

Sufficiency Economy: A Contribution to Economic Development

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Abstract—The Philosophy of Sufficiency Economy, bestowed by His Majesty the King Bhumibol Adulyadej to the people of Thailand, highlights a balanced way of living. Three principles of moderation reasonableness, and immunity, along with the conditions for morality and knowledge, can be applied to any level of the society—from an individual to the nation. The Philosophy of Sufficiency Economy helps address the current development challenges, which are issues on institutions, environmental sustainability, human well-being, and the role of the government.

Keywords—Sufficiency Economy, Development Theory, Sustainable Development, Environmental Sustainability, Social Capital, Human Well-Being,

I. STAGES OF DEVELOPMENT THEORY

DEVELOPMENT economics, recognized as a distinct branch of economics, dates back to the post war period. The classic theory of development, which influenced the world from mid 1940 to 1970, viewed the problem of less developed countries stemming from low capital and resource misallocations. Economists during this period believed that development was equivalent to a growth process that required high capital and resource reallocation from low-productivity agriculture sectors to high-productivity manufacturing sectors. Theorists argued that countries had to go through successive stages of growth, from the taking-off stage to the sustaining growth stage. Also, capital was considered necessary and sufficient condition for growth and development

However, there was a problem of capital accumulation in less-developed countries such that people were too poor to save. Therefore, it was thought that foreign aid, together with the right combination of saving and investment, would solve the capital accumulation problem. These patterns of growth-driven development and structural change dominated development theory in this early stage.

Later on, the view of non-linear a long-term growth process emerged and was considered to be a reason why a country faced multiple stable equilibria. One equilibrium occurs at a high level of investment, thus resulting in high output and income. The other is at low capital and investment levels, which leads a country to a poor income situation. A country

might be stuck in a bad equilibrium; such a situation is called a poverty trap. This poverty trap together with problems of inadequate infrastructure, high social overhead capital and coordination failure could impede the growth and development of a country for a long time. The Big Push or public-led policy helps accelerate the economy and push the economy out of the poverty trap.

In cooperation with the successes of active Keynesian government and the Marshall Plan in the 1930s, government was regarded as a prime mover in correcting all problems obstructing the economic growth during this period. This economic development valued the strong role of the government. There were huge market interventions from the government such as directing and coordinating investment flow, subsidizing investment, and opening new investment opportunities by creating new industries, especially in relation to import-substitution industries.

After the glorious days of the state-led development stressing capital accumulation and structural change, problems began in the 1970s. The record showed that even with high growth rate of income and industrialization, countries still suffered from high unemployment, high income inequality, excessive debt, high inflation, unbalanced growth and economic instability. As a result of these failures in the development process, the second era of development theory emerged in the 1970s and has lasted until now.

This phase of development theory, which is based on neo-classical theory, viewed the problems of underdevelopment as resulting from too active a government. In order to sustain growth and stability, the government policies needed to be removed. Such policies were the price distortions in the domestic factor and commodity markets, and the barriers to international trade. By removing such distorted policies, the economy would achieve efficient movements of resources among sectors, appropriate technology adoption, and an increase in capital accumulation.

Government failure was blamed for being behind development impediment. Instead, laissez-fair government was suggested as an effective policy. This was an era of neo-liberalism which emphasized liberalizing domestic and international markets for both goods and factors. This market-oriented development strategy dominated the world, especially during the 80s. Washington Consensus, a reform that aims to stabilize the economy via liberalization and openness, is evidence of the development thought during this stage. However, neo-liberalism eventually lost its reputation because of unrealistic assumptions of efficient markets and resource allocation that a country would achieve through market

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liberalization. More importantly, the practice is not applicable to less-developed countries that have been bombarded by problems of imperfect markets, incomplete or missing markets, asymmetric information, or dysfunctional or missing institutions.

The problem of Institution is currently seen as one of the biggest hurdles to development. The problem of dysfunctional or missing institution is the root of several problems of market and non-market activities. Additionally, the new kind of market failures, such as an incomplete market, transaction cost, imperfect and costly information, and the absence of futures markets (Meier, 2001; p. 21) are the interests of economists because they are believed to be obstacles to achieving economic growth and development.

Further, capital accumulation was later seen as an insufficient source of sustainable economic growth. Technology and human capital are crucial in driving long-term economic growth. An effective use of capital by humans, as well as a suitable institution that encourages technology acquirement, have become a main research agenda because of the complementary effects among them.

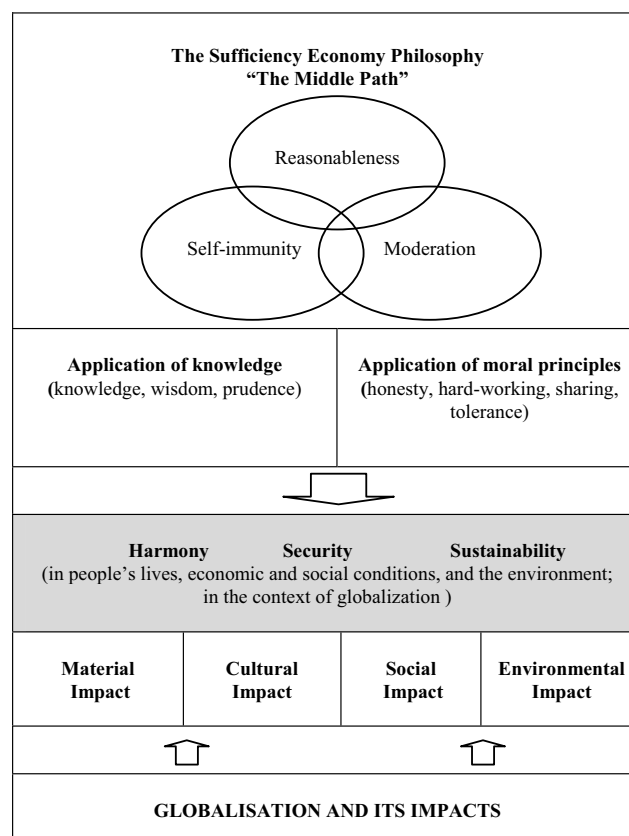
Now, the role of government has been shifted from “doing nothing” to “doing the right thing.” It is considered as an optimal role of government. Government becomes more active with the important task of getting the institution right by strengthening or creating institutions. With the right institutions, economic incentives will be created and the market will function more properly. Nevertheless, the government has to pay attention not only to economic matters but also to social development issues, including politics. Still, the problem of good governance remains an agenda of development theory.

Other than the above issues concerning institutions and government, development theorists now focus on the broader aspect of development. As can be seen in the top agendas of Copenhagen Consensus 2006¹ and the Millennium Development Goals, the focus is mainly placed on improving the well-being of people, along with quality economic growth in the sustainable environment. The quality of people's lives has now become the ultimate agenda in development. To achieve this, several development issues focusing on the problems of institutions, of the environment, of human capital, and of the government still need to be addressed since all of them affect human well-being.

II. SUFFICIENCY ECONOMICS PHILOSOPHY

The Sufficiency Economy Philosophy has been bestowed by His Majesty King Bhumibol Adulyadej to the people of Thailand. The philosophy guides people in living their lives according to the middle path. The concept of Sufficiency Economy can be applied to the individual level, the community level and the national level. The following is the synthesis of the Philosophy, with royal approval:

“Sufficiency Economy” is a philosophy that stresses the middle path as the overriding principle for appropriate conduct by the populace at all levels. This applies to conduct at the level of the individual, families, and communities, as well as to the choice of a balanced development strategy for the nation so as to modernize in line with the forces of globalization while shielding against inevitable shocks and excesses that arise. “Sufficiency” means moderation and due consideration in all modes of conduct, as well as the need for sufficient protection from internal and external shocks. To achieve this, the application of knowledge with prudence is essential. In particular, great care is needed in the utilization of untested theories and methodologies for planning and implementation. At the same time, it is essential to strengthen the moral fiber of the nation, so that everyone, particularly political and public officials, technocrats, businessmen and financiers, adhere first and foremost to the principles of honesty and integrity. In addition, a balanced approach combining patience, perseverance, diligence, wisdom and prudence is indispensable to cope appropriately with the critical challenges arising from extensive and rapid socioeconomic, environmental and the cultural changes occurring as a result of globalization.”



¹ A conference that gathers well-known economists and UN ambassadors and senior diplomats from 24 countries (accounting for 54% of world population) in order to identify and rank current major world challenges that need immediate attention.

Source: [1]

Fig. 1 The sufficiency economy philosophy framework

Fig. 1 illustrates the Sufficiency Economy framework. The three rings represent the three principles, which are moderation, reasonableness and self-immunity. The knowledge and morality content are two necessary conditions to achieve the three main principles. The knowledge condition requires thorough study of all available information and experience in order to make prudent decisions. The morality condition stresses integrity, trustworthiness, honesty and the hard-work of individuals. By practicing Sufficiency Economy, people would live in harmony and with security in a sustainable society and environment; and they would be able to tolerate and cope with all kinds of malign impacts of globalization.

III. THE CONTRIBUTION OF SUFFICIENCY ECONOMY TO DEVELOPMENT THEORY

A. Institutions and Sufficiency Economy

At the current stage of economic development research, theorists agree that "institution matters." Institution failure has caused a wide range of problems in economic activities and development, ranging from asymmetric information, missing markets, and moral hazard to governance and regulation issues [2]-[4]. The problems of dysfunctional and missing institutions are believed to be severe in developing economies. In finding solutions to these problems, much contemporary literature has extended its research scope beyond economic boundary to the cultural and societal issues of the economy in explaining the missing institutions and economic development through the concept of *social capital*.

Social capital, as defined by [5], is the internal social and cultural coherence of the society. This includes the norms and values that govern interaction among people and the institutions that are embedded in the society. The two main components are government social capital and civil social capital². Government social capital represents formal institutions, such as law and order and good governance, while civil social capital implies informal institutions such as trust, reciprocity, interpersonal networks and norms. Civil social capital has been recognized as an effective way of dealing with missing formal institutions in traditional societies.

Reference [6] points out the relationship between civil social capital and formal institutions in terms of both complementarity and substitution. In well-developed economies with strong formal institutions, civil social capital functions as a complement to formal institutions, while in less-developed economies with absent or dysfunctional formal institutions social capital becomes a substitute (see Table 1 in Appendix for some examples of the complementarity and substitution between informal and formal institutions).

Civil social capital helps solve economic problems at a micro-level, as noted by [7], because it changes the social environment, which affects individual decision-making. The problem of asymmetric information can be alleviated via social networks and trust, so cooperative activity can be

repeatedly achieved. Because of these benefits, civil social capital is believed to assist in improving economic performance, civic engagement, and human well-being [6], [8], and [9].

As noted in the previous section, the philosophy of Sufficiency Economy stresses the middle way of action with the three principles of moderation, reasonableness and self-immunity, and the conditions of knowledge and morality. Sufficiency Economy can be applied to all levels of a society, including the individual, the community and the nation. This philosophy (further) determines the behavior, the decision making and the interaction among people in the society. As a result, Sufficiency Economy can be viewed as a social capital that is embedded in the society. This social capital engraves the formal institutions and acts as an informal institution.

Trust, a key element of civil social capital as [10] suggests, has been recognized as a very important factor in economic transactions. In a society without formal institutions such as insurance and law and order, the informal institution can control trust through social appreciation and social punishment. Sufficiency Economy directly relates to this issue. From the morality principle, trustworthiness, honesty, and integrity are essential in the Sufficiency Economy, as indicated in the following synthesis:

"...At the same time, it is essential to strengthen the moral fiber of the nation, so that everyone, particularly political and public officials, technocrats, businessmen and financiers, adhere first and foremost to the principles of honesty and integrity. In addition, a balanced approach combining patience, perseverance, diligence, wisdom and prudence is indispensable to coping appropriately with the critical challenges arising from the extensive and rapid socioeconomic, environmental and cultural changes occurring as a result of globalization."

Within a society in which people have a Sufficiency Economy mindset, trust should not be a reason for obstructing economic transactions. Rather, it will enhance such activities and strengthen community ties. Moreover, interpersonal relationships, kinship and social networks are other elements of social capital that are essential for the society. Individuals and society benefit from this network in several ways. For example, people in the community may look after or take care of each other, help each other out, guard off bad substance and help build networks. All of these can be witnessed in a community with a "Sufficiency-oriented" mind.

Koy-Rut-Tak-Wa community is a good example of a Muslim community with a Sufficiency Economy mindset that has strong social capital [11]. Trustworthiness, integrity, honesty and altruism are fundamentals of this community. The community has never had incidences of violence, burglary, or drug or security problems. People in the community look after each other, self-police, and reach out to others. The community sets up a "house group" that covers houses in the immediate neighborhood. The reason behind the "house group" is that houses in close proximity to each other can look after each other and help each other out when there is such a need. Each house group has its own head, acting as a representative of the group in the community counsel. This

² For some economists, social capital is interpreted as civil social capital, which refers to social networks, social norms and trust.

social capital works very well in the Koy-Rut-Tak-Wa community.

Sufficiency Economy is a kind of strong social capital that is embedded in the society. This social capital helps alleviate the institutional problems in the economy. Through the morality conditions that are applicable at the individual, community and national levels, this social capital assists in forming and shaping strong formal institutions such as good and honest government. Sufficiency Economy as an informal institution also plays a very significant role in substituting formal institutions in case of dysfunctional or missing formal institutions. With strong trustworthiness, honesty, integrity, sharing, and altruism, proper economic and non-economic activities can be achieved.

B. Environmental Sustainability and Sufficiency Economy

One of the biggest concerns, not only of the economist but also of the government, non-government organizations and ordinary people, is environmental issues. To achieve economic prosperity at the cost of environmental degradation, deforestation, pollution, and depletion of resources now is viewed as poor decision-making.

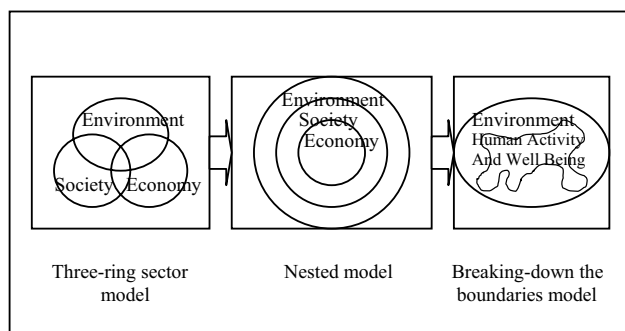
As [12] points out, a country, aiming at achieving high GDP growth, may employ bad policy and making bad decisions concerning environmental issues, as can be seen in the case of Papua New Guinea's decision on gold and copper mines in 1984, resulting in devastating environmental problems several years later. The number of GDP growth can be illusive because it does not account for the depletion of resources or environmental degradation. If it accounted for the environmental degradation, then the GDP growth could be significantly reduced. References [13] and [14], as cited in [15], have estimated the cost of degradation of natural resources, e.g. soil degradation, in China and Africa, respectively. Their studies show that soil degradation can cost the GDP of China as much as 5 percent and as much as 1-10 percent of the agricultural GDP of Africa.

Several studies have shown the correlation between income growth and degradation of environment. One such study is by [16], which indicates the impact of depletion of resources, as with forest clearance, on income growth. The findings indicate a strong positive relationship between the two: the larger the forest clearance of a country, the faster the growth rate. Likewise, [17] calculates the correlation of GDP growth and the indicators of environmental sustainability, for example changes in carbon dioxide emissions and changes in forest cover. The result demonstrates a strong negative relationship. All of the evidence confirms the notion that the high income growth that a country achieves is sacrificed by the depletion of natural resources and the environment.

Environmental degradation, such as water pollution, soil degradation, and other natural overexploitation, unarguably has more effect on the poor, whose income mainly depends on natural resources. Additionally, the poor are more vulnerable to the health hazards caused by pollution such as air pollution, toxic effluents and poor water supply. The followings are some examples of the effects of environmental degradation on human life from India, cited on page 86 in [15].

- Breathing urban India's air is equivalent to smoking 20 cigarettes a day. In the capital, New Delhi, the level of suspended particulate matter is more than twice the safe limit specified by the WHO. (Recent measurements of air pollution in India indicate that the level of suspended particulates may be as high as five times the limit considered safe by the WHO.)
- Every year more than 40,000 people die prematurely from the effect of pollution.
- More than 30 percent of garbage generated in cities is left unattended, becoming fertile breeding ground for disease.
- Only 8 out of India's 3,119 towns and cities have modern wastewater collection and treatment facilities, another 209 have rudimentary facilities, and the rest have none at all.
- One-third of the urban population has no access to sanitation services. In Lucknow, 70 percent of the population sends its waste into the Gomti River.
- Most sewer lines date to colonial times. Thus, 93 percent of Mumbai's sewage is dumped untreated into the sea, killing virtually all large marine life along the coast.
- Dichlorodiphenyltrichloroethane, commonly known as DDT, and benzene hexachlorine, called BHC, accounted for as much as 40 percent of the total pesticides used in India. Both are neurotoxins that severely impair the central nervous system and cause muscular dystrophy. Chemical analysis reveals their presence in milk, vegetables, cereals, and fruits in increasing quantities.

Environmental degradation affects not only monetary value (such as the cost of medical care and the loss of cultivated areas) but the quality of people's lives also. We can all agree that the environmental problems arising from overexploitation and abuse of the environment in both the industrial and agricultural sectors in order to achieve high income have had tremendous negative effects on human well-being. Humans should embrace the environment and live in harmony with it.



Source: [18]

Fig. 2 The sustainable development models

Reference [18] nicely explains the relationship of the economy, the society and the environment in the sustainable

development context. They show that the model of the three components has evolved from the three-ring sector model to the nested model, and finally to the breaking-down boundaries model, as seen in Fig. 2.

From the common viewpoint of the three-ring sector model, the environment, society, and economy may be misinterpreted as being, in some areas, independent and that those independent policies can be succeeded in these areas. Therefore, the nested model was formed based on the idea that all human activities occur in the environment. The economy or market activity is part of the society, and without it the economy cannot emerge. This is the model in which the economy is a subset of the society and the society totally depends on the environment. However, this concept suggests that the society and the economy are unified entities. This means that it ignores some activities, like non-market activity, informal economy and subsistence economy, which do not function as a formal economy but help contribute to human economic sources of living, especially for the poor.

In fact, all activities occurring in the society and in the economy can actually be counted toward human activity and which contribute to people's well-being. Hence, the boundary between the society and the economy has been eliminated in the final model. These human activities have impacts on the environment and the environment, simultaneously, has strong effects on human activity, both market and non-market kinds. Of course, human well-being significantly depends on these interactions. This close relationship between the environment and humans is represented by the fuzzy boundary between the two. To achieve sustainable development, we cannot separate the environment from human activities. What humans have taken from the environment and have done to the environment will reflect on human well-being.

The above concept of sustainable development is consistent with that of Sufficiency Economy in terms of environmental issues. Balancing the environment and human activities is the key. Reasonableness and moderation in environmental utilization will lead to achieving environment sustainability by never overexploiting or abusing the environment or natural resources. The self-immunity aspect of the Sufficiency Economy reminds human to embrace the environment and to conserve for the future.

One of the prominent schemes of the Sufficiency Economy that addresses the issues of environment degradation and natural resource depletion is sustainable agriculture. Sustainable agriculture adopts the philosophy of the Sufficiency Economy in the sense that one needs to be moderate, reasonable, and self-immune, together with being hard-working and acquiring knowledge. Sustainable agriculture practices organic farming, which eliminates the use of chemical fertilizer and chemical pesticide. Chemical fertilizer is one of the main causes of soil degradation, i.e. soil acidity, which reduces the productivity of crops. Chemical pesticide not only kills insects but endangers the environment, which in turn harms people. Instead, the natural materials that can be found locally are used to make organic fertilizer and insecticide.

Also, the typical mono-crop and cash crop that farmers always practice have been recommended to be changed into a

type of integrated farming, natural farming or agro-forestry. Mono-crop or cash crop that totally depends on the market price increases the farmers' vulnerability to external price shock and harms the environment as farmers tend to overuse chemical substances to increase their productions. Integrated farming consists of rice (the main source of food), fruit trees, fuel trees, timber trees, and other medical herbs and small plants. Big trees help provide natural fertilizer for the soil while small plants help retain moisture. This is a kind of farm that helps improve the ecology and conserving the environment.

Another serious environmental problem, stemming from human unreasonableness and immoderation, is deforestation or forest clearance. Deforestation denudes mountains, causing mudslides during heavy rainfall. In Thailand, mudslides from mountains have become real to people as there have had incidences that cost people's lives and destroy property, including houses, infrastructure, and cultivated lands.

Ban Wang-lum village in [11], a small community in the southern province of Thailand, after being devastated by a mudslide in 1996, has employed the Sufficiency Economy Philosophy in managing the problem. Being moderate, reasonable and self-immune, the villagers have stopped cutting trees from the mountains to preserve the forest and started planting timber trees in their own "community forest" in 1999. Seven committee members have been formed to monitor the utilization of the forest. Now, instead of cutting trees from the forest for house construction, the villagers use the proceeds from the community forest. The community forest has been viewed as a resource for the community's immunity and prevents further environment depletion.

In addition, to recover the forest and soil, farmers are advised to plant several kinds of big trees to improve humidity and soil retention, and the kinds of trees that have prolific wind-blown seeds on hill tops to help accelerate natural regeneration [19].

The Sufficiency Economy concept on environmental sustainability is not only applicable to rural areas but to the city also. With moderation, reasonableness, self-immunity, and awareness of social well-being, people, businesses and public organizations will be more conscious of environment protection.

We can see that the essence of the Sufficiency Economy regarding environmental issues is to guide people to live in harmony with nature. By being reasonable and moderate in natural resources utilization (never overexploiting or abusing the environment), and by being self-immune through environmental conservation, people can successfully live in harmony with nature.

C. Human Well-Being and Sufficiency Economy

We all agree that the ultimate goal of development is to improve human well-being because the majority of the world population still suffers from poverty, preventable diseases, and lack of other basic needs. At the Copenhagen Consensus Conference 2006, gathering well-known economists and UN ambassadors and senior diplomats from 24 countries (accounting for 54% of the world's population), current major

world challenges³ that needed immediate attention were prioritized. Those ranking at the top, which all targeted to improve the people's quality of life, are communicable diseases, sanitation and clean water, malnutrition and hunger, and education.

The Millennium Development Goals 2000 also aimed at improving the well-being of people, especially in less-developed countries. Such goals are to eradicate extreme poverty, to achieve universal primary education, to promote gender equality and to empower women, to reduce child mortality, to improve maternal health, to combat HIV/AIDS, malaria and other diseases, and to ensure environmental sustainability. Human well-being is considered a key to achieving all other aspects of development.

To improve human well-being, not only is monetary or asset value of concern, but so is the ability of people to shape their own choices now considered vital. Poverty alleviation, capability building, vulnerability reduction, and civil and political freedom are the key elements in helping to improve the quality of people's lives.

Poverty is the major impediment to development and is the main cause of low quality of life. In the third world, people are extremely poor and the society is often not self-reliant [20]. Sufficiency Economy attacks this problem at a very fundamental level since Sufficiency Economy emphasizes the idea that individuals and the family, most importantly, must be self-reliant.

In Thailand, a typical family often grows cash crops or mono-crops that are profitable during the time. However, the produce from these cash- or mono-crops depends on the market price, which increases the family's vulnerability to external price shock. Oversupply of the product reduces the price tremendously, so that the family is forced to borrow for reinvestment. What is even worse is that they have to borrow money to buy their own food since they cannot eat their cash crops.

In order to achieve self-reliance, according to the Sufficiency Economy, a family is advised to change from mono-crop or cash-crop farming to integrated farming. A combination kinds of plants, especially food plants like rice, vegetables, and fruits, are recommended for planting on the farm. Before the produce or value-added transformed produce is put up for sale, enough of it must be served to the whole family for consumption. Also, farm animals like fish and cattle are significant ingredients of the integrated farm. This would assist the family in having produce for consumption and also to be self-reliant. In this was such a characteristic of poverty of not being self-reliant is abolished.

Boonchuey Klongkaew from Ban Nong Grang Dong village in [11] is a real life example of a farmer who has adopted the Sufficiency Economy approach of self-reliance. Boonchuey, a 70-year-old farmer, once grew cash crops such as sugar cane, pineapple, and tapioca on his 64 rais farm land in hopes of high profits. However the results were disappointing as he had

accumulated a huge amount of debt over the time and became poor. Now, his life has been turned around after he practiced integrated farming. He is self-reliant, with plenty of food, and has more than enough surplus for trade. Additionally, he has enough money to repay all of his debts and to save for security. He now lives a peaceful life with dignity.

At the community level, several contexts of the Sufficiency Economy can be applied to alleviate poverty. The Ministry of Interior encourages communities to employ the following elements, cited in [19] page 48,

- schemes to reduce expenses through more home production, use of local new materials, energy savings, elimination of costly local entertainments and promotion of local markets
- schemes to increase income by encouraging community enterprises, producer groups and local tourism
- schemes for local saving
- promotion of local leadership and use of community plans
- activities to preserve and protect the environment
- schemes to promote social capital including local welfare schemes, community rice mill, and other cooperative schemes.

Ban Moung Wan and Koak Chareon villages in [11] are good examples of communities that have adopted almost all of the above schemes and have successfully reduced expenses and debt and increased their savings. These communities began with the micro saving scheme from a group of 10 people. The group members are required to save a very small amount of money every week. Now, the group has become bigger and stronger, with 667 members and a savings account of 7.5 million Baht.

People now, instead of obtaining loans from outside banks, borrow from the community savings account, which creates benefits for the community. The profits from the lending are divided into two parts: the first part is returned to the members and the other is used for community activities. This kind of savings is viewed as an immunity aspect of the Sufficiency Economy whereby people help guard themselves against external shocks.

Community shop, community rice mill, and community car services are examples among others that Ban Moung Wan and Koak Chareon have successfully operated in order to help the communities. Part of the benefits from all of these projects, including the savings program, is contributing to the community welfare fund. This fund is used for community activities and for welfare for orphans, the poor, and neglected elders.

The above welfare programs and mutual activities, and many other programs and activities, that several communities have engaged in as suggested by the Sufficiency Economy play the significant role of self-immunity to reduce vulnerability to various kinds of shocks (economic, cultural, and social). Examples of such welfare systems are community health centers, community cooperatives, village funds, funeral funds, and cultural and religious activities.

³ Major world challenges include climate change, communicable diseases, conflicts and arm proliferation, education, financial instability, governance and corruption, malnutrition and hunger, migration, sanitation and clean water, and subsidies and trade barriers.

To build ones' own capability so that the future can be shaped and choices made, one needs to acquire knowledge. Knowledge is one of the key conditions necessary for achieving the Sufficiency Economy philosophy. Without knowledge, it would be impossible to be reasonable and self-immune, as these two principles need rational decisions, information gathering, previous experience, analytical skills, and adaptability. Accumulating knowledge, therefore, is essential, whether through a formal educational system or through real life experience.

The Koy-Rut-Tak-Wa community has placed emphasis on education by founding a community Islamic elementary school. The school not only provides a formal curriculum but also stresses real life issues to guard against bad influences from outside the community, such as drugs and other violence.

Another example of the impact of the Sufficiency Economy on education is that of Ban Bau village, one of 900 villages of the Inpaeng network⁴ practicing it. Ban Bau village has set up a project called Children of the Inpaeng. This project aims at action-based learning from both the community (culture and experience) and the outside world. Such skills as critical thinking, decision making, leadership and teamwork are accentuated. The results are impressive, as there has been a great deal of improvement in the learning process of the children [19].

The aspect of the Sufficiency Economy that improves human well-being has come to the attention of the international arena. Reference [19] investigates the contribution of the Sufficiency Economy in relation to human development. It states that, like the UNDP's agenda on development, the heart of development in the context of the Sufficiency Economy is people's well-being. People aim at living up to their own potential and to have the fullest lives possible, with freedom and dignity.

However, the Sufficiency Economy provides more for human development in two aspects. One is the Sufficiency Economy process (the three principles), which can be used for analyzing situations, identifying objectives, setting plans and taking decisions, cited in [19] page 70; and this process is applicable at any level of the society. The other is the mental and spiritual development aspect of the Sufficiency Economy. This development, embraced in any type of development, yields mental and spiritual satisfaction at the individual level, and provides ethical culture at the organization level.

In addition to poverty alleviation, capability building and vulnerability reduction benefits from practicing the Sufficiency Economy, people can reap benefits from the insight into peacefulness and having more profound lives that results from the moral principle. Hard work, integrity, honesty, sharing and altruism play vital roles in human well-being. With a balanced-way of living, morality lifts up people's spirits and shows that living is much more meaningful. This represents another kind of freedom; a freedom from the materialism trap that people nowadays are entrapped. It is a freedom for those who have Sufficiency-oriented minds.

⁴ The Inpaeng network covers 900 villages in four Northeast provinces of Thailand, (UNDP 2007).

D. The Role of Government

Government plays a significant role in the economy as the market alone sometimes cannot function efficiently or properly. Those concerns about market functions that can impede development, such as asymmetric information, imperfect and missing markets and law enforcement problems, still require government action. The optimal role of government in building strong institutions and in deepening and facilitating market functions is the key.

It is not only at the individual level that the Sufficiency Economy can be applied, but also at the government level. With the concepts of moderation, reasonableness, self-immunity, together with the conditions for morality and knowledge, government should be able to achieve an optimal role. The "Sufficiency-oriented" government will aim at maximizing the welfare of the people while strolling in the middle path. The policy should be issued with prudence and vigilant, and should be subjected to experience and knowledge assimilation. No such policy without careful evaluation is launched resulting in bad impacts on the economy. In this manner, the economy will be tolerant of any kind of malign shocks from the outside world.

Good governance should also be a product of the "Sufficiency-oriented" government. Codes of conduct together with the principle of morality, which can be applied at both the individual and the government level, will enforce good conduct resulting in good governance and the honest culture of the government. This good governance will in turn create trust in the society. Once people have faith and trust in their government, civic and economic activities will be successfully accomplished, which consequently will contribute to the development goals of the nation.

IV. CONCLUSION

The three principles of moderation, reasonableness and self-immunity together with the two conditions of knowledge and morality of the Sufficiency Economy help contribute to development theory and convey a new paradigm for development. This is a development that embraces human well-being with the support of strong institutions, environmental sustainability, and good government.

APPENDIX

TABLE I
ROLE OF FORMAL AND INFORMAL INSTITUTIONS
IN PROMOTING WELL BEINGS

Contributing Factors	Informal Institutions	Formal Institutions
1. Information: · Markets, prices, product innovations · Values, opinions, beliefs · Political leaders, state performance	Families, friends, peers, neighbors, kin, ethnic networks, informal groups, work related networks; festivals, rituals, sports events, story telling, religious activities, civil society groups	· Newspapers, trade journals, magazines, books, radios, television, internet, freedom of press, information disclosure laws; regulations · Provision of infrastructure; roads, post offices, electricity, telephones · Schools, school curriculum · Political competition,

		citizenship rights, freedom to associate, independent audits, civil society participation and other accountability mechanisms
2. Trust	Norms, values, interpersonal relations, social sanctions	<ul style="list-style-type: none"> · Rule of law, independent judiciary, equity before law, enforceable human, consumer and property rights and contracts at low personal and financial cost; · Secure financial institutions · Schools, school curriculum, educational institutions, values education · Citizen participation in state activities and accountability mechanisms
3. Managing Risk: Health	Differential health care spending, and selective feeding to optimize chances of survival of the 'breadwinners'; Home-based care	<ul style="list-style-type: none"> · Health insurance policies; subsidized healthcare for the poor in clinics and hospitals; education; positive investment in girls
Livelihood	Within family diversification; kin or social group network; inter-generational transfer; work related networks, civil society groups	<ul style="list-style-type: none"> · Investment in human capability; stimulating livelihood opportunities; unemployment insurance, social security, safety net schemes; pensions; laws enforced for open and fair hiring based on merit; investment incentives for private sector
4. Credit	Ethnic groups, kin networks, friends, money lender, revolving credit societies, civil society groups	<ul style="list-style-type: none"> · Banks, credit rating bureaus, training and marketing
5. Local public goods, basic services and common property resources	Community groups and committees	<ul style="list-style-type: none"> · Co-production with local groups through direct Or indirect representation
6. Child care and socialization	Families, neighbors, friends, religious institutions	<ul style="list-style-type: none"> · Day care, nursery schools, schools, school based clubs, media; parent education, counseling
7. Dispute management and resolution	Family, extended kin, ethnic network, traditional council, church, community groups	<ul style="list-style-type: none"> · Lawyers, courts, tribunals, dispute resolution bodies, small court claims, mediation centers, police, social worker, alternative dispute resolution mechanisms
8. Security	Norms, self-policing, neighborhood or social group based security systems	<ul style="list-style-type: none"> · Police, armed forces, security personnel, laws about carrying arms by citizens, law enforcement and fairness in law

		enforcement, zoning laws, investment incentives to private sector
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Source: [6]

REFERENCES

- [1] N. Thongpakde, "Thailand's Economic Development and the Philosophy of Sufficiency Economy," Unpublished.
- [2] J. Stiglitz and S. Yusuf, "Development Issues," in *Frontiers of Development Economics*, G. Meier and J. Stiglitz, Ed. New York: the World Bank and Oxford University Press, 2001, pp. 227-268.
- [3] P. Bardhan, "Distributive Conflicts, Collective Action, and Institutional Economics," in *Frontiers of Development Economics*, G. Meier and J. Stiglitz, Ed. New York: the World Bank and Oxford University Press, 2001, pp. 269-290.
- [4] G. M. Meier, "The Old Generation of Development Economists and the New," in *Frontiers of Development Economics*, G. Meier and J. Stiglitz, Ed. New York: the World Bank and Oxford University Press, 2001, pp. 1-50.
- [5] P. Collier, "Social Capital and Poverty," Social Capital Initiative Working Paper 4., 1998, World Bank, Social Development Department, Washington, D.C.
- [6] D. Narayan, *Bonds and Bridges: Social Capital and Poverty*, Poverty Group, World Bank, July 1999.
- [7] S. Iyer, M. Kitson, and B. Toh, "Social Capital, Economic Growth and Regional Development," *Regional Studies*, vol. 39.8, pp. 1015-1040, 2005.
- [8] S. Knack, and P. Keefer, "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation," *Quarterly Journal of Economics*, vol. 111, pp. 1251-1288, 1997.
- [9] P. Whiteley, "Economic Growth and Social Capital," *Political Studies*, vol. 48, pp. 443-466, 2000.
- [10] P. Dasgupta, "Economics of Social Capital," *The Economic Record*, vol. 81, no. 255, pp. s2-s21, 2005.
- [11] *Sufficiency Economy Community: the Case Study*, Bangkok. Sufficiency Economy Sub-Commission under the National Economic and Social Development Board (NESDB), 2006. (in Thai)
- [12] J. Stiglitz, "Good Numbers Gone Bad," *Fortune*, October 2, 2006, p.30.
- [13] *Emerging Asia: Changes and Challenges*, ADB 1997, Manila.
- [14] J. Bojo, "The Cost of Land Degradation in Sub-Saharan Africa," *Ecological Economics*, vol. 16(2), pp. 161-173, 1996.
- [15] V. Thomas, M. Dailami, A. Dhareshwar, D. Kaufmann, N. Kishor, R. Lopez, and Y. Wang, *The Quality of Growth*, Oxford University Press, New York., 2000.
- [16] R. Naidoo, "Economic Growth and Liquidation of Natural Capital: The Case of Forest Clearance," *Land Economics*, vol. 80(2), pp. 194-208, 2004.
- [17] V. Thomas, "Revisiting the Challenge of Development," in *Frontiers of Development Economics*, G. Meier and J. Stiglitz, Ed. New York: the World Bank and Oxford University Press, 2001, pp. 149-177.
- [18] B. Giddings, B. Hopwood, and G. O'Brian, "Environment, Economy and Society: Fitting Them Together to Sustainable Development," *Sustainable Development*, vol.10, pp. 187-196, 2002.
- [19] *Thailand Human Development Report 2007: Sufficiency Economy and Human Development*, UNPD 2007, Bangkok.
- [20] A. El-Ghannam, "The Determinants of Social Well-being, Economic Development, and Development Index in the Third World Countries," *Perspectives on Global Development and Technology*, vol. 1, pp. 51-69, 2002.