



# RAILWAYS HERITAGE OF INDONESIA

Celebrating Mobility in the Archipelago

Hasti Tarekat Dipowijoyo

Heritage *hands on*

Indonesia-the Netherlands

## DUTCH INDIES PERIOD

### The railway networks in Java Island from 1867-1949

Governor General Johannes den Bosch in 1830 applied **Forced Cultivation** (het cultuurstelsel) means that the natives had to use 20% of their land to produce commodities European market such coffee, tea and sugar.

Otherwise, farmers had to work 66 days per year as forced labors in infrastructure projects.

The forced cultivation means huge investment in the Dutch Indies railways network to transport harvests to Batavia (Jakarta), Semarang and Surabaya.



(Foto: Spaarnestad)

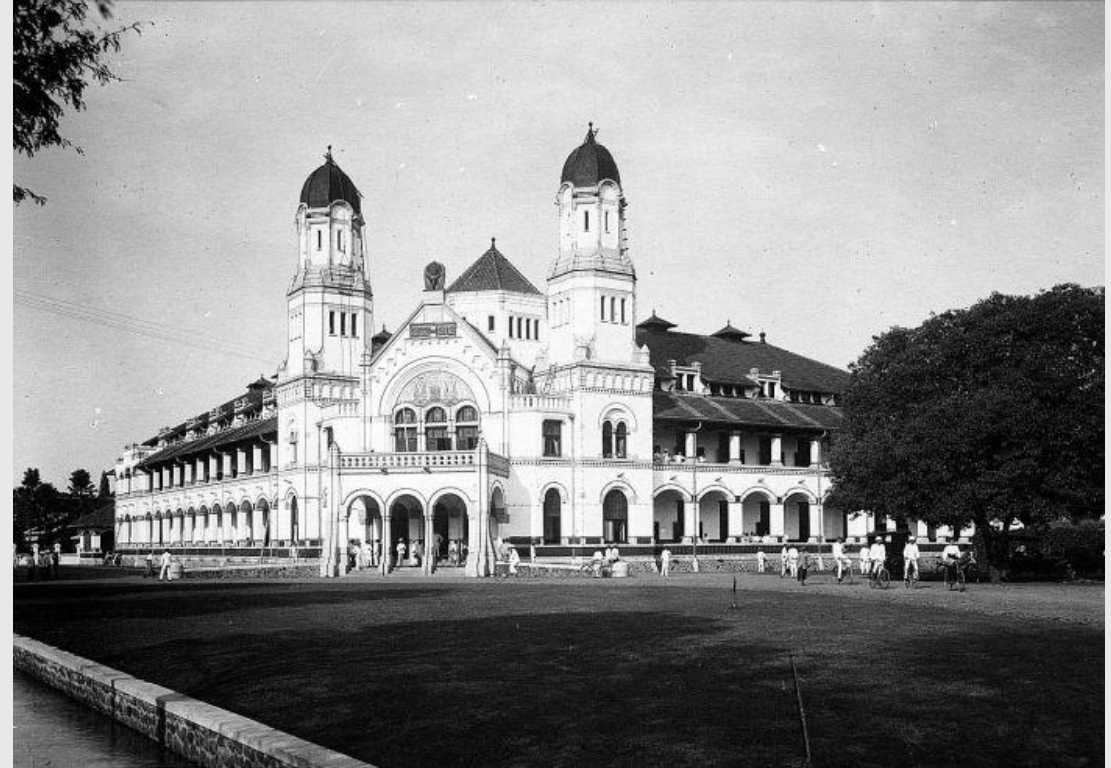


## DUTCH INDIES PERIOD

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*De Nederlandsch-Indische Spoorwegmaatschappij* –NIS (**the Dutch Indies Railways Company**) was established on 27 August 1863 because they received concession from the Governor General of Dutch Indies, Sloet van de Beele, on 28 August 1862 for traject **Semarang-Yogyakarta**.

The traject was challenging. Areas were difficult, many problems happened such as flood, lack of appropriate labors and problematic with material supplies. Despite these challenges, the main engineer Jan Philip de Bordes and his team stayed and made progresses.



Headquarter of de Nederlandsch-Indische Spoorweg Maatschappij (NIS) in Semarang, 1902, designed C. Citroen, Jacob Frederik Klinkhamer en B.J.Ouëndag (Foto: Tropen Museum)

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The first line was in **1867** between Semarang to Tanggung.

In 1888 railways network existed between Central Java to East Java (Semarang, Solo, Yogyakarta, Surabaya).

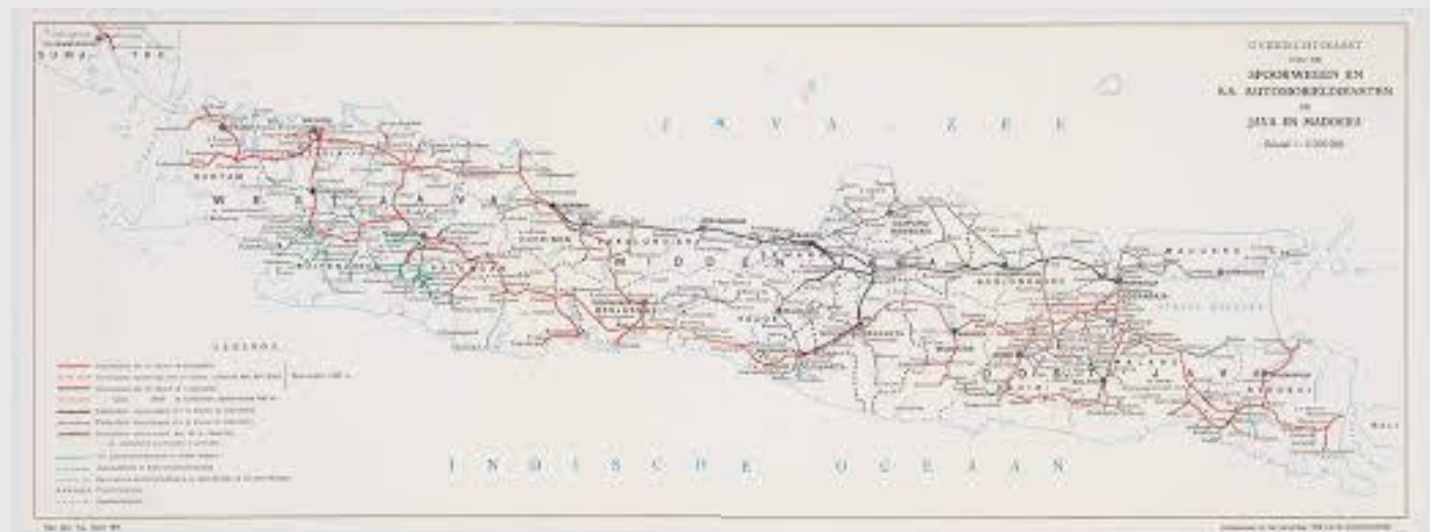
From Jakarta to Bogor, Sukabumi, Bandung, Bekasi en Tanjung Priuk (the port in north of Jakarta).

**In 1930 total railroad in Java was 7400 km.**

(Foto: In de Archipel | Indonesië)



(Foto: Tropen Museum)



(Foto: Sporen van Smaragd)

## DUTCH INDIES PERIOD

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The documentation of first railroad in the Dutch Indies in 1864 was done by Germany photographer Carl Lang and photo studio Woodbury & Page.

The results were two albums and **the oldest picture was taken on 15 August 1864.**





# DUTCH INDIES PERIOD

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Jakarta to Surabaya (1936)



Station Goendih, Semarang-Soerakarta  
(Foto: Tropen Museum)



At station Purwosari in Java on 13 november 1921  
(Foto: Spoorwegmuseum)



## DUTCH INDIES PERIOD

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Rail bridge Tjilame in West-Java  
(Foto: Tropen Museum)

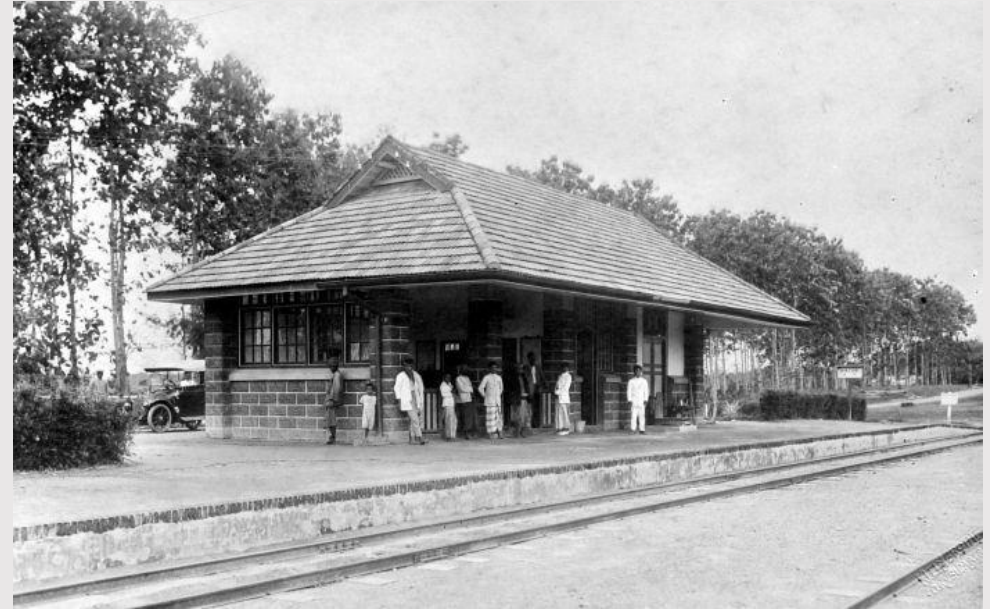


# DUTCH INDIES PERIOD

## The railway networks in Java Island from 1867-1949



Station Purwosari, Central Java  
(Foto: Tropen Museum)



Station Batu, East Java  
(Foto: Tropen Museum)



Station Tawang Semarang  
(Foto: Tropen Museum)



## DUTCH INDIES PERIOD

The railway networks in Java Island from 1867-1949



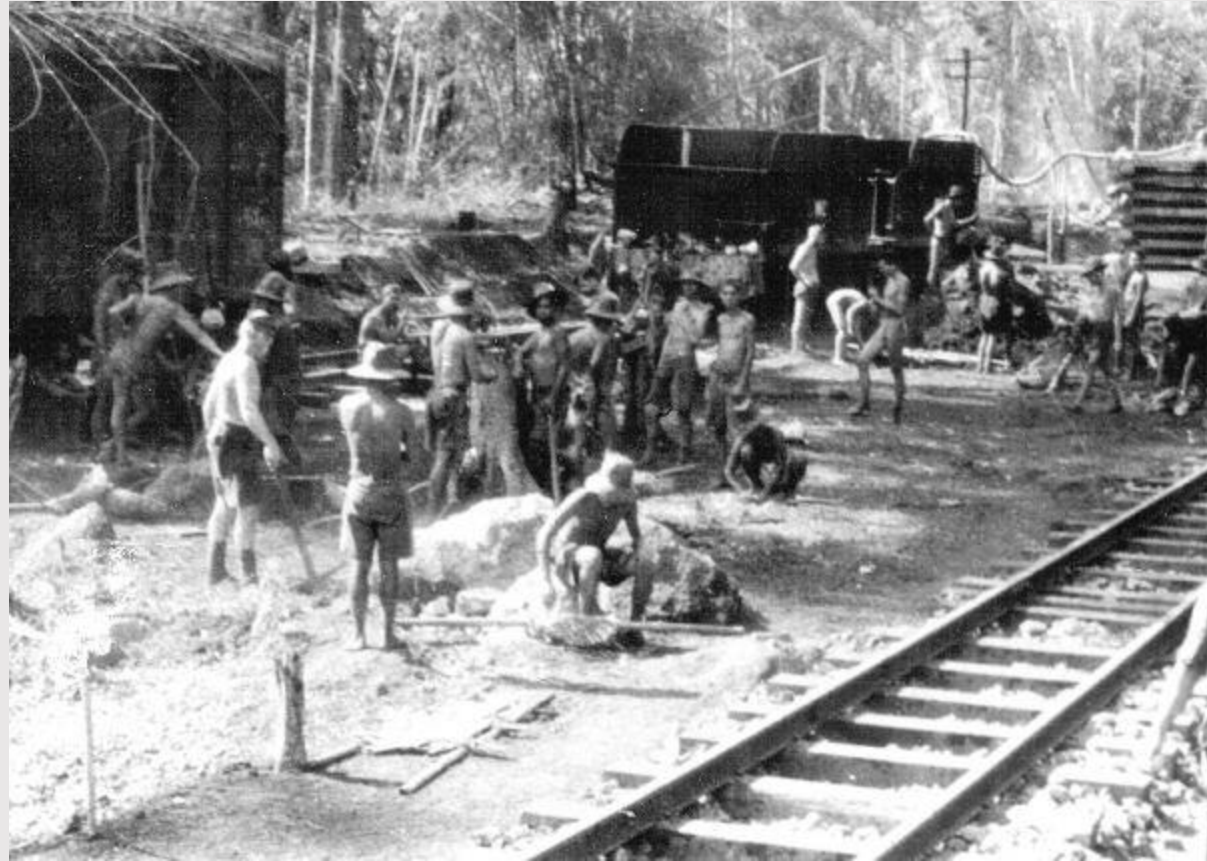
Station Batavia (Jakarta)  
(Foto's: Tropen Museum)



# JAPANESE OCCUPATION PERIOD (1942-1945)

Railroad tracks were dismantled by the Japanese administration to be brought to Burma for railways construction by forced labors.

In 1950 the length was reduced from 6,811 kilometers into 5,910 kilometers. It means about **901 kilometers railroad tracks disappeared.**



Source: <http://www2.gvsu.edu>



# AFTER INDEPENDENCE (1945-ONWARDS)

Nationalization  
since 1971



# AFTER INDEPENDENCE (1945-ONWARDS)

Unit Architecture & Preservation of Indonesian Railways Company was established on 1 April 2009 for identification, inventory, protection, maintenance, and adaptive reuse of heritage assets:

1. Historical objects (locomotive, coach, wagon, signaling, equipment);
2. 131 non-station buildings (office, workshop, depot, water tower, official residence, signal cabin & crossing signal cabin, bridge and tunnel);
3. 48 station buildings;
4. Railways.



# Unit Architecture & Preservation of Indonesian Railways Company (Locomotive)

(Courtesy of PT KAI)

In 1893 - 1902 from the Hartmann factory (Germany). Locomotives are assigned as locomotives to the officer's office or locomotive of passenger / freight trainers on short and flat routes on the island of Java.



In 1908, NIS brought 1 C18 steam locomotive and one C23 locomotive from Hartmann (Germany) factory.



# Unit Architecture & Preservation of Indonesian Railways Company (Coach)

(Courtesy of PT KAI)

This wooden wagon was used to mobilize soldiers from one city to another during the struggle for Independence. "Merdeka ataoe Mati!!" means "Independence or Die!!"



Wagon of Deli Sultanate in Medan, North Sumatra, from 1930





# Unit Architecture & Preservation of Indonesian Railways Company (Wagon)

(Courtesy of PT KAI)

Probolinggo Station, East Java. This station connects between Banyuwangi Station and Surabaya Gubeng Station.



GTCM carriage is a railway mechanical railway carriage, based from the interior modified GW carriage, the carriage serves to transport additional railway mechanical equipment and also serves for the rest of the railroad maintenance officers.



# Unit Architecture & Preservation of Indonesian Railways Company (Signaling)

(Courtesy of PT KAI)

Manual Siemens & Halske signaling is a signaling system that is driven mechanically / manually with human power.



Alkmaar signaling is driven by a mechanical / manual drive / handle lever with human power.





# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings - Warehouse)

(Courtesy of PT KAI)



Cikudapateuh Warehouse

# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings - Workshop)

(Courtesy of PT KAI)

Yasa Pengok Hall, Yogyakarta was built in 1914 by Nederland Indische Spoorweg Maatschapij (NIS), whose name was then Centraal Werkplaats and its main task was to carry out overhaul of locomotives, carriages and trains.



Balai Yasa Tegal is a workshop for maintenance and repair of trains, especially freight cars and passenger trains.





# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings – Water Tower)

(Courtesy of PT KAI)

Built in 1915 in Ketanggungan Station, Cirebon.



Built in 1912 in Station Cirebon



# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings – Official Residence)

(Courtesy of PT KAI)



Station Maseng, Bogor



Station Sidoardjo



# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings – Signal Post)

(Courtesy of PT KAI)



# Unit Architecture & Preservation of Indonesian Railways Company (Non Station Buildings – Bridge and Tunnel)

(Courtesy of PT KAI)



Cirangrang Bridge between Sasaksaat and Cilame Stations.



Ciharang Bridge between Bumiwaluya and Cipendeuy Stations.



# Unit Architecture & Preservation of Indonesian Railways Company (Station Buildings)

(Courtesy of PT KAI)



Jakarta Kota Station



Yogyakarta Station

# Unit Architecture & Preservation of Indonesian Railways Company (Station Buildings)

(Courtesy of PT KAI)



Delanggu Station, Central Java



Catang Station, Serang



# Unit Architecture & Preservation of Indonesian Railways Company (Railway Route)

(Courtesy of PT KAI)

Ambarawa-Bedono, a very important historical old-rack-railway left in the world.

It is a triple line railway; two in each side and one 'toothed track' in the middle.

The special 'toothed track' is to prevent slipping on steeply inclined tracks (65%) that is climb from 478 m to 711 m above sea surface, just in a 4,2 km distance.

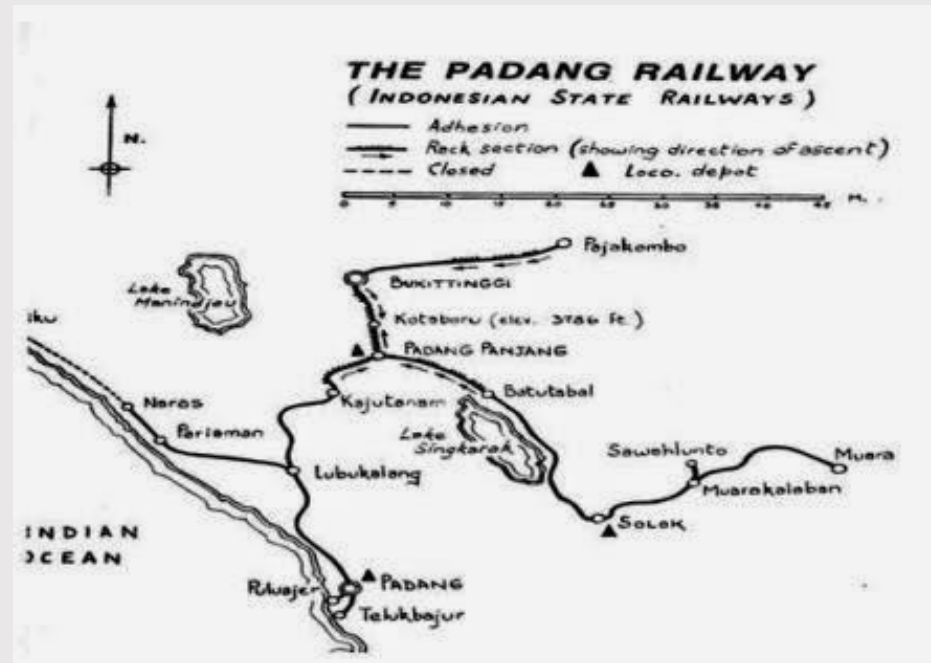
Touristic route between Bogor-Sukabumi since 1884



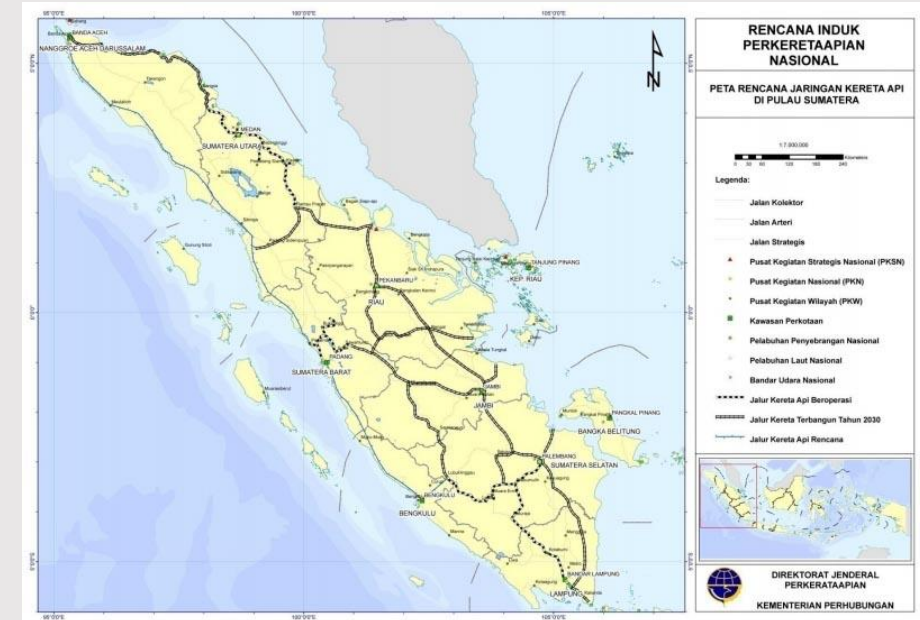
# Historic Urban Landscape (HUL) and Railways Sawahlunto

Sawahlunto is the oldest coal mining town in South East Asia.

In 1883, Dutch Indies Govt. build the Teluk Bayur Harbor and in 1887-1892, they began to construct railways from Pulau Air Padang to Muaro Kalaban and from this station the road goes up to the Sawahlunto area.



Picture: Expeditions / Adventure









# Historic Urban Landscape (HUL) and Railways Sawahlunto





# Historic Urban Landscape (HUL) and Railways Ambarawa

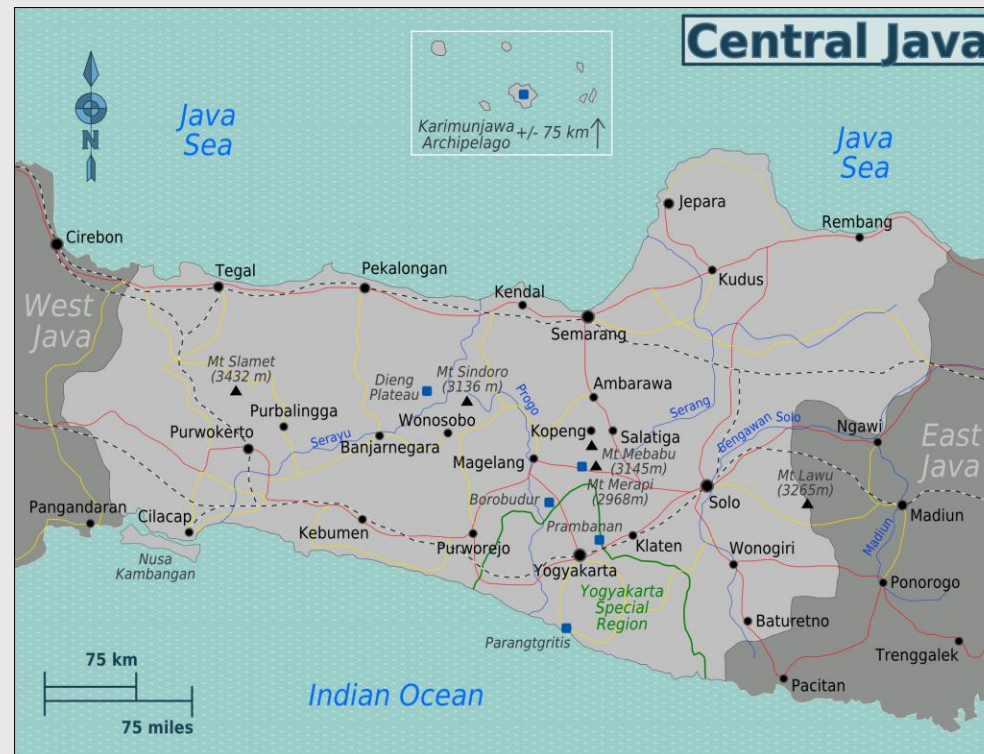
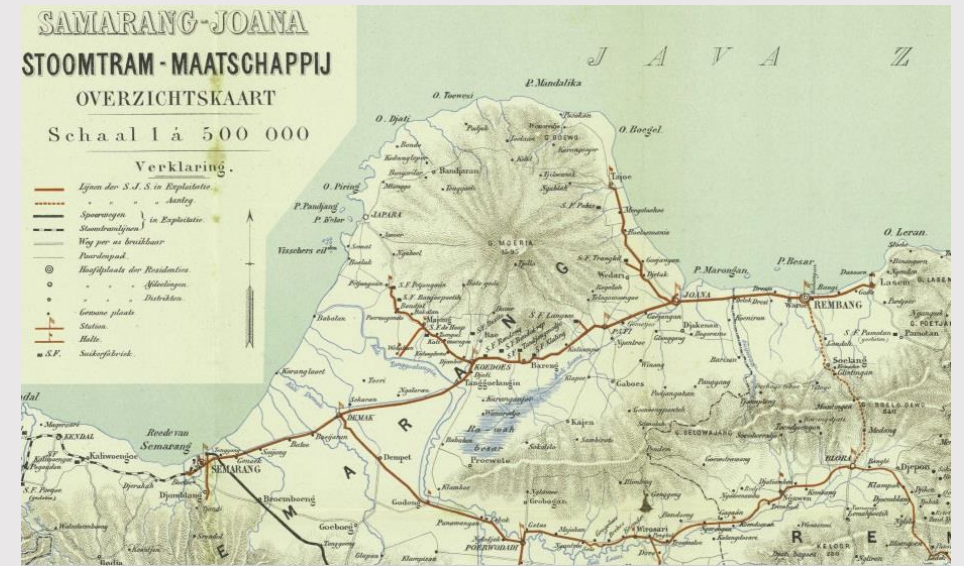
Ambarawa was a military city during the Dutch Colonial Government. On May 21, 1873, the Ambarawa railway station was built.

Ambarawa was the site of Japanese internment camps where up to 15,000 Europeans had been held during the Japanese occupation during World War II.

On April 8, 1976, the Ambarawa Railway Station was officially converted into a museum.

The museum preserves the steam locomotives which were then coming to the end of their useful lives when the 3 ft 6 in (1,067 mm) gauge railways of the Indonesian State Railway (the Perusahaan Negara Kereta Api, PNKA) was closed.

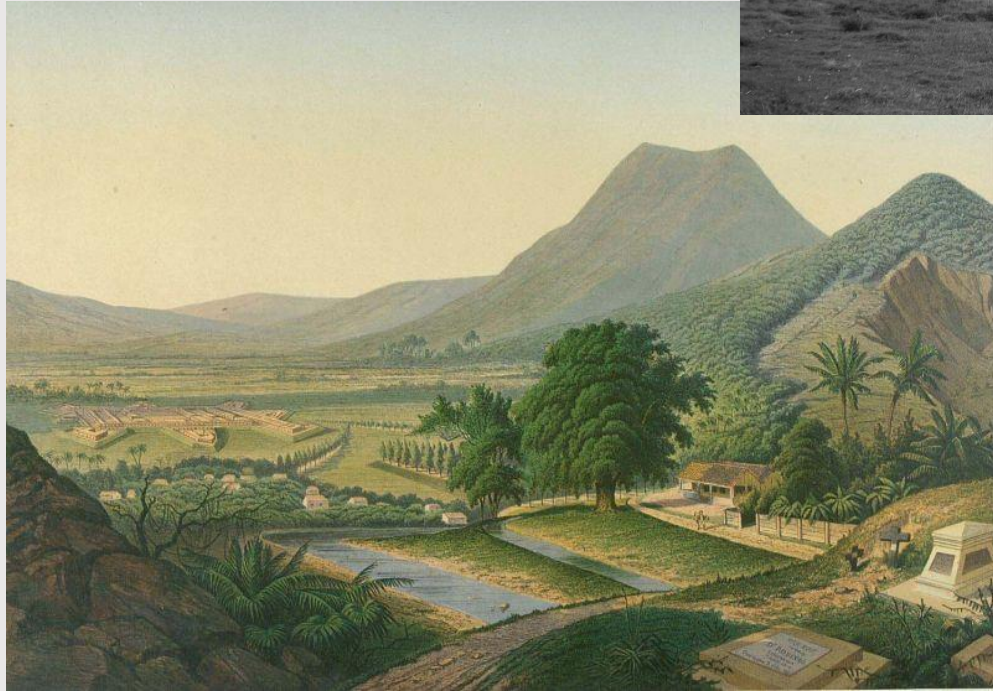
In 2010, the building of Ambarawa Railway Museum was made heritage building.



Source: KITLV



# Historic Urban Landscape (HUL) and Railways Ambarawa



Fort Willem I

Pictures: Tropen Museum





# Historic Urban Landscape (HUL) and Railways Ambarawa



Source: Phinemo



# Historic Urban Landscape (HUL) and Railways Ambarawa





# Stakeholders

Government

State-owned company PT  
Kereta Api Indonesia



Non-government

Indonesia Railway Preservation  
Society (IPRS)



Communities

Indonesianrailways

Indorailwaypicture



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### REFERENCES

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