

Roadmaps for Developing Thai Public Agencies Towards the Inspiration Level of the Sufficiency Economy Philosophy

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Abstract

This research investigates roadmaps for developing Thai public agencies to operate based on the Sufficiency Economy Philosophy. Primary and secondary data are collected from two government departments under the Ministry of Agriculture and Cooperatives using a triangulation approach. Primary data was obtained from in-depth interviews of top management and focus-group discussions among middle management. A systematic analysis was conducted using content analysis and descriptive statistics. Assessments of public administration based on the Sufficiency Economy Philosophy were conducted and the results revealed some aspects of the Sufficiency Economy levels. To ensure that the administration of public agencies based on the Sufficiency Economy Philosophy will progress towards the inspiration (the top) level of the Sufficiency Economy, roadmaps recommendations are proposed.

Keywords: Sufficiency Economy Philosophy, Thai Public Administration, Roadmaps

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แผนที่นำทางในการพัฒนาหน่วยงานราชการไทยสู่ระดับ สูงสุดของการประยุกต์ใช้หลักปรัชญาของเศรษฐกิจพอเพียง

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บทคัดย่อ

งานวิจัยนี้เป็นค้นคว้าแผนที่นำทางในการพัฒนาหน่วยงานราชการไทยเพื่อให้สามารถดำเนินงานบนพื้นฐานหลักปรัชญาของเศรษฐกิจพอเพียง ผู้วิจัยได้ทำการเก็บรวบรวมข้อมูลปฐมภูมิ และทุติยภูมิจากกรมในสังกัดกระทรวงเกษตรและสหกรณ์มา 2 กรม โดยใช้แนวทางสามเส้า สำหรับข้อมูลปฐมภูมิได้รวบรวมจากการสัมภาษณ์เชิงลึกของผู้บริหารระดับสูงและการสนทนากลุ่มในกลุ่มผู้บริหารระดับกลาง หลังจากนั้นได้วิเคราะห์ข้อมูลทั้งหมดด้วยวิธีการวิเคราะห์เนื้อหาและสถิติเชิงพรรณนา การประเมินการบริหารราชการตามหลักปรัชญาของเศรษฐกิจพอเพียงสะท้อนให้เห็นถึงการปรับประยุกต์ใช้หลักปรัชญาของเศรษฐกิจพอเพียงในบางแง่มุม จากผลการประเมินข้างต้น ผู้วิจัยได้นำเสนอแผนที่นำทางในการพัฒนาของกรมทั้งสอง เพื่อให้การบริหารราชการบนพื้นฐานหลักปรัชญาของเศรษฐกิจพอเพียงนั้นสามารถก้าวสู่ระดับสูงสุดของความเป็นเศรษฐกิจพอเพียงได้ในที่สุด

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1. Introduction

The Sufficiency Economy Philosophy (SEP) was developed by His Majesty King Bhumibol Adulyadej The Great. His Majesty provided guidance on appropriate conduct and pointed out the way to develop a more resilient and sustainable economy that is better able to meet emerging challenges such as globalization (Thailand International Cooperation Agency, 2021). The Sufficiency Economy Concept and Philosophy are determined as the guiding principle to be adopted in the 9th -13th National Economic and Social Development Plans (2002-2026), and the 20-Year National Strategy (2018-2037), (National Economic and Social Development Board, 2002; Office of the National Economic and Social Development Council, 2018).

Thailand was one of the 189 countries that joined the international community in endorsing the United Nations Millennium Declaration. Thailand also started the Millennium Development Goals (MDG +) initiative, which added additional goals and targets, to reflect its strong commitment to development by focusing on more precise and clear targets. Once the MDGs were concluded in the year 2015, the United Nations created the Sustainable Development Goals (SDGs). The Sustainable Development Goals (SDGs) have an emphasis that is different from the Millennium Development Goals (MDGs). While the MDGs was a starting point in global efforts to enhance the standard of living and well-being of the people, all 17 SDGs focus on promoting and nurturing participation, either directly or indirectly, of the international community at all levels. (Thailand International Cooperation Agency, 2021)

The 17 Sustainable Development Goals (SDGs) that were formally adopted by 193 United Nations member states in 2015 represent an ambitious set of global aspirations for the next fifteen years. A planetary emergency and the coronavirus disease (COVID-19) pandemic escalate changes in the landscape of development and complex issues regarding the environment, economy, and society. As a result, it is estimated that up to 1 billion people could be living in extreme poverty by 2030 (United Nations Development Programme, 2021). The situation becomes an opportunity for the world to push toward the Sustainable Development Goals. To achieve the goals, organizations around the world should adopt a sustainable business model (UN Global Compact, 2022) along with the development and delivery of technologies and solutions. To achieve

the organization's potential to reduce risk, improve productivity, drive growth, and create shared value, sustainability must be integrated across the organization. It's needed to stimulate coordination, learning, collaboration, and greater innovation, all leading indicators of healthy, thriving businesses in the 21st century. In addition, to achieve a business's potential, strategic and operational integration must consider the uniqueness of the organization and its components in terms of culture, identity, and strengths. These factors can either be barriers or amplifiers of executing strategy. The roadmap provides guidance on how to integrate sustainability-related goals and strategies across the organization (UN Global Compact, 2022).

It could be stated that the Sufficiency Economy Philosophy (SEP) focuses on development that is thorough and multifaceted as well as holistic and inclusive of the societal, economic, environmental, and cultural dimensions. The SEP can be applied to every sector by delving deep into the information in a systematic way and achieving the correct understanding. (Thailand International Cooperation Agency, 2021). A study by Mongsawad (2010) shows that the philosophy of sufficiency economy brings a new theory in addressing development challenges including issues of environmental sustainability, human capital, institutions, and the role of government. The philosophy aims at improving human well-being as a development goal which can be considered a new paradigm of development. This research aims to assess the current situation of application of the Sufficiency Economy Philosophy (SEP) to the performance of two government departments from the Ministry of Agriculture and Cooperatives. In addition, ensuring the administration of public agencies based on the SEP will be driven towards the inspiration (the top) level of the Sufficiency Economy, roadmap recommendations are proposed.

2. Literature Review

2.1 The Sufficiency Economy Philosophy, the Three Levels of the Philosophy, and Its Importance in Thailand

Definition and the Model from the Global Perspective

The Sufficiency Economy Philosophy (SEP) is a set of guidelines towards a healthier, more prosperous, more sustainable, and happier future nation (Avery & Bergsteiner, 2016). It covers perspectives on social, economic, environmental, and cultural. Merlin-Scholtes

(2007) stated that “Like human development, the Sufficiency Economy Philosophy places humanity at the center, focuses on well-being rather than wealth, makes sustainability the very core of thinking, understands the need for human security and concentrates on building people’s capabilities to develop their potential. And it adds a spiritual dimension to human development, reflecting the King’s own character, convictions, and sincerity”. On November 29, 1999, extracts of H.M. the late King Bhumibol Adulyadej’s speeches and other related remarks on sufficiency economy were compiled as an approach for all to adopt (Foundation of Virtuous Youth, 2017). According to the extracts, SEP is based on the Buddhist middle path, which aims for balance in life and practices. The philosophy can be considered as a guiding principle for people at all levels of society i.e., from the individual to a borderless society, either in the private or public sectors (Bergsteiner & Dharmapiya, 2016). In the case of the public sector, SEP can be adopted in practices by management with a macroeconomic perspective, in policy design, and alternative development strategies (Wibulswasdi et al., 2012).

The Three Levels of the Philosophy

To evaluate the adoption of SEP, Puntasen (2017) introduces the 3-level framework of SEP to explain the differences between levels of practice: *compliance*, *comprehension*, and *inspiration*. Based on the systematic model of SEP introduced by Bergsteiner and Dharmapiya (2016), Sathirathai and Towprayoon (2016) connect each level of SEP adoption with its related behavior.

At the *compliance* level, people partially adopt SEP to avoid risks that could harm them. At this first level, people may receive recommendations and guidance from their superior. However, they may be selective and comply with only some of the recommendations as a minimum for survival. People start to gain self-reliance as a partial outcome. Progression to the level of adopting SEP would come to those who reach the comprehension level. At this level, people start to adopt SEP logically, with understanding. Puntasen (2017) explains that people at this level reflect more on their way of thinking, which becomes aligned with SEP. Cognitive skills such as analytical, critical, and creative thinking would improve one’s ability to survive and bounce back from crises. As a result, the outcome of self-reliance would shift upwards to a state of resilience (Sathirathai & Towprayoon, 2016). Finally, people would reach the highest level of

Inspiration once they have fully adopted SEP: this is the level of enlightened practice. Work principles would be continuously followed along the lines of a fully developed sufficiency mindset and embedded virtues and knowledge. Therefore, this combination of practice and beliefs would become a way of life, which would move the individual from being self-focused to being other-oriented. Creativity and the ability to innovate would also be beneficial to people at this stage, since the values thus generated could be transferred to the owner of that innovation as well as to others (Jenjarrussakul, 2017). Therefore, with the development of SEP-based practices and the generated values, people at this level would be inspired and enjoy sharing their happiness with others. As a result, all the expected outcomes from the full adoption of SEP could be achieved.

The Importance of Sufficiency Economy Philosophy in Thailand

SEP was introduced as the “*guiding philosophy of national development*” in the Ninth National Economic and Social Development Plan (NESDP) (2002-2006) due to the situation which was described as “[...] *over the past four decades clearly indicates imbalanced development. While success measured in terms of quantitative indicators has been achieved, improvements in the quality of life seem to lag far behind*” (National Economic and Social Development Board, 2002). The above situation was a result of the implementation of the first to eighth NESDPs in which only the expansion and success of the national economy were emphasized in the country’s development. Rising land prices, higher investment from foreign investors, and higher GDP were used as signals which helped to prove the success of this policy (Puntasen, 2017). To continuously enhance the quality of life of people in Thailand, SEP has been embedded since then.

Since 2017, Thailand has been operating under the 12th NESDP (2017-2021). In this NESDP, SEP as a guiding principle to achieve the main goal of “Security, Prosperity, and Sustainability” in the rapidly changing and integrated world (National Economic and Social Development Board, 2016). It is comprised of flagship projects with implementation objectives that aim to prepare human capital, society, and the economy to serve the goals specified in the National Strategy. The implementation of the 12th NESDP is likely to fall short of expectations, as the country continues to grapple with the spread of COVID-19. The 13th NESDP, which will run from 2023 to 2027, aims to transform the country in five key areas: narrowing income disparities and poverty reduction through innovation; creating

a knowledge-based economy and value-added development; human resource development to meet demand in a digital economy; environmental conservation to deal with climate change; and advanced preparations to deal with changing global economic and social environments. The 13th Plan is expected to combine sufficiency economy concepts; the United Nations' Sustainable Creation Goals; the bio-, circular, and green economic models; and the 20-year national strategy plan in its development (National Economic and Social Development Board, 2021).

The National Strategy (2018-2037) is the country's first national long-term strategy developed pursuant to the Constitution. The country's vision is stated to become "a developed country with security, prosperity, and sustainability in accordance with the Sufficiency Economy Philosophy" with the goal being all Thai people's happiness and well-being. To evaluate the success of the National Strategy, six groups of indicators are used. The indicators cover government efficiency and better access to public services. The Strategy on Public Sector Rebalancing and Development aims to reform and enhance the country's governmental administrative services. The ultimate goal of the strategy includes the development of government agencies to be open to intersectoral operations among relevant parties. Furthermore, it also aims at ensuring quick responses to public needs and transparency (Office of the National Economic and Social Development Council, 2018). To achieve the goal of being a "sustainable national development according to good governance principles" (Institute for Population and Social Research, 2017) and to synchronize with the NESDP, SEP is used as a core principle in this strategy (Department of International Organizations, Ministry of Foreign Affairs of Thailand, 2018). Therefore, SEP plays a crucial part in national development in Thailand.

2.2 A Roadmap to Reach the Desired Outcome

According to Cambridge Dictionary (n.d.), a roadmap is "a plan for how to achieve something." It guides stakeholders to reach the desired outcome step-by-step, as well as provides supportive information behind the plan (Chisel, 2021; CIO Wiki, 2021). Forecasting and backcasting represent two major approaches to support planning and decision-making. Broman & Robert (2017) state that forecasting presents trends into the future and is often used in attempts to predict and solve problems. But it fails when the dominating trends are themselves the main part of the problem. The other way to solve this problem

is using backcasting, begins by defining the vision, and then asks: what shall we do today and subsequently to get there (Robert, 2000)? Broman et al. (2013) propose that forecasting should be used as a supplement in an explorative way with backcasting approach, especially in the sustainability context. To deliver sustainable design practices in the industry, Faludi et al. (2020) formulated a roadmap using the “backcasting” methodology. The roadmap starts with a vision, compares it to the current reality (the baseline), ideates solutions, and chooses a path forward (the roadmap). While the overall goal is to transform the industry, the roadmap can aim at the design community to turn visions of sustainability into reality.

3. Research Methodology

3.1 The Assessment Model of Sufficiency Economy for Public Agencies

Jenjarrussakul and Senasu (2022) develop an assessment model reflecting levels of applications of Sufficiency Economy Philosophy for public agencies which are based on Bergsteiner and Dharmapiya (2016), Sathirathai and Towprayoon (2016), and Puntasen (2017). This model has four dimensions based on system analysis. The first three dimensions aim at investigating evidence that reflects the existence of inputs, processes, and outputs. The fourth dimension assesses the existence of outputs/outcomes/impacts from the application of SEP in each agency. Additionally, there are two evaluation factors for each dimension. Each evaluation factor has three levels of intensity of application of SEP: compliance, comprehension, and inspiration. The basic level, called “Compliance (Partial Practice)”, refers to an agency that exhibits sustainability which focuses on performing work with prudence. The second level, called “Comprehension (Advanced Practice)”, refers to an agency that demonstrates happiness, which is reflected in prudence and moderation. Finally, the top-level, called “Inspiration (Enlightened Practice)”, refers to an agency that exhibits intended giving benefits to society that is based on reasonableness. Therefore, the two evaluation factors for each dimension are the criteria used to assess the existence of adoption of SEP and the proper implementation for each dimension at different levels. Figure 1 illustrates three levels of the assessment criteria of the Sufficiency Economy.

The first level - the outermost circle - is “Compliance” which reflects a sustainable organization. The middle circle is “Comprehension”. The highest level - the innermost circle - is “Inspiration”. Shown in each circle are the keywords of each dimension of the assessment reflecting means, methods of thinking, and norms of public administration as used in each level of the concept of the SEP.

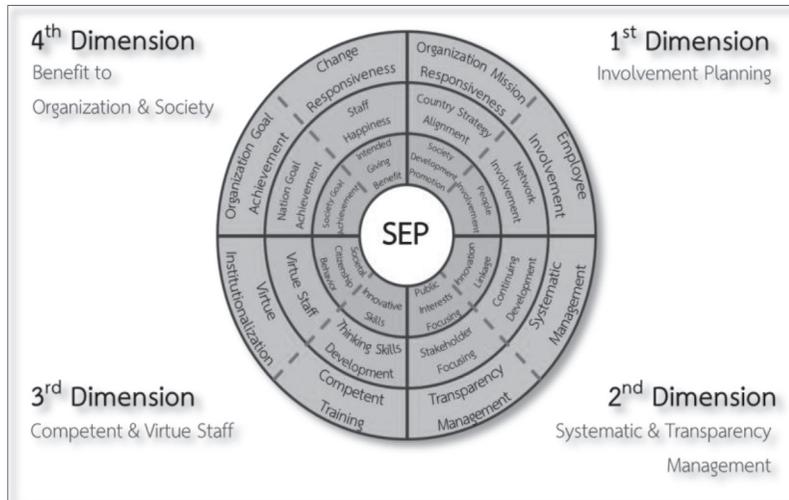


Figure 1: Assessment Model of the Sufficiency Economy for Public Agencies (Jenjarrussakul & Senasu, 2022)

3.2 Data Collection and Analysis

The participants in in-depth interviews were top management and participants in focus-group discussions were middle management from two departments of the Ministry of Agriculture and Cooperatives (MOAC); i.e., the Department of Royal Rainmaking and Agricultural Aviation, and the Land Development Department. These two departments are purposively selected because of revealing top assessment scores among eight sampling departments in Senasu and Jenjarrussakul (2019)’s study. Therefore, they are interesting as examples of best practices in applying the Sufficiency Economy Philosophy.

Triangulation of observers and sources of data was adopted to collect primary and secondary data in this qualitative research (Bryman, 2016, p. 386). When we collected

primary data from in-depth interviews, and focus group discussions, at least three observers attended. During the interviews, note-taking and tape-recording techniques, where permitted, were employed to record observations and responses to interview questions. Probes and document analysis were used to explore interview answers in more depth (Hussey & Hussey, 1997). The content analysis was conducted in phases (Duriau et al., 2007). Firstly, the recordings were transcribed and coded. After that, an analysis of content and interpretation were conducted. The triangulation of analysts was used to enhance the trustworthiness of the results. Backcasting methodology is adopted to formulate the roadmap, which starts with a strategic goal, compares it to the current reality (the assessment result), ideates solutions, and chooses a path forward, i.e., the roadmap (Broman & Robert, 2017).

4. Results

In this section, we elaborate on two case studies, i.e., the Department of Rainmaking and Agriculture Aviation and Land Development Department, by briefing the department context, sufficiency economy assessment result, and roadmaps towards the inspiration level of the sufficiency economy model.

4.1 Department of Rainmaking and Agricultural Aviation

The Department of Royal Rainmaking and Agricultural Aviation was founded in 2013. The aim of the establishment was to expedite operations of the Royal Rainmaking Project and to promote cooperation with other government sections in response to integrated duties. (Department of Rainmaking and Agricultural Aviation, 2022a)

Mission

1. Management of atmospheric water to create and distribute rainfall for the integrated development of agriculture, water resources management, forest conservation and rehabilitation as well as natural disaster reduction.

2. Research and development of rainmaking technology to enhance efficiency of weather modification and atmospheric water management for disaster reduction resulting from weather divergence and climate change.

3. Aviation management for rainmaking, research, and development as well as agricultural activities. (Department of Rainmaking and Agricultural Aviation, 2022b)

The Sufficiency Economy (SE) Assessment Results (Senasu & Jenjarrussakul, 2019)

The SE assessment results of the Department of Royal Rainmaking and Agricultural Aviation is at the compliance (partial practice) level which reflects a sustainable organization that engages employees in planning, has systematic and transparent management, training for employees so that they are capable of performing their duties, embeds ethics and morals in employees, and is an organization with prudence, immunity, and ability to respond to changes. Details are as in Table 1. It can be said that the outstanding characteristics of this department are competent staff with social responsibility behavior and networking with other agencies in related fields. However, as staff have to work every day for 8 months during the rain-making period (March–October), they are exhausted and have a low quality of work life. For the 4th dimension - “Benefits to organization and society” - the department should develop and strengthen global networking in the exchange and sharing of knowledge, technology, and practices of rainmaking. These should be the goals or desired outcomes for the department when developing strategic plans for its roadmap. Note that the field in grey means the department has no significant evidence according to the criteria. Table 2 shows roadmaps for the Application of Sufficiency Economy for the Department of Rainmaking and Agricultural Aviation to improve their performance to the highest level of the SE model. The department needs to improve the 3rd and 4th dimensions. Figure 2 illustrates the application of sufficiency economy assessment for the department.

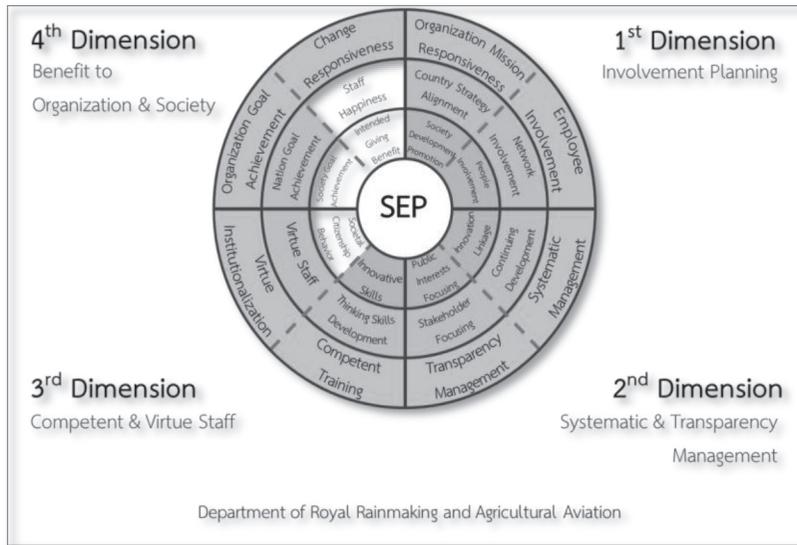


Figure 2: Assessment of Application of Sufficiency Economy by the Department of Rainmaking and Agricultural Aviation
 Note: Factors shown in white need improvement.

Table 1: Assessment of Application of the Sufficiency Economy by the Department of Rainmaking and Agricultural Aviation

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
1 st dimension	1. There is planning in response to an organization's vision, mission, and strategy (departments and ministries).	Mission goal formulation is aligned with the ministry's goals.	1. Organization's strategy is aligned with the national strategy.	Vision and long-term plans are clearly stated.	1. There are policy and strategic plans that support or promote social development or humanity.	Some strategic plans have significant impact. For example, water management against drought, plan against wildfire, and plan regarding climate change, etc.
Involvement planning	2. Strategic planning includes communication where understanding is forged, and employees' participation developed.	There are meetings to hear staff's ideas. Staff's ideas are added in planning process.	2. In strategic planning, there are briefings, discussions, and involvement of stakeholders or networking.	Relevant stakeholders are invited to participate in the planning process.	2. In strategic planning, there is public involvement.	Developed communication channels (i.e. TV, website, and social media) to receive input and disseminate information. - Open data and public hearing for an action plan.

Table 1: Assessment of Application of the Sufficiency Economy by the Department of Rainmaking and Agricultural Aviation (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
2 nd dimension Systematic and transparent management	1. Systematic management enhances efficiency at work.	There is a guideline based on information to plan daily missions. Also, there is communication of information to help team members keep abreast of progress.	Continuing development of management.	There are daily and annual summaries to help improve performance.	1. Management innovation to create benefit to network and people.	- There is application of new technology and research to improve efficiency in performance and services. - Mobile application regarding water demands map.
	2. Transparent management with policies, measures, monitoring system, and information disclosure.	There is a policy to oversee the direction of the organization which calls for brainstorming by the staff.	Management by focusing on customer and stakeholder.	Think of end results for people's benefit, based on the highest utilization of human resource management.	2. Create network involvement, and aim for people and stakeholders' self-reliance.	There are trainings to develop volunteers to support the department's operation and play a measured role in operations.

Table 1: Assessment of Application of the Sufficiency Economy by the Department of Rainmaking and Agricultural Aviation (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
3 rd dimension Competent and virtuous staff	1. Enhancement of skills and knowledge related to tasks for which they are responsible.	There are various methods for developing staff's knowledge and skills, both theoretical and hands-on tools.	1. Staff Development in analytical thinking, critical thinking, and creative thinking.	There is encouragement in research development, and upgrading assignment presentations based on necessary information.	1. Staff are capable of creativity and innovation development.	- Have made effort to search for and develop technology to increase work efficiency. For example, the development of a mobile application (water demands map). - There is a policy to study and develop creative thinking from other agencies' research.
	2. Institutionalization of morals and ethics for staff.	There are varied activities to promote good relationships among staff and to develop their morals and ethics	2. Staff could have moral and ethical livings, both in work life and personal life.	- Top management employs good leadership to encourage and motivate desired staff behavior. - Existence of No Gift Policy. - No complaint about corruption.	2. Staff are moral and ethical and are role models for others in society.	

Table 1: Assessment of Application of the Sufficiency Economy by the Department of Rainmaking and Agricultural Aviation (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
4 th dimension Benefits to organization and society	1. Work performance of agencies to achieve the organization's mission and objectives.	Annual performance rating is above goals.	1. Work performance of agencies to achieve the national strategy.	There are some achievements aligned with the national strategy.	1. Work performance of agencies has an impact on society and humanity.	
	2. Organization's ability to face or respond to changes.	- There are active solutions and action plans which cover 19 core challenges, including daily problems of staff shortage, fieldwork, and collaboration between agencies and volunteers in the area. - An implementation of risk management.	2. Ability to create happiness and a quality workplace for all employees.		2. Intention to give benefits to society and humanity.	

Table 2: Roadmaps for Application of Sufficiency Economy in the Department of Rainmaking and Agricultural Aviation

Strategic goals	Goal Deadline	Status* 2022	SE level	Measures
Quality of Work-life and Happiness			Comprehension	Improve happiness and quality of work-life for staff.
Manage working hours for staff to have a weekly holiday.	2023		4 th dimension, 2 nd assessment factor	At least one day leave per week during the 8 months rainmaking period (March–October).
Adjust procedures for ensuring guidelines for dealing with quality of work-life.	2023		4 th dimension, 2 nd assessment factor	Working procedures for ensuring both efficiency and staff engagement.
Manage job transfer and job rotation to support staff needs and career development.	2023		4 th dimension, 2 nd assessment factor	- Manual of career development. - Enhance flexibility of job transfer and job rotation.
Design and implement a happy workplace project.	2023		4 th dimension, 2 nd assessment factor	A higher level of staff happiness.
Virtuous and ethical way of life			Inspiration	Staff have virtue and ethical way of life and would be inspired as role models for others.
Develop ecosystem for virtuous and ethical workplace.	2024		3 rd dimension, 2 nd assessment factor	A project of intended giving benefit supported by top management.
Staff behave with a fully developed sufficiency mindset with embedded virtues and knowledge.	2024		3 rd dimension, 2 nd assessment factor	Regular sufficiency economy dialog in accordance with the current Intended Giving Benefit (IGB) or Corporate Social Responsibility (CSR) Guideline.

Table 2: Roadmaps for Application of Sufficiency Economy in the Department of Rainmaking and Agricultural Aviation (Cont.)

Strategic goals	Goal Deadline	Status* 2022	SE level	Measures
Staff move from being self-focused to being other-oriented.	2024		3 rd dimension, 2 nd assessment factor	Activities of intended giving benefit.
Impact of performance on society or humanity			Inspiration	Work performance of the department has an impact on society or humanity.
Eco-friendly drive: Develop a product or initiate a process to increase environmentally friendly drive and effectiveness.	2025		4 th dimension, 1 st assessment factor	Optimization and new development of products/processes for environmentally friendly rainmaking.
Anchoring sustainability aspects in the strategic goals of the department and their integration in strategic management decisions.	2025		4 th dimension, 1 st assessment factor	Expansion of participation in sustainable development goals.
Sustainable Happiness Society			Inspiration	Intended to give benefits to people and society.
Realize transparent society citizenship and integrate it within specific divisions.	2025		4 th dimension, 2 nd assessment factor	- Standardization and comprehensive establishment of global relationship management - Continuous support of society's citizenship behavior.
Deepening of a global partnership concept to provide sustainable solutions.	2025		4 th dimension, 2 nd assessment factor	Introduction of a partnership concept that is globally applicable for international networking.

Note: Status could be in progress, partially achieved, or achieved

4.2 Land Development Department

The Land Development Department (LDD) was established under the purview of the Ministry of National Development in 1963. In 1972, the government dissolved the Ministry of National Development and restructured administration, and the Land Development Department was transferred to the Ministry of Agriculture and Cooperatives. The Land Development Department has the duty to conduct soil surveys and analyses. The results of surveys and analyses form the basis for establishing land classification and utilization maps, developing land, and defining land use areas as well as soil and water conservation areas. Under the Act, the Land Development Department is responsible for the collection of statistics as a basis for conducting land censuses. (Land Development Department, 2022)

The Sufficiency Economy (SE) assessment results (Senasu & Jenjarrussakul, 2019)

The SE assessment results of the Land Development Department are also at the compliance (partial practice) level which reflects a sustainable organization that engages employees in planning, has systematic and transparent management, training for employees so that they can perform their duties, embeds ethics and morals in employees, and is an organization with prudence, immunity, and ability to respond to changes. Additionally, the department is a happy organization that allows employees in the organization to participate in planning, has systematic and transparent management, and trains employees to enhance their capability for work. However, there are some shortcomings in performance, i.e., employee training is needed to increase the staff's ability to be creative and to innovate as well as to instill an awareness of ethics and morals and to act as a role model for society. In addition, for the 4th dimension of “Benefits to organization and society”, the department should focus more effort in presenting clear evidence of the benefits to people at both the national and international levels.

Table 3 shows the application of the sufficiency economy assessment of the Land Development Department and table 4 demonstrates roadmaps of the application of Sufficiency Economy for the department, which aim to improve the 3rd dimension, 2nd factor at comprehension level, 3rd and 4th dimensions of both factors at comprehension

and inspiration levels. Figure 3 illustrates the application of sufficiency economy assessment for the department.

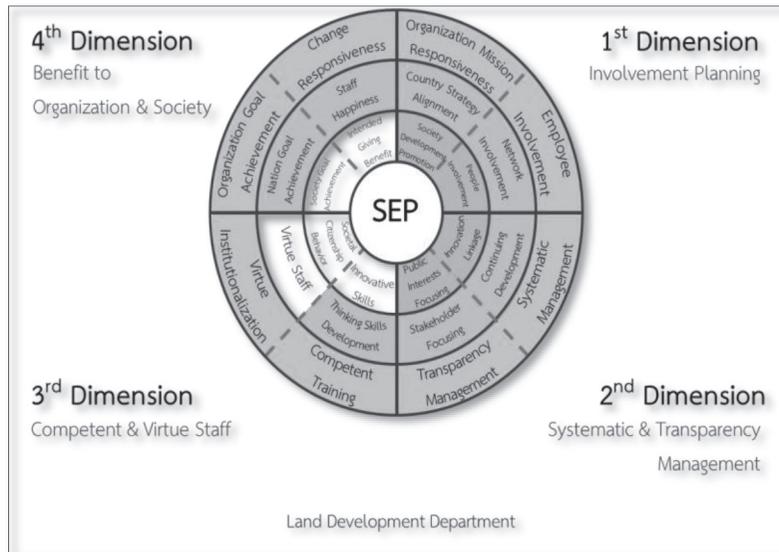


Figure 3: Assessment of Application of Sufficiency Economy by Land Development Department

Note: Factors in white need improvement.

Table 3: Assessment of Application of the Sufficiency Economy by the Land Development Department

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
1 st dimension	1. Public administration with planned response to an organization's vision, mission, and strategy (departments and ministries).	There is mission goal formulation aligned with the ministry's goals and the department has a core function in supporting the royal projects.	1. Organization's strategy is aligned with the national strategy.	The strategic formulation is aligned with the national strategy and Sustainable Development Goals (SDGs).	1. There are policy and strategic plans that support or promote social development or humanity.	- There are strategic policies aligning government policy in organic agriculture and environment-friendly agriculture. - Building awareness of food safety for farmers.
Involvement planning	2. Strategic planning includes communication where under standing is forged, and employees' participation developed.	The strategic plan is integrated from top-down and bottom-up and cascading to practices.	2. In strategic planning, there are briefings, discussions, and involvement of stakeholders or networking.	Relevant stakeholders are invited to the planning process.	2. In strategic planning there is public sharing and involvement of the people.	Networking and training volunteers in the area to support area activities.

Table 3: Assessment of Application of the Sufficiency Economy by the Land Development Department (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
2 nd dimension Systematic and transparent management	1. Systematic management enhancing efficiency at work.	There are many dimensions in management and driving forces to achieve goals.	Continuing development of management.	There are regular meetings to monitor and direct performance.	1. Management innovation to create benefit to network and people.	Innovate and implement new technology to improve performance and population services, e.g., LDD Soil Guide, Zoning application, and AGRI Map.
	2. Transparent management with policy, measures, monitoring system, and information disclosure.	The department implements standard monitoring and evaluating practices. There is information dissemination in project procurement.	Management by focusing on customer and stakeholder.	Thinking of end results for people's benefit and continuing to improve performance to increase people's satisfaction.	2. Create network involvement and aim for people and stakeholders' self-reliance.	There are agricultural development projects to support self-reliance, e.g., the 70,000 wells project, smart farmers, and knowledge exchange.

Table 3: Assessment of Application of the Sufficiency Economy by the Land Development Department (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
3 rd dimension Competent and virtuous staff	1. Enhancement of skills and knowledge related to tasks for which they are responsible.	There are various methods for developing staff's knowledge and skills, including the King's philosophy.	1. Staff Development in analytical thinking, critical thinking, and creative thinking.	There are activities and rewards to promote staff morale and encourage better performance.	1. Staff are capable of creativity and innovation development.	
	2. Institutionalization of morals and ethics for staff.	Morals are cultivated in core values, and there are various activities to promote staff morals.	2. Staff could have moral and ethical livings, both in work life and personal life.		2. Staff are moral and ethical and are role models for others in society.	

Table 3: Assessment of Application of the Sufficiency Economy by the Land Development Department (Cont.)

Dimension	Compliance Level		Comprehension Level		Inspiration Level	
	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices	Assessment Factors	Department's Practices
4 th dimension Benefits to organization and society	1. Work performance of agencies to achieve the organization's mission and objectives.	Annual performance rating is above goals.	1. Work performance of agencies to achieve the national strategy.	There is development in information, research, and activities to properly manage soil resources, so agriculturalists can increase income and achieve better quality of life.	1. Work performance of agencies has an impact on society or humanity.	
	2. Organization's ability to face or respond to changes.	There is risk awareness in uncertain situations by implementing PMQA practices.	2. Ability to create happiness and a quality workplace for all employees.	There is an employee happiness survey, and the results show in high level.	2. Intended to give benefits to society and humanity.	

Table 4: Roadmaps of Application of Sufficiency Economy by Land Development Department

Strategic Goals	Goal Deadline	Status* 2022	SE level	Measures
Moral and ethical staff			Comprehension	Support staff to live their lives based on morals and ethics, both in their work and personal lives.
Instill awareness of morals and ethics.	2023		3 rd dimension, 2 nd assessment factor	Top management exhibits good leadership to encourage and motivate desired staff behavior.
Rewarding role models of moral and ethical individuals.	2023		3 rd dimension, 2 nd assessment factor	Promoting evidence of a role model of moral and ethical individuals.
Creativity and Innovation Development			Inspiration	The staff is capable of creativity and innovation development.
Increase efficiency in the development process through consistent application of technology.	2024		3 rd dimension, 1 st assessment factor	Project to explore and develop digital technology to increase work efficiency.
Enhance decision-making effectiveness by developing an enhanced integrated database, applying an advanced data analytics approach, and introducing innovative sources.	2024		3 rd dimension, 1 st assessment factor	<ul style="list-style-type: none"> - Project which enhances the integrated database by applying advanced data analytics approaches aimed at extracting value from existing data. - Exploration of next-gen innovative resources which support developing and implementing next-gen innovative tools that are related to the mission.

Table 4: Roadmaps of Application of Sufficiency Economy by Land Development Department
(Cont.)

Strategic Goals	Goal Deadline	Status* 2022	SE level	Measures
Virtuous and ethical way of life			Inspiration	Staff have virtue and ethical way of life and can act as role models for others.
Development of ecosystem for virtuous and ethical workplace.	2024		3 rd dimension, 2 nd assessment factor	A project of intended giving benefit supported by top management.
Staff behave with a fully developed sufficiency mindset and embedded virtues and knowledge.	2024		3 rd dimension, 2 nd assessment factor	Regular sufficiency economy dialog in accordance with the current Intended Giving Benefit (IGB) or Corporate Social Responsibility (CSR) Guidelines.
Staff move from being self-focused to being other-oriented.	2024		3 rd dimension, 2 nd assessment factor	Activities of intended giving benefit.
Impact of performance on society and humanity			Inspiration	Work performance of the department has an impact on society and humanity.
Eco-friendly drive: Develop a product or initiate a process to increase environmentally friendly outcomes and effectiveness.	2025		4 th dimension, 1 st assessment factor	Optimization and new development of products/ processes for environmentally friendly rainmaking.

Table 4: Roadmaps of Application of Sufficiency Economy by Land Development Department (Cont.)

Strategic Goals	Goal Deadline	Status* 2022	SE level	Measures
Anchoring sustainability aspects in the strategic goals of the department and their integration in strategic management decisions.	2025		4 th dimension, 1 st assessment factor	Expansion of participation in sustainable development goals.
Sustainable Happiness Society			Inspiration	Intended to give benefits to people and society.
Realize transparent society citizenship and integrate it within specific divisions.	2025		4 th dimension, 2 nd assessment factor	- Standardization and comprehensive establishment of global relationship management. - Continuous support of society's citizenship behavior.
Deepening of a global partnership concept to provide sustainable solutions.	2025		4 th dimension, 2 nd assessment factor	Introduction of a partnership concept that is globally applicable for international networking.

Note: Status could be in progress, partially achieved, or achieved

5. Discussion

The results reveal the sufficiency economy assessment of the Department of Royal Rainmaking and Agricultural Aviation and the Land Development Department, and the roadmaps of application of the sufficiency economy to the inspiration (highest) level. Although this study includes only two public departments, which are under

the Mission of Services in Resource Management for Production under the Ministry of Agriculture and Cooperatives as case studies, it can be generalized to other public agencies. If other agencies were to apply the roadmap to improve their applications of the Sufficiency Economy Philosophy, a modification would be needed to reflect the reality of their mission, responsibilities, and current application situation. The rationale for proposing projects or activities in roadmaps of application of the sufficiency economy for these two departments, which can be applied to other government agencies, are based on related studies as follows.

5.1 Quality of Work-life and Happiness

Quality of Work-life is defined as “employee satisfaction with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace” (Sirgy et al., 2001, p. 242). According to several studies, employees who have high quality of work-life tend to report higher levels of engagement with their organizations, job satisfaction, job performance, and lower levels of turnover and personal alienation (Efraty & Sirgy, 1990; Efraty, Sirgy & Claiborne, 1991; Lewellyn & Wibker, 1990).

Happiness is defined by Veenhoven (1984: 22-24) as “the degree to which an individual judges the overall quality of his/her own life-as-a-whole favorably.” Following this definition, the term ‘happiness’ has been used in a variety of contexts, including interchangeability with terms such as “wellbeing” or “quality of life” and it refers to both individual and social welfare. Given the importance of work, a positive relationship between work-life satisfaction and personal-life satisfaction of employees is revealed by several studies in the related area (e.g., Chan & Wyatt, 2007; Sirgy et al., 2008, Al-Qutop and Harrim, 2011). Senasu and Singhapakdi (2014) find that job satisfaction has a positive effect on happiness in Thais. This finding is consistent with studies on happiness in other countries (e.g., Spector et al, 2007; Jaafar et al., 2012; Veenhoven, 2012). In other words, when people are satisfied with their jobs, it can have a positive impact on other aspects of their personal life, which can lead to happiness. The assessment of the Department of Royal Rainmaking and Agricultural Aviation reveals that although the staff is competent and devoted to hard work, many employees feel quite frustrated and exhausted. Therefore, top management should establish strategic goals of improving the quality of work-life by managing working hours, adjusting working procedures, and implementing happy workplace projects.

5.2 Institutionalization of Ethics, Virtue, and Ethical Way of Life

The institutionalization of ethics is defined by Singhapakdi and Vitell (2007) as “the degree to which an organization explicitly and implicitly incorporates ethics into its decision-making processes” (p. 284). Based on Brenner’s (1992) explicit/implicit categorization, Singhapakdi and Vitell provide examples of the implicit form of ethics institutionalization include ethical leadership and open communication. Codes of ethics and ethics training are two examples of the explicit form. Furthermore, Singhapakdi et al. (2010) have revealed that explicit ethics cultivation precedes implicit ethics cultivation. Marta et al. (2013) find that the effect of ethics on the quality of work-life is higher in collectivistic cultures such as Thailand than in individualistic cultures such as the U.S. In addition, the findings suggest that organizations in Thailand should focus on improving implicit ethics cultivation to raise perceptions of the ethics of their organizations, which is an important long-term variable in business success.

For the Department of Rainmaking and Agricultural Aviation, the assessment in the application of the Sufficiency Economy shows that their staff is moral and ethical, both in work life and personal life so there is only one further step which is to put effort into making staff become role models to others in society. The suggestions in the roadmap are the development of an ecosystem for virtue and ethics in the workplace, for staff to behave with a fully-developed sufficiency mindset and embedded virtue and knowledge, and to explicitly move from being self-focused to being other-oriented. These goals can be achieved by implementing some projects and activities, e.g., projects/activities intended to give benefit to others and to developing a virtue ecosystem by setting regular sufficiency economy dialog in accordance with Intended Giving Benefit (IGB) or Corporate Social Responsibility (CSR) Guidelines.

For the Land Development Department, the institutionalization of morals and ethics still needs to be improved before it can move up to act as a role model in society. The implicit form of ethics institutionalization via ethical leadership behavior plays a significant role in encouraging and motivating desired staff behavior. Additionally, a role model of a moral and ethical individual also reinforces the desired behavior. Enhancing implicit ethics institutionalization may involve significant change because it involves unspoken and unwritten changes, like making leadership and decision-making more transparent.

And it may also involve a call for upper management to discuss ethical issues more actively than they have in the past. The leaders of the Thai government should advise every public agency to establish ethics guidelines. This makes it clear that the government has played a part in raising awareness of ethics, at least in its explicit forms, which may be instrumental in raising implicit institutionalization.

5.3 Sustainable Happiness Society

Thailand is recognized as a prominent Buddhist country with nearly 95% of her population being Buddhist, and her culture extremely influenced by Buddhism. Buddhist teachings can nurture moral principles in Thai people, which is likely to improve their happiness (Wongtada et al., 2006). Religiousness can be a direct determinant of happiness, additionally, Senasu and Singhapakdi (2017) reveal that religiosity can also be a moderator of determinants of happiness, particularly in a Buddhist society like Thailand. They suggest that the government's role is to promote a higher degree of adherence to religious teaching and a more contented and moral population. The contented population can create more social capital, work harder, are healthier, and are more self-sufficient (Lyubomirsky et al., 2005; Cummins et al., 2009). Additionally, a concept of sustainable happiness proposes a new approach to happiness by combining reflection on sustainability issues with opportunities to improve one's quality of life and contribute to the well-being of individuals, communities, organizations, and the world (Dettori & Floris, 2019).

The shortcomings identified in assessment results for the 4th dimension of the inspiration level for both the Department of Rainmaking and Agricultural Aviation and the Land Development Department can be addressed by implementing some projects and activities. Expansion of participation in sustainable development goals and continuous support of society citizenship behavior are examples of important continuous efforts the department leaders need to pursue.

5.4 Creativity and Innovation Development

Creativity and innovation have a strong connection as creativity is considered a starting point of innovation (Amabile, 1996). In the case of an organization, successful innovation comes from an individual or team's creativity. Innovation has been spotlighted by organizations from diverse industries including public agencies. An innovation introduces

something new or an improvement which creates new value to the organization (Jenjarrussakul, 2017). In the global context, creativity and innovation are highlighted as essential skills (Nakano & Wechsler, 2018). Amabile (1996) explains that the creativity of an individual comprises three components: expertise, creative thinking, and intrinsic task motivation. Within the context of an organization, Amabile shows a strong relationship between work, expertise and intrinsic task motivation and explains that creative thinking is “something extra” that helps elevate expertise and motivation.

Since 2016, Thailand has moved towards a value-based economy with a focus on innovation (Thairath, 2016). As one of the core pillars of this movement, government agencies adopted digital technology as part of the improvement of their public services (Office of Research and Human Resource Development, Office of the Civil Service Commission, 2017). Digital innovations are introduced and adopted in government to create public values which meet citizens’ expectations (Panagiotopoulou et al., 2019). Several digital technologies such as applications, government portals, as well as data approaches such as data science, artificial intelligence, and policy analytics have been adopted. The adoption of such technologies allows government agencies to extract new values from their existing data. Thus, digital innovations are able to support organizations in making suitable decisions as well as improve their internal operational efficiency.

According to our findings, the assessment of the Land Development Department reveals that their staff is capable of creativity and innovation development, especially with the implementation of technologies aimed at improving their performance and services. Additional projects in the 3rd dimension of the inspiration level would encourage the department to create further values. Integration of existing systems and data, as well as the development and implementation of next-gen innovative tools are examples that could help the department increase its efficiency and effective decision-making.

6. Conclusion

To the best of our knowledge, this study is a pioneer study in roadmaps for developing higher-level application of the Sufficiency Economy Philosophy (SEP) for Thai public agencies. Despite the fact that the Office of the National Economic and Social Development Board has designated the Sufficiency Economy Concept and Philosophy as the major guideline to be adopted since 2002, Jenjarrussakul and Senasu (2022) found that there was still

a significant lack of understanding among government officials at all levels of the SEP or how to apply it, both in work and in their personal lives. Therefore, the application of the Sufficiency Economy Philosophy in the formulation of policy, action plans, management, and public administration still need to be unified in order to effectively drive Thailand towards the successful accomplishment of the Philosophy. It is recommended that policymakers should make a greater effort to provide precise instruction, offer official support to instill the right mindset, and improve practices based on the Sufficiency Economy Philosophy for all people and officers. This research suggests roadmaps for the needed strategic goals and measures to enhance the application of the SEP in public agencies by elaborating on two department cases. This is part of the government's role but efforts still need to be made by organizations, monasteries, communities, households, and individuals to contribute to ensuring sustainable happiness for all.

A limitation to this study that should be mentioned is that it includes only two public departments as case studies. If other agencies were to apply the roadmap to improve their applications of the Sufficiency Economy Philosophy, modification would be needed to reflect the reality of their mission, responsibilities, and current application situation. It would be beneficial if future research could collect data from other government agencies, private organizations, or non-government organizations in order to confirm the findings of this study.

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