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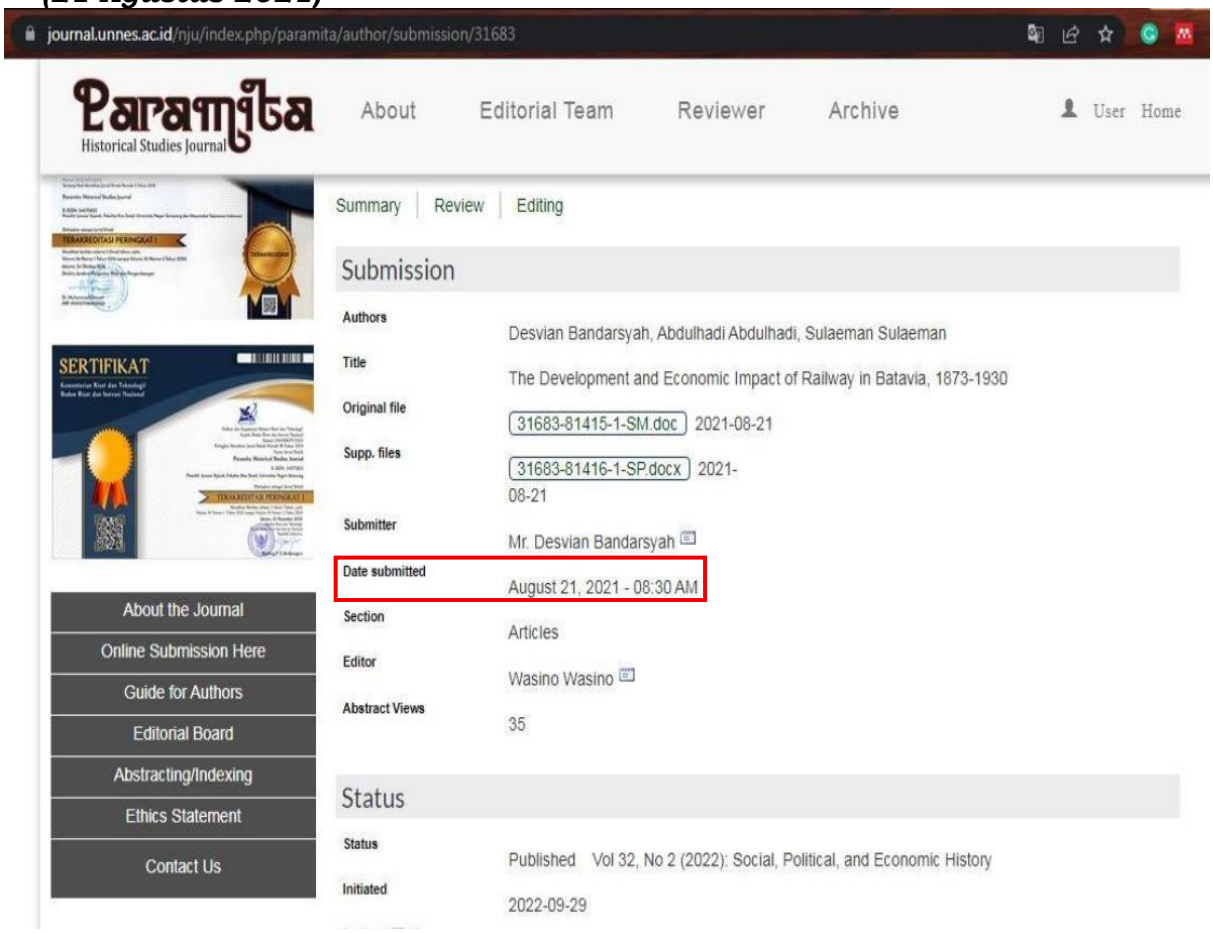


RAILWAY DEVELOPMENT AND ECONOMIC IMPACT IN BATAVIA IN 1930

ABSTRACT

This study aims to: determine the background of the development of rail transportation modes in Batavia, the process of developing rail transportation modes in Batavia and the development of railways in Batavia in 1930 and the impact of rail transportation modes on the economy of Batavia in 1930. The results of this study indicate that the increase in agricultural and plantation yields during the Cultivation Era caused serious problems for the transportation of plantation and agricultural products from the plantation area to the port. To overcome these problems, the first train was built in Batavia connecting Batavia with Buitenzorg which was operated by the Nederlandsche-Indische Spoorweg Maatschappij (NISM) on January 31, 1873. Furthermore, there was another railway company that also operated in Batavia, namely Staatsspoorwegen (SS) which operates the western route, including Batavia – Tanjung Priok which was inaugurated in 1885, Batavia – Anyer 1900 with a Duri – Tangerang branch in 1899 and Bataviasche Ooster Spoorweg Maatschappij (BOSM) which opened the eastern route, Batavia – Bekasi – Karawang in 1891. Not to forget there is also the Batavia horse tram operated by Bataviasche Tramweg Maatschappij (BTM) in 1869 which started the history of the history of the railroad in Batavia. With this, the train was able to have an economic impact on all economic actors in Batavia, from farmers, traders to industry though.

Keywords: Railway, Batavia, History of Railways, Batavia Economy etc.

ABSTRAK

Penelitian ini bertujuan untuk: mengetahui latar belakang pembangunan moda transportasi kereta api di Batavia, proses pembangunan moda transportasi kereta api di Batavia dan perkembangan perkeretaapian di Batavia tahun 1930 serta dampak moda transportasi kereta api terhadap perekonomian Batavia tahun 1930. Hasil penelitian ini bahwa terjadinya peningkatan hasil pertanian dan perkebunan pada era Tanam Paksa yang jumlahnya belipat-lipat menyebabkan masalah yang cukup serius bagi pengangkutan hasil perkebunan dan pertanian dari daerah perkebunan ke pelabuhan. Untuk mengatasi permasalahan-permasalahan itu, maka dibangunlah kereta api pertama di Batavia yang menghubungkan Batavia dengan Buitenzorg yang dioperasikan oleh *Nederlandsche-Indische Spoorweg Maatschappij* (NISM) pada 31 Januari 1873. Selanjutnya terdapat perusahaan kereta api lainnya yang turut beroperasi di Batavia, yaitu *Staatsspoorwegen* (SS) yang mengoperasikan lintas barat, meliputi Batavia – Tanjung Priok diresmikan tahun 1885, Batavia – Anyer 1900 dengan cabang Duri – Tangerang tahun 1899 dan *Bataviasche Ooster Spoorweg Maatschappij* (BOSM) yang membuka lintas timur, Batavia – Bekasi – Karawang tahun 1891. Tak lupa juga terdapat trem kuda Batavia yang dioperasikan oleh *Bataviasche Tramweg Maatschappij* pada tahun 1869 yang mengawali sejarah berdirinya sejarah kereta api di Batavia. Dengan ini kereta api mampu memberikan dampak ekonomi bagi seluruh pelaku ekonomi di Batavia, mulai dari petani, pedagang hingga industri sekalipun.

Kata Kunci : Perkeretaapian, Batavia, Sejarah Kereta Api, Ekonomi Batavia dll

INTRODUCTION

The train is a mode of transportation that has its own propulsion that runs alone or in combination with other railway facilities, which will or are currently moving on rail roads related to rail travel. (Law No. 23 of 2007). According to Hidayat in Pramyastiwi et al (2013: 63) The train (KA) has a number of advantages, including: being able to transport passengers and goods in large and bulk quantities, saving energy, saving land, being environmentally friendly, having a high level of safety, being adaptive to technological developments and being able to reach economic centers. (Dirjen KA, 2019). For these advantages, the presence of the rail transportation mode has an important role for accessibility and connectivity between regions which is significant for increasing regional productivity (Biomantara and Herdiansyah, 2019: 7).

The history of the railroad is in line with the history of other modes of transportation which began with the invention of the wheel. At first the known train was a horse-drawn carriage consisting of one carriage, then a horse-drawn carriage was created that was able to pull more than one carriage and run on a special line made of iron, known as the rail (steel). Carriages are usually also used at mining sites which are coupled with lorries and pulled by horse power. Warpani (1990) explained that the term train which is currently known in Indonesia arose because in the past the fuel used was coal or wood, so when the train was running it would emit a puff of smoke from the chimney. In addition, there are also quite a lot of sparks. Furthermore, rail transportation modes continue to develop, including in terms of architecture, communication and information technology, and materials technology. For example super fast trains, monorail trains (with one rail), magnetic levitation trains (maglev), heavy transport trains. The term train is still used today, even though the train is now modern and no longer uses fuel in the form of coal or wood that emits fire from the chimney.(Pujiriani, 2008: 43).

The long journey of rail transportation in Indonesia began in the Dutch colonial era since 1840 (Directorate General of Railways, 2018: 1). The history of the development of rail transportation in Indonesia began with the construction of the first railway line connecting Semarang-Vorstenlanden (Semarang – Solo – Yogyakarta) in Kemijen Village, attended by the Governor General of the Dutch East Indies, Mr. LAJ Baron Sloet van de Beele (1861 – 1866) on June 17, 1864 (PT KAI, 2017: 6). The construction was carried out by the private railway company Nederlandsch-Indische Spoorweg Maatschappij (NISM) led by Ir. JP Bordes. This line stretches from Kemijen (East Semarang) – Responsibilities (Grobogan) using a track width of 1435 mm. This line has been open for public transportation since August 10, 1867(Yahya, 2015: 9).

The railway line encourages the government and other private investors to build other railway lines (Hardini, 2009: 14). The Dutch East Indies colonial government through its state railway company, Staatssporwegen (SS) helped build the railway line on April 8, 1875. The first line opened by the SS connected Surabaya-Pasuruan-Malang which was inaugurated in 1878.

Table 3.1 Railway Companies in Java
(Source: Katam, 2014: 6)

Private Railway Company (Verenigde Spoorwegbedrijf – VS)	
Company name	**Abbreviation**
Nederlandsch-Indische Spoorweg Maatschappij	NISM
Semarang-Cheribon Stoomtram Maatschappij	SCS
Semarang-Joana Stoomtram Maatschappij	SJS
Oost Java Stoomtram Maatschappij	OJS
Kediri Stoomtram Maatschappij	KSM
Modjokerto Stoomtram Maatschappij	MSM
Malang Stoomtram Maatschappij	MSM
Pasoeroean Stoomtram Maatschappij	PsSM
Probolinggo Stoomtram Maatschappij	PbSM
Madoera Stoomtram Maatschappij	MadSM
Seradjoedal Stoomtram Maatschappij	SDS
State Railway Company (Staatspoor en Tramwegen – SS)	
Staatspoor en Tramwegen	SS

In addition, the construction of railway lines was also carried out in Aceh (1876), North Sumatra (1889), West Sumatra (1891), South Sumatra (1914), and Sulawesi (1922). Meanwhile, in Kalimantan, Bali, and Lombok, only a feasibility study for the construction of the railway line has been carried out, and no construction has yet been carried out. By the end of 1928, the total number of railway and tram lines in Indonesia had reached 7,464 km, with details of government-owned railways being 4,089 km and privately-owned railways being 3,375 km.

Based on the areas mentioned above, the construction of the railway line also touched the city of Batavia (Jakarta) in order to support the smooth economic activities of Batavia as the economic center of the Dutch colonial government. Batavia as a port city, the economic center and the center of the Dutch government, is surrounded by centers of plantations selling export and agriculture, such as Depok, Bogor and parts of Banten (Tangerang) in the west and south which cultivate export-sold crops such as tilapia (indigo), tea and coffee as superior products (Muhsin, 2017: 183). Meanwhile, in the east, Batavia is bordered by Bekasi which is the main producer of rice plants for Batavia (Husin, 2016: 141). These plantation centers and Batavia were then interconnected in inter-island and international trade (exports).

Table 3.4 Export Development of the Dutch East Indies in 1830 – 1850
(Source: Furnival, 1976: 138)

Year	**Total Export Value (f.000)**	**Value of Exports to the Netherlands (f.000)**
1830	12.753	6.586
1831	14.115	6.813
1832	21,081	13.021
1833	22,595	13,953

1834	29,220	19,129
1835	32.158	22,331
1840	73.972	56,892
1845	64,455	48.024
1850	57,320	44,803

Agricultural products and export commodity plantations in the buffer zones of Batavia grew rapidly when the forced cultivation policy was issued by the Governor General of the Dutch East Indies Johannes van den Bosch (1830 – 1834) in 1830. (PTPN X, 2016). The forced cultivation system requires each village to set aside a portion of its land (20%) to be planted with export commodities such as coffee, sugar cane, tea, and tarum (tilapia) (Stbld No. 22 Year 1834). Later the crops had to be sold to the colonial government at a predetermined rate and the harvests were handed over to the colonial government. Meanwhile, villagers who do not own land are obliged to work 75 days a year (20%) on government-owned plantations as a form of tax (Zulkarnain, 2010: 31). Later the crops had to be sold to the colonial government at a predetermined rate and the harvests were handed over to the colonial government. Meanwhile, villagers who do not own land are obliged to work 75 days a year (20%) on government-owned plantations as a form of tax (Zulkarnain, 2010: 31).

Table 3.2 Total Export Crop Production in Matrix
(Source: Furnival, 1976: 129)

Year	Coffee	Sugar	Indigo
1830	288.000	180,000	42,000
1840	1,132,000	1,032,000	2,123,000

Coffee is the main export commodity on the island of Java. Coffee has a much higher export value reaching 80% profit compared to sugar exports (Sondarika, 2015: 63). This profit is due to the high selling price of coffee, but the very low buying price. Therefore, from forced cultivation, the Kingdom of the Netherlands was able to obtain very large profits (Ricklefs, 2008: 268).

Table 3.3 Government Profits in Guilds
(Source: Daliman in Sondarika, 2015: 63)

Year	Coffee	Sugar	Indigo
1840 – 1844	40,227,637	8,217,907	7,835,770
1845 – 1849	24,549,042	4,032,060	7,726,362

Some of this profit was used to pay off colonial debts and the rest was used to pay Dutch debts, the cost of the war with Belgium, the construction of railroads and public works. (Vlekke, 2016: 273). At that time, the Dutch economy had previously fallen due to the Java War (1825-1830) in Indonesia and the Belgian war (1830-1831) in the Netherlands. Approximately 25 million guilders (approximately US$2.5 billion today) have been removed from the Dutch state treasury to overcome the resistance launched by Prince Diponegoro.(Ricklefs, 2008).

The forced cultivation policy did not only provide abundant production and profits, but also gave birth to quite serious transportation problems in the mid-19th century (Yahya, 2015: 1). Previously, transportation problems in Java were not too heavy (Yahya, 2015: 1). However, the occurrence of increased production many times caused problems and difficulties on how to transport the plantation products from the interior of the plantation center to the port (Mulyana, 2017: 52). These export commodity plantation and agricultural centers are isolated areas, difficult to reach because of the hilly terrain or mountainous areas, so that transportation of plantation and agricultural products becomes difficult to carry out. Moreover, transportation needs at that time still depended on road transportation which was only served by traditional modes of transportation such as carts, horse-drawn carriages and boats to navigate the river.

At first the plantation products were transported by means of transportation in the form of people carrying them, then they were transported by animal-drawn wagons, and continued by boats along the river (Tim Telaga Bakti Nusantara, 1997: 16). For temporary storage of goods, warehouses are built in certain places, including on the banks of the river. Transportation using boats encounters obstacles when water from the high tide enters the river (Mulyana, 2017: 75). Likewise, traditional transportation such as carts are still very slow and have a very limited carrying capacity (Mulyana, 2017: 53). At that time a cart (train) pulled by animals only had a capacity of 7-10 pikul with a daily distance of 7-9 km (Tim Telaga Bakti Nusantara, 1997: 17).

Meanwhile, the distance from the hinterland to the port which reaches tens, even hundreds of kilometers, can only be covered in a few weeks, even months to arrive at the port. (Yahya, 2015: 1). The problem is further exacerbated if the cart-pulling animal (cow, buffalo) dies or is stolen by someone in the middle of the road(Team Telaga Bakti Nusantara, 1997: 17). In addition, the road that will be traversed by horse carts, carts and carts, during the rainy season cannot be passed because the road becomes slippery and muddy. Meanwhile, in the dry season the road is dusty(Lasmiyati, 2017: 198). This is of course very difficult for business actors, especially farmers.

The pre-existing postal road can only be traversed by certain groups. Transportation for transporting plantation products is absolutely not allowed to pass through that road on the grounds that the road will be damaged quickly(Lasmiyati, 2017: 198). As a result, the exported commodities arrive late at the port, for example the port of Jakarta for coffee and the port of Semarang for sugar(Breman, 2014: 72). Even though the ship carrying the goods had been waiting at the port for a long time. Another consequence is the high cost of transportation by these modes because agricultural and plantation products that will be sold to big cities become unsold, because they are damaged (rotten) due to long accumulation in warehouses in rural areas.(Team Telaga Bakti Nusantara, 1997: 17).

Meanwhile, there was a disaster for cart-pulling animals, especially cows in 1840 (Stroomberg, 2018: 409). Forced to pull too much weight and travel too far, many cows died. While the animal breeding process is too long because it goes through a process that runs naturally. This resulted in a drastic increase in cattle prices(Mulyana, 2017: 54), for example around Batavia (Jakarta) and Buitenzorg (Bogor) in 1810 the price of cattle was only f 30.00 per head, in 1840 the price rose to f 50.00. As a result, transportation costs have increased drastically.

Towards the end of the 19th century, private entrepreneurs felt that mass transportation was a very urgent need. They complain about the difficulty of

transporting plantation products for export as well as transporting imported goods from the port to the hinterland(Novita et al., 2015: 24). In order to overcome these transportation difficulties at the suggestion and request of the Governor-General of the Dutch East Indies, the Minister for Colonial Affairs JC Baud brought 40 camels from Teneriffe, West Africa and a number of donkeys to Java. The existence of these animals is intended as a tow cart transporting plantation products. In addition, they were also sent to the Dutch East Indies in the form of trains with geared wheels as many as 20 pieces complete with railroads. Unfortunately all the camels died, so this program was declared a failure and therefore discontinued. Therefore, the existence of mass transportation modes (train class) is expected to be able to overcome the transportation problems of transporting the produce(Lasmiyati, 2017: 198).

In connection with these difficulties, in 1846 Governor General JJ Rochussen (1845 – 1851) proposed to the Dutch government that the construction of a railway line connecting Batavia – Buitenzorg (Bogor) be carried out for economic, political and government administration purposes. (Team Telaga Bakti Nusantara, 1997: 48). Because trains are considered more effective and efficient than road transportation(Jumardi et al., 2020: 41). However, there is a lot of debate about who is entitled to the construction of the railway line.(Nurhayati, 2014: 2). On the one hand, there are parties who want the construction and management of the railway line to be held by the colonial government and on the other hand there are other parties who want the private sector to build and operate the railway in the future. The colonial government and the Netherlands did not agree(Firdausi, 2018b).

Rochussen believes that development should be carried out by the government itself not by the private sector, even though it requires a large budget. From an economic point of view, trains are useful for transporting plantation products such as coffee, tea and quinine from the interior of Bogor to the port in Batavia. If the transportation of plantation products is operated by the government, the tariff will be cheaper, and vice versa if it is operated by the private sector, the tariff will be more expensive(Mulyana, 2017: 60). In addition, from a political and administrative point of view, the railway is useful for connecting Buitenzorg (Bogor) which is the residence of the Governor General of the Dutch East Indies (Bogor Palace) and the administrative center of the government.(Wirawan, 2020). Therefore, Rochussen felt that the colonial government had more authority to build the railway line.

Following up on Rochussen's proposal, the Dutch government sent a military Lieutenant 1 Engineer David Maarschalk to conduct a survey of the planned construction of the Batavia – Buitenzoorg railway. This survey was carried out by the military because the land in the area was considered prone to disturbances, both security disturbances and disturbances from landlords(PT. KAI, 2017). As a result, in 1853, Maarschalk suggested that development should be carried out by the government but in operation it was delegated to the private sector through a rental system. Based on the decree of the King of the Netherlands (Koninklijk Besluit) dated October 31, 1852, many plantation entrepreneurs have submitted applications for the construction of the railway line to the Dutch government long ago.

They have an interest in making the distribution of plantation products smoother. But until 1861 their application was always rejected, because of the following things(Team Telaga Bakti Nusantara, 1997: 50): (1) There is no agreement on who has the right to manage the concession of the railway. (2) There is no valid field survey so research and studies must be carried out first (3) There is no valid economic study,

while the proposed budget is still limited to estimates that are not yet real (4) there is no real data on infrastructure transportation, making it difficult to estimate the benefits to be obtained and (5) difficulty in determining labor and work wages. These are the things that make the construction of the railway line yet to be realized.

When Rochussen became Minister for Colonial Affairs in 1860, he continued to strive for the government to carry out the construction of railway lines in the Dutch East Indies. However, his proposal was again rejected by the chief engineer of Burgerlijke Openbare Werken (BOW) or the colonial era Public Works Service, De Bruyn. According to him, the construction of the railway line is not too urgent(Mulyana, 2017: 61). Contrary to the proposal of Rochussen, his successor, Governor General AJ Duymaer van Twist (1851 – 1856) wanted the private sector to build and manage the route.

The Minister for Colonial Affairs at the time, JC Baud, said the same thing. According to him, private companies should be given the opportunity to build and exploit railways considering the political situation at that time was dominated by many liberal groups in parliament(Raap, 2017: xi). Both of them encouraged the Dutch government to immediately approve the concession request by the private sector. The debate over who has the right to build and operate the railway has finally reached a stalemate(Firdausi, 2018b). What happens next is who is better able to build the pathway. If the government has an interest and is able to build it, then the government must build it. On the other hand, if the private sector has an interest and is able to build it, then the private sector will build it.

Finally, the permit for the construction of the Batavia – Buitenzorg railway line was granted to the private railway company Nederlandsch Indische Spoorweg Maatschappij (NISM) based on the Decree of the Governor General of the Dutch East Indies Number 1 dated March 27, 1864 and Number 1 dated June 19, 1865 and the decree of the King of the Netherlands dated July 22 1868. The colonial government entrusted the construction of the Batavia-Buitenzorg railway to NISM because of its success in building the Semarang – Tanggung railway line in 1864-1867. In addition, this concession was also granted because the state finances at that time did not allow for the construction of the railway line.

However, the construction of the Batavia – Buitenzorg railway line could only begin in 1869. Exactly two years after the completion of the pioneering railway line in the Dutch East Indies, namely the Semarang – Tanggung railway line as far as 25 km. This was caused by various obstacles that were quite time-consuming, including: changes in concession requirements, especially technical problems regarding the provisions on the width of the rail to be used. Initially, the width of the rail to be used was the same as the Semarang – Yogyakarta line, namely 1,435 mm (international standard rail/width), but it was changed to 1,067 mm (narrow rail) in accordance with the decision of the Minister of Colonial Affairs de Wall dated 27 September 1869.

The government wants to determine the standard of rail width for the entire Dutch East Indies region (especially Java) to anticipate the possibility of fragmentation of the railway network on the island of Java whose construction has been planned. (Raap, 2017: xii). Wide rails have advantages in capacity, stability and comfort. Meanwhile, narrow rails have advantages in terms of savings because they are cheaper to build and operate(Raap, 2017: xiii). In addition, narrow rail lines can be built in less time with sharper turns. This became the basis for consideration for the colonial government to determine which rail width was more suitable for the topographical conditions of Java

Island from an economic point of view.

It is planned that the construction of the railway line will be carried out simultaneously. However, due to financial constraints in 1870, the 56 km long project led by JP Bordes had to be built in stages over four years. The first stage opened was the Batavia NIS (Jakarta Kota) – Koningsplein (Gambier Station) route for 6 km in September 1871. The second stage was opened by Koningsplein (Gambier Station) – Meester Cornelis (Bukit Duri) on 16 June 1872. The third stage was opened by MeesterCornelis (Bukit Duri) – Buitenzorg (Bogor) on January 31, 1873.

Based on research conducted by JA Kool, chief engineer of the Dutch railway company and NH Henket, professor of the polytechnic school in Delft (Netherlands) in 1869 suggested that the most suitable rail width was 1,067 mm. In mountainous areas (such as Java), rail construction costs can be reduced by up to 67%. So it was decided that the narrow rail was more suitable for the standard rail in the Dutch East Indies. The construction of the Batavia – Buitenzorg line began on October 15, 1869, witnessed by the Governor General of the Dutch East Indies, Mr. Pieter Mijer (1866 – 1872). The implementation of the construction was led by Ir. JP Bordes.

The total length of this route is 59 km, consisting of 55.6 km of the Batavia – Buitenzorg route, 1,058 m of direct route to Bukit Duri and 1.9 km of the route to Kleine Boom (Fish Market). It is planned that the construction of the Batavia – Buitenzorg line which consists of three parts, namely (1) the Jakarta section of 9.3 km, (2) the Bukit Duri section of 20.9 km, and (3) the Bogor section of 28.3 km, will be carried out simultaneously. However, in 1870 this project was stopped due to several problems, including financial problems, difficulties in adjusting the appropriate topography of the land, difficulties in finding suitable workers according to the needs and the problem of land acquisition to be built by rail so that the construction and operation was carried out in stages.

The first wave, which took place from October 15, 1869 to February 1870, had completed 7.6 km for the Jakarta section, 13.1 km for the Bukit Duri section and 18.7 km for the Bogor section. So the total number of lines that have been completed is 39.4 km, 5 km are being worked on and 14.1 km have not been worked on. Furthermore, the second wave lasted from June 1870 to June 1871 and the 9.3 km long route was completed in the Bogor section. Finally, the third wave took place from June 1871 to January 1873 which had completed the entire rail line so that it could be crossed by rail transportation.

The opening of the railway line is divided into the following periods: (1) September 1871, the operation of the railway line from Kleine Boom to Koningsplein (Gambir) for 9.3 km; (2) June 16, 1872, the Koningsplein – Bukit Duri section is operated for 4 km. (3) January 31, 1873, the Bukit Duri – Buitenzorg section of 46 km was operated which marked the operation of this entire line for the public. The construction of the Batavia – Buitenzorg railway line has cost f 3,197,700.00 or f 43,600.00 per km for the construction of the railway line and f 5,000.00 for equipment. Initially, the planned budget was f 4,000,000.00 or f 68,259.39 per km, but later changed because it used rails with a width of 1,067 mm (narrow rails) so that the total was f 3,311,250.00 or f 56,505.97 per km. So there is a savings of f 806.

The Batavia – Bogor railway line consists of 15 stations, starting from Pasar Ikan Station through the following stations: Batavia NISM (Jakarta Kota), Sawah Besar, Noordwijk (Jalan Juanda), Koningsplein, Pegangsaan, Bukit Duri, Pasar Minggu, Lenteng Agung , Pondok Cina, Depok, Citayam, Bojonggede, Cilebut and ends at

Bogor Station. However, in 1885, the northern three-kilometer line was closed, and Batavia NISM Station became the northern end of the railway line.

Meanwhile, forced cultivation which causes poverty for the Indonesian people, especially Java, has drawn criticism from a number of figures, including: van Deventer, Baron van Hoevel and Edward Douwes Dekker. (Poesponegoro and Notosusanto, 1984: 14). They think that Indonesia is not just a "cash cow" for the Netherlands, but must be developed and improved as well as the level of welfare(Puspitosari, 2018: 173). Criticism was also raised by liberal groups who accused that forced cultivation had also killed their plantation business in the Dutch East Indies(Wirawan, 2020). As stated by Anne Booth in Kurniawan(2014: 164) that forced cultivation only benefited the colonial government and was more inclined as a form of exploitation.

The liberal group that was in power at the time in the Dutch parliament was strongly opposed to the Cultivation system that occurred in Java and wanted to improve the lives of the Javanese population while seeking profits in the colony by allowing the establishment of various private companies. (Aprilia et al, 2020: 88). They insisted that the government should no longer intervene in economic activities, that it was sufficient that economic activities be carried out by the private sector, so that the private sector should be given freedom in doing business. These various reactions (especially from liberal groups) resulted in forced cultivation being slowly replaced by new policies that were more concerned with the welfare of the people, namely open door politics or better known as the liberal economic era in 1870.(Puspitosari, 2018: 172). This Policy started the era of economic liberalization in the history of colonialism in Indonesia (Aprilia et al, 2020:88).

In accordance with the demands of the Liberals, the colonial government began to give freedom to private entrepreneurs in various business activities in Indonesia, especially in plantation business in Java and outside Java.(Aprilia et al, 2020:88). During this period the Western private sector was more free to invest their capital by opening coffee, tea, sugar and quinine plantations and processing factories for plantation products which were quite large in Java and outside Java.(Daliman, 2012: 47). The plantations belonging to private companies experienced rapid progress, bringing in quite large profits for entrepreneurs and drastically increasing the profits of the Netherlands.(Witton, 2003: 25). With the increase in the plantation business, it will increase the need for transportation along with supporting facilities and infrastructure such as ports, railways, road transportation and telecommunications networks to support the improvement of people's lives.

The rail transportation mode is here to support the smooth distribution of transportation of agricultural and plantation products (Hariyadi, 2015). The opening of the Batavia-Buitenzorg railway line as far as 58 km in 1873 became the starting point for the development of rail transportation in Batavia(Laksana et al, 2015: 2). In its development, the rail transportation mode has changed its function from just transporting plantation products to being a mode of transportation for passenger transportation(Jumardi et al, 2020: 40). The year 1930 was the pioneering period in the history of the development of the Jakarta (Batavia) railway today. This is because until 1930 the facilities and infrastructure as well as the rail (rail) network have been built in the Jakarta metropolitan area (covering Bogor, Depok, Tangerang and Bekasi) today.

The study of the history of transportation, especially the history of rail transportation, is a distinctive feature among other historical themes and in the midst of the drought of writing Indonesian history today. (Purwanto and Adam, 2017: 4).

Moreover, the history of the presence of the rail transportation mode is not widely known by the public. The train as the oldest mode of mass transportation since the end of the 19th century in Indonesia (which most of the station buildings have been designated as Indonesian cultural heritage), is a silent witness to the history of the founding of this country.(Deddy, 2015; Purwandono, 2017). So writing a history about the history of the railway has benefits in an effort to instill awareness of the history of the nation's journey.

Through writing the history of the railway, it will increase people's learning about the history of the nation and the history of the Dutch colonialism, especially the history of the railways through the cultural heritage of the railways as a source of information. Another form of historical awareness through the history of railways is the emergence of awareness to participate in efforts to preserve railway cultural heritage, such as not committing acts of vandalism or other unlawful acts against rail cultural heritage and rail transportation facilities and infrastructure. Therefore, this research has the title "Railway Development and Economic Impact in Batavia in 1930".

RESEARCH METHODS (for research article)

The method used in this research is a historical or historical research method. Historical researchaims to reconstruct the past objectively and systematically and objectively by collecting, evaluating, verifying, and interpreting evidence in order to obtain accurate conclusions. (Suryana, 2010: 18). The reconstruction process was carried out based on literature studies, archival studies and documentation as research techniques. The historical method is the process of critically examining and analyzing past records and relics and writing down the results based on facts that have been obtained through imaginative reconstruction or historiography.(Irwanto and Sair, 2014: 11).

The historical method can also be interpreted as a method of research and writing history by using methods, procedures or techniques that are in accordance with the rules of historical science(Daliman, 2015: 27). With the existence of research based on historical methods, it is expected to produce scientific, objective, systematic and logical historical writing. Judging from the data source, data collection uses two sources, namely primary sources and secondary sources. According to Sugiyono (2016:137)Primary sources are data sources that directly provide data to data collectors, while secondary sources are sources that do not directly provide data to data collectors. Furthermore, when viewed from the method or technique of data collection, data collection techniques can be carried out in the following ways:

1. Archival Studies, by examining the original sources directly on the archives (Archive Studies) of the colonial era railways in the National Archives of the Republic of Indonesia (ANRI) as well as digital data sourced from credible and trustworthy websites such as https:// /www.delpher.nl/ https://indearchipel.com/, https://javapost.nl/ and others.
2. Literature study, by searching, reading, researching and reviewing written sources in the form of books, journals, papers and other scientific works as well as official websites that are relevant to research topics such as PT. KAI, PT. PGN, PTPN X and others.
3. Documentation, which is done by watching videos of historical interviews filled by leading practitioners such as Prof. Dr. Djoko Marihandono (Professor of History UI) and Dr. Dicky Soeria Atmadja, academician in the field of mapping

techniques at ITB who is active as vice chairman of the International Council on Monuments and Sites (ICOMOS) Indonesia.

In accordance with the research method used,In the historical research method, there are four research steps that the researcher must take (Gottschalk, 1986: 18) among others:

1. Collection of objects from an era and collection of relevant written and oral materials (Heuristics).To obtain data regarding the focus of the research, researchers looked for data sources in several places, including: the National Archives of the Republic of Indonesia (ANRI), the National Library of Indonesia, the Ministry of Education and Culture Library, the Regional Archives Library and the UHAMKA FKIP Library. Researchers are also looking for accredited journals and official websitescredible and trustworthy, such as, among others, https://www.delpher.nl/ https://indearchipel.com/, https://javapost.nl/, PT. KAI, PT. PGN, PTPN X and others.
2. Get rid of inauthentic written materials (Criticism/Verification) byassessing the content of the information obtained is by comparing one source with other similar sources (internal criticism) and questioning the sources that have been obtained with questions such as “who is the publisher/author?”, “when was the source published/made? ”, “what material is the source made of?”, “is the source authentic or not?”(Kartodirjo, 2017: 126).
3. Concluding reliable testimonies based on authentic materials (Interpretation).Researchers try to interpret the data and historical findings that have been obtained. In order for the researcher's interpretation to be accounted for, the preparation of this research is descriptive-analytic, namely analyzing how the development of rail transportation modes in Batavia occurred until 1930 and how the socio-economic conditions of the Batavian people were before and after the existence of the rail transportation mode. To help analyze the problems studied in this study, the researchers also used an interdisciplinary approach from other disciplines such as sociology and economics.
4. The researcher presents a complete article that is systematically and logically arranged into an analytical description of the development of the railway and its economic impact in Batavia (Historiography). The discussion is limited to 1930.

THE DEVELOPMENT OF RAILWAYS IN BATAVIA IN 1930

1. The Nederlandsch Indische Spoorweg Maatschappij (NISM) Railway Line Batavia (Jakarta) – Buitenzorg (Bogor) 1873

The presence of modes of transport train fire in Batavia, motivated by the needs of the transport of mass that is more rapid and esfisien to support to support the distribution of the results of the estate of Buitenzorg to be sold to the city as well as in exports to Europe via the Port of Sunda Kelapa, Batavia (Jumardi dkk, 2020: 41). Presence modes of transport train railway has shortened the process of transportation. Not like transport ashore more like a horse a train fire was not affected by the weather, no need to break the night and can reduce theft and excess charge. During a half months the operation of the train fire NISM it very many passengers. But in the months following its passengers to experience a decline.

Below this is a table number of passenger service train fire Batavia - Buitenzorg at the beginning of the operation among other things:

Table 4.1 Number of Passengers on the Batavia – Buitenzorg Train in 1873
(Source: Sutarma, 1988: 58)

Months to	Total Passengers Total	Number of Passengers/ day	Number of Passengers/ train/day
I (September)	35.740	2383	170
II (October)	45.091	1455	104
III (November)	26.758	892	64
IV (December)	22.015	710	51

The train travel costs are divided into three classes, namely class I (Europe) at f 0.12 per km, class II (foreign eastern: Chinese, Arabic) at f 0.09 per km and class III (inlanders/natives) at f 0.03 per km. It is possible that this caused NISM to suffer losses in operating this railroad in 1872. The losses suffered by the NISM railway company have inevitably resulted in a shock to entrepreneurs' confidence in the company's success (Stroomberg, 2018: 411).

Details of NISM receipts from passengers, goods, consignments, vehicles, goods for tasks and others only amounted to f 72,384.29. NISM suffered a loss of f 4,277.83. However, in 1873 and the following years after the Batavia – Buitenzorg railway line was operational, NISM experienced quite a drastic profit. In 1873, the net income of NISM was f 379,547.95 while the total expenditure was f 174,250,375. So the profit amounts to f 205,297,575.

Based on the NISM report from 1870 - 1880, the Batavia-Buitenzorg route was generally dominated by freight transport, with details of 25% local transportation, 25% direct transportation of raw materials from Priangan (Bogor), 5% direct transportation to Tanjung Priok port, 5% transit , 11% construction work. And of the total goods transported 77% are owned by private companies. Commodities transported include coffee, sugar, potatoes, peanuts, cinnamon, wheat flour, oil, palm sugar and rice.

The following is a table of profits that NISM earns from the operation of the Batavia – Buitenzorg railway from year to year.

Tabel 4.2 Keunggulan NISM Tahun 1874 – 1899
(Source: Poolman, 1917)

Year	Reception *f*	Expenditure *f*	Profit *f*	Dividend %
1874	458,671	213.091	245.580	3.75
1879	644.674	263.544	381.130	6.75
1884	751.562	321,497	430.065	8.25
1889	716,944	324,871	392.073	6.10
1894	741,486	327.593	413,893	9.40
1899	844,909	396,006	448,903	11.10

Since then the business of rail transportation has become one of the mainstays of entrepreneurs to invest, because it can bring promising profits. The

success of NISM in building the Semarang – Yogyakarta railway and the Batavia – Buitenzorg railway line has stimulated investors' interest in building railways in other areas (Hardini, 2009: 14). The existence of these two railway lines is also proof that the train is present as a solution to the need for more effective transportation in supporting the smooth transportation of plantation products (Jumardi et al., 2020: 40). Furthermore, NISM as a private railway company is able to expand its wings by building other railway lines on the island of Java.

In addition to the Batavia – Buitenzorg (middle cross) railway line which has been opened by NISM, there are other railway companies that also operate the train line in Batavia, namely Staatsspoorwegen (SS) or the State Railway Company which operates the western route, including Batavia – Tanjung Priok was inaugurated in 1885 and Batavia – Anyer 1900 with the Duri – Tangerang branch in 1899 and Bataviasche Ooster Spoorweg Maatschappij (BOSM) or the East Batavia Railway Company which opened the eastern route, Batavia – Bekasi – Karawang in 1891.

These three railway companies tend not to cooperate in managing the railway network in Batavia so that the railway infrastructure in Batavia is not well maintained and not integrated (Raap, 2017: 26). Therefore, the colonial government decided that the management of the entire railway network in Batavia should be held by only one party, in this case the SS, which is a state company. Based on Staatsblad No. 141, the colonial government established a state railway company called Staatsspoorwegen (SS) on April 6, 1875. From the beginning of its presence, the SS was encouraged to take over the entire railway network in Batavia so that railway facilities and infrastructure in Batavia could be improved.

This takeover plan has existed since 1877, due to the government's desire to have a direct railway line from Bandung to Batavia. By taking over the Batavia – Buitenzorg railway line, the train line to Bandung can be realized. In addition, this takeover was also carried out so that the SS could integrate this railway line with other railway lines in Batavia. Through tough negotiations, government began to apply to NISM to take over the Batavia – Buitenzorg . railway line(Hariyadi and Sudarsih, 2015: 57).

In fact, in 1881 an agreement was reached between NISM and SS regarding the sale and purchase of this line, amounting to f 6,000,000.00. However, the agreement could not be implemented because the price was deemed too high. SS had difficulties in procuring the budget. As a result, in 1898, the SS preferred to take over the Batavia - Karawang (BOSM) railway line first to realize the Batavia - Bandung direct railway line. Finally in 1906 the SS succeeded in realizing a direct railway line connecting Batavia - Bandung via Karawang - Padalarang.

Meanwhile, NISM feels that the profits from the Batavia - Buitenzorg railway line are decreasing and even losing money, after the government succeeded in opening the Batavia - Karawang - Padalarang line. In its development, the Batavia - Buitenzorg - Cianjur railway line was unable to compete with the Batavia - Karawang - Padalarang railway line which was owned by the government. More passengers use the Batavia - Karawang - Padalarang railway to go to Bandung or to Batavia, because it is considered

faster than the Batavia - Buitenzorg - Cianjur railway(PT. KAI, 2017b). This situation prompted NISM to immediately sell the Batavia - Buitenzorg route to the government.

Seeing this situation, since 1908, the SS tried to renegotiate with NISM to take over the Batavia – Buitenzorg railway line. NISM offered a higher price to sell this line to the government of f 11,000,000.00. The price offered by NISM cannot be accepted by the government. The government then offered it, so in 1913 there was an agreement on the price to be f 10,600,000.00. Finally, based on Staatsblad Number 469 of 1913, the Batavia – Buitenzorg railway line officially became part of the SS railway network and was integrated with other railway lines.(Katam, 2014: 6).

With the sale of this line to SS, in the same year, SS began to repair railway facilities and infrastructure on this line.(Hariyadi and Sudarsih, 2015: 57). Some lines and stations were demolished, renovated, and some were built new. Among them by building a double line in 1917 and closing the Batavia SS Station (ex-BOSM/Jakarta Kota) in 1923.(Hariyadi and Sudarsih, 2015: 58). Instead, Batavia Noord Station (ex-NISM/Jakarta Kota) which is located about 200 m to the north is temporarily used as the main station serving passengers. The entire building of the Batavia SS Station was demolished in 1926 to build a larger and more magnificent station.

This development was carried out by the BOW and in terms of implementing the design, it was carried out by Algemeen Ingenieur Architectenbureau (AIA) or the General Bureau of Architects and Engineers (Hariyadi and Sudarsih, 2015: 58). The design phase of the building was started in 1927 by FJL Ghijsels. Finally the station design consisting of 12 lines was ready. Hollandsche Beton Maatschappij (HBM) as the winner of the project tender began construction in 1928. A year later this new station was completed and inaugurated on October 8, 1929 under the name Batavia Benedenstad Station. The inauguration ceremony was carried out in a morning greeting ceremony which was witnessed directly by the Governor General jhr. ACD de Graeff who ruled in the Dutch East Indies in 1926-1931(Kompas, 2009)

Coinciding with the construction of the new Jakarta Kota Station, SS also electrified this line, this line became the second line to be electrified after the lineTanjung Priok – Meester Cornelis . train(PT KCI, 2017). In 1928, the SS electrified this line on the part of Batavia – Koningsplein – Manggarai – Meester Cornelis (Laksana dkk., 2020: 3). The electricity in this route is supplied by the Kracak PLTA through Depok and Kedungbadak (Bogor) substations. Thus, in 1930, for the first timeElectric Railroad (KRL) lineoperate.

2. Train Line Tanjung Priok Port Service Batavia – Tanjung Priok 1885

The existence of this railway line cannot be separated from the bustle of Tanjung Priok Port, which has become a port of pride during the Dutch East Indies era. Its presence not only served as the gate of the city of Batavia but also the Dutch East Indies. In its development, the port of Sunda Kelapa (Batavia) in the area around the Fish Market was no longer adequate due to sedimentation of canal mud at the Ciliwung estuary since 1832 and its peak in 1859(Hariyadi and Sudarsih, 2015: 57). The port has experienced severe silting that causes ships can no longer dock in the port, so cargo must be transported from the middle of

the sea by boats. Therefore, a new port facility was built at Tanjung Priok, which is about 10 km to the east of the Sunda Kelapa port to replace it.

Initially the Batavia – Tanjung Priok route was built by the Tanjung Priok Port Service for the transportation of materials for the construction of the Tanjung Priok Port(Laksana et al, 2020: 6). At the same time as the construction, the old Tanjung Priok Station was built, which is located right above the pier of Tanjung Priok Port. This station was completed by Burgerlijke Openbare Werken (BOW) in 1883. Subsequently, the operation of this railway line was handed over to the SS in 1884.(Hariyadi et al, 2016: 15). It was only on November 2, 1885 that the opening was inaugurated to coincide with the opening of the Tanjung Priok Port. Initially, this train line only aimed to Batavia NISM where passengers could directly transfer to the NISM train to Bogor(Raap, 2017:116). In addition, this train line is also connected to the Batavia SS Station (ex-BOSM/Jakarta Kota) where passengers can also transfer to the BOSM train to Karawang.

With the increasing activity of the port, since 1914, there was an expansion of the port which caused the old Tanjung Priuk Station to be dismantled(Hariyadi et al, 2016: 18). The SS then searched for a new place next to the Lagoa warehouse for the construction of a new station. SS assigned Ir. CW Koch as the main architect of the station. To prepare for the construction of the station, SS made a mock-up model of the new station. During construction it required about 1,700 workers, 130 of whom were European nationals.

Coinciding with the construction of a new station, in 1917, the SS had a plan to electrify the railway network in Batavia and its surroundings.(PT KCI, 2017). Electrification is considered to be economically profitable. This route is the first to undergo electrification in the Tanjung Priok – Meester Cornelis section. Electrification began in 1923 and was completed on December 24, 1924. Electricity on this route was supplied by the Department of Water and Electricity, which at that time built the Ubrug Hydroelectric Power Plant (PLTA) and the Kracak Hydroelectric Power Plant in the Sukabumi area. The electricity is then supplied to the Ancol and Jatinegara substations.

The colonial government then bought a number of electric locomotives to pull the train series(PT KCI, 2017). The locomotives purchased were the 3000 series made by Swiss Locomotive & Machineworks (SLM) – Brown Baverie Cie (BBC), the 3100 series made by Allgemaine Electricitat Geselischaft (AEG) in Germany, the 3200 series made in Werkspoor in the Netherlands, as well as the KRL from the Westinghouse and General Electric factories. Electrification then continues by operating the Batavia - Kemayoran and Batavia - Koningsplein - Manggarai - Meester Cornelis routes(PT KCI, 2017).

Since April 6, 1925, a new station was opened for the public outside the supervision area of the Tanjung Priok Port Service(Raap, 2017:117). This opening coincided with the launch of the first KRL route Tanjung Priok – Meester Cornelis. The first launch was at the same time commemorating the 50th anniversary of the SS. The station building is in Art Deco style and has an area of 3678 m2 (0.3678 ha), standing on an emplacement area of 46930 m2 (4,693 ha).(Widayanti and Widyarsih, 2012: 9). Then since May 1, 1927, the City of Batavia has passed the KRL that surrounds the city. With the completion of this station, there was a "waste" committed by the SS. With eight lines and

five platforms, this station is very large and by 1929 this station is almost as big as Batavia Benedenstad Station (Jakarta Kota)(Widayanti and Widyarsih, 2012: 7).

Figure 4.1 Tanjung Priok Port and Station
(Source: https://javapost.nl/2020/04/18/badplaatsen-van-batavia-tjilintjing/)

This station is also equipped with temporary lodging on the left wing of the building for passengers who will continue their journey by boat. With the opening of Kemayoran Airport which serves general flights, SS has to face a tough challenge considering that many passengers are switching to airplanes. The station which was built at a distance of about one kilometer from the port made passengers reluctant to use this new station(Hariyadi et al., 2016: 24). Because of this, many connecting trains with ships immediately turned onto the track to the harbor dock and did not stop at this new station, which had always been quiet from the start. This station will only be the terminus for KRL since 1925(KA Magazine, 2014).

3. Bataviasche Oosterspoorweg Maatschappij (BOSM) Railway Line Batavia – Bekasi – Karawang 1891

The construction of other railway lines was also carried out by the private railway company Bataviasche Oosterspoorweg Maatschappij (BOSM). BOSM is a private railway company that gets a concession for the construction of a railway line to cross East Batavia. Initially, the construction of the Batavia – Bekasi railway line would be carried out by HJ Meertens and Firma Tiedeman and Van Kerchen. After being given permission by the colonial government to build, it turned out that HJ Meertens and Firma Tiedeman and Van Kerchen did not carry out the construction. Finally on September 16, 1882 the government revoked the concession that had been granted.

The government gave the concession for the construction and exploitation of the Batavia – Bekasi line to the Nederlandsche Handel Maatschappij (NHM) based on Government Decree 19 February 1884 Number 1. NHM made changes to the route from the plan previously proposed by HJ Meertens and Firma Tiedeman and van Kerchen. The line that was built was the train line from Batavia via Pasar Senen and Meester Cornelis to Bekasi. NHM apparently did not build the Batavia – Bekasi railway. Half a year after obtaining concessions

from the government, NHM then handed over the concessions it had received to Bataviasche Oosterspoorweg Maatschappij (BOSM).

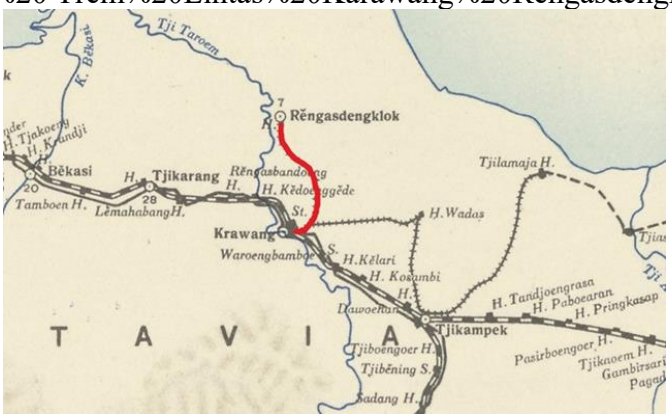
After this handover, BOSM began to build a segment of the railway line that stretched from Batavia Zuid (South Batavia) - Bekasi for 27 km which started operating on March 31, 1887. (Java-bode: nieuws, 1885). It is stated that the results of transportation on the Batavia-Bekasi railway for November 1889 amounted to f 9,633.38 or f 11.89 per kilometer day and for December it was f 8,827.49 or f 10.54 per kilometer day. This figure is smaller than the profit of the Batavia-Buitenzorg line at the beginning of its operation(De locomotief, 1890). However, this did not discourage BOSM from developing this pathway.

Figure 4.2 Batavia – Bekasi railway line
(Source:https://heritage.kai.id/page/Stasiun%20Bekasi)

Batavia
St.n Bekasi
Tj. Priok
Tj. Priok
Tj. Priok

own station in Batavia, namely Batavia BOSM Station. Thus, the operation of the Batavia – Karawang railway line through Meester Cornelis and Bekasi as far as 63 km is owned by BOSM.

Figure 4.3 Bekasi – Karawang railway line (Source: https://heritage.kai.id/page/ Pembangun%20 Trem%20Lintas%20Karawang%20Rengasdengklok)



After the route was extended to Karawang, BOSM actually experienced financial problems and poor management (PT. KAI, 2017a). The government agreed with the condition that after the work was completed, the Batavia – Karawang line was purchased by the state railway company (SS), including Bekasi Station. Finally, after the route was extended to Karawang on August 4, 1898 Batavia - Karawang was officially purchased by the SS for f 5,000,000.00(Laksana et al., 2020: 4). The purchase of this line is related to the government's desire to have a direct train line to Bandung.

Throughout 1900 there were eight trains that stopped at Bekasi Station in a day. Four times from Batavia-Karawang and vice versa. The journey from Batavia to Bekasi takes about two hours and fifteen minutes. The cost of train travel is differentiated by class. In the same year, for a trip from Batavia to Bekasi, class 1 passengers spent f 1.7. With the same route, class 2 passengers pay a train ticket of f 0.8, the fare for class 3 passengers (mixed and indigenous) is f 0.45 and class 3 only needs to pay f 0.26. Meanwhile the cost of goods per 10 kg is f 0.10.

After successfully acquiring this railway line, the SS immediately extendedThis line reached Padalarang on May 2, 1906. The Batavia – Bandung line via Karawang Padalarang was built to cut the travel time of the Batavia – Bandung train. SS uses this line for express trains, so this line is very suitable for passengers who want to arrive in Bandung immediately. The journey to Batavia and Bandung via Karawang – Padalarang only takes 2¾ hours. Therefore, it is hoped that passengers from Batavia who want to go to Bandung or vice versa prefer to take the train through this route.

To facilitate the journey to Bandung, in 1909, a new station was built which is located about 600 meters to the east of the former BOSM Meester Cornelis Station.(Het nieuws van den dag voor Nederlandsch-Indië, 1909). The Head of Exploitation Westerlijnen (west passage) SS announced that the new Meester Cornelis Station was only temporarily opened for passengers, luggage

and freight forwarders on October 15, 1909. Meanwhile, the old station would still be used for freight traffic.

4. **Staatsspoorwegen Railway (SS) Duri – Tangerang 1899 and Batavia – Anyerkidul 1900**

Staatsspoorwegen(SS) began operating in the Banten area since the 1890s. This was done after the completion of the construction of the railway line across the southern island of Java. To open up the isolation of the Banten area which during the Dutch colonial period became one of the areas that experienced a lot of upheaval, in addition to the construction of Jalan Raya Pos Anyer - Panarukan,(Wijokangko et al., 2020). So the infrastructure in the Bantam (Banten) area continues to be developed so that the mobility of the community becomes smoother, and since then, the construction of the West Java (Banten) railway line has begun to be rolled out.

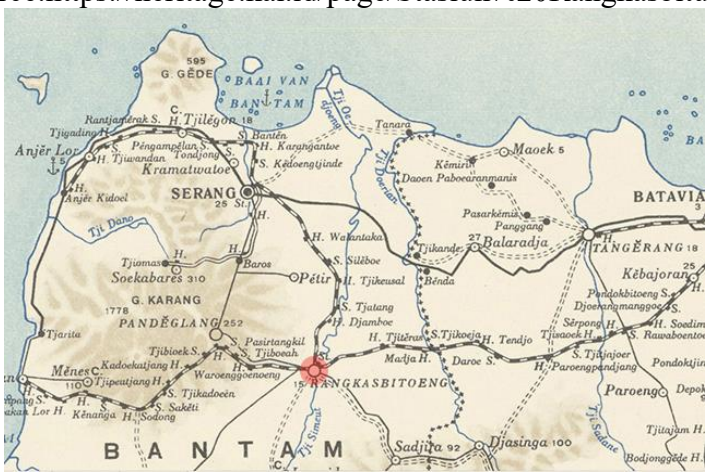
The construction of a railway line in the Banten area began after SS obtained a railway line construction concession issued by the government based on Staatssblad No. 180 dated July 15, 1896, to build the Batavia - Rangkasbitung - Cilegon - Anyer Kidul railway line and the Duri - Tangerang branch crossing with a total length of 175 km as well as the Tanah Abang - Pegangsaan link(PT. KAI, 2017e).

The SS built the Batavia – Anyer Kidul line starting from Batavia Station, Angke, then turned south towards Duri, and met at Tanah Abang. From Tanah Abang, the route goes west to Rangkasbitung. This line was completed on October 1, 1899. However, the line from Batavia SS Station to Angke had to stop operating and was dismantled in 1929 due to the construction of the new Batavia SS Station as the main station.

Figure 4.4 Line Map of Batavia SS – Duri
Source: http://maps.library.leiden.edu/apps/s7#

From Rangkasbitung the line was extended to Serang on July 1, 1900 and ended near the port of Anyer Kidul on December 20, 1900. Furthermore, the SS also built a 56 km cross-branch from Rangkasbitung – Pandeglang – Labuan which operated on May 2, 1906, as well as cross-branch Cilegon – Merak 10 km long which was in operation in 1914.

Figure 4.5 Map of Rangkasbitung – Anyer Kidul Railway
(Source:https://heritage.kai.id/page/Stasiun%20Rangkasbitung)

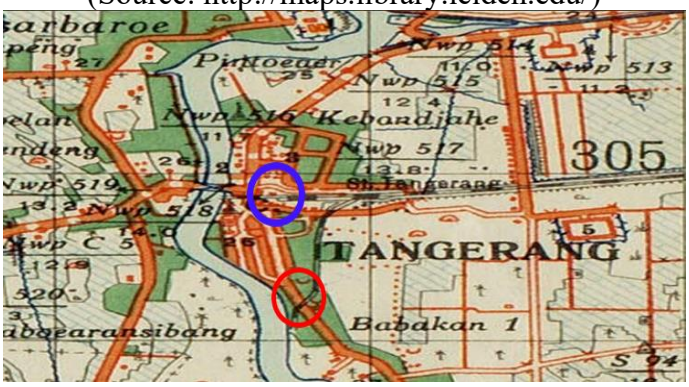


The existence of a train service makes it easier for passengers to transport and transport goods(PT. KAI, 2017e). Imported goods from abroad were brought from the port of Batavia for further distribution to Banten. On the other hand, agricultural and plantation products from the interior of Banten such as rice, rubber and fruits are transported to the Tanjung Priok port. Banten residents have an average livelihood as farmers. The most important plantation product is coconut. European plantations were limited to rubber (hevea) found in southern Banten.

In addition, the existence of this route is also used as passenger transportation to facilitate the Merak - Lampung ferry port. The series of trains that are run consist of several types which are distinguished by passenger class. There are four classes of trains, namely class 1 for Europeans, class 2 for foreign easterners: Chinese and Arabs, class 3 for mixed and natives and class I which is reserved for indigenous groups.

Meanwhile, the 19 km Duri – Tangerang branch line was inaugurated on January 2, 1899. From Tangerang this line also has branches to the Cisadane River to transport sand and agricultural products, such as rice, peanuts, cassava, tilapia, coconut, and various types of vegetables. .(de Jong, 1993: 45).

Figure 4.6 Railway Line Branching to Cisadane River
(Source: http://maps.library.leiden.edu/)



In addition to transporting agricultural products, the Duri – Tangerang route also transports household handicrafts or small industries, namely woven bamboo hats known as Tangerang hats.(PT. KAI, 2017f). Buyers of these hats are mostly filled by Chinese and Europeans. The Chinese would resell it domestically while the Europeans would send it abroad via the Tanjung Priok Port. The woven hat craft at that time had an important meaning(PT. KAI, 2017f). By 1913 the production of woven hats had reached more than 5 million units. In the same year, the sales value of woven hats has reached f 1,328,820 with a unit price of 26 cents.

Nine months after the inauguration, a branch from Duri was also opened to the LJN Eindhoven en Compagnie Gravenhage gas plant.

Figure 4.7 Location of Duri Station (red) and gas plant (blue)
(Source: https://heritage.kai.id/page/Stasiun%20Duri)

The factory, which was established in 1862, distributes gas from the evaporation of coal for lighting needs in Batavia and Meester Cornelis(PT. PGN, 2018). Coal supply for the gas plant is supplied directly from the Tanjung Priok port. Finally, in 1864 this gas company was taken over by the state-owned gas company, Nederlandsch Indische Gasmaatschappij (NIGM).(Alkatiri, 2019).

5. The Old Rail Link for Tanahabang – Salemba – Kramat 1900 and the New Rail Link for Tanahabang – Manggarai – Jatinegara 1913

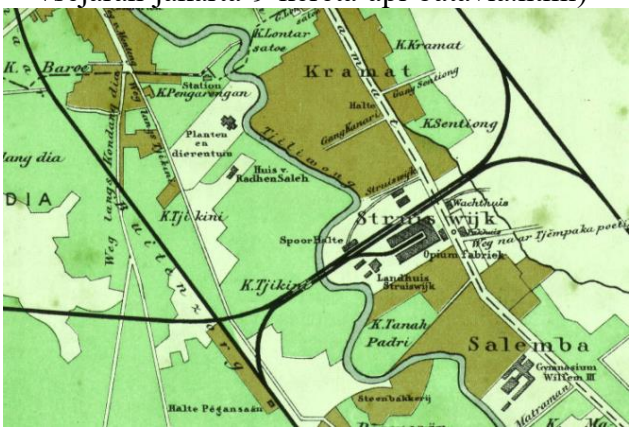
After the operation of all railroads in Batavia, to integrate the railway network in Batavia, a connecting line was built through Tanahabang - Salemba - Kramat (Interchange Cikini) (Laksana and Wijokangko, 2020: 7). The line, which operated around 1899 - 1900, coincided with the opening of the Duri - Tangerang railway line, starting with Tanah Abang Station via New Gondangdia (Menteng Housing) then cutting the Batavia - Bogor line near the Pegangsaan Bus Stop via Salemba Station and continuing with the Pasar Senen line - Meester Cornelis near Kramat Station.

Before heading to Salemba Station, the train line from Tanah Abang Station crosses a bridge over the Ciliwung River. Furthermore, after crossing the railway bridge over the Ciliwung River, this connecting line has branches to the Opium Factory in the Salemba area. The Opium Factory, which is estimated to have been in existence since 1901, is opposite Salemba Station and has a special train line to Salemba Station. Opium in the Dutch colonial era was something that was legal, official and well managed by the government. The large profits

obtained by the Dutch East Indies government from taxes on opium/opium made the Government legalize the trade and consumption of opium and even establish and manage opium factories. The use is for purposes in the health sector, and partly for consumption.

Opium did not come from the Dutch East Indies, but from outside the Dutch East Indies. The legal opium belonging to the government is opium originating from Turkey, Persia and Bengal, the largest opium consumers in the Dutch East Indies are the Indigenous people and the Chinese, followed by the indigenous aristocrats and Europeans.

Figure 4.8 Old Connection Line Tanah Abang – Pegangsaan - Salemba
(Source: http://poestahadepok.blogspot.com/2016/12 /sejarah-jakarta-9-kereta-api-batavia.html)



With this connecting route, a circular route was formed around the city of Batavia (ceintuur-baan) starting from Batavia SS, Angke, Duri, Tanah Abang, Pegangsaan, Salemba, Pasar Senen, Kemayoran, until returning to Batavia SS.

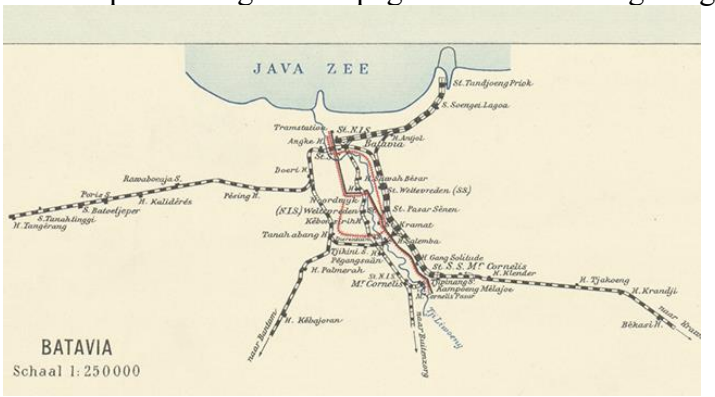
When the SS was rearranging the railway facilities and infrastructure on the Batavia – Buitenzorg line, this connecting line was also undergoing restructuring. (Hariyadi and Sudarsih, 2015: 139). One of them is by dismantling Bukit Duri Station (which was later converted into a train depot) and replacing it with a bigger station in Manggarai. The station which was completed on May 1, 1918 has one of the most complete large workshops owned by the SS to carry out maintenance on trains, wagons and steam locomotives. The arrangement was also carried out by rebuilding this connecting line with the new Manggarai - Jatinegara link. This new connecting line removes the railway line from the New Gondangdia area.

Figure 4.9 New Connection Line Tanah Abang – Manggarai – Meester Cornelis
(Source: http://poestahadepok.blogspot.com/2016/12/sejarah-jakarta-9-kereta-api-batavia.html)

To connect Manggarai Station with Jatinegara Station, SS started to build a double line that goes uphill from Jatinegara Station, the new line is made higher than before. In addition, SS also built a concrete bridge over the Ciliwung River. To avoid level crossings with congested highways, the SS raised the railway line, with the construction of a viaduct (bridge) over Matramanweg (Jalan Matraman) which was completed in 1918.

Then this new connecting line starts from Tanah Abang (via the south of Menteng Housing) - Manggarai - Jatinegara. Coinciding with the construction of this new connecting line, a new canal (Flood Kanal Barat) was also built, which was connected to the Krukut River in Tanah Abang.

Figure 4.10 Cross-Jakarta Railroad
(Source: https://heritage.kai.id/page/Stasiun%20Tangerang)

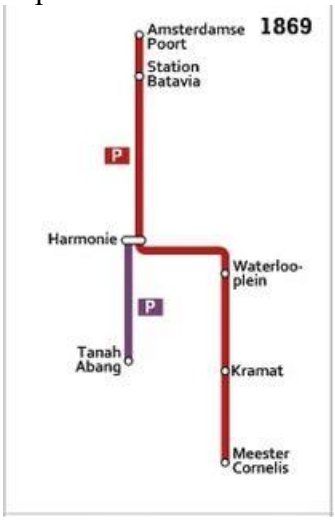


The completion of the construction of Manggarai Station and this new connecting line, has made the old connecting line Tanahabang - Salemba - Kramat (Cikini Interchange) no longer functioned and replaced by a new connecting line Tanah Abang (via south of Menteng Housing) - Manggarai - Jatinegara (Interchange Jatinegara). Thus, the train lines in Batavia were truly connected into a unified whole which was then known as the Trans-Jakarta Railway (Jabodetabek).

6. Tram Batavia Bataviasche Tramweg Maatschappij (BTM) / Nederlands Indische Tramweg Maatschappij (NITM) 1869 and Batavia Elektrische Tram Maatschappij (BETM) 1899

The development of rail-based transportation modes in Batavia was not only filled with rail transportation modes, but there were trams (trams) which started the history of rail transportation modes in Batavia. Its history begins with the operation of the horse tram by the private company Bataviasche Tramweg Maatschappij (BTM) on April 20, 1869.(Batavia Handelsblad, 1869). The width of the rail used is 1,188 mm. At first this horse tram was used as a mode of urban transportation serving the Fish Market route – Kampung Melayu via Amsterdamsche Poort (Amsterdam Gate) – Molenvliet (Glodok) – Harmoni, in the same year it was extended to Tanah Abang with a branch to Meester Cornelis via Rijswijk (Water Door). /Jalan Juanda), Pasar Baru, and turn again to Waterlooplein (Banteng Field), Stoviaweg (Senen), Tanah Tinggi, then Kramat, Salemba, Matraman, Meester Cornelis and end at Kampung Melayu(In de Archipel, 2017).

Figure 4.11 Horse Tramway Batavia – Meester Cornelis (Kampung Melayu)
(Source: https://indearchipel.com/2017/12/04/trams-batavia-overzicht/)



At the beginning of its operation, this horse tram can accommodate 30-40 passengers and is pulled by 4 horses (Yahya, 2015: 66), is estimated to have served about 1500 passengers and by September 1869 the number had increased to 7000 passengers. But Alwi in Firm(2019)mentions that in 1880, BTM experienced operational problems due to many horses dying from exhaustion and the number was even higher. The horses imported from Sumba, Timor, Sumbawa, Tapanuli, Priangan and Makassar did not match the hot and humid tropical weather of Batavia.

The problem is getting more and more troublesome when the towing horses defecate carelessly so that along the rails they pass are filled with dirt and unpleasant odors(Teguh, 2019). High horse taxes and poor tram finance have caused the use of horse trams to decline drastically. As a result, Europeans are reluctant to use horse trams(Sulaeman, 2017: 8). Apart from that problem, horse trams are quite helpful for city residents to meet their transportation needs. The

fare for each route is only 10 cents. This problem forced the operation of horse trams to be temporarily taken over by the Dummler en Compagnie . Firm(Java-bode : nieuws, 1881).

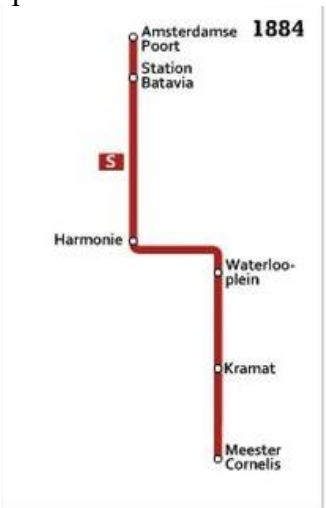
Then, on 19 September 1881 BTM officially changed its name to Nederlands Indische Tramweg Maatschappij (NITM) and took over the Batavia tram service which was previously operated by the Dummler en Compagnie Firm. At the beginning of this name change, NITM had an initial capital of f 1,150,000 (which later increased to f 1,241,000.00)(NITM, 1921). The company also established an office in Amsterdam, represented by a management board consisting of MP Pels, FJH Schmitz, IJ van Santen, DFA Bauduin and GHL van Oordt.

Since the name change, the fleet and infrastructure have been improved in stages, namely by replacing horsepower with steam locomotive power as the towing, steam locomotives are considered more efficient because they can shorten travel time. This steam locomotive was produced by Hohenzollern, with its first purchase costing f 8,800.00 and the process of transitioning the fleet being completed in 1884. Meanwhile the horse tram service was closed from 12 June 1882.

The steam tram service began to reopen on July 1, 1883 with the inauguration of the steam tram service to coincide with the inauguration of the Jakarta Kota – Harmoni crossing(Batavia Handelsblad, 1883). The steam tram operates daily from 5:45 to 18:30 at intervals of 10 – 7 minutes. Steam tram ticket prices vary for each class, in this case the colonial government set a policy of racism, including class I for Dutch and Europeans, class II for Arabs and Chinese and natives only allowed in third class.(Teguh, 2019).

To help the economy of the people in Batavia, in 1904, NITM opened a steam tram service called Pikolanwagen, which was devoted to transporting merchandise and livestock to Batavia.(Sulaeman, 2017: 10). This steam tram service is very helpful for fishermen from the Fish Market to bring their catch to the city. This steam tram service is also used by goat breeders to carry their livestock, by the Dutch, the Pikolanwagen is seen as a tram that has unlimited carrying capacity.

Figure 4.12 Batavia Steam Tramway – Harmoni
(Source: https://indearchipel.com/2017/12/04/trams-batavia-overzicht/)



Entering 1897, the tram service in Batavia continued to increase with the presence of electric trams operated by another private company called Batavia Elektrische Tram Maatschappij (BETM).(Java-bode : nieuws, 1897). The company started operating in Batavia since the inauguration of the electric tram connecting Harmoni – Tanah Abang Market – Dierentuin (Menteng) in November 1899, with a branching route to Tanah Abang Station which operated in November 1899.(Bataviaasch Nieuwsblad, 1899). This electric tram line was then extended to Batavia BOS Station via Kwitang, Kramat, Pasar Senen, Gunung Sahari (across the Ciliwung river), then turned west via Jacatraweg (Jalan Pangeran Jayakarta), and ended at Batavia BOS Station. Finally in 1907 this line was extended again to the Amsterdamsche Poort/Fish Market. But unfortunately the branch to Tanah Abang Station was closed in 1904.

Figure 4.13 Harmoni Electric Tramway – Dierentuin (Menteng) and Kramat – Batavia BOS
(Source: https://indearchipel.com/2017/12/04/trams-batavia-overzicht/)

The presence of electric trams is considered to be very helpful for city residents. Apart from the cheap ticket price (a penny or ten cents), the route it takes almost covers the entire city area. Then, the schedule is very tight, so people don't have to wait long(Bataviaasch nieuwsblad, 1900). Due to these advantages, electric trams have become quite important transportation for transportation needs in Batavia. In order to improve services, BETM also continued to improve by extending its electric tram line in 1913, by opening the Batavia – Dierentuin route via Harmoni, Koningsplein/Weltevreden, and ending at Dierentuin.

Figure 4.14 Batavia Electric Tramway
(Source: https://indearchipel.com/2017/12/04/trams-batavia-overzicht/)

Meanwhile, NITM also continued to improve its services by building a double track on its line in 1915 and purchasing a new steam tram train in 1921. Therefore, the presence of the BETM electric tram began to compete with NITM's steam tram. This competition makes the choice of transportation modes in Batavia more lively. However, entering 1920, there was an unhealthy competition between BETM and NITM which caused ticket prices to become expensive. The government of the city of Batavia demanded that NITM upgrade its fleet to an electric tram service but was refused by NITM (Het nieuws van den dag voor Nederlandsch-Indië, 1914). As a result of the dispute between NITM and BTM, the two companies began to apply transit tickets and special schedules during peak hours. After the dispute between the two companies, the two were later merged under the name Batavia Verkeers Maatschappij (BVM) on July 31, 1930.

THE IMPACT OF THE RAILROAD TRANSPORT MODE ON THE BATAVIAN ECONOMY IN 1930

The development of rail transportation modes by the colonial government of the Dutch East Indies, in addition to meeting the needs of the colonialists, was also intended to promote the economic growth of the population in the colonized country, the Dutch East Indies (Indonesia). The existence of a train mode of transportation in Batavia (the economic center of the Dutch colonial government) became a separate economic opportunity for Batavia in order to encourage the creation of people's welfare.

The rail mode of transportation is driving the expansionplantation area. The expansion of the plantation area will increase the need for rail transportation modes.The increasing need for rail transportation has encouraged investors to build rail lines in other areas. Because it can bring promising profits. This is evidenced by the existence of other companies engaged in the mode of transportation of cattle trains such as SS, BOSM, BVM and others. With the expansion of plantation land and the increasing demand for rail transportation modes will create jobs, people can earn wages (by becoming labor) in plantation centers as well as in the construction of railway lines.

Before the train, the inland areas of the plantation centers around Batavia were isolated areas, difficult to reach because of the hilly terrain or mountainous terrain. This situation certainly made it difficult for farmers to sell their plantation products, to overcome this problem, a train mode of transportation was built to Batavia (port) in order to facilitate the distribution of transportation of plantation products (goods) for sale. The smooth distribution of the transportation of goods has increased the carrying capacity to be sold to other areas. The money from the sale received by the farmer will help the survival of the farmer's livelihood and can be used as an indicator of the level of farmers' welfare.

In addition, increasing transport capacity will encourage increased investment in supporting facilities for export-import activities such as warehouses, packaging, and pre-shipment processes through the largest port in Batavia, namely Tanjung Priok Main Port, which is also the main gateway to the city of Batavia or the Dutch East Indies.

Table 4.3 Export Development of Dutch East Indies Plantation Products in 1900 – 1914 (Source: PTPN X, 2016)

Year	Average Annual Export Value (000 Guilders)	Average Annual Export Value (% increase)	Average Annual Export Weight (000 guilders)	Average Annual Export Weight (% increase)	Average Export Value/ kg (in guilders)
1900 – 1904	263,057	19.7	1,644,596	57.5	0.16
1905 – 1909	379,916	44.4	2.640.115	60.5	0.14
1910 – 1914	573,700	51.0	3,318,786	25.3	0.17

In addition to playing a role in supporting the export and import transportation of plantation products, the existence of rail services also helps the operation of several important industries for the economy of Batavia, the first being the gas factory LJN Eindhoven en Compagnie Gravenhage, a supplier of gas-fired electricity for lighting needs in Batavia and Meester Cornelis. The second is the Opium Salemba factory which is one of the largest sources of income. In subsequent developments the railway also gave rise to certain centers of economic activity such as markets around the railway line. The emergence of these markets is always associated with nearby train stations such as Pasar Baru (near Juanda Station), Pasar Minggu, Pasar Senen and others. In addition, there is also an inn (hotel) that stands near the train station, one of them is the Train Hotel (near Bogor Station). Thus, apart from functioning as a passenger transport station, the station also functions as a local trade network.

CONCLUSION

The construction of the railway line in Batavia was motivated by the difficulty of transporting plantation and agricultural products from the interior of isolated plantation and agricultural centers to the port (Batavia). The presence of the rail transportation mode is becoming increasingly important for the economy of Batavia and its surroundings, because its development and management is characterized by quite fierce competition between the government and the private sector as well as the private sector and the private sector. all levels of society economic actors in Batavia, from farmers, traders to industry though. Furthermore, the train continued to play its role as a reliable

mode of transportation until the era of the independence revolution even today.

REFERENCES

Alkatiri, Z. (2019). *Sejarah Pabrik Gas di Jakarta*. Sejarah Jakarta: Masa Lalu Ibukota. https://sejarahjakarta.com/2019/04/12/sejarah-pabrik-gas-di-jakarta/

Aprilia, A. T., Irawan, H., & Santosa, Y. B. P. (2020). Meninjau Praktik Kebijakan Tanam Paksa di Hindia Belanda 1830-1870. *ESTORIA*, *1*(1), 80–93.

Batavia Handelsblad. (1869). Batavia Handelsblad edisi 12 Juli 1869. *Batavia Handelsblad*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:110532900:mpeg21:p003

Batavia Handelsblad. (1883). Batavia Handelsblad edisi 30 Juni 1883. *Batavia Handelsblad*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:110537133:mpeg21:a0020

Bataviaasch nieuwsblad. (1900). Bataviaasch nieuwsblad edisi 30 Juni 1900. *Bataviaasch Nieuwsblad*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:011032600:mpeg21:a0062

Bataviaasch Nieuwsblad. (1890). Bataviaasch Nieuwsblad edisi 5 Juli 1890. *Bataviaasch Nieuwsblad*. http://poestahadepok.blogspot.com/2019/06/sejarah-bekasi-3-rencana-pembangunan.html

Bataviaasch Nieuwsblad. (1899). Bataviaasch Nieuwsblad edisi 10 April 1899. *Bataviaasch Nieuwsblad*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:011032698:mpeg21:p001

Biomantara, K., & Herdiansyah, H. (2019). Peran Kereta Api Indonesia (KAI) sebagai Infrastruktur Transportasi Wilayah Perkotaan. *Cakrawala*, *19*(1).

Breman, J. (2014). *Keuntungan Kolonial dari Kerja Paksa: Sistem Priangan dari Tanam Paksa Kopi di Jawa 1720-1870*. Yayasan Pustaka Obor Indonesia.

Daliman, A. (2012). *Sejarah Indonesia Abad XIX-Awal Abad XX: Sistem Politik Kolonial dan Administrasi Pemerintahan Hindia-Belanda*. Penerbit Ombak.

Daliman, A. (2015). *Metode Penelitian Sejarah*. Penerbit Ombak.

de Jong, M. van B. (1993). *Spoorwegstations op Java*. de Bataafse Leeuw.

De locomotief : Samarangsch handels- en advertentie-blad. (1890). De locomotief : Samarangsch handels en advertentie blad edisi 11 Februari 1890. *De Locomotief : Samarangsch Handels- En Advertentie-Blad*. http://poestahadepok.blogspot.com/2019/06/sejarah-bekasi-3-rencana-pembangunan.html

Direktorat Jenderal Perkeretaapian. (2018). *Review Rencana Induk Perkeretaapian Nasional*. Kementrian Perhubungan Republik Indonesia.

Direktorat Jenderal Perkeretaapian. (2019). *Moda Transportasi Kereta Api, Moda Angkutan Umum Massal Pilihan di Perkotaan*. Djka.Dephub.Go.Id. https://djka.dephub.go.id/moda-transportasi-kereta-api-moda-angkutan-umum-massal-pilihan-di-perkotaan-1

Firdausi, F. A. (2018a). *Hikayat Stasiun Beos: antara Batavia dengan Lumbung Padi Karawang*. Tirto.Id. https://tirto.id/hikayat-stasiun-beos-antara-batavia-dengan-lumbung-padi-karawang-c4E2

Firdausi, F. A. (2018b). *Jejak Jalur Kereta Api Pertama di Jawa*. Tirto.Id. https://tirto.id/jejak-jalur-kereta-api-pertama-di-jawa-cLZe
Furnival, J. S. (1976). *Netherlands-India: A Study of Plural Economy*. B.M. Israel.
Gottschalk, L. (1986). *Mengerti Sejarah* (N. Notosusanto (ed.)). UI Press.
Hardini, I. (2009). *Mengenal Kereta Api*. Kenanga Pustaka Indonesia.
Hariyadi, I. M. (2015). *Selayang Pandang Sejarah Perkeretaapian Indonesia 1867 - 2014*. Unit Architecture & Preservation PT. KAI.
Hariyadi, I. M., & Sudarsih, A. (2015). *Stasiun Kereta Api: Dahulu, Kini dan Mendatang 1867 - 2016*. PT Kereta Api Indonesia (Persero).
Het nieuws van den dag voor Nederlandsch-Indië. (1909). Het nieuws van den dag voor Nederlandsch-Indië edisi 11 Oktober 1909. *Het Nieuws van Den Dag Voor Nederlandsch-Indië*. https://www.delpher.nl/nl/kranten/view?query=meester+cornelis+nieuwe+station&coll=ddd&identifier=ddd:010994020:mpeg21:a0014&resultsidentifier=ddd:010994020:mpeg21:a0014
Het nieuws van den dag voor Nederlandsch-Indië. (1914). Het nieuws van den dag voor Nederlandsch-Indië edisi 19 Oktober 1914. *Het Nieuws van Den Dag Voor Nederlandsch-Indië*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:010167977:mpeg21:a0004
Husin, H. (2016). Ujung Senja Pabrik-Pabrik Gula di Batavia Awal Abad ke-18. *Sosio-E-Kons*, *8*(2), 139–147. http://digilib.mercubuana.ac.id/manager/t!@file_artikel_abstrak/Isi_Artikel_805865244638.pdf
In de Archipel. (2017). *Trem di Batavia: Ikhtisar dan Peta*. Https://Indearchipel.Com/. https://indearchipel.com/2017/12/04/trams-batavia-overzicht/
Irwanto, D., & Sair, A. (2014). *Metodologi dan Historiografi Sejarah*. Eja Publisher.
Java-bode : nieuws, handels-en advertentieblad voor N.-I. (1881). Java-bode : nieuws, handels- en advertentieblad voor Nederlandsch-Indie edisi 27 April 1881. *Java-Bode : Nieuws, Handels- En Advertentieblad Voor Nederlandsch-Indie*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:010497648:mpeg21:a0037
Java-bode : nieuws, handels-en advertentieblad voor N.-I. (1897). Java-bode : nieuws, handels- en advertentieblad voor Nederlandsch-Indie edisi 14 Desember 1897. *Java-Bode : Nieuws, Handels- En Advertentieblad Voor Nederlandsch-Indie*. https://www.delpher.nl/nl/kranten/view?coll=ddd&identifier=ddd:010496145:mpeg21:p006
Java-bode: nieuws, handels en advertentieblad voor N.-I. (1885). Java-bode : nieuws, handels- en advertentieblad voor Nederlandsch-Indie edisi 9 Mei 1885. *Java-Bode : Nieuws, Handels- En Advertentieblad Voor Nederlandsch-Indie*. https://www.delpher.nl/nl/kranten/view?identifier=ddd:010507303:mpeg21:p007&coll=ddd
Jumardi, Abdulhadi, Annisa, A. S. N., Hermawan, V. A., & Al Zamani, M. Z. (2020). Perkembangan Transportasi Kereta Api di Jakarta. *Pattingalloang: Jurnal Pemikiran Pendidikan Dan Penelitian Kesejarahan*, *7*(1), 40–48. https://ojs.unm.ac.id/pattingalloang/article/view/13291/0
Kartodirjo, S. (2017). *Pemikiran dan Perkembangan Historiografi Indonesia*. Penerbit Ombak.

Katam, S. (2014). *Kereta Api di Priangan Tempo Doeloe*. Pustaka Jaya.
Kompas. (2009). *Stasiun Batavia Selatan Genap 80 Tahun*. Nasional.Kompas.Com. https://nasional.kompas.com/read/2009/10/23/10494612/stasiun.batavia.selatan.genap.80.tahun
Kurniawan, H. (2014). Dampak Sistem Tanam Paksa terhadap Dinamika Perekonomian Petani Jawa 1830-1870. *Socia: Jurnal Ilmu-Ilmu Sosial*, *11*(2), 163–172. https://journal.uny.ac.id/index.php/sosia/article/view/5301
Laksana, A. D., & Wijokangko, G. R. (2020). *Jalur Kereta Opium Jakarta: Riwayat dan Tinggalan Jalur Kereta Api Cikini - Salemba - Pabrik Opium*. Kereta Anak Bangsa.
Lasmiyati. (2017). Transportasi Kereta Api di Jawa Barat Abad ke-19 (Bogor-Sukabumi-Bandung). *Patanjala: Jurnal Penelitian Sejarah Dan Budaya*, *9*(2), 197–212. http://ejurnalpatanjala.kemdikbud.go.id/patanjala/index.php/patanjala/article/view/21
Muhsin Z, M. (2017). Produksi Kopi di Priangan pada Abad Ke-19. *Paramita: Historical Studies Journal*, *27*(2), 182–194. https://doi.org/http://dx.doi.org/10.15294/paramita.v27i2.11160
Mulyana, A. (2017). *Sejarah Kereta Api di Priangan*. Penerbit Ombak.
Murti Hariyadi, I., Basir, E., Pratiwi, M. I., Ubaidi, E., & Sukmono, E. (2016). *Arsitektur Bangunan Stasiun Kereta Api di Indonesia*. PT Kereta Api Indonesia (Persero).
Nederlandsch-Indische Tramweg Maatschappij 1881-1921. (1921). *Nederlandsch-Indische Tramweg Maatschappij*.
Novita, F., Sodiq, I., & Arif, P. (2015). Perkeretaapian di Wonosobo Tahun 1917-1942. *Journal of Indonesian History*, *4*(1), 23–31.
Nurhayati, Y. (2014). *Sejarah Kereta Api Indonesia*. CV. Rizki Mandiri.
Perusahaan Gas Negara. (2018). *Sejarah Perusahaan Gas Negara 1859 - 2015*. Pgn.Co.Id. https://pgn.co.id/tentang-kami
Poesponegoro, M. D., & Notosusanto, N. (1984). *Sejarah Nasional Indonesia Jilid 5*. Balai Pustaka.
Poolman. (1917). *Verslag van den Raad van Beheer der Nederlandsch-Indische Spoorweg Maatschappij 1869 - 1900*.
Pramyastiwi, D. E., Hardjanto, I., & Said, A. (2013). Perkembangan Kualitas Pelayanan Perkeretaapian sebagai Angkutan Publik dalam rangka Mewujudkan Transportasi Berkelanjutan (Studi pada PT Kereta Api Indonesia Daerah Operasi 8 Surabaya). *Administrasi Publik Fakultas Ilmu Administrasi Universitas Brawijaya, Malang*, *1*(3), 61–69. http://administrasipublik.studentjournal.ub.ac.id/index.php/jap/article/view/109
PT Ilalang Sakti Komunikasi. (2014, August). Majalah KA Edisi 97 Agustus 2014: 6 Stasiun Heritage di Batavia. *Majalah KA Edisi 97*.
PT Kereta Api Indonesia (Persero). (2017). *Company Profile PT Kereta Api Indonesia (Persero) 2016*. PT Kereta Api Indonesia (Persero).
PT Kereta Commuter Indonesia. (2017). *Menuju 100 Tahun KRL Jabodetabek*. Krl.Co.Id. http://www.krl.co.id/
PTPN X. (2016). *Awal Mula Perkebunan Tebu di Nusantara*. PTPN X. http://ptpn10.co.id/blog/awal-mula-perkebunan-tebu-di-nusantara
Pujiriani, I. (2008). *Faktor-faktor yang Mempengaruhi Terjadinya Keluhan*

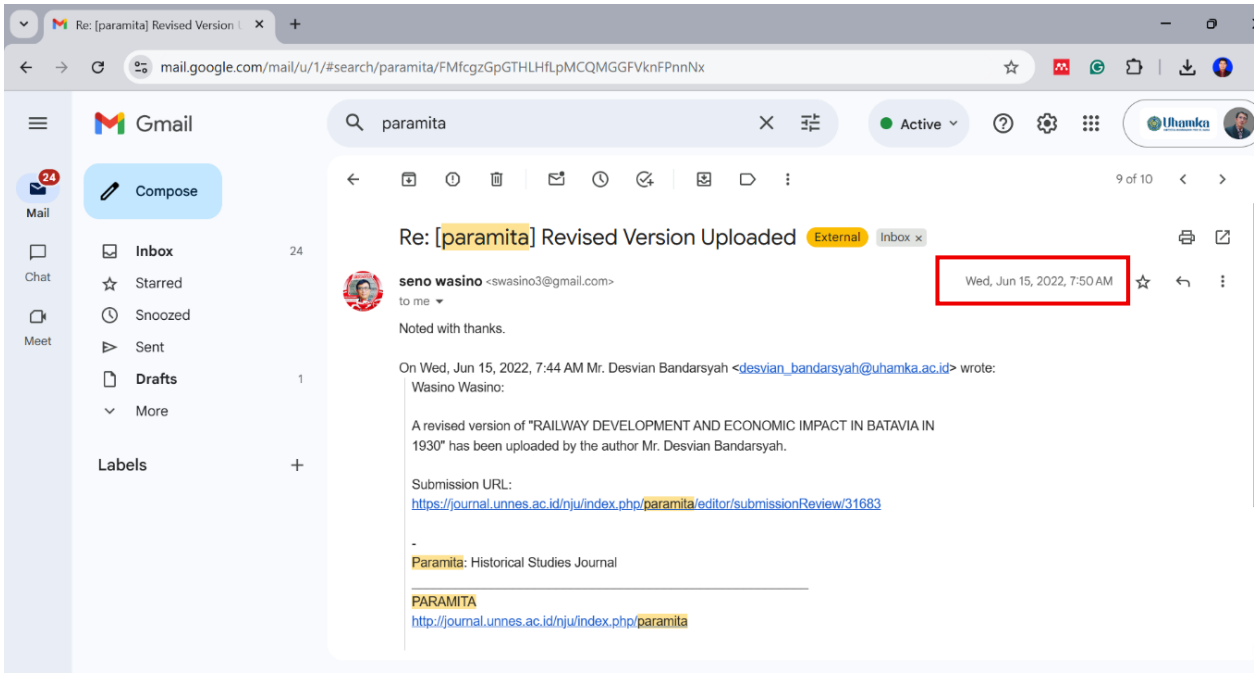
Pendengaran Subyektif yang Dirasakan oleh Masinis Kereta Api Dipo Lokomotif Jatinegara Tahun 2008. Fakultas Kesehatan Masyarakat Universitas Indonesia.
Purwandono, A. (2017). *Buku Ini Jadi Referensi Sejarah Kereta Api di Indonesia*. Krjogja.Com. https://www.krjogja.com/angkringan/historia/buku-ini-jadi-referensi-sejarah-kereta-api-di-indonesia/
Purwanto, B., & Adam, A. W. (2017). *Menggugat Historiografi Indonesia*. Penerbit Ombak.
Puspitosari, R. (2018). Sekilas tentang Pendidikan di Praja Mangkunegaran Masa Mangkunegoro VII,. *MUKADIMAH*, *1*(2), 172–178. https://jurnal.uisu.ac.id/index.php/mkd/article/view/528
Raap, O. J. (2017). *Sepoer Oeap di Djawa tempo Doeloe*. Kepustakaan Populer Gramedia.
Undang-undang Nomor 23 Tahun 2007 tentang Perkeretaapian, (2007).
Ricklefs, M. C. (2008). *Sejarah Indonesia Modern 1200–2008* (M. C. Ricklefs & M. S. Nugraha (eds.)). Penerbit Serambi.
S, D. (2015). *Kisah Kereta Api dan Tanam Paksa yang Kejam*. Cnnindonesia.Com. https://www.cnnindonesia.com/ekonomi/20150617172941-92-60658/kisah-kereta-api-dan-tanam-paksa-yang-kejam
Sondarika, W. (2015). Dampak Cultuurstelsel (Tanam Paksa) bagi Masyarakat Indonesia dari Tahun 1830 - 1870. *Artefak*, *3*(1), 59–66.
Staatsblad Nomor 22 Tahun 1834.
Stroomberg, J. (2018). *Hindia Belanda 1930* (B. Pradana (ed.)). IRCiSoD.
Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.
Sulaeman, A. Y. (2017). *Trem Batavia, Mutiara Transportasi Jakarta yang Terlupakan*. Issu.Com. https://issuu.com/adriansyahyasinsulaeman/docs/jurnal_20trem_20batavia-ilovepdf-co
Suryana. (2010). *Metodologi Penelitian Model Praktis Penelitian Kuantitatif dan Kualitatif*. Universitas Pendidikan Indonesia.
Sutarma, O. (1988). *Studi tentang Pembangunan dan Perkembangan Kota 1869 - 1900*. Universitas Padjajaran.
Teguh, I. (2019). *Sejarah Trem di Jakarta: Dari Helaan Kuda sampai Tenaga Listrik*. Tirto.Id. https://tirto.id/sejarah-trem-di-jakarta-dari-helaan-kuda-sampai-tenaga-listrik-dkha
Tim Telaga Bakti Nusantara. (1997). *Sejarah Perkeretaapian Indonesia Jilid 1*. Angkasa.
Unit Architecture and Preservation PT. KAI. (2017a). *Pembangunan Trem Lintas Karawang - Rengasdengklok*. Heritage.Kai.Id. https://heritage.kai.id/page/Pembangunan Trem Lintas Karawang Rengasdengklok
Unit Architecture and Preservation PT. KAI. (2017b). *Stasiun Bekasi*. Heritage.Kai.Id. https://heritage.kai.id/page/Stasiun Bekasi
Unit Architecture and Preservation PT. KAI. (2017c). *Stasiun Gambir*. Heritage.Kai.Id. https://heritage.kai.id/page/Stasiun Gambir
Unit Architecture and Preservation PT. KAI. (2017d). *Stasiun Jatinegara*. Heritage.Kai.Id. https://heritage.kai.id/page/Stasiun Jatinegara
Unit Architecture and Preservation PT. KAI. (2017e). *Stasiun Serang*. Heritage.Kai.Id. https://heritage.kai.id/page/Stasiun Serang
Unit Architecture and Preservation PT. KAI. (2017f). *Stasiun Tangerang*.

Heritage.Kai.Id.
Vlekke, B. H. M. (2016). *Nusantara: Sejarah Indonesia*. Kepustakaan Populer Gramedia.
Warpani, S. (1990). *Merencanakan Sistem Perangkutan*. Institut Teknologi Bandung.
Widayanti, R., & Widyarsih, M. (2012). Analisisis Perkembangan Gaya Arsitektur pada Fasade Bangunan Stasiun Kereta Api Tanjung Priuk. *Jurnal Ilmiah Desain Dan Konstruksi*, *11*(2), 3–14.
Wijokangko, G. R., Suherman, A., & Hartono, T. (2020). *Cerita Kereta Api Banten, Jejak Tinggalan Jalur: Cigading-Anyer Kidul, Rangkasbitung-Labuan, Saketi - Bayah Gunung Mandur*. Kereta Anak Bangsa.
Wirawan, J. (2020). *Kereta api dan jejak penjajahan Belanda di Priangan: dari tanam paksa hingga plesiran*. BBC News. https://www.bbc.com/indonesia/majalah-52468047
Witton, P. (2003). *Indonesia*. Lonely Planet.
Yahya, S. K. (2015). *Naskah Sumber Arsip Perkeretaapian di Indonesia* (S. K. Yahya (ed.)). Arsip Nasional Republik Indonesia.
Zulkarnain. (2010). Serba Serbi Tanam Paksa. *ISTORIA: Jurnal Pendidikan Dan Sejarah*, *8*(1), 30–46. https://journal.uny.ac.id/index.php/istoria/article/view/3720

SUBMISSION PREPARATION CHECKLIST

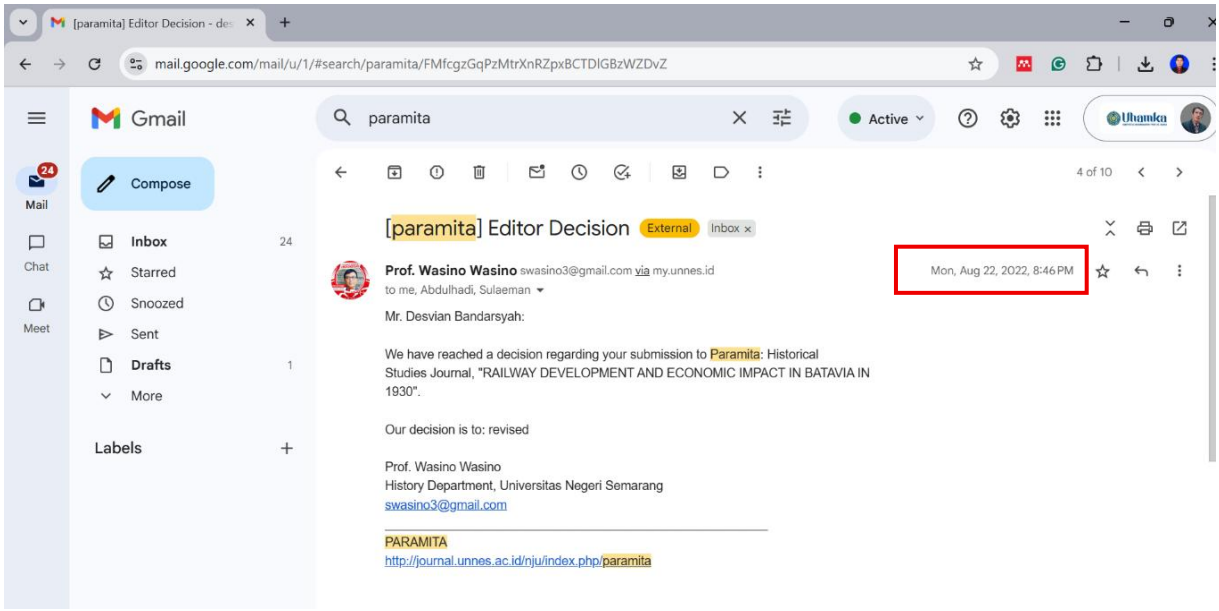
- ✓ The paper complies with the focus and scope of the journal;
- ✓ The article has significant contributions to science (covering aspects of suitability, authenticity and high novelty);
- ✓ The paper has a compelling title (concise, straightforward, valid);
- ✓ The abstract is concise (no more than 250 words), has a complete component (goals, methods, results, conclusions) and relevant keywords;
- ✓ The introduction summarizes the fundamental, gives a critical evaluation of the previous research of study (the literature review of the last ten years) and states aims clearly;
- ✓ The research methods (for research paper) include: sources, steps, and analysis techniques are described clearly;
- ✓ The results and discussion is compliance with the purpose of writing and has clear and comprehensive interpretation;
- ✓ The conclusions sound convincing.
- ✓ The paper uses the relevant sources and has consistent and complete citations
- ✓ The language of the article is clear and communicative
- ✓ The typing format and the total number of pages according to the template (6000-8000 words)

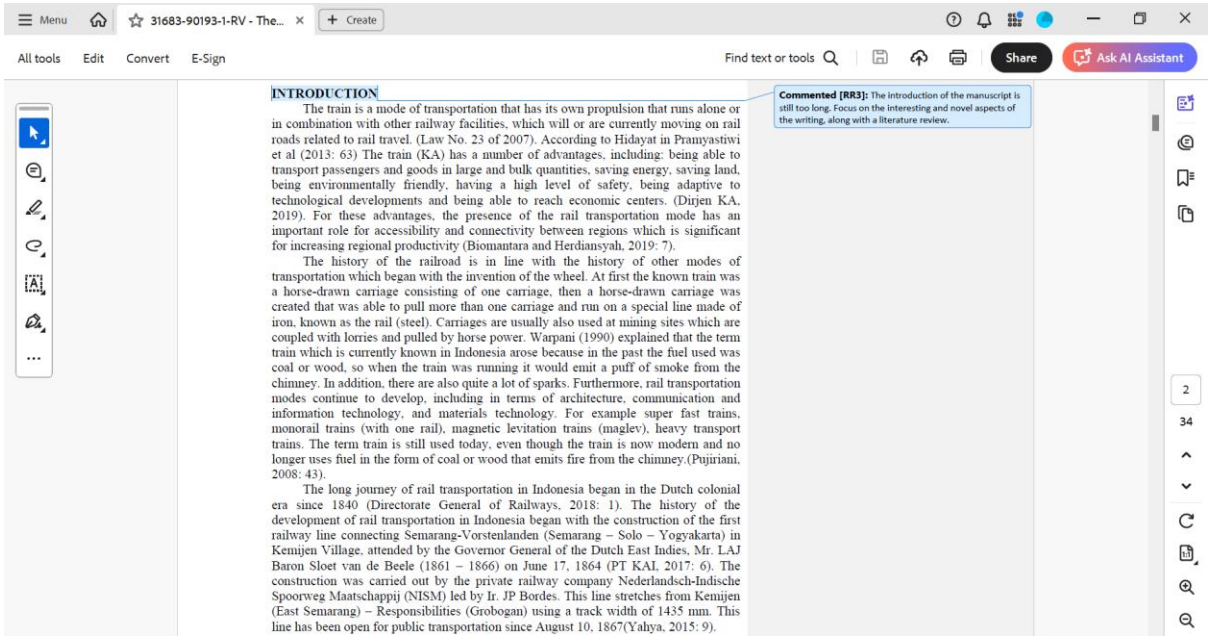
Lampiran II
2. Bukti konfirmasi review dan hasil review pertama (15 Juni 2022)



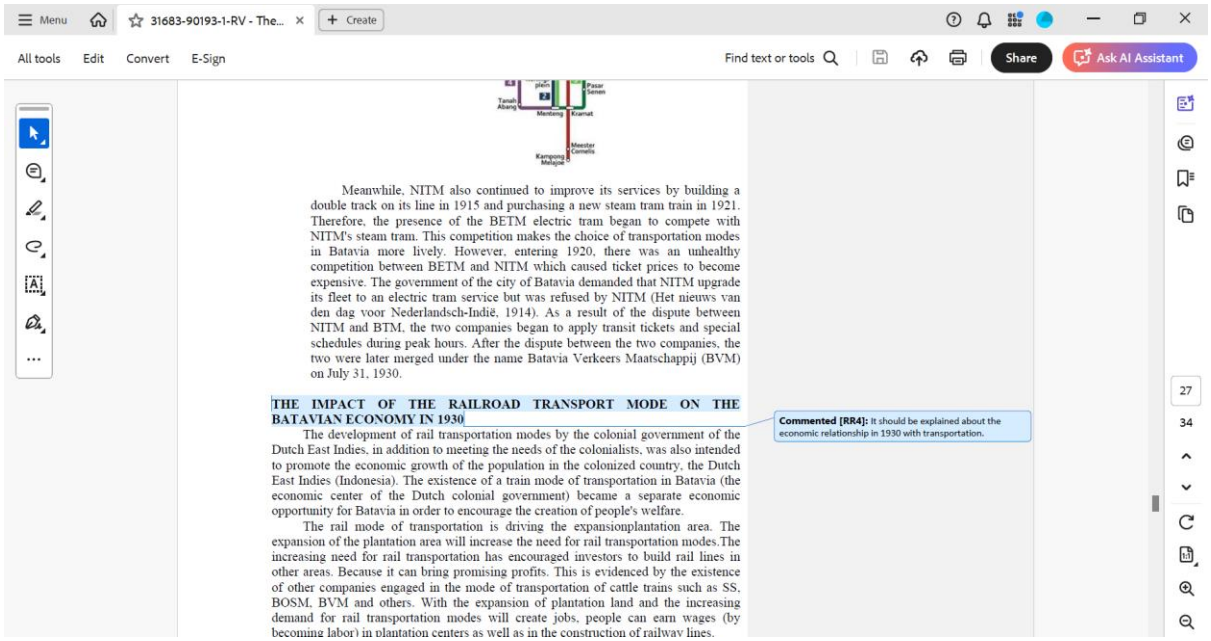
Lampiran III

3. Bukti konfirmasi submit revisi pertama, respon kepada reviewer, dan artikel yang disubmit ulang (22 Agustus 2022)





Lampiran IV
4. Bukti konfirmasi review dan hasil review kedua (28 Agustus 2022)



Meanwhile, NITM also continued to improve its services by building a double track on its line in 1915 and purchasing a new steam tram train in 1921. Therefore, the presence of the BETM electric tram began to compete with NITM's steam tram. This competition makes the choice of transportation modes in Batavia more lively. However, entering 1920, there was an unhealthy competition between BETM and NITM which caused ticket prices to become expensive. The government of the city of Batavia demanded that NITM upgrade its fleet to an electric tram service but was refused by NITM (Het nieuws van den dag voor Nederlandsch-Indië, 1914). As a result of the dispute between NITM and BTM, the two companies began to apply transit tickets and special schedules during peak hours. After the dispute between the two companies, the two were later merged under the name Batavia Verkeers Maatschappij (BVM) on July 31, 1930.

THE IMPACT OF THE RAILROAD TRANSPORT MODE ON THE BATAVIAN ECONOMY IN 1930

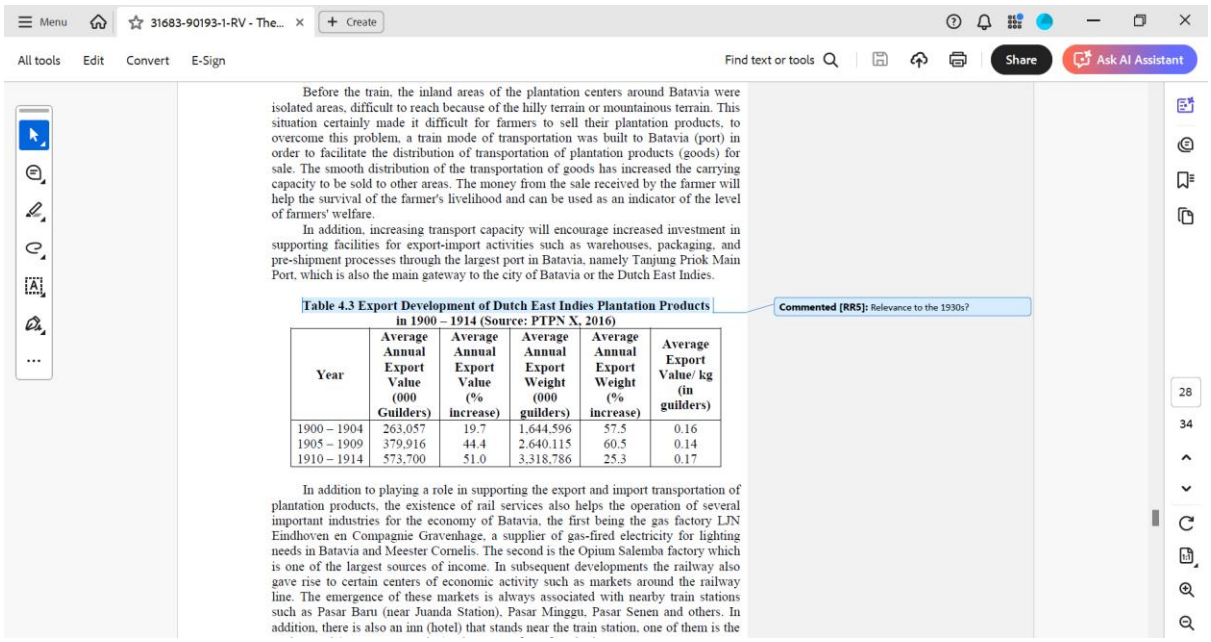
Commented [RR4]: It should be explained about the economic relationship in 1930 with transportation.

The development of rail transportation modes by the colonial government of the Dutch East Indies, in addition to meeting the needs of the colonialists, was also intended to promote the economic growth of the population in the colonized country, the Dutch East Indies (Indonesia). The existence of a train mode of transportation in Batavia (the economic center of the Dutch colonial government) became a separate economic opportunity for Batavia in order to encourage the creation of people's welfare.

The rail mode of transportation is driving the expansionplantation area. The expansion of the plantation area will increase the need for rail transportation modes.The increasing need for rail transportation has encouraged investors to build rail lines in other areas. Because it can bring promising profits. This is evidenced by the existence of other companies engaged in the mode of transportation of cattle trains such as SS, BOSM, BVM and others. With the expansion of plantation land and the increasing demand for rail transportation modes will create jobs, people can earn wages (by becoming labor) in plantation centers as well as in the construction of railway lines.

Lampiran V

5. Bukti konfirmasi submit revisi kedua, respon kepada reviewer, dan artikel yang diresubmit (5 September 2022)



Before the train, the inland areas of the plantation centers around Batavia were isolated areas, difficult to reach because of the hilly terrain or mountainous terrain. This situation certainly made it difficult for farmers to sell their plantation products, to overcome this problem, a train mode of transportation was built to Batavia (port) in order to facilitate the distribution of transportation of plantation products (goods) for sale. The smooth distribution of the transportation of goods has increased the carrying capacity to be sold to other areas. The money from the sale received by the farmer will help the survival of the farmer's livelihood and can be used as an indicator of the level of farmers' welfare.

In addition, increasing transport capacity will encourage increased investment in supporting facilities for export-import activities such as warehouses, packaging, and pre-shipment processes through the largest port in Batavia, namely Tanjung Priok Main Port, which is also the main gateway to the city of Batavia or the Dutch East Indies.

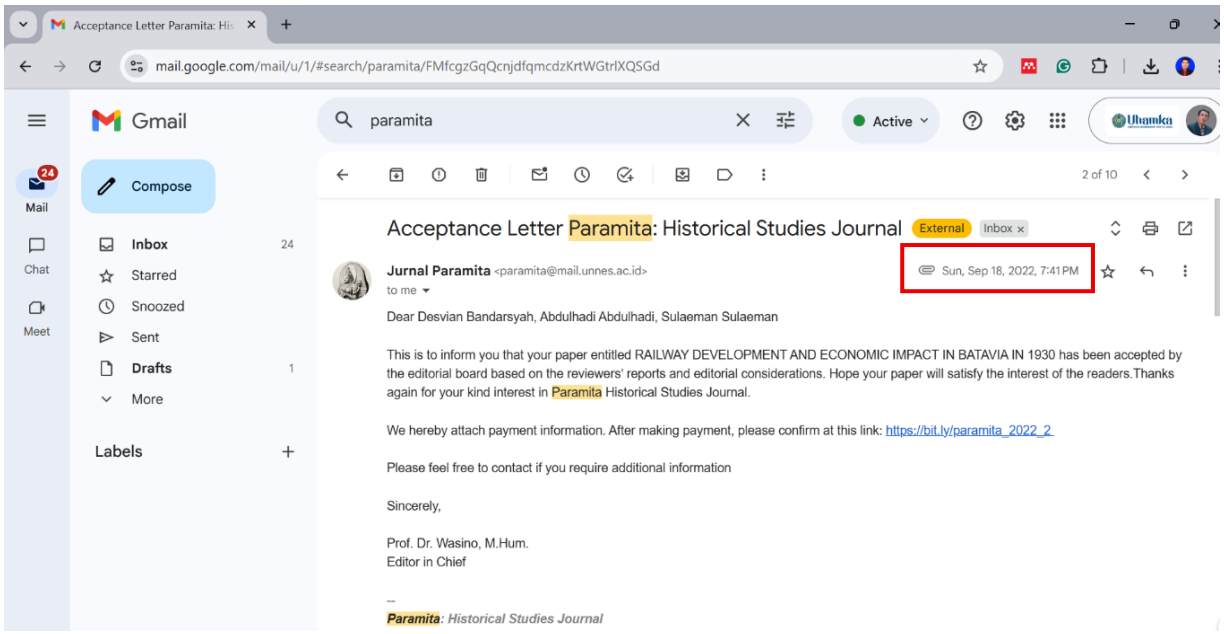
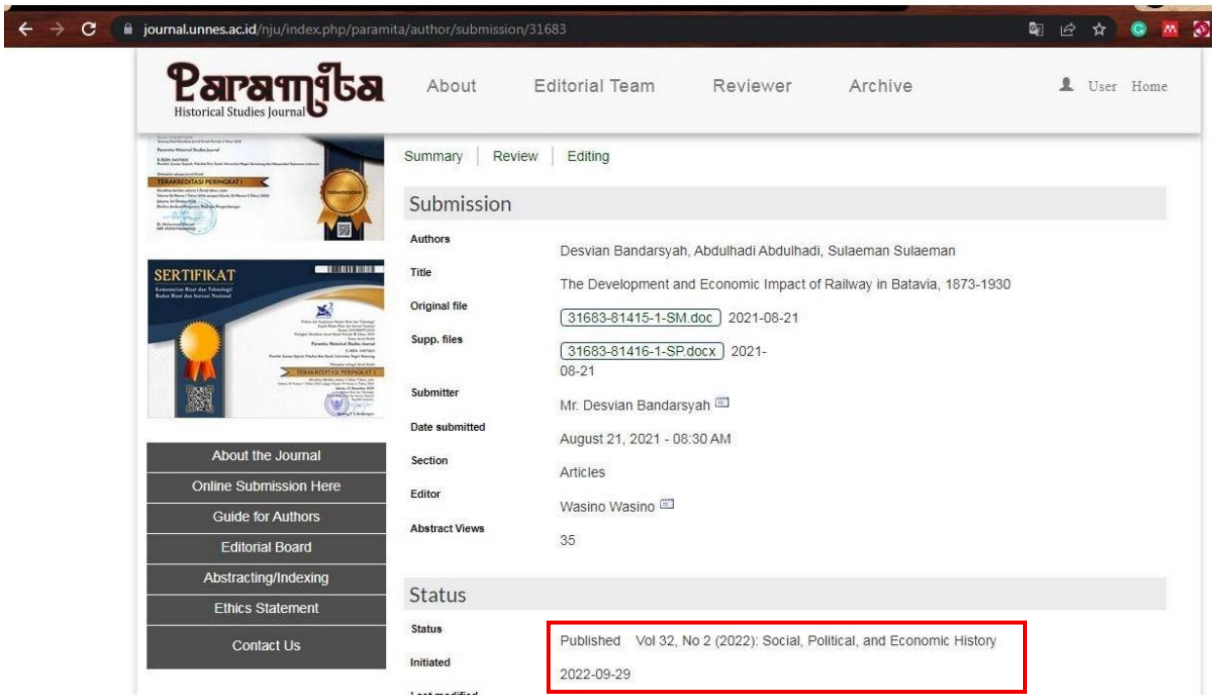
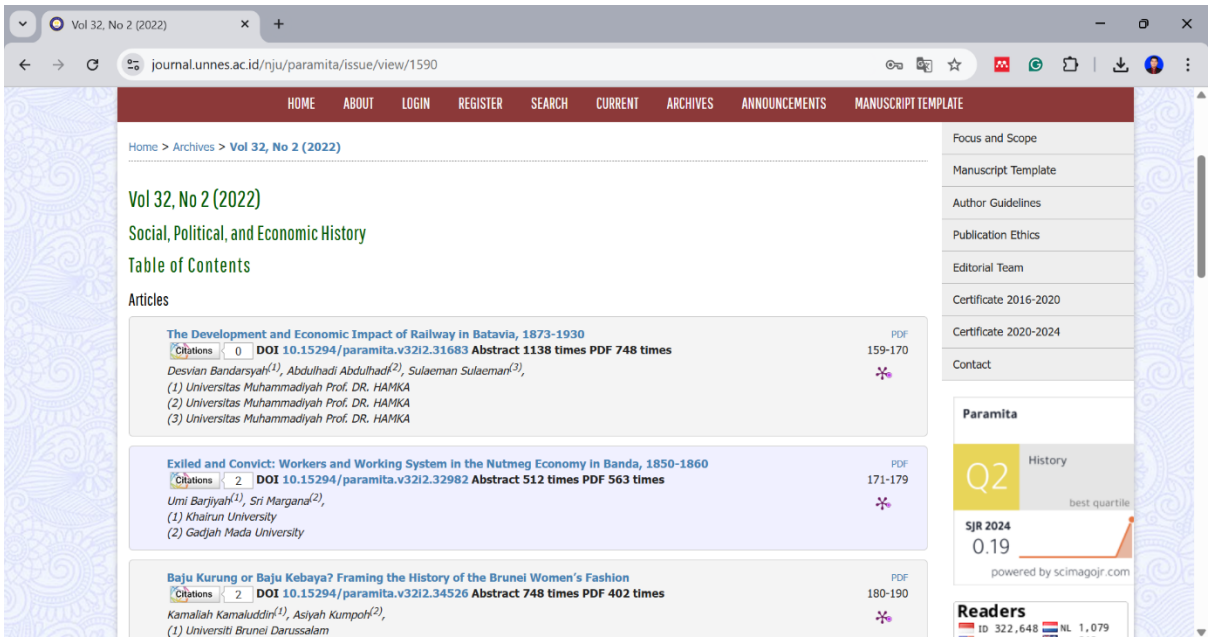
Table 4.3 Export Development of Dutch East Indies Plantation Products in 1900 – 1914 (Source: PTPN X, 2016)

Commented [RR5]: Relevance to the 1930s?

Year	Average Annual Export Value (000 Guilders)	Average Annual Export Value (% increase)	Average Annual Export Weight (000 guilders)	Average Annual Export Weight (% increase)	Average Export Value/ kg (in guilders)
1900 – 1904	263,057	19.7	1,644,596	57.5	0.16
1905 – 1909	379,916	44.4	2.640.115	60.5	0.14
1910 – 1914	573,700	51.0	3,318,786	25.3	0.17

In addition to playing a role in supporting the export and import transportation of plantation products, the existence of rail services also helps the operation of several important industries for the economy of Batavia, the first being the gas factory LJN Eindhoven en Compagnie Gravenhage, a supplier of gas-fired electricity for lighting needs in Batavia and Meester Cornelis. The second is the Opium Salemba factory which is one of the largest sources of income. In subsequent developments the railway also gave rise to certain centers of economic activity such as markets around the railway line. The emergence of these markets is always associated with nearby train stations such as Pasar Baru (near Juanda Station), Pasar Minggu, Pasar Senen and others. In addition, there is also an inn (hotel) that stands near the train station, one of them is the

Lampiran VI
6. Bukti konfirmasi artikel accepted (18 September 2022)



Lampiran VII
7. Bukti konfirmasi artikel published online (29 September 2022)