Agribusiness and cultivation of coconut in the Netherlands at the end of colonial era

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Abstract. This research explains the importance of smallholder coconut cultivation (small plantations) that produce copra as the main product in East Indonesia during the end of Dutch colonial era. For approximately eight decades, the economy of Eastern Indonesia depends a lot on copra ("green gold"). The inhabitants of Eastern Indonesia, particularly Sulawesi Island, the people's coconut plants that produce copra had become important trade commodities, since the 1880s, when European nations used copra as an important basic material in making soap and butter and atomic bombs. In essence, the coconut plant is suitable for land elevations between 5-1000 meters above sea level, with an average air temperature of 27ºC-28ºC. Coconut plants need a minimum of 2000 hours of sunshine per year, with rainfall ranging from 1300-2300 mm per year. It is also suitable for soils that contain a lot of limestone and alluvium, which contains a lot of texture fertile soil.

1. Introduction

For more or less "eight decades," Makassar's economy depends a lot on copra ("green gold"). However, the population of East Indonesia, especially South Sulawesi, copra has been an important trade commodity in eastern Indonesia, since the 1880s, when European nations used copra as an important ingredient in making soap and butter. Of the total Greater Copra exports, 60 percent of regional income depends on copra, and around 70% of it is exported through the port of Makassar. The increased export of Makassar port copra also contributed to the increasing economic development in regions outside Java. In 1905 exports of regions outside Java reached 25% with a total of f.165,000,000. In 1925 it increased to 54% with the amount f. 280,000,000 and in 1940 increased to 60% with the amount f. 495,000,000.

Since the 1880s, the demand for cooking oil in Europe has risen sharply. Many oil companies are looking for new cooking tools such as copra oil, which is high in fat. Butter that originally used a lot of animal fat was reproduced again to use more fat made from vegetables. That is why in the early decades of the 20th century, the imperialist countries emphasized the importance of copra in overcoming the lack of basic ingredients in the emergence of butter and soap industrial plants in European and American countries. The use of butter is increasing; butter has become an exclusive food for industrialized countries. In addition, copra is also used in soap making. Soap usage is increasing because it is the basic ingredient in making bombs in the face of the First World War. Since then, copra has continued to increase in the colonies of tropical countries, including the Dutch East Indies.

In the Dutch East Indies, copra exports were highest in Makassar, exceeding the capacity of Menado, West Burneo, and West Sumatra. In 1896 the number of copra exports in the four regions were respectively: Makassar 8.76 tons with a value of f.983,820, West Kalimantan 6.28 tons with a
value of f 756,800, Menado 6 tons with a value of f.607,000 and West Sumatra 5.7 tons with a value of f.539,000. When the price of copra reached its peak in the world market in 1920, the amount of Makassar copra exports reached 50,792 tons with a value of f.13,713,840. Menado is in the second position, which is 46,250 tons with a value of f.12,487,500 West Kalimantan 39,722 tons with a value of f.10,724,940 and West Sumatra 19,234 tons with a value of f.5,192,910. Overall, the value of copra exports from the four regions reaches f.42,119,190 outside Java and Madura.

In 1920 the export value of the Dutch East Indies copra reached f.58,272,000. That means the value of copra exports is ranked third after sugar and rubber. Another commodity that also contributed to the value of the Netherlands Indies exports in a row was pepper a number f. 49 million, tapioca f. 21 million, hemp f. 21 million, kapok f.16 million, palm oil f. 13 million, corn f.12 million, quinine f. 10 million, resin and rattan f 10 million and lemongrass oil f 3 million.

When compared with the five most copra exporting countries in the world, the Dutch East Indies was ranked first, then followed by the Philippines, Malaya Inggeris, and Ceylon. Before the First World War between 1909-1913 the number of exports of the Dutch East Indies reached 2.38 million tons, followed by the Philippines 1.30 million tons, Malaya England 0.72, and Ceylon 0.42 tons. Furthermore, between 1924-1928, when copra in the world market improved these countries, the number of copra exports rose, the Dutch East Indies remained at the highest position of 3.64 million tons, then successively followed by the Philippines 1.82 million tons, Malaya Inggeris 1, 67 and Ceylon 1.06 tons.

2. Research
2.1. Research Issues
When Coconut Crops became a leading regional commodity in the Great Eastern Region Economic growth outside Java increased rapidly. At that time, Makassar emerged as part of the world economy. Makassar's relationship with the world's copra marketing center is developing in accordance with market rhythm. The pattern of inter-island trade increased, forming a production network at the level of producers between the Chinese and Arabian and Chinese traders, forming the strength of the Economy of Eastern Indonesia. The integration of the islands in the Great Eastern Region with the world market is integrated. That makes Makassar the center of world copra trade.

The high production of copra in the eastern part of Indonesia on the one hand and the emergence of superior commodities in the eastern Indonesian archipelago make the islands interdependent designed through a pattern of production policymaking the regional trade rhythm increase. That raises the question Why is Makassar able to integrate the pattern of production networks and encourage the formation of leading regional commodities? Is the prominence of Makassar as a copra producer making the islands in the Great Eastern Region (eastern Indonesia) integrated with Makassar? Or is this because it is more because Makassar emerged as a trade center because there is a policy that copra exports in Eastern Indonesia only pass through the Makassar port. It is important to answer the historical problematic "Why did the Makassar copra export after the Shipping Policy between 1900 and 1927 Makassar port its integration in the world market increase.

2.2. Research Purposes
This study aims to examine the pattern of commodity trade, especially in the formation of copra trade emporiums in eastern Indonesia, which emphasizes the importance of superior regional commodities, which strengthen inter-island economic integration and integrate with the world's maritime axis. A resulting history is a form of writing critical economic history that understands the causal mechanism between the structure of production and the structure of trade in the formation of the world market. This research is expected to be a policy model in developing policy integration patterns integrated in the future.
2.3. Research Methodology

This study uses a historical research method through the study of archival documents, starting from the search of sources, source criticism, explanations to historiography. Sources used are more emphasized on a variety of primary data stored in the Dutch National Archives in The Hague, Gemeente Archief in Amsterdam, Buitenlandse Zaken Archief in The Hague, Nationaal Archief Den-Haag (NAD) sources in The Hague include: Nederlands Handel Maatchappij (NHM), Koninklijke Paketvaart Maathappij (KPM), Minesterie van Kolonien, 1914-1952, Minesterie van Economische Zaken van Landbouw, 1918-1945, Minesterie van Handel, Nijverheid 1906-1922, Collectie [1]. These archives contain records of copra trade reports, social and political economic reports, and reports and developments of transportation and transportation copra trade in Makassar. Archives which specifically contain reports on copra are the Gemeente Archief Amsterdam and the Buitenlandse Zaken Archives in The Hague. The Gemeente Archief Amsterdam contains the Makassar Oliefabrieken Insulinde archive which contains letters of copra trade transactions in the Dutch East Indies, credit and banking problems that have invested in Makassar. The Buitenlandse Zaken Den Haag Archive, in addition to containing a report on the political development of the Permesta struggle and the Republic of South Maluku also includes the involvement of the Military and the United States in copra smuggling.

The Jakarta National Archives include Secretarie's Gouvernement, van het Inventory Archief van de Algemene Secretarie en Het van de Gouverner General Cabinet 1944-1950. These two sources. Contains Besluit on trade policies at the Makassar port, coconut plantations and issues of economic and political conditions. Another source is Hunger (1940); this document contains a concise report on the economic, political and shipping trade conditions [1]. Besides that, this study also uses interview documentation from M. Saleh Lahade, Riri Amin Daud, Kawilarang, and others. The Archives and Library of South Sulawesi Province contain Selayar archives, Negara Indonesia Timur, Saleh Lahade and Rahman Tamma's Personal Collection Archives, all of which are in Makassar. These sources generally contain reports on developments in the political situation of the Great East Region, trade issues, including military involvement in copra smuggling and trade.

Archive sources that have been published include the Koninklijk Instituut Voor Taal-, Land-en Volkenkunde (KITLV) in Leiden, Koninklijk Voor de Tropen Instituut (KIT) in Amsterdam and the National Library of Indonesia in Jakarta. In the KITLV there are various archive sources such as De Bevolkingscultuur van Klapper in het Bijzonder Tammes, PML 1920, Algemene Voorwaarden voor den Verkoop van Copra Handelvereeniging van Makassar 1910-1920, Reglement van het Copra arbitrage-Bureau van de Handelen and Instructie Omtrent de Verst. Makassar van 1887-1930. There are also various magazine and newspaper books related to Makassar as a trading city. In Koninklijk Instituut Voor De Tropen (KIT) in Amsterdam there are sources such as Gids van Makassar en Zuid Celebes, Departement van Economische Zaken in 1938 and 1940, Tijdschrift voor Economische en Sociale geography: Nederlandse Vereeniging voor Economische Zaken in 1938 and 1940, Tijdschrift voor Economische en Sociale geography van Makassar: Letterkundige Causerie Jaarverslag van de Handelsvereeniging te Makassar Jaar 1925-1940, Celebes 1921-1934; Begroting van Uitgaven en Ontvangst van de Gemeente Makassar 1907-1936. Government Regulations concerning State Enterprises; In the Jakarta National Library there are sources such as Jaarverslag of de Kamer van Koophandel en Nijverheid te Makassar Jrg 1891-1927, Notulen van het verhandelde in de vergaderingen van den Raad van Gemeente - Makassar 1917-1941; Berichten Oost Indonesia's Economische 1949; The Economic Review of Indonesia vol. 1 1947, Vo 6 1952. Central Bureau of Statistics, import and export of several ports in Indonesia from 1947-1958; Central Bureau of Statistics, Trade and Excise Import Exports in the Dutch East Indies (Statistiek van den Handel en de In en Uitvoerrechten in Nederlandsch Indie 1900-1940 and Staatsblad van Nederlandsch Indie). In addition, various magazines are used, such as Economic News 1951-1956, Tempo Doeloe Weekly magazine. These sources contain information about trade in Makassar both during the colonial period and after independence.
3. Research Result

3.1. Plantation Policy in the Greater East

The article on palm oil in the archipelago is not much studied. Only in 1908 E. Bolen wrote about planting coconut with the title, Een Pracische handling over de cocos culture. Eight years later, in Hunger (1916) wrote the problem of coconut in the Dutch East Indies under the title Cocos Nucifera: Handboek Voor de Kennis van den Cocos Palm in Nederlandsch Indie, Zijn Geshiedenis Beschrijving, Cultuur en Producten [2]. According to Hunger, the pioneer of coconut development in the archipelago, especially in eastern Indonesia, is Moluksche Handels Maatschappij (MHM). This trading company introduces the coconut cultivation system on a regular basis.

Van Martius in his book Historia Naturalis Palmarum tells us that coconut plants are first found on the west coast of America, namely in the Panama area and islands around the Pacific Ocean. Another case with Alph de Canolle, who said that coconut plants did not originate from America but from the Indies. According to Alph de Canolle, long before coconut plants were found in America, coconut plants in the Indies had been discovered. The unclear origins of the coconut plant, strengthen the suspicion that the coconut tree has spread in various regions. But what is clear is that when Columbus discovered South America, coconut plants were discovered.

In the archipelago itself, the story of coconut has long been known. This is evidenced by the presence of coconut trees on the reliefs of Borobudur Temple. The coconut tree in the relief contains the meaning of fertility. The word coconut (Bugis / Makassar = kaluku) is indeed an everyday language that is found in four ethnic tribes in South Sulawesi. In the community of South Sulawesi coconut trees have symbolic meanings such as fertility, peace and wealth. In its local tradition, it is not surprising that a baby's placenta must be planted together with a coconut seedling in the hope that the child can be as healthy as a coconut tree that will flourish. In Selayar a coconut tree is used as a basis for consideration for whether a young man or woman applies to a girl he loves. The Makassar Bugis sailors don't fly the sails of the boat if they don't bring a coconut seed sprout on the boat. In short, the meaning of coconut is not only a source of economic income but has also become a tradition in Makassar Bugis human culture.

Coconut plant is very important because it has become the main crop for coastal areas such as Selayar, Mandar, Bone Gulf coast, and even other Eastern Kingdom. Because of the importance of coconut plants, the rate of development of coconut plants continues to increase. In 1872 the number of coconut trees was around 8 million, then increased by 14 million trees in 1920, even in 1940 it had reached 60 million trees, with an average annual production value of between 4-6 million tons. From 1909-1958 around 30.45 million tons. This figure certainly does not convince actual production because it is only calculated from the number of exports, in the case of farmers or more people, also for the needs of coconut consumption.

The expansion of coconut trees in South Sulawesi is growing rapidly in line with the involvement of local elites. In Selayar and Sinjai the nobles had 500 to 600 coconut trees. Van der Stok reports that the wealth of the local elite, in general is a coconut tree. Engelhard gave an example in Batangmata, Bonea, and Bontobangun areas, the aristocrats had an average of 10-20 thousand coconut trees.

In South Sulawesi to prevent a greater monopoly of coconut and coffee plantations, the Resident Government of Celebes Onderhoorigheden adopted an agrarian law in 1893 with stbl. 259. This agrarian law contains the application of land restrictions and registration of taxable land area (lanrente). This policy was strengthened by the Decree of the Makassar Agriculture Department, dated 1 March 1937, which contained a ban on coconut and coffee farmers from arbitrarily contracting their lands to plantation companies. For this purpose, it is stipulated that each farmer must not exceed 750 square meters. This regulation applies to coffee plantations in Mamasa, Makale, Koera-koera, Rante Sappa, Balambong, Mambi, Manipi, Ereng-Ereng areas. This regulation lasted until the 1950s.

In Eastern Indonesia, especially in Ternate, various rules were found in planting coconuts. The Dutch East Indies government issued a policy of planting coconut. The policy is called the Regulations on Coconut Planting and Copra Trade in the Presidency of Ternate and Surrounding Areas. The policy stipulates that landowners, tenants, and users must clean their gardens, so that coconut pest does not
spread to other coconut plants. The aim is that disease beetles that often kill Ternate coconuts can be prevented. For residents who do not clean their gardens will get a sanction. Farmers who first violate the rules of planting coconut and maintaining them are put on a fine payment of money. If a European violates this regulation, he/she is liable to a maximum fine of f25, when an offender is an indigenous person or who is equivalent to a maximum of f10 50, or by being prosecuted for paying all risks resulting from the development of the coconut pest. To make this policy effective, in each district where many coconut trees are grown in Ternate, a coconut plantation order control body was formed.

Eastern Indonesia (Timur Raya), whose population was three quarters of the 8,000,000 in 1939 depending on the results of coconut cultivation through copra exports. Based on the development of the Dutch East Indies copra export, East Indonesia was included in the main copra exporter. This development reached its peak after the commodity was badly needed in the world market. Statistical reports show that copra exports in Eastern Indonesia in 1920-1958 Indonesia still exist and occupy the first position in the Dutch East Indies or in the percentage of Eastern Indonesia supplying copra every year.

What is shown about the copra production area also shows that the Eastern Kingdom is almost evenly distributed on the Islands. For example, in 1939 copra production in Eastern Indonesia amounted to 315 thousand tons, which were exported through the Port of Makassar. The production areas are from Eastern Indonesia, as shown in the table below:

Table 1. Copra production in the eastern region in 1939.

| Eastern Indonesia, including: | Tons |
|-------------------------------|------|
| Minahasa, Kotamubagus and Bolaang Mongondow | 100,000 |
| Sangir (include Siau, Tagulandang, Talauld) | 30,000 |
| Teluk Tomini (include tuguan and Una-Una) | 60,000 |
| Pantai Barat Sulawesi, Donggala Utara | 16,000 |
| Pantai mamuju-Mandar | 10,000 |
| Sulawesi Selatan (include kepulauan) | 17,000 |
| Halmahera (include Bacan) | 30,000 |
| Banggai (include Luwuk dan Sula) | 22,000 |
| Kepulauan Sunda Kecil (not include Bali) | 15,000 |
| Seram, Ambon, Bulu | 6,000 |
| Kelompok Tanibar, Kei, Aru | 5,000 |
| Irian (north-south coast) | 4,000 |
| amount | 315,000 |

When viewed from the amount of production, the area of South Sulawesi is not too high when compared to North Sulawesi. It's just that if Makassar is placed as a transit port, it appears that in general, copra from Eastern Indonesia is shipped through the Makassar Port. For example, the comparison of copra exports from the Greater East region and those shipped through the Makassar Port in 1937-1940 is shown in the table below:

Table 2. The production of Kopra Timur Raya which is shipped through Makassar Port.

| Year | Through Makassar | Greater Eastern Production |
|------|------------------|---------------------------|
| 1937 | 188,452          | 381,600                   |
| 1938 | 288,065          | 316,740                   |
| 1939 | 210,839          | 315,000                   |
| 1940 | 93,509           | 153,832                   |
The table above shows that between 61% - 90% of copra is exported through the port of Makassar. It seems that 1939 was the highest peak, reaching 90%. The increase in Makassar port exports in the period was due to the fact that other production areas in Eastern Indonesia were increasingly difficult to export directly because the exporters found it increasingly difficult to visit the area due to security disturbances, but the infrastructure factor of the Makassar Port could not be ignored as the main factor.

Coconut has many uses, ranging from leaves to roots can be used for the benefit of humanity. So many uses, then the coconut tree is termed various nicknames such as the plant of life, (the be heavenly tree), green gold, a tree of unlimited use. " The emergence of these terms is because coconut trees provide many benefits for the happiness of humanity, not only humans who live in the tropics but also human beings who live outside the tropics, in various parts of the world.

3.2. Plantation Policy in the Dutch East Indies

In the VOC chronicle, the beauty of Yanpiter Soen Coen's house in Batavia is told because it is surrounded by coconut tree decorations. Coconut seedlings have been traded, even one of the types of plants that have been pawned since 1678. This shows that the coconut plant has given meaning to the lives of the people not only as an ornamental plant but also has become an economically valuable plant, and this is no exaggeration if the coconut palm mate lieff described as a waving crown over Batavia.

The first suggestion of planting coconut trees was made during the reign of Governor-General Van Imhoff (1743-1750). He recommended that coconut plantations be planted in every new village, which is a minimum of 300 trees. Planting is not intended to seek profits for the government alone, but also local residents can enjoy it. In other areas such as Bogor, the VOC government issued a regulation for everyone who was going to have a wedding expected to take coconut seeds from the prince, which they then planted on the land owned by a designated official. Different in Periangan, each person who is going to get married first planted 1 or 2 coconut trees in his own land.

In Eastern Indonesia, especially in Ternate, various rules were found in planting coconuts. The Dutch East Indies government issued a policy of planting coconut. The policy was called the Regulations on Coconut Planting and Copra Trade in the Ternate Presidency and Surrounding Areas.

The policy stipulates that landowners, tenants and users must clean their gardens so that coconut pest does not spread to other coconut plants. The aim is that disease beetles that often kill Ternate coconuts can be prevented. For residents who do not clean their gardens will get a sanction. Farmers who first violate the rules of planting coconut and maintaining them are put on a fine payment of money. If a European violates this regulation, he/she is liable to a maximum fine of f25, when an offender is an indigenous person or who is equivalent to a maximum of f10. 50, or by being prosecuted for paying all risks resulting from the development of the coconut pest. To make this policy effective, in each district where many coconut trees are grown in Ternate, a coconut plantation order control body was formed.

In addition to the policy in planting coconut, it is also found in the policy in making copra. In West Sumatra the Dutch government issued regulations on coconut picking and making copra, including coconut meat, which had to be dried by means of sunlight as the main priority. It aims to reduce the appearance of mushrooming in coconut meat. In the drying of coconut meat, the preferred layer is the bottom and the top must be completely dry. Coconut meat that is dried through fire smoke should not be touched by fire to avoid black spots. The fire must always be maintained to prevent too much smoke, let alone burn. Copra must be completely dry before leaving the drying place because if the copra is moist, the copra is moldy. Copra must be stockpiled in places that are exposed to enough air and light.

Buying and selling copra that is not yet dry enough is subject to a fine. Neither does copra processing from old fruit result in black copra, nor does copra mixed with shell, sand, gravel, or other mixtures if found to be subject to sanctions. Law enforcers, farmers, and assistant officers have the right to inspect copra drying areas, plots, gardens, houses, and buildings or copra management sites,
where copra is sold or stockpiled based on convincing locations for exporters. If there is a violation, legal sanctions include:

a. When European offenders or the equivalent are subject to a maximum fine of f100 or confinement for 8 days;

b. When offenders are indigenous or equivalent, are fined f.100 or forcibly employed on public projects without pay for 30 days;

The coconut picking copra regulation and implemented after 30 days was published in the Javasche Courant edition in which the regulation was announced. And so that no one pretends not to know, the rules will be included in official newspapers, and as far as necessary, they will be translated into Malay and Chinese.

The second view saw that the colonial government's initiative was not the only factor in the introduction and expansion of coconut cultivation in Eastern Indonesia. Residents began to plant and expand coconut cultivation for their own needs without encouragement from the government. The government is only involved after the planting of coconuts is done by farmers. There is evidence that before Du Bois de Jancigny was advised to plant 5000 coconut trees on Selayar in 1849, thousands of trees were found in Selayar. Even other local farmers, such as from Bulukumba, Sinjai, and the coast of Bone bay, have developed it as a very important daily necessity crop. It is said that the local traders in the Bugis interior like to trade gemstone rings and gold. Upon returning from Selayar they brought coconut seeds and developed them as garden plants.

In the agriculture report, it was stated that until 1860 coconut plants in South Sulawesi were still very much a step except in the Selayar area. At that time, almost 70% of coconut trees in South Sulawesi were found in Selayar. That is why since 1855 Selayar has been a supplier of coconut seeds for other regions. In 1855 the Governor of Makassar ordered that all old, dry coconuts from the Selayar area be developed in the surrounding area. Even in 1861 7000 coconut seeds were sent to North Sulawesi to be planted.

![Coconut oil export chart](image)

Figure 1. Makassar coconut oil export chart to America in the years 1915-1924.

The graph above shows the export of coconut oil from Makassar to America for three years continued to increase (1915-1917) except in 1918. The decline in Makassar coconut oil exports in 1918 were more due to the disruption of war, which resulted in increasingly difficult shipping. The decline that continued to occur from 1921 to 1924 was due to the fact that Makassar's OFI machines were less productive. That is because the machines are old, besides that the level of local consumption continues to increase, so the concentration of exports decreases.

4. Conclusion

The emergence of Makassar as the world's copra production center can be said as a justification that the economy outside Java develops due to the presence of superior regional commodities in the world.
market. That shows, "The history of the economy outside Java must be seen separately from the economic growth of the island of Java. In addition, the development of the economy outside Java flows seen from the historical framework of the archipelago economy, about "the importance of the formation of leading regional commodities in Eastern Indonesia". Economic strength in Eastern Indonesia is determined by the strengthening of inter-island trade network connectivity that is integrated with world markets.

There are two kinds of opinions about the role of the government and local residents in the introduction and expansion of coconut as a new commercial plant in the Eastern Indonesian region. The first view is that the Dutch Government is considered as the driving force for the expansion of coconut plant expansion. This view is mainly based on knowledge gained in several places in South Sulawesi where there is evidence of the opening of the "Ondernemingen Klapper" in various regions in South Sulawesi. The second contrast is that the colonial government's initiative was not the only factor in the introduction and expansion of coconut cultivation in Eastern Indonesia. Residents began to plant and expand coconut cultivation for their own needs without encouragement from the government. The government is only involved after planting coconuts, but more are influenced by global conditions, about the need for copra in the world market continues to increase.

References
[1] Hunger F W T 1940 Memorie van Overgave van Gouverneur Celebes en Onderhooirigheden (Amsterdam)
[2] Hunger F W T 1916 Cocos Nucifera: handboek voor de kennis van den cocos-palm in Nederlandsch-Indië, zijne deschiendenis, beschrijving, cultuur en producten (Amsterdam: Scheltema & Holkema’s boekhandel)