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# Oosthoek Sugar Eden: The colonial sugar industry in Panaroekan

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#### **Abstract**

Sugar has been indispensable in the global economy over the past nineteenth century. New lands were being explored to become sugar-producing areas, not least Panaroekan. During the colonial period, several sugar factories were constructed in Panaroekan. In addition, some of these sugar mills are still in operation. Based on this research background, this paper examines the history of the sugar industry in Panaroekan during the colonial period. In addition, this research also aims to identify the varying factors that drove the growing sugar industry in the region. This research will use the historical approach as a method to reconstruct events in the past. Based on the research conducted, it is known that the area's fertility and the existence of low-cost labor were the major factors that prompted the accelerated growth of the sugar industry in Panaroekan. This made the area an important sugar manufacturer in the Eastern part of Java.

#### **Keywords**

sugar; the sugar industry; Panaroekan; colonial policy.

#### **Abstrak**

Gula menempati posisi yang penting dalam perekonomian global di sepanjang abad ke sembilan belas. Daerah-daerah baru di eksplorasi menjadi kawasan penghasil gula tidak terkecuali Panaroekan. Pada masa kolonial didirikan beberapa pabrik gula di Panaroekan. Bahkan beberapa pabrik gula tersebut masih beroperasi hingga saat ini. Berdasarkan latar belakang tersebut, maka kajian ini membahas bagaimana perkembangan industri gula di Panaroekan selama periode kolonial. Selain itu, penelitian ini bertujuan untuk mengidentifikasi berbagai faktor yang mendorong pertumbuhan industri gula di wilayah tersebut. Penelitian akan menggunakan pendekatan sejarah sebagai metode untuk merekonstruksi peristiwa di masa lampau. Berdasarkan penelitian yang dilakukan diketahui bahwa kesuburan wilayah dan ketersediaan tenaga kerja yang murah menjadi faktor utama yang mendorong percepatan pertumbuhan industri gula di Panaroekan. Sehingga menjadikan kawasan ini sebagai penghasil gula yang penting di ujung timur Pulau Jawa.

#### Kata kunci

gula; industri gula; Panaroekan; kebijakan kolonial.

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#### INTRODUCTION

In the last decade, the sugar industry in Indonesia has faced an alarming condition. This situation is due to the decreasing national sugar production rate while the demand for sugar continues to increase. Instead of securing national stocks, the government issued a policy to import sugar. The government through the Ministry of Trade (MoT) has opened the tap for sugar imports in Indonesia. The implementation of this regulation is referred to as Permendagri (Minister of Trade Regulation) No. 117/M-DAG/PER/12/2015. Based on the regulation, the categories of sugar that are allowed to be imported include raw crystal sugar/crude sugar, refined crystal sugar, and white crystal sugar. Based on the Data from the Ministry of Agriculture, during the period 2014-2016, the sugar production rate was only 2.5 million tons. Meanwhile, the domestic sugar consumption reached 5.5 million tons per year (Ministry of Agriculture, 2017). In 2024 sugar imports are estimated to reach 5.4 million tons. This figure makes Indonesia the largest sugar importer in the world (CNBC, 2023).

This condition is inversely comparable to the situation in Indonesia two centuries ago. At that time, the sugar industry in Indonesia experienced rapid development. The Dutch Colonial Government built sugar factories all over Java, one of which was in Panaroekan. It cannot be denied that the sugar industry was one of the important sectors in the economy in the Dutch East Indies. Thus, various efforts were made by the government to succeed this industrialization process. The years 1830-1920 are known as the "Golden Age" of the sugar industry in Java.

Domestic sugar production was not only fulfilling national consumption but also the needs of the global market. It was even able to supply the needs of the global market so at that time the success of the sugar industry led Indonesia to become the second-largest sugar-exporting country after Cuba (Bosma, 2023). This certainly might not happen overnight. The intervention of the government through colonial policies in supporting the development of the sugar industry was allegedly one of the key factors that led Indonesia to become the "King of Sugar" in that age. Elson mentioned that the sugar industry was very well organized in Java. This is because the population is relatively dense so the need for labor in the sugar industry can be fulfilled (Elson, 1984).

As for Panaroekan, the sugar industry in this region flourished from the midnineteenth century to the early twentieth century. Eight sugar factories were operating in the region before the malaise crisis. This condition made Panaroekan one of the important areas of sugar industry development in the Karesidenan Besoeki during the colonial period. And yet, some of the sugar factories in Panaroekan are still operating today. It is certainly interesting to discuss the development of the sugar industry in this area. Unfortunately, studies on the history of the sugar industry in this region are severely limited. Moreover, studies of the sugar industry are often centered on a few areas in central Java or Vorstenlanden.

Studies on the development of the sugar industry in Panaroekan have actually been mentioned by several experts. However, most of the previous researchers discussed the sugar industry in the period after independence. Nursiyah (2013) in her article entitled "Pasang Surut Pabrik Gula De Maas di Desa Kalimas Kecamatan Besuki Kabupaten Situbondo Pada Tahun 1977 – 2000" only discusses how the dynamics of de Maas sugar factory in the contemporary period. In addition, Daliarna (2014) in his research entitled ""Perkembangan Pabrik Gula Wringin Anom Kecamatan Desa Wringin Anom Kecamatan Panarukan Kabupaten Situbondo Tahun 1998 – 2010" for example only discusses the Wringin Anom sugar factory. The periodization taken was quite contemporary. Furthermore, there is a study by Utari (2014) entitled ""Pabrik Gula Panjdie Terhadap Kondisi Sosial Ekonomi Masyarakat Kecamatan Panji Kabupaten Situbondo Pada Tahun 1998 – 2008". In these articles, it was found that there were several mistakes in the writings that resulted in ahistorical articles. Then the last one, Nurcahyo (2011) in his work entitled "Tata Kelola Industri Gula di Situbondo Masa Kolonial dan Kebijakan Pergulaan Masa Kini" only discusses how sugar management in Situbondo before and after the malaise crisis. This research does not explain how exactly the sugar industry first developed in Situbondo (Panaroekan).

Based on this background, this study discusses the colonial sugar industry in Panaroekan. The novelty of this study lies in the fact that there is no single study that discusses the development of the sugar industry in Panaroekan during the colonial period. This study also elaborates that Panaroekan's success as one of the leading sugar producers in East Java was not only influenced by colonial policies. This shows the interconnectivity between colonial policies and the natural conditions and society in Panaroekan.

#### **METHOD**

This research uses the historical method, according to Kuntowijoyo, the use of the historical method can provide a detailed overview from beginning to end so that critical analytical research outcomes are obtained (Kuntowijoyo 2013). The method consists of topic selection, heuristics, verification or source criticism, interpretation and historiography. Heuristics means collecting sources and determining the topic of the problem to be studied in research. So before conducting historical research, the author can determine the desired topic and then search for historical sources as supporting data for the arguments presented in the research.

The heuristic process in this research was carried out in various places and libraries, including the UGM Department of History Library, UGM Faculty of Arts Library, UGM Central Library, UGM Center for Population and Policy Studies, and East Java Provincial Library. This research also uses contemporaneous sources obtained from the National Archives of the Republic of Indonesia such as the Algemene Secretarie, Grote Bundel Besluit series. Several websites that provide historical sources that can be accessed online such as the digital collection of Leiden and Delpher found pictures or maps of the development of the sugar industry in Panaroekan during the colonial period. In addition, the author used similar previous research as secondary

sources such as books and scientific articles to support the author's ideas contained in this research.

Various historical sources collected from various locations, both in the form of archives and information collected from contemporaneous publications, were then compared between the contents of one source and another to obtain credible and reliable historical facts. Furthermore, the sources are classified according to the themes that have been compiled based on the framework. In this step, source criticism and historical explanation are carried out simultaneously in one historical writing process.

#### **RESULTS AND DISCUSSION**

# **Geographical Background of Panaroekan**

Geographically, Panaroekan has a diverse topography, ranging from lowlands along the coast to hills located further inland. This creates a variety of ecosystems that support biodiversity, including tropical forests, wetlands, and rivers that flow from the mountainous areas to the sea. The Afdeeling Panaroekan extends along the north coast of Java with 140 km of coastline. During the colonial era, Panaroekan was also known as Oosthoek, which means East End, because it is geographically located at the eastern end of Java.

The total area of Panaroekan is approximately 1,638.50 km2 or 163,850 ha. Panaroekan is a lowland with an altitude of 0-1,250 meters above sea level with a slope between 0o-450 and has eroded dry soil reaching 26.12% or 42,804 ha. The region consists of a varied landscape, including dense tropical rainforest, fertile agricultural land, and rivers flowing from the surrounding mountains. These rivers not only provide essential water for people's lives but are also the foundation for agricultural activities, which were once the main economic sector in the region.

#### Socioeconomic Background in Panaroekan

Panaroekan is one of the districts that is demographically inhabited by Madurese. The existence of the Madurese in Panaroekan is inseparably linked to the historical fact that the Madurese migrated to Java in search of a better life. The barren nature of Madura Island makes it extremely hard to cultivate for agriculture. In contrast to Panaroekan, where there is plenty of fertile soil and irrigation for agricultural activities. This encouraged Madurese migrants to settle and work in the agricultural sector (De Jonge, 1989). So gradually the population in this region began to increase. However, in the second half of the nineteenth century, there was a rapid increase number of the population in Panaroekan. (Sutherland, 1979). This was driven by several important factors such as economic development, infrastructure, and colonial policy.

In 1845, several different ethnic groups had long inhabited the Panaroekan area, including Madurese, Javanese, Europeans, Arabs, Chinese, Moors, Malays, Bugis, and Balinese (Tidjschirft, 1849). Although many ethnic groups inhabit this area, the largest population is Madurese. The Javanese population was less than one-tenth that of the

Madurese and almost all were forced to move to the south Panaroekan (Bondowoso and Jember). Colonial literature states that no Javanese lived in Soemberwaroe in 1845 and only five Javanese were identified as living in Panaroekan, two in Binor and three in Kalitikoes (Tijdschrift, 1849).

# Sugarcane Plantation in Panaroekan

Land clearing and sugarcane plantations began to be developed on a large scale in Panaroekan in the early 19th century. In 1830, sugarcane began to be cultivated in the Karesidenan Besoeki. The cultivation of sugar cane in the Karesidenan was concentrated in several areas in Afdeeling Panaroekan. Based on several pieces of literature, the location of sugarcane cultivation in Besoeki Karesidenan is spread across several areas in Panaroekan. (Knight, 2014). This policy was part of the implementation of Cultuurstelsel. The government through this policy forced local farmers to grow sugarcane on their land and sell it at a price determined by the colonial government (Fasseur, 1992). The plantations in Panaroekan were not only managed by the colonial government but also by the private sector.

Sugarcane planting was carried out on a large scale using 700 bouws of rice fields and 500 bouws of farmland. In 1831 the sugarcane crop was added to 1,200 bouws and the following year it increased to 1,280 bouws. Sugarcane cultivation continued to be developed so that in 1833 the area of sugarcane cultivation in Besokie was  $\pm$  3,850 bouws (Verslag, 1832). The total sugar cane planted was 3,098,304 plants. Throughout 1833, each bouws was able to produce 30 pikols of sugar. The total for that year reached 40,000 pikols (Verslag, 1832).

It was recorded that in 1840, almost 65% of the total sugarcane harvest in the Dutch East Indies was produced from several Karesidenan in East Java, including Besoeki Karesidenan, Pasuruan, and Surabaya (Kartodirdjo and Suryo, 1991). This shows that sugarcane was one of the important commodities that was successfully cultivated in the Besoeki Karesidenan. The process of sugarcane production generally involves a lot of people and a fairly large area of rice fields. In 1845 in Panaroekan, there were 17,672 households involved in sugarcane cultivation, using an area of 5,031 bouws. This number continued to increase in the following years. By 1850 there were 19,412 households and 6,600 bouws of rice fields used in the sugarcane production process (Kartodirdjo et al., 1978). As a result, sugar production in Panaroekan increased significantly, making the region one of the main sugar producers in the Dutch East Indies (Elson, 1984).

The positive growth of sugar cane plantations prompted the colonial government to build sugar factories. So in the 1840s sugar factories began to appear in Panaroekan. The change in policy from the forced cultivation economic system to the liberal economic system encouraged the commercialization of sugar factories in Panaroekan. After the enactment of the liberal economic system, many new factories

emerged with various technologies and production machines that were more modern than other sugar factories in Java.

Based on some photo archives and some records of the colonial sugar industry in Java, it shows that the sugar factories established in Panaroekan have modern types of machinery such as centrifugal machines, steam boilers with large capacities, and so on (Leidelmeijer, 1999). The existence of sugar factories in Panaroekan also brought major changes in the social and economic structure of the local community. The factories required large numbers of workers, most of whom were residents and migrant workers.

## **Sugarcane Plantation in Panaroekan**

The success of sugar cane plantations in Panaroekan encouraged the presence of new sugar industries in the region. On August 04, 1846, the first sugar industry was established in the Panaroekan afdeeling, precisely in the Olean district. This sugar factory is known as the smallest sugar factory in Java and has a unique building form. The Olean sugar factory is bordered to the north by Kayu Putih village, Tenggir village to the east, Talkandang village to the south, and Alasmalang village to the west. Suikerfabriek Olean known as the Olean sugar factory is a sugar factory under the management of the N.V. Maatchappij tot Exploitatie der Suikerfabrieken Phaiton en Olean company with offices in Rotterdam. While in the Dutch East Indies, this sugar factory was under the auspices of the Anemaet & Co. Firm until 1957, when this sugar factory was established in 1864. Pandjie sugar factory was established by N.V. Cultuur Maatschappij "Pandjie-Tandjongsarie". With a representative company initially Firma Traser Eaton & Co. Soerabaja in the Dutch East Indies, before management with a representative company Firma Tiedeman & Van Kerchem Soerabaja.

After the introduction of the liberal system in 1870, the number of sugar factories and sugar cane plantations in Panaroekan increased. The colonial government also continued to make many infrastructure improvements and expand the irrigation network. This development was intended to expand plantation land for private management. In 1871, a commission chaired by R. De Bruyn was formed to prepare a massive irrigation development project. The commission then formed an irrigation brigade (afdeeling irrigation) which was a special work team from Burgerlijke Openbare Werken (BOW) that handled the construction of irrigation projects (Pasandaran and Taylor, 1984). The development of irrigation infrastructure in Panaroekan had a significant impact on increasing sugarcane production and encouraged more sugar industries to emerge in the region.

In 1881, Suikerfabriek Wringin Anom was established. This sugar factory was established by N.V. Cultuur Maatschappij "Wonolangan" with representatives from N.V Factorij Batavia, a subsidiary of Nederlandsche Handel Maatscappij. In the following year, Suikerfabriek Boedoean was established. Boedoean Sugar Factory was established

by N.V. Cultuur Maatschappij Boedoean with representatives of N.V. Kooy & Co Administratie Kantoor Soerabaja (Verslag, 1926).

The significant development of the sugar industry prompted the initiative to build two new sugar factories in Panaroekan in 1882, namely Suikerfabriek Pokaan and Suikerfabriek Pradjekan (Nijhoff, 1911). A.H. Benjamin was the administrator of the Pradjekan sugar factory Regeerings Almanak, 1885). The Pradjekan sugar factory was established in 1883 by the company N.V. Cultuur Maatschappij Pradjekan en Tangarang. The company initially received funding from firma Anemaet & Co. Soerabaja. Later it was changed to Ir. J.W. Birnie Soerabaja. When the sugar factory was first established, it had an area of about 950 ha with a milling capacity of 650 tons/day. But in 1909-1957 this sugar factory was taken over by the Cultuur Handel on Industrie Bank based in Surabaya. In 1882 the average sugar production at Boedoean Sugar Factory was 85 pikols, Wringin Anom Sugar Factory 91 pikols, Olean Sugar Factory 117 pikols, and Pandjie Sugar Factory 108 pikols (Algemeen Verslag, 1882).

About 5 kilometers from Suikerfabriek Pandjie, a new sugar factory was established called Suikerfabriek Pokaan more popularly known as Suikerfabriek Tandjongsarie. This sugar factory, which is estimated to have been established in 1884-1885, was owned by Geo Henderson c.s., which was registered as the same joint company as Pandjie Sugar Factory. Based on colonial articles, Pokaan Sugar Factory received a Gouvernement Besluit dated March 18, 1890 No.27 which was issued on a five-yearly periodic basis. From this data, it can be concluded that Suikerfabriek Pokaan is estimated to have been established in 1884-1885. The administrator of SF Pokaan was John Couperus (Regeerings Almanak, 1885). There is not much data about this sugar factory but in colonial literature, it is written that Suikerfabriek Pokaan was established. Even in Dr. R. J. Broersma's notes, this sugar factory is not mentioned as one of the sugar factories in Panaroekan (Broersma, 1913). However, the Pokaan sugar factory was referred to as the only "vrije Suikerfabriek" in the Karesidenan Besoeki (Tidjschrift, 1891).

The next factory to be established in this area was Suikerfabriek Asembagoes. In 1884 the Dutch government in Amsterdam sent a telegram regarding approval for the establishment of a sugar factory in Assembagoes (Soerabaiasch Handelsblad, 1884). Then on April 19, 1884, the Assembagoes sugar factory was officially established. In 1884 the Dutch government in Amsterdam sent a telegram regarding the approval for the establishment of a sugar factory in Assembagoes (Soerabaiasch Handelsblad, 1884). Then on April 19, 1884, the Assembagoes sugar factory officially received an operating permit from the Dutch East Indies colonial government (Regeerings Almanak, 1885). The construction of this factory cost almost half a million guilders (Regeerings Almanak, 1885) In 1889 this sugar factory was leased to a third party, and not long after the Assembagoes sugar factory generated a net profit from the harvest of 65,000 picols or around ± 4 tons (Nieuwe Haarlemsche Courant, 1889). The Assembagoes sugar factory was in debt and then merged into N V. Suikercultuur Maatschappij (Assembagoes en

Sempalwadak) with the representative of the company N.V Kooy & Co Administratie kantoor Soerabaja in the Dutch East Indies (Verslag, 1926). The Administrator of the Assembagoes Sugar Factory was C.H.R. Falkman (Regeerings Almanak, 1885).

The last sugar factory was Suikerfabriek De Maas. This sugar factory is located in the village of Kalimas in Besuki. De Maas is the second sugar factory established in Panaroekan, precisely in 1896 by N.V. Cultuur Maatschappij "de Maas" which is located in Rotterdam. This factory is registered under the ownership of A. Van Hoboken & Co. Meanwhile, in the Dutch East Indies, the management was represented by Firma Anemaet & Co Soerabaja (Verslag, 1993-1935). The construction of the De Maas sugar factory cost f 2,850 (Colonial Bussines, 307941). However, this sugar factory slumped due to the economic depression that hit the world. So this individual company had to merge into the Naamlooze Vennotschaap (NV) holding. This merger was generally carried out by establishing cooperation between the company and a bank to obtain capital injections.

De Maas Sugar Factory finally received capital assistance from De Javasche Bank (Kuntohartono, 1987). In the 1930s, an economic crisis occurred known as the Great Depression. This event has shaken sugar factories throughout the island of Java, resulting in a reduction in production and even temporary factory closures. If in 1929 there were a total of 180 sugar factories operating in Java, then in 1935 only 45 sugar factories were still operating (Verslag, 1933-1935). However, along with the improvement in global economic conditions in 1940, the number of factories operating increased to 85 factories (Booth, 2000: 205). Of course, this decline affected the sugar industry in Panaroekan. It was recorded that eight of the twelve sugar factories in the Besoeki Residency were operating in Panaroekan before the malaise crisis (Archief voor de Javasuikerindustrie, 1896). However, after the economic crisis, only 4 sugar factories in Panaroekan were still able to survive, including Suikerfabriek Pandjie, Olean, Pradjekan, and de Maas (Nurcahyo, 1999).

## **CONCLUSION**

The presence of the colonial sugar industry in Panaroekan is closely related to the success of the sugar plantations that were established during the cultivation period. This region was chosen as the development area for sugarcane plantations and the sugar industry because in general it has fertile soil conditions and is suitable for the development of the sector. In addition to the favorable geographical conditions, the easy access to the port to support export activities is a key factor that supports the sustainability of this industry. Although the sugar industry in Panaroekan has always shown positive development, the malaise crisis has shaken the industry. This adversely affected the sugar industry in Panaroekan and resulted in several sugar factories temporarily closing.

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