



The 16th National and International Conference
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Introduction

According to the current situation in Ukrainian war, which began with the invasion in Russia, it has a wide impact on the world economy. This includes supply chains to global markets as Western sanctions in Russia put pressure on its economic recovery in the face of the coronavirus disease starting. in 2019, which has a period longer than 2 years. Throughout the past one month several economic research houses have analyzed the energy crisis as a result of the Russo-Ukrainian war. It becomes a pressure and affects the confidence and recovery of the Thai economy. Thailand may face impacts through tourism, impacts from high inflation and indirect impacts from a slowdown in key trading partner economies.

The rice situation in 2022 has an overall picture of the average price of paddy that farmers can sell in February 2022, increasing from the previous month. It received support from the rice market and positive factors from India, which is the number one rice exporter in the world. This is because India is facing a shortage of freight trains. This has caused India's rice exports to slow down, causing some trading partners to turn to purchasing more rice from Thailand (Reuter, 2022). Meanwhile, Thailand's parboiled rice market competes well with India's with 44 percent exported to South Africa, Benin, Cameroon and Angola (USDA, 2022). Thailand's white rice market is also competitive in terms of export prices with Vietnam. Currently, the price of Thai rice in the world market at the 5% quality level is 432 US dollars per ton. The jasmine rice market and the sticky rice market received factors from the government's implementation of the loan program to delay the sale of rice paddy in order to maintain the price of rice by storing it in granaries and not sending it out to the market at the same time. The amount of rice participating in the project is 90 percent of the project target amount of 2 million tons of paddy rice. As a result, rice mill operators can purchase rice from the market in reduced quantities. (Office of Agricultural Economics, 2022) for the latest situation. The government sector has focused on solving the problem of rice export price competition by reducing production costs from 6,000 baht per rai to 3,000 baht per rai and increasing the variety of Thai rice varieties at least 12 within a period of 5 years (BAAC Innovation Research and Development Center, 2022).

However, there are predictions of farmer trends in 2022-2024 that Thai rice production is in a better direction. with factors from the weather The amount of rainfall and water in the dam is expected to result in increased rice production, along with support from the government. The demand for rice consumption in the country is likely to increase following



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the current economic recovery. Including the rice mill business, there is an opportunity to expand from increased output, but there is still a problem in terms of rice processing capacity, more than rice quantity. In particular, small entrepreneurs are often at a disadvantage to medium and large entrepreneurs in terms of the price of purchasing raw materials in the central market, causing small entrepreneurs to have higher costs for purchasing rice. Therefore, it can be seen that medium and large sized entrepreneurs have greater purchasing power and can compete with each other (Chaiwat Sowcharoensuk, 2022).

A representative of the Northeast Rice Mills Association revealed that rice production in the Northeast has an output of over 20 million rai of rice cultivation, which has problems with production figures. This is because most rice mills purchased less rice than last year and in terms of rice prices, there was still a problem with exports not increasing at the beginning of the year. However, during November and December last year, there were no problems with exports in terms of rice prices, which remained the same as at the beginning of 2021 and at the beginning of 2022, rice prices have moved up due to There is a barn pledging project. This caused farmers to start moving by coming out to dry rice and put rice in granaries to sell themselves in the granary pledging project. This affects rice mills because rice mills buy less rice from farmers (Digital Economy Base, 2022).

Due to the situation at ABC Rice Mill, Bang Len District, Nakhon Pathom Province, there was a problem in the production process that was delayed causing the delivery to not be in time as scheduled. Therefore, a study was conducted on ways to increase the efficiency of logistics that has brought the process. Logistics has been applied in the rice mill. This is because the logistics process is a process that starts from procuring raw materials to delivering them to customers on time. The important goals are the speed of product delivery, the flow of products and information, creating added value and reducing costs. The researcher is interested in conducting a study on increasing the logistics efficiency of rice mills, a case study of ABC Rice Mill, Bang Len District, Nakhon Pathom Province, to study the logistics management process of rice mills, the working efficiency of the rice mill and propose guidelines for increasing the efficiency of the rice mill production process.

Objectives of the research

1. to study the logistics process of a rice mill a case study of ABC Rice Mill, Bang Len, Nakhon Pathom.
2. To study guidelines for increasing the efficiency of the rice mill's production process a case study of ABC Rice Mill, Bang Len, Nakhon Pathom.



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Related literature

The Council of Supply Chain Management Professionals (2012) has defined logistics management as: It is part of supply chain management. From planning, development, improvement and control to achieve efficiency in operations. Whether it is the flow of goods, storage, services, and information exchange.

Douglas, James & Lisa (1998) gave the definition of logistics management as follows: Logistics is the management of the flow of goods and raw materials from the point of origin to the consumer or point of sale of the product.

Kent N. Gourdin (2006) defined logistics management as the continuous process of delivering consumer needs. By making the products available for sale to benefit consumers. Whether it is in terms of the quantity of products, various conditions at the time and place that consumers want. With a price that is appropriate and reliable.

Ruth Banomyong (2016) has given the definition that Logistics management It is part of supply chain management. which is involved from planning Implementation and control of the movement of goods and services Including related information From the starting point to the point of the consumer To be as efficient as possible according to customer needs, taking into account the case of sending products back together.

Kritchakrit Na Wattanaprasert (2015) gave a definition of logistics that Logistics management is the activity involved in collecting, procuring, moving, storing and shipping from the point of origin to the point of consumption. It involves the movement of objects and the creation of added value. Therefore, it is a component of supply chain management.

The Department of Business Development (2018) stated that the definition of the Council of Logistics Management (CLM) gives the meaning of logistics as “part of the supply chain process. By planning to put into practice and effectively control the flow of goods, services and other related information from the starting point to the final point. In order to achieve customer needs” and the Institute of Logistics and transport has given another definition of logistics is “the positioning of resources in relation to time. or strategic management of the overall supply chain” and the supply chain is “a series of events that is committed to creating satisfaction for customers which will include production procurement Product distribution and reverse logistics Including related activities such as transportation, storage and information technology.

The researcher concluded that Logistics management is planning the flow of information and products To achieve maximum efficiency from collecting products to



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Research results

From the study of A study on increasing the efficiency of logistics in rice mills, a case study of ABC Rice Mill, Bang Len District, Nakhon Pathom Province, using in-depth structured interviews. By asking 14 key informants, analysis can be done according to the following objectives:

1. Logistics process of rice mill From the analysis, it is found that ABC Rice Mill has a well-designed delivery area to clearly organize and prepare for delivery in carrying out various activities, it relies on communication between customers and middlemen. Transportation begins with the transport of rice products from the storage area using employees to lift the sacks up and down. To save time and speed and use a forklift to transport between the storage area and the truck. Problems in the logistics management process of rice mills from the analysis results it is found that most of the problems faced by the mill came from the manual labor needed to make every component. Causing everything to be delayed as well in every process. As a result, it affects the transportation that makes the customer not receive the product quickly. and cause a lack of credibility Customers may not return to use the service again. The mill therefore had to adjust its work to be faster in order to be able to produce products in time as specified with the customer.

2. Increasing the efficiency of a rice mill can be done by adjusting internal work processes to be faster. Plan management by reducing work steps in some areas that are not necessary. There has been an increase in the working area of the mill and increased machine labor to achieve complete work. Including increasing product transport cycles and adding more vehicles to ensure fast and efficient transportation.

Summary and discussion of study results

1. Rice mills have well-designed storage areas to clearly organize paddy and milled rice in preparation for shipping. Including carrying out various activities of the rice mill using communication between rice mills. Customers and middlemen for exchanging information and making agreements between the two parties to reach a common understanding. In addition, the transportation of the rice mill starts with the transport of rice products from the storage area by using employees to lift the sacks up and down and using forklifts to transport them between the storage area and trucks, which is consistent with the work. Research by Jesdalak and Saklang (2017) studied logistics management of rice mills. A case study of Runganan Rice Mill Company Limited, Phon District, Khon Kaen Province, found that those involved in the logistics management system were divided into It is divided into 3 groups: the



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group of raw material sellers to the mill, the rice mill, and the mill's customers, which have different roles in each logistics activity by the activities of the logistics plant of Rung Rice Mill. Anan consists of 8 activities: 1. Sourcing and purchasing paddy rice. 2. Transportation of paddy 4. Storing and maintaining paddy rice inventories 5. Verifying rice orders 6. Packaging and branding 7. Storing rice 8. Export of rice 9. Public relations and marketing Therefore, developing and improving the efficiency of logistics processes in order to make operations from upstream to downstream successful and create the most value for money in production as well as in sourcing and purchasing paddy, storing paddy inventory and exporting milled rice. This is because there is protection in storing and keeping the rice in good quality condition and can be used in terms of improving and increasing the efficiency of logistics to get the most value.

Most of the problems the mill encountered came from the use of human labor, causing delays in every process. Resulting in an impact on transportation that causes customers to not receive their products quickly and causes a lack of reliability. Customers may not return to use the service again. The mill therefore has to adjust its work to be faster in order to be able to produce products in time as specified with the customer, which is in line with the study of Chulasawat, et al. (2021) studying the matter of reducing costs in rice mills by using Environmentally friendly logistics and supply chain management processes When considering the problems in each section, it was found that On the upstream side, farmers sell paddy rice to mills. Not giving importance to the environment Because they still use the same chemicals. In the middle part of the water or rice mill, it was found that Rice mill operators have ideas for environmental logistics management by bringing in modern machinery and using a conveyor system to reduce errors and reuse waste raw materials for use in production. Perform work This is because machines are used in place of human labor to reduce mistakes and reduce time wastage in order to gain benefits in terms of the work process to reduce unnecessary steps.

2. Guidelines for increasing the efficiency of the rice mill will be achieved by adjusting the internal work process to be faster and planning management by reducing work steps in some areas that are not necessary. Including increasing the working area of the mill and increasing machine labor to achieve complete work. Freight transport cycles have been increased and additional vehicles have been added to ensure fast and efficient transportation. This is consistent with the research of Chansri, et al. (2018) studying guidelines for increasing efficiency in logistics management. A solar farm company found that factors affecting guidelines for increasing efficiency in logistics management. Logistics which has a positive relationship in the same direction. There are 13 optimization factors: customer service,



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ordering processes, customer demand forecasting, purchasing, inventory management, transportation, warehousing services, reverse logistics management, Spare parts and service support, factory and warehouse site selection, material handling, packaging and logistics communications. However, customer service should give importance to delivering products at the time that customers want by forecasting customer demand, planning delivery, and creating a schedule for delivering products.

Benefits obtained from research

1. Make you aware of the logistics management process of rice mills. Case study: ABC Rice Mill, Bang Len District, Nakhon Pathom Province.
2. Makes you aware of problems in the logistics management process of rice mills. Case study: ABC Rice Mill, Bang Len District, Nakhon Pathom Province.
3. Can suggest guidelines for increasing the efficiency of the rice mill's production process, case study: ABC Rice Mill, Bang Len District, Nakhon Pathom Province.

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