also, there are over 1.7 million local scholars nationwide whose **Thai wisdom is accumulated, preserved and passed on** from generation to generation. Unfortunately, the process of knowledge transfer, search, extraction, collection, creation and application is not adequately systematic.

By assessing the situation of humans and the Thai society with respect to changing contexts potentially affecting the country's future development, **strategies for development of human quality and the Thai society towards a knowledge**

based and learning society will aim at developing the Thai people and society in three main areas. **First, promote human development for virtue leading knowledge.** To achieve that, learning and spirituality of all groups in all ages will be developed throughout life; children will be provided with strong basic knowledge including life skills, capacities, and workforce skills appropriate to demand, so that they can progress towards the world of work and competition effectively; excellence of manpower will be fostered, especially in the creation of innovation and knowledge; life-long learning will be promoted; and both local wisdom and modern knowledge will be nurtured from the community level to the national level for the development of economy and society. **Second, promote health, both physical and mental, in a livable environment.** To do that, emphasis will be given to the development of a comprehensive health system including prevention, physical and mental rehabilitation, food security, safe food consumption, and the reduction of behavior that entails risk of health. **Third, promote peaceful coexistence in society.** To reach that goal, good relations will be nurtured among people in the society on a basis of reasonableness; life security will be protected at the level of family and community; diverse and comprehensive systems of economic and social protection will be developed; opportunities of access to capitals will be increased; personal safety will be enhanced on a basis of social justice; an integrated judicial process and concerted enforcement of law will be installed; consciousness of the rights and duties of citizens and respect for human dignity will be promoted to reduce conflict.

2. Objectives and Targets

2.1 Objectives

(1) To create opportunities for continuous learning with virtue and involvement from the social institutions of family, religion and education and to increase manpower capacity in professions that improve living standards and the country's competitiveness.

(2) To strengthen a quality comprehensive health system consisting of promotion, prevention, cure, and rehabilitation aiming at the reduction of sickness and health care expense.

(3) To build a socio-economic protection system as well as life and property security for stable living and peaceful coexistence.

2.2 Targets

To conform to the above objectives, targets for development of human quality and the Thai Society towards a knowledge-based and learning Society at the end of the Tenth Plan in 2011 are set as follows.

(1) Qualitative targets

All Thai people will be developed physically, intellectually, ethically, morally, and emotionally so that they are capable of problem solving, skilled for their careers, secure to spend their living with dignity, and able to live in peaceful coexistence.

(2) Quantitative targets

(2.1) The number of average academic years per person will increase to 10 years.

(2.2) Academic achievement in all core subjects will be higher than 55 per cent at every level.

(2.3) Quality mid-level skilled workforce will make up for no lower than 60 per cent of the whole national workforce.

(2.4) The number of research and development personnel will rise to 10 persons for each population of 10,000.

(2.5) Life expectancy of the population will go up to 80 years.

(2.6) The rate of sickness from the first five preventable diseases namely heart disease, high blood pressure, diabetes, stroke, and cancer will be reduced.

(2.7) All those in the informal economy will be provided with social protection.

(2.8) Criminal cases will be reduced by 10 per cent.

3. Development Approaches

To accomplish the mission in human development for quality with virtuous behavior and all-round knowledge, development approaches under the strategies for development of human quality towards a knowledge based and learning society set out in the Tenth Plan (2007-2011) place a great emphasis on human development in 3 dimensions: promoting virtue leading knowledge appropriate for all people of every age group so that they are able to see through changes and confidently progress towards a knowledge-based society, improving the capacity of the country, along with promoting a healthy environment among people with peaceful coexistence in society, social and economic protection, justice process, rights and protection of rights and liberty, and living security.

3.1 Promote human development for virtue leading knowledge and social immunity by getting children and juveniles well prepared through mental readiness, life skills, basic knowledge necessary for living, competency development, and labor skills; creating manpower to respond to the country's development; fostering continuous learning; and promoting knowledge management.

(1) Cultivate good-heartedness, ethics, and public consciousness among children and juveniles by doing the following.

(1.1) Encourage the family, community, religious institutions, and educational institutions to join forces in helping children and juveniles develop into good-hearted and good-natured human beings who refrain from vice and drugs, possess leadership skills, and devote themselves for public interest; watching over the youth, chastening and advising them as if they were family members; and searching for good people from the society, honoring them, and taking them as an example for others at every level.

(1.2) Instill an attitude of public interest to allow the youth to learn to do things for others. Create opportunities for people, particularly children and juveniles, to learn to work together for public interest through activities such as volunteering jobs, caring for natural resources and environment, boy scouts and girl guides, cooperative activity, etc. Promote operations that take more responsibility towards society and emphasize transparency and accountability at the organizational level of all development alliances.

(2) Promote intellectual, emotional, and ethical readiness among children and juveniles through an education system that aims at both academic and practical knowledge as follows.

(2.1) Children's development must start from when they are fetus and continue suitably throughout their growth. Create their learning readiness by educating parents about child care as well as mental, emotional, social, and intellectual development of the child from birth. Parents must train their children to think and analyze logically and systematically, understand and be able to control themselves appropriately, realize their potential, and cooperate with others by learning together from real-life experience and be happy with the learning.

(2.2) Diverse curricula for both formal and non-formal education must be developed according to brain development. The curricula must integrate the knowledge of ethics, history, culture, and peaceful conflict reduction, which foster an understanding of the student's own origin and allow them to learn to live with others peacefully and happily. Instructional media must boost children's desire to learn using information technology as a tool. Teacher quality must be improved and teachers must have the knowledge of and be able to make use of new technology.

(2.3) Guide new generations of youth towards more vocational study by setting up parent networks at educational institutions. A variety of services must be constantly provided to the society. An effective transfer system must be developed. Students who pass basic education and return to their native town must be provided with an opportunity for continuous learning so that they can carry on local wisdom and play a part in conserving natural resources and environment.

(3) Increase labor force capacity and skills to support the country's competition by improving basic working knowledge and skills and organizing a learning system for careers that connects from the basic level to the professional level.

(3.1) Improve basic working knowledge and skills for higher labor productivity in thinking, analysis, creativity, problem-solving, decision-making, group work, ethics, and working discipline, so workers can have an easier time learning about and operating on complicated technology and get themselves ready for a learning society.

(3.2) Organize a learning system for careers with respect to knowledge, competency, and skills related to new technology and connecting from the basic level to the professional level by doing the following.

1) Build a cooperative network among the public sector, the private sector, and communities at every level to improve labor competency by providing workers with a variety of short-term training courses. With those courses, workers will have more options in their careers allowing them to change jobs suitable to their expertise and potential, as well as suitable to a particular situation. Training must be offered widely in the workplace.

2) Impel social organizations like community organizations, establishments, medical institutions, foster homes, and so on to organize a learning center whereby both basic knowledge and a variety of other academic knowledge areas are taught to increase people's capacity and to promote sustainable learning.

3) Rapidly set up a Professional Qualification system in ready areas according to demand and seriously put it into practice, so workers can earn a wage suitable for their knowledge, skills, and experiences. Life-long learning must be nurtured, together with the establishment of a Professional Qualification Institute.

4) Provide jobs for the underprivileged appropriate to their capacity by encouraging private sectors, communities, and educational

institutions to collaborate in arranging career training programs and creating jobs for both employed and self-employed workers.

5) Assemble information, news, and knowledge useful for work and professional advancement in every job area and disseminate the information through various forms of media which are interesting, easy to understand, and extensively available so that workers see through changes and tricks, reducing the chance of being taken advantage of.

(4) Build excellence of manpower in the creation of innovation and new knowledge useful to national development by developing and enhancing quality human resources in all disciplines, particularly in science and technology; producing researchers; and generating factors facilitating the development of all sciences.

(4.1) Develop and enhance excellence of quality manpower on the basis of self-reliance on new sciences.

1) Produce researchers in areas that respond to the needs of the market and the society so that they can be the backbone for the country's development.

- Promote more efficiency in the search for children with remarkable talents in a variety of areas and enhance capacity excellence in both knowledge and morality by allowing families to have access to constructive recreations and artistic activities held in schools and communities.

- Produce more researchers in science and social science to enable them to manage knowledge for the sake of development in major fields such as technology, human resources development, social development, and administrative management, as well as enhance international research collaboration suitable for the Thailand context.

2) Improve capacity, creativity, and expertise of existing researchers to enable them to create innovation useful to the society generally and commercially.

- Cultivate trust value among researchers to develop a research network both domestically and internationally for exchange, learning, and transfer of knowledge and experience leading to the creation of valuable new knowledge.

- Support more research, development, and creations of innovation that relate to biodiversity; create value and value added work; and improve overall productivity, which will lead to sustainable self-reliance.

(4.2) Generate factors facilitating development of all sciences systematically with an emphasis on actual participation, incentive measures, and distribution of learning sources in all regions.

1) Systematically promote the learning process in all disciplines, in particular in technology that generates value added work through foreign investment, by encouraging multinational companies to organize more research and development activities in the country. In addition, identify the condition of knowledge and technology transfer through foreign investment and, simultaneously, use venture capital funded by the public and private sectors to support research and development to create the country's own technology.

2) Identify incentive measures to allow researchers to work to their fullest capacity by allowing them to be exempted from all taxes concerning research and development in all areas, providing stakeholders with a fair system of distribution of benefit gained from research and development, developing the process of knowledge and technology dissemination, and honoring Thai scientists, researchers, and developers with outstanding works, so they are a good example for the youth.

3) Develop and distribute learning sources in all areas, develop and improve centers of excellence in every discipline, and create a network among related organizations in all regions to bring science and technology to communities to enable people to make use of the knowledge in their careers and improve on local wisdom effectively.

(5) Promote life-long learning to enable people to learn continuously, have access to knowledge sources including new sciences as well as culture and wisdom. This is to develop a life-long learning culture, promote various forms of learning management, and improve the environment to support a learning society.

(5.1) Create continuous learning culture among people of all ages, helping them to realize the usefulness and the importance of life-long learning, which will improve their quality of life and enable them to live their lives wisely by doing the following:

1) Move towards a learning society by educating people to have an understanding as well as realize the importance of life-long learning and become interested in a variety of learning styles.

2) Change people's attitudes to become knowledge seekers, honoring them for their diligence and perseverance as well as their ability to see through changes.

3) Promote the learning of information technology among children and juveniles to provide them with unlimited access to information and knowledge.

(5.2) Develop life-long learning styles and curricula that accord with town and community conditions by doing the following:

1) Use educational institutions and the communities as learning places for community people by organizing activities after school in schools; developing more curricula for general public in colleges and universities; and increasing the use of public space for learning, for instance, libraries, museums, learning centers, and sports centers.

2) Develop learning curricula that respond to local needs by surveying the demands of learners; developing curricula with local scholars as teachers; providing training courses for learning leaders like educators, sports coaches, youth leaders, librarians, curators, volunteers, and so on as they will be the ones who organize learning activities; making learning calendars to boost public

interest; and encouraging the learning of basic science and technology that can be used in daily life.

(5.3) Improve the environment to support life-long learning

for all as follows.

1) Promote collaboration between the government and the private sector in life-long education management by identifying incentive measures such as tax reduction for private sectors that support life-long education, encouraging learning management in companies, etc.; amending rules, regulations, and laws concerning life-long learning so that they facilitate continuous learning; and improve learning places to suit learning activities.

2) Systemize life-long learning information that can reach everyone via media and information technology and set up a counsel unit for learning to advise learners on the learning that matches their needs.

(6) Develop knowledge management in economics, society, and natural resources and the environment from the community level to the national level to enhance people's learning and to be able to make use of the learning for the country's economic, social, natural resource and environmental development. This can be done as follows.

(6.1) Manage, develop, and utilize culture and local wisdom

to sustain traditional knowledge that have been passed on from generation to generation and highlight it for international recognition.

1) Manage cultural knowledge, local wisdom, and biodiversity by searching for the knowledge, extracting it from scholars, making it tangible for others to learn, setting a data warehouse of the whole knowledge in communities, and using it for community development, for instance, developing a community plan and protecting it legally and practically from any interested groups who wish to corrupt it.

2) Encourage new generations to learn about the local wisdom through real practice from scholars or elders who have obtained their local

knowledge from the community learning center and strive to have the local wisdom taught as a subject in educational institutions.

3) Improve on existing local knowledge through the utilization of new technology for use in daily life; manage natural resources and environment in the area systematically and use them to generate products and services that bring income to the community; conduct folk research in which community researchers collaborate with educational institutions and the government; and organize a research system to build in-depth knowledge.

(6.2) Manage knowledge at the national level with the aim of building capacity and competitiveness in the global market on the basis of self-reliance according to people's capacity, as below.

1) Promote research and development in all areas to produce knowledge and technology that correspond to the capacity of the country and catch up with changes. Also, nurture the utilization of the knowledge and technology for economic and social benefits that increase productivity, create value, improve quality, and conserve and foster sustainable use of natural resources by adjusting financial incentive measures as well as promoting collaboration among the government, the private sector, and educational institutions to constantly improve research and development capacities.

2) Develop innovation that leads to self-reliance, and therefore, reduces import of technology; improve the financial incentive system; and manage intellectual property systematically by focusing on protection, benefit distribution, commercial use of the knowledge, and setting up of organizations directly responsible for the management of intellectual property.

3.2 Promotion of physical and mental health for Thai people in a healthy environment. This can be achieved by enhancing food security and preventive health care.

(1) Develop a comprehensive health system which aims at promotion, prevention, cure, and physical and mental rehabilitation; improve service

quality; produce medical and public health personnel while improving the capacity of observation and management of current emerging and re-emerging diseases.

(2) Revive natural food sources to adequately sustain life, especially for the poor and the underprivileged; nurture safe consumption and use of herbs, local wisdom and culture for good health by integrating existing local wisdom with new knowledge to generate prosperity; create and make use of biodiversity instead of chemical substances; and integrate clean technology in agriculture.

(3) Encourage the Thais to reduce, refrain from, and quit behaviors that jeopardize their health while caring for their health appropriate to their age, having the knowledge of primary prevention, developing proper consuming behavior, exercising regularly, playing sports, and making the most of their free time. In addition, create collaboration between family and community in building good health and improving community environment to suit health better.

(4) Develop alternative medicine and traditional medicine which aim at research and development for better quality of life and higher economic value; provide protection of intellectual property obtained from research and development; and develop personnel who can integrate alternative medicine or traditional medicine with modern medicine.

3.3 Create an environment in which all Thai people can live in coexistence peacefully by fostering good relations among people in the society based on reasonableness and nurturing secure living both at the family and the community levels by developing an economic and social protection system, justice process, human rights, and security in living, all of which will bring about peace and happiness in the society.

(1) Build family strengths, create good relations and warmth in the family, and preserve culture and good value and pass them on to future generations by doing the following.

(1.1) Educate parents to live their lives happily, safely, and securely whereby family members realize their roles and duties; to bring up their

children properly according to their age based on academic principles as well as religious teachings; and to be a good example for their children while conforming to the Thai culture.

(1.2) Encourage families to apply their living skills in guiding their children on the basis of ethics, appropriateness and thriftiness, as well as teaching them about their origin by participating in social and religious activities together, allocating time for regular talks with their children, keeping public space for family activities, and creating the value of a warm family through media and information technology.

(1.3) Expand information space and public space for the youth to be able to express their thoughts and imagination freely, leading to collective learning.

(2) Provide people with a variety of comprehensive economic and social security benefits to enable them to effectively protect themselves against and reduce risks they face and encourage them to work to generate income for stable living as follows.

(2.1) Create opportunities for people to gain access to capital for their careers and income by setting up village funds as a community financial institution which connects with government and commercial banks and can provide loan services for career development of people. Moreover, press for measures that turn assets into capitals so that community people can generate income which will in turn bring about economic security for them.

(2.2) Increase social protection both formally and informally for community people; provide comprehensive social welfare especially for the informal sector, women, and the disadvantaged so that they can live their lives sufficiently; and enhance old age pension savings for economic stability in the future.

(2.3) Promote household savings with an aim of reducing expenses and increasing income by fostering savings among Thais in different patterns, for example, government bonds, real estate, and life as well as health

insurance for life security and therefore encourage better investment for national development through greater overall national savings.

(3) Promote safe and peaceful living based on justice in the society, which allows people to live their daily life happily and to obtain fair rights protection by doing the following.

(3.1) Create an integrated justice process, seriously **enforce the law, and promote the use of an alternative justice process** to protect rights and liberty of the people, particularly the disadvantaged, children, and women, and to solve crime and drug problems.

(3.2) Create consciousness regarding rights and duties of the people based on the law, tradition, and culture of peaceful coexistence; raise awareness of value and respect for human dignity of both oneself and others; nurture equality between men and women, especially the women's role in management and administration at every level for tangible practical results; and reduce conflicts at every level on the basis of morality and ethics.

(4) Increase opportunities for the elderly, the disabled, and the underprivileged to have wide access to social services by improving their capacity in careers, promoting health, and fostering life-long learning using diverse approaches.

4. Roles of development partners

In order to develop Thai human resources and society towards a wisdom and learning society, development partners from all sectors have roles in creating better development practice on the bases of collaboration and integrated teamwork as follows.

4.1 The public sector formulates policy and measures of their governance; supports and co-ordinates to bring all the works together both at the policy level and the implemental level; and undertake monitoring and evaluation.

(1) At the policy level/central administration

(1.1) Create education and learning opportunities for all groups of people, foster the development of human quality, collaborate with the industrial sector and educational institutions to develop human resources at every level, set up a Professional Qualification system, create factors facilitating the development of science and technology while developing a network of greater learning sources in all forms and distribute them to every area, and encourage social institutions and organizations, especially family, religious, and educational institutions to manage education that nurtures the concept of virtue leading knowledge.

(1.2) Promote systematic knowledge management, promote in particular the systematic management of intellectual property, and cultivate knowledge, understanding, and pride of Thai culture and wisdom among people.

(1.3) Develop a comprehensive health system which aims at promotion, prevention, cure, and physical and mental rehabilitation; improve service quality; produce medical and public health personnel; increase the capacity for monitoring of emerging and re-emerging diseases; and bring a network of health promotion to the community.

(1.4) Administer, co-ordinate, and connect the development of all sectors; adopt an administrative style that integrates both vertical and horizontal management; monitor security development of people of all ages; and carry out monitoring and evaluation of the overall operation.

(2) At the local level

(2.1) Increase efficiency in the management of local administrative organizations and set priority for local development that responds to problems and actual needs and corresponds to the direction of the country's development to enable the local government to manage allocated budgets worthwhile.

(2.2) Provide adequate and quality basic services necessary for living and security and safety and develop a social protection system and quality social welfare for people in every area.

(2.3) Foster continuous learning, promote health, provide social services for all, especially for the underprivileged, allocate a balanced budget for economic and social development, and initiate community plans.

(2.4) Support and co-ordinate the search, collection, storage, and transfer of local knowledge, wisdom and culture systematically for use in local development.

(2.5) Promote and organize constructive integration of community people for development activities and create a sharing network among social observation alliances concerning learning development, health, safety in life and property, and the justice process.

4.2 The private sector

(1) Install corporate governance in organizations; improve production primarily utilizing knowledge, technology, and innovation through production process friendly to the environment; increase labor quality by promoting the learning process and biosanitation; and develop a business alliance system.

(2) Support research and development that leads to the creation of innovation and production technology on the basis of self-reliance and reduction of technological imports, along with building production and service identity based on Thai wisdom and culture so as to increase economic value and worth.

(3) Collaborate with the public sector and educational institution to identify direction for the development of human quality to increase competitiveness; take part in developing educational curricula into which knowledge and experience are incorporated; and promote development of knowledge, skill, and workforce capacity to absorb international technology.

4.3 Civil society is the aggregation of development partners which encompass community, society, foundation, association, and private development organizations.

(1) Produce natural leaders to be the backbone of the civil society in initiating constructive activities, promoting continuous participation, collaborating with other sectors, as well as expanding the network into the national level.

(2) Strengthen the learning process and support systematic knowledge management of the community; create new knowledge to equip community members with knowledge and skills necessary to thrive through changes; build career opportunities; foster a healthy environment by collaborating with educational institutions and local administrative organizations; and reinforce the role of scholars and elders in the community in passing on local knowledge to younger generations.

(3) Manage natural resources and the environment in the area systematically by developing them with new technology and improving on local wisdom with preservation, revitalization, and sustainable use.

(4) Build economic and social security for people, especially the underprivileged by promoting savings, developing community enterprises, establishing community welfare, and providing social monitoring and social watch.

4.4 Social institutions consists of

(1) Family

(1.1) Apply the philosophy of Sufficiency Economy in the way of living, and seek knowledge, improve skills in caring for family members suitable for their age, and be a good example for children.

(1.2) Instill a knowledge seeking habit and desire for reading in children; continually support their learning according to their capacity and interest; pass on culture, tradition, and good values; and teach them about role, duty, discipline, responsibility, morality, generosity, and public consciousness.

(1.3) Join membership of different groups for knowledge exchange as well as provide assistance in problem-solving, and establish a community watch for safety.

(1.4) Participate in systematic search, collection, storage, and transfer of folk wisdom and culture, along with promoting learning exchange among community members and utilizing the knowledge in their living.

(1.5) Produce and consume non-toxic vegetables, replace chemical substances with herbs in the prevention and cure of sickness, maintain a healthy household environment, manage household garbage, and drive towards a pleasant and livable community.

(2) Educational institutions

(2.1) Adopt child-centered learning and teaching process, search for children's capacity and develop the capacity according to their capability, driving towards excellence in the area of their aptness, and integrate non-formal learning into formal education, along with cultivating morality and ethics.

(2.2) Develop and organize the learning and teaching in a way that provides the youth with basic strong knowledge and skills to prepare them for their potential careers, along with providing guidelines for taking up jobs. Also combine life knowledge, basic skills, culture and wisdom in all forms of education.

(2.3) Build and improve manpower with excellence in the creation of innovation by developing a learning process in science and technology with an emphasis on real practice starting from childhood. In addition, engage experts in new technology from different organizations as well as Thai folk scholars in sharing their experience and expertise.

(2.4) Create new knowledge leading to the creation of innovation emphasizing a self-reliant technology base, integrate Thai wisdom with technology, and disseminate the knowledge extensively.

(2.5) Be an information source as well as an academic consultant for the community; conduct research with the community, turn the tacit knowledge of each scholar into explicit knowledge, create a learning process that improves on local wisdom through modern technology for use in daily life, and build community capacity to allow for knowledge management in the community.

(3) Religious institutions

(3.1) Motivate people to use dharma in their living, be the spiritual center for the society by adjusting the style of dharma promulgation to suit the occasion and the target group, and provide guidelines for dharma-based living.

(3.2) Develop religious personnel who are capable of motivating people to have faith in and conform to religious teachings.

(3.3) Join forces with families, educational institutions, and other social institutions in building good people and good society by focusing on activities for public benefits, support, and cultivation of value and consciousness in self-devotion for others.

(4) Mass media

(4.1) Produce constructive media, a positive trend, and decent sphere for children and families and encourage children to take part in creating constructive media.

(4.2) Publicize a wide range of academic knowledge, research, and innovation that respond to the needs of different target groups, nurture the knowledge which adds perspectives and opens a worldview, stimulate people to realize the importance of learning, create motivation, inspire creative thinking among people, and use mass media as a tool to create the right understanding about role, rights, and good citizenship.

(5) International organizations

(5.1) Provide academic support in development works, be an information center and consultancy, foster training, and improve personnel competence so as to increase the capacity of the countries requesting for assistance.

(5.2) Co-ordinate knowledge sharing among countries and strengthen learning and development to create development options appropriate for the context of each country.

(5.3) Organize, strengthen, and raise awareness in assistance networking among countries as well as international development partners on the issues that have an impact on or boost international development, along with promoting interactions among countries with diverse ethnicities, cultures, and languages for reconciliation.

(5.4) Monitor and propose areas in development suitable for changing situations at the global level.

Chapter 3

Strategies to Strengthen Community and Society as Basis of National Security

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Strategies to Strengthen Community and Society as Basis of National Security

1. Introduction

To move towards balanced and sustainable development of the country, it is vital to increase all of its capitals—social capital, economic capital, and natural resource and environmental capital—and bring them together for advantages in development. Of the three types of capital, social capital must be the main basis, starting by improving human quality that entails possessing knowledge with virtue, having public consciousness, the ability to see through changes to moving towards strong community, lending assistance both in communities and between communities, and becoming the power for national development.

Community originates from the aggregation of people from rural and urban areas, those in a village or between villages, districts, or provinces, those with the same profession, or those coming from different careers and areas but sharing the same interest. Such aggregation may be in the forms of foundations, cooperatives, association, or any other groups unregistered as career groups or clubs. Within a community, there must be regulations, principles and coexistence criteria; strong participation of community members to bring thoughts into practice; a learning process and various knowledge management styles according to the **socio-geography** of each community suitable for a way of living based on natural resources, wisdom and use of community culture with caution and carefulness; morality and ethics; love and concern for one another; unity and sacrifice; and determination to develop oneself and others. His Majesty the King's Sufficiency Economy philosophy is thus brought as the basis for community members to carry out and participate in community activities which lead to the happiness brought about from **balance, reasonable moderation, and a good safety net, enabling people to rely on themselves**. That is because the community is able to make use of existing economic capital, social capital, and natural resource and environmental capital with equilibrium and in

relation to tradition, custom, and community culture, as well as to strengthen close social relations among people both inside and outside the community. Strong aggregation of community members can prevent and fix hard and complicated problems, especially poverty that is holistically involved with the economy, society, and politics. So as to tackle the problem, strong communities are required as the backbone in an operation to eradicate poverty. Apart from problem solving and fixing, the aggregation enables people to improve the future of the communities.

So far, development has employed decentralization, enabling communities to take part in development more by promoting a learning process to develop community plans in 3,657 districts, fostering every step of community process in the making of local administrative organizations' development plans and district development plans, and participating in the monitoring and evaluation of performance, along with developing the capacity of community leaders. At present, there are 28,296 registered small community enterprises nationwide. A sum of 77,508 million baht has been transferred to village funds and urban communities through the participating process of career creation for communities. This is just one part of getting communities prepared for administrative decentralization into regional areas, which requires a continuous and comprehensive operation.

The economic crisis that took place reflects an imbalanced national development process. The fact that Thailand has rapidly become an aging society and that globalization has brought with it modern economy and borderless communication, along with fast technological change, greater urbanization, and consumer behavior that imitates western cultures have all had an impact on ways of life of people in the community. This may be a threat if the community does not have adequate knowledge to help survive through changes. On the other hand, if the community can adjust and take appropriate advantage of the changes, it may be an opportunity for the community's development.

To build a healthy and happy Thai society, according to the philosophy of Sufficiency Economy, strong communities are an indispensable mechanism for community development. Strategies and development approaches will allow communities to organize holistic activities; foster the participation of community members in the learning process and knowledge management using natural resource

capital and community capacity; enhance manufacturing for sufficient self-reliance; nurture interdependence among community members both inside and outside the community on the basis of respect for cultural diversity leading to peaceful coexistence and reconciliation; and conserve, develop, and make use of existing biodiversity appropriately and sustainably which brings about an abundance of earth, water, forest, plant, and wildlife. The aim is for communities to have a pleasant and pollution-free environment, peaceful coexistence between humans and natural resources and the environment, the ability to deal with poverty through integration, a safety net to handle and make use of change wisely, and a strong role in the country's development.

2. Objectives and Targets

2.1 Objectives

(1) To strengthen community capacity and community networking by means of a systematic learning process and knowledge management that develop into community development plans for development and problem-solving in communities on the basis of self-reliance as well as interdependence in the local communities.

(2) To develop community economy and quality of life based on community strengths and balanced utilization of economic capital, social capital, and natural resource capital for safety net development, expense reduction, income creation, and an integrated way of solving poverty.

(3) To develop the capacity of communities to coexist peacefully with the ecology for mutual benefits, as well as conserve, revitalize, and make use of natural resources and environment sustainably, which will bring about happy and restorative society.

2.2 Targets

Qualitative targets

There will be pleasant and peaceful communities consisting of activities that improve quality of life and social welfare, food security, balanced living

based on a natural resource base and good cultural practice in the communities, good governance, self-reliance ability, a safety net against changes in the Thai context amid globalization, all of which will lead to the decrease of poverty.

Quantitative targets

Each community will have participatory community plans which local administrative organizations can use in budget allocation for local development and in extending the community's opportunities for capital access with community participation in the decision-making process.

3. Development Approaches

3.1 To manage strong communities by promoting collective learning and collective thinking and implementation; strengthening existing aggregated groups with an emphasis on the readiness of the communities in relation to individual, household, community, and national livelihood in which moderation and subsistence economy are primarily brought into consideration before connecting to the communities and the outside world; organizing systematic knowledge management process; and developing learning networks both inside and outside each community. All of those can be achieved as follows.

(1) Stimulate community members to come together so as to carry out various forms of activities, both formal and informal, which suit each community space and its common interest for **benefits of the communities**; strengthen the capacity of existing community groups for better development by continuously arranging public spaces for community activities; publicize useful information through personal media, educational media, local media, and national media; and adjust legal mechanisms, rules and regulations, and financial measures to boost participation from all sectors in creating strong communities.

(2) Organize comprehensive knowledge management and learning process of communities as follows.

(2.1) Develop a systematic and up-to-date community database in each community, both household databases and a database of various community

capacities such as the status of different groups, community activities, economic capital, natural resource capital, local wisdom capital, local scholars, community natural leaders, the search for local history and culture, and so on; making capital mapping to which community members can have convenient access and utilization as a basis for management of community natural resources and for identification of development options fitting to the community's way of life.

(2.2) Organize continuous collaborative learning in communities, allowing members to participate in the thinking, formulating, and undertaking of development approaches and activities with an emphasis on self-reliance through the communities' natural resources, wisdom, way of life, culture, and local environment capacities, by analyzing available community data to uncover problems, causes, and solutions and implement the solutions; installing networks of study visits for knowledge exchange, and make use of the knowledge for benefits of the communities through capital sources in each community, such as a people bank, credit union cooperatives and various village and community funds. Moreover, develop community needs into community plans that are related with local development plans, provincial strategic plans, and any other plans seen as suitable.

(2.3) Support community scholars, leaders, and gurus to pass on local knowledge and local wisdom through learning and knowledge management in communities by combining biodiversity and cultural diversity with real-life living, while additionally searching for new strong generations of natural leaders with morality, ethics, perseverance, and public consciousness to initiate and increase community learning activities widely and sustainably.

(2.4) Support knowledge management and research to create new knowledge that corresponds to capital diversity in communities, along with reviving folk knowledge by encouraging local researchers and researchers from educational institutions to conduct participatory action research with a proper integration of local wisdom and technology, for instance, integrated farming and folk handicraft through systematic collection of knowledge making it available to the communities and improving on it for the benefits of self-reliance and interdependence among community members.

(3) Prepare communities well to enable them to handle potential changes effectively by strengthening family security, providing social services to communities, cultivating good values, installing an interdependence system among members of the same community as well as those from different communities based on religion and community culture, offering human rights protections, and watching out for disasters and lending assistance in time of calamities through the following.

(3.1) Strengthen security, good relations, and ethical strength in families by continuously organizing interactive activities; employing community media as well as public media to disseminate all kinds of information useful to living, for instance, knowledge on nutrition, advice on married life and good parenting, ways to obtain government services, prices of agricultural produces, marketing channels, and so on; cultivating the value of a warm family through male and female roles; and carrying out activities that bring together the role of the family, educational institutions, and religious institutions regularly.

(3.2) Improve opportunities and environment conditions to support education and life-long learning, both in the forms of formal and non-formal education, making use of various learning sources in each community such as the community learning centers, demonstration centers established by government organizations, folk museums, etc., allowing community members to regularly have access to external learning sources full of beneficial information and technological knowledge cheaply, for instance, distance learning via satellite, constructive radio and television programs, the community internet, printing media, and others.

(3.3) Reinforce secure living among community members by providing life insurance, social welfare, food security, health and dwelling security, consumer protection, and human rights security as follows.

1) Foster community funding for various forms of savings such as contractual savings, saving cooperatives, one-baht-a-day savings, etc. for use as a budget source in career development and basic social welfare for community members; promoting a saving discipline; and nurture other forms of people's savings so as to decrease expenses and increase incomes for their career and

living, such as savings of abundance in soil, water, forests, plants, vegetables, fruits, and animals, etc.

2) Build healthy civil society networks to make use of biodiversity and local wisdom diversity to strengthen food security by conducting integrated farming for sufficient consumption all year round, replacing chemical substances with herbs and local wisdom for food safety, and supporting the roles of communities in health promotion and health observation to guard against emerging and re-emerging diseases and create a healthy and pollution-free environment.

3) Improve service quality and prepare communities and local administrative organizations to be capable of providing basic social services effectively according to the needs of people at every age and from every community lifestyle, for example, by establishing child care centers which correspond to the way of life in communities, while also promoting the roles of father and mother; providing care services for elders by the communities; monitoring human rights and community rights; lending assistance to children, women, elders, the disabled, the underprivileged who have been taken advantage of; and propelling holistic community development processes aiming at clean, peaceful, convenient, safe and disciplined communities.

4) Increase the capacity of communities and local administrative organizations to coordinate with external organizations to handle community risks such as the impact from free trade or huge government investment, international crimes caused by free population movement especially human trafficking, drugs, and money laundering, along with providing comprehensive and effective relief systems in times of natural catastrophes, low prices of agricultural products, and emerging and re-emerging diseases.

5) Encourage local administrative organizations, communities, educational institutions, and religious institutions to collectively participate in carrying on good traditions of the communities; revitalizing the value of collective work through such traditions as *long khaek*, the tradition in which community members offer their labor for help in activities like rice-farming, house construction, etc., and *suep chata lamnam*, the tradition of extending the life of waterways; practicing dharma and maintaining religion; lending assistance and

support to those in need, especially the poor, as if they were family members; being alert for risky behaviors of the youth; nurturing understanding of and respect for cultural and ethnic diversities; campaigning for public consciousness to foster good citizenship, public responsibilities, integrity, and pride in their origin and hometown among community members and to encourage them to be community volunteers.

3.2 To build secure community economies through a balanced integrated production process on the basis of the capacity and strength of each community with emphases on production for sufficient consumption within the community, cooperation between communities and private enterprises in investment that creates career and income and fairly allocates benefits to the communities, and promotion of women's roles in propelling community economies which can lead to the elimination of poverty. All of those can be achieved by the following approaches.

(1) Support communities to work as cooperatives and enterprise groups such as natural dyeing cooperatives and organic fertilizer groups; develop a networking system to carry out agricultural activities as well as various other activities; establish processing and production of agricultural products based on community natural resources for sufficient consumption within the community; create an exchange system of surpluses between communities or a network to enable sale of the surpluses to external markets based on fair and acceptable agreement on mutual benefits.

(2) Campaign for and promote the production and service sectors in machine or activity movement to local or remote areas in order to create jobs and boost employment there and reduce labor movement to big cities and the capital city allowing for complete and warm families, along with carrying on local culture and tradition, continually searching for community leaders, and simultaneously considering possible impacts on the environment and the people's traditional way of living.

(3) Promote venture capital between community organization networks and local administrative organizations, government bodies, or state enterprises on the basis of transparency using the resource base available in the community area, for instance, the founding of a biodiesel factory, organic agriculture, crafts, health and spa service, ecological and long-stay tourism, and so on; also promote trade and

investment between the community economy and medium or large enterprises; build a comprehensive collaborative business network for production by reviewing theories, regulations, and laws in a way that facilitates venture capital; and nurtures a good administrative system.

(4) Foster an integration of Thai local wisdom and local culture to create value of products and services with high marketing potential like health food, handicrafts, health service, tourism service, and so on by strongly preserving the local value and identity in commercial use of the local wisdom and culture.

(5) Develop a business incubator system in each community, along with producing entrepreneurs by fostering knowledge development in management, marketing, knowledge necessary for the production of products with local identity, product standard improvement, product branding, intellectual property management, and career skill development of various groups according to career diversity in the community, including that of the disabled, to reduce economic risks.

3.3 To enhance the capacity of communities to coexist peacefully with natural resources and the environment for mutual benefits by promoting community rights and community participation process in reserving, conserving, revitalizing, developing, utilizing, and improving the management efficiency of natural resources and the environment in the communities as follows.

(1) Raise awareness for the value of natural resources and the environment in a community's way of life, along with decentralizing to enable the communities with good potential to work together with the government to manage local natural resources and conserve, revitalize, and develop natural resources and the environment effectively.

(2) Support community mechanisms and networks in the fair management and protection of natural resources and the environment relating to the production to sustain community life, for instance, in the utilization of biodiversity in communities for food security and as healing herbs without creating a negative impact on the natural resource base; in the management of community forests to serve as a food source, coastal fishery management, integrated watershed management, the

management of the environment in urban communities (such as of waste and polluted water), and in the management of compensation systems for the destruction of community natural resources by activities carried out outside the communities.

(3) Increase the capacity and knowledge of local administrative organizations in managing natural resources and the environment, so they, as the main partner, can join forces with communities and other related partners in the conservation, revitalization, and management of natural resources and environment, for example, in forest and conservation area management, watershed management, mangrove forest management and revival, management of eco-tourism in communities, etc. with fair use and distribution of benefits.

4. Roles of Development Partners

In order to create strong, livable, and happy communities with networks between communities that lead to national development and with the capacity to sustainably rely on themselves and see through changes, developed partners must take up the following roles.

4.1 The public sector

(1) The central administration

(1.1) Conduct administration by integrating plans of every level systematically from the national development plan to government strategic plan, operation plan, provincial cluster strategies, local plans, community plans, along with integrating activities under national agendas including campaigns to fight off drugs and poverty problems, strengthen Thailand, solve the Avian flu problem, and so on, by employing a community mechanism as the basis for operation.

(1.2) Coordinate and facilitate collective participation of partners including national partners, provincial partners, Poverty Fighting Centers, Drugs Suppression Centers, local administrative organizations, private development organizations, and community scholars and leaders in undertaking activities for communities, together with providing support in the form of financial and academic resources.

(1.3) Improve rules and regulations, laws, financial and fiscal tools, funding outside the regular budget, and decrease imports of agricultural chemical substances, reduce taxes, or provide expense compensation for private enterprises that create jobs in communities, and invest venture capital in communities.

(1.4) Implement decentralization to enable communities to manage their own basic services, along with strengthening the operational capacity of local administrative organizations in all aspects including finance, the four requisites (which are food, clothing, dwelling, and medicine), maintenance of natural resources and environment, and rights protection of people and communities, and develop economic and social infrastructure in the areas beyond the capacity of the local organizations.

(1.5) Change attitudes and worldviews of government officials towards holistic problem-solving process and community development allowing them to help strengthen the capacity of communities, facilitate people's self-operation, create an understanding of the practices in the Sufficiency Economy philosophy, and increase the roles of communities to participate in activities for their communities.

(1.6) Build an integrated social watch system from the community level to provincial, national, and international levels, particularly watch for international crimes caused by free population movement including human trafficking, drugs, and money laundering, which have an impact on communities along the country's borders.

(2) The local administration

(2.1) Bring community plans into the consideration process of budget allocation for local development and implement the plans into concrete operations by means of resource mobilization from areas under the responsibility of the government sector, private enterprises, non-governmental organizations, and communities to create participation and ownership which lead to community development by the communities and for the communities.

(2.2) Provide basic economic and social services to communities extensively and effectively whereby community members can equally have access to capital sources, education, public health, and social protection.

(2.3) Foster collaboration among development partners at every level from community level to provincial and provincial cluster level, regional level, and national level in carrying out development activities widely useful to communities in many dimensions, along with encouraging the setting up of social measures for transparency and fairness of services as well as measures to protect those who do good for communities and society.

(2.4) Develop systematic and up-to date local databases with household information as well as information on various capacities of communities such as clustering and community activities, economic capital, natural resource capital, capitals of local wisdom, scholars, and natural leaders; promote knowledge management in the communities; coordinate with educational institutions in the areas; and allow civil society sector to participate in the development process and be the leader in knowledge management.

(2.5) Develop a monitoring system of communities and identify indicators of community strengths in various dimensions such as community happiness indicators, both internal happiness like complete understanding of religious principles and pride in communities and external happiness such as having warm families, enough of the four requisites, and life security.

4.2 The private sector

(1) Support research and development so as to create knowledge and improve local wisdom; collaborate with communities to conduct research; participate with the communities to improve on local wisdom; and coordinate and generate balance between the economic sector and communities.

(2) Promote resources and experts; create jobs in communities; take responsibility of communities around the enterprise; initiate volunteer activities for society; manufacture products safe to consumers; and refrain from destroying the environment and decent ways of life of the communities.

(3) Nurture community enterprises systematically, create a community enterprise incubator program, and encourage new entrepreneurs; participate in manufacturing community products from natural resource diversity and community

capacity; and support such production in the forms of investment capital, marketing opportunities, and knowledge with fair benefit distribution.

4.3 Communities (people/civil society)

(1) Gather together to collectively think, make, and develop community databases; identify community development approaches and activities on the basis of self-reliance by taking the capacities of natural resources, wisdom, ways of life, culture, and environment of local areas into consideration; analyze problems, causes, and solutions employing the community database and reduce those into real practices based on knowledge and capacity of the community; undertake study visits for knowledge exchange and networking; and create participatory community plans.

(2) Initiate constructive community activities and be the leader in carrying out the activities, particularly activities that combine the roles of family, religious institutions, schools, and local administrative organizations; create protection networks; establish a social welfare system in communities; provide assistance to all types of the underprivileged; and maintain natural resources and the environment.

(3) Develop social measures in community monitoring services; nurturing good governance in communities, and providing protection for those who bring benefits to the communities or the society.

4.4 Other social institutions

(1) Non-governmental organizations

(1.1) Take up a role in knowledge management and passing on new knowledge to communities and be mentors who help strengthen participation of communities in conservation and management.

(1.2) Be supplement units that can rapidly and efficiently assist communities in the areas they lack or have pressing problems, especially providing care and aid to the underprivileged, children, women, and elders.

(2) Educational institutions/academics

(2.1) Collaborate with communities to conduct research in which community researchers are the main researchers, extract knowledge from local scholars and turn it into explicit tangible knowledge, and become an information source and consultant of communities.

(2.2) Build the capacity of communities to enable them to manage knowledge of their own, create a learning process for communities; and depend on new technology to improve on local wisdom which can be utilized to increase economic value bringing in income to communities.

(2.3) Stimulate, disseminate, and provide new information and knowledge indispensable for living in the modern age, such as foreign languages, impact of global warming on ecology and livelihood, and dangers of cyber-reliance, and so on.

(3) Religious institutions

(3.1) Cultivate the right attitudes and dharma practices in living habits to create a safety net and encourage religious personnel to be a good example of sufficient living.

(3.2) Collaborate with educational institutions, communities, and the family in carrying out activities for public benefits as well as cultivating good value and public consciousness and continuing traditions.

(3.3) Be spiritual centers that bring people together for family and community development.

(4) Mass media

(4.1) Be the center for flow of information useful for communities' adaptation; circulate accurate information concerning impacts of free trade and consumer protection in terms of both products and services around communities; and create an understanding and raise awareness on rights to which people and communities are entitled.

(4.2) Cultivate consciousness regarding morality, ethics, value in love for the hometown and warm families, and moderate living behavior based on good culture in children, juveniles and Thai society, along with maintaining and revitalizing natural resources and the environment.

(4.3) Include constructive information for society in all types of media to build a safety net for children and families; and allow children to participate in the production of constructive media, such as media reflecting the maintenance of natural resources and environment, social observation, knowledge dissemination, and so on.

(4.4) Make use of all kinds of community media to give knowledge to and create good value for communities, for instance, information about dangerous products, conservation of natural resources and environment, activity creation for families, consciousness stimulation for love of the hometown, admiration for good people, and building discipline in people and communities, etc.

Chapter 4

Strategies to Reform the Structure of the Economy for Balance and Sustainability

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Strategies to Reform the Structure of the Economy for Balance and Sustainability

1. Introduction

Due to challenges Thailand will have to face in the future as well as remaining weaknesses in the economic structure, sustainable and stable development of the country's economy in the long run will require rapid reform of the structure of the economy for balance and sustainability. This needs to be in line with the concept of "moderation" which aims at using "reasonableness" to consider cautiously relevant factors, while taking into account all potential impacts and developing from a "knowledge base" obtained externally as well as from the local wisdom accumulated within the country for optimal and wise use in the face of globalization. This process should generate balanced expansion in terms of both quantity and quality based on "interdependence" rather than competition. To achieve all that, it is crucial to urgently reform the structure of production to expand and strengthen the production base of a domestic economy that comes from small, medium, and community enterprises. This can be done by exploiting cluster process. Moreover, upstream or downstream stages of production must be well connected with the international economy sector to allow for better competitiveness. Simultaneously, there must be value creation of products and services of the country on the basis of systematic development and knowledge management so that "knowledge and innovation bases" become an integral component in the country's manufacturing of products and services. That, in turn, will enable the production in all areas to utilize factors for production efficiently, create designs for niche markets, create the country's own brand that is reputable and acceptable in the market, and make products and services of international standard and quality.

The reform of the production structure must be based on the reasonableness of careful analysis and understanding of the country's status, not causing destruction to

natural resources and environment as in the past but exploiting the country's production strengths to build a stronger production base giving more advantages to the country. In so doing, the country's agricultural sector will have to develop into a safe and sufficient food base while the industrial sector must move towards a higher level of the value chain; and the service sector depend on the country's strengths in the diversity of natural resources, culture, and ways of life as guidelines in development, as well as expand its base as a result of the advances of services in education, public health, communication and telecommunications, and financial service. In addition, there must be the support of networking among all branches of production that will elevate the value chain of both production system and service system by making use of technological advances appropriately so that the country's production and consumption use energy and other natural resources less and in an environmentally friendly manner. The support can be drawn from the following: (1) more efficiency in the development of infrastructure and logistics to reduce production cost and improve people's standards of living; (2) reform of law and rules and regulations; (3) reform of tax structure to correspond to the changing economic structure and support competitiveness, along with using international trade policy and support of investment that will generate a strong economic base; and (4) collaboration with neighborhood countries for assistance in the reform of the production structure, the increase in competitiveness, and the social development of the country.

In the meantime, it is essential to create an "economic safety net" to be prepared for changes and external threats. In particular, free trade as well as the mobilization of an investment fund and a "risk management" mechanism must be operated properly in product and service markets, financial market, labor market, and other markets of factors of production so as to reduce the possible impacts of speculation and national and international fluctuations. To do that, many surrounding factors must be effectively developed both in the improvement of effectiveness of operational organizations and in the development of good knowledge and management as tools to create "balance" in efficiency, quality and quantity in the production process as well as consuming behavior. The setting up of "safety net and risk insurance systems" encompasses the following: an increase in the efficiency of energy usage and development of alternative energy sources to reduce the vulnerability of Thai economic energy, appropriate management of macro-economy,

promotion of adequate savings as the country's funding sources and for a decrease in dependency on international funds especially in the forms of loans and short-term fund, and reduction of uncontrollably extravagant consumer behavior. All that will create a safety net against risks from running circulation deficit, offer insurance to people at a time when the country is becoming an aging society, and encourage every part of the society to lead their lives in "moderation" having appropriate expenses and investment on the basis of careful analysis of potential risks.

However, such reform of the structure of the economy must be carried out along with promoting "fair competition" based on effective marketing mechanisms which reflects costs and real values, enforcing law and regulations to protect against business monopoly and investment and to effectively maintain the standards of products and services, establishing a mechanism of fair benefit distribution and appropriate consumer protection such as effective enforcement of consumer protection law, developing the system of micro-finance to create channels for village and community funding and savings, reforming tax structure so that it is fair for everyone, and adopting decentralization.

Therefore, the reform of the structure of the economy for balance and sustainability under the Tenth National Economic and Social Development Plan will be undertaken based on three main approaches: (1) to reform the production structure to increase productivity and enhance the value of products and services of Thailand on the basis of knowledge and Thai-ness; (2) to build a safety net and a risk management system for product and service markets, financial market, factor of production market, and a fiscal system; and (3) to promote fair competition and fair distribution of the benefits of development.

2. Objectives and Targets

2.1 Objectives

(1) To reform the production structure towards value creation of products and services on the basis of knowledge and innovation, along with promoting networking among different areas of production for higher production value.

(2) To build a safety net as well as a risk management system for various sectors including finance, energy, factor of production market, labor market, and investment market.

(3) To create a fair system of business competition and investment by considering benefits of the country, along with establishing a mechanism to fairly distribute benefits from development to people in all sectors.

2.2 Targets

The economic development set out in the Tenth Plan to reform the structure of the economy for balance and sustainability has the following targets.

(1) Production: Total productivity will be higher, to reach an average of no less than 3 per cent per annum; Thailand's competitiveness will be improved with an increase in exports in the global market; there will be development in a way that will increase efficiency in the use of production factors, capital, and energy which will decrease dependency on imports; investment in research and development is targeted at 0.5 per cent of GDP; and logistic costs will be decreased from 16 per cent of GDP in 2005 to 13 per cent within 2011.

In terms of the economic structure, there will be more balance between national economy and international economy in which the proportion of the domestic demand to the international trade, calculated from the total value of exports and imports of products and services, will increase steadily from 71 per cent in 2005 to 75 per cent in 2011.

As far as each area of the country's production is concerned, production bases from the agricultural sector, the processed agricultural sector, and the service sector including tourism service, educational service, public health service, and financial service will be bigger with more variety. As for the industrial sector, there will be more new industrial clusters and industries with stronger potential that can be used to create market channels with the new industrial clusters. The proportion of the agricultural production sector as well as agro-industry will go up from 12.4 per cent of GDP in 2005 to 15 per cent by 2011.

(2) The economic system will be improved and become more stable: general inflation rate will be at 3.0-3.5 per cent per annum; unemployment rate will not exceed 2 per cent of labor force, financial administration will be more effective with a decrease in public debt at no more than 50 per cent of GDP; the country's total savings will be at 35 per cent of GDP in 2011 as there will be an increase from household savings, private businesses, and the government on account of systematic promotion of savings and an increase in income base which will lower the country's risk of current account deficit, set at no more than 2 per cent of GDP per annum; energy consumption will be more effective whereby energy consumption elasticity under the Tenth Plan is targeted at 1:1, lower than the average of 1.4:1 set in the Ninth National Economic and Social Development Plan and consumption of renewable energy will be at 8.0 per cent; the proportion of energy consumption to GDP will be decreased, particularly through the reduction of gasoline in transportation, from an overall present energy consumption of 38 per cent to 30 per cent.

(3) Community enterprises as well as small and medium enterprises will be strengthened and expanded: there will be more new entrepreneurs and products and services provided by small and medium enterprises, targeted at 40 per cent of GDP in the Tenth Plan, an increase from 39.4 per cent in 2005. Equally, larger micro-economy, more effective marketing mechanism and better operation of the future market of agricultural products, management of agricultural land that will enhance stability in prices of agricultural produces, social investment by the government, more efficient labor and proper labor protection will all contribute to the improvement of income distribution with the first 20 per cent of those with the highest income accounting for no more than 10 times of those 20 per cent with the lowest income.

3. Development Approaches

To reform the structure of the economy for balance and sustainability, emphases will be given on expanding domestic economy to enhance productivity almost at the same level as that of the international economy, developing a safety net to guard against risks inflicted by globalization, building a mechanism of benefit distribution to the majority of people, and fostering fair competition, based on the following approaches: (1) reform of the production structure to strengthen the

production and service sectors on the basis of increasing values of products and services through knowledge and innovation, good management, development of infrastructure and logistic systems, organizational reform, amendment of law and regulations, and development of standard system in various aspects to support the reform of the production structure; (2) efficient building of safety net and risk management systems of the economy by managing overall economy efficiently, increasing the efficiency of energy consumption and development of alternative energy, and systematically fostering savings; and (3) promotion of fair competition and production of tools and mechanism of benefit distribution to allow the reform of the economic structure to solve the poverty problem and create better income distribution. The approaches have the following details.

3.1 To reform the production structure to increase productivity and enhance the value of products and services on the basis of knowledge and Thai-ness by using cluster development approach and supply chains, as well as community networking based on modern knowledge, local wisdom and Thai culture, and biodiversity to create products that have high quality and value and brands that command market acceptance; cultivating a good investment atmosphere to attract foreign investment to support the reform of the country's economic structure especially technological transmission and improvement; and nurturing overseas investment to propel the strategies of the economic structure reform.

(1) Structural reform of the agricultural sector will enable Thailand to have food security and safety. Thailand will become one of the world's leading food producers and a major producer of fiber and materials that support areas of production other than food. Moreover, not only will it enhance the production of new types of agricultural products such as renewable energy, products manufactured by making use of biodiversity, and products that respond to changing consumers' tastes, the economic sector will also be a stable income base for agriculturists. All of those can be achieved as follows.

(1.1) Encourage research and development of food products to establish the country as one of the world's major producers of processed food with standards and safety to build confidence among consumers in the long run. Targeted products include rice, prawns, young fowls, fruit, and vegetables.

(1.2) Promote the production and value creation of non-food products with new market opportunities such as herbs and fiber crops, along with plants that can be used to produce renewable energy like oil palm, tapioca, and sugar cane.

(1.3) Support the utilization of the knowledge of local wisdom and Thai culture as well as biodiversity to create product value to generate a variety of products with high value, develop postharvest technology, and maintain the quality of agricultural products.

(1.4) Establish agriculturalist institutions and develop community plans and community enterprises for networking and mechanism in value creation throughout the value chain between the community level and the national level so as to increase products' strengths and competitiveness, especially agricultural products, with an opportunity from free trade agreements.

(1.5) Foster sustainable agriculture based on the philosophy of Sufficiency Economy, such as integrated farming, new theory agriculture, and organic farming for food security and variety in the household, which will reduce price risk and increase product value. That can be done through an integration of the knowledge sources available in each community to allow knowledge exchange and transfer among agriculturists to enable them to adjust their production system and expand cultivated lands for more sustainable agriculture.

(1.6) Promote public relations and branding of agricultural products as well as processed agricultural products to be well-known and recognized by consumers both domestically and internationally in order to expand markets for value added agricultural products.

(1.7) Set up a system of agricultural land use and water sources that correspond to and suit the capacity of each area so as to increase productivity and reserve irrigable areas for continued production in the agricultural sector.

(2) Structural reform of the industrial sector will turn the country's industry into a production base both at the regional level and the global level for

industries with high capacity. It will also serve as a foundation for new wave industries with good potential and trend on the basis of value creation through knowledge and innovation. Structural reform of the industrial sector can be done as follows.

(2.1) Make an investment and development for connection of the value chain, along with propelling new wave industries with great capacities such as the automotive industry, petrochemical industry, rubber-based industry, fashion industry, stationery and office supply industry, home industry, circuit board and hard disk drive industries, radio and television industries, and new wave industries which are bio-based and enhance future capacity of the country like bio-energy industry, and bio-based material industry, nutra-ceutical industry.

(2.2) Create a road map of patent management to enable entrepreneurs to improve on the production of targeted products in new wave industries as well as in industries with good potential and competitiveness.

(2.3) Initiate an integrated applied research system which aims at creating innovation both in the forms of products and production process by increasing technological capacity from acquisition of and access to technology from abroad, creating intra-organizational and inter-organizational networking, and utilizing the acquired technology or local wisdom to improve research and development of technology to the higher level in order to create uniqueness and distinctiveness.

(2.4) Encourage specialized institutions to take an obvious role and responsibility in the development of a certain industry or other related industrial groups by means of cluster approach and provide infrastructure and other facility systems such as knowledge exchange center, product testing center, accreditation center, and so on.

(2.5) Produce or enhance the making of entrepreneurs who facilitate innovation through a business incubator system that is in line with other supporting systems including capital sources and knowledge management process that employs information technology.

(2.6) Improve personnel aptness and expertise by encouraging educational institutions and other institutions to offer both formal human resources development and training that are in line with the demand to elevate each industry, along with raising awareness and developing skills to correspond to industrial habits and generating and developing personnel with great demand in targeted industries, particularly those in fashion, automotive, and mould and die industries.

(2.7) Develop industrial clusters for industries with great capacity and market opportunities by supporting business networking in industries with potential that still require the strengthening of industrial structure, particularly industrial and spatial cluster development in the areas of food, textile and garments, tourism service, etc., along with propelling cluster development agents and monitoring the cluster development in productions and services under strategies in the reform of the industrial structure.

(3) Structural reform of the service sector will enable the service sector to become the country's main source of income creation by developing Thai tourism to be a hub for natural and cultural tourism in the region on the basis of striking features and diversities of natural resources, cultures, and Thai-ness; improving competitiveness of the service industry to expand the production base and marketing of the service industry regionally based on distinctiveness and specialized expertise of important services such as education service, health care and spa service business, wholesale and retail business, financial service business, information technology service business, construction business, and Thai film business.

(3.1) Revitalize and develop natural and historical tourist attractions, as well as historical sites in terms of area-based groups and strengthen Thai identities by preserving local culture, way of life, and wisdom to create new tourist products for Thai tourism and become the tourist destination of the global tourism industry.

(3.2) Promote investment and development in service industries related to tourism to support tourists with specific interests and create value for such businesses as the health service industry, convention and exhibition center business, long stay business, shopping, OTOP products, man-made attractions, and so on.

(3.3) Improve quality and standard of businesses and services with capacity so that they are trustworthy and acceptable and meet the needs of the global market and support the policy of free trade in the service sector on the basis of cultural distinctiveness and Thai-ness, in particular the businesses that are capable of attracting foreign customers to domestic services including tourism industry, educational service industry, health industry and Thai film industry.

(3.4) Strengthen tourism market and customer groups of service industry continually so as to maintain old market base and expand new quality markets like the Russian market and the markets of former Russian colonies, Middle East market, and niche tourist market through collaborative networking of the government and the private sector for collective marketing strategies.

(3.5) Develop supporting factors facilitating the operation of tourism business which include building a transportation network to connect and allow access to tourist attractions, developing life and property safety standards, providing infrastructure, amending law and regulations, developing personnel to meet the demand of the business, and strengthening the business capacity of entrepreneurs as well as the management capacity of local administrative organizations.

(3.6) Establish a collaborative network among the government, private sector, and local community organizations to preserve and develop natural, historical, and cultural tourist attractions, along with nurturing the aggregation of community members in various manners in order to integrate people's careers with tourism activities to create jobs and income for the people.

(4) Development of factors supporting the reform of production structure

(4.1) Manage bodies of knowledge systematically in the accumulation, creation, dissemination, and application of the knowledge and technology including the commercial use of the knowledge and appropriate protection of intellectual property and patents for the economic and social reform towards a knowledge based economy and society as follows.

1) Develop manpower in science and technology both quantitatively and qualitatively to support new technology and to create a knowledge based society at the levels of researchers, school students, university students, teachers, and professors.

2) Develop and produce bodies of knowledge and technology by nurturing the development of the process of acquiring knowledge and technology as well as research and development according to the potential of Thais and integrating all of the acquired knowledge to the knowledge of local wisdom.

3) Foster research, development, and innovation, and push towards their commercial use, along with improving on local wisdom for economic value creation, effectively manage intellectual property by setting up public-private funds for research and development in targeted industries, and establishing joint venture companies to develop technology and technological incubator units, rapidly create new innovations, and found a model center for innovation expansion to foster medium and large enterprises.

4) Develop infrastructure in science, technology, research, and innovation to support the reforms of the production and social structure as follows.

- Urgently develop and improve centers of excellence specialized in key technology in universities and research units.

- Build up the intellectual property management system to nurture the commercial use of research and development results by founding an Office for Intellectual Property Management aimed at providing protection for intellectual property to universities, managing benefit distribution and creating collaboration between universities and the industrial sector for further utilization of the knowledge and technology industrially.

(4.2) Develop infrastructure and logistics services to support the reform of production structure by developing infrastructure in terms of

both quantity and quality to support the competitiveness of the country's production sector, business sector, and service sector as follows.

1) Develop infrastructure in transportation and logistics management and a telecommunication system that are modern and effective as follows.

- Set up an integrated network of logistics domestically and connect it with international networks by developing various forms of multimodal transportation, feeder, and commodity distribution centers in strategic production bases throughout the country, as well as improving efficiency in trade facilitation system.

- Complete efficiency in the management of production logistics networking for the whole supply chain and enhance logistics service business, personnel, and mechanisms that propel the strategies.

- Foster the modes and methods of transportation that conserve energy, particularly track, water, and pipeline transportations, along with adjusting energy consumption in the transport sector towards a low-cost mode, choosing modern modes of transportation, and using technology in transportation to reduce transportation costs both at the business level and the international level.

- Perfect the mass transportation network in Bangkok and its municipality for convenience, quickness, safety, time saving, and a decrease in energy consumption.

- Develop telecommunication networks and services that are state-of-the-art and effective by taking into account worthiness in investment and aiming at free service competition to support the production, business, and the service sector as well as support the upcoming e-government system developed to provide services to people and the business sector.

2) Manage infrastructure with transparency using resources available economically, worthily, and effectively by engaging all stakeholders in the management as follows.

- Establish participation process among all stakeholders in the development of infrastructure systematically for collaboration, acceptance, and transparency in the operations of the project.

- Encourage a thorough study into the appropriateness of projects as well as possible impacts on environment, community and society, and people's health to make certain that it is worthwhile to invest in the projects, along with laying out clear measures to reduce environmental and social impacts by insisting on the screening process of the projects and strictly enforcing laws regarding environment.

- Boost investment and competition in the private sector to provide more infrastructure services without investment redundancy by amending laws and regulations on the basis of transparency to be more flexible and pressing on with the founding of organizations to be in charge of protecting consumers, overseas investment, and fair competition.

- Promote supply management and create consciousness to collectively use energy economically, worthily, and effectively.

(4.3) Undertake international trade policy, nurture investment, and initiate collaboration with neighboring countries for support of the production structure reform, increase of competitiveness, and social development of the country as follows.

- 1) Build a mechanism to handle possible impacts and take advantages of the ratification under international treaties and free trade agreement in businesses, investment, and services to enable business or business proprietors affected by the free trade to improve their competitiveness or change their business operations and relieve social impacts that may arise during the processes.

- 2) Expand export markets by means of free trade with the counties in South America, the Middle East, and Africa that have trade channels with Thailand and strengthen significant participations of the public sector, the private

sector, academics, the general public, and particularly mass media in every step of free trade negotiations for mutual benefits of knowledge exchange.

3) Press on the reform of international laws and regulations and develop personnel specialized in international laws to be well prepared for free trade and conform to cooperation framework, along with encouraging the private sector to benefit the most from the free trade already negotiated by developing basic logistics infrastructure, reforming law and regulations, forming public-private trade delegation, and developing human resources.

4) Nurture collaborations of the Economic Community, Social Community, and Security Community among countries in the region to readily progress into the East Asian Community by extending the ASEAN and ASEAN +3 cooperation and drive towards the implementation of the Asian bond market for use as a last reserve.

5) Strengthen cooperation with other countries under the cooperative frameworks of GMS, ACMECS, IMT-GT, and BIMSTEC by developing a network of infrastructure connecting economic corridors and amending domestic and international law to facilitate cross-border trades, along with promoting tourism, preventing environmental and social impacts, and developing human resources.

6) Develop new entrepreneurs and encourage Thai entrepreneurs with good capacity to make a variety of investments in international markets and negotiate with business allies concerning the amendment of laws and regulations with respect to investment in those countries, such as labor law and service provision laws as a means to promote Thai investment.

7) Support and strengthen cooperation with other countries to solve shared problems like contagious diseases, natural disasters, energy shortage, security problems, transnational crimes, and money laundering, as well as cross-border problems including labor movement, drugs, and shared and sustainable consumption of natural resources and environment along key river basins like the Mekong river basin.

8) Create international acceptance and confidence by nurturing the country's roles in the world, improving the country's standards in various aspects including labor, environment, and good governance, and developing the country according to the Millennium Development Goals (MDGs).

3.2 To build resilience into the economy will require three main approaches. The national economy will be managed efficiently to maintain stability while support will be provided for the reform of the production structure by mobilizing capital to efficient sectors of production; savings will be promoted systematically as a means to mobilize capital and as security for people's lives; and efficiency of energy usage will increase while sources of alternative energy will be developed to reduce dependence on energy imports and to save on foreign exchange.

(1) Effective management of the national economy encompasses a monetary development approach and financial development approach, which have the following details.

(1.1) A monetary development approach to maintain economic stability, promote savings and support appropriate capital mobilization to the real economic sector, and foster the reform of production structure, bringing progress and fairness to every sector of the society, as follows.

1) Operate monetary policy independently and flexibly with transparency with an aim at maintaining economic stability by carrying out monetary policy that suits the dynamism of the economic structure and foundation, making necessary changes in goals and operational processes of the monetary policy, setting up measures and action plans in advance to guard against crises or to reduce impacts caused by various financial crises as well as to enable the Bank of Thailand to carry out monetary policy more independently without political interference by announcing policy statements to the public and stipulating scope of responsibility.

2) Manage the monetary sector in a way that it is stable and competitive and can serve as a mechanism to efficiently support economic expansion, savings, and investment by doing the following.

- Reform the financial institution system according to the financial institution development plan and increase efficiency and transparency in overseeing financial institutions to correspond with financial environment and the constantly changing structure of the financial institution system by nurturing collaboration between overseeing units to exchange information and design management principles with parallel standards to support the overlapping trend among different types of financial institutions for the stability of the financial system.

- Adopt the international standard level of efficiency in the management of financial institutions in the country by pressing on the development of necessary basic legal infrastructure, especially the Act on the Undertaking of Financial Business and Deposit Protection Agency Act, so as to manage the financial institutions efficiently in line with the international standard, which will allow for immediate prevention and problem solving.

- Improve the systems of evaluation and risk management of the financial institutions' assets using the international standard, for instance, Basel II, which will be brought into use to evaluate minimum capital requirements of funds in 2008, with an emphasis on effective law enforcement, along with specifying penalties and awards or motivation.

- Develop and improve financial infrastructure by amending law and regulations and managing capital market to be clear and transparent to support competition and simultaneously protect consumers, which will in turn increase stability of the capital market. In particular, reform income tax structure of investment in stock exchange and in bond electronic exchange so that it is neutral, and promotes business capacity to operate on the basis of corporate governance in line with the international standard adjusted to fit the country's environment.

3) Increase the role of the capital market to be in line with the changing economic structure and the financial sector, having the same international standard as other capital markets and capable of dealing with impacts and making use of capital mobilization freely, as follows.

- Operate according to the capital market development plan to increase demand or investment of capital in the capital market for a deeper and bigger market, along with generating market stability by expanding the investment base in the stock exchange and debt instrument as well as supporting investment through funds, increasing investors in domestic institutions, which will reduce risks from capital mobilization, and continually developing the Asian bond market to boost opportunities in funding for efficient projects.

- Increase supplies or instruments bought or sold in the capital market including equity instruments or debt instruments issued by both public and private sectors as well as other new financial instruments so as to provide more saving and investment options, reduce risks of proprietors and investors, and boost liquidity and market size. To achieve that, it is indispensable to offer knowledge and understanding about each type of financial instrument to investors, issuers of the instruments, and brokers in the market.

- Encourage small and medium enterprises to become registered companies and issue equity instruments and debt instruments as tools for more funding by increasing planning and financial management capacities of the small and medium enterprises, developing and promoting use of venture capital in new businesses with great capacity but offer a long payback period or in businesses that are the target of the policy, nurturing opportunities of being registered in the Market for Alternative Investment (MAI), and encouraging securitization of credits of small and medium enterprises.

(1.2) Fiscal development approach to support economic expansion with stability under fiscal sustainability framework by increasing efficiency in fiscal management with good systems of monitoring and evaluation under worthiness, sustainability, and maintenance of financial discipline. The financial development approach has the following details.

- 1) Create fiscal transparency and develop good risk management system in finance to raise awareness of the 4 types of fiscal risks, which are as follows: (1) risks from the government's lack of understanding of the real fiscal situation; (2) risks from fluctuations of macro-economy; (3) risks from fiscal

instability; and (4) risks from poor fiscal structure and fiscal management organizations.

2) Develop the Consolidated Public Sector Accounts which consists of government fiscal data including extra-budget and extra-budgetary funds, local administrative organizations, and state enterprises so as to understand the real fiscal situation of the public sector, along with establishing an account system which shows contingent liabilities that may turn into fiscal risks.

3) Modify tax structure to be in line with the reform of production structure and the increase of competitiveness in the production sector, for instance, stipulating tax rates in imports of raw materials and finished goods that correspond with the direction of production structure reform and reviewing corporate income tax as well as the structure of tax base to suit changing economic structure, and so on, and manage taxation effectively corresponding to the changing economic structure.

4) Prioritize expenditures with emphasis given on expenses in social development including in education and public health, scientific development, research and development that improve quality of life, supporting reform of production structure and knowledge management for knowledge based development by developing a Medium-Term Expenditure Framework (MTEF) under the framework of stability maintenance at the macro level and the government's spending needs according to development significance. All that will allow fiscal management to be flexible and adjustable which will reduce risks to fiscal status.

5) Manage extra-budgetary expenditure and extra-budgetary funds with increased efficiency and transparency to reduce risks to fiscal status by managing the system of fund and revolving fund provided by the government effectively and nurture transparency in fiscal management to relieve repetitive or unnecessary budget burden.

6) Reform the social insurance system as well as pension system for people's long-term security when Thailand becomes an aging society and to reduce the government's expenses and promote savings.

7) Increase efficiency in the operation of state enterprises with good management and transparent operational report using efficient law enforcement and strengthen service competition from the private sector to make use of natural resources for the optimal welfare for the people. However, privatization must be undertaken by focusing on the following 3 criteria: increase of efficiency in operation, increase in the government's assets, and benefit maintenance for the underprivileged and those with small income to have access to services.

(2) Promotion of savings and increase of options in domestic funding to reduce risks of deficit crisis of current accounts and balance of payments resulting from shortage of savings and inappropriate funding; to enable people to have life insurance from sufficient savings, in particular those approaching the elderly stage; and to help relieve the government's burden by doing the following.

(2.1) Promote the whole system of national savings including household savings, public savings, and private business savings to generate savings sufficient for the country's investment, along with creating secure income base for people as well as nurturing saving behavior to increase household savings.

(2.2) Develop various saving systems including mandatory savings by establishing a National Pension Fund with pension framework covering 13 million people and develop saving funds into the saving system for aging for the informal sector which is comprehensive and covers the whole workforce of the country.

(2.3) Nurture the cooperatives system and develop micro-financial organizations as a saving alternative for grassroots people.

(3) An increase of efficiency in energy consumption and an urge on the use of renewable energy to save foreign currencies from energy imports, reduce production cost and energy-related expenses of the people, and decrease pollution caused by energy usage in people's production and consumption processes as follows.

(3.1) Provide more energy supply sources domestically and internationally, along with finding new energy sources and reserving enough of them

to support people's needs during energy shortage state so as to create long-term energy security in the country.

(3.2) Increase efficiency in energy usage in the transport, industrial and household sectors through motivation as well as forced measure, for example, specifically promoting investment for industries that create high economic value but use a small amount of energy, controlling imports of foreign machinery and equipment with low efficiency in energy savings, and so on; exploit urban planning measures and reforms of transportation structure and logistic systems with emphases on transportation modes that uses little fuel and decrease in transportation of both man and commodity, track and water transportation, cluster development, and comprehensive urbanization.

(3.3) Campaign for participation of all sectors in conserving energy and using various forms of alternative energy including natural gas vehicles (NGV), gasohol, and biodiesel, along with providing advice to the household sector, the private business sector, and the public sector in the process of producing alternative energy and renewable energy, reduction of energy usage, and creating consciousness in energy conservation.

(3.4) Conduct research and development in alternative and renewable energy, study the appropriateness of using new forms of fuel to generate electricity for the future in terms of techniques, commercial worthiness, reduced environmental impacts, and prepare personnel well, helping them to understand reasons and necessities.

3.3 To promote fair competition and fair distribution of the benefits of development through economic management and the creation of tools and mechanisms to protect against monopolies in every market, as well as fostering benefit distribution to all areas to allow economic structure reform to strengthen enterprises, protect consumers, solve the poverty problem, and nurture better income distribution by doing the following.

(1) Promotion of fair competition in the country will enable business entrepreneurs to operate their businesses freely and fairly; prevent

monopolies and all unfair activities by strengthening the law enforcement mechanism in trade competition; and review the investment measure to facilitate business operations of domestic and international investors under fair competition environment.

(2) Extension of infrastructure development to all regions equally and fairly will allow people to have thorough and sufficient access to services according to the demands in the area through systematic participation of all stakeholders and expansion of service networks of infrastructure in information technology and communication to create learning opportunities and extensive information access for people, especially the elderly, the underprivileged, children, and women, along with developing the plumbing system in rural areas to widely provide sufficient water to people, planning the development of dwellings that correspond to career sources and production base areas, and creating livable communities to improve quality of life and reduce inequality in basic service access between people in rural and urban areas.

(3) To increase efficiency and coverage in providing services of a micro-finance system to foster development of community capacity and to improve grassroots economy by strengthening community financial organizations to support retail savings and develop community enterprises and by employing specific financial institutions in funding for small and medium enterprises as well as the grassroots economy as follows.

(3.1) Encourage community financial organizations to become legal entities that have freedom in decision-making and operation and are capable of undertaking any transactions on behalf of the group under central overseeing rules and standards, to allow all stakeholders to be exempted from taxes just like cooperatives.

(3.2) Increase efficiency of personnel at the community level to enable them to manage funds and accounts of financial groups effectively and ethically for transparency in information disclosure and for good governance in those community organizations.

(3.3) Establish capital networking among financial groups and that between financial groups and financial institutions for the optimal benefit in domestic funding and financial liquidity management to support economic expansion with stability.

(3.4) Make use of specialized financial institutions as a mechanism in funding for small and medium enterprises as well as the micro-economy and increase efficiency in the operation evaluation of those specialized financial institutions, for instance, separating commercial business accounts from policy business accounts for operation auditing and evaluation as well as for financial support in line with development targets and stability of the specialized financial institutions.

(4) Implementation of fiscal policy to support income distribution will employ decentralization to distribute all forms of advances to all regions which includes decentralizing tax collection, budgeting, disbursement, and public debt making under fiscal discipline; increasing capacity of local administrative organizations, and providing readiness regarding rules and regulations and responsibilities by doing the following.

(4.1) Develop income sources for local administrative organizations to enable them to depend on their own income rather than that given by the central government by increasing efficiency of tax collection; clearly separating government taxation from tax collection by the local administrative organizations systematically, for instance, use of land tax instead of property tax and local maintenance tax and collecting environmental tax to increase income of the local administrative organizations; and reforming the management of accumulated credit of local administrative organizations for optimal benefits and income from accrual management.

(4.2) Clearly specify roles and responsibilities, which includes differentiating between roles and responsibilities to be taken by local administrative organizations and those by the central government, joint cooperation between local administrative organizations and the central government in providing public services, and joint cooperation among local administrative organizations in related operations.

(4.3) Provide freedom for local administrative organizations to plan their own budget with transparency and accountability by encouraging participation of people in the making, management, auditing, and evaluation of expenditures and increasing capacity of personnel in local administrative organizations for more efficiency of local fiscal management corresponding to local and community development approaches.

(4.4) Set up an expenditure framework that covers allocated budget under provincial strategies to reflect the true budget for local development.

(4.5) Decentralize debt making and debt management to local administrative organizations under fixed conditions and overall stability maintenance of the country, as part of which the government does not guarantee loans.

4. Roles of Development Partners

4.1 The public sector: Roles of the government will be decreased to formulating policies and overseeing and promoting surrounding conditions to better facilitate business operation to enable people to benefit optimally from the country's development. The following are details of roles of the public sector.

(1) Formulate the country's economic development policies that are in line with the country's economic development strategies to allow for stability and increase in the quality of expansion, along with promoting savings at every level.

(2) Oversee and support works of the private sector to increase its efficiency and competitiveness and to enable it to operate based on corporate governance to be ready for changing trends in the economic system.

(3) Carry out the works that are indispensable to propel development strategies and activities that offer no commercial compensation but are necessary for people's quality of life.

(4) Enforce thorough and fair taxation and allocate budget for successful operation according to development policy framework on the basis of good governance with accountability and flexibility in management.

4.2 The private sector must operate by taking more responsibilities towards the country's society and environment, and cooperating with the public sector towards society and the country's development. Operation of the private sector has the following details.

(1) Cooperate with the public sector to formulate strategies for the country's development and reduce them to practice.

(2) Invest in businesses, co-operatives, and community enterprises, as well as cooperate with the public sector in providing infrastructure services for people.

(3) Promote business and personnel development by supporting research, development, and innovation; adjusting production and operation process to increase production efficiency and competitiveness; and reducing energy waste.

4.3 Local administrative organizations will have more roles in development owing to more decentralization into the regions. Roles of the administrative organizations are as follows.

(1) Cooperate with public and private sectors to promote businesses in communities, as well as to conserve and develop the areas, cultures, and ways of life of the community people for stability and sustainability.

(2) Improve fiscal management capacity to allow local administrative organizations to depend on their own income and to organize local public services effectively according to problems and demands of the local people, along with reforming management system based on corporate governance.

(3) Make public knowledge known to the people, especially the information regarding budget and plans or development projects through various forms of media.

4.4 Communities (people/civil society) will have an increasing role in the country's development process as follows.

(1) Provide information with respect to projects and participate in auditing operation carried out by the public sector so that the operation is transparent and corresponds to development needs.

(2) Save and conserve energy to increase the country's efficiency in energy consumption.

(3) Seek academic knowledge and improve professional skills with intention and determination.

4.5 Academics/educational institutions are expected by the society to be the source of knowledge and maintain academic impartiality, which should have the following roles.

(1) Provide accurate economic knowledge to the public impartially to enable them to use the knowledge to analyze development points correctly.

(2) Provide academic advice and conduct co-research with communities to improve on local wisdom using modern technology and innovation that leads to value creation of products and services.

4.6 Mass media has a role in boosting community strengths as follows.

(1) Improve quality and standard of the media by creating consciousness and responsibilities in accurate and impartial publication of news and information.

(2) Receive thoughts and ideas and create participation of the people in developing and auditing operation of the public sector.

(3) Disseminate knowledge on the reform of economic structure to the people thoroughly and extensively.

Chapter 5

Strategies for Development of Biodiversity and Conservation of the Environment and Natural Resources

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Strategies for Development of Biodiversity and Conservation of the Environment and Natural Resources

1. Introduction

The main objective of the Tenth National Economic and Social Development Plan is a society of happy coexistence under the philosophy of “Sufficiency Economy” as the core principle of living. As for natural resources and environmental management, the Tenth Plan adheres to the principle of “sufficient” way of living of people, communities and society, relating to and relying on natural resources and environment. Moreover, the Tenth Plan focuses on the “balance or middle path” between conservation and utilization, between short-term benefit and long-term benefit, and between loss and gain. Meanwhile, “integrity or righteousness” in possession, accessibility and sharing among interested groups are taken into account. Provision of “understanding” of natural resource and environmental management is encouraged in every part of society. In addition, “moderation” in development will be taken into account in order not to overuse the natural resources beyond their carrying capacity and to clean up pollution in the ecosystem in order to maintain its “balance” to secure natural resource base for the livelihood of people in the society so that they can live peacefully and for sustainable development of the country.

Thus, the strategic planning begins with the principle of “reasonableness” by providing knowledge about geological, social and cultural environment and value of the existing resource base in order to make people understand the relating factors between humans and nature and environment; preventing any harm of the ecological system; creating a strong sustainable foundation; taking existing opportunities and factors in the society to upgrade and change procedurally and qualitatively, which is “self-reliant” development to create “wisdom” and to build up “self-immunity” for the society to be ready to confront any external changes and harmful factors. In this case,

the Tenth Plan focuses on information accessibility and development of bodies of knowledge for protective administration; adjustment of production and consumption pattern to create sustainability in line with the recovery of local wisdom for the management of their own resource base; as well as creating development alternatives on biological and cultural diversity which reflect local strength and wisdom.

To achieve the objectives, strategies for development of biodiversity and conservation of the environment and natural resources are initiated by making use of the strength and improving the weakness of the existing environment and resource capital. In addition, changing contexts that may happen in the future are also included. The Tenth Plan applies the administrative concept leading to balanced and sustainable development in the dimension of the economy, society, environment and natural resources by recovering and creating prosperity of important natural resource bases such as soil, water, forest, sea-coastal resources and biodiversity. There is also environmental development and the control of pollution that affects the ecosystem in order to maintain the limited resources to be the important factor for living, to be the basis to self reliance as well as to enhance social capital and maintain the economic capability of the nation for balanced and sustainable development.

Biodiversity is the strength of Thailand. It relates to the Thai way of living, culture and local wisdom. Biodiversity is the living capital which associates with every resource indicating prosperity and is the most essential part of the ecosystem. Meanwhile, the external changing contexts including biotechnology advancement, ageing society, health-conscious trend and environmentalism will be an opportunity to make use of biodiversity as the base to add value to both production and service sectors as well as the important raw material for higher-valued innovations. On the other hand, international commitments and both bilateral and multi-lateral free trade agreements will extensively affect the project on environmental resource development, intellectual property, trade, service and the production sector. Therefore, the standpoint and strategies for the project have to be clearly identified in order to be able to protect national interests, to maintain the stability of environment and resource base as well as to protect the rights of community and local wisdom, leading to happy living for people in the long run.

As for the assessment of Thailand's environmental and natural resource capital, it is found that the prosperity of environment and resource which is originally the national strength is affected by the development plans that mainly focus on resource utilization to respond to the economic growth. As a result, people use the resources extravagantly without any awareness of their limitations. In addition, the expansion of the economic sector and the transfer of their production bases of the high-polluting industries as a result of free trade agreements and investment as well as consumption behavior and materialism trend increase pollution and waste, which affect both environment and people's health. These make the current situation of natural resource and environment capital troublesome for living and also affect the sustainable development as follows.

In total, 67,000,000 rai of the forest areas have been destroyed within the last 40 years. At present, the forest area is only 33 per cent of the whole country, which is less than those of other countries in Asia such as Japan, South Korea and Vietnam, and it is lower than 40 per cent which is the lowest level at which the balance of an ecosystem can be preserved. The continuous loss of forest area causes flood, drought and other natural hazards more often and more violently. Moreover, the country suffers from water shortage and the deterioration of water quality. The condition of Thailand's water shortage is severe by UNESCO's criteria. The consumption of water continuously increases while development of additional large water sources is limited through lack of suitable area as well as conflicts over water.

Soil resources are deteriorated due to the land abuse. The prosperity of soil is decreasing while the demand of agricultural land is increasing, so chemicals are used to increase crop yield. This causes residues in soil. Moreover, there is the problem of land ownership. In 2003, there were about 770,000 people without land ownership and 11,500,000 rai more of agricultural lands were needed. Also, marine and coastal resources' quality is in decline. Piscatorial rate is three times lower; the areas of mangrove forests have decreased from 2,000,000 rai to 1,500,000 rai and 50 per cent of coral sources and 30 per cent of sea-grass sources are deteriorated. Biodiversity resources are rapidly being destroyed as well. This is caused by human activities which destroy other creature's habitation and effect the ecosystem adversely. The rate of extinction of living creatures is increasing, with 684 flora and fauna on the endangered species list.

Overall, although there is continuous change, the situation of the country's quality of environment is still unsatisfied and it affects people's health and quality of life. However, air quality in big cities with serious traffic congestion, open air burning areas and industrial areas is lower than the standard, especially for the quantity of particulate matter which tends to increase in accordance with economic expansion and the numbers of cars. The production and importation of dangerous substances used in the agricultural and industrial sectors is increasing but there is a lack of suitable management mechanism in the aspects of quality control during the production process, storing process, logistics and environment contamination. Accidents with chemicals often occur, causing loss of lives and property, and the residue remains in the environment and contaminates the food chain, thus affecting people's health and ways of living.

The quantity of garbage and hazardous waste is as high as 22 million tons a year. The quantity of garbage tends to increase continuously though at present, the country is not able to adequately dispose of it and the reusing process can be performed limitedly. Two-thirds of hazardous substances are from electronic and metal industries, which are expanding rapidly and growing more than the overall expansion of the industrial sector by 2-3 times.

These changed situations and contexts make us realize that natural and environmental resource capitals which used to be the strength of the country and the firm base of the development of communities and society as well as their living have been affected by unbalanced development plans. Meanwhile, the strategic administrative approach to demonstrate national potential and opportunity as one of the countries having the most prosperous biodiversity is not clearly defined. Thus, if the resource bases are not adequately protected, they would become so weak and deteriorated then they become a hindrance of the country development.

Strategies for development of biodiversity and conservation of the environment and natural resources with the philosophy of "Sufficiency Economy" are core principles of practice and contain 3 approaches, namely, the maintenance of resource bases and the balance of the ecosystem to keep balance between

conservation and utilization of resources; the creation of good environment to upgrade people's quality of life and sustainable development; and the improvement in the value of biodiversity and local wisdom to lay the foundation of economic structural changes as long-term biodiversity-based development. The strategic implementation in accordance with those approach will help maintain the prosperity of natural resources to support fundamental living of people adequately; keep the environmental problems under control so they do not disturb the delicate condition of the ecosystem for living as well as create a value in the biodiversity resource base which is an opportunity to make use of the existing changing context and to be the development in accordance with the country's basis and to relate people's ways of living and local wisdom to new knowledge and innovations. With these guidelines, the implementation will make every sector aware of values of the resource base, which should be cherished, and it will initiate an integrated process that will link the strengthening of economic capital, social capital and natural and environmental capital together to provide opportunity for every level of the society and to balance the development of the country for a sustainable and peaceful society.

2. Objectives and Targets

The Tenth Plan will be the turning point to change the direction of the national development back to the strength and real capability of Thailand with the expectation that it will help adjust the national economic structure to become more balanced; offer open and varied development opportunities to communities and society in accordance with their environment and the potential and wisdom of the population; and launch strategic plans for development of biodiversity and conservation of the environment and natural resources for equitable distribution of development benefits to the majority of the population throughout the country which will lead to self-reliant and sufficient life within the green and happiness society.

2.1 Objectives

(1) To preserve and recover natural resources, environment and biodiversity; and upgrade values and quality of life.

(2) To strengthen the economic capital, social capital and environment and natural resource capital to create a balanced and sustainable base for national development.

(3) To adjust the economic structure leading to development based on biodiversity in long-term.

(4) To equitable decentralization and benefit sharing at both local and national levels; and maintain the benefits of the nation in accordance with agreements stated in international obligations.

2.2 Targets

(1) The Preservation of natural resource prosperity

(1.1) To protect at least 33 per cent of the prosperity of the country's forest area; conserve at least 18 per cent of the country's forests; and revive 2,900,000 rai of conserved forest.

(1.2) To rehabilitate at least 10,000,000 rai of land with problems such as acidic soil, alkaline soil and organic-insufficient soil; and reduce at least 5,000,000 rai of the area with soil erosion problems.

(2) The response to demands and essentials for living

(2.1) Issue demesnes (title deeds) for 10,000,000 rai and allocate some lands to at least 700, 000 people without land ownership.

(2.2) Administrate 25 river basins in an integrated way and increase irrigated areas by at least 800,000 rai.

(2.3) Reuse at least 30 per cent of the waste throughout the country; appropriately manage 80 per cent of all toxic waste from communities and

industries; and create a toxic waste returning system for used products by suppliers and importers.

(2.4) Reduce the import of fertilizers and agricultural chemicals to no more than 3.5 million tons a year; and set up a system for managing the chemicals from the production process, to importation and elimination process.

(2.5) Maintain the quality of water in no less than 85 per cent of river basins and other natural sources to be in standard and good quality; improve the quality of main rivers especially the lower part of Chao Phraya river, the lower part of Tha Chin river, the lower part of Lam Ta Khong Reservoir and Songkhla Lake, so that the quality of water is not severely deteriorated. Moreover, the quality of air in urban and rural areas and also in industrial areas should be controlled to be in conformity with the standard.

(3) The foundation for the adjustment of economic structure to development based on biodiversity

(3.1) Complete a national database of biological diversity including the regulation mechanism for access control, usage and equal sharing.

(3.2) Create at least 1,500 self-reliant communities with security in food and health as a result of biological management in the community.

3. Development Approaches

The major principles used in the indication of approaches under this development strategy are as follows: first, emphasize conservation and recovery of natural resources and control the quality of environment seriously and continuously. Second, be cautious about utilization of natural resources and environment, way of living of people in the community and set up activities and economic production with appreciation of their values with the participation of interested groups and people affected by resource use. Third, use the strength and the opportunity of the country, which is biologically diverse resources, to steadily establish a national development

process by founding an economic structure adjustment base which will lead the country to an integrated way of development among economic capital, social capital and environmental and natural resources, reducing impacts of pollutions by non-violent means. The main operational approaches are as follows.

3.1 The preservation of a resource base and the balance of the ecosystem

Making people realize that the resource base is a public treasure and everybody would equally receive benefits from it as well as take responsibility for it. The administration approach will be in the form of decentralization and the method will enhance the local participation. Bodies of knowledge and strengthening of capability and consciousness will be the important deciding equipment in order to maintain the balance between conservation and utilization, between short-term benefit and long-term gain among interested groups. Moreover, it is necessary to set up a network among the public sector, private development organizations, private sector, communities, localities and scholars to create genuine social drive for the operations as follows:

1) Develop a database system and build up bodies of knowledge

Develop a geographical information system database and a 1:4000 information map so that they can be used together with local participation in identifying reserved forest boundaries correctly, as well as set up a database system and making a list of intrusion in order to install a system of land possession distribution to the poor so that they can have their own production factor. In addition, promote co-research between the academic sector and localities, searching for local knowledge, wisdom and culture according to the eco-geographical system, to take care and recover the ecosystem and also continuously observe changes in major ecosystems such as head watershed forests, river basins and the coastal ecosystem, which are the sources of biodiversity. Arrange the data into a correct and united database, and then distribute it to every concerned party to build up the knowledge base and use it as equipment for resource management as well as showing a concrete sample for balanced and sustainable conservation and resource base management.

(2) Promote community rights and participation in resource management

Decentralization of resource management to competent local communities, promote participating activities and strengthen the power of the community; emphasize the role of local leaders, local administrations, folk scholars and the foundation of social networks and local networks for resource conservation and management in order to improve the capability and role of communities in resource base recovery as well as to pass on knowledge to enhance local wisdom in combining resource management with modern knowledge and connecting resource management with local production. The Tenth Plan is also to enforce the locality to establish community forests, fishery and coastal resource management. Moreover, a persuasion method would be created to have the community responsible for recovering and maintaining local species of both flora and fauna which are meaningful for their way of living, being a local identity or being of rare and economic value in creating security in food and way of life. This will make the communities around the ecosystems and resource bases become strong social network bases for natural resource recovery and maintenance.

(3) Develop an integrated management system for natural preservation and recovery

(3.1) Give priority to zoning and area-based management with regard to the geographical conditions and bearing capability of the ecosystem. Build up the borderline of conserved areas by making an agreement with the community in order to prevent any illegal intrusion for land expansion in the future. Identify the limitations of land use and possession. Together with the community, identify land use zones and conduct area planning; solve conflicts concerning metes and bounds overlapping and organize protection against public land and protected forest area intrusion as well as develop an appropriate code to maintain the proper land use for the land that the government has already invested in irrigation: ensuring it remains land for agriculture.

(3.2) Issue an emergency declaration for temporary utilization breaks for severely destroyed resources to provide them some times to recover themselves and to make the resources sustainable. In some areas that are highly important, they must clearly be declared to be the protected areas.

(3.3) Initiate a fair and peaceful solution mechanism to the conflicts in accordance with every party's agreement and integrate it to balance changes in purposes and unsustainable production process, to create balance from future development based on national biodiversity.

(3.4) Recover forests to become prosperous and endure their biodiversity by strictly performing according to the utilization control measure; more forest plantation; initiate "Forest friendly" measures by setting up an activity promoting ecosystem recovery and maintenance; as well as making use of natural resources with the maintenance of the ecosystem.

(3.5) Manage water in river basins with integrate means for suitable quantity and quality of water to response to people's needs for their well being and sufficient economic production.

1) Recover and preserve forests that are water sources to be prosperous by plantation; build up weirs around upstream areas; and plant vetiver grass in sloping areas.

2) Upgrade water sources for better usage by providing enough clean water for consumption for every community; upgrade the storage capability of existing water sources; recover natural water sources and dig a pond within an agricultural area; develop a network to balance water sources with water distribution; develop additional water sources only in suitable areas and areas acceptable for people; as well as develop the way to use ground water with surface water in areas that have competent artesian wells under the suitable administration of water demand.

3) Prevent and relieve flood problems by constructing “Monkey Cheeks” (community water storage systems) for handling floods and upgrading prevention systems and water drainage systems in urban communities.

4) Control and relieve problems of wastewater by recovering and increasing the capability of large public wastewater disposal systems; enacting a law for efficient control and disposal of wastewater; promoting the disposal of wastewater from its origin both from houses and groups of buildings; as well as levying a wastewater disposal service fee.

5) Increase effectiveness and efficiency in water management by developing an assistant system for deciding on water management, a draught and flooding forecast and alarm system and database system of the water situation and projects on water sources as a follow-up; upgrade the ability of water management organizations at national level and of the public sector to be able to turn policies about sustainable watershed management into practice and to create participation among national organizations and between national organizations and local authorities; as well as upgrade river basin organizations and community organizations to develop knowledge and ability to efficiently manage water utilization and relieve conflicts about water at the local level.

(3.6) Recover soil fertility by supporting agriculturists to use appropriate and various cultivating means; issuing a measure to reduce agricultural chemicals; reducing and controlling mono-crop cultivation; promoting conservative agriculture; expand the area of organic agriculture and sustainable agriculture to maintain biodiversity within agricultural areas.

(3.7) Promote integrated marine and coastal area management with a local community participation process to indicate area and usage regulations under the agreement of development partners about community mangrove forest management, coral and sea grasses preservation, aquatic animal catching areas, farming areas and coastal fisheries.

(3.8) Set up regulations and controlling measures regarding tourism around natural attractions that are within the supporting capability of the ecosystem as well as creating tourism value by quality rather than quantity of tourists.

(3.9) Plan the management of mineral resources; improve royalty fees and increase income proportion to local administration organizations; conduct studies to indicate appropriate amount of mineral that should be used with regard to the necessity and value in the future; issue a measure and strictly enforce it to control the impacts from mining, which causes pollution in the environment, damages the fertility of forest and watershed forest as well as people's health.

(3.10) Upgrade disaster management and prevention system, emphasizing a disaster management plan that covers time from before the disaster, during the occurrence, after the occurrence and long term prevention measures; develop an in-advance alarm system, emergency rescue and impact prevention and reducing the impacts of physical and infrastructural measures as well as economic and social activity controlling measures in endangered areas.

3.2 The creation of a better environment to upgrade people's quality of life and sustainable development

Until now, production and service structures of Thailand use resources as the main base extravagantly and wastefully. Additionally, a materialistic consumption trend has increased people's demand on consumption. Resources have been used wastefully and they cannot recover or be recreated to meet the demand. Moreover, disposing of waste from consumption is a burden for society and some waste is hazardous substances which affect public health and quality of life. Most of the past pollution and environmental administration methods were separated solutions and solutions to the immediate cause of the situation, not of the origin of the problem. Not only did it not help reduce pollution, it also caused more expense rather than preventing the problem from happening in the first place, which is the management on the supply side; aiming to reduce resource use and amount of waste from the beginning or at its origin. Thus, in order to return natural and environmental resources to become a sustainable development base, it is necessary to change production and

consumption pattern whether in the industrial, agricultural or service sector to become environmentally friendly. It is also urgent to raise consciousness and create new value regarding sufficient consumption; help people acknowledge and understand, leading people to change their consumption behavior to a more sustainable style; create supply of products and services which are environmentally friendly enough to convince entrepreneurs to produce more of these kinds of products and services; as well as upgrade administration capability emphasizing pollution prevention and control at its origin. The procedure is as follows.

(1) The adjustment of production pattern and consumption behavior to reduce impacts on natural and environmental resource base

(1.1) Issue a public policy which promotes sustainable production and consumption within the society such as adjusting investment policy on transportation infrastructure for saving energy, such as encourage the rail system and marine transportation instead of land transportation. Support mass transportation instead of personal cars to help save resources and energy as well as to reduce pollution, issue tax and price measures to persuade consumers to change production pattern and consumer behavior.

(1.2) Ensure clean production in industrial and service sectors especially small and medium enterprises that cause pollution, and extend the result of experience of clean production; develop personnel for clean technology especially for SMEs in the state enterprise sector and their business counterparts.

(1.3) Promote organic farming and sustainable agriculture to reduce the amount of chemical use in the agricultural sector by boosting the utilization of local wisdom and adapting clean technology for use in the agricultural sector, promoting organic fertilizer usage in farming, develop and pass on techniques and knowledge about sustainable agriculture, guarantee damage cost assessment of the product caused by changes from mainstream agriculture to sustainable agriculture along with creating a marketing network to support organic agricultural products and promoting reusing agricultural remains.

(1.4) Issue economic measures, both monetary and fiscal measures to create sustainable production and consumption and adjust tax structure to conserve the environment; motivate economical utilization of resources and energy in production activities; as well as support entrepreneurs to use clean technology and production processes such as collecting fees for resource utilization; reduce taxes for entrepreneurs producing environmentally friendly products, provide some tax benefits to entrepreneurs who reuse used products as raw material in the production process, support the entrepreneurs who create new products from used products by investment promotion and reduce importation tax for clean technology and corporate income tax for entrepreneurs and push financial institutions to offer low interest rate loans to the entrepreneurs using a clean production process.

(1.5) Support research, development and application of clean technology, materials technology, and nanotechnology in order to save resources and energy as well as to help reduce pollution. In addition, support the production of alternative energy from plants and biomass by coordinating with private sectors that will use the knowledge commercially and with the community that has the original knowledge and wisdom, to help extend it and exchange knowledge, especially for the agricultural sector, which has a lot of local wisdom.

(1.6) Create markets for environmentally friendly products and services. In this case, the public sector will lead in consumption, improving public procurement rules and regulations to be able to endure those products and issue standard criteria, verification mechanism and quality guarantee for environmentally friendly products to be in conformity with international standards and the global market. Develop and set up a database of green-labeled product or products that are environmentally friendly. Appoint and reward public organizations that are green organizations. Promote environmentally friendly procurement in private organizations through a green supply chain or environmental management through business counterparts along with connecting environmentally concerned consumer networks to exchange knowledge and participate in rights defense and surveillance, such as clubs or networks of chemical-free agriculture or a consumer club for health and the environment.

(1.7) Promote Thai tradition, culture and way of living to foster the values of sufficient consumption and natural resources and environment conservation via family, academic and religious institutions by direct teaching, being a role model and doing activities together, including creating a sufficient community model that consumes only when necessary and uses products produced with local resources based on the original wisdom, emphasizing self-learning and self-reliance, such as through an organic agriculture community.

(1.8) Launch campaigns and advertisements in order to raise public awareness and understanding, and foster the value of sufficient and sustainable consumption into the public. Provide information and knowledge about impacts of unsustainable consumption and toxic contamination on public health and the environment, to let consumers have enough knowledge for decision making when purchasing products and services.

(2) Development of the efficiency in administration in order to reduce pollution and control activities that affect people's quality of life

(2.1) Set up a Strategic Environment Assessment (SEA) to coordinate the process of identifying policies, plans and local development in accordance with the capability of supporting and managing the pollution within the area; set up a system, device and indicator on the Health Impact Assessment (HIA); develop a system to assess social and health impact of the report on environmental impact, then indicating those principles for the study of the possibility of development projects of the government and/or projects the government have approved for the responsibility of the private sector; including developing a survey to assess the impact of development projects, especially the large public projects that have significant impact on the quality of life, environment and biodiversity.

(2.2) Identify land use area and directions as well as organize community growth and economic activities by considering the capability of nature, culture, quantity and category of economic activities, infrastructure and public services in order that the impacts can be controlled and do not exceed the supporting capability of the area and also the administration capability.

(2.3) Upgrade the disposal capability of municipal solid waste, electronic waste, hazardous and infectious waste by creating economic motivation to reduce and sort waste at their source; support community business, community welfare and private business from recyclable waste and develop a collecting and sorting system as well as infrastructure and promote private investment on hazardous waste management. In addition, issue a law for entrepreneurs to be responsible for their product waste; levy taxes on products that cause hazardous waste; consider charging packaging tax and levy taxes at different rates for recyclable products and products causing hazardous waste; support research and apply it commercially as alternative products/packages; as well as ensure local administration organizations separately establish an infectious waste collecting and disposal system which is a centralized system.

(2.4) Manage chemicals utilization systematically, controllably and securely for chemicals in industrial, agricultural or service (public health included) sectors; provide control, surveillance and tracking systems through the processes of production, storage, logistics, consumption and disposal and efficiently manage risk through the cycle. Follow the movement of international policy on chemical disposal, especially the policies of the European Union, and distribute the information to entrepreneurs for them to be aware of and understand. Support and develop organizations that have questions about chemicals and occupational health to collect the data to be able to connect between networks to manage safety for domestic chemical usage.

(2.5) Control air pollution from logistics, industries, construction, open air burning and the release of greenhouse gases that lead to global warming and climate change by urging upgrade of mass transportation to be a non-pollutant one such as electric cars; promote the use of clean engine and energy especially for mass transportation system. Increase green areas in cities and support a Clean Development Mechanism (CDM).

(2.6) Enhance the capability and efficiency of pollution disposal and relief service of local administrative organizations in the aspect of technical matter, personnel and budget along with raising consciousness and

decentralizing to local administrative organizations and communities to participate in inspecting and keeping surveillance of natural resources and environment. Identify budget conditions to attract local administration organizations to be responsible for environmental problem solving. Moreover, charge fees for waste water treatment and solid waste disposal to support local environment management; set up a complete solid waste disposal center or joint investment as well as provide a suitable and fair compensation system for communities that receive impacts from procedures of public sector and local administration organization such as establishing landfills or incinerators and waste water treatment system.

(2.7) Encourage efficient mechanism to identify the strategic position towards international commitment and agreements on environment including trade agreements involved with the environment. The significant international commitments are the United Nations Framework Convention on Climate Change, Kyoto Protocol and conventions on chemicals and hazardous waste management such as Basel Convention, Stockholm Convention on Persistent Organic Pollutants and Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals; follow their movements and discussion issues; set up a team of specialists to be ready for negotiation; issue a law for standard regulations and control the importation and usage of chemicals and hazardous waste under the involved conventions. Identify clear regulations about types of projects that should be performed as well as distribute benefits from carbon credit trading under Clean Development Mechanism. Promote international cooperation at global, regional, multi-lateral and bilateral levels, exchange experience, build networks of learning in order to negotiate and protect national interests.

3.3 The development of values of biodiversity and local wisdom

With the Philosophy of Sufficiency Economy as the core principle, the development must be done by stages. Firstly, build up knowledge and self-immunity as well as prevent external threats. When the community can securely rely on itself, expand opportunities, create networks as well as upgrade wisdom and production and develop innovations until they can connect with national economy and importation according to their real potential. The Tenth Plan will be the foundation that will lead

to changes in economic structure which, in the long run, will lead to the development on biodiversity with the procedure as follows:

(1) Knowledge management and creation of self-immunity

Although Thailand has rich biodiversity resources and continuously gathers bodies of knowledge from people's ways of life and utilizes the original resource base of the community, there has been no connection between local wisdom and up to date knowledge, which means the overall national knowledge base is currently not strong. At present, there are both opportunities and threats from new technologies. Therefore, the biodiversity based development should start with the building of bodies of knowledge and self-immunity.

(1.1) Develop a database system; install a database management system and establish an information center about biodiversity resources with details of taxonomy, specifications, usage and involved local wisdom with the name of the specific community that owns the wisdom. In addition, set up a local information system enabling the community to participate in the process while the public sector and development partners help develop data storage and recording system of community resource account base and wisdom as well as establish research information systems which can be linked together with an administrative system that can prevent unfair commercial utilization of information.

(1.2) Build new bodies of knowledge and personnel; foster a learning system and community consciousness to realize values of biodiversity and local wisdom. Provide knowledge and personnel to develop a curriculum about biodiversity in the aspect of its recovery, conservation and utilization especially about being healthy using natural means, traditional Thai medical practice and herbal medicine as well as organic agriculture. Pass on the local wisdom systematically; apply science and technology for upgrading local wisdom; establish hospitals applying traditional Thai medicine in every region of Thailand; support personnel creation with integrated knowledge and understanding about ecology, biotechnology, economy and society as well as support folk experts and traditional Thai medics and folk botanists in passing on knowledge to create the next generation experts. Mobilize

knowledge about patent and intelligent property; raise awareness of the Thai wisdom; as well as distribute the knowledge to the public.

(1.3) Promote research for development which combine local wisdom with modern knowledge; support co-researching and development between scholars and communities which focus on research that responds to local economic necessity or research for importing compensation such as developing services on herbal health, creating the productivity of organic agriculture, improving plant species and develop plant seeds, researching and developing to upgrade knowledge on local wisdom, and creating product values and local product innovations.

(1.4) Protect biodiversity resources from external threats particularly from international commitments and free trade agreements; follow their movement and discussion issues; prepare for negotiation in the global stage; set up offensive measures for supporting an issue of intelligent property and patent registration on living creatures which might bring problems to community resource base in the future. Establish a process for implementation of public policy which is open for figuring out impacts that will happen to various groups carefully by setting up a transparent and strong internal mechanism both legally and administratively before accepting any international commitment. Establish a regional coordinating network and jointly identify the position about biodiversity management.

(1.5) Establish a system for protecting community rights and fair benefit distribution in the aspect of law, measures and organization establishment with the participation of concerned parties in order to own a mechanism that protects local genetics and wisdom rights by surveillance, governing, identify conditions of access to information and knowledge about biodiversity resources both for the sake of learning or making use of them; as well as develop a mechanism for returning benefits to the community that owns the genetics and wisdom when they are used commercially.

(1.6) Conserve and recover local genetic diversity to maintain the diversity of species which relate to ecosystem, way of living and culture of the community especially for the protection of endangered species and the conservation

of traditional rice types and flora which are the identity of the locality and the country. Establish a bank for genetic resources and biological resources both at the local and national level as well as develop a mechanism of measure on biological security and prevent alien species from intrusion.

(2) Support the utilization of biodiversity to ensure local and community economic stability

One factor in the achievement of biodiversity based development is roles of communities which are starting with supporting communities to rely on themselves until they become strong then expand the opportunity for the community to produce products for commercial. Communities that own local wisdoms and live among resource bases will be able to use resources for living to achieve self reliance and food and health security. When communities become self-reliant, they should join together and set up a network among themselves to exchange resources and knowledge and to create local markets. This will lead to wisdom development and innovation. In addition, emphasis will be on creating value added products from coordination of networks and equitable distribution of benefits.

(2.1) Encourage biodiversity utilization to create security for food and health leading to sustainable self reliance. Recover local ways of living and promote production pattern of communities that rely on their own for food and health with local resources by creating the diversity within a community and making use of created biodiversity. Some concrete examples of successful communities should be disseminated and coordinated to build up the learning process and participation with strengthen community in order to lead the Tenth Plan into practice.

(2.2) Support production and service sectors that are able to be managed by communities themselves by developing the potential of the communities to have authority in management of production, marketing and value-adding of the resource base and local wisdoms such as health services, organic farming, herbs, natural products, healthy foods and eco-tourism; analyze marketing direction and opportunity; make a guide map of the development and overall promoting approach beginning with gradually strengthening economic foundation, promoting aggregation

and connection and expanding networks to build up a powerful production and marketing base.

(2.3) Develop community enterprises by training; develop skills in production, management and marketing by creating standard models for learning; promote SMEs to have good management; aggregate to support business performance; support market researching of products and services related to biodiversity such as Thai massage, spa, food, non-chemical agriculture and natural products to maintain and develop capability of the community. Moreover, emphasis will be on recruiting and training personnel and labors to be in response to the direction of expansion and to response to larger markets.

(2.4) Promote and integrate involved policies such as health enhancement policy, the development of herbal medicine and traditional Thai Medication, safe food, sustainable agriculture promotion, agricultural chemicals reduction as well as clearly identify the position about some issues that might have conflicts over policies in the future such as the issue of GMOs in order to make involved organizations and the public understand and proceed towards the same direction.

(3) Develop the country's capability and initiate innovations from biological resources which are the identity of the country

The production upgrade for competition should be done when communities are strong and knowledgeable enough and able to strongly protect the resource base. The capability and readiness have to be considered in order to start creating innovations from upgraded local wisdoms, considering trends of growth and demand in markets. Products that are the strengths of the country should be researched and developed continuously. On the other hand, the development of products with advanced knowledge, technology and investment might have to rely too much on foreign countries especially for biotechnology and the production of medicine extraction industry. Therefore, they should be performed when the country has enough collective capital and original knowledge, and then upgrade the production to the development of biotechnology for commercial use.

(3.1) Initiate innovations from biological resources that have enough accumulative knowledge, developing from the desire to respond to the expanding market such as innovations to increase productivity of organic agriculture, healthy food and herbs and clearly identify the position on medicine industry and food industry which emphasize natural products that are at the standards, high quality and targeting to support of domestic demand and reduce external reliance. Identify policies and direction of innovation development using technology at a suitable level relating to the potential of local wisdom to create innovations that are the country's identity based on internal strength.

(3.2) Upgrade safety standard of food, herbs and natural products to be in conformity with the establishment of a healthy society; raise up consumer confidence; develop production process to be at standards; provide supporting systems with the collaboration of several agencies such as plant production in accordance with good agricultural practice (GAP), Good Manufacturing Practice (GMP), Food and Drug Administration (FDA), Thai Industrial Standards Institute (TISI), Equivalency of Organic Certification as well as have clinical studies on herbal and Thai traditional medicine.

(3.3) Promote aggregation and networking; develop community enterprises, minor entrepreneurs and business sector in production, trading and service group which can present local identity and connect community enterprises together and expand to the national level.

(3.4) Create values and promote images that are the strength of the country, starting from health issues such as healthy society, natural lifestyle and safe food, to relate them to economic, resource, local wisdom and cultural base of Thai society by making Thai youth more interested in Thai wisdom and distribute the knowledge to every level of society to build up a demand driven force which will help expansion from national level to the global market competition in the future.

4. Roles of development partners in strategy development

Every party is part of the joint power that brings about the achievement of development as well as receives both impacts and benefits from or be stakeholders of the development or changes of natural resources and environmental quality. Hence, in order to make the result of development with this strategy to lead to balanced and sustainable development, conditions for achievements that are inevitable are the participation of every party through the development process along with consciousness promoting, responsibility, knowledge providing and setting of the learning process for Thai people, setting up a mechanism that is easy to participate, having a fair right to access of every party, use and receive benefit from natural resource as long as it does not exceed the limitations of the natural resources as well as being responsible for the impacts of their activities together. Each party should have roles as follows.

4.1 The public sector in central, provincial and local areas have to adjust their role from being controllers and commanders to be coordinators and distribute administration authority to other development partners particularly communities.

(1) The maintenance of the resource base and balance of ecosystem. The central public sector has to promote the duties to look after resources and develop knowledge in communities as well as set up an agreement for fair usage of production and private sector by improving rules, regulations, laws and applying economic mechanisms; create, connect and promote the access of involved information to the partners; use the mechanism and access of real and correct databases as equipment for participatory administration. Meanwhile, local administrative organizations must enhance the role in natural resources management and conservation by developing bodies of knowledge, and the capability of administrations and processes to fairly distribute benefits to communities.

(2) The creation of a good environment to upgrade people's quality of life and sustainable development. The central public sector has to improve public policies to support economical utilization of resources and environmental quality maintenance. Apply economic and social measures to motivate both producers and

consumers to use resources and energy economically and reduce pollution as well. Local administrative organizations have to develop their capability, knowledge and responsibility to be ready for administrative authority distribution and local resource allocation in order to look after the quality of environment.

(3) The development of values of biodiversity and local wisdom

Establish a national database; encourage collaborative research and development with communities; identify its position on issues that might cause conflicts in the future such as the issue of GMOs; issue measures to protect biodiversity resources and the rights over local wisdoms from external threats; set up a system for fair benefit distribution as well as forge partners with other developing countries.

4.2 The private sector will not do any economic activity that is harmful to the quality of natural resources or environmental quality but must set up and support social activities including those of communities that use local wisdom to conserve natural resources and environment. Moreover, the private sector has to have environmental ethics and be responsible for society by producing products and services with clean production process and technology, promoting value creation from biodiversity resources with marketing techniques and innovations. The private sector, also, has to distribute benefits from usage of biodiversity resources fairly between owners of local wisdoms and owners of technology and innovations as well as upgrade production process and set up standards for food safety, herbs and natural products.

4.3 Civil society consists of non-governmental organizations, communities and people. The civil society sector has important roles as follows.

(1) The maintenance of a resource base and balance of ecosystem.

There has to be establishment of an association and network on conservation, management and setting up of a local community resource database. The civil society sector will pass on and upgrade local wisdom of resource management together with modern knowledge; set up an agreement and regulations on utilization of community resources such as community forest, river basin and coastal resources; as well as issue measures to control activities that are harmful and destroy the ecosystem such as

touring and doing activities that are not suitable within reserved areas or wild animal trading and rare animals petting.

(2) The creation of good environment to upgrade people's quality of life and sustainable development The civil society sector must foster values, campaign and distribute information on the conservation of natural resources and environment and sustainable production and consumption to the public; provide an administrative plan within communities; participate in conservation and maintenance of quality of environment around the area as well as connect networks together to exchange knowledge.

(3) The development of values of biodiversity and local wisdom. It is necessary to promote learning about making of model schemes on self-reliant community especially for food and health and extend to creating of community enterprises, sustainable usage of local biodiversity resources, communities connecting in order to exchange knowledge, surveillance on the access of local genetics; as well as support public sector in negotiating with foreign countries about issues involving benefits from biodiversity.

4.4 Other institutions, such as academic institutions and mass media. Academic institutions should be responsible for providing education to the public; doing research and development together with developers and communities on ecosystem change follow-up and surveillance, resource utilization within the area and natural resources and environment conservation; supporting information collecting to set up a database; supporting community and folk botanists on information collecting about resources and local wisdom to be in conformity with national database; providing education to create knowledge; using scientific knowledge to upgrade and extend local wisdoms; as well as nurturing human resource development and bringing out community capability through the process of community plans.

It is necessary that mass media institutions publicize some models of the resource base and environment conservation and management of balance and sustainability as well as news, information and knowledge to raise knowledge, understanding and consciousness about natural resources and environment

conservation; be a stage for brainstorming and coordinating to create commitment and agreement on joint administration of natural resources and environment of the society; encourage new generations to pay more attention to Thai wisdom; broadcast various case studies and lessons about problems on registering a patent: patterns and conditions leading to competing for benefits from genetic resources, biodiversity and local wisdom, to raise public awareness.

Chapter 6

Strategies to Promote Good Governance in the National Administration

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Strategies to Promote

Good Governance in the National Administration

1. Introduction

With the rapid and extensive flow of information and capital in the age of globalization, people have begun to be interested in new rights, duties and values throughout the world. Therefore, national administration that respects democracy and protects the rights, liberty and participation of people as well as protects human rights and conserves natural resources and environment is widely called for. Thailand founded the country's administration under the democratic form of government with the King as Head of State since constitutional monarchy was established in B.E. 2475 (1932) and adopted the Constitution of Thailand in B.E. 2540 (1997). This reflects principles and an intention to enhance stability of the democracy of the country and also to create fair distribution in administrative authority and benefits in Thai society by allowing every party to participate in national administration more extensively, which can be counted as the perfect foundation of participatory democracy and good governance structurally, mechanically and professionally. However, the past developments have not been able to move the national administration system towards a real good governance system. It provided changes in forms but it could not be driven to implementation extensively because the national administration system is a large complicated system and the administrative authority is centralized. Although overall administration system and mechanism allow people to participate, it is not enough and not beneficial for creating efficiency, effectiveness and justice in order to be ready for changes.

Therefore, the national development during the Tenth National Economic and Social Development Plan should particularly focus on fostering genuine good governance in national administration because good governance is a factor that

enhances a democratic regime to be more open for people to have development of liberty under a liberal economy and also is fairer to every party. In many countries' experiences, it is found that in the countries that are highly democratic and politically open, participation will bring about extensive opinion exchange, people aggregation, new value creation, especially regarding justice, equality and ability, which will lead to the development that creates justice and peacefulness in the society.

Under challenging circumstances and conditions that the country has to confront with and adjust itself in order to be a society of happy coexistence as stated in the visions of the Tenth Plan, strategies to promote good governance in national administration are to be created. They are important strategies that drive other missions and strategies in the Tenth Plan under the principles of Sufficiency Economy philosophy as the performance guideline as follows.

The enhancement of good governance in national administration focuses on developing "human" potential in every part and every sector of Thai society to have mental basis relying on "morality", being honest, and "expertise" which are conditions that lead people to behave themselves "rationally" understanding their rights, duties and responsibility as population of Thailand according to administration under the democratic form of government with the King as Head of State and be able to join together into a powerful network that participates better in driving national administration and developing the country. Strategies to promote Good Governance in National Administration also have to pay attention to strengthen structural systems, mechanisms and national administrative processes on good governance and democracy that are open for every party to participate, by revising the public administration system, both bureaucratic and state enterprise system to be transparent and capable; emphasizing the role of coordination and surveillance instead of controlling and commanding; and working jointly with other sectors as a development partnership. Meanwhile, central bureaucratic authority has to be reduced and also the role and distribution of authority increased for decision making, performing and resource distribution. It needs to be allocated to regional and local authorities as well as communities to be able to be responsible for the area development so as to respond to people needs and socio-geographical conditions along with promoting the role of the private sector and reformation of private business to be stable, honest and

transparent, reducing monopoly, being fair to consumers and business rivals; as well as stimulating on reformation of law and regulations related to economic and social development to create “balance” in allocation and distribution of benefits from development thoroughly and fairly.

In addition, maintenance and enhancement for security have to be operated concurrently to lead national administration to its balance and sustainability by focusing on enhancing potential of institutions responsible for defense, security and peace of the country in order to coordinate with other sectors to operate on protecting and developing the country in order to maintain independence of the country, royal institutions, benefits of the country under the democratic form of government with the King as Head of State as well as to be able to maintain security for people and society to live peacefully. This will be the “self-immunity” and help the administration and development of the country to be in balance in aspects of economy, society, natural resources and stability which will lead the country to its peacefulness and sustainability.

2. Objectives and Targets

2.1 Objectives

(1) To promote and develop democratic culture as part of the way of life in Thai society under the democratic form of government with the King as Head of State.

(2) To adjust the structure and process of the national administration to be a process that opens for every party to participate better, along with decentralizing the administrative authority to regions and localities.

(3) To enhance people’s and civil society’s strength and consciousness in the rights and duties in order to participate in national administration process and take care of benefits of every sector for justice in the society.

2.2 Targets

(1) The country's good governance both in the public and the private sectors is better, compared to other countries, with the Transparency Index at least 5.0 points within the year 2011.

(2) People have better potential to participate in national administration, by

(2.1) The majority of people have clear knowledge and understanding about their rights, duties and responsibility as the population under the Thai Constitution.

(2.2) People increasingly participate in public committees for development and planning.

(3) Reducing labor force in civil service up to 10 per cent within 5 years in order to downsize bureaucratic system and having efficiency, modern and having higher capability as well as being able to adapt information technology in all part of the bureaucratic implementation.

(4) Local administrative organizations have the ability to be more independent and self-reliant; are able to efficiently increase the role in public service management to local people as well as have the ability to administer with principles of good governance.

(5) There are more researches and development in democratic culture, good governance and peaceful means during the period of the Tenth Plan.

3. Development Approaches

3.1 Promote and develop a democratic culture and good governance as part of the way of life, learning process will be seriously encouraged in line with raising consciousness for living their life rationally; accepting the agreement of

coexistence; realizing of their rights and duties, liberty, equality, ideologies, values that support administration under the democratic form of government with the King as Head of State and good governance culture, to people in every part of society especially the youth and leaders of society at all level to be good models. In addition, democratic process will be given solid foundation by truly allowing popular participation, mechanisms and processes to scrutinize the use of power and politics will be made freer, stronger and more efficient.

(1) Campaign for building up learning process as well as raising consciousness, values, democratic culture and good governance to children and all people seriously and continuously, as follows.

(1.1) Provide correct knowledge and understanding of the rights, duties, responsibility, liberty and equality; create value appreciation and consciousness to protect and involve in developing knowledge and democratic culture in every person via all kinds of media through various easy-to-understand forms. Public sector will provide budget and broadcasting time that will be best accessible to audiences. The suitable programs that help promote morality, ethics and good governance are included in news, drama series, songs and folk games.

(1.2) Support institutes and educational institutions, both formal and informal education; develop academic course, activities, trainings, knowledge sharing forums on democratic culture, foster democratic values, ethics and morality since childhood in order to have consciousness in performing their duty honestly and habitually.

(1.3) Promote coordination among government sector, family, religious institutions, schools, civil society and media in terms of raising consciousness, the principles of democracy, democratic culture and good governance in order to foster children and juveniles from school age to working age realizing and assuring in coexistence in administration under the democratic form of government with the King as Head of State.

(1.4) Make ethics manual for people and children for them to use as a frame of living and for academic institutions to use as learning media.

(1.5) Support the creation of innovations and research and development concerning democratic culture, good governance culture and peace culture which are academically correct, in order to be able to develop thoughts, principles, development approaches of democratic culture and good governance culture that are suitable for the context of Thai society.

(1.6) Provide more public forums for people to join in sharing, learning and brainstorming as well as consulting, discussing and monitoring creatively on national administration and public policy making.

(2) Develop democratic leadership with morality, ethics and good governance at every level to be a good model in the society, as follows.

(2.1) Enhance the learning process and develop leadership skills according to administration under the democratic form of government with the King as Head of State to adhere to democratic, peace cultures and good governance to be ready for inspection and opinions from people and other social sectors in order to pass on and create changes in the society, communities and local at every level.

(2.2) Provide a development plan for social leadership at every level as well as leaders that have authority and play a part in guiding the development for children and people to strictly adhere to the principles of good governance, which means that they have to be honest, justice, believe in righteous values, be able to separate personal relationship and benefit from work, refuse to pay respect to those who have decadent behavior as well as praise those leaders who are in accordance with democratic and good governance principles. The leaders will be role models for people in the society. In addition, social punishments for decadent behavior have to be enforced. The leaders will be good models for children to follow, in this regard.

(2.3) Build the pillar groups of family, community, school, and every other part of society as well as good governance of youth in schools and community by promoting network joining as a mechanism and network organization acting as the campaigning center for developing of the learning process, doing activities that enhance democratic and good governance culture, and continuously extend the learning network.

(2.4) Support cultural organizations, which participate in fostering leaderships for democracy and good governance as well as promote provincial cultural councils to be a center for disseminate the development of democratic and good governance cultures at the local level.

(3) Strengthen the political development to be transparent and honest so as to support the foundation of democratic culture and good governance culture by promoting every part of society to join in making the participatory development plan, identify standards for ethics and morality of politicians and behave in line with benefits of people and the nation in mind, to be suitable models for society as well as promote national administration with good governance in conformity with administration under the democratic form of government with the King as Head of State.

3.2 Strengthen the people participation in national administration for people and civil society sector to be able to appreciate decision making authority in accordance with the principles of democracy and good governance to create justice and balance, and to be able to participate in inspection of public sector for performance transparency and effective reduction of corruption in the bureaucratic sector based on acceptance and trustfulness.

(1) Encourage people to create strong cooperative networks and better participation in national development

(1.1) Support cooperation of people as economic, social and political organizations, and build up a powerful network both horizontally and vertically.

(1.2) Promote civil society to be a part of committees and subcommittees in public sectors at national, regional, provincial and local level in order to participate in formulating strategic plans for regional, provincial clusters, provincial and community, monitor balance of public administration by providing the rights to receive complete and correct public information, the rights to express their opinions and the rights for inspection.

(1.3) Encourage a civil consultant mechanism at both national level and area level from provincial to local levels for people to express their opinions on policies, development strategies and administration systematically so as to reflect people's satisfaction and demands which will be useful for effectively adjusting public policy and development strategies.

(2) Enhance the strength and capability of the inspection mechanism of the people sector

(2.1) Develop the media to report investigative news entirely and correctly as well as strictly adhere to their occupational ethics by supporting joining of mass communication groups that are independent and stable, to control and inspect their own group to be responsible for society, adhere to the occupational etiquette in producing and presenting media to society without interference from public sector or any other business and interest groups as well as protect the rights and liberty of media producers to be able to independently present fact information under an organization that protects media's rights and liberty.

(2.2) Develop frames and methods of participation between private organizations/civil society and academic sectors in the form of extended networks as well as create a working network with other development partners which are mass media and public sector in order to create sharing and learning process to be able to widely analyze in-depth information and build the power to inspect the corruption commission.

(3) Support peace culture and provide mechanisms that promote peaceful conflict management

(3.1) Disseminate, create better knowledge and understanding and foster peace culture to children, juvenile and people to lead to a learning process and using commitment for problem solving to enhance conformity in society.

(3.2) Revise roles and duties of various mechanisms of conflict management such as public hearings, mutual agreements etc. as well as research and development knowledge, to find proper approaches and manage conflicts efficiently and effectively.

(4) Enhance opportunity for people at all level to equally access the process of justice at every stage of investigation process, take care and help people, especially disadvantaged groups from the process of accusation, law prosecution, investigation, to the end of the case as well as provide a mechanism that protects witnesses on the corruption cases and provide compensation for those who receive negative impacts from operations of the public sector.

(5) Speed up the establishment of social organizations as stated in the Constitution to be the independent pillar agency so as to balance exercising of bureaucratic power such as environmental independent agencies and consumer protection independent agencies.

3.3 Create public administration that works with efficiency and good governance emphasizing services rather than control, and working in cooperation with development partnerships

(1) Develop the bureaucratic system and government officials to be up-to-date, transparent and higher potential

(1.1) Provide a national policy mechanism to promote the expansion of e-government service to every public organization and effectively manage public budget.

(1.2) Promote research and development in all part of the bureaucratic system, the mission of which is necessary for further development or be adjusted, be cancelled or revised, along with on the improvement of authority, structure, working system and force rate to be in line with the needs of each organization by considering worthiness, situation and other factors as well as providing a plan to enhance the capability of officials to support impacts from changes in roles, missions and downsizing policy of the public sector.

(1.3) Develop principles and regulations about the administration of special organizations under government supervision in order to meet the standard of public organizations. The special organizations include public organizations, special organizations within the ministries and special service units. The improvement includes income rate identification, committee meeting compensation, and performance guidelines, as well as set up monitoring and evaluation system for performance achievement for efficiency and effectiveness.

(2) Develop bureaucratic system and civil officials to perform their work in conformity with good governance

(2.1) Adjust the attitude of civil officials to be seriously aware of the importance of administration under the democratic form of government with the King as Head of State, democratic culture, good governance and peace cultures, learn and realize benefits and necessity of working with people in national administration process by providing capability training and development in making public relation and communication systems in order to create better understanding continuously and regularly since the starting period of and periodically along their working life on all issues.

1) Promote civil officials to adhere to integrity and morality to be able to separate personal matters from public affairs and work professionally as well as be able to openly express their opinions and advice academically. Foster civic culture to government officials with regard to public benefits and be responsible for the public as well as be ready for inspection by civil and other sectors.

2) Ensure the government sector strictly respects and performs in accordance with the information enclosure laws and people participation by revealing information for those who request urgently. In addition, security guarantees must be provided to ensure the officials for reveal information about corruption.

(2.2) Develop the evaluation system for good governance enhancement in bureaucracy and individuals with clear indicators and use the evaluation results for consideration of annual reward allocation for government agencies and individual achievement. In the meantime, there should also be provided a punishment for those whose results are lower than criteria. In this case, there should be a neutral organization for conducting the evaluation and reporting the results to the public.

(3) Enhance administration systems of public enterprises to be efficient and transparent, ready for inspection

(3.1) Create transparency in performance, study and prepare project and criteria for investment decision-making, follow related regulations and laws with regard to necessity, value for money and benefit of people as well as competitiveness and financial status of the organization based on transparency in order that performance of public enterprises will respond to people's demand and bring the utmost benefit to the society by the following.

1) Build participation process for stakeholders in project management of public enterprise systematically and also disseminate precise information entirely to create understanding, leading to engagement and acceptance.

2) Create organization culture within public enterprises that enhances capability and build value-added to the organization, be able to adjust organization's strategies to be in line with changing surroundings as well as pay attention to risk management, economical and reasonable resource usages, responsibility to the society, participation in development of a community's quality of life and environmental maintenance.

3) Stimulate problem solving of public enterprises that has performance financial problem by making management and recovery plans for the deficit public enterprises, identify clear goals and measures, and push them forward into serious practice, consider the possibility of using the existing resources to add value and income to the organization, set up suitable and clear subsidization rules for deficit services of each category, revise the necessity in abolishment, disposal, transfer or maintenance of public enterprises in case that the businesses are effectively performed by the private.

(3.2) Increase roles of private sector in public enterprise business continuously, to enhance its capability and be able to serve the public sufficiently and thoroughly at a reasonable price and to reduce investment burden of public sector by identifying a suitable pattern of the private role in enhancing the feature and structure of each business, indicate regulations and conditions to prevent the situation that a public monopoly is switched to private monopoly as well as develop a powerful controlling system in order for the competition to be impartial and transparent with regard to benefits of the country and effectively protecting consumers. However, in case of public enterprises about public facilities which affect people in a wide area, the public sector will administer them further.

3.4 Continue the decentralization of administration to the regions, localities and communities, capacity will be developed and decision-making powers transferred to enable localities to take responsibility for public administration and public services, solve problems in response to the needs of people in the area, and promote economic and social progress in the locality; opportunities will be created for people to participate in the development of their own localities.

(1) Improve structure, mechanism and regulations of public resource allocation for more decentralization of decision-making to regions, locality and community

(1.1) Support integrated strategic administration system based on mission/ area/ strategic job and promote participation in regional development administration and create linkage with the local community to serve as a system that initiate problem-solving in area development by collecting problems about people's needs and socio-geographic conditions of the area to make the strategies for developing an approach under the participation process of concerned party as follows;

1) Support community planning which is initiated by community process mechanism and development to learning process; strengthen a local community to be able to help themselves; integrate community plans, local plans and other plans at provincial levels, provincial clusters and regional levels to be able to genuinely support budget and resource allocation, for development and manage conflict solution of locality and community in correspondence with their demands.

2) Promote strategic planning at the level of region, provincial clusters and province in accordance with national strategic plan and response to demand of local community area based on socio-geography under participation process of all stakeholders in every policy to implementation as well as join in decision-making and evaluation along with the development of working process that is beneficial for integrated administration as well as providing the central database system to support the strategies at the level of region, provincial clusters, provinces and set up the evaluation system.

3) Promote strategic integration at ministerial and department levels with regard to strategic issue and local people's demands at local area, regions, provincial clusters and provinces along with focusing on development of administrative mechanism that link central strategies and local strategies together to achieve integration of development in the area efficiently and effectively.

4) Adjust performance process and administration of finance, inventories and fiscal matters to facilitate for integrated performance of region, provincial clusters, province and local area as well as develop strategic evaluation system at every level by opening for civil organizations to participate in evaluation and counter inspection of area-based development administration.

(1.2) Improve provincial budget and use integrated budget at area level to be able to support missions under development strategies of province, provincial clusters and regional development strategies with the criteria that are suitable for conflict situations and area conditions with regard to budgeting management to be value for money, open and transparent and allow provincial agencies to be able to adjust the budget reasonably under the provincial development strategies as well as promote upgrading of provincial status to be the budget-request unit at the further stages.

(1.3) Revise the roles of ministries, departments, provinces and local administrative organizations to be clear and not redundant to be able to perform missions that supportively connect together; well coordinate joint resource utilization and cooperate with other local sectors as well as to be able to manage complete work within the local areas as follows.

1) Ministries should be adjusted to be strategy making units that develop policies and indicate goals of the development. As for the departments or mission groups, their roles should be adjusted to be the units that support knowledge and innovations and manage them to gain achievements as indicated strategies and goals.

2) Provinces should be a host to manage all public service within the responsible area and be able to connect governmental and central strategic relationship with local and community *needs* as well as be responsible for supporting local organizations and being a unit for mission implementation in local areas, if the locality is unable to perform that mission.

(2) Decentralize administrative authority to local administration organizations to be able to provide public services responding to local needs of people in the area as well as bring economic and social progress to the society.

(2.1) Enhance financial, fiscal and administrative capability of local administration organizations to be more effective as follows.

1) Strengthen independence for local administration organizations to rely on themselves by developing income revenue at local level, being able to provide public services to serve people's needs and the local social and economic expansion by the following.

- Expand income base collected by the locality itself, property tax system should be replaced property tax and local maintenance tax by pushing forward the promulgation of Land and Building Tax Bill, B.E. ...

- Promote locality to apply a payback public management system and service charge system that has service receivers take more responsibility for their fees in order for the service receivers to share investment burden reasonably and fairly.

2) Develop local budgeting and accounting system by adapting performance based budgeting system and accrual basis accounting system for use locally for the performance to be transparent, inspectable and efficient enough to support mission transfer and new subsidization.

3) Enhance administrative capability of local administration organizations and improve performing processes to be more open to the public

- Apply new management system to upgrade the capability of management staffs and local staffs to be able to perform professionally and creatively; adapt proactive working style; possess skills in public policy and community administration and effective management to be able to control cost while

standardizing service to meet international criteria as well as be able to promptly adapt themselves to all circumstances.

- Introduce new budgeting and fiscal management system to reduce organization expansion but increase income; utilize technology and adjust people's behavior to realize the benefits of using payback public service in order to add an alternative to banking management as well as employ more market mechanisms for public service development.

- Improve the performing system being able to respond to people's needs with performance transparency and responsibility to society by presenting information on performance outcome to the public, improving working process and reducing procedures and co-arranging public services with local organizations as well as following up and examining local performance.

(2.2) Adjust the roles between central and local authorities to support local fiscal capability and public service. The role of the central authority has to be adjusted from controlling to facilitating, setting up service standard and providing technical assistances as follows.

- 1) Develop money transfer and subsidies to locality to serve as equipment and mechanism, maintain fiscal balance and disciplines of the government and local administration organizations, as well as promote local independence for supporting allocation and transfer of public service development to the locality. In this case, the new approach of subsidy allocation should mainly focus on reducing financial gaps among localities.

- 2) Develop system for local public service with regard to people's needs by adjusting the service making system that transfers purchasing power of public service to locality while central organizations take the role of producing and selling services to the locality; transfer the role to locality if it can produce services on its own as well as provide authority for the locality to perform some service activities in lieu of the central organizations. In addition, the standard of local public service has to be developed to have a health security system that contains

minimum standards of a quality assessment system, quality enhancement system and development of an effective evaluation system.

3.5 Promote strength, honesty, and good governance in the private sector, measure will be instituted to encourage more listed companies and private businesses in general to adopt corporate governance; consciousness will be fostered of the importance in business practice of honesty, equity to the consumer, fair competition, social responsibility, and sharing benefits with the public; professional business institutions will be encouraged to play a greater role in building good governance in the private sector.

(1) Provide a measure to promote committees and administrators to be more responsible for shareholders, creditors and consumers by setting up punishments for administrators who are involved in corruption and using inside information for the benefits of themselves and company as well as compel committees and investigating committee to pass the training on good corporate governance.

(2) Set up a measure to encourage minor investors to be enthusiastic about participating in business administration; create awareness and provide opportunities for interested minor investors to be able to attend meetings by various means as well as be able to vote in shareholder meetings via internet/post etc. in order to protect their benefits from investment and participate in consideration of the performance outcome of the company according to the principles of good governance.

(3) Provide incentives for private businesses, both those in stock market and ordinary business sector, which are certified as of good corporate governance to receive convenient services from the public sector and/or board of governors of the Stock Exchange of Thailand (SET).

(4) Allow agencies that regulate business to be independent from the administrative sector in order that the controlling and inspection mechanism of private business will be independent and be able to boost stock investors and people confidence in transparency, justice and lack of discrimination.

(5) Campaign for creating knowledge and understanding about advantages of good regulatory management to private business, administrators/committees, shareholders and people so that it will bring about competitive advantages and good image in transparency, and meanwhile the whole country and society will receive indirect benefits as well. Moreover, they must be aware that they have to perform their jobs honestly and fairly to consumers.

(6) Promote vocational institutions, groups and clubs to play a role in creating good governance in the business sector. Improve vocational institutions, vocational associations, groups and other business entrepreneurs' clubs to be stable and capable enough to drive good governance and investigate the performance of individuals and business institutions in the fields to be transparent; adhere to occupational morality, ethics and etiquette and be honest to every concerned party as well as help train business entrepreneurs to understand the principles of good governance.

3.6 Reform laws, regulations and procedures about economic and social development to balance the allocation of benefits from development, especially laws about economic and social development, laws that minimize civil officer's discretion. Moreover, strengthen the enactment mechanism of laws that are beneficial for new and small entrepreneurs.

(1) Study and revise laws about economic and social development

(1.1) Examine the laws that might create imbalance of benefit allocation such as laws that provide privileges for agricultural sector, small and medium enterprise or community sector and laws involving consumer protection and strengthening consumer status as a counterbalance of the private business sector.

(1.2) Improve the bureaucratic procedure for administrative performance to cover and have better efficiency. Amend the Act for the Establishment of and Procedure for Administrative Performance, B.E. 2539, which is the *central standard* for the procedure for administrative performance for

every public administrative institution (excluding the consideration of policies of the government, constitution-authorized organizations and courts) for use as guidelines for better transparent, righteous and fair performance by adding more contents as follows.

1) Add regulations about the qualifications of administrative legislators with prohibitions that cover the aspect of their relationship as family, relatives, siblings and business relationship with personnel and organizations that will gain advantages from the legislation.

2) Issue ministerial rules and regulations in form of support or subsidies. Listen to the opinions of both direct and indirect interest groups and provide opportunity for them to express opinions as well as offer them explanation and further necessary information.

(2) Improve the legislation process by providing an opportunity for sectors and groups to participate in passing a law and legislation as much as possible, for them to look after their benefits and counterbalance each other, which will help balance the benefit allocation. Nevertheless, the law amendment must be processed completely through the whole system both for major laws and minor laws as well as both national laws and local laws along with amending other involved laws to be in conformity with them.

(3) Strengthen the law enforcement system especially the laws about business operation under the Trade Competition Act, B.E. 2542, to prevent an unfair action in business operation and be beneficial for small and new entrepreneurs to create fair competitive atmosphere within the country.

(4) Set up rules and regulations for the State's projects and measures. The suitability and the impacts of those rules and regulations have to be analyzed and the information has to be distributed to everybody who is concerned with them. Moreover, issuing ministerial regulations that support and aid private business has to pass the project's suitability and impact analysis before proceeding to operation and identify the direct beneficiaries (number of companies and their names)

and the indirect beneficiaries. The impacts of the projects have to be evaluated and publicized as well.

3.7 Maintain and promote national security in administration aiming at balance and sustainability of the country, the capability of agencies involved in defense, security, and peacekeeping will be developed for efficiency and readiness in defending the country and responding to threats in all forms of emergency; cooperation with other sectors will be developed to defend and develop the country, and protect national sovereignty, the monarchy, national interests and administration under the democratic form of government under the King as Head of State; the safety and security of the people and society will be maintained by upholding good governance at all levels leading to the sustainable balance of national administration and development in economy, society, environment and resources, and security.

(1) Develop the army's capability to be efficient and ready to protect the country and promptly respond to threats in any kind of situations. Focus on developing the army to be of suitable size, full of quality and efficient administration as well as adhere to the principles of good governance, supporting military studies, research and technological developments that require potentials and domestic resources.

(2) Mobilize army forces and resources to help support solution development of national major problems with other concerned agencies and sectors by focusing on promote utilization of army forces and armaments with performance of other agencies for the mission in border area and the development of management of major problems affecting the stability of human and natural resources, which tend to become more and more important, such as problems from catastrophes, natural hazards, new pandemics, drugs, HIV, international crimes and illegal immigration of alien labor, with systematic preparation. Moreover, there has to be prevention measures, solution measures for emergency problems and recovery measures after situations in order to relieve people's troubles and protect their safety as well as promote thorough distribution of development benefits in every area especially in remote and border areas.

(3) Encourage making of policies and development strategies for security with the participatory process to be apparatus of administration and implementation by focusing on stability issues that cover and connect to all related dimension and security issues that focus only on highly important topics such as border security. Corporative promotion with neighboring countries is needed in order to create trust and coordination in development, along with development of people's capability and border communities to be strong enough to participate in development and to solve the problem of individual status with regard to fundamental rights and stability maintenance; supporting and helping the disadvantaged, mine victims and victims from the violence of three southern border provinces; and the organization of village and communities with a powerful prevention system and area-integrated administration system and networking between agencies and development partners at every level of the society to manage problems under the principles of good governance.

4. Roles of Development Partners

4.1 The public sector

(1) Play a major role in campaigning for creating of learning process and civil culture and value according to the principles of administration under the democratic form of government with the King as Head of State as well as promote democratic culture and consciousness in good governance to people at all levels, of all sectors and all institutions/agencies seriously and continuously as follows.

(1.1) Support planning for leadership development to set up the pillar group at the level of families, schools, communities and other sectors of the society to be the center of campaigning for creating of learning process and activities for fostering democratic culture.

(1.2) Promote cooperation between government, households, religious institutions, schools and media to foster consciousness about good governance to children and people; make them aware of and fight against corruption

by implanting good governance for children in schools and communities; as well as allocate budget for good governance advertisements to religious institutions, schools and media.

(2) Support to educational institutions, both formal and informal institutions, universities and other academic institutions. Provide knowledge for children and people to understand their rights and duties according to democracy and uphold and practice in real life.

(2.1) Introduce a curriculum of democratic political culture, setting up training, knowledge sharing, public forums discussing democratic rights and duties, morality and Thai way of life and democratic culture.

(2.2) Undertake a moral and ethics manual for children and people as well as participate in monitoring and evaluating good governance in bureaucratic sector together with government agencies.

(2.3) Study, research and create innovations that lead to learning and analyzing of development of a democratic and good governance culture that is suitable for the Thai way of life in the society.

(3) Provide an opportunity for people to participate in decision making authorities about national development in the form of committees and subcommittees with the public sector; provide them with the rights to access information equally and conduct a leadership development plan for every level of society, to be models for children and people to behave accordingly.

(4) Develop the bureaucratic system to be more efficient and transparent

(4.1) Improve roles and missions to be suitably concise and value for money; develop services/performance in the form of e-government, special organization, public company and special service units as well as study and research to downsize government officials to be appropriate in order to reduce personnel expenditure on personnel by developing administrative regulations and guidelines for special organizations under government supervision.

(4.2) Continuously and regularly upgrade capability of government officials since they start working to create better understanding and awareness of the importance of good governance and people participation emphasizing **professional performance**. The officials can openly express their opinions and advice according to academic theories. Foster civil culture to government officials, caring for public benefits; responsible for public and able to separate personal matters from public matters. **Strictly perform according to the Official Information Act** and develop an evaluation system for good governance supported both at organization and individual level by a ministerial ombudsman and internal audit agency as primary evaluators. The evaluation result will be used for consideration of annual reward allocation of government sector, and consideration of officer achievement. The result of organizational performance will be reported to the public.

(5) Conduct strategic plans for region, provincial clusters and province that correspond to national strategic plans and response to the needs of local and community area with regard to their socio-geographical conditions under the participation process of every part of the society along with the development of operating process of finance and inventories that is beneficial for integrated administration with the central database to support regional, provincial clusters and provincial strategies as well as the evaluation system.

(6) Improve budget allocation to response and support missions of provincial clusters/provinces and encourage adjustment of the status of provinces to be the budget-requesting units and adjust roles of agencies at the level of ministry, department and province as well. The roles of ministries should be adjusted to be

responsible for making of strategies and policies and guiding development goals. Roles of departments or mission groups should be improved to be the knowledge-support units that enhance new technology and knowledge and administrate them to gain achievement. Provinces should act as the hosts to administrate every government mission within the area of the province; support and help local organization as well as act as operation units in case the locality cannot operate that mission itself.

(7) Reform laws, regulations and procedures concerning the economic and social development by providing an opportunity for partners and groups to participate in inspecting laws that tends to cause unfair benefit allocation, laws that are subject to authorities' discretion, and strengthen law enforcement mechanisms especially for the laws related to business operation to prevent any unfair actions in business operation.

(8) Make an analysis of a project and its impact before the operation of the project for government's projects and measures that are likely to *support* or *aid* private businesses and identify the direct beneficiaries (number of companies and their names) and the indirect beneficiaries as well as evaluate the project and report its impacts to the public. Amend the Act of Establishment of and Procedure for Administrative Performance, B.E. 2539 by adding regulations about the qualifications of administrative legislators that legislators are forbidden to be related to each other as relatives or siblings, including through business relationships. Moreover, issue ministerial rules and regulations that listen to the opinions of both direct and indirect interest groups.

(9) Decentralize more authority to local administrative organizations. Roles of central authority should be changed from a controller to be a facilitator; set up service standard and support them in technical matters by **developing money transfer and subsidy system to the new locality** with regard mainly to reduce fiscal gap among localities and **developing local public service system** as well as developing the standard of local public service to have a quality guarantee system which has a minimum standard quality guarantee system, quality development system and the development of an efficient evaluation system along with encouraging **development of local administrative organizations to rely on**

themselves. Local administrative organizations need to be able to gather their own income; provide public service enough to catch up with social and economic expansion in the locality, as well as develop the people's potential to be **partners** in development of their own locality. **Develop the staffs' potential of local administrative organizations** to be able to perform professionally with the responsibility to the community and be more transparent as well as apply modern budgeting and fiscal administration systems.

4.2 Independent organizations under the Constitution

Independent organizations under the Constitution (Election Commission of Thailand, National Anti-Corruption Commission, State Audit Commission, the Constitutional Court, the Administrative Court, the Ombudsman of Thailand, and National Human Rights Commission of Thailand) should play a part in supporting good governance fostering public and political sectors by continual investigation of the performance of public officials and politicians to encourage transparency, honesty and fairness to all concerned, with enough budget for administration and operation from the government.

4.3 The private sector

(1) **The private business sector** must operate business with transparency, ethics, morality and etiquette in their occupation and be honest with every concerned partner as well as take part in training business entrepreneurs to have knowledge and understanding of the principles of corporate governance.

(2) **Board of Governors of the Stock Market of Thailand, Board of Trade of Thailand, the Federation of Thai Industries and the Association of Thai Committee Institutions** should campaign and provide knowledge and understanding to private businesses, directors/committees, shareholders and ordinary people to realize the benefits of "good corporate governance", in that it will bring about business competitive advantages and create a good image concerning performance transparency, as well as introduce the regulation that a company will be allowed to be

registered in the stock market only when the committees and ombudsmen of the company pass the corporate governance training.

(3) Institutions, associations, clubs and vocational groups develop etiquette for each occupation and use it for governing the business sector under control to operate the business corresponding to good governance with justice, honesty and fairness to consumers and social responsibility.

4.4 Academic institutions and state enterprises

(1) The academic sector has to develop knowledge about good governance as well as prevention and suppression of corruption as well as distribute knowledge to the public in order to urge the society to be alert, realize and participate in inspection of good governance and corporate governance and be alert to corruption. In addition, the sector has to develop a network that has a good relationship with the media, civil society and private organizations in order to offer complete and correct information in fighting against corruption to all partners.

(2) State enterprises have to improve their organizational culture to focus on performance efficiency; and systematically encourage people participation in developing projects; reveal the complete and correct information; urgently manage problem of state enterprises with deficit by making a recovery plan with goals and procedures that are clear and suitable for each state enterprise; as well as providing opportunity for private sector and people to participate in investment and resource utilization fairly and equally.

4.5 Civil society, people, media and community sectors

1) Civil society has to develop skill for democratic leadership in order to be able to teach and create changes in local community as well as enhance role of the provincial cultural council to be a center of developing and distributing democratic culture at the responsible area.

(2) People sector

(2.1) Study and learn about their own rights, duties and responsibilities; develop value appreciation or raise awareness in protection, maintenance and participation in development of administration under the democratic form of government with the King as Head of State; be able to creatively express their opinions on the public stage as well as be able to involve in making decisions about public policies that have an impact on people.

(2.2) Aggregate to be an organization in the field of economic, social and political; and be a powerful network; co-establish independent organizations such as an environmental independent organization and consumer protection independent organization; as well as participate in being committees and subcommittees in the public sector to be able to take part in policy making, planning as well as inspection and balancing of the exercise of state power.

(3) Mass media

(3.1) Distribute knowledge about democratic, good governance and peace cultures via every kind of media in various forms with easy-to-understand contents by inserting the contents in news, drama series, songs and traditional games.

(3.2) Strongly work with civil society and public inspection specialists; receive trust from the society by setting up the standard for news report; control performance of media to be under the strict occupational etiquette as well as maintain neutrality and independence in news reports.

(3.3) Develop the ability to conduct in-depth investigation; carefully check received information and search for information and facts thoroughly.

(4) Community will participate in the process of local community development and administration by joining in making provincial development strategies with provincial government officials and joining with local administration to create a project and budget allocation to response to community's needs as well as committing to performance that is transparent, honest and fair.

Chapter 7

From Strategy to Implementation and Evaluation

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From Strategy to Implementation and Evaluation

1. Introduction

Through ten years of the Eighth National Economic and Social Development Plan, Thailand shifted the development paradigm to a new holistic approach, the people-centered development. After that, the Ninth National Economic and Social Development Plan, Sufficiency Economy philosophy was applied as the core principle for national development and administration by changing from a sectored approach to integrated development that connects every dimension together as a whole as well as pays attention to the people participation and all parts of the society in every stage of the development with changing administration for adapting the strategies to implementation. Nonetheless, the process of adaptation of the Eighth and Ninth Plans to implementation under the new paradigm did not achieve much in the way of concrete results as expected because there was an economic crisis in the first year of the Eighth Plan. The government had to focus on recovering and solving economic problems and reduce its impacts on people and the society. Therefore, the operation of principal strategies was unable to be fully performed. Moreover, the concepts of Sufficiency Economy philosophy and humans as the center of the development were rather new, so most agencies and institutions did not understand the principles and could not perform according to the concepts at full potential.

Nonetheless, after the enforcement of the Constitution of the Kingdom of Thailand, B.E. 2540 (1997) and Royal Decree on Principle and Procedure for Good Public Governance, B.E. 2546, which are the foundation of good governance to support adjustment of roles, missions and public administrative strategies to lead to the standard performance, the result of the performance has been clearly measured. The government changed its ideology from controlling and operating by itself to supervising and facilitating for people. Inspection of equipment and systems as well as the report on the government sector performance evaluation were created and led to the administration that focused more on concrete achievement. This process helps

support the continuous and efficient driving of a development strategy in the public sector.

The Tenth National Economic and Social Development Plan adheres to the new development paradigm and focuses on the participation of people from all levels of the society in every procedure of the performance from the brainstorming and planning process to joining in development in conformity with the role and responsibility of each part of the society. This is the mobilization of resources both from inside and outside of the public sector and the reinforcement of social power from every part of the society to push the strategies to be implemented materialistically as well as continuously taking part in inspection of the result of the performance. Therefore, it is necessary to create bodies of knowledge and understanding in the principles of philosophy of Sufficiency Economy and apply them to drive the development for partners in every part of the society along with providing changing administration processes and mechanisms leading to the participation of every part of the society to push the strategies to be implemented by making and applying plans at various levels to be the equipment of driving and improvement of the allocation of budget and resources; amend laws and regulations to be beneficial for the development of bodies of knowledge in order to help the development to be successful as well as provide systematic monitoring and evaluation.

2. Objectives

2.1 To enhance the participation of development partners of all partners in compiling operational plans which integrate the Tenth Plan.

2.2 To improve the resource management system as well as budgeting system to support participatory strategy implementation.

2.3 To amend and upgrade laws and regulations to be beneficial for practical implementation of the strategies to be efficient and capable.

2.4 To study and research to develop bodies of knowledge as well as learning process for each person who is supporting the strategies to implementation.

2.5 To create a systematic evaluation and set up development indicators using proper and efficient evaluation.

3. Development Approaches

3.1 Ensure development partners at various levels in compiling operational plans which integrate the strategies of the Tenth Plan under the principles of the Sufficiency Economy philosophy by emphasizing the following issues.

(1) Clearly allocate the major roles of development partners to be able to perform missions and coordination to suitably support each other in driving the strategies to implementation by the following.

(1.1) Public sector has to change the role from governing, controlling, commanding and operating by itself to be the supporting coordinator and facilitator and be able to work with development partners in the form of development partners that are considerate towards people's needs.

(1.2) Private sector has to be responsible for society, communities and consumers; carry out production process that is environmental friendly and not against cultural values and environment with transparent and fair business operation as well as take part in providing social services and other creative activities with public sector.

(1.3) Institutions, such as religious institutions, will play an important role in distributing dharma principles, fostering attitude leading by dharma for living, supporting other people and participating in activities for public benefits. Educational institutions will play a role of providing knowledge and develop capability and learning process of children and people of all ages. Media will take part in surveillance and be a medium that reveals the truth as well as creating knowledge and creative social trends.

(1.4) Communities must have the capability to rely on themselves and aggregate together to create strength in efficient participation in every stage of the development process.

(2) Create knowledge and understanding in the principles of Sufficiency Economic philosophy and continuously apply them to develop partners of every part and every level of society to be able to join in driving the

development and making operation plans at various levels; push creation of the learning process and the adjustment of thinking method, attitudes and values leading to realization and understanding and be knowingly ready for changes and be able to apply for use in daily living.

(3) Encourage making and applying of plans of various levels that are related to the Tenth Plan to be apparatus of the process to drive the strategies to be implemented under the principles of Sufficiency Economy philosophy and integrated principles based on area, mission and participation as follows.

(3.1) Apply process mechanism and national governmental administration to drive the development in order that government will be able to coordinate roles, missions, approaches, measures and working methods systematically towards the same direction and suitably allocate budget and resources leading to horizontal integration among public agencies and association with the roles of other concerning parts leading to plan a three-year investment public plan that covers the highly-important approaches and measures of each strategy of the Tenth Plan.

(3.2) Apply the mechanism of the four-year governmental operation plan and annual operation plan of the government sector to drive and integrate with dimensions of the mission according to common authority of ministries, divisions and departments; dimension of area at the level of province and provincial clusters; and dimensions of special agenda or national terms that need the collaboration of various agencies for integrated performance to be able to more systematically allocate resources.

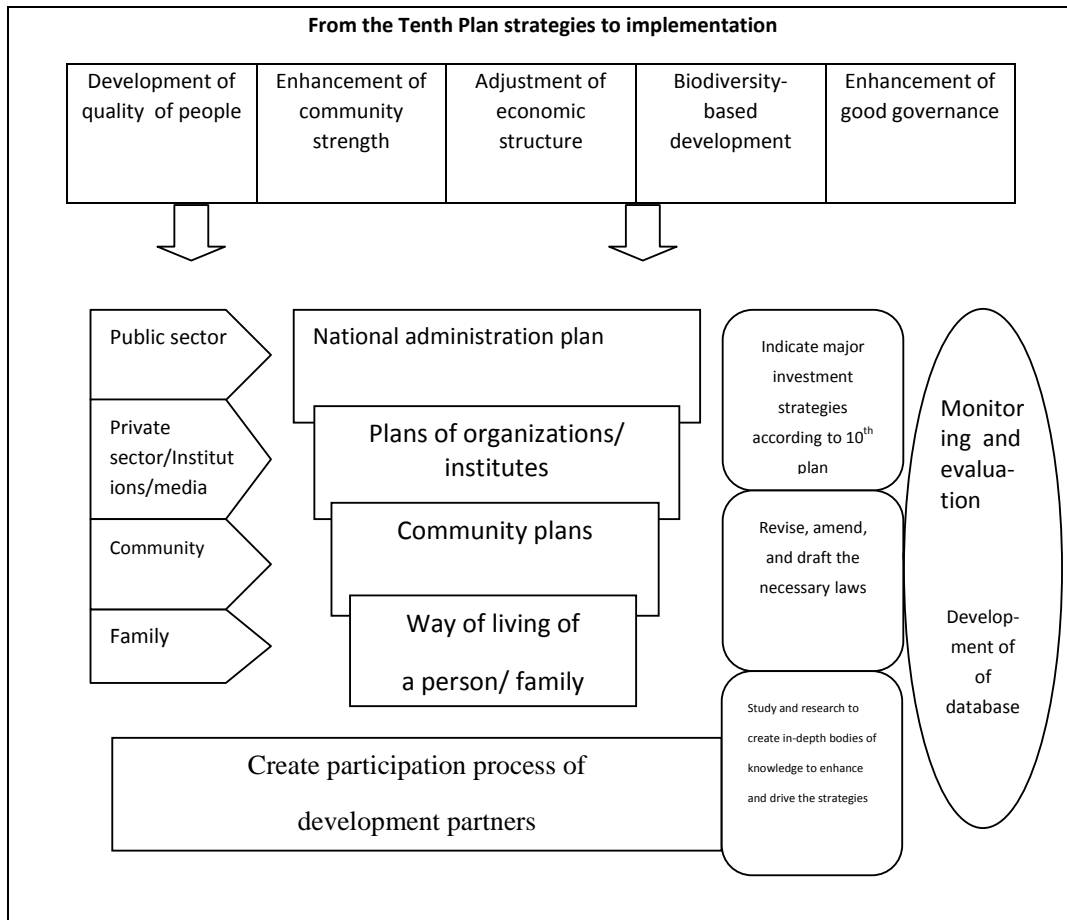
(3.3) Apply process mechanisms and community plans to create integration and connection with local plans and plans of various levels. Community plan process will be used as apparatus for enhancing community strength in order to make communities know themselves as well as other communities, social capitals and existing resources as well as be able to manage themselves in order to achieve the desired goals leading the communities, families and family members to a happy life under the principles of philosophy of Sufficiency Economy. Moreover, create participation of development partners within the area in community plan making process and associate them with local plans and plans at higher levels such as

provincial plans, provincial cluster plans and regional plans to create integration in operations.

(4) Encourage provision of a consulting mechanism for people sector to participate in driving development at area level by supporting creation of a consulting mechanism at the operation level within the areas, from the level of provinces, districts and localities, to help the people sector to participate in presenting opinions on the operation of strategies, development approaches, service and administration system management, and evaluation. This can reflect people's satisfaction and be used in improving the performance of government sector to be efficient enough to genuinely response to the needs and overall advantages of people in the area.

3.2 Identify important investment guidelines according to the development strategies of the Tenth Plan in order that development partners of every part of the society will be able to adapt them to drive according to their missions; bring other concerned parts of society to participate in performing as well as be able to mobilize resource allocation from various sectors to be beneficial for strategic driving as follows.

(1) The development of the quality of people and Thai society to be a knowledge and learning oriented society and enhance the strength of the community and society to be the firm fundamental of the country. The important investment guidelines within 5 years of the Tenth Plan are as follows.



(1.1) Comprehensive development of health system, focus on enhancement, prevention, maintenance and recovery of body and mind; develop quality of service and production of medical and public health especially the invention of health promoting innovations and the enhancement of administrative capability of health insurance system that links together the 3 systems, which are government welfare, social insurance and health guarantee, emphasizing health promoting and disease prevention with communities, which will result in better labor productivity in the long run.

(1.2) Promotion of lifelong learning, emphasize the administration of bodies of knowledge and learning process within communities and develop learning sources along with building the mechanism of mobile units to motivate children of all ages and their parents to be alert in lifelong learning and for children to have suitable development with their age, thoroughly providing enough computers for education and offering educational opportunities continuously by

offering loans for studying in fields that are in accordance with the demand of labor force and the solution of personnel insufficiency as well as by granting scholarships to disadvantaged children.

(1.3) Quality improvement of research and development by implanting science learning continuously from childhood to every level of education; producing new researchers among middle class and affluent people and creating suitable motivation both physically and occupationally.

(1.4) Continuous development of community potential by making participatory community plans, developing community enterprises that emphasize incubation of community enterprises, promoting aggregation to form co-operations that focus on a co-operative system and network development; enhancement of necessary skills for entrepreneurs along with expansion of opportunity to access community and national sources of investment funds, and creating a mechanism for wisdom and innovation to become important capitals.

(1.5) Establishment of social security for the informal sector to receive full social protection and taking care of the elders and the disabled within communities as well as offer a service for providing permanent residence for low-income people who take a good care of their residence. In this case, community and locality have to take part in every activity.

(1.6) Integrated operation regarding life and property safety, set up a conformed jurisdiction that helps reduce the proportion of crime and drug problems as well as reduce conflicts within a community with alternative jurisdiction.

(1.7) Poverty solving with an integration of physical and knowledge development that is driven by development partners with the clear roles among government sector at the level of central authority, provincial sector, local administrative organization sector and people and community sector with regard to sufficiency leading to happiness.

(1.8) Strengthening of cultural capital and its economic value creation that helps maintain and pass on local culture and wisdom as an identity of the country for the inheritance of the next generation as well as utilization

of a part of culture that is the strength of the country for economic and social benefits for product and service innovations leading to the development of quality of life.

(1.9) Promotion of roles of mass media and the private sector in youth development can be implemented through production of creative media with the participation of children. Campaign for self-immunity against inappropriate media will be launched and the concept of happy family will be promoted via every type of media along with the enhancement of private sector roles in education, labor force development, occupations for the disadvantaged and the disabled and the surveillance of environmental quality.

(2) The improvement of economic structure to be balanced and sustainable. The important investment guidelines within the five years of the Tenth Plan are as follows.

(2.1) Saving system reform to cover 13 million labor forces throughout the country by expanding compulsory saving, reforming the pension fund and saving for senescence of laborers in the informal economic system.

(2.2) Cluster promotion and supply chain development in productions and services with good capacity in each segment and area to enhance productivity and competitive capability as well as the development of industrial and area-based aggregations especially in field of food, vehicles, textiles and clothes production and the tourist service as well as drive clustering development of coordinators and the evaluation of clustering development in production and service sector.

(2.3) Complete innovation system reform in educational and research institutions as well as set up funds and joint ventures and permission center and innovation distribution center to be able to develop innovation quickly.

(2.4) Founding a value creation base in the agricultural sector by means of research, breeding and propagation of good varieties of agricultural products for every farmer to enhance the production capability of important core products in the form of food, herbs, energy and fiber, which are rice, cassava, sugarcanes, oil palms and rubber trees. Public sector will be mainly in charge

and check the quality of main species, and then encourage agricultural institutions and communities to produce and distribute them to farmers within the area.

(2.5) Reduction of transportation and logistics cost, develop and expand the capability of rail, marine and tube transportation, feeder system, collection and distribution centers along the strategic production places throughout the country to support a multimodal system as well as invest to develop trade facilitating system and develop logistic personnel both in quantity and quality as well as the development of the network structure of mass transportation in Bangkok and its vicinities to be complete and to change the fuel used in mass transportation in order to reduce fuel cost.

(2.6) Investment for development of public services, develop information technology network structure of the public sector and e-government system such as e-Health, e-Education and e-Services with regard to the suitability of technology and investment worthiness to support services for the people and business sector.

(2.7) Investment to create an opportunity for balanced and fair access to basic services; expand network of telecommunication infrastructure to make services available in rural areas; invest on information technology in schools and communities in order to provide an opportunity for them to access information and to improve knowledge of students and people in the country; thorough and suitable development of water sources and the water system for consumption and utilization in country; as well as provide water for consumption and industrial utilization and reduce the quantity of waste water in water works.

(2.8) Create energy security, provide more energy sources both domestic and international sources and find new energy sources that are commercially worthy or have low capital cost as well as restore energy sources and rush on technology development and investment of alternative energy sources such as production of gasohol and biodiesel production, increase the amount of NGV service stations for vehicles as well as research and develop solar energy and wind energy.

(3) Strategies for development of biodiversity and conservation of the environment and natural resources, the important investment guidelines within the five years of the Tenth Plan are as follows.

(3.1) Development of geographic information database system for zoning and marking of nature reserve boundaries. Government works together with communities in boundary indication using 1:4000 maps as the standard to build the databases; investigate the rights and make a list of area intrusion as well as plan a system to distribute land to people without land ownership for them to have their own production factor.

(3.2) Development of water sources for beneficial use by building check dams to store water within the ground; develop water works to be enough for all villages; increase the capability to maintain existing water sources; improve the condition of natural water sources, dig a pond within agricultural lands; develop more additional water sources within the area; develop surface water and groundwater distribution network; set up the information system of the management of 25 river basins integratively; the recovery of groundwater conditions in Bangkok and its vicinities as well as improve groundwater seeking system in critical areas.

(3.3) Inundation control and relief by improving water drainage system and prevent flooding in the urban community from the risk rivers in spate; developing an information system for decision making and alarm of upstream areas and the forecast of water level, flood and landslide alarm and dam safety.

(3.4) Investment in building, expanding and improving wastewater treatment system and centralized solid waste management system throughout the country to increase efficiency and coverage of crisis areas and tourist attractions. The government must allocate some budget to local administrative organization and has them collect service fees on waste treatment that reflects real capital of the operation.

(3.5) Change toward clean engine and energy to reduce air pollution, it is necessary that the government invest in the changing of engine systems and fuel of all government vehicles and BMTA buses into clean engines and fuel.

(3.6) Support of the business that exploit reused or recycled materials and hazardous waste management. The government issues incentive measures; pushes financial institutions to offer low interest rate loans to business entrepreneurs, both community and individuals; support private investment on hazardous waste treatment; improve and issue rules, regulations and laws to support and to let the entrepreneurs responsible for their own product waste, the assessment of suitability and possibility of using of community waste as alternative energy with a suitable technology for investment.

(3.7) Creation of database management system and establishment of national information center on biodiversity natural resources that provide details of taxonomy, features, utilization and concerning local wisdom with the name of communities that own the wisdom and have the management system that is able to prevent the information from unfair commercial usage.

(4) The reinforcement of good governance in national administration, the important investment guidelines within the five years of the Tenth Plan are as follows.

(4.1) Campaign for the cultivation of good governance awareness, value of democratic culture, and peace culture in people at every level, sector, and institution/organization via every type of media in various forms with contents that are easy to understand and able to access by the goals; encourage educational and academic institutions on setting up training courses; provide a center for exchanging knowledge with the community; as well as increase social public space for people to join in the inspection of public policies.

(4.2) Allow the public to take part in the thinking, decision-making, operating, taking responsibilities for, and inspecting the country's administration system by revising and improving mechanisms, procedures and processes of the public sector especially of projects using high budget and supporting/ promoting/ controlling projects that widely impact people both directly and indirectly as well as provide an opportunity for people sector and interested partners to be committees and subcommittees.

(4.3) Review and amend laws, regulations, steps, and processes in relation to economic and social development to create fairness in allocation of benefits arising from the development by studying and revising them to issue and amend the laws that are monopolistic, as well as laws, rules, regulations and announcements of government sector that involve social and economic development to be beneficial for participation process of people sector; be transparent by revealing results of the study/ analysis of the project; listen to opinions of the concerned party as well as add laws that are beneficial for agricultural, community economic and community sector.

(4.4) Build bodies of knowledge concerning development of democracy and good governance culture by supporting investment in education and research into building knowledge appropriate for the Thai society drawing upon domestic and international experience about democratic, good governance, peace culture and principles of conflicts between personal and public benefits.

(see details in Appendix 1)

3.3 Urgently amend and develop laws to support strategy driving to achieve efficient and effective results of implementation under frames of law amendment beneficial for good national administration, improvement of economic structure, enhancement of competitive capability of the country, solution of poverty problem; prevention of corruption; thorough distribution of economic benefits and self-immunity against economic changing trends in globalization as well as encourage the development of legal personnel to have modern knowledge and ability responding to government's needs and global change. The guideline of law amendment and legislation development is as follows.

(1) Social aspect, there are laws that are pressed for enforcement along with amendment and new drafting as follows.

(1.1) Laws that require urgent enforcement such as Vocational Education Act, B.E. ..., Royal Decree of the Establishment of Vocational Qualifications Institute, Private School Bill, B.E. ..., National Health Bill, B.E. ..., Community Forest Bill, B.E. ...

(1.2) Laws that need amendment such as Life-long Learning Promotion Bill, B.E. ..., Protection and Promotion of the Thai Traditional Medicine Wisdom Act, B.E. 2542, Public Health Act, B.E. 2535, Act of Establishment of the Institute for Community and Organization Development and Cooperatives Act, B.E. 2542.

(1.3) Laws that require new drafting such as Ministerial Regulation on Administrative Committees of Private Schools, Alcoholic Beverage Control Act, Act on the Protection of Community Rights to Manage Community Natural Resources and Environment.

(2) Economic aspect, there are laws that have to be enforced as soon as possible and laws that need amendment as well as laws that must be pressed for concrete enforcement as follows.

(2.1) Laws that require urgent enforcement: Bill on the Undertaking of Financial Business, B.E. ..., Deposit Protection Agency Bill, B.E. ..., Franchise Bill, B.E. ..., Business Guaranty Bill, B.E. ..., Bill on the Establishment of protection Measures against Increased Imports, B.E. ..., State Investment Corporation Bill, B.E. ..., Transport Administration Bill, B.E. ..., Bill on the Administrative Organization of the Suvarnabhumi Airport, and Water Business Bill, B.E.

(2.2) Laws that need pressing amendment: Investment Promotion Bill (No. ...), B.E. ..., Bankruptcy Bill,(No. ...), B.E. ..., Trademark Bill,(No. ...), B.E. ..., Patent Bill, (No. ...), B.E. ..., Anti-dumping and Foreign Goods Support Act, B.E.. 2542, and Construction Workers Act, B.E. 2522.

(2.3) Laws that require concrete enforcement: Trade Competition Act, B.E. 2542, especially concerning the issue of authority over market behavior, Royal Decree that support the Electronic Transactions Act, B.E. 2544, Draft Ministerial Regulation proposed by Ministry of Finance on the issuing, transferring, guaranteeing, and pledging of debt instrument.

(3) Natural resources and environment aspect, there are laws that need to be pressed for enactment and amendment as follows.

(3.1) Laws that require urgent enactment: the Bill on the Management of hazardous Waste of Product Residue, B.E. ..., Water Resources Bill, B.E. ..., National Park Bill, B.E. ..., Bill on the Control of Access to Genetic Resources and Benefit Distribution from the Use of the Genetic Resources in Research and Commerce

(3.2) Laws that need pressing amendment: Act on the Promotion and Maintenance of the Quality of the National Environment Act, (No. ...), B.E...., Wild Animals Conservation and Protection Act, (No....), B.E. ..., Forest Act,(No. 8), B.E. ..., and National Conserved Forest Bill,(No. ...), B.E. ...

(4) Good governance and national administration aspect, there are laws that need to be pressed for amendment as follows: Consumer Protection Bill, (No. ...), B.E. ..., Administrative Organization of the State Bill, (No. ...), B.E. ..., Government Information Bill, (No. ...), B.E. ..., Budget Procedure Bill, (No. ...), B.E....

(see details in Appendix 2)

3.4 Study and research to create bodies of knowledge and learning process to support the development of the Tenth Plan's strategies to implementation by emphasizing study and research to create bodies of knowledge that are beneficial for creating the learning process and extensive distribution that will be useful at both practical level and policy level. The major contents of research according to strategic issues of the Tenth Plan are as follows.

(1) Development of human quality and the Thai society toward a knowledge based and learning society there should be research to create various fields of knowledge such as the study of impacts of extension of the age of retirement to 65 regarding economic, social and living influences, a study of the frames of active social investment that expect integrated achievement (KPI) during the period of the Tenth Plan, studies of types of activities in production and service sectors in accordance with the development procedures, and the study of health investment that focuses on development of a complete health system.

(2) Strengthen community and society as a basis of national security there should be research to create various fields of knowledge such as studies of the connection of organization researching network of civil society sector both in formal and informal forms that are different from area to area.

(3) Reform the structure of the economy for balance and sustainability. There should be research to create knowledge of various fields as follows.

(3.1) Overall economic administration aspect, there should be research on saving behavior and the development of a long term saving system and the study of a fundamental monetary system.

(3.2) Adjustment of production structure for the production productivity, values of products and services to be based on knowledge and Thai-ness aspect, there should be research on different aspects.

1) The adjustment of agricultural structure, there should be research on the opportunity and possibility for agricultural product value adding and production productivity enhancement, studies of the administration after harvest for products that can be spoiled easily or those faced with the problem of decline in price every year, studies of Thai agricultural product administrative approaches that have potential in marketing according to changes in population structure into an aging society and the realization of consumer sanitation, and studies and research of market demand on the support of adding value and marketing potential of agricultural products from various groups.

2) The adjustment of industrial structure should emphasize in-depth research in order to lead to investment in construction, development and driving of high potential industries and new industries, especially biological industries and studies to develop and apply the 8 branches of important technological innovations for use in industrial development.

3) The adjustment of the structure of service sector should emphasize research into the capability of production of the Thai service sector, in-depth tourism market research in order to connect information about market and taste together with product demand and other involved industrial service, and studies

to develop competitive capability of new service sectors with potential throughout the value chain, such as educational service business, health and spa service, and construction and Thai boat building and repair business.

4) Trade and investment, there should be in-depth research on factors that affect positive investment atmosphere of the country, in-depth research to indicate and improve investment promotion measures in the form of both tax privileges and non-tax privileges to attract foreign direct investment as well as encourage Thai investors to invest in foreign countries as well.

(3.3) Supporting factors of efficient public economic administration and economic and investment structure adjustment should be researched as follows.

1) Infrastructure and logistic service aspect: there should be a study and survey of the full form of product transfer throughout the country, study and making of information about logistic cost per GDP, the evaluation of Thai logistic system development, the study to develop logistic supplier business, the study to enhance the development of connecting system of information network between public sector and logistics sector for importation and exportation, and the study to support the development of logistic network to connect with other countries as well as study and promote new technology to apply in logistic system administration.

2) Energy aspect, research should focus on the development of nuclear energy for electricity production in order to develop other alternative energy sources to replace natural gas, along with the development and study of the efficiency of solar cells and the study of markets of biodiesel in aspect of both demand and supply.

(4) Development of biodiversity and conservation of the environment and natural resources should be researched as follows.

(4.1) The development of biodiversity and local wisdom should be studied in order to install a system to complete the taxonomy of Thailand's biodiversity and connect local wisdom with new bodies of knowledge.

(4.2) The enhancement of the stability of the resource base: there should be research to follow changes of ecosystem and impacts of the development, studies to install the system to divide the categories of protected areas and conserved areas in conformity with reality, studies and surveys to develop mineral resources in the future, studies of the role of community in the management of the water resource in the river basin system and the development of participation in irrigation administration to increase the capability in water utilization and to increase water value.

(4.3) The creation of a good environment to upgrade people's quality of life and sustainable development: study and develop marketing approach to support technology, industrial and agricultural products that are friendly to the environment, study of approach and measures of waste recycling business, study of utilization approaches of financial equipment to enhance clean production and consumption.

(5) Promote good governance aimed at social justice and sustainability should be researched as follows

(5.1) Promotion of good government in national administration: there should be in-depth research on the enhancement and upgrading of good governance in Thai bureaucracy and the adjustment of bureaucratic regulations to create economic justice in society, studies of the resource allocation system that helps strengthen the power of development partners at the level of areas/ provinces/ locality, the improvement of roles of missions, duties, working system and agency size of the public sector; and research on worthiness of public missions; making the management system one of knowledge within organizations and e-Government.

(5.2) Promotion of strengths of the people sector in the participation in national administration: there should be evaluation of the result of people sector participation in national administration.

(5.3) Promotion and development of democratic culture: there should be studies of roles of social leaders that effect the development of

democracy and good governance and research on development approaches of democratic culture and way of living of Thai society.

(5.4) Decentralization and area development: there should be studies and research to create bodies of knowledge about the following.

1) The decentralization aspect: emphasize study and revision of the adjustment of central, regional and local missions to be suitable and beneficial for each other, the development of financial and administrative capability for local administrative organization to be able to efficiently be responsible for performing the transferred missions, focusing on income management for local administrative organizations of each level in correspondence with their missions and expenditure demand, and on creating public services of local administrative organization along with study of alternative patterns and measures to enhance the capability of local administrative organizations in self collecting income and provide evaluation of achievement and impacts of policy operation, authority distribution and the development of bodies of knowledge and policy suggestions that enhance the distribution of power.

2) The development of areas and cities: there should be studies of tendency and impacts of the expansion of towns and the community system at the level of country, region and urban areas that are the center of regional civilization, making and driving of national strategies on area-based development, the installation of sustainable development strategies in urban area and urban community systems in the core economic center of the country and the study of form, system and mechanism of the administration to drive the development of community areas that connect the local community with regional and central areas.

(5.5) Driving of the strategies to implementation and evaluation: there should be development of evaluation systems and creation of development achievement indicators at every level, the evaluation of development achievement in accordance with the Tenth Plan and government administrative plan using the development impact indicators as well as the development of information system and statistic administration system for planning and evaluation in every ministry, division and department.

(see details in Appendix 3)

4. Monitoring and Evaluation

4.1 Develop monitoring and evaluation system and create indicators to measure the achievement of development at every level

(1) Support the development to upgrade a new system of public administration monitoring and evaluation that focuses on performance achievement with standards and measuring methods that are clear, easy to understand and have results among agencies that can be examined and compared as well as a method that can be used at every level from every area, agency and individual level.

(2) Encourage every part of government to develop into the system of monitoring and evaluation of good public administration in order that their mission performance will bring about the utmost benefits to the public, efficiently and transparently as well as be able to respond to various demands of people.

(3) Support the development and making of development achievement indicators in accordance with the Tenth Plan at overall plan level, strategic level and the association with plans at other levels that conform with the Tenth Plan such as government administrative plan and operation plan at the level of ministries, regions, provincial clusters, provinces as well as localities and communities. Develop the indicators to measure final impacts of the development according to the Tenth Plan that leads to the society of happy coexistence based on participation process of every involved sector, to develop acceptance and utilization of the evaluation network.

(4) Provide knowledge and understanding; learning and knowledge skills on evaluation and making of development indicators to personnel, agencies, organizations and development partners at every level as well as continuously present the evaluation report to the public.

4.2 Promote the development of information databases at every level of society and the connection of information networks between central agencies at the level of policy as well as area and local level

(1) Encourage agencies at information policy level to develop an information system, databases and statistic administration system in order to set up a plan to respond to the development in accordance with the Tenth Plan; promote information development for surveillance and indication of changing direction of national and global economic and social situation; examine policy operation, performance evaluation and budget spending by connecting them to form a system which is up-to-date, accurate, of standards, easy to access and stores the information for rapid retrieval.

(2) Promote establishment of joint information networks. Provinces coordinating with educational institutions will be responsible for making a database using for planning and evaluation at the level of province, locality and community; as well as the connection of provincial, local and community information networks with a central network as a system that is easily accessible and can be used conveniently and rapidly.

Appendices

**Appendix 1 Guidelines for Investment
under the Tenth National
Economic and Social
Development Plan**

**Appendix 2 Framework and Guidelines of
Law Development under the
Tenth National Economic and
Social Development Plan**

**Appendix 3 Research Areas for the
Creation of Knowledge Bodies
under the Tenth National
Economic and Social
Development Plan**

Appendix 1

Guidelines for Investment under the Tenth National Economic and Social Development Plan

1. Economic aspect

1.1 Saving system reform: Reform the saving system to cover the country's whole manpower of 13 million people through expansion of mandatory savings, pension fund reform, and pension savings for the informal sector.

1.2 Cluster promotion and supply chain development in productions and services with good capacity in each segment or area: Productivity and competitiveness must be enhanced. For instance, industrial clusters should be developed for the industries with good capacity and market opportunity by supporting networking to enable capable industries which require economic restructuring to be strengthened. In particular, industrial and special clusters must be developed especially in the industries of food, automobile, textile and garment, and tourism, etc. Cluster development agents must also be propelled while monitoring and evaluation must be undertaken for cluster development in the production and service sectors under guidelines for industrial restructuring.

1.3 Comprehensive reform of innovation system: A comprehensive reform must be carried out on the innovation system in educational institutions, research institutions, establishment of funds and joint-stock companies, assigning of offices, and innovation distribution centers in order to greatly improve innovation developments.

1.4 Founding a value creation base in the agricultural sector by means of research, breeding, and propagation of good varieties of agricultural products: With a value creation base, good varieties of agricultural products will be adequately available for agriculturalists for use to increase production efficiency of main products

such as food, herbs, energy, and fiber including tapioca, sugar cane, oil palm, rubber, and so on. In so doing, the public sector must be responsible for producing and inspecting the quality of foundation varieties while agricultural institutions as well as the community sector take the role of producer of registered varieties and distributor of the varieties to farmers in the area. An example for that process is the community rice centers. In addition, the private sector may be encouraged to partly produce improved or breeder varieties along with the public sector, but the public sector must inspect and accredit the quality of those varieties to be distributed to the farmers, like oil palms.

1.5 Reduction of transportation and logistics cost: The network capacity of track transport, water transport, pipeline transport, feeder, and product distribution centers in the country's strategic production bases must be increased so as to support a variety of modes of multimodal transportations. An investment must also be made to develop systems for facilitating commercial transactions such as Single Window Entry and One Stop Service. Moreover, personnel in logistics must be developed both quantitatively and qualitatively. The network of mass transit in Bangkok and its municipality should also be improved and the pattern of energy usage by the public transportation system must be changed to reduce fuel cost.

1.6 Investment for the development of public services: An investment must be made to develop the networks of public information technology and e-government systems such as e-Health, e-Education, e-Services, and others by taking into account the appropriateness of technology and worth of the investment to enhance services provided for the people and the business sector.

1.7 Investment to create an opportunity for balanced and fair access to basic services: Expand the network of telecommunication infrastructure to make services available in rural areas while investing in information technology in schools and communities to enable the people to have access to news and information and to enhance knowledge development among students and members of the rural communities. Also develop water sources as well as water systems in rural areas for thorough and sufficient consumption, along with providing water sources for industries and decreasing water waste in the water system network.

1.8 Establishment of energy security: More energy from domestic and international sources must be supplied and new energy sources with commercial worth and low cost must be found. Energy sources must also be reserved. In addition, technology must be developed urgently while an investment must be made in renewable energy, for instance, the production of gasohol and biodiesel, expansion of service stations of the natural gas for vehicles (NGV), and research development in solar energy and wind energy, etc.

2. Social aspect

To propel strategies for development of human quality and Thai society towards a wisdom based and knowledge based society and to make the society a strong foundation for the country in the next five years, investment must be made in the following.

2.1 Comprehensive development of the health system: The health system must focus on both physical and mental prevention, cure, and rehabilitation. Quality of services and production of medical and public health personnel must be fostered. Particularly, innovations for health promotion must be created and there must be an increase in the efficiency in managing health insurance that combines three systems—welfare for government officials, social security, and health insurance—emphasizing health promotion and health prevention, which must be done in collaboration with the communities leading to long-term improvement of labor productivity.

2.2 Promotion of life-long learning: Knowledge and learning process management in communities must be nurtured, along with organizing mobile units to stimulate children of all ages as well as their parents to become enthusiastic about life-long learning and to foster development among children according to their ages. Computers must also be thoroughly supplied to support teaching and learning. Opportunities for continuous learning must be created by providing loans that correspond to the demand of manpower and the solution to shortage of human resources and offering scholarships to the disadvantaged.

2.3 Quality improvement of research and development: Quality of research and development can be improved by cultivating the learning of science at a very

young age and continued throughout every level of education, producing young researchers in the mid-level and top-end of manpower, and creating physical motivation and appropriate career path.

2.4 Continuous development of communities' capacity: That can be achieved by making participatory community plans, developing community enterprises with an emphasis on community enterprise incubator programs, supporting aggregation in the form of cooperatives focusing particularly on system development and networking, improving skill and knowledge of becoming proprietors, and increasing opportunities for access to capital sources—in which wisdom and innovation are included as crucial capital sources—both at the community level and the national level.

2.5 Establishment of social security for the informal sector to receive full social protection: The elderly and the disabled in each community must be taken care of while the services to provide permanent dwellings for those with small income must be established with maintenance for livable communities. Communities must be well looked after. Most importantly, communities and the local people must be allowed to take part in all activities.

2.6 Integrated operation regarding life and property safety: Restorative practice must be carried out to reduce crimes and drug problems. Community conflicts must also be diminished through an alternative justice process.

2.7 Poverty solving with an integration of physical and knowledge development: The problem-solving process must be driven by all development partners—the central government, the provincial government, local administrative organizations, and the community sector—whose roles are clearly specified by taking into consideration the concept of moderation that will lead to happiness.

2.8 The strengthening of cultural capital and its economic value creation: To achieve that, the identity of Thai local culture and wisdom must be preserved and passed down to younger generations. Then, cultural strengths must be used for economic and social benefits to create innovations for products and services, leading to improvement in quality of life.

2.9 Promotion of roles of the mass media and the private sector in youth development: The roles include creating constructive media with participation from the youth, campaigning for a safety net against negative media, promoting the trend of warm families using all forms of media, fostering the role of the private sector in education, developing manpower, providing careers for the underprivileged and the disabled, participating in watch and monitoring programs, and maintaining the quality of environment.

3. Natural resource and environmental aspect

3.1 Development of geographic information systems for zoning and marking of nature reserve boundaries: The government must engage the community in the identification of reserve zone boundaries using a map with the scale of 1:4000 as the basis for the database system. In addition, they must examine all rights to the land, record all land intrusion for personal benefit, and establish a system that distributes land tenure to enable landless people to have their own productive inputs.

3.2 Development of water sources for beneficial use: Check dams must be built to better store water underground and enough water systems must be developed for every village. Moreover, the capacity of existing water storages must be increased while natural water sources need to be improved. Ponds must be dug up in farming lands and new water sources are to be developed in suitable areas. In addition, systems of surface water and groundwater distribution must be established. There must also be an integrated information technology system that manages the country's 25 major basins. Groundwater in the Bangkok and municipal areas must be restored and a groundwater monitoring system needs to be modified in crisis areas.

3.3 Inundation control and relief: That can be done by improving water drainage and flood protection systems to guard against flood disaster in areas in jeopardy of flood waters, creating an information system for use in the decision-making process, providing warning systems including warning in water source areas, water levels forecast, flood warning, and landslide warning, and building safety for reservoirs and dams.

3.4 Investment in building, expanding, and improving waste water treatment and centralized solid waste management system throughout the country to increase efficiency and coverage of crisis areas and tourist attractions:

To do that, the central government must allocate some budget to local administrative organizations which then collect service fees that reflect real operational costs from community people.

3.5 A change towards clean engine and energy to reduce air pollution: The government must invest to replace the engine system and fuel energy used by government automobiles and all buses of the Bangkok Mass Transit Authority with clean engine and energy.

3.6 Support of the businesses that exploit reused or recycled materials and hazardous waste management: The government must set up tax incentive measures, encourage financial institutions to offer low-interest credit loans to community and private proprietors, support private investment in the management of hazardous waste, amend and issue law and regulation to force proprietors to take responsibilities for their product residues, evaluate appropriateness and feasibility of making use of community waste especially as energy, and search for proper investment technology.

3.7 Creation of database management system and establishment of national information center in biodiversity natural resource: The database must have taxonomy details, qualifications, uses, and related local wisdom with information of owners of the local wisdoms. There must also be a management system that can protect against unfair commercial exploitation of the information.

4. Good governance aspect

4.1 Campaign for the cultivation of good governance awareness, value of democratic culture, and peace culture in people at every level, sector, and institution/organization by supporting investment in campaigns through every type of media in the forms of news, plays, songs, and folk plays that are easy to understand and reach all target groups; encouraging educational or academic institutions to organize training courses, activities, and forums to exchange knowledge with the communities; increasing social public spaces to enable the people to take part in the

exchange, learning, consulting, and monitoring all matters concerning public policies; and making social leadership development plans at the national, organizational, community, and youth levels for use as good examples for the society.

4.2 Allow the general public to take part in the thinking, decision-making, operating, taking responsibilities for, and inspecting the country's administrative system by adjusting and improving mechanisms, steps, and processes in the operation of the public sector. Particularly with high-budget projects or projects with supporting, promoting, or controlling features that will have an enormous impact on people both directly and indirectly, the people sector and allied stakeholders must be given an opportunity to join advising or working committees or subcommittees. The people must also be encouraged to come together to form a public organization as the backbone to fight against corruption and misdemeanors, protect consumers, maintain natural resources and the environment, and so on.

4.3 Review of laws, regulations, steps, and processes in relation to economic and social development to create fairness in the distribution of benefits arising from the development: Study and review must be conducted to amend monopoly laws and other laws, rules, regulations, or government notices regarding economic and social development to facilitate participatory processes of the people sector. For transparency, results of the study or the project's analyses must be disclosed and ideas or comments from related parties must be heard. In addition, laws supporting the agricultural sector, the community economy sector, and the community sector must be legislated while law enforcement must be strengthened, especially laws concerning business undertaking to prevent unfair activities towards other proprietors.

4.4 Creation of knowledge body about the development of democratic culture and good governance culture: This can be done by providing funding in education and research that generates accurate, varied, and thorough knowledge. The body of knowledge must be built from domestic and international experiences regarding democratic culture, good governance culture, peace culture, conflicts between personal interest and public interest, etc. to allow for framework and guideline suitable for the Thai context.

Appendix 2

Framework and Guidelines for Law Development Under the Tenth National Economic and Social Development Plan

1. Goals

To update laws to support dynamic changes of situations amid globalization; to make laws an important foundation for stable and sustainable economic, social, and natural resource and environmental development of the country; and to increase the capacity of legal personnel.

2. Framework for Law Development and Improvement

Law development and improvement need to be undertaken to facilitate good administration of the country and economic restructuring, improve the country's competitiveness, solve the problem of poverty, prevent corruption, foster fair and thorough distribution of economic benefits, create a safety net to handle economic changes in the face of globalization, and pursue the developing of knowledgeable personnel in the law field to respond to the government's demands and global changes.

3. Guidelines for Law Development and Improvement

3.1 Economic aspect: Laws must be amended and improved in order to reinforce the country's international competitiveness in the era of globalization, especially reducing various costs that facilitate economic restructuring; to create a positive investment climate to attract domestic and foreign investors; to strengthen the country's businesses to allow them to be successful in open markets, bilateral or multilateral free trade negotiations, and others; to nurture registration and protection of intellectual property to allow for value creation of products and services on the

basis of knowledge and Thai-ness. To achieve that, some laws need urgent enactment while others need pressing amendment, and still others need concrete enforcement.

(1) Laws that require urgent enactment

- **Bill on the Undertaking of Financial Business, B.E.** for use as a fundamental tool to effectively oversee financial institutions, which covers the undertaking of financial business by non-commercial banks with a potentially extensive impact on the people; to prevent and solve problems immediately, to restore stability to financial institution system; and to protect retail banking.

- **Deposit Protection Agency Bill, B.E.** to protect people's deposits in financial institutions, particularly retail banking, strengthen security and stability of the financial institution system, and cultivate financial disciplines among savers and financial institutions to make decisions based on reasonableness and risk consideration.

- Matters of law and law enforcement in current financial transactions must be clear and provide protection for all related persons in accordance with the international standards, for instance, leasing and factoring, which are another way of funding in the business sector at present. Some laws in the Civil and Commercial Code that were legislated a long time ago may need amendment or specific enactment, for example, **Bill on the Undertaking of Factoring, B.E.; Bill on Letter of Credit, Trust Receipt, and Standby Credit, B.E.; Financial Derivatives Bill, B.E.**; and so on.

- **Franchise Bill, B.E.** to systemize the undertaking of franchise businesses by setting up measures that provide support, aid, protection and justice for franchisees.

- **Business Guaranty Bill, B.E.** to allow for use of assets with economic value that cannot be mortgaged or pawned as a guarantee for loan, which will provide the business sector with better access to capital.

- **Bill on the Establishing of Protection Measures against Increased Imports, B.E.** to stipulate measures that prevent increased imports.

- **State Investment Corporation Bill, B.E.** to establish the State Investment Corporation to enable the government to manage state enterprises and securities companies flexibly and effectively.

- **Transport Administration Bill, B.E.** to restructure the country's transport administration by policy mechanism from overseeing mechanism and operating mechanism and by establishing a mechanism that involves the private sector in infrastructure development.

- **Bill on the Administrative Organization of the Suvarnabhumi Airport, B.E.** to found a special local administrative organization.

- **Water Business Bill, B.E.** to set up a management system of proper and transparent water businesses and to promote efficient water business operations to enable people to have access to standard and quality services.

- **Bill on the Development of Renewable Energy and the Conservation of Energy, B.E.**

- **Movie and Video Bill, B.E.**

- **Town Development Bill, B.E.**

- **Law governing civil responsibilities of the proprietors of international seaport and transport management.**

- **Law governing the establishment of an electricity administrative organization.**

- **Law governing the undertaking and administration of natural gas business.**

(2) Laws that need pressing amendment

- **Investment Promotion Bill (No. ..), B.E.** to improve the component of the committee, increase the role in promoting investment of Thai

investors in foreign markets, enhance privileges of those promoted, and cancel rights and privileges that support exports, in accordance with the WTO agreement.

- **Bankruptcy Bill (No. ..), B.E.** to limit the scope of bankruptcy law not to apply to government officials, officials of state enterprises, farmers, and labor forces who do not have businesses in trade and commerce.

- **Trademark Bill (No. ..), B.E.** by holding meetings to hear ideas concerning amendments from related parties.

- **Patent Bill (No. ..), B.E.** by holding meetings to hear ideas concerning amendments from related parties.

- **Anti-dumping and Foreign Goods Support Act, B.E. 2542** to correspond with the current situation.

- **Construction Workers Act, B.E. 2522** to be in line with the present situation.

- **Operate the project on the amendment of rules, regulations, and matters of law regarding logistics** to increase efficiency of the Thai logistics system to be in line with the international standards.

- Laws governing information technology.

- Laws governing golf and spa businesses.

(3) Laws that require concrete enforcement

- **Trade Competition Act, B.E. 2542**, particularly in the matter concerning market dominance behavior.

- Royal Decree that supports the Electronic Transaction Act, B.E. 2544.

- Draft Ministerial Regulation proposed by Ministry of Finance on the issuing, transferring, guaranteeing, and pledging of debt instruments.

3.2 Social aspect

(1) Laws that require urgent enforcement

- **Vocational Education Act, B.E.**

- **Royal Decree on the Establishment of Vocational Qualifications Institute**

Both the Vocational Education Act and the Royal Decree on the Establishment of Vocational Qualifications Institute will enhance manpower development by improving the vocational qualifications system to be in accordance with the international standard. If both laws are not legislated and enforced during the period of the Tenth National Economic and Social Development Plan, there may be a negative impact on labor mobilization caused by free labor flow and movement.

- **Private School Bill, B.E. ...**

The Private School Bill will play an important part in supporting the organization of education by the private sector to enable private schools to manage education more clearly and effectively. The Private School Bill is currently under the consideration of Office of the Council of State of Thailand.

- **National Health Bill, B.E.**

The National Health Bill is the law governing national health that specifies rights and duties in health and stipulates guidelines for an integration of knowledge and cooperation in health from the public and people sectors for sustainable promotion of individuals, communities, and society.

- **Community Forest Bill, B.E.**

The Community Forest Bill will protect and enhance the use of community forests. The Bill has been drafted and is now considered by the cabinet.

(2) Laws that need amendment

▪ Life-long Learning Promotion Bill, B.E.

The Life-long Learning Promotion Bill has been approved by the cabinet with a condition that the role of the Office of the Non-Formal and Informal Education must be modified. The Office must not organize the teaching and learning by itself but has a role in promoting and supporting other units to organize the teaching and learning process. Responsible organizations should press on the amendment and enactment of the law so that life-long learning has been brought into practice with concrete results.

▪ Protection and Promotion of Thai Traditional Medicine Wisdom Act, B.E. 2542

The law plays a crucial role in supporting and improving folk medicine and Thai traditional medicine and protecting herbs. Because of the law, a Thai traditional medicine wisdom fund has also been founded. However, the stipulation of standards between Thai traditional medicine and modern medicine should be different. Issues that are in conflict with the Medicine Act, B.E. 2510 on herbs that are made into curing medicines should be examined and amended to allow Thai traditional medicine to become an alternative medicine that can be truly used in health care.

▪ Public Health Act, B.E. 2535

The Public Health Act is the law which controls activities that may have negative effects on or harm a person's health, for instance, filth and solid waste treatment as well as activities harming the health of markets and other places that sell food and other products in public areas. Amendment should be made on the matters concerning local operational mechanisms with an emphasis on participatory process from all parts to improve efficiency in public health management at each locality.

▪ **Act on the Establishment of the Institute for Community and Organization Development and Cooperatives Act, B.E. 2542**

Both Acts are laws supporting, controlling, and supervising the operations of different groups in the people sector of each community. The laws should be amended by taking the Cooperatives Act, B.E. 2542 into consideration to cover and certify legal status of saving groups. The amendment of the laws will reduce conflicts and add flexibility, along with enhancing effective savings of the people sector.

(3) Laws that require new drafting

▪ **Ministerial Regulation on the Administration Committee of Private Schools**

The law will enhance educational management of the private sector, leading to better quality in education.

▪ **Alcoholic Beverage Control Act**

The Alcoholic Beverages Control Act will reduce the amount of alcoholic consumption and lend assistance to those affected by harmful wrongdoings caused by drinkers of alcohol in the Thai society. The law should be drafted to cover such matters as decrease in alcoholic consumption, alcoholic rehabilitation treatment, and funding to aid people harmed by alcoholic consumers. (The law will replace the Liquor and Spirit Act, B.E. 2493, which is outdated.)

▪ **Act on the Protection of Community Rights to Manage Community Natural Resources and Environment**

The law will protect the rights of traditional local communities and allow them to participate in conserving, revitalizing, maintaining, and making use of natural resources and environment of their communities.

3.3 Natural resource and environmental aspect: Laws governing matters on natural resources and environment are meant to maintain environmental quality; deal with hazardous wastes; develop, protect, and conserve water resource; and conserve

wildlife. To achieve the goal, local administrative organizations must also take part in the management of natural resource conservation, particularly in boundary demarcation for land use. That is, certain areas in national parks must be kept for wildlife nature reserves while conservation areas must be separated from areas for tourism. Moreover, they will participate in balanced and sustainable use of natural resources for research and commerce.

(1) Laws that requires urgent enactment

▪ **Bill on the Management of Hazardous Wastes from Used Product Residue, B.E. ...** by providing funds to support organizational administration and operation to raise circulating funds according to the objective of setting up funds independent of the public sector. Local administrative organizations will also be designated to participate in the management of hazardous wastes and collect fees for their waste management and officials will be assigned to ensure that the law is obeyed.

▪ **Water Resource Bill, B.E.** by specifying rights to water resources; organizations to manage the resources; operational funding; development, restoration, protection and conservation of water; prevention and solution to inundation, water shortage, and irrigation. Penal provision must also be identified.

▪ **National Park Bill, B.E. ...** to promote wildlife conservation by stipulating boundaries for each national park and allowing local administrative organizations to take part in the conservation of natural resources, boundary demarcation for land use in the national park, and fundraising.

▪ **Bill on the Control of Access to Genetic Resources and Benefit Distribution from the Use of the Genetic Resources in Research and Commerce** to identify criteria, procedures, and conditions in applying for access to the genetic resources and to make use of them domestically and internationally; specify permission of access and negotiation mechanism for national benefits; and designate the central organization and the authorized organization.

- **Bio-safety Bill** to identify criteria for safety control in moving, caring for, utilizing and studying genetically modified organisms both domestically and internationally; specify mechanisms and organizations to consider granting permission to move, care for, utilize, and study the genetically modified organisms; and designate organizations to evaluate bio-safety.

(2) Laws that need pressing amendment

- **Act on the Promotion and Maintenance of the Quality of the National Environment (No. ..), B.E.** The Act on the Promotion and Maintenance of the Quality of the National Environment B.E. 2535 should be amended. In particular, the definition of “commercial airport” must be changed. The Ministry of Natural Resources and Environment must provide a clear definition of the “commercial airport” to avoid problems regarding the operation of the Department of Civil Aviation.

- **Wildlife Conservation and Protection Bill, B.E.** The law must be amended to promote wildlife conservation by specifying types of reserved animals, protected animals, wildlife according to the list of the international conventions, prohibition of hunting, wildlife ownership and trade, commercial breeds, establishment of public zoos, stipulation of wildlife reserve areas, protection of wildlife living areas, setting up wildlife conservation funds, participatory conservation of natural resources by local administrative organizations, and boundary demarcation for land use in wildlife reserve areas.

- **Forest Act (No. 8), B.E.** The law must be amended to accord with the civil and commercial law governing titles and component assets and to correspond with the cabinet’s resolution on rights of a person to use his or her assets. It should be modified to allow different control for teak trees and rubber trees growing in the forest and those growing on titled land. The law must also grant authorization to issue letters of certification or ownership for the trees grown on titled land and find other related measures to handle the situation.

- **National Conserved Forest Bill (No. ..), B.E.** The law must be amended to lessen steps in applying for beneficial use of national conserved

forests, encourage local administrative organizations to participate in the conservation of natural resources, and demarcate boundaries for land use between conserved areas and areas for tourism.

3.4 Good governance promotion

(1) Laws that require urgent modification

- **Consumer Protection Act (No. ..), B.E.** The Act must be modified to provide the independent consumer organization committee under the Constitution Section 57, set up funds for consumer protection development, and change the status of the Office of the Consumer Protection Board not to be under the Prime Minister's Office.

- **Administrative Organization of the State Bill (No. ..), B.E.**The Bill must be amended to be in accordance with the government's administrative policy by specifying clearer authority and function of the prime minister and the cabinet, in particular the function that concerns solving pressing crises to enable the government to work more flexibly according to their strategic planning and terminating the status of departments and provinces as a legal entity.

- **Government Information Bill (No. ..), B.E.** The Bill should be modified to cover independent agencies under the constitution and every government organization, encourage information disclosure electronically, and adjust authority and function of the committee.

- **Budget Procedure Act (No. ..), B.E.** The Act should be modified to improve budget procedure to be in line with the change in budget system and the government's administrative policy with an emphasis on strategic works, decentralization of budget management, reduction of procedures, and change of role of Bureau of the Budget.

Appendix 3

Research Areas for the Creation of Knowledge Bodies under the Tenth National Economic and Social Development Plan

Topics and brief main points of the research areas that are important and need to be carried out under the Tenth Plan in order to build bodies of knowledge and learning processes supporting the driving of strategies to implementation classified according to the development strategies set out in the Tenth Plan are as follows:

1. Strategies for development of human quality and the Thai society towards a knowledge-based and learning society

1.1 A study of economic, social, and living impacts from the extension of the retirement age to 65 years, as well as a study of the career structure of the elderly in line with changes according to the economic structure and a study of administrative mechanisms appropriate to the Thai social context.

1.2 A study of proactive social investment framework under the Tenth Plan, which aims at an integrated Key Performance Index (KPI) through Key Success Factors with high social return. Upon completion of the research, a project plan on social investment that makes balanced use of economic capital, social capital, and natural resource capital must be proposed.

1.3 A Study of types of activities in the production sector and the service sector according to each stage of development starting from groups that primarily depend on an advantage of labor and have minimal added value and value creation for their products and services, to groups that utilize more knowledge employing agricultural processing, have their own industrial brands and conduct their own research and development, and groups that use knowledge and opportunity to create products and services which command customers' trust and confidence. Demand for manpower as well as guidelines for manpower administration and development in each group must also be reflected.

1.4 A study on health investment which aims at developing a comprehensive health system including health prevention and promotion to strengthen health, reduce medical fees, and increase work efficiency, which will have a positive impact on labor productivity.

2. Strategies to strengthen community and society as a basis of national security

2.1 A study connecting research networks on the civil society sector, both formal and informal, which is different from area to area. The study will focus on factors that contribute to the strength of each civil society, its operating mechanisms, the management of each civil society and its networking, and systematic data collection of the civil society sector for use as a local tool towards development of strong communities.

3. Strategies to reform the structure of the economy for balance and sustainability

3.1 Overall economic administration

(1) Studies of saving behavior and development of a long-term saving system. This can be done by placing an emphasis on factors influencing savings of the economic sector in terms of direction and impact size, in order to be able to formulate policy that properly promotes savings. A study must also be carried out on long-term saving systems of countries which focus on saving expansion that covers the majority of people. This can be done by examining existing saving systems to increase their efficiency and capacity for optimal benefits as well as study more saving systems that will be needed by comparing practices of foreign savings, impacts, and short-term and long-term risks.

(2) A study of grass-roots financial system to establish a system to support the commercial finance system and specify appropriate operating styles and regulations in accordance with the conditions and structure of Thai society, the structure of the country's financial sector, and consumer protection.

3.2 Reform of the production structure to increase productivity and value of products and services on a basis of knowledge and Thainess

(1) Agricultural restructuring

(1.1) Research on opportunity and feasibility study in value creation of agricultural products and productivity in the product groups which draw incomes from exports, particularly products exported as fundamentally processed materials with minimal added value, which will diminish Thailand's opportunities in foreign markets. Such products include rubber, rice, tapioca, and sugar cane. Thus, research results can be used towards concrete practices and improve the country's opportunities.

(1.2) Research on post-harvest management in products prone to perishability and facing low price problems annually and for which the government has to constantly solve the problems at hand through price interference. Such products include fruits such as longan, durian, rambutan, lychee, and mangosteen and vegetables like garlic, shallots, and onion. Research will enable the government to find long-term solutions to the problems.

(1.3) Research on approaches in the handling of Thai agricultural products with altered marketing capacity resulting from changes in the population structure towards an aging society, and awareness on consumers' health and sanitation. Examples of such products are herbal plants, organic products, and energy plants. So far, the government's support on this issue has been limited, wreaking loss of development opportunities.

(1.4) Research on market demand for various groups of agricultural products with value creation and marketing capacity to be able to plan marketing strategies according to the production supported and promoted by the government.

(2) Industrial restructuring

(2.1) In-depth research to boost an investment in the establishment, development, and propelling of potential industries, new-wave industries, and especially bio-based industries. The research must be carried out in order to identify segments of industries and products on which value creation is

emphasized throughout value chains and in line with the service sector in a mutually supporting manner.

(2.2) Research for development and application of 8 major technological innovations for benefits in industrial development. The 8 major areas of technology consist of advanced production, electronics and motor vehicles, nutra-ceutical, embedded system, bio-fuel, solar cell system, bio-plastic, and rubber products made from rubber trees. The research must focus on technological management, examining market patterns and mechanisms along with government mechanisms and measures, which will enable technological management to become of commercial use.

(3) Service restructuring

(3.1) A study on productivity in the Thai service sector with an emphasis on crucial factors contributing to productivity and value creation of services based on knowledge, technology, innovation, skill, and expertise. In the study, survey of important services will be carried out and tools to assess the efficiency of production both in the form of products from the service segment and sources of economic growth from the service segment that use advanced technology will be developed. Database of production and service restructuring of the country must also be provided as the information will be useful to the proposal of economic policy suggestions regarding the service segment to increase the country's competitiveness at the national level, the segment level, and the business level.

(3.2) In-depth research on tourism market to allow for connection of market segmentation, taste and product demand, and related services and incentives under the concept which develops tourism in a way that boosts and relates to other products and services as part of sustainable tourism development. Such development requires marketing data from in-depth research that will help in the understanding of dynamism of needs and expectation each traveler segment has on tourism, in particular the segment interested in nature, regional culture, and Thai-ness. In addition, emphasis will be placed on quality tourists while products and services will be comprehensively developed.

(3.3) A study to develop competitive capacity of new potential services throughout value chains, for example, educational service business, health and spa service, construction business, and boat repair and boat building businesses.

(4) Trade and investment

(4.1) In-depth research on factors contributing to the country's positive investment climate. The research will continue from the Productivity and the Investment Climate Survey (PICS) 2004-2005 with an emphasis on details of the main factors influencing positive investment climate and factors boosting production efficiency in terms of rules and regulations and supervision. The Government's services must also be examined to formulate proper policy aimed at solving problems at the foundation and modifying rules, regulations, and supervision. That way, economic restructuring at the macro level, the sector level, and the industrial level can have a positive impact on results of economic operation in international competition and domestic economics, which will in turn support and enhance the country's economic restructuring.

(4.2) In-depth research to formulate or modify measures in investment promotion, both tax-based incentives and non-tax incentives, to attract foreign investment as well as to encourage Thai investors in making overseas investments. The study will be conducted so as to formulate investment promotion measures which support investments only in the segments that correspond to the strategies and approaches undergoing economic restructuring. The measures must cover and incorporate both tax-based incentives and non-tax incentives to attract foreign investment (FDI) and support Thai investment overseas. All this requires in-depth research so appropriate measures can be specified for truly effective promotion of investment. Research must also be done on the reform of administrative mechanisms and patterns so that the management and administration of the Board of Investment of Thailand and other related public and private organizations are flexible, leading to effective proactive management and administration.

3.3 Factors contributing to effective overall economy administration and factors supporting economic restructuring and investment

(1) Infrastructure and logistic services

(1.1) Study and survey of comprehensive product handling nationwide. The study will continue from the pilot project of Commodity Flow Phase I, which was conducted by the Office for National Statistics, to design data collection on commodity flow. The project was completed in September, 2005.

(1.2) Research and data organization on logistic cost to GDP. The project was originally carried out by the Competitiveness Development Office/Office of the National Economic and Social Development Board and completed in September, 2005. The next step is to adjust and improve existing data as well as collect more data that cover definition and overall image of logistics to accurately and reasonably reflect cost and true added value of the logistic industry, to have exhaustive data according to logistic activities of the international standards, to set standards for accurate calculation of logistic cost which has meticulous details, and to study as well as to calculate logistic cost of each product segment.

(1.3) Evaluation of the development of Thai logistics to develop Key Performance Indicators (KPI) for overall logistic development system in Thailand and to survey status, development of logistic data system, and approach in collecting data used in KPI development. The KPI and logistic system development can be used as tools to continually measure progress and the level of logistic system development of the country and to monitor progress and evaluate the country's logistic system development and use of the KPIs that have been developed.

(1.4) A study for development of logistic service provider business (LSPs). The study will examine development trend of international business, economic situation and regional economics, trend of economic clusters, and domestic conditions, etc. which will create opportunities or threats to logistic service provider businesses. Considering the country's economic restructuring, it is believed that growth of the logistic service provider business is likely to triple or quadruple GDP. It is, therefore, a good opportunity for value creation in the logistic service provider business. Due to changing contributing factors, in order to achieve that, the public and private sectors must come up with value creation as well as threat prevention approaches.

(1.5) A study to support development of Thailand Single Window e-Logistics. The study must be conducted to review the system of procedures and documents regarding current imports and exports and to set up standards of data lists and import-export document forms with simplification, harmonization, and standardization in mind. This will be the basic logistic data for imports and exports that will develop into e-Logistics.

(1.6) A study to support logistic networking development that connects with international networking. The study should examine, for instance, opportunities and methods of systemizing logistic connections of domestic and foreign networks as well as plans to extend networks into neighborhood countries, specifically India and China. At present, some studies concerning the issue are being undertaken by the Thailand Research Fund.

(1.7) Research supporting the application of new technology in logistic management and administration, such as RFID Intelligent Packaging and B-Double special trailers.

(2) Energy

(2.1) Development of nuclear energy to generate electricity. Studies have been conducted to develop other alternative energies to replace natural gas, for example, development of water sources, solar energy, geothermal energy, and wind energy. However, there are troubles in operation and development is still limited. In addition, other energies such as oil and coal are insufficient in the country and need to be imported, which is often expensive and the price normally changes according to the global market situation. Thus, nuclear energy will be another alternative for the country in the future as it is cheap, and therefore, reduces cost of generating electricity. Nonetheless, it must be approved by people and strict safety measures must be established. Also, equipment and system must be inspected regularly to prevent leaks and danger to the environment and the people in the surrounding area of the power plants. Moreover, the right method of eliminating radioactive waste must be adopted.

(2.2) A study for increase of efficiency of solar cells. With the study, solar cells will be more worthwhile reducing production cost, increasing efficiency in energy storage, and being more suitable for the tropical rainforest climate of Thailand. All that will be of great benefit to people living in remote areas where electricity is inaccessible. Cost in electric transmission line system will be saved and imports of energy will be minimized. Pollution will also be diminished as solar cell energy is clean and sustainable.

(2.3) A study of the demand and supply of the biodiesel market to identify in detail the target of production of materials in terms of both quantity and cultivated land. That is, the quantity and cultivated land must be in line with the demand of production to avoid shortage or excess supply. The lands that are reserved for the cultivation of biodiesel materials must not be used for other kinds of agriculture because Thailand has limited areas for cultivation and other agricultural products are grown for exports as well as domestic consumption, and not as a replacement for oil.

4. Strategies for development of biodiversity and conservation of the environment and natural resources

4.1 Development of the value of biodiversity and local wisdom

(1) A study for an organization of complete taxonomy of biodiversity of Thailand. The study must be carried out in collaboration with local communities and folk botanists in order to assess the potential of biodiversity in national parks, wildlife nature reserves, wetlands, and the ecological system; to make a database of local wisdom and diversities of varieties and genetics; and to gather rare and endangered species and local plant genetics, all of which lead to development of breeds or species with high economic value. Nonetheless, the importance of the study lies in establishing foundation for the development of a management system along with the development of local communities' capacity in conserving and making used of biodiversity as well as in protecting rights of the communities and benefits of the country in the face of genetic resource competition.

(2) A study of an integration between local wisdom and modern knowledge, for instance, herb development, development of knowledge in organic farming, research in agro-ecosystems, soil ecosystem, microorganism, tissue culture, and development of natural products. The study is important in that it creates value from biodiversity resources through an integration of local wisdom and modern knowledge.

4.2 Establishment of security of resource base

(1) Research to monitor changes of the ecological system and impacts from development, for instance, coast ecosystems, basin ecosystems, and the ecological system and fragile areas as sources of biodiversity.

(2) Research to systemize the categorization of protected areas and conserved areas that corresponds to facts, along with studies of guidelines for the sustainable utilization of natural resources in conserved areas, such as eco-tourism, mangrove community forest management, and watershed forest management.

(3) Research and survey for future development of mineral resources. The study must take into consideration efficiency, economic and social worth, and needs of future generations. The study must also examine guidelines for the management of pollution caused by mining which will have a negative effect on natural resources and environment as well as health, sanitation, and lives of the people. Moreover, support must be provided for collaborative research among community scholars, developers, and academicians to strengthen communities enabling them to manage natural resources in their own communities by themselves.

(4) Research on roles of communities in the management of water resources in watershed systems. With the research, local wisdom, which amounts to over 800 items of wisdom, will be developed for watershed management from water sources to river courses and river mouths. The local wisdom will then be developed into international knowledge that can be learned and applied to manage basins still lacking efficient administration. Nevertheless, an information technology system and geographic information system should be incorporated into the management of

watershed resources for accuracy and perfection and for the creation of situational models that can be advantageous to administrative planning.

(5) Research for development of participatory irrigation management. So far, decentralization of irrigation management from the government to local administrative organizations and communities have posed some problems as the latter still lacks knowledge in management and system maintenance, causing a lot of damage. In addition, distribution of water to communities is inefficient. Therefore, more studies in the participatory processes that are still unclear should be conducted so as to increase efficiency in water usage and create value for water.

4.3 Promotion of good environment for better quality of life and sustainable development

(1) Research on development of a marketing approach for the promotion of technology as well as industrial and agricultural products friendly to the environment. The research will include evaluation of the government's past policy and operation in the purchase of environmentally friendly products in order to modify the approach and develop product varieties, promote knowledge and understanding among related persons through advertising, develop a database of green label products, thoroughly prepare the system to support the products, formulate measures which support environmentally friendly products by means of price privileges, and create incentives for individuals and units involved with purchasing mechanisms.

(2) Research on guidelines and measures that promote waste recycling businesses. The study will generate more recycling businesses, be it among those who sort out and separate valuable materials, middlemen who buy those valuable materials, or industrial groups which process recycled materials or waste into raw materials for later production. A study of guidelines and measures promoting waste recycling businesses must be carried out so as to solve problems of solid waste management. The study must cover obstacles and limitations in business operation and must propose policy and guidelines on amendment of related laws as a way to support the recycling businesses.

(3) Research on guidelines for the use of financial and fiscal tools to support clean production and consumption. The study will examine the possibility and guidelines of using financial and fiscal mechanisms to encourage proprietors to utilize clean technology and production processes in order to save natural resources and motivate people to reduce and separate wastes. For example, environment tax may be imposed on products which cause negative impacts on environment while taxation may be applied in special areas or in main tourist attractions so as to allocate the collected taxes for use in the management of local environment.

5. Strategies to promote good governance aiming at social justice and sustainability

5.1 Promotion of good governance in the country's administration. To reform the public administrative system to be in line with the good governance principle, in-depth research must be conducted on the following areas: promotion and improvement of good governance in the Thai Bureaucratic System; reform of laws and public service regulations for economic and social righteousness; allocation system of natural resources that enhance the strengths of development alliances at the areal/provincial/local level; reform of roles, functions, operating systems, and sizes of public organizations; worth of public operations; knowledge management system in organizations; and e-Government.

5.2 Promotion of strengths of the private sector in the participation in administration of the country. Research must be carried out in the evaluation of roles of participation of the private sector in the country's administration. The participation includes sharing ideas and viewpoints, collective thinking, collective performing, and joining policy planning of the government's projects.

5.3 Promotion and development of a democratic culture. Research must be undertaken to establish a process that enhances and develops democracy in every sector and every level of society of the country. The in-depth research must cover 2 aspects: (1) a study of roles of social leaders that influence the development of democracy and good governance principle; and (2) research on approaches for development of democratic culture and ways of living of communities and the Thai

society, for instance, the cultivation of democratic culture and education, the promotion of democratic culture in daily living, and so on.

5.4 Decentralization and area development. Research should be conducted to build bodies of knowledge in the following areas.

(1) Review of roles and functions of the central government and the regional and local organizations so that they are appropriate and supportive of one another. The study will enable all sectors to carry on their duties in a related but non-overlapping manner. Moreover, the study will need to provide guidelines for the management of mutual use of natural resources and to increase administrative capacity to propel local community development.

(2) Development of financial, fiscal, and administrative capacities of local administrative organizations to enable them to take up duties from decentralization effectively. To achieve that, research must be undertaken in two main areas: **(1) income allocation to each level of local administrative organizations according to their functions and expenditure needs for their management of public services.** The research will be aimed at identifying criteria for fair allocation of income among local administrative organizations in line with their size, approach, and basic service functions in order to learn about necessary expenses of each level of the organization so that proper income can be allocated to truly suit their duties. And, **(2) A study of methods, options, and measures to improve local administrative organizations' capacity in collecting their own income.** The study will be intended to effectively use existing measures and guidelines to create new options for expansion of income base and utilization of service fee collection to allow local communities to rely on themselves in the long run.

(3) Monitoring and evaluation of achievement and impact from decentralization as well as development of knowledge and policy recommendations that enhance decentralization. Research will be aimed at monitoring and evaluating success and impact from decentralization by setting up clear key performance indicators, allowing every person and every related sector to participate in the process, disseminating knowledge of decentralization and concrete

results from the operation in certain areas, and developing policy recommendations that boost an efficient decentralization process.

(4) Trend and impact of town expansion and community system at the national level, the regional level, and in towns which are the center of development in the region. The study will examine situations and trends of changes in the level of urbanization, urbanization process and clear direction of expansion, impact of town expansion, and impact of community system on changes in land utilization, life quality, environment, natural resources, economics, and various segments in production system. The study must be carried out at the national level, the regional level, and in towns which are the center of development.

(5) Planning and propelling the national spatial development framework. Results of the study will suggest patterns of spatial development at the national, regional, and provincial levels so as to specify use of main spaces at the regional and sub-regional levels, along with recommending patterns of system and potential development of key communities to be in accordance with the capacity and socio-geography of the communities. Manufacturing of potential products and services in various areas will be analyzed and networking development of infrastructure and logistic system properly connecting different levels of spaces and communities will also be examined. In addition, additional administrative measures towards real practices will be studied to enhance positive development networks between rural and urban areas, which will in turn support the country's development towards a sustainable society with happiness.

(6) Strategic planning for urban development and sustainable urban system in the country's economic center areas (coastal areas of the upper Gulf of Thailand). The study will examine strategic planning of urban development in areas with great economic potential along the coast of the upper Gulf of Thailand, which covers the areas of Bangkok and its municipality. The study will also investigate the connection of areas along the east coast and those along the west coast to become a pleasant and livable metropolis, a prototype of the country's quality town and a base for distribution of development, which will increase the country's competitiveness stability and sustainably.

(7) Administrative patterns, systems, and mechanisms which propel community spatial development connecting local communities with the region and the country. Research will focus on studying administrative mechanisms and systems in relation to the propelling of community spatial development, starting from the process of community planning that is connected with local spatial planning and spatial planning at the provincial, regional, and national levels. A study will also be carried out on factors facilitating integrated development and promotion of communities' capacity to allow the communities to truly participate in the operations at the spatial and community levels.

4.5 Propelling strategies into real practices as well as monitoring and evaluation of the practices. In order to develop monitoring and evaluation systems as well as establish Key Performance Indicators for every level of development, it is indispensable to conduct research in 2 key areas: (1) monitoring and evaluation of development according to the Tenth Plan as well as Bureaucratic Administration Plan using the KPI to assess impacts of development; and (2) development of a data system and statistic management system for planning, monitoring, and evaluation in every bureau, department, and ministry.