Many people misunderstood thinking that the Royal insight concerned only farmers. In fact, this can be applied by people from all walks of life, whether merchants, businessmen, government officials and others...
The King's Sufficiency Economy and the Analyses of Meanings by Economists

Synthesized and compiled from discussions on "The King's Sufficiency Economy: Perspectives of Economists"

The National Research Council Committee on Economic Branch
The Office of the National Research Council of Thailand
"Sufficiency Economy" is a philosophy that stresses the middle path as an overriding principle for appropriate conduct by the populace at all levels. This applies to conduct starting from the level of the families, communities, as well as the level of nation in development and administration so as to modernize in line with the forces of globalization. "Sufficiency" means moderation, reasonableness, and the need of self-immunity for sufficient protection from impact arising from internal and external changes. To achieve this, an application of knowledge with due consideration and prudence is essential. In particular great care is needed in the utilization of theories and methodologies for planning and implementation in every step. At the same time, it is essential to strengthen the moral fiber of the nation, so that everyone, particularly public officials, academics, businessmen at all levels, adheres first and foremost to the principles of honesty and integrity. In addition, a way of life based on patience, perseverance, diligence, wisdom and prudence is indispensable to create balance and be able to cope appropriately with critical challenges arising from extensive and rapid socioeconomic, environmental, and cultural changes in the world.
Introduction

His Majesty King Bhumipol Adulyadej has long been concerned about the direction of national development as well as problems which are caused, both directly and indirectly, by national development process. These concerns have led him to begin speaking about sufficiency economy and the new theory of agricultural practice in 1974. His Majesty thoughts relating to sufficiency economy reappeared in his lectures and speeches during 1994-1998 with clear explanation of social, political and economic contexts and the existing conditions surrounding the nation. The emphasis was given to the notion of community's economic self reliance as a way to enhance community's strength in light of globalization. His Majesty the King's initiatives were also aimed at giving directions in building social immunity as well as offering ways to solve problems that had existed. However, it became clear that while a number of concerned agencies had embraced His Majesty's ideas and theories and had enthusiastically translating them into concrete actions, adequate knowledge and a depth of understanding of sufficiency economy were lacking. At the same time, it was apparent that academics and economists held differing views about sufficiency economy, leading some to conclude that sufficiency economy is not relevant to mainstream economics amidst globalization with a fast-pace economic development policy direction such as free trade agreement.

Consequently as a result of the 3rd /1998 meeting which took place on June 12 1998, the National Research Council Committee on Economics Branch agreed that steps should
be taken to study the King's ideas to gain better knowledge and understanding. Sufficiency economy as an alternative to development can then be disseminated with correct understanding and effective application in order to strengthen Thailand's agricultural sector and to develop linkage to the development of the larger economic system.

Subsequently, the National Research Council Committee on Economics Branch organized two workshops titled "The King's Sufficiency Economy: The Economists' Perspectives". The first workshop took place on August 26, 1999 at the Central Grand Plaza Hotel and the second took place on 16 September, 1999 at the Maruay Garden Hotel. These two workshops aimed at mobilizing thoughts and understanding from academics and knowledgeable persons in the field of economics on the subject of sufficiency economy within the context of mainstream economics. The outcomes of the workshops comprised a multiplicity of views and standpoints from a number of economists which resulted in the document title "The King's Sufficiency Economy and the Analyses of Meanings by Economists" in October of the same year.

Later, the Thailand Development Research Institute (TDRI) in collaboration with the Chaipattana Foundation, the Office of the National Research Council of Thailand (NRCT) the National Economic and Social Development Board (NESDB) and the National Institute of Development Administration (NIDA) had organized a 1999 annual meeting. In this event, the National Research Council Committee on Economics Branch in the field of economics presented the core content derived from the previously held workshops. TDRI had then compiled all the
themes and proposed them to NESDB to be part of the national development policy and the Ninth National Social and Economic Development Plan with an emphasis on strengthening communities.

Apart from using it as information in national development planning mentioned above, the National Research Council Committee on Economics Branch, hopes that this document will benefit those who are interested in the King's concept of sufficiency economy and if read together with the article prepared by the National Economic and Social Development Board, with His Majesty's analysis of the meaning of sufficiency economy and his approval to publish and circulate to the public, one will gain greater understanding of sufficiency economy.

The Committee would like to thank all participants in the conferences for their contribution in making this document complete. Thanks are also extended to the Office of National Research Council of Thailand for the financial support for this operation.

*The National Research Council Committee on Economics Branch*

*July 2003*
## Contents

**The King's Sufficiency Economy and the Analyses of Meanings by Economists**

- The Royal Speech on Sufficiency Economy
- Sufficiency Economy and the Economic and Social Development Context in Thailand
- Is Sufficiency Economy an Economic Thought or Is It Beyond Economics?
- Is Sufficiency Economy the Idea, Philosophy or Practical Approach?
- Should Sufficiency Economy be Developed as a New Approach in Economics?
- Is Current Economies Subject Applicable to Sufficiency Economy?
- Is Sufficiency Economy Applicable to Other Economic Sectors?
- Should Sufficiency Economy be Used as a Vision for the Ninth Economic and Social Development Plan?
- Issues to be Reconsidered for More Research
- Conclusion

<table>
<thead>
<tr>
<th>The King's Sufficiency Economy and the Analyses of Meanings by Economists</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Royal Speech on Sufficiency Economy</td>
<td>1</td>
</tr>
<tr>
<td>Sufficiency Economy and the Economic and Social Development Context in Thailand</td>
<td>2</td>
</tr>
<tr>
<td>Is Sufficiency Economy an Economic Thought or Is It Beyond Economics?</td>
<td>17</td>
</tr>
<tr>
<td>Is Sufficiency Economy the Idea, Philosophy or Practical Approach?</td>
<td>25</td>
</tr>
<tr>
<td>Should Sufficiency Economy be Developed as a New Approach in Economics?</td>
<td>28</td>
</tr>
<tr>
<td>Is Current Economies Subject Applicable to Sufficiency Economy?</td>
<td>31</td>
</tr>
<tr>
<td>Is Sufficiency Economy Applicable to Other Economic Sectors?</td>
<td>32</td>
</tr>
<tr>
<td>Should Sufficiency Economy be Used as a Vision for the Ninth Economic and Social Development Plan?</td>
<td>36</td>
</tr>
<tr>
<td>Issues to be Reconsidered for More Research</td>
<td>38</td>
</tr>
<tr>
<td>Conclusion</td>
<td>43</td>
</tr>
</tbody>
</table>
## Appendix

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram of Consumption and Production</td>
<td>1-1</td>
</tr>
<tr>
<td>Theories of Buddhist Economics</td>
<td></td>
</tr>
<tr>
<td>Summary of Opinions from the Workshop</td>
<td>1-2</td>
</tr>
<tr>
<td>Names of Economists Who joined the Workshop</td>
<td>1-8</td>
</tr>
<tr>
<td>The National Research Council Committee on Economics Branch</td>
<td>1-9</td>
</tr>
<tr>
<td>Working Committee on the King's Sufficiency Project</td>
<td>1-10</td>
</tr>
</tbody>
</table>
The King's Sufficiency Economy and the Analyses of Meanings by Economists

1. The Royal Speech on Sufficiency Economy

"...National development must be carried out step by step, starting with laying the foundation to ensure that the majority of the people have enough to live on and to live for as the basic step, using economical yet theoretically sound methods and equipments. When the bases are securely established, higher levels of economic growth and development should be promoted." *

The Royal Speech of His Majesty the King
Granted to students of Kasetsart University
On July 18, 1974

"...What others may say does not matter, whether they say that Thailand is old-fashioned or that we are outdated. Anyhow, we have enough to live on and to live for, and this should be the wish and determination of all of us to see sufficiency in this country. It is not that we will attain supreme prosperity, but we will have a sustainable and peaceful country." *

The Royal Speech of His Majesty the King
On the occasion of the Royal Birthday Anniversary
At the Dusitdalai Hall, Chitralada Villa,
Dusit Palace
On Monday, December 4, 1995

* This part of translation is the translators' version.
2. Sufficiency Economy and the Economic and Social Development Context in Thailand

In understanding His Majesty the King's ideas, one should not only take into consideration the content of his speech, but must understand the political, social and economic context at the time his messages were conveyed to the public. This is because his messages reflect the concerns he has had for the conditions of the nation. It has been well-accepted that the speeches of His Majesty the King which were delivered on various occasions serve not only as moral guidance, but also as suggestions to senior officials both in the military and in the civil service sector, to corporate leaders and to the Thai people in general, so that they would further reflect on how to best improve the situations.

Of particular import was the remarks which His Majesty granted to the students of Kasetsart University in 1974 as it had a great significance to the Thai political context and the economic development of Thailand. That is, in 1974 Thailand was in the period that could be called "the great burgeoning of democracy era," the period following the October 14th 1973 students' uprising, which the King himself named "the day of the great sorrow" when he himself intervened and stopped the violent crackdown on the students. This event resulted in the step-down of the dictatorial regime led by Field Marshal Thanom Kittikachorn, Field Marshall Prapas Jaruesatein, Colonel Narong Kittikachorn, all of whom were forced to leave the country. The new administration led by Professor Sanya Dharmasakti, was formed under the King's approval to usher the country into a new era of democracy whereby popular demands for social and economic
justice were part of a general scene. The speech granted by the King to groups of delegates who gathered for his audience on his birthday clearly reflected the political situations and conditions facing the nation. On this occasion, His Majesty remarked with a slightly humorous tone: "Everybody needs each other. If someone falls because he is tired or is fainted, those who stand behind have to help or hold up the person and assist him/her until he is able to stand on his feet again. At the same time, if anyone thinks that he is alone in this world and it just happens that he wants to perform a bit of acrobatics, stretching his arms and legs a little too forcefully, this may cause clashes. And if there are clashes, others would also have rights to clash and results in a complete clash." †

His Majesty's remarks pointed to the political conditions at the time, a period during which Thai people were able to take collective action to demand social and political rights. This was, in part, due to the fact since the beginning of Field Marshall Sarit Dhanarajata regime in 1959, the majority of Thais were barred from enjoying such rights. During this same period, Thailand's support of the U.S. enabled the U.S. to establish military bases for the intervention in the Vietnam War. The social impact of the U.S. military presence was apparent. Prostitution and the hired wives phenomena had created an increase in numbers of children of mixed ethnicity, born out of wedlock, known then as "kaw nok na," ‡ one of the examples of a society lacking peace.

† Translators' version
‡ Literal translation is "rice that is planted outside the paddy field" which is an equivalent to "Someone who is culturally a misfit, or a social outcaste."
The ongoing demonstrations and frequent political collective actions by the people further indicated that Thailand was facing economic problems, a consequence of economic policies of the Thai state a decade earlier. From 1961 until 1974 the government had begun using three consecutive national economic and social development plans. The year 1974 was right in the middle of the Third Plan which gave a great deal of emphasis on national economic expansion via industrialization for import substitution. Within this policy framework, the state had to invest in the development of infrastructure using foreign loans and accelerate the export of agricultural products as paying back strategy. This resulted in the expansion of agricultural lands and the decrease of forest lands along with the state promotion of cash crop production. The outcome was a rapid economic growth rate of 7-8 percent per year.

At the same time, it is worth noting that there was a wider income gap. The economic expansion in the industrial sector was much greater than the national growth rate, while the pace of job recruitment in the industrial sector itself did not expand as fast leading to unequal income distribution. These were the contexts of His Majesty's speech granted to students of Kasetsart University on July 18, 1974. The significance of his speech lies in His Majesty's caution about the direction of development with an emphasis on economic growth as the main objective which could lead to various social problems.

Instead, His Majesty gave a higher priority to sufficiency or adequacy (kwam por me por kin) of the majority of the people first. When the foundation is strong and secure, we can begin to
plan for further development and move to higher economic level. To use the language of economics in explaining the idea, Thailand should focus on building a stable economic base first. That is we must make sure that the majority of the people have enough to live their lives sufficiently. One can also explain that His Majesty the King's ideas provided grounds for a development direction which underscored income distribution to build secure economic basis for the country before moving up to a higher stage of development. His idea was essentially in opposition to national development approach at the time. In fact, it was not His Majesty's alone who held this view. Leading academicians at that time namely Dr. Puey Ungphakorn and economists from Kasetsart University, National Institute of Development Administration as well as a number of economists from Thammasat University had also demanded the change of national development direction to make it suitable for political development at that time which was increasingly more democratic.

After His Majesty remarks on July 18, 1974, His Majesty spoke again on December 4, 1974, emphasizing the fact that "we have enough for ourselves." He asked everyone to have a wish and determination for Thailand's sufficiency and peace because at that time Thailand clearly was a country without peace. A large number of people did not have enough to live. This was in large part due to the fact that the benefits of development had disproportionately fallen to the hands of a few in the society. His Majesty also asked everyone to make a contemplation and determination in the direction of sufficiency so that Thailand can have enough to live on and to live for. As he notes: "It is not that we will attain supreme prosperity but we will have a sustainable
Moreover, even when the course of development did not change in ways His Majesty wished to have happened, he continued to work in his royal-initiated projects with the goal of creating sufficiency for all Thais. By examining the content of His Majesty's speeches during the following years, especially since 1994, his methods of implementation to achieve his goal can be summarized in four major areas: first his plans and steps to improve the physical conditions of soils in areas specified as having problems with soil quality, soils in dried highland, problematic soil conditions such as acid soils, saline soils, hard soils, soils in wetland all of which need to be corrected and improved. This is so that Thailand would become the golden land (Suwanna Bhumi), with an equivalence in meanings to the land with richness in natural resource and fertility. Second, his majesty placed a great deal of emphasis on the ability to develop and utilize technology that is technically sound and economical. Third, his support for diversification of production to help decrease risks and to maintain constant cash flow. Fourth, His Majesty encouraged farmers' institutions and organizations to take part in solving problems of the agricultural sector through proper intervention such as rice bank, water buffalo bank and savings groups. Lastly His Majesty's interest in the promotion of processing of agricultural products such as the processing of unprocessed milk, vegetable and fruit processing.

During the leadership of Prime Minister Prem Tinsulanonda from 1980-1988, Thailand faced severe economic crisis for the first time since the First National Economic Development Plan
beginning in 1961. This economic crisis in Thailand was triggered by global oil price crisis which also created a global economic downturn the world over between 1982-1993. At the same time, Thailand was also facing a unique problem of its own. The specificity of the problem was related to the country industrial development policy focusing on import substitution. This policy had finally led to the impasse of domestic market. Moreover, there were a number of factors contributing to Thailand's economic crisis. These factors include: 1. a continuing decrease in prices of agricultural products, mostly a result from the success of green revolution globally that resulted in a rapid increase in agricultural yield; 2. industrial countries' price protection policy on domestic agricultural products had caused the over supply of agricultural products, leading the their efforts to expand their foreign markets through dumping; 3. Thailand's conditions of foreign debts were beyond the country's ability to pay. The causes of debts lied primarily in the purchase of weapon with high interest loans and with too short period for pay-back time. This situation happened during the leadership of Prime Minister Tanin Kraiwixien.

After the global economic recovery in 1984 in industrial countries, these countries began to recognize that problems of trade deficits with Japan was caused by the weakening of the value of the Japanese yen. In 1985, Japan was forced to float its own currency causing the yen to double of its original value. This situation had forced Japan to move its production bases outside the country in 1986, which had naturally made Japan's competitors follow the same route in order to maintain their ability to compete with Japan. In this light, Thailand seemed to have received positive impact from these changes beginning in
1987. What immediately followed then was the hike in land price in Thailand. Those in the business of buying and selling lands, including those who have lands to sell, had gone through a rapid shift of their economic status. But in 1991, when the economy relating to lands and real estates business began to slow down, there was a coup d'etat led by General Suchinda Kraprayoon. With the people's power and the grace of His Majesty the King who had similarly intervened during October 14, 1976, the military dictatorship was finally forced out of power on May 20, 1992. After that the economy of Thailand began to recover. This was due to the expansion of export industry which had begun prior to this. In 1996, the economic boom for Thailand was over. Exports slowed down at rapid rates. Consequently the Thai government declared the baht devaluation in July 2, 1997, marking the official recognition that Thailand was undergoing economic crisis.

The economic expansion of the country had reached the highest rate and had sustained for a long period of time. This period lasted for eight years, from 1987-1995. Even then, on December 4, 1994, His Majesty brought forth his initiatives on the "New theory" His Majesty's "New Theory" was in essence one approach under "sufficiency economy" framework with the particular meaning of "having enough to live on and to live for" along the line of his 1974 speech. This is the theory which grew out of his Majesty's experience, after having tried to put his theory into practice for a long enough period before speaking about it in 1994.

Although it is generally accepted that the period of 1988-1991 was the golden era of development in Thailand, with
economic growth rate of more than 10 percent, the first time in the history of national development, poverty among the majority of Thais in the rural area remained prevalent. What was worse then was the fact that a large number of farmers lost their lands due to high opportunity cost in land use. In other words, the cost of lands was too high for the low value of their agricultural produces. While at the same time, new social problems namely the spread of HIV Aids and drugs, especially amphetamine pills began to intensify, reinforcing the view that economic expansion alone might not be the right approach in solving the nation's problems. At this point, His Majesty proposed "sufficiency economy" in the form of the "New Theory" in 1994 which was the same as his idea that was first told in 1974, as an alternative to solve the problem of rural poverty. Notably from then on, His Majesty put forth his idea of sufficiency economy in his speech every year.

In 1995, His Majesty reiterated the "New Theory" by applying his idea to the problem of floods and drought faced by the nation in that year. He made a comparison to prove his point that the "New Theory" could help solve these extreme tendencies because at one time during the year, the country has abundant amount of water, always up to the point of flooding, causing a lot of damage to the crops. Cyclically, a lot of energy consuming and costly efforts are made to drain the water. Then the lands are dry and nothing can be planted. Helping the people to have their own water sources according the "New Theory" will enable them to maintain their agricultural practice while having enough to live on. As His Majesty remarked: “In any year, when the level of water is adequate, they will be able to plant their usual crops or have-what is called-their annual rice crop. If, after that, in
In the dry season, water becomes scarce, they will still be able to use the water that has been saved in the pond in their own plot of land to cultivate any crop or even a second rice crop. They will not have to depend too heavily on the main irrigation system because they have their own supply. Moreover, they may be able to plant vegetables or raise fish, or do other things. The New Theory" is devised to prevent poverty. In a normal situation, it will make the farmer richer. In cases of floods the farmers will be able to recover with a minimum assistance from the government. The farmer will be self-reliant. That is why I encourage the application of the "New Theory."

Therefore, even though the "New Theory" serves as guidelines for agricultural practice so as to enhance the farmers' self-reliance and alleviate their suffering when facing uncertainty from the native, the essential meaning of the "New Theory" conveyed by His Majesty in 1995 centers around the building of an immune system to help reduce the severe impact of economic uncertainties, especially when there are economic problems. Consequently, His Majesty's speech on the "New Theory" in 1995 was not only an elaboration of his previous speech on the subject in 1994, but was also meant to caution senior government officials and the general public not to feel too complacent about the economic condition of Thailand characterized by a high level of export growth in that year.

In the following year of 1996, the export rate in the region began to slow down, signaling some economic problems. Yet there was little recognition about the upcoming crisis in Thailand. The majority of people thought that these signals were only a
temporary and felt that there was still a chance for the problem to disappear. In this year, His Majesty put forth additional views:

"At present, Thailand is still in a relatively good position. I use the word "relatively" because now, there are people who will say that there are quite a few people who are in a miserable conditions. By using the word "relatively," I mean by our own standard, and we will still have much to work for in improving the situations; there is still a lot of work before us."

"I am concerned because even the past two years that were the jubilee years, I have seen evident signs which show that people are still in great difficulties, and there are things that still need to be remedied and looked after in many areas. There is also the plight that comes from natural disasters; these natural disasters could be alleviated or dealt with; we only need some time to do it. There is another kind of danger from the human mind; this could also be rectified, though with more difficulty than the natural disasters. Nature is something outside our body, but the mind is within us. This is something more difficult to cope with but it is not impossible."

As clearly seen in the speech, His Majesty expressed great concerns over the issue of people's greed and impact of too rapid economic expansion in his view. During 1987-1995, His Majesty stressed three central concepts in his speeches namely "sufficiency", "moderation" and "living within one's means." For some, this emphasis had less of a moral tone, but was interpreted as the King's note of precaution on risk reduction in times of uncertainties in all dimensions, including weather conditions, especially to those in the agricultural sector. When the economic
crisis did occur in 1997, His Majesty extended his explanation to give concrete examples of self-indulgence driven by greed and insatiable desire without thorough consideration of the negative impact that can happen to one's self and others. The examples were the canned pineapple industry and the canned baby corn industry. His Majesty stressed that whatever project one wants to do, one must do it with great precaution and with the least greed. Evidently, this was the issue of concern which His Majesty had already expressed in 1996. When there was one of the most severe economic crises ever experienced by the country, this particular part of his speech became one of the most frequently referenced:

In fact, I have often said to such audience as this one that to be a tiger is not important. The important thing for us is to have self-supporting economy. A self-supporting economy means to have enough to survive. About this, I have often said that a "self-sufficient economy does not mean that each family must produce its own food, weave and sew its own clothes. This is going too far, but I mean that each village or each district must have relative self-sufficiency. Things that are produced in surplus can be sold, but should be sold in the same region, not too far so that the transportation cost is minimized."

"Perhaps I did not speak clear enough, but when I reread what had written from my speech, I thought that it was clearly stated that 50 percent sufficiency, or even only 25 percent sufficiency, would be enough. I meant that the application of sufficiency economy does not necessarily mean full sufficiency, and may I add that full sufficiency is impossible."*

* Translators' version
According to his speech, it is evident that His Majesty the King understood that the causes of economic crisis in Thailand were closely related to the fact that Thailand had operated based on what His Majesty called "trade economy," using both Thai and English terms to make his point. His Majesty underscored the fact that if the country would change to **sufficiency economy**, making it one-fourth of the whole economy would suffice: "only one-forth of its application did not mean the area of one-forth, but one-forth of the extent (degree) of sufficiency."

In academic circle, one of the issues that was the subject of debate among economists is the term "sufficiency", the term which most economists equate with "autarky", the theory which explains that the country must produce everything based on domestic needs and does not depend on the importation of products. Some economists were concerned that there would be an interpretation of sufficiency economy in the attempt to protect the import of certain agricultural products produced by foreign countries with lower costs, and that this might lead to a higher cost of production domestically, making competition impossible. It is difficult to argue that the concept of sufficiency economy had stimulated a lot thoughts about economic systems of the country. Some economists touched upon the issue of economic security and pointed out that non-engagement in trading does not always lead to economic security, as trading opens up more choices of products for consumers. Singapore was used as an example in this regard because Singapore has an open economy, yet it has received relatively less impact from the economic crisis. It was believed that this was due to the fact that there were more choices of products.
While some economists confirmed that the fact that His Majesty the King used the term "sufficiency economy" as "self-sufficient economy" in the first place is appropriate, for if one consults the Webster Dictionary, the term "sufficiency" means "the ability to achieve the objectives with one's self without asking for assistance from others or from outside sources". Seeking clarity of meanings of the term sufficiency economic, this group of economists made reference to His Majesty's speech as follows:

"Some people literally translate it from English into Thai as standing on one's own feet. Some say that this expression is rather odd, ................................. . These are perhaps strange thoughts but they derive from the expression: to stand on our own feet which means to be independent. This means that our two feet are firmly set on the ground, so we can stand without stumbling. We don't have to borrow other people's feet to support us. However sufficiency or to have enough has more extensive meaning than this. The word to have enough is sufficient. Sufficiency is moderation."

But when we examine His Majesty's speech quoted above, it seems that His Majesty's explanation and definition of sufficiency economy are very close to the meanings given in the English dictionary. This is interestingly related to His Majesty's goal to have one-forth of the country's economy changed to sufficiency economy. That is, if Thailand's economy at that time solely operated under trade economy, the reduction of trade economy to 75 percent is required, making the rest 25 percent sufficiency economy. His Majesty elaborated that even within this 25 percent, it did not mean that there should not be trading. But,
that each locality must at least have the ability to rely on itself. His Majesty specifically mentioned the village and the district levels. The main reason for the application of sufficiency economy at these levels is "transportation cost," which in essence would mean transaction cost. For transportation cost is part of transaction cost. That is to say, if transaction cost, of which transportation cost is a part, is greater than the benefits from an increase in efficiency based on division of labor, the reduction of transaction cost should be a better option than production for trading with the outside. His Majesty believed that Thailand had the conditions and potentials to practice sufficiency economic which was different from Singapore as Singapore did not have the same conditions and might not have the potentials to do so. Having put great effort to explain this thoughts in details in his various speeches, it seems that the issue should be clear for all economists. Yet, despite His Majesty's explanation, there were still some who did not understand. In 1998, His Majesty made additional comments with regard to some confusion over its application: "I have to come right to the point because I am worried that even a person with a Ph.D. still misunderstood my point. He indicated his understanding that the application of one-forth of the sufficiency economy means the coverage of a quarter of the area in the country. Perhaps I did not speak clearly enough. One-forth of its application did not mean the area of one-forth, but one forth of the extent (degree) of sufficiency."

At that point His Majesty gave further explanations on the meaning of the term "sufficiency" as follows: "However sufficiency or to have enough has more extensive meaning than this. The word to have enough is sufficient. Sufficiency is moderation."
If one is moderate in one's desires, one will have less craving. If one has less craving, one will take less advantage of others." And concluded that: "Sufficiency means moderation and reasonableness and the need for self-immunity for sufficient protection from impact arising from internal and external changes."

If one has the opportunity to continuously followed His Majesty's speeches along with the analyses of social political and economic contexts during which time of His Majesty's speeches and guidance were granted to the public, it would become clear that His Majesty the King was in disagreement with development direction that placed too much emphasis solely on economic expansion without careful examination of the foundation to assist the majority of the people to have a secure base or in his Majesty's notion "to have enough to live on and to live for" first. From the middle of the third National Social and Economic Plan in 1974 and during the subsequent period of 1987-1986 when national economy expanded at higher rates, His Majesty felt, "Thailand saw a particular Kind of danger from within the mind of the people," that there were a lot of greed and insatiability as well as situations whereby people took advantage of each others, causing others a great deal of suffering. Most importantly, according to His Majesty, the main cause of suffering stemmed from the fact that Thailand tried to be a country based wholly on trade economy. His Majesty had hoped to see that there was a one-fourth increase for the portion that he called sufficiency economy, again with the highlight on its meanings of "moderation, honesty, not being too greedy, not taking advantage of others and reasonableness, as an alternative for Thailand to end that suffering."
3. Is sufficiency Economy an Economic Thought or Is It Beyond Economics?

Based on His Majesty's speeches on sufficiency economy discussed in the previous sections, the National Research Council Commission, Economics Branch organized two academic workshops under the theme "the King's Sufficiency Economy: Economists' Perspectives." These two workshops served as a forum for the exchange of thoughts and opinions on the subject. The first event took place on August 26, 1999 at the Central Grand Plaza Hotel and the second event took place on September 16, 1999 at the Maruay Garden Hotel. Several conclusions were made as a result of these meetings. In essence, it was agreed that there were differences in thoughts and opinions about sufficiency economy among economists. One group of economists thought that sufficiency economy was above mainstream economics currently taught in higher education institutions around the world today. On the other hand, there was another group of economists who felt that sufficiency economy was applicable to economic thoughts of the present. To have a clear view on variations of standpoints on this subject, four major groups of thoughts can be made. The first group explains that sufficiency economy is above economics; the second group is those representing the middle ground; the third group thinks that sufficiency economy is relevant to mainstreams economics; the forth group is the group with the other useful opinions. Economists may identify with ideas of more than one group. Details of the four groups are as follow:

(1) The first group of economists explains that sufficiency economy is the idea that is beyond economics. Sufficiency
The King's sufficiency economy

in their opinion means the reduction of one's desire down to the level of self-reliance with sufficiency. This group believes that sufficiency economy is the same thing as the Thai intellectual heritage and wisdom known as pāñña. It also rests on the application of religious teachings to economic system which is related to spirituality of everyone in the country. They also believe that it is wisdom of the Thai population and is regarded as the social capital of the nation which all must learn how to use well because it can have a significant impact on the foundation and the direction of national development. Moreover, They believe that sufficiency economy gives the direction for national development based on Buddhist principles. In their opinions, sufficiency economy builds people strength and creates a sense of freedom from dependency by focusing on self-reliance and the reduction of desire to the level that enhances self-reliance, guided by moderation. When we do not have to depend on others, we will begin to feel that there are things that we can give to other such as time, knowledge, compassion, hospitality or even capital. When we found that there are plenty to be given to others, the nation would begin to feel that we have the ability to give and when we all have the ability to give, we would know happiness in a new light.

One of the conclusions made by this group of economists is sufficiency economy is the economy based on self-reliance. It concerns community economy and the national economy of the people who live in close affinity with community. The relation among people which include family and kin community, are much more diverse than the one that people have with the market. The analyses of human lives and their relations based on market
economy alone are thus inadequate as in the Thai society there are communities which can be characterized as strong and self-reliant and in these communities, people's relationships can be described as close and tightly knitted. These are factors which have long been the economic and cultural bases of the Thai society for a long time. It forms the basis of life of the Thai people and of the Thai society. Therefore, if economists try to understand sufficiency economy, they must switch off their interests in capitalist system and the studies of economics in the Western context which places importance on the individual to economic system of the community which is the basis of the Thai economy.

Sufficiency economy is about moderation which is related to thoughts and philosophy that are beyond economics because it interconnects with religions, Buddhism in particular. As E.F. Schumacher wrote in the book titled "Small is Beautiful" in his chapter 4 on "Buddhist Economics." Sufficiency economy should not be taken to mean "equilibrium" in economics. In essence, its meaning includes how to help people develop a sense of reasonableness, characterized by moderation. At the same time, it is believed that economic measures and policies can control people's desire and greed.

But if we were to relate sufficiency economy to what is known in mainstream economics, one of the major goals of economic development is economic security. Sufficiency economy should be able to contribute to economic security as in the case of agricultural sector, with the emphasis on food security, the position taken by many countries, despite high production cost, in order to secure employment and protect the agricultural sector. In times of war or in time of global deprivation, even though there
is money, there is no food to be purchased. Thus, building food security or in this case adhering to sufficiency economy is to build security to the overall economic system to a certain extent. In light of this contribution, it is necessary to encourage the development of sufficiency economy in order to help reduce risks and to build a protection against economic insecurity in the long run.

(2) The Middle Group. This group is characterized by having the opinions which fall in the middle. According to this group of economists, sufficiency economy has three core elements, namely moderation, risks and self-reliance. All these three elements are interconnected; no single element can be missed. The meaning of moderation mentioned here may be closer to the meaning of equilibrium in economics but it is the kind of equilibrium that is dynamic and is consistently adjusted, depending upon the situation and the appropriateness of individuals and group of individuals. Concerning risk, the meaning this group of economists put forth can be described as the building of immunity or the act of risk reduction so as to be as safe from inconsistencies as much as possible with sustainability as one of its characteristics. However, it also depends on the level of desired safety. Moderation in other meaning has to do with diversification of risks, especially risks that can be controlled. Therefore, the reduction of risks in this way is done by an attempt to diversify risks or to build immunity. One other way to reduce risk is to be self-reliant by increasing a level of ability to control factors leading to uncertainties and to do it within an individual capacity as much as possible. The more self-reliant one can be, the lesser uncontrollable factors there are, causing the decrease in risks as well. One last element self-reliance consists of mindfulness, pañña
and perseverance. All these elements can contribute to the risk reduction. However self-reliance does not mean that one should not depend on others. Level of interdependency within communities helps build positive power. **What should be avoided is the act of taking advantage of others. In short, what helps regulating moderation is risk reduction, and what helps regulating risk is self-reliance.**

One other perspective focuses on the similarity between sufficiency economy and the notion of sustainability, a contrary to mainstream economics in the sense that mainstream economics rests on the assumptions that everyone is rational and each has objectives and utility function. However, when there is an economic crisis, these objectives have to be questioned. Prior to the economic crisis, a large number of Thais acted more or less as risk-lovers, a phenomenon which was in part induced by too much protection against risk in the financial sector by the government. Everyone tend to be a risk lover because the government policy helped created a risk-free condition for these risk lovers. His Majesty the King recognized this problem and had encouraged the people to reduce risks. At the same time, problems that occurred were often caused by people who did not receive adverse consequences from their own decisions. Thus, question that needs a clear answer is "How can we make the people who generate a risk taking situation be jointly responsible for the social costs?" With regards to sustainability, there are several key elements such as the balance of the ecological system, diversification of risks and the reduction of dependency on cash income in situations when the transaction cost is too high. This principle is not conflicting with economic rationality if
transaction cost is taken into consideration. However, his Majesty's proposal in this regard is meant for groups of people who are facing very high transaction cost, and do not aim at being implemented throughout the country.

One final perspective of this second group on sufficiency economy has is related to the attempt to create global efficiency. For if consideration was made on market economy alone, market efficiency could be the sole focus,. But the fact is in the market system there is cost which is called transaction cost. Besides the playing field may not be leveled for all, especially those with low bargaining power, making the transaction cost for them too high. In the sectors that cannot rely on market efficiency or cannot depend on trade economy, the alternative for these sectors will have to be sufficiency economy and interdependency among themselves.

(3) The third group explains that sufficiency economy is congruent with mainstream economics in areas such as: economic performance under budget constraint; risk management with balanced risk diversification. This must also taking into consideration of the trade-off with efficiency. For if one does not depend on the outside too much, one can reduce risks, yet there will be some opportunity costs in terms of increased efficiency derived from specialization through exchange or trade. Or we can make a comparison between consumption and investment. When additional consumption is possible through income increases, there is no risk involved. Unfortunately, additional cannot be created either. But if one want to have more wealth from additional investment, risks will have to follow naturally. Besides, not engaging in trading does
not mean that there would be no risks. This is because trading opens opportunities for more choices and also risks can be reduced, the same as self reliance that implies the ability to control risk factors. Even if there is international trade or when there is a use of technology from foreign countries, what matters then is the degree to which one has the ability to control market mechanism or the working of such technology. Therefore, trading with foreign countries or the use of foreign technology does not automatically mean the loss of control, but it depends on the rules and regulations being mutually agreed upon.

However, sufficiency economy places an emphasis on stability and gradual development as opposed to taking risks. The key problem here is the ability to assess risks which is a very important condition in risk management. In light of globalization with unlimited flow of information, making failure from risk management risk less likely to occur. This is because there are speculators who wait to intervene and benefit from the failures of risk lovers. This system naturally forces people to use increasing precision in their calculation of risks.

Nonetheless, sufficiency economy of His Majesty the King highlights downside risk. As from the downside, there tends to be natural capacity to cope with low risk or having low risk margin. This kind of system helps those with low bargaining power to have the ability to handle low risks and to be able to absorb shock making the system stable.

Others had the opinion that economics is the subject that seeks for the possibility of more choices, and to encourage people to choose the best one available, in general. It is not necessary
for one to do everything by him/herself. Therefore, what is agreed upon with no exception in economics is the theory of comparative advantage. But although such theory is accepted, what is needed is basic necessity which relates to economic security. And in order to achieve economic security, is not necessary that we should do all by ourselves? His Majesty had spoken about this, and underlined that one-fourth would suffice, for it is the best point or optimality. The main issue is how to create the optimality in production to maintain security in the livelihood at the basic level.

(4) The forth group gave some useful comments on sufficiency economy by stating that one should consider sufficiency economy as thoughts in leading lives and as ideas for the national development to provide answers for the country's direction, i.e. in what ways the country should move in order that there will be solidarity in order for Thailand as nation to have the kinds of livelihood that are based on people's potentials and natural resources. In doing this, consideration must be made at the family level which is the basis of the creation of peace and happiness for all in the nation as well as at the community level, within which families live, up to the national level. Sufficiency economy identifies with a macro economic analysis with consideration of economic well being at the micro-level up.

As we can see, the differences in meanings of the King's sufficiency economy lie between two poles. One pole explains that sufficiency economy is above economics. This group selectively uses the meanings given by His Majesty in describing sufficiency economy as "moderation honesty, not being too greedy and not taking advantage of others." The other pole
explains that sufficiency economy is congruent with mainstream economics. This group uses shorter definition of sufficiency economy, i.e. moderation and reasonableness (explained by this group as "being rational.") And the most reasonable thing to do is risk management so as to reach optimality.

4. Is Sufficiency Economy the Idea, Philosophy or Practical Approach?

This issue should be examined because a number of economists who participated in the two workshops expressed the opinion that sufficiency economy should be the theory and philosophy. Their reasons are that sufficiency economy rests in large part on Buddhism. Therefore it fits to be a theory or a philosophy. Other reason is from the practical aspect of the New Theory, step 1, which aims at promoting self-reliance among small farmers. The theory can in fact be applied to all kinds of economic activities. His Majesty had given several examples in his speech in 1997 when he specifically spoke about people who had a tendency to overspend and those who could finally rely on themselves. His examples included industrialists who aimed at gaining high profits and took a risk of building large scale manufacturing plants, despite the fact that there were not enough raw materials in the localities. Others were too concerned about profits without thinking about the conditions of farmers who produce raw materials for them in ways that were mutually beneficial in the long run. These industrialists ran into the shortage of raw materials and eventually had to force themselves out of the business. All these examples point to the fact that sufficiency economy are thoughts and principles which can be
applicable in almost all fields of economic activities, but with proper application.

Other economists offered their analysis that sufficiency economy should not be only thoughts or philosophy but a tested theory derived from real experimentation. This group of economists pointed out that His Majesty the King had begun by actually practicing his ideas without first importing knowledge and theories from the outside. His initiatives were driven by genuine concerns for the betterment of the quality of life of his people. In putting ideas into practice or implementation, His Majesty would have to go through trials and errors. His Majesty's personal account, written when he was at the age of eighteen, is somewhat pertinent: "When I was a student in Europe, I did not know much about my country. I did not know how I was related to my country but I have learned to love my people. When I began communicating with them and found out that it is the love is that so valuable, I then know that my place in this world is to be among my people." Therefore, his Majesty the King had begun his work based on the reality of the Thai society and with his imagination about the ways in which he could enable Thai people and the Thai society to survive. From the essential inquiry "How can the Thais, the families and communities become strong?", His Majesty began with the country's interest as a fundamental objectives. This approach was indeed quite the opposite of the national development approaches prior the Eighth National Social and Economic Development Plan (1997-2001) whereby the state was the key actor of the development process. Clearly then, His Majesty's ideas and theory are essentially the accumulation of his practical experiences and
experimentation outcomes combined. Again, examples to indicate this observation about His Majesty's work approach are many. His pioneer work on integrated farming practice at Huy Sai which at first became the subject of disagreement among academics at the Ministry of Agriculture. At that time, mono-cropping was the dominant agricultural approach. Efforts of His Majesty to link sufficiency economy to all sorts of economic activities seem endless.

With all that have been discussed above, it is obvious that sufficiency economy is not just a life philosophy for individuals, but it has meanings and implications relevant to many groups and parties. It is also not just about livelihood or ways to make a living at the family level, but can be national development strategy. It can therefore be considered as the mode of production which includes arts, culture and the history of the nation.

In conclusion, economists varied in their views and analyses of sufficiency economy. There were those who believe that sufficiency economy serves as thoughts and philosophical ground for individuals in leading their lives, while at the same time the theoretical and philosophical grounds of sufficiency economy can be used for national development. However, there were economists who believed that sufficiency economy cannot be only "thoughts" because it is the idea that had been tested and used for practical purpose and should have the status of tested theory. Sufficiency economy is also inductive, beginning at the micro level in order to arrive at some conclusions at the macro level where all sectors have been carefully considered. What most economists seemed to agree was that if Thailand were to use
sufficiency economy a theory for the macro development of the nation, further efforts must be made in thinking about how to put sufficiency economy within national policy framework, leading to policy that can actually be implemented. This step apparently requires additional research and serious investigation.

5. Should Sufficiency Economy be Developed as a New Approach in Economics?

When considering the analyses of meanings of sufficiency economy based on mainstream economics previously explained (see item 3), it is evidently unnecessary to develop sufficiency economy as a new approach in economics. This is because the central principle of sufficiency economy lies in its proposal for producers and consumers to produce or consume within the constraints of their resources and available income. In addition, major objectives of sufficiency economy include a decrease in dependency, an increase in the capacity in the control of production by one's self, and a decrease in risk caused by the inability to effectively control the market mechanism. In this regard, mainstream economics cautions that a decrease in market reliance and an increase in self reliance do not necessarily result in more economic security because a decrease in market reliance can also mean the reduction of opportunities which may result in an increase in risks.

At the same time, a number of economists asserted that it might be necessary to develop sufficiency economy to become a new approach in economics. Part of the reasons were that even though economic development in the past contributed to the
reduction of absolute poverty, it had also increased relative poverty. An increase in economic and social gap between the population was the consequence. Other than that, there was evidence of social disintegration in a large number of rural communities. The attitude of dependency among people in the rural sector was the negative effect caused by imbalanced and top-down development approaches. During this time, His Majesty the King had the opportunities to closely observe the changes that happened in the rural sector, a result of his long standing engagement in working directly with his people in rural areas. Therefore, instead of maximizing production in order to increase consumption, His Majesty felt that what should be encouraged was the reduction of luxury as the ways to help strengthen families and communities. Sufficiency economy does not reject luxury. Luxury is permissible so long as it is within one's means to accommodate it. He remarked that the majority of the people did not spend according to their ability to pay. Most spent beyond their ability to earn.

Generally speaking, economics as a subject is interested in the problems of the country at the macro level and believes that solving problems by institutional structural adjustment and management will enable people to adjust and adapt according to the institutions. In short, economists believe that the change in institutional structure will solve the problems. Having always begun his work with the people, from the families to the communities, His Majesty used a different methodology in studying and understanding economic problems of the people--a methodology which is different from the ones being taught in higher education institutions. One important factor which does
not receive much attention from mainstream economists is the cultural factor. This cultural factor, diverse with local variations and also powerful, it can be used for the benefits of the communities in cases where there are a sense of collectivity and strong cultural identity and cohesion. When taking cultural factor into consideration, communities and elements of communities turn into economic power, a significant social capital of communities. His Majesty places great importance on communities, groups and cooperatives. In this area, further understanding is needed to shed some light on the differences between groups, organizations and market economy, or a conceptualization of market in ways that are different from markets of competition which is familiar to economists.

If the economy perceived is based on sufficiency economy framework, directions of national development may need to be changed to giving priorities to strength building at the community level, the tambon, district and provincial levels. Tactics used in creating area-focused sufficiency, based on the levels mentioned must be the focus, with the administrative reform of the public sector to make it conducive to this change.

In summary, the analysis of economic problems, focusing on the people, the family and community is necessarily different from the analysis of problems which begins at production process, the working of the market mechanism, and efficiency based on the division of labor. However, it is difficult to reject the fact that Thailand is closely connected to the global trade system. It is important, therefore, to note that analyzing economic problems within the framework of sufficiency economy does not mean a rejection of global economic system. To simply put,
sufficiency economy gives less weight on production for trading as a single and primary goal, but places greater emphasis on economic activities which enhance the ability of the people and the society to be self-reliant and simultaneously happy. Viewed in this light, whether sufficiency economy should be developed as new approach of economics remains worth pondering.

6. Is current Economies Subject Applicable to Sufficiency Economy?

It can be clearly seen that with the introduction of Buddhist ethics which is the ethical root of sufficiency economy into mainstream economics, the subject will be more or less comparable to the concept of sufficiency economy. In general, economics principle emphasizes efficiency, namely, to gain the most out of existing resource limitation. For example, to maximize utility under budget constraint, to maximize profit under cost constraint and the given level of productivity, or to minimize cost. In some cases, the concept of maximization and optimization are used interchangeably in various instances discussed earlier. However, sufficiency economy emphasizes the concept of optimization only. Sufficiency as a concept rests on neither greed nor deprivation, the two extremes which are the main causes for internal conflict, contradiction, alienation or misery.

However, although a common principle agreed by both mainstream economics and sufficiency economy is downside risk management or risk diversification, mainstream economics has additional reservation that in some specific cases, being less dependent on the market or using risk diversification through
multiple cropping may not be the best assurance for reducing risks. On the other hand, in some cases, trade can contribute to reduction of risks. Yet in some other instances, instead of diversification of risks through multiple cropping, diversification of income sources becomes the alternative. Such form of diversification will reduce the complexity of pre-requisite knowledge for multiple cropping which can be costly in terms of learning time. As such, the principle of sufficiency and reasonableness of sufficiency economy can be translated in technical terms of economics as optimization and rationality. The concept of sufficiency economy can be adopted by mainstream economics in all cases and all economic sectors without any inconsistency. Mainstream economists had their argument that since economics has been developed for much longer time, its analytical dimensions can be more thorough and can help reduce any mistakes caused by hasty conclusions.

On the contrary, in taking into consideration certain of values or specific facts that are beyond the grasp of the mainstream economics, the application of the analytical tool of mainstream economics alone can create limitations, since it is possible that the development of its theoretical bases has rested on narrower analytical frameworks.

7. Is Sufficiency Economy Applicable to Other Economic Sectors?

It is worth mentioning again at the beginning of this section that His Majesty's concern and his speech on sufficiency began as early as 1974. Unfortunately, his idea has only been
better understood by the public with his introduction of the "New Theory," demonstrating the method of water and farm management. The application of the New Theory has actually improved the living condition of small farmers to be self-reliant, most notably since 1994. However, the concept of sufficiency economy introduced as a national development strategy has only been perceived by leading officials and the academic circle of the country only since the most severe crisis in the economic history of Thailand in 1997. Apart from that fact, the concept of sufficiency economy in their understanding cannot be clearly differentiated from the "New Theory" applied to the agricultural sector and the rural economy of Thailand. Such understanding had resulted in a general tendency to conclude that sufficiency economy can be best applicable to small farmers who have low bargaining power in the market for their produces or, in other words, when the transaction cost in dealing with the market economy is too high for them.

In general, sufficiency economy is understood in relationship to certain key values namely moderation, honesty, not being too greedy, and not taking the advantage of the others. Although these concepts are applicable to all economic activities and for everyone, from individuals and families to communities, these economic agents or units are unfortunately only familiar with factors in the terminology of market economy with more focus on international trade, money and financial assets, industrial and service sectors, to name a few. It is not surprising then that there is a tendency to understand that the concept of sufficiency economy as being more suitable and applicable to the development in the rural area as it is also true that the concept of...
rural culture conjures up images of a close relationship among individuals, families and communities. Such conceptual block makes the efforts to apply sufficiency economy to other economic sectors a great challenge.

However, if a broader meaning of sufficiency economy is being interpreted as moderation or reasonableness, or using the equivalent technical term in economics "optimization through proper risk management", this new interpretation of the concept may make the applicable to all economic sectors of the country more possible, with the common core concept of downside risk management. Although sufficiency economy does not encourage greed and the act of taking advantage from the others, it may not be reasonable to expect sufficiency economy to also serve as a moral restraint, as the majority of people are still driven by greed and are dominated by the inherited avijjā (Not knowing everything at its own nature or ignorance). While their ignorance remains, to be able to restraint themselves from greed will not be possible, unless also being forced externally. To this extent, in order to apply sufficiency economy effectively, it is the duty of the state to make rules in order to create incentive or punishment through the measures of taxation. In short, the state must intervene through its legislative or fiscal measures to generate "sufficiency" to related economic agents. Most importantly, all these measures must be made open to the public and must not allow the concerned authorities to make any personal judgment for their own economic gain. Taking into consideration the measures suggested might be one viable way to apply sufficiency economics to all economic activities.
One example of the lack of proper intervention by the state which resulted in economic crisis in 1997, was related to the use of a hundred percent financial assurance by the state to the public, resulting in the so called "moral hazard". Such policy measure encouraged imprudent risk taking behavior of the people. In other words, this policy encouraged greed. In order to revert such undesirable activity, the state must design a new system to contain greed as well as making it too costly for anyone who tries to take advantage over the others. Therefore, in principle, it is entirely possible to apply sufficiency economy to all economic sectors in Thailand. **However it must begin from the clear understanding of the Thai government and its officials. They must be the ones who design the rules and regulations in order to control the behavior of each individual in the Thai society not to be too greedy as well as not to take the advantage over the others.**

Moreover, the rules must be transparent and must not be subject to personal judgment of those who have the authorities especially policy makers. There are numerous economic activities in various economic sectors that require in-depth understanding before rules and regulations are properly adopted. Research is needed to understand the details of different cases. Otherwise negative outcomes resulting from establishing inappropriate rules might occur.

To summarize what have been discussed in this part, sufficiency economy can be applied to all economic sectors; it is not only limited to agricultural sector or rural sector. It can be applied to financial and real estate sectors as well as international
trade and investment. These sectors were the ones that were the causes of the last economic crisis of 1997. Such application can be done through the principle of optimization and proper risk management. However, there must be conditions such as transparent rules and regulations enforced by the state with the aim to reduce greed and to prevent any individuals or groups to take advantage of the others. Additional research is required for the said purpose. If most of us in Thailand agree that this is a priority area, we all should make a move immediately.

8. Should Sufficiency Economy be Used as a Vision for the Ninth Economic and Social Development Plan?

The economic crisis in Thailand in 1997 and His Majesty's longstanding concerns for national development direction publicly expressed since 1974 should prove a good reason for the inclusion of sufficiency economy as part of the Ninth Social and Economic Development Plan (2002-2006). Previous discussions have suggested that ideas and practices which are related to sufficiency economy have already existed in the rural economic sector at the levels of family, community, to district and provincial levels. The core of this concept is to strengthen the community from all dimensions including economic social and cultural. They all must be integrated into one, but each must be able to maintain its own identity in the manner of pluralism of the whole. The proper measure in achieving such goal is to motivate people in each community to come together and find their own ways to strengthen their own community. Most importantly each community must assess and understand its own needs at each level of community
by itself in order to find its own potential to produce according to the identified needs, as long as the advantage resulting from too high transaction cost is on its side. However, in the area that comparative advantage from the division of labor still prevails and such advantage is more than what is needed to compensate for the height of the transaction cost, the role of market economy still exists. Nevertheless, improvement of communal capability must also be enhanced continuously.

For other economic sectors, the key and relevant element of sufficiency economy is optimization through proper risk management. The economic agents also can manage risk within the context of sufficiency economy, must be the ones who should restrain their greed as well as their desire not to take advantage of others. In order to contain such undesirable nature of economic agents in various economic sectors, further research is needed. In the Ninth National Economic Development Plan, consciousness on the said condition must be underscored, and more work must be done in order to find appropriate means to contain greed and selfishness at an acceptable level. The ability to control greed and selfishness is also useful for the trade economy or market economy as well. Without greed and selfishness, the market will be able to perform its role more efficiently. As long as the market is efficient, the transaction cost will be kept at a low level. This situation will only be possible when the rent-seeking behavior of economic agents is under proper control mechanism, with will both enhance market efficiency and ethical business conduct. In principle it is evident that whether sufficiency economy should be used as a vision for the Ninth Economic and Social Development Plan is no longer an issue. The only remaining
question is how to integrate the concept into the Plan in such a way that will not be the distortion of His Majesty's goal of sufficiency economy as well as how to implement the concept in the most efficient way.

9. Issues to be Reconsidered for More Research

This synthesis has already pointed out quite clearly that whether sufficiency economy is on the same or beyond economics plane depends largely on how one defines the concept. If Buddhism is adopted in understanding the concept, it will be beyond mainstream economics, but it will not be beyond "Buddhist Economics." This point will be elaborated later. However, if the condense version of sufficiency economy implies "moderation" and "reasonableness", the concept can also be explained by mainstream economics as discussed earlier.

Next, in answering what should be reconsidered for further research, it seems clear that there is a need to know how to put sufficiency economy into actual practice so that it will bring desirable result for the whole economy of Thailand. Even in the case of the "New Theory" that has been well-accepted and adopted by small farmers, if it happens that the land to be used is not suitable geographically or people are in heavy debts, and so engrossed in these factors that are not conducive to change, the introduction of even the first step of the "New Theory" may not be appropriate. The question then is how should sufficiency economy be modified in order to be able to accommodate this exceptional case?
Moreover, the "New Theory" as one practical aspect of sufficiency economy can be at its best under the condition of "strong" community. The first factor leading to such a condition is the community members' potential for self-reliance. At this level, the question to be raised is how to transform their potentiality into actual communal capability. Also communal strength must consist of communal cooperation or communal mutual support for activities related to their mutual benefits. To this extent, one must take into consideration of the existing structure of local government such as Tambon Administrative Organization (TAO), Health Districts that will be transformed into municipalities, ranging from tambon municipality, city municipality, City of Pataya municipality and Bangkok Metropolis as well as Provincial Administrative Organization (PAO). Given the said structure of local government, the question is how to arrange appropriate relationship between civil society at various levels such that there will be closer cooperation between civil society and related official body and in order that the degree of sufficiency economy can be enhanced in specific areas. The purpose for applying sufficiency economy in this instance is to reduce the influence of market economy that can result in adverse consequences on the livelihood of the people, particularly when there is too high transaction cost such that the market cannot function efficiently.

In addition to helping rural communities to be able to look after themselves according to the principle of sufficiency economy, the problem remained unresolved is "How can the urban poor, especially those who no longer have backing from social and physical capital such as relatives or agricultural lands in rural
areas, benefit from sufficiency economy? How can they be assisted in applying His Majesty's sufficiency economy to be consistent with their economic activities? Can community enterprises or small and medium term enterprises based on the principle of sufficiency economy be possible to help the urban poor?"

Apart from applying the principle of sufficiency economy to improve the rural economy as well as the urban poor, what have rarely been discussed is how to generate an immune system for the national economy against risk and uncertainty resulting from rapid movement of international capital, without being deprived of opportunities in being part of members of global communities who benefit from rapid and free flow of information in amidst information technology revolution. All issues deserve research investigation. Further research on how to adequately apply sufficiency economy to economic activities in the industrial sector of the country, apart from agro-industry or processing industry of agricultural products and resources found in each locality.

In addition to the industrial sector, there is the service sector that is part and parcel of the national economy. Research focus is urgently needed in personal service sector such as educational services, health services, entertainment, and recreation and tourism, and most importantly the money and banking sector and real estate, all of which contributed the 1997 economic crisis in Thailand. The question is how can sufficiency economy be effectively applied to some of these critical sectors?
It is well known that the real estate sector normally responds very well to financial activities especially after the real economic sector reaches its peak in its performance, the major cause of bubble economy in 1997. The main issue concerning the financial and real estate sector is how to contain risk taking behavior within a reasonable boundary, or how to adopt some concepts of sufficiency economy to contain greed within an acceptable limit, soon as investment in the real economic sector reaching the point of saturation. Actually, one most useful role of the financial sector is to facilitate expansion of the real economic sector under the limitation of resources and environment given the existing technology. After the limit is reached, the expansion of financial sector by its own initial will result in bubble economy as discussed earlier. In such a case, proper measures should be designed to reduce motivation for excessive risk taking.

International trade and investment is another area which will benefit greatly from His Majesty's sufficiency economy. Future research in this area should focus on questions such as "How should international trade be intervened in order to enhance competitive capability for fair play which will benefit all parties involved?" In case of international investment, the question is: "How do we set international investment rules in ways that both countries, be they investor and the recipient of investment, can benefit from such activity? In case there are some adverse consequences, such undesirable results should be kept at the minimum. All what have been discussed above are major issues that require further investigation. In-depth studies are needed for each of them, if significant changes to the country's fundamental economic structure are to be taking place.
One special precaution for the move that will work in opposing direction to His Majesty's will is the attempt to make sufficiency economy a ready-made formulas and the attempt to apply the same formulas all over the country. Such action will be a ploy to sabotage the King's initiative in the most discrete way. Lessons learned from the past, being political or economic after 150 years since the country was made open to the West, strongly confirm that no single ready made development formulas is universally applicable and/or successful as an all encompassing national development strategy. Although, not a long time ago a number of people tried to introduce communist socialism as a ready made formulas, fortunately without much success. Similarly, there are some who try to adopt neo-liberalism for national development of Thailand that had already resulted in the recent economic crisis. His Majesty's initiative and his suggestion of sufficiency economy is not a ready made formula either. It is neither communist socialism nor neo-liberalism but it is economic thoughts based on the Thai cultural root, with Buddhism as its guiding philosophy. This Buddhist culture does not offer any ready-made formulas. Everyone can approach the core of the truth through "pañña". Therefore "pañña" is the key word to be emphasized. It is opposite to a "ready made formula". Such formula does not require "pañña".

Although His Majesty's himself has already shown the practical way of sufficiency economy in agricultural sector, in order for small farmers to understand and practice it in consistent with rural development in Thailand, there are many other economic sectors that still need to have clearer understanding of the concept for appropriate application. Sufficiency economy
serves only as the first step that will provide a needed immune system for the future economy of Thailand. It will also help guide the national economy to move forward on the road of sufficiency, meaning by adhering to the principles of adequacy, moderation, and reasonableness. For the actual application of sufficiency economy to take place and yield fruitful results in various economic sectors, thorough investigation on the concept and the ways to apply it correctly is urgently needed.

10. Conclusion

The synthesis of The King's Sufficiency Economy and the Analyses of Meanings by Economists was based on the transcription of academic discussion on "The King's Sufficiency Economy: Perspectives of Economists" at the two workshops. The first one took place on August 26, 1999 at the Central Grand Plaza Hotel, and the second one on September 16, 1999 at the Maruay Garden Hotel. The synthesis was not arranged by sequences of those who shared their opinions but by the flow of the essence presented. The synthesis begins by explaining sufficiency economy within the changing context of the Thai society different periods, starting from his first remarks to Kasetsart University students on July 18, 1974. It is essential to understand the context of the Thai society during different time periods to understand the meanings of His Majesty's speeches and remarks which normally reflect his analysis of the Thai society based on his own opinion, as well as his suggestions for solving the problems he had envisaged. Sufficiency economy has thus evolved in response to the growth-oriented of national development direction since the First National Social and
Economic Development Plan through the middle of the third National Social and Economic Development Plan. It was evident that much wider socio-economic gap appeared as the result of such development direction. Such gap led to increasing concerns for social justice and the introduction of economic socialism into a national debate in the Thai society by various groups of people.

Sufficiency economy proposed then placed more emphasis on economic security for the majority of the Thai people before the country should develop to a higher level. The October 6th, 1976 incident led to economic ideological conflict between socialism and liberalism and that of political ideology between authoritarianism and democracy. It finally led to political and military defeat of the Communist Party of Thailand in 1982. Meanwhile, the national economy was affected by global economic crisis resulting from rapid increase in oil price for the second time by the OPEC cartel during 1979-1980. Since 1987, the Thai economy recovered from the six year recession, due to rapid influx of foreign capital as a result of floatation of the yen from Plaza Accords in September 1985.

Since then the Thai economy reached its peak at the expansion of more than 10 per cent for three years in a row during 1988-1990. It was the period when those who had more socio-economic and political opportunity went on the grand scale of consumerism while most people in the rural areas were still very poor and were not able to achieve self-sufficiency. Such situation contributed to the collapse of family and community institutions. After having tested his idea of the "New Theory" through actual experiments for more than 20 years according to "sufficiency
economy" principle since his first remark in 1974, His Majesty's began to give his speech on the "New Theory" as a practical version of his sufficiency economy to top administrators and his citizens continuously each year as though to warn that the bubble economy enjoyed by the privilege class during 1993-1996 would not last. It would bring catastrophe to the majority of people because of greed, selfishness, and the attempt of some groups of people to take the advantage of others. He stressed that "It is a catastrophe from human mind that also needs to be corrected, but it is much more difficult than natural catastrophe."

His Majesty’s warning was received with no responses until the economic crisis in 1997 when economists began to be aware of the significance of his speeches. Unfortunately, they were mostly confused by the concept of "self-sufficiency" introduced in the West to mean "autarchy." In fact, the King only wished to increase the proportion of sufficiency economy from what he deemed already in existence. In his opinion, the country had gone in full swing at embracing trade economy and no room was left for internal economic security which was one of the purposes of sufficiency economy. Although many economists began to show some understanding, some still were fixed on interpreting it as the proportion of agricultural area to be cultivated by the method of the "New Theory" instead of the proportion of economic activities between the trade economy and his sufficiency economy. As a result, His Majesty's the King had to reconfirm his idea in 1998, by providing two sets of meanings. They are "moderation, honesty, not being too greedy, and not taking the advantage over the others, "or in the way can be easily understood by most economists as "moderation and reasonableness"
The said speech stimulates economists to interpret its meaning. Four groups of ideas are classified. The first line of thoughts sees it as a Thai wisdom as it combines religion into economic system. It relates to the mind and spirit of people in Thailand. It is therefore beyond economics. The second line explains that sufficiency economy consists of three major principles. The first principle is right balance that has the meaning close to the concept of equilibrium in economics. The second one is risk reduction and self-reliance. Right balance is regulated by risk reduction and risk reduction is in turn regulated by or the result of self-reliance. The third line explains that the concept is consistent with mainstream economics. It is the way to organize any economic activities under the condition of budget constraint. It is also a form of risk management that the distribution of risk is in balance, together with the consideration of exchange and efficiency. Basically, sufficiency economy gives more weight to downside risk in order to resist shock and generating stability under the principle of comparative advantage. The forth line explains as the development from below. It emphasizes sufficiency at individual, family and communal levels, and moving upward to wider society and finally the country.

All in all, it can be concluded that the first two lines of ideas explain sufficiency economy as related to moderation, honesty, not being too greedy, and not taking advantage over others, while the third line of ideas explains it as moderation and reasonableness in their own way as optimization and rational. No matter how one may interpret the concept, sufficiency economy is not merely an economic thought or philosophy. It derives from the actual practice. Neither is it merely a philosophy to guide an individual's life. Its philosophical base and practical benefits
make it a national development strategy that could rightly be called the mode of production of a nation. If this latter interpretation is proves congenial to us, the concept is needed to be developed as the new direction of national development with the potential to gradually change the dependency attitude especially among rural villagers. The new emphasis should be focused on how to strengthen a Thai person, family, and community. It provides the way to analyze and change the direction of development from the bottom up to macro economic policy, in opposition to the conventional method which begins with designing a macro policy first and apply it to various levels. This method has already proven unfruitful.

The question whether economic subject is consistent with sufficiency economy depends on whether one accepts the inherent Buddhist ethics in the concept of sufficiency economy. Excluding these ethics namely not being too greedy and not taking the advantage of others, and explaining sufficiency economy as moderation and reasonableness and modifying further into economics terminology as optimization and rational, one can explain sufficiency economy by analytical tools available in mainstream economics. As the known practical example of sufficiency resulting from actual experiment is the "New Theory" for agriculture in the rural area, the question whether the concept can actually be applied to other economic sectors of the country remains to be answered.

If sufficiency economy is explained as optimization through proper risk management and downside risk management, the concept can clearly be applied to other economic sectors of the country. However, for human-beings born with greed
and ignorance, measures must be designed for them to manage risk for social optimality. The measures must include rules and regulations, incentive and punishment as well as taxation measures. All in all, the rules and regulations must be transparent in order to prevent related government officials to use personal judgment for rent seeking purpose. Under such circumstance, sufficiency economy can be applied to all economic activities. Nevertheless, more research is needed to understand everything as it is without any distortion. This is a necessary and sufficient condition for any problem to be actually solved eventually.

Considering the usefulness of the concept discussed above, it is appropriate to adopt sufficiency economy as a guiding principle for the Ninth National Economic and Social Development Plan (2002-2006). Even though His Majesty's the King has already set practical examples in agricultural and rural sectors, what remains to be reconsidered in term of research works are, for instance, the significance of strengthening the community as well as rehabilitating the rural economy, proper relationship between various levels of civil society with various levels of local government, as well as good governance for all levels of administration. It is also necessary to find appropriate form of sufficiency economy for industrial and service sectors that include personal services and financial services and real estate, the main cause for the past economic crisis. There must also be an attempt to apply sufficiency economy to international trade and investment. All of them are major issues. As a cardinal principle, one should not look for a ready made formula which seems to be the cause of development failure known through our experience of ideological conflicts between the attempt to introduce socialist communism and the uncritical adoption of
neo-liberalism, the main cause for the past economic crisis.

The synthesizer has his opinion that sufficiency economy is part and parcel of Buddhist economics that emphasizes the middle way, the way that does not involve craving and painful activities. Both ways are not conducive for generating pañña (the ability to understand everything at its own nature). In Buddhist economics, pañña is the most crucial factor that can rescue human beings from pain or misery. pañña cannot be generated independently. It is part of the same package containing sila (perception) and smadhi (concentration) known as trisikha (the three training). Buddhist economics aim for human being to be free from pain or misery as well as aiming for global socio-economic system to be sustainable development. Production and consumption is only a part of the process for mental development (Sati or mind fullness and pañña). It has no ultimate goal in itself as what has been explained in the mainstream economics that only ends with utility maximization, the real cause for stimulation of consumption. It is in fact the cause of major problems currently facing humankind. In the same way that sufficiency economy emphasizes moderation, not being greedy, and not taking advantage of others, Buddhist economics similarly, explains these concepts in a simple way for most Thai people to understand, since most of them have their cultural root in Buddhism.

By way of closing, it is perhaps appropriate to introduce this part of His Majesty's speech given on Wednesday 4th of December 1996 to point to the challenge of interpretation of the King's concept of sufficiency economy by various parties as follows:
"Sometimes when there are the King's initiatives, it would take ten or twenty years before they can be implemented. Then others have taken the ideas and implemented them and said that they are royal-initiated projects. Sometimes I do not even know that they are royal-initiated projects, yes. (laugh) I did not know it was my initiative. They had taken the idea. Sometimes I spoke one word and they have turned it into a project of million words. This kind of action is sometimes good and sometime not quite so. What I did was reflecting, just reflecting on something and they took the liberty to begin the work and said that this was a royal-initiated project. Sometimes this is good since it showed that they gave a lot of credits to that idea or that project. But sometimes, the project was not of good quality, yet I received credits from that poor quality project. This is something that is not so pleasant. But in large most royal-initiated projects carried out by others have proved to be of value and useful. This has made me feel delighted for I had only given a little bit of thoughts but the impact is useful and sustaining and is beneficial to the large number of people. This concerns royal-initiated projects." §

§ Translators' version
References

Thai

1. The King's remark given to the students of Kasetsart University on July 18, 1974.

2. Royal Speech, given to the audience of well-wishers on the occasion of the Royal Birthday Anniversary, at the Dusidalai Hall, Chitrada Villa, Dusit Palace on Wednesday, December 4, 1974.


5. Royal Speech, given to the audience of well-wishers on the occasion of the Royal Birthday Anniversary, at the Dusidalai Hall, Chitrada Villa, Dusit Palace on Wednesday, December 4, 1996.


7. Royal Speech, given to the audience of well-wishers on the occasion of the Royal Birthday Anniversary, at the Dusidalai
Hall, Chitrada Villa, Dusit Palace on Friday, December 4, 1998.

8. A Transcription from Magnetic Tape from the Discussion on "The King's Sufficiency Economy: View Points of Economists" First Session, August 26, 1999 at the Central Grand Plaza Hotel organized by the National Research Council Committee on Economics Branch.

9. A Transcription from Magnetic Tape from the Discussion on "The King's Sufficiency Economy: View Points of Economists" Second Session, September 16, 1999 at the Maruay Garden Hotel, organized by the National Research Council Committee on Economics Branch.

10. Apichai Puntasen, A Lecture Note on "Buddhist Economics (EC 700)" for Master Degree Students of the Thai Section, Faculty of Economics, Thammasat University, August 1999.

English


APPENDIX
Consumption and Production Theories of Buddhist Economics.

The system of production and consumption under the condition of sustainable development and the promotion of peaceful life.

1. Unsustainable development is the condition when net goods and services produced are not sufficient for the maintenance of the production process to continue at the same rate.
2. Sustainable development is the condition when net goods and services produced are just sufficient for the maintenance of the production process to continue at the same rate.
3. Sustainable development and the reduction of conflict or contradiction for more peaceful body and mind is the condition when net goods and services produced are more than enough to maintain the existing system of production. The rest can be used to reduce pain and suffering of those who are needed. With the help of technology production efficiency can be improved.
Summary of Opinion from the Discussion

"The King's Sufficiency Economy: Perspectives of Economists", Organized by the National Research Council Committee on Economics Branch. First Session on Thursday 26th August, 1999 at the Central Grand Plaza Hotel and the Second Session on Thursday 16th September, 1999 at the Maruay Garden Hotel.
First Group: Sufficiency Economy is Beyond Economics

♦ "In principle, sufficiency is a philosophy. It is a concept that is beyond the concept of balance or equilibrium in economics. It relates to Buddhism as E. F. Schumacher states in his Chapter 4 on Buddhist Economics in his book "Small is Beautiful". However, the concept of balance or equilibrium in economics is close to maximize something without any limitation of wants which seem to be always not having enough.

♦ "National development must begin from social capital. There are two most important forms of social capital, spirituality and endowed wisdom of the Thai people. The real issue is how to develop the said social capital.

♦ "Self-reliance- how to do this, if we try to reduce our desire to the level that we can be self-reliance, it should be called sufficiency, because we do not need to depend on the others. We shall find that we have some surplus, surplus in time, knowledge, pañña, loving kindness, generosity, capital. The more surplus we have the more we can give, and we will find happiness. The more we give, the stronger we will be. The more we give, the more we will depend less on others. We will be stronger and find more happiness or satisfaction in life.

♦ "Religion and our endowed wisdom teach us to be self-reliant by reducing our desire and to share more of what we have. However, money economics or economics of exchange teaches us to depend on others, to stimulate our desire and take away from the others."
"Sufficiency economy is the process to develop human beings and society. It is a way of thinking.

Second Group: Sufficiency Economy is Neutral.

"His Majesty's speech can be interpreted in economic term as to gain optimal global efficiency. In mainstream economics, we only emphasize market efficiency: As we try to regulate the market to function in the most efficient way, global efficiency will be the result. However, we usually forget that the market also has its own cost known as transaction cost. In some cases, this cost is too high for some groups of people. In such cases, their transaction cost will be too high to produce and exchange through the market system. For those who face such problem they should depend less on the market by the way of sufficiency economy.

"Other things mentioned in His Majesty's speech are in the main frameworks of reasonableness that can be applied to the known concepts available in economics. There are three main issues. The most important one is balance. This balance is similar in meaning to the well-known economic term "equilibrium." However it should be the macro-economic equilibrium.

"The second one is on "risk". Most people use the concept of immunity against fluctuation as an opposition to risk. The other well-known term is close to sustainability. However, it depends on the level of security in determining the level of immunity.
"The method to keep balance and to contain risk within the desirable limit is through self-reliance or one may call self-sufficiency. Self-sufficiency is the way to control risk within manageable limit.

"The equilibrium or balance is one of the most important things in understanding micro economic system. That is how to judge the said balance. What regulates balance is risk.

**Third Group: Sufficiency Economy is Consistent with Mainstream Economics.**

"Uncertainty and imperfection of market is a typical concept in mainstream economics. When there is uncertainty and imperfection in the market, there must be some way to regulate it. In mainstream economics, it does not mean that everyone will try to maximize everything without taken into consideration of the amount of risk involved. It seems as if during the past economic crisis, we try to maximize everything blindly and forget to recognize that there is risk involved. From the point of view of mainstream economics, His Majesty's speeches as a foundation for our national development, ask us to consider downside risk and how to manage it in any economic activities.

"The assumption that the more the country opens up for trade will result in uncertainty, and thus more risk, this assumption cannot be fully convinced, although it is true that there can be more risk involved.

"As we open ourselves for more trade, it provides us more room for flexibility. Although more trade can imply more risk, it also provides us more choices.
"Economics tell us how to select the best choice from what are available for us. In general we do not need to produce everything that we want. We produce only things that we can do best and exchange or trade such products. This is why there is a term in trade known as "gains from trade."

Forth Group: Other Useful Concepts.

"The one that has been completely missing from economics is human being. We do not pay attention in human being. We have more trust in an institution. We believe that restructuring institutions is more important than human being. His Majesty starts from dealing with each individual as a human being, a family, and a community. This way of thinking is much different from mainstream economics thoughts that we are accustomed to. His thinking is more of a holistic view. What we have learnt usually stresses on each individual. However, His Majesty puts more emphasis on a community, a group, a cooperative. This line of thoughts belongs to collectivism.

"Sufficiency economy has been our economic and cultural foundation for a long time. It has been the root of our lives, our society, and our nation. We must develop new theories to be consistent with this foundation. Economic analysis under the price theory or market system provides only partial answers to most people in this country.

"We must move away from capitalism and Western economic theories that emphasize individualism, and pay more attention to communalism which has been the basic foundation of our country. We should create a new set of theories that has the
explanatory power for communal economic relationship. Our national economy should work on these dual-tracks, capitalism and collectivism.

How should we adopt appropriate technology and market system while maintaining an adequate level of self-reliance and getting rid of colonialist mentality implicitly exists within capitalism?
Names of Economists who join the discussion on "The King's Sufficiency Economy: Economists' Perspectives", organized by the National Research Council Committee on Economics Branch

<table>
<thead>
<tr>
<th>Kovit Poshyananda</th>
<th>Luechai Chulasai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khosit Panpiamrat</td>
<td>Vithit Ratchatatanunt</td>
</tr>
<tr>
<td>Jakrapong Uchupalanun</td>
<td>Wisarn Pupphavesa</td>
</tr>
<tr>
<td>Jonghatai Amornpattanakul</td>
<td>Srit Boonthong</td>
</tr>
<tr>
<td>Chalongphob Sussangkarn</td>
<td>Suphat Suphachalasai</td>
</tr>
<tr>
<td>Chatthip Nartsupha</td>
<td>Supawut Saicheua</td>
</tr>
<tr>
<td>Chaiwat Konjing</td>
<td>Sunthorn Arunanondchai</td>
</tr>
<tr>
<td>Tongroj Onchan</td>
<td>Suthawan Sathirathai</td>
</tr>
<tr>
<td>Nongyao Chaiseri</td>
<td>Somchai Krusansombat</td>
</tr>
<tr>
<td>Nipon Poapongsakorn</td>
<td>Somchai Jitsuchon</td>
</tr>
<tr>
<td>Naris Chayasoot</td>
<td>Sangsit Piriyarungsun</td>
</tr>
<tr>
<td>Pornchai Rujiprapha</td>
<td>Sophon Supapong</td>
</tr>
<tr>
<td>Pichit Akrathit</td>
<td>Sopin Tongpan</td>
</tr>
<tr>
<td>Bhanupong Nidhiprabha</td>
<td>Adis Israngkura</td>
</tr>
<tr>
<td>Medhi Krongkaew</td>
<td>Apichai Puntasen</td>
</tr>
<tr>
<td>Yongyuth Chalamwong</td>
<td>Ammar Siamwalla</td>
</tr>
<tr>
<td>Rajit Mahavihakanont</td>
<td></td>
</tr>
</tbody>
</table>
The National Research Council Committee on Economics Branch  
(January 12, 1999 - January 12, 2002)

<table>
<thead>
<tr>
<th>Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naris</td>
<td>Chaiyasoot</td>
</tr>
<tr>
<td>Chaiwat</td>
<td>Kyonjing</td>
</tr>
<tr>
<td>Kovit</td>
<td>Poshyananda</td>
</tr>
<tr>
<td>Chatthip</td>
<td>Nartsupha</td>
</tr>
<tr>
<td>Nongyao</td>
<td>Chaiser</td>
</tr>
<tr>
<td>Pichit</td>
<td>Akrathit</td>
</tr>
<tr>
<td>Medhi</td>
<td>Krongkaew</td>
</tr>
<tr>
<td>Yongyuth</td>
<td>Chalamwong</td>
</tr>
<tr>
<td>Luechai</td>
<td>Chulasai</td>
</tr>
<tr>
<td>Wuthichai</td>
<td>Choomnong</td>
</tr>
<tr>
<td>Supavut</td>
<td>Saicheua</td>
</tr>
<tr>
<td>Sunthorn</td>
<td>Arunanondchhai</td>
</tr>
<tr>
<td>Somchai</td>
<td>Krusuansombat</td>
</tr>
<tr>
<td>Suthawan</td>
<td>Sathirathai</td>
</tr>
<tr>
<td>Bhanupong</td>
<td>Nidhiprabha</td>
</tr>
<tr>
<td>Jonghatai</td>
<td>Amornpattanakul</td>
</tr>
<tr>
<td>Rajit</td>
<td>Mahavihakanont</td>
</tr>
</tbody>
</table>
Working Committee on the
King's Sufficiency Economy Project

Suthawan Sathirathai
Nongyao Chaiser
Chaiwat Konjing
Somchai Krusansombat
Yongyuth Chalamwong
Luechai Chulasai
Srint Boonthong
Rajit Mahavihakanont
Jonghatai Amornpattanakul
Synthesized and composed by

Apichai Puntasen

Editorial Team

Suthawan Sathirathai
Apichai Puntasen
Srinit Boonthong
Somchai Krusuanombat
Chaiwat Konjing
Rajit Mahavihakanont

Translated and edited by

Apichai Puntasen
Titiporn Siriphant Puntasen

Those who refer to this or part of this document should mention the office of the National Research Council of Thailand in the pages where the information appears.