

BESOEKISCH PROEFSTATION FOR EUROPEAN INVESTORS IN THE DISTRICT OOSTHOEK DUTCH EAST INDIES

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ABSTRACT

In 1870 the Dutch Colonial Government had a new policy towards the Dutch East Indies as its colony. The promulgation of the Agrarische Wet and Agrarische Besluit by the Dutch Colonial Government, it opened opportunities for investors to invest in the Dutch East Indies. European investors flocked to the Dutch East Indies to invest. The business that was run was a plantation, by growing agro-industrial plants that were selling well in the European region at the time. This research used historical methods to explore the secrets behind the courage of European investors to lease land in the Indies, especially the Oosthoek area. The results of the research proved the success of European investors doing business because of the large role of a research laboratory named Besoekisch Proefstation. From this research, there has been a success in minimizing crop failures which impacted the high profits earned by the investors.

Keywords: *Besoekisch proefstation; European investor; Oosthoek region*

INTRODUCTION

The fall of Constantinople^{1 2} in 1453 as a free market in the European region into the hands of Ottoman Turks resulted in European countries (Portuguese, Spain, the Netherlands, the UK, etc.) with business interests becoming frustrated. Ottoman Turks blocked Constantinople from European businessmen. Starting from this incident shattered the dreams of businesspeople to reap huge profits. But not so long ago businesspeople who received support from their country traveled to look for new markets as their place to obtain merchandise, especially spices originating from the Dutch East Indies, also to market their merchandise and look for colonies to be exploited for the prosperity of their country.^{3 4} Background of the condition of the country of origin of the influential businesspeople in finding a colony. As an illustration, the Portuguese in a short period of time exploited the Dutch East Indies as the largest producer of spices in the world at that time. Likewise, the United Kingdom has experienced progress in industry, looking for colonies to market their products, especially fabrics.

¹ Burger, D. H., *Sedjarah Ekonomis Sosiologis Indonesia*, (Djakarta: Pradnjaparamita, 1962), p. 40.

² Izzah, L., et.al., *Industri Kreatif Kafe Kopi: Analisis Pemangku Kepentingan & Prospek*, (Jember: UPT Percetakan & Penerbitan Universitas Jember, 2019), p. 1.

³ Danvers, I.; F.C., *The Portuguese in India*; vol. 2, 1984. p. 181.

⁴ Furnivall, J. S., *Netherlands India: A Study of Plural Economy*, (London: Cambridge University Press, 1939).

In contrast to the Netherlands, it was a poor area entangled in an "eighty-year war" with Spain.⁵ This condition resulted in exploitation outside the humanitarian limits of the Dutch East Indies. Work without wages, printing passive thinking concepts that only accept without resistance because of the concept of "laborers and employers", compulsory work for the manufacture of modes of transportation in the form of Daendels "Raya Pos" road.⁶ Compounded by the greed of the Javanese kings to gain self-satisfaction, and pride in the many vassal kings by asking for help from the Dutch colonial. As a result, the wealth of natural resources and human resources which are the wealth of his kingdom are at stake. As an illustration of the contractual agreements made by the rulers of the King of Mataram with the Dutch colonials, the people felt even worse and showed the arrogance of the king. One example of a contract made between Susuhunan Mataram (Amangkurat III) and the Dutch colonial must be obeyed by its people, and if there is disobedience, the people will be sentenced. The contents of the command of Susuhunan Amangkurat III are proven by the people who live on the seashore, as follows:

*"... ordered the people not to make it difficult for the Company to trade along The coast of Mataram region. For the benefit of the Company, the people were asked to provide merchandise, such as wood, rice, salt, white and black sugar, and other items. Whoever violates this order will get punishment (Sutjipto Tjiptoatmodjo 1983)."*⁷

The exploitation by the Dutch colonials continued with various policies implemented in the colony to resolve the poverty experienced by the Kingdom of the Netherlands as a result of the war with Spain. Began with representatives of large capital owners in the Netherlands who are members of the VOC⁸ to depleting natural wealth of the Dutch East Indies, followed by the concept of van den Bosch's thinking⁹ because the VOC was unable to deposit profits according to the wishes of the Kingdom of the Netherlands. Van den Bosch attempted with the idea of a cultuurstelsel (forced cultivation system) which obliged the Javanese people, in particular, to grow agro-industrial crops (such as coffee, sugar cane, tobacco, etc.) that were selling well in Europe at that time. The realization of the idea of the cultuurstelsel was rolled out in 1830 and ended in 1870 with the success of enriching the Kingdom of the Netherlands. The end of the cultuurstelsel system gave rise to a new chapter in implementing policies to continue exploitation with a model giving investors the freedom to invest in the Dutch East Indies. This policy arose because of protests from large capital owners in the Kingdom of the Netherlands who wanted to get the chance to enjoy the fruits of heaven (coffee, sugar cane, tobacco, etc.) in the Dutch East Indies.

⁵ Burger, 1962.

⁶ Burger, 1962

⁷ Anonym, *Corpus Diplomaticum*. Vol III, 1680. pp. 223-225.

⁸ Boomgaard, P., *Anak Jajahan Belanda: Sejarah Sosial dan Ekonomi Jawa 1795-1880*, (Jakarta: KITLV dan Djambatan, 2004), p. 19.

⁹ DJZ., N. Van Elten, *Iets Over den Voorgaaden en Tegenwoordigen Staat van Nederlandsch Indie Vergezeld van Eene Beoordeeling van Twee Vlukschriften* ('S Gravenhage & Amsterdam: De Gebroeders van Cleef, 1835), p. 18.

Finally, two regulations emerged that gave investors the opportunity to invest in the Dutch East Indies, namely the regulation of *Agrarische Wet* and *Agrarische Besluit*.^{10 11} The policy was not wasted by European investors from the Netherlands, Britain, and other European countries to compete in the Dutch East Indies. In general, they set up plantations planted with agro-industrial plants, namely coffee, sugar cane, tobacco, etc. The question that arises from this research is what makes investors dare to invest in the Dutch East Indies especially in the *Oosthoek* region (east end of Java), even though they have no experience in the plantation business.

RESEARCH METHOD

Research related to the exploitation of the Dutch East Indies region by the Dutch colonial has been carried out by many researchers, both foreign and Indonesian researchers with various perspectives and various interests, for example for research results from researchers, theses, theses, dissertations, and many others. Research results from researchers referred to by the authors including JS Furnivall, J. Thomas Lindblad, and Alexander Claver. The results of the research of these 3 experts are referred to by the authors in relation to the temporal scopes studied between 1870-1917. This research begins with an explanation of the political policies of the Dutch colonial government in 1830 with a cultuurstelsel policy that brought success to the economy of the Kingdom of the Netherlands.

J.S. Furnivall with the results of his research recorded in the book "Netherlands India: A Study of Plural Economy"¹², provided invaluable information to the author about the condition of the Dutch East Indies between 1600-1939. Moreover, JS Furnivall from 1878-1960 served as the British colonial administrator in Burma for many years, and later became a Professor of Burmese Studies at Cambridge University. The information obtained during his tenure as British colonial administrator in Burma made it easy to obtain information on the development of Dutch colonial exploitation in the Dutch East Indies. Informants who sided with the British government in the Dutch East Indies region certainly provided very useful information for the British government in the colony. As is known that the two countries between England and the Netherlands competed to get a colony in Southeast Asia. The JS Furnivall study traces the economic and social development of the Dutch East Indies from the arrival of the Dutch until 1939. This study illustrates the geographical, economic, and social conditions of the colony, and how the Dutch population and native inhabitants of the Indies lived side by side in the Dutch East Indies.

J. Thomas Lindblad in his article entitled "Aspects of the Dutch Expansion in Indonesia, 1870-1914"¹³, provides information on economic conditions in the Dutch East Indies region between 1870-1914, by showing non-Marxist economic arguments that apply to the case of Dutch expansion in the Dutch East Indies. As a small country but able to exploit a very wide area of the Dutch East Indies. J. Thomas Lindblad highlighted the reasons for the

¹⁰ Cremer, J.T., *Verspreid door Tusschenkomst van "De Liberale Unie" Koloniale Politiek*, (Haarlem: H.D. Tjeenk Willink, 1981), p. 5.

¹¹ Wasino, et.al., *Sejarah Nasionalisasi Aset-Aset BUMN dari Perusahaan Kolonial Menuju Perusahaan Nasional*, (Jakarta: Biro Hukum Kementerian BUMN Republik Indonesia, 2013), p. 35-39.

¹² Furnivall, 1939.

¹³ Lindblad, J. T., "Aspects of the Dutch Expansion in Indonesia, 1870-1914". *Journal Modern Asian Studies*, 23[1], 1989, pp. 1 – 24.

success of the Dutch in mastering the Dutch East Indies in terms of the economy. He suggested reviewing Dutch historiography in the early period when the Netherlands expanded. The first part of this article explains that the concept of 'imperialism' can be advantageously applied in the Dutch colonial past. Economic arguments come in various forms.

There are highly localized examples of individual pioneers or colonial administrators who penetrate virgin territories that have not been touched by the colony, which ultimately results in formal incorporation and effective occupation. Economic and political motivation, or even psychological, to understand why conquests occur are described at the level of micro-observation. Then there is a more global approach that concentrates on structural changes in the economic and political sphere and extends into longer periods and larger areas. It will be argued here that we can fully appreciate the momentum of overseas expansion only by considering also the macro-economic framework. In short, expansion implies that personal interests are being built on the premises of the colony and that the emerging colonial state has its own economic foundation. The second and third sections of this article will survey the micro and macro aspects of the expansion of Dutch imperialism in the Dutch East Indies.

Alexander Claver in his book "Dutch Commerce and Chinese Merchants in Java Colonial Relationships in Trade and Finance, 1800-1942"¹⁴, analyzes the world of commercial companies in Java in the period 1800-1942. The focus is the role of trade finance, namely the flow of money between the parts of the trading system. Capital and credit regarding availability, accessibility and functions are very important to understanding this system. This study aims to find out how trading companies function and play a role in the economic sector. Do entrepreneurs fulfill their duties by balancing maximum business security with minimal risk? Can they fulfill their own and/or others' expectations by providing enough profit margins to survive? Another important question concerns the identification of participants in the trading business. Who trades and how do they work together? Entrepreneurial activities cannot be protected from outside influences. Identifying possibilities for independent decision-making will clarify how the trading community (ie traders, trading companies, and banks) adapts to the challenges posed by changing circumstances).

The spatial focus of this research is on Java. Java is the fifth-largest island in the Indonesian archipelago. The period under study was between 1800 and 1942. After the collapse of the VOC and the arrival of Britain, the nineteenth century witnessed the development of economic and financial infrastructure in Java. The year 1942 witnessed the collapse of the colonial state and the temporary end of Dutch commercial activity with the Japanese occupation of the Dutch East Indies.

The research results of the three experts mentioned above have inspired researchers to conduct research related to the success of European investors both Dutch and English in 1870-1917 in the Dutch East Indies. The meaning of the Netherlands Indies region in this study is the State of Indonesia (the mention of the Dutch colonial state of Indonesia in the colonial period). Henceforth, in this study researchers called the State of Indonesia as the Dutch East Indies. The spatial scope is the *Oosthoek* region (eastern end of Java). The Dutch Colonial called the *Oosthoek* region for areas east of Surabaya¹⁵, including the Besuki

¹⁴ Claver, A., *Dutch Commerce and Chinese Merchants in Java Colonial Relationships in Trade and Finance, 1800–1942*, (Brill. Leiden. Boston, 2014).

¹⁵ Gonggrijp, G.F.E., *Geïllustreerde Encyclopaedie van NederlandschIndie*, (Leiden: Leidsche Uitgeversmaatschappij, 1934). p.1047.

Residency, while in this study included in the Oosthoek region were *afdeelingen* located in the Besuki Residency. The *afdeelingen* include Djember, Panaroekan, Bandawasa, and Banjoewangi. Henceforth researchers call *afdeelingen* residing in the Besuki Residency in this study as the Oosthoek region. Regarding the location of the research laboratory *Besoekisch Proefstation* located in Djember. *Besoekisch Proefstation* is the name of a research laboratory established in the middle of the region in the Besuki Residency, namely *Afdeeling* Djember. The Besuki Residency Area is a place for the establishment of large plantation companies that investors lease from both the Netherlands and the UK.

That laboratory is a money machine for investors, because the results of his research can minimize the losses that will be suffered by investors / large plantation entrepreneurs. The *Besoekisch Proefstation* research laboratory examines matters relating to the selection of seedlings, the process of planting, pests of diseases, the process of harvesting, post-harvest, etc. of agro-industrial plants (coffee, sugar cane, tobacco, rubber, etc), to be successfully planted and produce large profits. In addition to the results of JS Furnivall's research, J. Thomas Lindblad, Alexander Claver and other experts referred to by researchers, researchers also used the main sources issued by the association of plantation entrepreneurs in the *Oosthoek* region and also the publications issued by the tobacco entrepreneurs association in the Dutch East Indies and publications issued by the *Besoekisch Proefstation* laboratory. Some primary sources are used in addition to other primary sources, including: *Publicaties van het Nederlandsch-Indisch Landbouw-Syndicaat Eerste Jaargang Aflevering VIII Soerabaian e.Fuhri & Co. 1909*; *Publicaties van het Nederlardsch-Indisch Landbouw-Syndicaat Zesde Jaargang Aflevering XV*; *Publicaties van het Nederlandsch-Indisch Landbouw-Syndicaat Zesde Jaargang Aflevering XVI* and *Statistisch Overzicht op Handels en Financieel gebied Jaargang 1933*.

This research was historical research by Kuntowijoyo.¹⁶ The stages of research included, determining the topic, heuristics (research data collection), source criticism (data verification) and historical writing (historiography).¹⁷ The object in this study was the *Besoekisch Proefstation* research laboratory in the *Oosthoek* region in 1870-1917. In addition, this research was based on two groups of data sources, namely primary and secondary data. Secondary data were collected from various places and included published works, and research results, related to the Dutch colonial exploitation, starting from the cultuurstelsel system to the entry of European investors in the territory of the Dutch East Indies. Secondary data were analyzed using documentary analysis techniques. While primary data were colonial sources obtained by researchers when researchers searched for data at the University of Leiden in the Netherlands. The primary data included research results from the *Besoekisch Proefstation* research laboratory in the Dutch colonial era and annual plantation company reports from investors who leased land in the *Oosthoek* region.¹⁸

The data collected was called raw data. These data were selected and adjusted to the research topic being studied. In the historical method, this stage was called a source of criticism. The purpose of source criticism was to find out the validity of the source, so which sources were authentic and not, and which sources were credible and not.

The data that has been categorized would be the raw material in data analysis. Data analysis was carried out in two stages, namely preliminary analysis, and final analysis. In this

¹⁶ Kuntowijoyo, *Metodologi Sejarah*, (Yogyakarta: Penerbit Tiara Wacana, 2003).

¹⁷ Garaghan, G. J., *A Guide to Historical Method*, (New York: Fordham University Press, 1957), p. 33.

¹⁸ Gonggrijp, 1957.

stage, it was called source/fact interpretation. In the Interpretation phase, there were two activities namely analysis and synthesis. Sometimes, a source contains several possibilities, so the analysis would look for facts to explore the reasons why investors dared to invest in the *Oosthoek* region of the Dutch East Indies. Though they did not yet know how the condition of the region. After obtaining the facts about the reasons why investors dared to invest in the *Oosthoek* region of the Dutch East Indies, then it would be synthesized. Finally, the last stage of this research was writing a research report. This research report would pay attention to the chronological and diachronic aspects so that it would obtain a descriptive-analytical historical report.

RESULTS AND DISCUSSION

Investment Security Guarantee from The Dutch Colonial Government

The success of the *cultuurstelsel* system which began to be implemented in 1830 and ended in 1870 was conceived by van den Bosch^{19 20 21} brought prosperity to the Kingdom of the Netherlands. Van den Bosch's efforts forced farmers to grow agro-industrial crops (coffee, sugar cane, tobacco, etc.) in lieu of taxes bearing fruit. To maximize the implementation of the *cultuurstelsel* system, its implementation was led and supervised by European officials (residents) but continued to use the powers of the native chiefs (regents) who governed as before. Farmers continue to work in the village community under the village head. The multilevel monitoring model from the resident to the *bekel* (village head) who is directly in contact with the farmers has an impact on the success of the *cultuurstelsel* system. It is not difficult to get the compliance of Javanese farmers to obey their king's orders through *bekel*, because the "*kawulo-gusti*" (feudalism-type class stratification) relationship has been constructed. Farmers or the community assume that the land they are working on or is their residence is a loan from the king, so they feel obliged to obey the king. This concept of obedience was used by the Dutch colonial government to obtain financial benefits for the benefit of the Kingdom of the Netherlands.

Table 1. Exports from the Dutch East Indies 1825-1870

No	Year	Score (/million f)	Weight (/1000 tons)
1	1825	7	-
2	1830	13	-
3	1840	74	-
4	1850	57	-
5	1860	99	-
6	1870	108	108

Source: DH. Burger, *Sedjarah Ekonomi Sosiologi Indonesia II*, Djakarta: Pradnja Paramita, 1970, p. 131.

Evidence of the success of the *cultuurstelsel* system which was forced on Javanese farmers to grow agro-industrial crops (coffee, sugar cane, tobacco, etc.) was the surge in exports of the Dutch East Indies to the European region. The evidence of a surge in exports can be seen

¹⁹ Van den Bosch, J. *Mijne Verrigtingen in Indie*, (Amsterdam: Frederick Muller, 1864), p.132.

²⁰ Day, C., *The Policy and Administration of the Dutch in Java*, (Kuala Lumpur: Oxford University, 1975). p. 257-258.

²¹ Booth, A., *The Indonesian economy in the nineteenth and twentieth centuries': A History of Missed Opportunities*. (Basingstoke/New York: MacMillan Press/St. Martin's Press, 1998), p.137–138.

from the value of exports from 1825 before the introduction of the *cultuurstelsel* system to the end of the implementation of the *cultuurstelsel* system in 1870 (see table 1).

Table 2. Production of Some Plantation Products (in 1000 tons) during the Implementation of the Cultuurstelsel System

No	Year	Coffee	Sugar	Tea	Copra	Rubber
1	1830	22	-	-	-	-
2	1840	54	58	-	-	-
3	1850	74	102	-	-	-
4	1860	83	130	1	-	-
5	1870	90	172	2	-	-

Source: DH. Burger, *Sedjarah Ekonomi Sosiologi Indonesia II*, Djakarta: Pradnja Paramita, 1970, p. 133.

Detailed evidence of plantation products can be seen in the table 2, which shows that agro-industrial plants that experienced a surge after the implementation of the *cultuurstelsel* system were coffee and sugar cane which had been processed into sugar which was exported by the Dutch colonial government to Europe.

Coffee and sugar products that are exported to Europe during the *cultuurstelsel* system are applied alternately to occupy the most important export goods. In 1856 coffee occupied the main export goods with 36% of the total exported goods to Europe. Sugar occupies the second export commodity with 29% of the total export goods to Europe. In 1885 after the end of the *cultuurstelsel* system, sugar occupied the main export goods with 45% of the total goods exported to Europe. This is because of the expansion of sugar cane fields as the main ingredient in making sugar. In the same year, in 1885 coffee occupied the second export item with only 10% of the total export goods to Europe, due to the large number of leaf crust pests that damaged coffee plants (see table 3). Later after the *Besoekisch Proefstation* laboratory was founded in 1911.

Table 3. The Most Important Export Results in the Order of Their Importance (with each share in% of total export value)

No	Year	Result No. I	Result No. II
1	1856	Coffee (36)	Sugar (29)
2	1885	Sugar (45)	Coffee (10)
3	1895	Sugar (36)	Coffee (24)
4	1900	Sugar (29)	Tobacco (12)
5	1913	Sugar (23)	Petroleum (17)

Source: DH. Burger, *Sedjarah Ekonomi Sosiologi Indonesia II*, Djakarta: Pradnja Paramita, 1970, p. 134.

The end of the policy of the *cultuurstelsel* system in 1870's which prospered in the Kingdom of the Netherlands impacted on the protest of large capital owners in the Kingdom of the Netherlands who demanded to be given the opportunity to invest in the Dutch East Indies. The insistence of the capital owner in the Dutch parliament gave rise to new policies from the Dutch colonial government to open the widest possible area of the Dutch East Indies for rent by investors. The issuance of *Agrarische Wet* and *Agrarische Besluit* which guarantees legal security for investors to invest in the Dutch East Indies, especially the *Oosthoek* region was welcomed by Dutch investors to immediately invest in the Dutch East Indies.

The *Agrarische Wet* Regulation was passed by the parliament of the Kingdom of the Netherlands on April 9th, 1870, which contained 2 main points namely land ownership by the indigenous population in the Dutch East Indies and the release of land as a form of leasing

(*erfpacht*).²² For implementation on the ground, the Parliament approved the issuance of more detailed and complete regulations enacted on July 20th, 1870, under the name *Agrarische Besluit*.²³ With the enactment of these regulations, customary rights or values governing land ownership by residents remain recognized and respected by the colonial government and will even be guaranteed by colonial legal institutions by being contained in the law and endorsed by the highest authority in the Netherlands Indies region, the Governor General.²⁴

The enactment of the *Agrarische Wet* and *Agrarische Besluit* regulations in the Dutch East Indies region provided investors with comfort and legal certainty to invest in the Dutch East Indies. European investors, both Dutch and British investors competed to invest in the Dutch East Indies. Dutch investors began renting land in the Deli area in 1875 with a Board of Commissioners consisting of E. Luden Voorzitter, Mr. AW Gerritzen, and DJ. Sanders is a member of N.V. Deli Batavia Maatschappij. The land is planted with tobacco by rubber side business.²⁵ Specifically, the *Oosthoek* region was leased by investors in 1879 (Lijst van: Particuliere ondernemingen in Nederlandsch-Indie op gronden door het gouvernement afgestaan in huur (voor landbouwdoeleinden) en erfpacht 1914, 1915). Many investors are interested in renting land to open plantations in the *Oosthoek* region (see table 5).

Availability of Low-Paid Labor

One of the requirements to open a modern plantation is to have cheap labor. There was no difficulty for the Dutch colonial government to help provide cheap labor in the Dutch East Indies. Relations with the Javanese kings who had been defeated by the Dutch made it easier to provide cheap labor. Moreover, the workforce in the *Oosthoek* region is very easy to obtain, especially coming from Madura.

Historically, the Madurese first came to the Besuki region spearheaded by Kyai Wirabrata by opening land in Besuki. The Babad Besuki explained that Kyai Wirabrata came from the Tanjung Pamekasan Madura area. The reason for migrating to Java was because food in Madura was expensive, due to the difficulty of water flowing into the fields.²⁶ The reason for migrating is also due to the condition of infertile land for agriculture, avoiding ill treatment from the Regents, bad relations with neighbors, avoiding the obligation to enter the army (J. van Goor, 1976). Usually, Madurese are mobilized for warfare,

In 1820, in the Bandawasa area (Besuki Residency) it had a population of around 40000 (MS. Collectie Schneither, ARA, no. 98 (Statistiek van Java); signed by Besuki Resident, June 3rd, 1821), mostly Madurese. The opening of tobacco plantation land attracted many Madurese people. They come to get new jobs as garden workers or garden coolies.

²² Berger, A., *Encyclopedic Dictionary of Roman Law*, (Clark: The Lawbook Exchange, 2003), p. 545.

²³ *Staatsblad van Nederlandsch Indie*, 1870 No. 118

²⁴ Van Vollenhoven, *Het Adatrecht van Nederlandsch Indie*. (Leiden: Brill Archive, 1931). p.672.

²⁵ Dentz; Van der Breggen, *Statistisch Overzicht op Handels en Financieel Gebied Jaargang 1933*, (Amsterdam, 1934). pp. 10, 66-67.

²⁶ *Babad Besuki*. Ms. Lor. 2186. Pupuh I : 1.

Table 4. Javanese and Madurese population in Afdeeling Bandawasa in 1845

No	District	Number of Villages	Javanese Population	Madurese Population
1	Bandawasa	46	425	24.508
2	Wanasari	43	1.283	24.326
3	Penanggungan	36	935	15.420
4	Sukakerta	32	3.713	8.090
5	Weringin	33	23	13.601
6	Jember	36	6.656	2.543
7	Puger	43	6.247	2.427
	Amount	269	1.981	90.915

Source: P. Bleeker, "Bijdragen tot de Statistiek der bevolking van Java", *TNI*, 9e jaargang, iv, 1847, p. 148.

But of the many reasons Madurese migrated to the Java region, the main reason was looking for new livelihoods. Before leaving for mainland Java, they had received information from relatives or acquaintances who had first settled in Java. Usually on Eid al-Fitr the Madurese who settled in Java return to their homeland. Information from those returning home will clarify the condition of the Java region, so that they are interested in coming to Java. Information obtained in 1857 stated that each year there were still many Sumenep Madura people who moved to the mainland of Java, especially to Besuki and Prabalingga (J. Hageman, 1857).²⁷ From table 4, it can be seen that the Districts of Bandawasa, Wanasari, Weringin and Penanggungan, have the highest Madura population.

In the following years, the migration of Madurese to the *Oosthoek* region was facilitated by the port. The most important ports on the north coast are Besuki Harbor, Panarukan Harbor, and Anchor Port. The Port of Besuki is used for boat trips to Madura and for ships carrying sugar from the Buduan and De Maas Factories. The Anchor Port is only useful for sugar exports from the Asembagus Factory. Panarukan Port is the most important port. The "Bodemeijer" shipping company organizes shipping from Sumenep-Panarukan every day. People from Madura and Sapudi came to the *Oosthoek* region, specifically to the Bandawasa region to find work using this shipping traffic.

For every bus that arrives at the port, buses are already available that will transport them to Bandawasa, Jember, and Banjoewangi. Means and transportation infrastructure made by the colonial government was an economic node that brought ease to bring the community's agricultural products and the results of plantation companies in the *Oosthoek* region, especially the Bandawasa region.²⁸ The number of plantations in the *Oosthoek* region is a honeycomb for job seekers from the Madura region. The large number of migrants who come to get work will benefit the plantation entrepreneurs. This condition is one of the causes of the availability of cheap labor in the *Oosthoek* region.

The Role of Besoekisch Proefstation as a Money Machine (Economic Fortune)

The hope of competing for profits from European investors, especially the Dutch, to lease land in the Indies, especially the *Oosthoek* region, was truly extraordinary. Beginning in 1875, Dutch investors leased land in the Deli Area, Sumatra, and other areas of the Dutch East Indies to the *Oosthoek* region. Not only the capital owners from the Netherlands who

²⁷ Hageman, J. M. "Geschiedkundig over zigt van Madoera". (MS. KITLV. H.14, 1857). pp.21.

²⁸ ANRI, "Memori Residen Bondowoso (A.H. Neys). 25 April 1929". in *Arsip Nasional Republik Indonesia Penerbitan Sumber-Sumber Sejarah No.10*, (Jakarta: Arsip Nasional Republik Indonesia, 1978), p. 83.

were interested in renting land in the Dutch East Indies to make their business successful but also the capital owners from the UK such as Firma Fraser, Eaton & Co.²⁹

At that time the European market needed coffee, sugar, tobacco, rubber, cassava, etc. which can only be cultivated in countries with tropical seasons. Accuracy of calculation to reap huge profits has become a separate calculation for investors who want to invest. The choice fell in the Dutch East Indies region because it was guaranteed security to invest from the Governor General as the highest authority in the Dutch East Indies region which was an extension of the colonial government in the Kingdom of the Netherlands. Regulation *Agrarische Wet* and *Agrarische Besluit* made peace and comfort investors to invest in the Dutch East Indies. Evidently, there are many investors who are members of large companies leasing land in the Dutch East Indies, especially in the Oosthoek region (see table 5).

Table 5. Names of Companies Leasing Land in the Oosthoek Region Began Renting in 1879 until Continuing to Rent in 1913

No	Afdeeling/District	Company Name
Afdeeling Djember		
1	District of Djember	Landbouwmaatschappij Oud-Djember Landbouwmaatschappij Besoeki Cultuurmaatschappij Kali Djompo Maatschappij U.U. exploitatie der koffieonderneming Rajap Cultuurmaatschappij Djelboek N.V. Landbouw Maatschappij Oud-Djember Tabakmaatschappij Goemelar N.V. Cultuurmaatschappij Kali Klepoe-Goenoeng Post Cultuurmaatschappij Tjorah Mas Kepoetren Estates Cultuurmaatschappij Ketadjik
2	Rambipoedji District	Cultuurmaatschappij Kali Klepoe Goenoeng Post N.V. Landbouwmaatschappij "Oud-Djember"
3	District Majang	Cultuurmaatschappij Middle Soember Nederlandsch-Indische Rubber en Koffie Cultuur Maatschappij Cultuurmaatschappij Beliri Cultuurmaatschappij Garahan Tjorahmas Kepoetren Estates Cultuurmaatschappij Garahan Cultuurmaatschappij Paconda N.V. Cultuurmaatschappij Goenoeng Goeniti Maatschappij tot exploitatie van het land Kalimrawan Landbouwmaatschappij Oud-Djember Cultuurmaatschappij Wonodjati Cultuurmaatschappij Kalibadjjing Cultuurmaatschappij Goenoeng Majang Cultuurmaatschappij Badjing Oendjoer Landbouwmaatschappij Poeger Naamlooze vennootschap Koloniale Bank
4	District Poeger	Cultuurmaatschappij Badjing Oendjoer Landbouwmaatschappij Oud-Djember Cultuurmaatschappij Zuid-Djember Handelsvereniging Amster[am]

²⁹ Pradadimara, D. "Modal Britania di Indonesia Masa Kolonial (Britain's Capital in the Colonial Period in Indonesia)", *Mozaik Humaniora*, 16[2], 2016. p. 4.

		N.V. Landbouwmaatschappij Poeger Handelsvereniging Amsterdam
5	Tanggoel District	N.V. Besoeki, Rubber Cie Landbouwmaatschappij Oud-Djember Rubber Cultuurmaatschappij Amsterdam Caoutchouc Cultuurmaatschappij Kalitengah Landbouwmaatschappij "Aengsono" Cultuurmaatschappij Kalidoeren Kaliglagah Estate Ltd. Maatschappij tot exploitatie van het land Kalimrawan Cultuurmaatschappij Djamintoro Internationale Crediet en Handelsvereniging Rotterdam Cultuurmaatschappij Djelboek N.V. tot exploitatie van het land Widodaren Cultuurmaatschappij Toegoesari Rubber Cultuur Maatschappij Gondang The Soekokoelon Rubbercompany Ltd Rubbercultuurmaatschappij Soemberajoe N.V. Handelsvereniging Amsterdam
Afdeeling Panaroekan		
1	District Pradjekan	Maatschappij tot exploitatie van de landen Pantjoer en Angkrek. onderneming M.J. Stibbe N.V. Cultuurmaatschappij der Edjinlanden te Djember, onderneming, J.F. Couvreur. A. van Hoboken & Co. onderneming GEHL Geul
Afdeeling Bandawasa		
1	Besoeki District	Comité voor de exploitatie der Yang-plateaux als gezond heids- en ontspanningsoord
Afdeeling Banjoewangi		
1	Banjoewangi	Cultuurmaatschappij Paconda, onderneming Van Hoek N.V. Cultuurmaatschappij Lidjen te Rotterdam, onderneming. FL Bresser N.V. Cultuurmaatschappij Kali Klattak, onder neming. H. A. J. Tobias. Cultuurmaatschappij Pesoetjen. 's Gravenhage, onder neming .J. Bos. N.V. tot voortzetting van de zaken van Mr. D. Mounier. onderneming Eckman. J.L. Ettli, weduwe van J.H. van Delden. onderneming. Erven J. A. N. Ponder, onderneming. Kho King Ie, onderneming. Oei Boen Kiat. Maatschappij tot exploitatie van het land Kali Selogiri, onderneming. K. W. Grant.

Source: Processed from Lijst van: Particuliere ondernemingen in nederlandsch-indie op gronden door het gouvernement afgestaan in huur (voor landbouwdoeleinden) en erfpacht 1914, Batavia: Landsdrukkerij 1915.). p. 86-97. Particularly, for Afdeeling Banjoewangi was only involving the District Banjoewangi.

Investors came to the Dutch East Indies to lease land leased by the Dutch colonial government by opening European-style plantations that were not normally practiced by the Indies community. European plantation is a large-scale, capital-intensive agricultural business, that use of large land areas, large labor organizations, the detailed division of labor, use of wage labor, neat working relationship structures, use of modern technology,

specialization, administrative and bureaucratic systems, and planting commercial plants intended for export commodities in the world market.³⁰

Of course, the business which is run by opening a modern plantation does not want to lose money, because they do not have the experience to grow agro-industrial plants (coffee, sugar cane, tobacco, tea, rubber, etc.) in their home country. The need for presence of research laboratories for tropical plants is very much needed by investors that the businesses they run do not lose much.³¹ In 1890 there were efforts made by 'sLand Plantentuin (Bogor Botanical Gardens) to conduct research activities on tea, coffee, tobacco, rubber, etc. in meeting the technological demand of large estates cultivated by investors (plantation entrepreneurs).

The planters in the Oosthoek region are also working to establish a research center that helps to guide technically the cultivation of the plants they are trying to produce, among others: coffee, sugar cane, tobacco, etc. On November 26th, 1910, a meeting was held between large tobacco plantation entrepreneurs in the Besuki Residency (including Djember, Bandawasa, Panaroekan, and Banjoewangi) who decided that a research laboratory (*proefstation*) was needed to succeed in their plantation business. The meeting was chaired by Gerard David Birnie (one of the owners of “Landbouwmaatschappij Oud-Djember”, who has a business octopus in the Besuki Residency) and Teun Ottolander (An expert on tropical plantations). At that time, all plantation entrepreneurs in the Besuki region, either those present or represented, agreed to establish a pro-station at the expense of the entrepreneurs. The desire to establish a Proefstation in the Besuki region was finally followed up by holding a hearing on December 10th, 1910, Vereniging tor Bevordering van Landbouw en Nijverheld (Djember) decided to establish *Besoekisch Proefstation Vereniging* on January 1st, 1911. In 41 days, on June 12th, 1912, its research laboratory organ *Besoekisch Proefstation* (Besuki Research Center) domiciled at Djember (Indonesian Coffee and Cocoa Research Center).³²

The establishment of the *Besoekisch Proefstation* desired by the plantation entrepreneurs has helped to solve problems related to agro-industrial crops (coffee, sugar cane, tobacco, rubber, etc.). Moreover, one of the administrators of *Besoekisch Proefstation* named Teun Ottolander is known as the founder of the plantation “empire”. He is a figure who has succeeded in developing plantations both for his organization and for his plants, as well as diligently initiating meetings for harmony or scientific seminars and congresses to discuss issues in the plantation environment as well as writing diligently in “De Bergcultures” (Coffee Research Center and Indonesian Kakau).^{33 34}

Teun Ottolander is the inventor of several coffee varieties. The three varieties that use their names are *C. Arabica* var. *erecta* Ottolander, *C. arabica* *columnaris* Ottolander, and *C.*

³⁰ Kartodirdjo, S., *Sejarah Perkebunan Di Indonesia Kajian Sosial Ekonomi*, (Yogyakarta: Aditya Media, 1991), p. 4.

³¹ Waqas, U., Abd Rahman, A., Ismail, N.W., Basha, N.K., Umair, S. “Identifying Key Determinants of Supply Chain Risk Management: A Qualitative Study amongst Smallholder Agropreneurs of Fresh Fruits & Vegetables in Malaysia”. *International Journal of Innovation, Creativity, and Change*, 11[1], 2020. pp. 716-734.

³² Pusat Kopi dan Kakao Indonesia. *3 Abad Kopi Indonesia. Perjalanan 300 Tahun Kopi di Indonesia chapter 4*. p. 3.

³³ Izzah, L, *Haji Kopi: Paradoks Masyarakat Miskin Kawasan Perkebunan Kopi Kecamatan Silo Kabupaten Jember*, (Yogyakarta: Jogja Bangkit Publisher, 2015), p.101.

³⁴ Pusat Kopi dan Kakao Indonesia.

arabica sperm Ottolander et Cramer. Together with his team, Teun Ottolander found varieties of Arabica coffee varieties AB 3, S 792, and USDA 230762 which were considered to have several advantages and were worthy of being recommended on a commercial scale. Most plantation entrepreneurs in the Oosthoek region grow Arabica coffee, with the discovery of superior seedlings from the *Besoekisch Proefstation* research laboratory led by Teun Ottolander will help coffee planters generate huge profits.

Table 6. Coffee shoulder diversification experiment with one shoulder area (1 bouw = 0.7 ha), consisting of 250 rubber sticks and 1750 coffee sticks

No	Year	Coffee Production	Rubber Production
1	1911-1912	4.601 load (276.060 kg)	-
2	1912-1913	4.606 load (276.360 kg)	8.720 lbs (4.360,0 kg)
3	1913-1914	6.696 load (401.760 kg)	47.000 lbs (23.500,0 kg)
4	1914-1915	2.802 load (168.120 kg)	72.019 lbs (36.009,5 kg)
5	1915-1916	5.235 load (314.100 kg)	139.888 lbs (69.944,0 kg)
6	1916-1917	8.662 load (519.720 kg)	213.735 lbs (106.867,0 kg)

Source: Pusat Kopi dan Kakao Indonesia. 3 Abad Kopi Indonesia. Perjalanan 300 Tahun Kopi di Indonesia.

Likewise, coffee plants that are diversified with rubber plants are the result of research from the *Besoekisch Proefstation* research laboratory developed by one of the plantation entrepreneurs in the *Oosthoek* region and one of the founders of the *Besoekisch Proefstation* research laboratory named Gerard David Birnie. The results of the diversification of coffee with one shoulder-wide rubber (1 bouw = 0.7 ha), consisting of 250 rubber stems and 1.750 coffee stems obtained coffee and rubber production in table 6.

The results of the *Besoekisch Proefstation* research laboratory experiments above have greatly helped plantation entrepreneurs to get the maximum profit. All plants need to be planted on plantations of entrepreneurs in the *Oosthoek* region were examined by the *Besoekisch Proefstation* research laboratory. The plants studied included: coffee, rubber, tobacco, bananas, cocoa, indigo, quinine, palm oil, rice, sugar cane, tea, fiber, etc. Providing newsletters from all over the world as a reference for plantation entrepreneurs to develop their plantation businesses. Difficulties experienced by plantation entrepreneurs, especially in developing their plantation business, can be resolved by the *Besoekisch Proefstation* research laboratory.³⁵

Table 7. Amounts of tobacco exports in (pack) and Java Tobacco export prices for the period 1870-1915

No	Production Year	Package (pcs)	Price (f)
1	1870	106.940	10.500.000
2	1871	129.000	15.500.000
3	1872	207.351	18.500.000
4	1873	240.006	22.500.000
5	1901	307.326	13.500.000
6	1902	336.500	12.250.000
7	1903	339.717	17.500.000
8	1904	328.243	16.500.000
9	1905	432.370	22.200.000
10	1906	515.610	26.800.000
11	1907	617.599	32.400.000
12	1908	505.900	26.000.000

³⁵ *Catalogus Der Bibliotheek van Het Besoekisch Proefstation Te Djember*, 1919.

13	1909	303.391	19.250.000
14	1910	458.025	27.000.000
15	1911	707.742	36.500.000
16	1912	693.280	30.000.000
17	1913	586.093	24.000.000
18	1914	490.784	28.500.000
19	1915	787.271	80.000.000

Source: Dentz & van der Breggen, *Statistisch Overzicht op Handels en Financieel gebied Jaargang 1933 Amsterdam January 1934*, p. 66-67

CONCLUSION

The role of research laboratories conducted on *Besoekisch Proefstation* in finding superior seeds, disease pests for agro-industrial plants (coffee, sugar cane, tobacco, etc) had an impact on the success of large plantation companies in the Oosthoek region, the Dutch East Indies. Accuracy in calculating the risk of these accomplished businessmen proves that they are a group of big businessmen who are ready to compete in exporting the agro-industrial crops awaited by the European market. The decision of Gerard David Birnie (one of the *Landbouwmaatschappij Oud-Djember Bosses*) and his colleagues to establish *Besoekisch Proefstation* shows their ability to do business. Their attention is not only on capital for their business but on the establishment of research laboratories for the tropical plants they plant. The *Besoekisch Proefstation* research laboratory is a money machine for making multiple profits.

REFERENCES

- Anonym, *Corpus Diplomaticum. Vol III*, 1680. pp. 223-225.
- ANRI, “Memori Residen Bondowoso (A.H. Neys). 25 April 1929”, *Arsip Nasional Republik Indonesia Penerbitan Sumber-Sumber Sejarah No.10*, (Jakarta: Arsip Nasional Republik Indonesia, 1978).
- Babad Besuki*. Ms. Lor. 2186. Pupuh I : 1.
- Berger, A., *Encyclopedic Dictionary of Roman Law*, (Clark: The Lawbook Exchange, 2003).
- Bleeker, P., *Bijdragen tot de Statistiek der bevolking van Java*, TNI. 9e No. 4, 1847.
- Boomgaard, P., *Anak Jajahan Belanda: Sejarah Sosial dan Ekonomi Jawa 1795-1880*, (Jakarta: KITLV dan Djambatan, 2004).
- Booth, A., *The Indonesian Economy in the Nineteenth and Twentieth Centuries’: A History of Missed Opportunities*, (Basingstoke/New York: MacMillan Press/St. Martin’s Press, 1998).
- Burger, D. H., *Sedjarah Ekonomis Sosiologis Indonesia*. (Djakarta: Pradnjaparamita, 1962).

- _____, *Sedjarah Ekonomis Sosiologis Indonesia II*. (Djakarta: Pradnja Paramita, 1970).
- Katalogus Der Bibliothek van Het Besoekisch Proefstation Te Djember*, (Semarang & Soerabaia: G.C.T. van Dorp & Co., 1919).
- Claver, A., *Dutch Commerce and Chinese Merchants in Java Colonial Relationships in Trade and Finance, 1800–1942*, (Leiden & Boston: Brill, 2014).
- Cremer, J.T., *Verspreid door Tusschenkomst van “De Liberale Unie” Koloniale Politiek, Twee redevoeringen*. (Haarlem H.D: Tjeenk Willink, 1981).
- Danvers, I.; F.C., *The Portuguese in India. vol. 2*, (1984).
- Day, C., *The Policy and Administration of the Dutch in Java*. (Kuala Lumpur: Oxford University Press, 1975).
- Dentz; Van der Breggen, *Statistisch Overzicht op Handels en Financieel Gebied Jaargang 1933*. (Amsterdam, 1934).
- Departement van Binnenlandsch Bestuur, *Lijst van: Particuliere ondernemingen in nederlandsch-indie op gronden door het gouvernement afgestaan in huur (voor landbouwdoeleinden) en erfpacht 1914*. (Batavia: Landsdrukkerij, 1915).
- DJZ., N. Van Elten, *Iets Over den Voorgaaden en Tegenwoordigen Staat van Nederlandsch Indie Vergezeld van Eene Beoordeeling van Twee Vlugschriften*, ('SGravenhage & Amsterdam: De Gebroeders van Cleef, 1835).
- Furnivall, J. S., *Netherlands India: A Study of Plural Economy*, (London: Cambridge University Press, 1939).
- _____, *Hindia Belanda Studi tentang ekonomi Majemuk*, (Jakarta: Freedom Institute, 2009).
- Garaghan, G. J., *A Guide to Historical Method*, (New York: Fordham University Press, 1957).
- Gonggrijp, G.F.E., *Geillustreerde Encyclopaedie van Nederlandsch Indie*, (Leiden: Leidsche Uitgeversmaatschapij, 1934).
- Hageman, J. M. “Geschiedkundig over zigt van Madoera”, (MS. KITLV. H.14, 1857).
- Izzah, L, *Haji Kopi: Paradoks Masyarakat Miskin Kawasan Perkebunan Kopi Kecamatan Silo Kabupaten Jember*, (Yogyakarta: Jogja Bangkit Publisher, 2015).
- Izzah, L; et.al., *Industri Kreatif Kafe Kopi: Analisis Pemangku Kepentingan & Prospek*. (Jember: UPT Percetakan & Penerbitan Universitas Jember, 2019).

- Kartodirdjo, S., *Sejarah Perkebunan Di Indonesia Kajian Sosial Ekonomi*. (Yogyakarta: Aditya Media, 1991).
- Kuntowijoyo, *Metodologi Sejarah*, (Yogyakarta: Penerbit Tiara Wacana, 2003).
- Lindblad, J. T., “Aspects of the Dutch Expansion in Indonesia, 1870-1914”. *Journal Modern Asian Studies*, 23[1], 1989, pp. 1 – 24.
- MS. Collectie Schneither. *ARA. no. 98 (Statistiek van Java); signed Resident Besuki. June, 3rd 1821*, (1821).
- Pradadimara, D. “Modal Britania di Indonesia Masa Kolonial (Britain’s Capital in the Colonial Period in Indonesia)” *Mozaik Humaniora*, 16[2], 2016. p. 4.
- Pusat Kopi dan Kakao Indonesia. *3 Abad Kopi Indonesia. Perjalanan 300 Tahun Kopi di Indonesia; chapter 4*.
- Staatsblad van Nederlandsch Indie, 1870 No. 118*.
- Tjiptoatmodjo, S, “Kota-Kota Pantai Di Sekitar Selat Madura (Abad XVII. Sampai Medio Abad XIX)”, *Ph.D. Dissertation*, Universitas Gadjah Mada Yogyakarta, 1983.
- Van den Bosch, J. *Mijne Verrigtingen in Indie*, (Amsterdam: Frederick Muller, 1864).
- Van Goor, J., “Some Aspects of Tightening Control on Madura by the Dutch Government in The 19th Century”. *Paper Historical Congress in Noordwijkerhout*, (the Netherlands, 1976).
- Van Vollenhoven. *Het Adatrecht van Nederlandsch Indie*. (Leiden: Brill Archive, 1931).
- Wasino; *et.al.*, *Sejarah Nasionalisasi Aset-Aset BUMN dari Perusahaan Kolonial Menuju Perusahaan Nasional*. (Jakarta: Biro Hukum Kementerian BUMN Republik Indonesia, 2013).
- Waqas, U.; *et.al.*, “Identifying Key Determinants of Supply Chain Risk Management: A Qualitative Study amongst Smallholder Agropreneurs of Fresh Fruits & Vegetables in Malaysia”. *International Journal of Innovation, Creativity and Change*, 11[1], 2020. pp. 716-34.