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A Strategy to Overcome The Economic Depression: The Local Wisdom Of Rubber Farmers In Labuhan Batu During The World Economic Crisis (Malaise) In 1930-1942

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Abstract

Starting from the early 1930s, the world entered a period of malaise, which often referred to as the Great Depression. Economic conditions throughout the world experienced a crisis, including in the Dutch East Indies region. The economic crisis had an impact on several sectors, including the agricultural sector, which resulted in the decline of prices globally. Rubber was one of the commodities that experienced a decline in prices, thus giving an impact on business actors, including rubber farmers. However, for the people of Labuhan Batu, although most of them worked as rubber farmers, they tried to survive the crisis by planting other export crops besides rubber such as areca nut, coconut, rice, etc. This contrasts with the community in other regions such as Bengkalis, which relied on rubber farming as the only economic resources. This local wisdom will be discussed in this paper. In order to discuss this matter, a research method based on culture and history was carried out. To find out what economic activities were carried out in the Labuhan Batu community, especially the rubber farmers, it is necessary to use the historical method, which is conducted by collecting data from a specific era. The local wisdom of smallholder rubber farmers in Labuhan Batu discussed in this paper is expected to be an inspiration and reflection for farmers in responding to the future economic crisis.

Keywords: pragmatics; Smallholder Rubber Farming; Economic Malaise; Labuhan Batu; Local Wisdom

1. Introduction

In the 1920s, the Dutch East Indies, along with the British and French possessions in Southeast Asia, were among the world's greatest producers of rubber. The Labuhan Batu area was a major rubber producer in the Dutch East Indies, though not as much as other areas such as Jambi, Palembang, and Kalimantan. There were not only company-owned plantations in Labuhan Batu, but also privately owned small farms. Labuhan Batu locals worked as rubber farmers. The lives of smallholder rubber farmers in Labuhan Batu were affected by a variety of policies. Stevenson's Scheme policy was one of said policies. This policy allowed Labuhan Batu farmers to reap benefits but caused Malay Peninsula farmers to deal with production restrictions.

As the world's largest rubber producer, the British colony controlled about 75% of the global rubber trade. In the 1920s, global rubber production exceeded the demand. Rubber prices fell because of this. To deal with the crisis, every rubber-producing British colony implemented a strategy of reducing rubber production at first. Unfortunately, the price of rubber later fluctuated, this time because of the global economic crisis that struck just before World War II.

During this economic crisis, farmers were faced with a difficult situation, including the decline in rubber prices and low global rubber. However, farmers in Labuhan Batu were able to face this difficult situation with the local wisdom they lived with. Said local wisdom will be discussed in this paper: How farmers dealt with the world's challenging

situation at the time, and how they handled problems despite the fact that the price of rubber had fallen as a result of the economic crisis.

2. Method

The method used in writing this article is analytical descriptive research and used both qualitative and quantitative data. Antiquarian data such as archival sources, older scientific publications, and older books were used, however this does not affect the essence of this paper. since the use of antiquarian data is necessary in research using the historical method. The data was obtained in the National Archives of the Republic of Indonesia, the National Library of the Republic of Indonesia, and other libraries in Medan such as Tengku Lukman Sinar Library and the University of North Sumatra Library. In addition to these sources, field observations were also carried out in the former smallholder rubber farming land in Labuhan Batu, especially in Labuhan Bilik and nearby locations.

3. Global Economic Crisis

The world economic crisis, or often referred to as the malaise, which occurred in 1929 was an aftermath of World War I (1914-1918) in Europe. World War I caused major catastrophes for mankind, such as poverty, overproduction, decrease in credit offer and inability to complete payments. This situation occurred almost all over the world, including the Dutch East Indies. Rubber was one of the commodities ended up being overproduced due to the decrease of global demand. Smallholder rubber farmers all over the world, including those in Labuhan Batu, were affected by this situation. Before the global economic crisis, there was overproduction because of the increase of rubber farming, including in Labuhan Batu. The Stevenson's Scheme was issued with the aim to limit production in order to stabilize and increase rubber prices on the global market.

Even though the Stevenson's Scheme was abandoned in 1928 and the international economic recession began in 1930, smallholder rubber continued to grow until early 1934. There was a drop in the price of rubber on the international market in the years leading up to the economic recession. According to the data in table 1, the export of smallholder rubber at the Labuhan Bilik Port continued to increase. However, starting in 1928 the world rubber price fell from 2.58 guilders in 1926 to 1.46 guilders per kg in 1929 [1].

Despite the fluctuation of prices, smallholder rubber farming expanded during this period. Rubber prices continued to fall around the world. Rubber prices dropped to 0.83 guilders in 1930 and to 0.31 guilders in 1932 [2]. Two major factors contributed to the drop in rubber prices when the economy entered a recession. First, the global economic depression that began in the late 1920s had an impact on the development of the automotive industry, especially in the United States and Europe. The automotive industry was the main market for rubber. Second, after the British government abolished the Stevenson's Scheme policy in 1928, there was an overproduction of rubber. The British colonies' rubber farmers increased their production. Consequently, industries that mainly involved raw/natural rubber in their production could not absorb them, unlike the United States [3].

This situation lasted until 1934. Exports of smallholder rubber through the Labuhan Bilik Port continued to fall during the 1930 and 1934 crisis. This was a result of the global economic crisis. The Dutch East Indies were unable to recover from their economic recession. This caused a drop in worldwide market prices, a decrease in demand for commodities due to lower work opportunities, and a reduction in state revenues and expenditures. The Dutch East Indies and the people of Labuhan Batu were indeed affected. However, in order to keep prices stable, numerous countries with rubber-producing colonies around the world, including England, France, and the Netherlands, reached an agreement on rubber exports.

4. Subsistence Agriculture Economic System

Agriculture and Indonesians are inextricably linked. Being an agricultural and maritime nation gives Indonesia various advantages. Agricultural products could be traded in the coasts. According to Mubyarto (1972), there are two types of agriculture in Indonesia: agriculture in a broad sense and agriculture in a narrow sense. Smallholder agriculture, plantations, forestry, livestock farming, and fisheries are all forms of agriculture in a broad sense. Meanwhile, smallholder agriculture, or agriculture in a narrow sense, is a family agricultural business in which the community produces essential foods like rice, secondary crops, and horticulture crops like vegetables and fruits. In

most cases, Indonesia's agricultural system is still based on a subsistence agricultural system, which means that farmers carry out agricultural activities in order to support their families' daily needs rather than for profit. In general, Indonesian farmers would not sell all of their harvest because part will be stored for the purpose of supplying farmers' home rice during non-harvest periods. Essentially Generally, the subsistence agricultural economy can be viewed as a minimalistic way of life of the farmers, which aims to meet their basic needs. Production subsistence and living subsistence, according to Clifton R. Warthon (1963), are the two categories of subsistence. Living subsistence refers to the agricultural activities that merely aims to meet the minimum necessary of needs, whereas production subsistence is broader and characterized by low commercialization and monetization.

This subsistence agriculture economic system was used by the residents of Labuhan Batu. They grew rice and other products like tubers, beans, and vegetables. In addition to agriculture, they relied on fisheries, including river fishing, particularly in the Labuhan Batu area. The caught fish, such as terubuk fish, shrimp, and others, to be consumed by themselves. This continued despite the expansion of agriculture in the Labuhan Batu area, both *onderneming* and smallholder farms.

Several factors influence the agricultural expansion of a commercial crop in a farming community. According to Myint, there are at least four conditions that promote the spread of agriculture, based on his research on the economics of commercial crop farming by inhabitants in Africa and Asia. The first is the availability of land in the form of underutilized forests that may be utilized to grow export crops. Fertility levels, distribution, and soil access are also considered. Second, underemployment. This situation arises because of farmers' lack of interest to boost production because of the domestic market's inability to absorb surplus production. Third, there is adequate transportation. Fourth, there are companies that do both import and export functions. The first function is to harvest, process, and distribute farmers' produce, while the second is to meet the needs for imported commodities. According to Myint, this last function offers a strong encouragement for farmers to produce export crops [4].

Specifically discussing the farmer's economy, Boeke views subsistence agriculture as the main characteristic of farmers in rural areas and will continue to be so in the future. Similar to Boeke, B. H. Higgins argues in one of his studies that farmers have a stagnant/static attitude about poverty. Furthermore, according to James C. Scott, farmers are static, apathetic, and simply desire to sustain their subsistence. Any alteration that threatens their survival, if deemed necessary, will be resisted. These three views are in line with the first opinion, which views farmers as subsistence groups of people who are static, apathetic, with no desire to take economic opportunities. The second opinion, on the other hand, views farmers as a group of people who not only wishes to maintain their subsistence, but also responds to external economic stimuli. This is reflected in their efforts in growing commercial crops, in addition to food crops. The higher the profit from commercial crops, the more likely farmers are to quit food crops. When commercial crop revenues begin to affect subsistence, however, they will return to cultivating food crops, switch to other commercial crops, or maximize the potential of agricultural products. Based on these arguments, Myint implies that farmers are flexible and reasonable enough not to rely solely on one type of crop [5].

Although there are export crops for commercial purposes, the farmer's economy in Labuhan Batu is still characterized by a subsistence system. Pepper, areca nut, copra, and other commercial crops are planted by Labuhan Batu farmers. Pepper was a major export product around the beginning of the twentieth century, while the development of *onderneming* limited the land availability for cultivation. Coconut, areca nut, coffee, gambier, and tobacco are among leading export crops. Coconuts are grown in almost every part of the area. Except in the highlands, it's widely found in Batu Bara, Labuhan Batu, Siak, Bagan Siapi-api, and Rokan [6].

5. Smallholder Rubber Farming and Polyculture Agriculture

Farmers in East Sumatra, particularly those in Labuhan Batu, relied on forest products before a more structured agricultural system was developed. Rattan, latex, wax, lakawood, dammar gum, and other forest products are commonly traded. [7] This agricultural system was used until East Sumatra was totally colonized by the Dutch. Farmers in Labuhan Batu used to conduct shifting agriculture, which involved clearing new lands. If a land is considered unprofitable, the farmers would relocate to a new one to cultivate rice.[8]

Farmers grew rubber trees, specifically *ficus elastica*, in addition to rice. *Ficus* was once a forest product collected with other forest goods such as dammar resin, gutta-percha, and rattan before being cultivated. Because of its high price, *ficus* sap was in high demand. As a result, in 1905, numerous farmers in Labuhan Batu began to cultivate it. In

addition to the increased market price of *ficus*, local farmers planted *ficus* in Labuhan Batu for a variety of reasons, including the declining number of *ficus* trees growing in the forest as a result of tapping by removing branches, which resulted in the tree to die. Furthermore, increased exploitation of forests for farming has resulted in a fall in the number of *ficus* trees.[9]

The community continued to cultivate *ficus* until the East Sumatra region was recognized as a *cultuurgebied*. Communities began to follow suit once major plantations cleared lands and grew more profitable perennials. *Hevea brasiliensis* was the new plant being planted. Some communities, though, continued to grow *ficus*. Farmers preferred *hevea* over *ficus* because it produces more latex and takes less time to tap. People moved to planting *hevea* for a variety of reasons, including easier maintenance and higher selling prices. [10]

Hevea was chosen over *ficus* because it was more profitable. For starters, the *hevea* tapping period is shorter, ranging from 4-6 years, but the *ficus* tapping period is longer, ranging from 7-10 years. Secondly, *hevea* also produces more latex than *ficus*. Thirdly, *hevea* trees are easier to tap than *ficus* trees. Fourthly, the rise in rubber prices. The average price of rubber on the London Market in 1900, for example, was 4 shillings 3 pence per pound. In 1910, it increased by more than 100%, to 8 shillings 9 pence per pound. Fifth, even though the price was rather high, farmers did not mind buying *hevea* seeds. Data shows that farmers from this area obtain rubber seeds from Malay Peninsula, either from traders or residents who stopped there on their way back home after carrying out pilgrimage (Hajj). *Hevea* trees planted in Labuhan Batu around 1910 and thereafter reached peak production just as the Stevenson's Scheme was introduced by the British. These rubber trees had reached the age of ten years or more at the time.[11]

Hevea seeds were first imported from the Malay Peninsula by Chinese traders and pilgrims returning from Mecca. Then, starting in the 1920s, seeds were obtained from East Sumatra rubber plantations. Residents could purchase rubber seeds for one cent each seed ready to plant in 1925. Seeds could be purchased from the local farmers or obtained from one's own farm when these *hevea* trees started to produce their own seeds. Farmers in Tapanuli obtained seeds by themselves or through distributors from the Malay Peninsula, particularly the Malacca and Penang regions. They could also purchase seeds from government-owned agricultural institutions.[12]

The rubber trees were normally left after the rice or other plants were harvested, although farmers would periodically come to the farm to clean up in order to let the rubber grow. This was carried out until the rubber trees were considered ready to be tapped. Rubber trees could be tapped after four years, but some people began tapping even earlier. The tapping was done merely using knives, machetes, and even axes. Farmers with sufficient funds would usually buy and use proper tapping tools, as used in plantations. For sap storage, coconut shells, cans, and even bamboo were usually used, while the latex were transferred into the reservoir using cans, bamboo, or leaves. The collected latex was then coagulated with acidic liquid to transform it into rubber *slabs* in a prepared container such as a bucket, can, etc. This was usually done at the rubber farms, but sometimes it would be done at home. These *slabs* were ready to be sold and collected by traders.[13]

The distribution stages of rubber, starting from the upstream to the Labuhan Bilik Harbor and to the peninsula (Penang and Singapore), were quite long. Since the factories were located on the peninsula, exporters generally placed a confidant in the production area, including in Labuhan Bilik. Tauke karet (Rubber Bosses), as they were known, were mostly Chinese, with family members or confidants acting as their representatives. These representatives were given a sum of money by the taukes in Peninsula. They developed a network with traders in communities along the river's banks, such as the Barumon River, Bilah River, and Panai River. These small business owners were offered funds by the representatives.

Rubber was sold once a week in the villages along the river. Market days were held on different days in different villages along the river, but on the same day every week in each village. Rubber prices around the river may vary due to a lack of communication networks between each trader. However, the longer the distance between the port and the village, the lower the price. In order to achieve a better price, some traders would deliver the *slab* directly to Labuhan Bilik. This required a lot of time, money, and courage, so the profits obtained were not much different from selling them to collectors who sailed to the upstreams to purchase rubber.[13]

Farmers in Labuhan Batu benefited greatly from the British government's policy of limiting rubber production in order to keep rubber prices low. Rubber price was greatly dependent on market needs because it was a demanded globally. As a result, the price of rubber was highly volatile and subject to supply and demand. Rubber prices would be high if demand increased while production remained low. Conversely, when demand for rubber fell while supply was plentiful, the price tended to fall. On the London market, rubber prices in the period 1890-1910 averaged between

3 *shillings 1 pence* and 8 *shillings 9 pence* per pound. This last price occurred in 1910 and was the highest rubber price in the London Market until at least 1940. From 1910 to 1921, the price of rubber continued to experience a significant decline every year. In 1921, the year before the introduction of the Stevenson's Scheme, rubber was priced at an average of 9 pence per pound on London Market.[15]

The decline in world rubber prices in the 1910s was a result of the efforts of industrial countries such as the United States, Germany, and Russia to reduce dependence on natural rubber produced by the British. The three countries developed synthetic rubber for several reasons. Russia, for example, began to develop synthetic rubber in correlation with the October Revolution which happened in 1917. Despite the slow progress, these three industrial countries' activities were effective in placing pressure on prices of natural rubber. In addition, the United States began investing in natural rubber production in Southeast Asia through the US Rubber Company in 1910. Finally, the low demand for natural rubber, as well as World War I, contributed to the fall in rubber prices.[17]

The British was impacted significantly by these unfavorable circumstances. In the midst of this, the British Rubber Growers' Association requested Winston Churchill's assistance as Secretary of State for the Colonies in 1920. Churchill formed an investigation committee which members were representatives of the British Rubber Growers' Association and chaired by Sir James Stevenson. This committee then designed the Stevenson's Scheme, a rubber export restriction that was imposed on the British colonies in Asia, especially Sri Lanka and British Malaya, and went into force on November 1, 1922. Prior to the implementation of this scheme, Britain attempted to work with rubber-producing countries across the world, particularly the Netherlands. The Netherlands rejected, and the project was eventually carried out only by the United Kingdom.[18]

Stevenson's Scheme had an impact on global rubber prices once it was implemented. The London Rubber Market recorded an average price increase of 9 *pence* per pound to 1 *shilling 9 pence* per pound in 1922, when this scheme was implemented. Until 1926, the average annual price of rubber in the same market ranged from 1 *shilling 11.75 pence* to 2 *shillings 1 pence*. The average price fell drastically to only 6 *pence* per pound in 1927, then rose slightly to 10.75 *pence* in 1928, the year the British government repealed the Stevenson's Scheme policy. This amount is identical to the guilder conversion, which went from 1.47 guilders in 1922 to 1.65 guilders in 1924, and then to 2.56 guilders in 1925.[20]

Stevenson's Scheme, which was unilaterally adopted by the British, benefited both plantation and farm-based rubber producers in the Dutch East Indies. Rubber farmers in Labuhan Batu also benefited from this scheme. From the data, it was found that the initial involvement of farmers in Labuhan Batu in the rubber business is at least estimated to have occurred since the 1890s. They collected rubber sap from the *ficus elastica* tree, which grew abundantly in tropical forests in their area at the time.[21]

This activity was done by collecting forest products, known as *boschproducts* (forest products) by the Dutch colonial government. Towards the turn of the century, indications emerged that there was a shift from collecting forest products to cultivating *ficus*. This shift was the result of at least two factors. **First**, there was a decline in the number of *ficus* trees in the forest. Seeds were harvested from the forest's *ficus* trees and planted on people's farms afterwards. **Second**, the price of rubber sap was very competitive at the time.

Not long after cultivating *ficus*, around 1910 farmers started to choose *hevea* over *ficus* because it was deemed more profitable. **For starters**, tapping period for *hevea* is shorter, starting at 4-6 years, while for *ficus* tapping starts at 7-10 years. **Secondly**, *hevea* produces a lot more sap (latex) than *ficus*. **Thirdly**, unlike *ficus* trees, *hevea* trees are easier to tap. **Fourthly**, the cost of rubber was rising. Rubber was priced at 4 *shillings 3 pence* per pound on the London Market in 1900, for example. The price went up by more than 100% in 1910 in the same market, to 8 *shillings 9 pence* per pound. With such competitive prices, as the fifth reason, residents did not mind buying *hevea* seeds despite the expensive price. From the data obtained, farmers in this area obtained rubber seeds from the Malay Peninsula, both from traders and residents who stopped there on their way back home after carrying out pilgrimage (Hajj). *Hevea* trees planted in Labuhan Batu around 1910 and thereafter reached peak production just as the Stevenson's Scheme was introduced by the British. These rubber trees had reached the age of ten years or more at the time.[22]

After conducting research on various sources, the researcher could not obtain any quantitative data on the number of farmers, the price of rubber, the number of trees, or the total production in Labuhan Batu between 1922 and 1928. The quantitative data gathered is limited to smallholder rubber exports from the Labuhan Bilik Port, which served the Labuhan Batu production area. This is unsurprising since smallholder agriculture was not the colonial government's primary focus, therefore it was deemed unnecessary to be recorded. Only in the early 1920s did the government pay

attention to small-scale rubber farming. This was proven by the establishment of the Dutch East Indies Smallholder Rubber Agricultural Research Commission in 1925.

When the global economic crisis hit, the output of smallholder rubber in Labuhan Batu continued to rise, but was slightly disrupted. Despite the fact that the Stevenson's Scheme was ended in 1928 and the international economic recession began in 1930, smallholder rubber farming continued to expand until early 1934. There was a drop in the price of rubber on the international market in the years leading up to the economic recession. According to the data in table 1, the Labuhan Bilik Port continued to see an increase in smallholder rubber exports. The world rubber price declined from 2.58 guilders per kg in 1926 to 1.46 guilders per kg in 1929. The decline in rubber prices started in 1928. Despite price fluctuations, smallholder rubber farming expanded throughout this time period. Rubber prices in the world continue to decline in succession. Rubber prices dropped to 0.83 guilders in 1930 and 0.31 guilders in 1932.[23]

Two major factors contributed to the drop in rubber prices when the economy entered a recession. First, the global economic depression that began in the late 1920s had an impact on the development of the automotive industry, especially in the United States and Europe. The automotive industry was the main market for rubber. Second, after the British government abolished the Stevenson's Scheme policy in 1928, there was an overproduction of rubber. The British colonies' rubber farmers increased their production. Consequently, industries that mainly involved raw/natural rubber in their production could not absorb them, unlike the United States.[24]

This situation lasted until 1934. Exports of smallholder rubber through the Labuhan Bilik Port continued to fall during the 1930 and 1934 crisis. This was a result of the global economic crisis. The Dutch East Indies were unable to recover from their economic recession. This caused a drop in worldwide market prices, a decrease in demand for commodities due to lower work opportunities, and a reduction in state revenues and expenditures. The Dutch East Indies and the people of Labuhan Batu were indeed affected. However, in order to keep prices stable, numerous countries with rubber-producing colonies around the world, including England, France, and the Netherlands, reached an agreement on rubber exports.

Labuhan Batu farmers reduced their rubber production in response to various policies and crises. This decrease in production was caused by a decline in rubber prices that began in the 1920s, however it rose the next year before declining again. Despite the fact that some farmers continued their tapping activities, some others abandoned their rubber crops. Instead, many rubber producers returned to their farms and rice fields, which they had abandoned during the 1920s when rubber prices were high. Rice imports in East Sumatra decreased from 191,027,212 kg in 1930 to 125,326,689 kg in 1932 as rubber farmers returned to rice production.

Furthermore, as rubber prices fell, exports of other commercial agriculture products such as copra and areca nut increased.[21] The number of smallholder rubber exports had fallen as a result of lower rubber farmer activities. This decline could be seen from the number of smallholder rubber exports at the Labuhan Bilik Port . After reaching its peak export record of approximately 4,132 tons in 1929, the port of Labuhan Bilik saw a dramatic drop to 1,811 tons in 1932. However, before the implementation of the rubber restriction policy, farmers began to re-tap previously abandoned rubber trees due to the increase of demand and price in the global market. As explained in the previous section, the increase in demand and prices for rubber occurred due to a restriction for rubber production, which lasted until 1934.

Farmers were hesitant to tap their rubber when the rubber restriction policy went into effect because the regulations, which imposed quotas and required rubber to be in the form of dry natural rubber, were deemed disadvantageous to farmers. Farmers also lacked the ability to process natural rubber into dry natural rubber, in addition to the declining prices. Furthermore, the government allowed farmers to sell coupons based on the quantity of rubber trees they possessed, and most farmers just sold their harvest licenses to traders or exporters. As a result, it's not unexpected that many traders bought farmers' harvest permit coupons at certain rates based on price fluctuations each time the coupons were distributed. Many traders traveled from Medan, Tanjung Balai, and Tapanuli to Labuhan Batu to purchase smallholder rubber harvest permit coupons.[25] As a result, because all harvest permits had been sold, most farmers no longer tap their rubber trees. Many rubber farmers preferred to sell their coupons because they obtain cash right away instead of having to tap and turn sap into dry natural rubber.

6. Conclusion

From the discussion above, it can be concluded that the people of Labuhan Batu were able to cope with the global economic crisis, despite experiencing its impacts. They were able to face difficult circumstances while other areas had to face a fairly severe impact, such as famine, which happened in Bengkalis. In Bengkalis, people looted food warehouses because the economic crisis caused them to lose their jobs and caused the drastic fall in rubber prices on the global market. Such a severe impact is due to the fact that the Bengkalis solely did monoculture agriculture, as opposed to the Labuhan Batu, who practiced polyculture agriculture. During the economic crisis, the people of Labuhan Batu abandoned rubber farming and instead focused on selling coupons for harvesting permit. When rubber prices were high, the villagers of Labuhan Batu re-cultivated other crops that they had previously abandoned. Rice, areca nut, and gambier, as well as other forest products like rattan, were cultivated throughout the economic crisis. This is what allowed the residents of Labuhan Batu, particularly rubber farmers, to survive in the middle of the global economic crisis.

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