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ปีเพาะปลูก 2560/2561: มุมมองด้านการบริหารจัดการโครงการ<sup>1</sup>  
Evaluation of Loans for Deferral Sales Project of Major  
Paddy Rice in Crop Year 2017/2018:  
Project Management Perspectives<sup>1</sup>

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## บทคัดย่อ

บทความวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ประเมินบริบท ปัจจัยนำเข้า กระบวนการ และผลผลิตของโครงการสินเชื่อชะลอการขายข้าวเปลือกนาปี 2560/2561 และ 2) นำเสนอแนวทางในการพัฒนาโครงการที่เหมาะสมกับบริบทของประเทศไทยวิธีดำเนินการวิจัยใช้เชิงคุณภาพ โดยศึกษาจากเอกสาร การสังเกตแบบไม่มีส่วนร่วม และการสัมภาษณ์เชิงลึกกลุ่มผู้ให้ข้อมูลสำคัญ ได้แก่ 1) เกษตรกร 2) สหกรณ์การเกษตร 3) ธนาคารเพื่อการเกษตรและสหกรณ์การเกษตร และ 4) นักวิชาการ ใช้วิธีการเลือกแบบเจาะจง จำนวน 31 คน และทำการวิเคราะห์แบบอุปนัย ผลการวิจัย พบว่า 1) ผลการประเมิน ประกอบด้วย (1) บริบท ได้แก่ เกษตรกรผู้ปลูกข้าวมีหนี้สินที่เกิดจากการลงทุนในการทำนา จึงต้องรีบนำเงินไปใช้หนี้และใช้จ่ายในชีวิตประจำวันหลังจากการเก็บเกี่ยวข้าวได้ทันที ประกอบกับ วิถีชีวิตเปลี่ยนแปลงไปจากอดีต ไม่นิยมเก็บข้าวไว้ในยุ้งฉางเพื่อขาย จึงมีผลต่อการเข้าร่วมโครงการนี้ของเกษตรกรและสถาบันเกษตรกรทุกภูมิภาค (2) ปัจจัยนำเข้า ได้แก่ บุคลากรงบประมาณ วัสดุอุปกรณ์ และสถานที่มีเพียงพอ แต่ประสบปัญหาในส่วนของผู้จำหน่ายที่ไม่มีความเชี่ยวชาญด้านพันธุ์ข้าว ไม่มีเครื่องตรวจสอบคุณภาพข้าว และไม่มียุ้งฉางในบางจังหวัด (3) กระบวนการ ได้แก่ การดำเนินงานมีความคล่องตัวและมีรูปแบบการจัดการที่ทันสมัย แต่ไม่ได้ให้ความสำคัญกับการแข่งขันเท่าที่ควร และ (4) ผลผลิต ได้แก่ โครงการก่อให้เกิดการชะลอการขายข้าวเปลือกออกสู่ตลาด บรรเทาความเดือดร้อนของเกษตรกรเกี่ยวกับค่าใช้จ่าย และเกษตรกรขายข้าวเปลือกได้ในราคาสูงขึ้น เป็นต้น เพียงส่วนหนึ่งเท่านั้น เนื่องจากมีเกษตรกรเข้าร่วมโครงการน้อยกว่าเป้าหมายที่ตั้งไว้ จึงไม่เห็นผลที่ชัดเจน และ 2) แนวทางในการพัฒนาที่สำคัญ ได้แก่ (1) กำหนดมาตรการช่วยเหลือเกษตรกรครอบคลุมเรื่องปัจจัยการผลิต (2) เพิ่มค่าเก็บรักษาข้าวให้แก่เกษตรกร (3) รัฐสนับสนุนเครื่องอบลดความชื้นข้าวในชุมชน และ (4) การจำนำยุ้งฉางควรจำแนกประเภทข้าวธรรมดากับข้าวอินทรีย์ และสนับสนุนเงินกู้ดอกเบี้ยต่ำหรือไม่เก็บดอกเบี้ยสำหรับผู้ปลูกข้าวอินทรีย์

**คำสำคัญ:** การประเมินผล นโยบายผลิตผลทางการเกษตร โครงการสินเชื่อชะลอการขาย ข้าวเปลือกนาปี

## Abstract

This research article aimed 1) to evaluate contexts, inputs, processes, and outputs of the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18, and 2) to propose project development guidelines that suit the Thai context. It employed a qualitative design to collect data from documents, non-participant observations, and in-depth interviews. Purposively selected, 31 key informants comprised 1) farmers, 2) agricultural cooperatives, 3) Bank for Agriculture and Agricultural Cooperatives, and 4) scholars. The obtained data were analyzed using inductive analysis. Findings revealed that 1) the evaluation results included: (1) contexts: since the rice farmers accumulated debts from rice-farming investment, they were forced to immediately cash out their rice harvests to repay these debts and cover daily expenses. Furthermore, their ways of life have changed, and hence, storing rice in barns for later sales was no longer practiced. Consequently, these actions influenced farmers and farmers' institutions in every region on their participation in this project. (2) Inputs: despite human resources, financial budgets, materials, equipment, and venues being adequate, officials

struggled with limited expertise in rice varieties, the lack of inspection equipment on rice quality, and no access to barns in some provinces. (3) Processes: operations were effectively streamlined with modern management, but competitions were not sufficiently emphasized. (4) Outputs: the project helped to defer sales of paddy to markets as an attempt to relieve farmers' cost burdens, and through it, they were able to sell the paddy with higher pricing. The project is only a factor among many as fewer farmers were found participating in than targeted, making results being less tangible. 2) The mainly proposed development guidelines were (1) issuance of measures to assist farmers with production factors, (2) increase of rice-storage fees for farmers, (3) state sponsorship of community rice dryers, and (4) barn pledges should separate ordinary rice from organic rice, and low-interest or interest-free loans should be subsidized for organic rice growers.

**Keywords:** Evaluation, Agricultural Products Policy, Loan Project to Defer Rice Sales

## Introduction

Rice is an essential crop for humans. On food security, rice is a staple food for domestic and global consumption. Moreover, different rice varieties can be processed into diverse products. Culturally, rice has long been recognized as a part of traditions, cultures, ways of life, and valuable folk wisdom. In Thailand, there are as many as 3.7 million farmer households that cultivate rice, and from generation to generation, Thai citizens have been on the rice farming ventures for a long duration. In fact, agriculture is deeply rooted in Thai ways of life. Economically, rice is a vital economic crop in Thailand. Annually, Thailand exports a large amount of rice, generates revenues of no less than 200 billion baht, and owns approximately 25% of the market share. [1]

Rice production statistics in 2016-2018 suggest that Thailand ranked as the sixth-largest rice producer in the world, and the top five included China, India, Indonesia, Bangladesh, and Vietnam. As for rice exports, Thailand is the second largest exporter after India. [2] More specifically, Thailand's rice production gradually increased every year from 18.60, 20.37, to 21 million tons in 2016/17, 2017/18, and 2018/19, respectively. The production expansion resulted in an increase of 1.77 million tons of rice produce between 2016/17 and 2017/18. This growth is a vital contribution to Thailand's Gross Domestic Product (GDP) in 2017 as the agricultural sector was able to recover and help boost the GDP to 15,452,882 million baht, an increase of 919,407 million baht compared to the previous year. In the same year, the agricultural sector contributed 1,337,284 million baht (8.7%) to the GDP, which is a 6.2% growth reversing the continuous decrease since 2014. [3] The rice production data are exhibited in Table 1. [4]

**Table 1** Rice production statistics

Nation	Crop year 2018/19 (million tons)	Crop year 2017/18 (million tons)	Crop year 2016/17 (million tons)
China	144.5	145.99	144.85
India	109	110	106.5
Indonesia	37.3	37	37.15
Bangladesh	34.7	32.65	34.58
Vietnam	28.67	28.58	27.86
Thailand	21	20.37	18.6

Source: The United States Department of Agriculture (USDA), as of May 2018

Based on figures on rice exports from 2016-2018, Thailand became the second-largest rice exporter with 10, 10.5, and 11 million tons of rice being exported in 2016/17, 2017/18, and 2018/62, respectively (see Table 2).

**Table 2** Rice export statistics

Nation	Exports in 2018/19 (million tons)	Exports in 2017/18 (million tons)	Exports in 2016/17 (million tons)
India	13	13.2	10
Thailand	11	10.5	10
Vietnam	6.8	6.8	5.6
Pakistan	4	4	4
Myanmar	3.5	3.5	1.6

Source: The United States Department of Agriculture (USDA), as of May 2018

Despite leading the world in the productions and exports of rice, rice farmers in Thailand remain in deep poverty with income inadequacy, debts, and uncomfortable living conditions. A major influencing factor of farmers' life quality involves markets. As the government has been consistently rolling out policies to support agricultural products throughout periods, rice farmers rely on these time-specific measures to survive. For instance, during the Yingluck Shinawatra's administration, a "paddy rice pledge project" was initiated, and it was a grand scheme as well as the talk of the town. Through this project, measures were issued to support farmers through the rice-pricing intervention, where the government acted on their behalf as a major rice trader. Nonetheless, since the administration has limited field-specific

specialization when compared to firms in the private sector, a decision to take higher pledge prices exceeding market prices was made against general pledge principles. Therefore, the state, as a rice trader who managed the entire rice system, established a rice market, and boosted up the rice prices, undeniably suffered huge losses. This is not to mention that corruption occurred at almost every step of the process. All in all, a subsidizing scheme like this one is not sustainable farming facilitation, although some groups might believe that the policy offered farmers some unprecedented and tangible benefits. [5]

The administration of Prime Minister General Prayut Chan-o-cha carried out many projects to support agricultural products. One of the most profitable ones included a barn pledge project to defer the sales of paddy rice in 2017/18. The cabinet resolution dated September 19, 2017, approved this project with the objectives to delay the selling of paddy to the market and relieve farmers from related cost burdens. More specifically, the project intervened to regulate paddy sales by postponing the sales until prices rose. This project also offered loans to farmers, agricultural cooperatives, farmer groups, and community enterprises. Credit lines were determined by types of rice, i.e., (1) Jasmine paddy rice, (2) sticky paddy rice, (3) paddy rice, and (4) Pathum Thani 1 paddy rice. [6]

As previously discussed, the agricultural sector, especially rice farms, is vital to Thailand in multiple dimensions. Although Thailand is not the largest producer and exporter of rice, volumes of production and exports indicate that rice is Thailand's number one economic crop with an internationally recognized reputation. Nevertheless, its domestic rice market is facing problems with price fluctuations and falls on the farmers' end. The prices plummeted more significantly, especially during post-harvest periods. The data on such fluctuations by month are shown in Table 3. [7]

**Table 3** A summary of monthly average prices of milled rice and paddy in 2018 by the Thai Rice Mill Association

Type of Rice/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Jasmine rice (baht/100 kg)												
100% Class-2 Jasmine rice (2016/17)	3,240	3,394	3,345	3,365	3,533	3,617	3,525	3,475	3,450	3,450	3,400	-
100% Class-2 Jasmine rice (2017/18)	3,150	3,300	3,365	3,365	3,567	3,667	3,475	3,410	3,400	3,400	3,350	3,450
100% Class-2 Jasmine rice (2018/19)	-	-	-	-	-	-	-	-	-	3,350	3,350	3,350
Broken Jasmine rice (2016/17)	1,234	1,250	1,250	1,250	1,260	1,280	1,265	1,250	1,277	1,298	1,280	-
Broken Jasmine rice (2017/18)	1,265	1,294	1,270	1,281	1,317	1,330	1,305	1,250	1,307	1,313	1,280	1,307
2. Pathumthani fragrant rice (baht/100 kg)												
Pathumthani fragrant rice	2,343	2,483	2,248	2,537	2,617	2,325	1,825	1,865	1,885	1,900	2,050	2,138
Broken Pathumthani fragrant rice	1,083	1,083	1,112	1,200	1,200	1,200	-	-	-	1,190	1,185	1,190
3. White rice (baht/100 kg)												
5% white rice	1,240	1,198	1,186	1,272	1,290	1,243	1,175	1,185	1,182	1,195	1,180	1,176
4. Parboiled rice												
Broken parboiled rice	850	920	920	990	990	990	990	990	960	900	900	925
5. Sticky rice (baht/100 kg)												
RD6 Khon Kaen special sticky rice	2,163	2,189	2,063	2,088	2,200	2,100	2,150	2,175	2,200	2,200	2,220	2,300
6. Paddy (baht/100 kg)												
New Jasmine paddy (2017/18)	15,538	17,050	15,892	17,000	17,333	17,500	17,000	17,000	17,000	17,450	17,750	17,000
Pathumthani fragrant paddy	11,462	12,667	11,174	12,800	13,200	11,900	9,650	10,280	9,767	9,750	10,150	10,600
Sticky paddy (RD6)	11,500	10,950	9,590	10,500	10,400	10,433	10,250	10,517	10,775	10,825	11,150	11,850

Source: The Thai Rice Mill Association

So far, the government remains primary as a mechanism to determine agricultural support measures. This status quo suggests that state interventions are inevitably crucial as the government has the multi-level budget, power, personnel, and resources capacities to drive concrete results at central, provincial, and local levels. However, it is also essential for the government to maneuver its interventions in the way that they could deliver developmental sustainability for farmers and promote future self-reliance. Projects should be carefully strategized and carried out to avoid unnecessary economic losses, corruption, impacts on rice quality, rice-market distortions, and transformations in rice-trade structures (e.g., from free and competitive markets to patronage in trades that involve political connections and allies). Based on these necessities, this study aimed to evaluate the loan project to defer the sales of paddy in 2017/18. The justification of the study was that no previous research had investigated this project and the entire operations within its system. Consequently, the researcher reviewed the procedures of the entire project (i.e., starting from evaluating its contexts, inputs, processes, and outputs) to propose developmental strategies for the project that would be more appropriate to the Thai settings.

## Objectives

1. To evaluate contexts, inputs, processes, and outputs of the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18
2. To propose development guidelines for the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 that suit the Thai contexts

## Literature Review

Stufflebeam's CIPP Model was implemented to evaluate the project. As detailed below, this project evaluation model was designed to measure projects in four dimensions: contexts, inputs, processes, and outputs. [8]

Firstly, the evaluation should involve and serve stakeholders with fairness in the democratic ways of justice by taking into consideration the users who utilize the evaluation results, parties with direct and indirect impacts, and others who are not directly involved in the matters to ensure the most accurate data could be obtained.

Secondly, the evaluation is improvement-oriented, meaning that the CIPP model was not designed to stop at offering judgment nor fact-finding. Contrarily, it was intended to identify rooms for improvement, trigger transformations, and strengthen the evaluated. Nonetheless, some projects could be found non-improvable and terminated for being poorly productive.

Thirdly, the evaluation has objectivist orientation, meaning that through CIPP, theoretical and moral assessments are emphasized instead of personal attitudes, beliefs, or opinions. Hence, the evaluation should be impartial without apparent conflicts of interests and value multisource data to avoid biases.

Finally, the evaluation should value standards and meta-evaluation. Evaluators' professional standards (i.e., usefulness, feasibility, correctness, and accuracy) should be valued, and meta-evaluation should be independently conducted by an external body to avoid conflicts of interest.

## Methodology

This research employed a qualitative design. Documents on Thai agricultural-product policies (i.e., especially on the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 executed during the administration of Prime Minister General Prayut Chan-o-cha), policy evaluation concepts, and other relevant studies were reviewed. In-depth interviews with key informants and non-participant observations were also conducted. Provincial case data on regional leaders in the rice production of Crop Year 2016/17 were applied: 1) Ubon Ratchathani in the Northeast, 2) Nakhon Sawan in the North, 3) Suphanburi in the Central, and 4) Nakhon Si Thammarat in the South. The analysis was conducted at an individual level, and the key informants included 31 stakeholders, i.e., farmers, representatives of farmers' institutions, and experts in agricultural policies as elaborated below:

1) Farmers: 18 community leaders who were directly affected by the project were selected. More specifically, they comprised six each from (1) Ubon Ratchathani, (2) Nakhon Sawan, and (3) Nakhon Si Thammarat. Note that no participant from Suphan Buri was selected as none participated in the project.

2) Representatives of participating agricultural cooperatives: Since farmers' institutions were one of the project's targets, six representatives from a farmers' institution in Suphan Buri was selected for being the only participating institution.

3) Representatives of the Bank for Agriculture and Agricultural Cooperatives (BAAC): Four representatives (i.e., a representative from each province) of the bank were selected. This bank was relevant to the study as it was appointed by the Rice Policy and Management Committee (RPMC) as the responsible body in implementing the project.

4) Experts in agricultural policies: Three experts were selected for possessing adequate knowledge or expertise in agricultural policies.

The data were collected in three steps as follows:

1) Review and analysis of secondary data: In this section, multiple data sources were



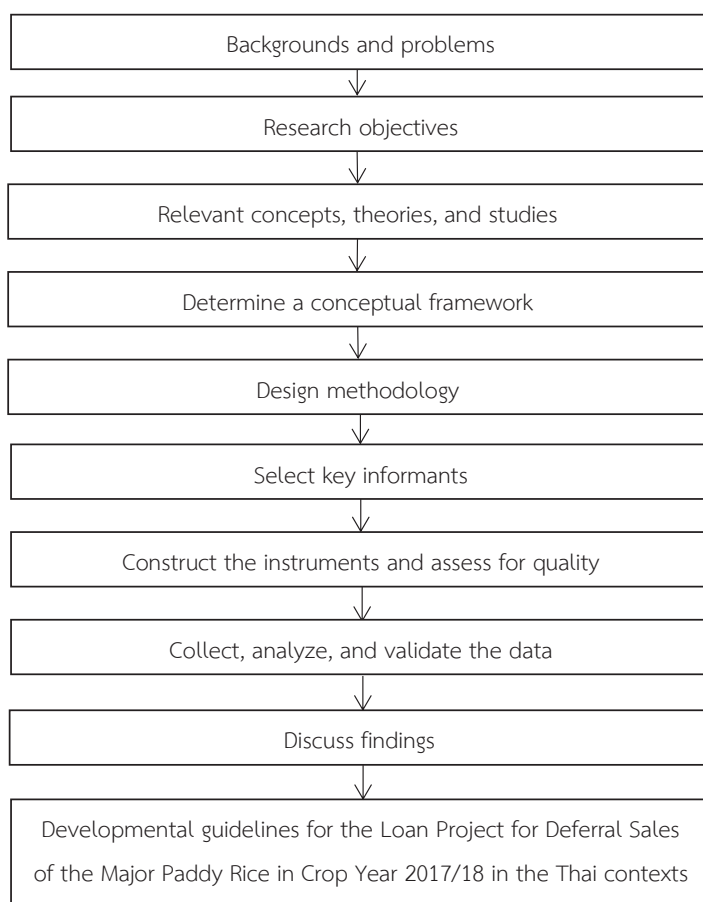
reviewed, e.g., books, textbooks, academic articles, research articles, official documents, executive summary reports, seminar documents, newspapers, website information, and field-survey documents.

2) In-depth interviews: The instrument included semi-structured interview forms with predetermined questions derived from the research objectives and in-depth interview indicators. However, as the interviews proceeded, emerging issues that the key informants presented were not neglected. These interview forms were separately created to tailor to the key informants. Before implementing, they were additionally assessed for quality (i.e., content validity and reliability) by three experts. The interview questions included a combination of open- and close-ended items, with the open-ended ones being the majority. Moreover, similar inquiries could be asked through an open- and close-ended question to explore more actual, more in-depth, and narrower information about the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 depending on specific dimensions and indicators as specified in the research framework. The interviews were conducted interactively in a friendly manner, where there were no dedicated interviewer or interviewee. Interactions were interpreted to extract hidden meanings in these responses. Also, during the interviews, the researcher recorded the data for later use and to match the derived data with each question.

3) Non-participant observations: The researcher went on field surveys to collect the project-related data but did not engage in the activities with the key informants. However, the researcher stayed passive as a part of the groups to objectively gather the ideas, beliefs, and experiences that the informants shared with the groups. These attempts were to prevent prejudice and biases.

For data analysis, the researcher systematically compiled and organized the data by matching the contents to the research objectives. Subsequently, analytic induction was employed to draw conclusions to be used in further validations.

Furthermore, data were validated with an internal examination. In this procedure, the researcher took the key informants' perspective to view the explanations and conclusions, whereas no issue was neglected or left out from biases. Another external examination was conducted via triangulation using different methods in collecting the same data. For instance, observations were simultaneously conducted while a key informant was being interviewed. Additional information was searched for from various sources, or other key informants were asked for improved data accuracy and integrity. The research procedures could be visualized in summary, as in Figure 1.



**Figure 1** A summary of the research procedures

Source: A data summary by the researcher

## Findings and Discussion

The findings are presented and discussed based on the research objectives as follows:

1. Evaluation of contexts (C), inputs (I), processes (P), and outputs (O) of the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18

### 1.1 Contexts (C)

An influencing factor of farmers' decisions to participate in the project was the annual prices of rice. When prices were high, the farmers would immediately sell paddy to rice mills after harvest. Only a minimal amount was stockpiled in the barns for household consumption. This notion is especially true with sticky rice as farmers in the northeast tend to store it for personal use. However, in years when rice prices plummeted, these farmers would decide to join the loan project to defer their rice sales until the price situations improved and agree to sell it according to the project's terms. Nonetheless, not every non-corporate

farmer who participated in the project brought all of their rice to the project. Many of them were pressured by time-sensitive expenses, e.g., daily living costs as well as agricultural and non-agricultural debts. Hence, some of their rice was sold to mills right after harvest. As a result, many internal and external factors came into play each year in price fluctuations, e.g., climates, crop epidemics, governmental stocks of rice, market demands, non-domestic supplies, and global prices. More importantly, unfavorable economic conditions and farmers' debts significantly impacted the participant numbers by province, resulting in the participation targets not being met. Statistically, Ubon Ratchathani ranked the lowest in the number of participating farmers, whereas Nakhon Sawan ranked the second highest. Furthermore, Suphanburi was able to attract two agricultural cooperatives, while Nakhon Si Thammarat was able to attract no farmer or farmers' institution. The notion is consistent with Phongpaichit and Christopher [9], which discovered that fluctuations in climate, weather, and environment (e.g., floods, droughts, pests, and high production costs) could bring more loss to farmers. Most farmers are either middle- or low-class citizens who were forced to borrow money, fertilizers, and chemicals from middlemen to invest in their farming. Congruently, Chung [10] studied the effects of Thai premium rice collection policy on international trades and social welfare and revealed that a critical influencing factor of Thai rice supplies was weather fluctuations. Similarly, the researcher's study in 2017 on the quality of life of Thai farmers in Suphanburi, which showed that most farmers in the province still suffered economically to improve living quality. Specifically, their living conditions were restricted by debts from cultivation, high production costs (e.g., labor, rents, and excessive use of chemicals), and uncertain product prices. [5]

Besides, this project only targeted to collect two million tons of paddy, which is comparatively little when compared to the total rice being produced to the market. Therefore, the amount was not substantial to tip the pricing scales in farmers' favor. Since many generations of rice farmers in Thailand have been facing similar undesirable economic environments, e.g., debts and income-expense imbalance, they were forced to take out loans either from formal lenders or informal loan sharks to sustain their farming investment and daily living coverages. Thus, after the rice harvest, they had no choice but to immediately sell the produce to middlemen and mill owners as that quick cash was needed for debt repayment in the purchases of fertilizer, chemical, and pesticides. Many of them had to empty their rice stock for these debts and had none left for consumption. Even though these farmers grew rice, they had no excess rice for personal consumption, and when they need it, they had to repurchase it from retailers. On the other hand, domestic and international situations on rice stocks, prices, and consumer demands are all interrelated, causing farmers to operate

their businesses amid income fluctuation and market volatility. Moreover, since these farmers had to quickly cash out on their produce to repay debts and keep up with daily expenses, the number of participating farmers and farmers' institutions in the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 in each province remained low.

### 1.2 Inputs (I)

Barns were crucial for the operations of this project. Evidently, Ubon Ratchathani and Nakhon Sawan were the two provinces that were found abundant with rice barns as local farmers preferred to store rice in them. The reason behind this phenomenon is that farmers in the Northeast habitually use barns to store sticky rice and Jasmine rice for their year-round consumption. Since these barns had been used quite sustainably, they were constructed with hard and durable wood and maintained in satisfactory working conditions. Nevertheless, some of them were examined and found to require improvement and repairs. Contrarily, no barns were found employed by the farmers in Suphanburi and Nakhon Si Thammarat.

On this note, since the project required barn storages from the participating farmers and farmers' institutions, such a barn demand was not consistent with local contexts and facts as the farmers had different ways to operate their businesses. The notion is especially true in Suphanburi (Central) and Nakhon Si Thammarat (South) as no barn was available for rice storage. Similarly, many of the past governmental projects, e.g., the paddy pledge project, failed to establish an understanding of why farmers needed to immediately sell their paddy after harvest and failed to convince them why it would be more beneficial to storing rice for longer while spending extra efforts in caring for barn storage. These failures were reflected in the results, i.e., not many farmers opted to use barns and wait for the right rices. Therefore, it is safe to assume that both the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 and the barn pledge project were not designed to suit local contexts nor match the real-world problems that the Thai farmers are encountering.

### 1.3 Processes (P)

Operations in the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 were streamlined with modern management through the applications of various techniques that were introduced by the private sector to state-enterprise agencies. On this note, the efforts indicated that appropriate technology was implemented, and the project was managed with adequate employment flexibility. The operation manual clearly stated that if the staff working on the project could not generate enough sales, the bank may consider outsourcing. The bank also established rules to incentivize workers. Hence, this loan project essentially promoted operations towards criteria to unlock rewards. Despite

the fact that the government and the Bank for Agriculture and Agricultural Cooperatives had launched many public relations campaigns and advertisements about the project through formal and informal channels (e.g., project presentations at meetings with governmental leaders, governors, district-chief officers, village headmen, and bank customers), TV and radio broadcasts, and community announcements, only a few farmers and farmers' institutions in each area participated in this project. This phenomenon is consistent with the notion of Rayasawath and Laothamatas [11] which evaluated the Tapioca Pledge Policy in the Northeast of Thailand and found that the policy's process was evaluated to promote a moderate level of understanding as most of the farmers received news from their farmers' group or village leaders. The notion is in line with the Office of Agricultural Economics [12] on the evaluation of a rice bank project in farmers' institutions in 2017 which reported that the project publicized information on various media to inform farmers about how the bank operates and handed out multiple invitations for membership (e.g., print media, brochures, vinyl signs, billboards, and electronic media). However, this study found that multi-channel public relations, in general, did not produce substantial impacts on the participation decisions as economic and social factors were more significant and imminent. On the other hand, although this project employed multiple public relations channels, it appeared that the operators in-charge were too slow to provide the services. As a result, some of the rice farmers decided not to defer their sales and immediately sold their rice stock to the mills after the harvest.

The researcher believes that agencies operating in charge of the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 should adopt the management that revolves around human resources development by incorporating new techniques and technology that the private sector offered into the operations run by government agencies and state enterprises. However, ensure that these techniques and technology are in line with organizational contexts and problems as no matter how effective a tool is, no solution works universally. Therefore, internal factors (e.g., organizational characteristics, cultures, goals, vision, and values, as well as behaviors of organizational members), are all relevant. Simultaneously, agencies should train their employees for changes and dynamics and equip them with the capacities to operationalize new solutions at maximum potential. Additional labor procurements might be necessary if specific expertise is needed. Loans should be carefully scheduled to match the timing of deferrals and sales. Through these measures, the unfavorable effects of operational delays could be mitigated.

#### 1.4 Products (P)

The Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18

was initiated with a budget of 24,109.95 million baht, and it was able to help defer as many as 70% of the paddy sales within the project due to the fact that there were not many major-rice farmers participating in the project. By province, the farmers included:

**Table 4** Major-rice farmers who participated in the project

Region/Province	Major-rice farmers who participated in the project
Northeast/Ubon Ratchathani	400 farmers (Khueang Nai District)
North/Nakhon Sawan	14 farmers (Nong Bua District, Tha Tako District, and Phaisali District)
Central/Suphan Buri	Two agricultural cooperatives (Sam Chuk District)
South/Nakhon Si Thammarat	None

**Source:** Field data collection

Nevertheless, the quantity of rice being sold by farmers to the market during the harvest season was high. According to the meeting summary of the Rice Policy and Management Committee No. 2/2018 dated Monday, April 30, 2018, which took place at the Phakdi Badin Building, Government Houses, the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 has 220,937 farmer participants with 1.419 million tons of rice (70.95% of the two-million-ton target). As 0.258 million tons were redeemed from the pledge, 1.161 million tons of paddy remained. In April 2018, the paddy prices were higher than the BAAC's loan prices; hence, the bank urged the farmers to redeem their paddy, take a storage subsidy of 500 baht per ton, and repay the loans as required by the project.

From this phenomenon, the researcher perceives that if the government's intention was to help farmers sell rice at a higher price point, with more farmers participating in the program, conditions should be made more flexible by extending options other rice produce beside paddy. Also, loans should be given for deferrals of "Second Paddy" as the measure would attract more farmers in all regions (e.g., in-season rice fields and double-crop fields) to participate in the project, especially the ones in Nakhon Si Thammarat and Suphan Buri.

2. The developmental guidelines for the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 in the Thai contexts

The guidelines are summarized and discussed as follows:

### 2.1 Contexts

Considering the laid out economic conditions, the government should formulate aid measures that cover production factors so that the farmers and farmers' institutions could reduce the costs of investment. With this intervention, farmers' debts might decrease. Hence,

there would be no justification to rush the sales of rice. The mentioned production factors might include tractors and pushcarts for community use, which would promote community sufficiency. Furthermore, these aids could work in harmony with farmers' institutions as these bodies were established to narrow the gaps for middlemen by supervising harvests, transportations, drying, processing, and sales. In terms of costs, the farmers suffered from costs of labor and trucks being hired to transport rice to their barns. Laborers were found needed to operate on time-consuming processes when they brought the rice to dry to reduce its humidity. Initially, the farmers were receiving 1,500 baht of rice-storage incentives. However, the incentivization should be raised to 2,000 baht considering labor and other expenses involved in the investment. Furthermore, the government should seek to increase the rice collection target from previously two million tons to a higher quantity that reflects the total amount of rice so that the volume is significant to manipulate prices. This notion is consistent with Attavanich [13] which evaluated the impacts of the rice-pledging scheme on economic statuses of Thai farmers and offered a suggestion that the government should have a parallel method to reduce production costs by increasing the efficiency of production factors through cost-effective budget spending as well as through ongoing or further public projects.

The researcher discovered that, within the developmental guidelines for the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 in the Thai contexts, economic environments demonstrated profound impacts as they affected farmers' decisions on the participation in the project.

## 2.2 Inputs

The project should take farmers' contexts into account. Currently, it is suitable for farmers in the Northeast and the North. According to Stufflebeam and Shinkfield [8], it is believed that some projects that could not be improved should be terminated for being unproductive. In turn, it is believed that ending unproductive projects could turn the tide around as such an action could free organizations from less beneficial endeavors and reprioritize valuable resources to further projects or activities as it is unwise to maintain ineffective investment and operations when there are already many rice barns and fields.

For other regions, the government should come up with other policies, measures, and projects that genuinely meet the needs and address regional problems. Contextualization can maximize the implementational efficiency of these agricultural policies and programs in solving local issues. Besides, the government should provide rice dryers for communities and help position cooperatives as farming contractors to support farmers in rice drying. Furthermore, the government should offer subsidies for these cooperatives to reduce risks of failures on rice drying from uncertain weather conditions. These suggestions

are in line with Vedung [14], which perceived client needs as the most vital factor not to be neglected when running a project. Congruently, Gordon [15], a study on LDP's rice policies in Japan, reported that rice policies had to be contextualized based on affected situations despite being backed by robust operational networks.

The researcher perceives input factors as fundamental to the developmental guidelines for the project. The government should sufficiently allocate inputs to ensure that the project is effectively executed through its operating mechanisms so that its objectives and goals could be achieved.

### 2.3 Processes

The Bank for Agriculture and Agricultural Cooperatives and other relevant agencies should publicize the details of the project in advance. Preferably, it should be conducted sooner, e.g., two to three months before the harvest season. When the project is open for farmers and farmers' institutions, representatives of the Bank for Agriculture and Agricultural Cooperatives should standby in the areas as first responders to offer services. Through this mechanism, more farmers are projected to gain an interest in participation. This suggestion is consistent with the Office of Agricultural Economics [8], which evaluated the rice bank project for farmers' institutions in 2017, proposed an idea that public relations should be delivered in details to elaborate on the bank's model of operations and projected benefits from participation and membership when using the bank services. With detailed elaboration, farmers would gain a better understanding and realize the importance of such membership and services. Similarly, the Office of Agricultural Economics [16], which evaluated the development of organic agriculture in 2017, demonstrated that the agencies conducted public relations in general areas via exhibitions.

On this note, the researcher believes that a modern government should utilize modern public relations. Target groups should be clearly defined, e.g., rice farmers on in-season rice fields for this case. The next step is to determine communicative goals by using the contents that are easy to digest. Furthermore, a public relations plan should be constructed and observed. In particular, the timing of the public relations and recruitment should be conducted during a pre-harvest season so that targeted farmers have time to make informed decisions on their project participation.

### 2.4 Products

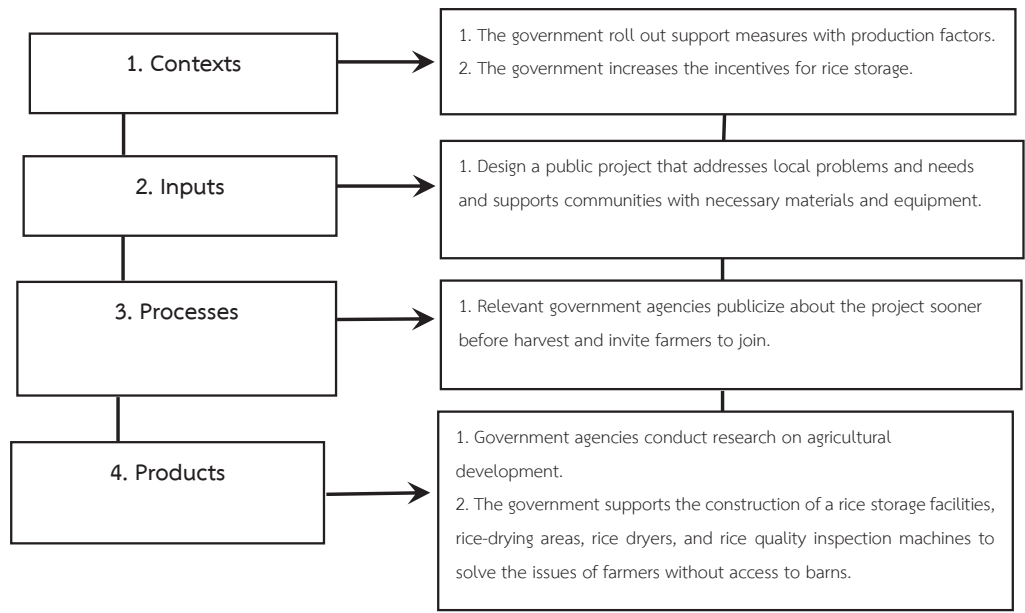
Developmental guidelines for the project should be constructed by a relevant government agency, especially the Ministry of Agriculture and Agricultural Cooperatives. Before issuing such guidelines, studies should be conducted to investigate the agricultural sector on primary issues, e.g., analysis of product quantity per rai, the introduction of technology,



and existing agricultural innovations. Early support for farmers and farmers’ institutions would enhance the chance for participation, which would further lead to more sales of paddy being deferred. After farmers harvest their rice, the Bank for Agriculture and Agricultural Cooperatives and relevant agricultural cooperatives should intervene in marketing, whereas BAAC customers should be responsible for storing the rice in a single location to support those without rice barns. Moreover, the government should offer financial support to construct rice silos and maintain necessary operations through the provisions of rice-drying spaces, rice dryers, and rice quality inspection machines. Subsequently, each province should fulfill the rice purchases when the government successfully negotiates a G-to-G trade deal.

The researcher agrees with the strategy to defer the sales of paddy by selling them to such markets because the current downstream process with marketing could not tackle root causes. Hence, upstream measures should be employed with research and development support from production, production processes, and down to farmers at the bottom of the mechanism so sales could be tangibly deferred.

The developmental guidelines for the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 in the Thai contexts are summarized in Figure 2 below.



**Figure 2** The developmental guidelines for the Loan Project for Deferral Sales of the Major Paddy Rice in Crop Year 2017/18 in the Thai contexts

Source: An analysis by the researcher

## Suggestions

The researcher offers of suggestions for practical utilization.

1) Since policies on price guarantees to support farmers are with mechanisms that require the government to subsidize differences between market and reference prices, the subsidization should mainly be calculated from product quantity instead of household land areas. The justification is that some farmers own no land and conduct agricultural businesses by renting. In some cases, they were fake farmers.

2) Several measures could be implemented to accelerate exports amid intense global competitions. The Bank for Agriculture and Agricultural Cooperatives should be ready to offer credit expansions, export credits, and low-interest loans, whereas the Ministry of Commerce should seek to establish new markets, find new partners, and monitor global trades, especially in relations to significant competitors because, in some market conditions, countries would try to reduce foreign rice imports and increase domestic yields. Furthermore, the Ministry of Agriculture and Cooperatives should promote the diversification of rice products to serve different consumption needs. Emphases should be placed on value additions, reduction of rice in stock, and speeding up rice sales through multiple retail and wholesale channels.

## References

- [1] The Thai Rice Foundation Under Royal Patronage. (2018). *Rice policy and farmers*. Retrieved October 5, 2018, from: [http://www.thairice.org/doc\\_dl/convention-2559-policy-2.pdf](http://www.thairice.org/doc_dl/convention-2559-policy-2.pdf). (In Thai)
- [2] Department of Foreign Trade. (2018). *Information on rice production and trade*. Retrieved October 7, 2018, from: <http://www.thairiceinfo.go.th/?page=DataL3.ShowData&codeData=A1001>. (In Thai)
- [3] Office of Small and Medium Enterprise Promotion. (2018). *SME white paper 2018*. Bangkok: Office of Small and Medium Enterprise Promotion. (In Thai)
- [4] Department of Foreign Trade. (2018). *Rice production and export data*. Retrieved October 7, 2018, from: <http://www.thairiceinfo.go.th/?page=DataL3.ShowData&codeData=A1001>. (In Thai)
- [5] Hunnak, C. (2017). *Quality of life of Thai farmers: A case study of Suphanburi Province*. Nakhonpathom: Collage of Innovation Management, Rajamangala University of Technology Rattanakosin. (In Thai)
- [6] Cooperative Promotion Department. (2018). *Loan project to slow rice sales in 2017/2018*. Retrieved on October 5, 2018, from: [http://www.cpd.go.th/cpdth2560/index.php/component/k2/newscpd\\_project\\_to\\_slow\\_rice\\_2561\\_14oct2560](http://www.cpd.go.th/cpdth2560/index.php/component/k2/newscpd_project_to_slow_rice_2561_14oct2560). (In Thai)

- [7] Thai Rice Mills Association. (2019). *Summary reports of rice price and paddy price*. Retrieved on March 5, 2019, from: <http://www.thairicemillers.org/images/1new.pdf>. (In Thai)
- [8] Stufflebeam, D.L., & Shinkfield, A. J. (2007). *Evaluation theory, models, and applications*. California: Jossey-Bass Publishers.
- [9] Phongpaichit, P., & Christopher, J. B. (1995). *Thailand, economy, and politics*. Kuala Lumpur: Oxford University Press.
- [10] Chung, M. W. (1978). A model for evaluating the effects of Thai government taxation of rice exports on trade and welfare. *American Journal of Agricultural Economics*, 60(1), 65-73.
- [11] Rayasawath, C., & Laothamatas, A. (2015). Policy evaluation of tapioca pledge: A case study of the Northeast. *Journal of Ratchaphruek*, 13(2), 33-40. (In Thai)
- [12] Office of Agricultural Economics. (2017). *The evaluation of the rice bank project in farmer institutions in 2017*. Bangkok: Centre for Project and Programme Evaluation, Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. (In Thai)
- [13] Attavanich, W. (2015). *The impact evaluation of rice pledging scheme on the economic status of Thai farmers*. Bangkok: The Thailand Research Fund (TRF). (In Thai)
- [14] Vedung, E. (2006). *Evaluation research*. In Peters, B. Guy and Pierre, Jon, eds. *Handbook of Public Policy*. London: Sage Publications.
- [15] Gordon, P. J. (1990). Rice policy of Japan's LDP: Domestic trends toward agreement. *Journal of Asian Survey*, 30(10), 943-958.
- [16] Office of Agricultural Economics. (2017). *Evaluation of the development of organic agriculture in 2017*. Bangkok: Centre for Project and Programme Evaluation, Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. (In Thai)