# The Development of the Land Transports and the Effects on the Role of River in East Sumatera 1900-1942

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Abstract. The location of the ports on the riverbanks was closely related to the river as the main and accessible mode of transport. Through the river, the goods from upstream were brought to downstream to be traded and exported outward, especially to Penang. The goods from overseas were also imported through the river. Therefore, in the absence of land transport, river became very strategic and significant. However, after the presence of plantations, the abundant crops required efficient and effective transportation facilitity, impelling the establishment of land transports such as railways and highways. The development of land transport undoubtedly had certain impacts on river transportation, one of which was that the river transportation was increasingly abandoned for it became ineffective and inefficient. However, there were also several rivers that continued to be an important mode of transport.

# **1** INTRODUCTION

When the expansion of the plantation economy began to occur since the last four decades of the 19th century, many changes ensued in East Sumatra. The expansion had turned the face of East Sumatra from a wilderness into a plantation area, making this area as the most developed areas outside Java which was later known as het dollar landsch (dollar land). These changes were very influential on the pattern of life of local residents, among them was the transportation. River as the main mode of transport suffered a setback in line with the construction of land transports; the highways and railways. The implications of these changes were also very influential on the port as a center of economic activity, government, and culture of the local people. Port as a traditional city then lost ground due to the construction of highways and railways. This was due to economic activity shifting from the river to the land which caused the traditional ports were relatively less needed.

The location of the ports on the riverbanks was closely related to the river as the main and accessible mode of transport. Through the river, the goods from upstream were brought to downstream to be traded and exported outward, especially to Penang. The goods from overseas were also imported through the river. Therefore, in the absence of land transport, river became very strategic and significant. Those who held the hegemony over the river would dominate the economic and powerful advantages. Malay powers in East Sumatra were originally formed due to their hegemony over the river. The rulers took advantage of the import-export duty, the trade monopoly, even the transportation business. This paper will discuss how the state of the river before the presence of land transports, why the development of land transport was needed and how the existence of the river after the presence of land transports.

#### 2 METHOD

The technique of collecting primary and secondary data are conducted through observation or direct survey to research object and searching supporting data to libraries and institutions that are considered to be the source of data, for example the National Archives of the Republic of Indonesia; National Library of Indonesia, North Sumatra Provincial Library and Achives and Tengku Lukman Sinar Library; this stage is conducted to collect archives, books, publications / magazines and other materials

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related to transportation and river. The data analysis method applied is the historical and archaeological analysis method that aims to study and explore facts or experiences and developments of the past by trying to draw conclusions and make interpretations of the data from the event. The main data include data in the form of archives, books, reports, and so forth that most of which are still in Dutch. While supporting data obtained from direct visits or field observations by visiting the rivers in East Sumatra. After the data collection are complete, the next step conducted is to verify the data that have been obtained and then interpret it into a complete writing.

## 3 THE RIVER TRANSPORTATION BEFORE THE PRESENCE OF LAN TRANSPORTATIONS

Before the influx of Dutch colonial rule in East Sumatra at the end of the 19th century, there may not have been such a city as imagined today. If the city can be defined simply as an area that is central to governmental, economic, and cultural activities, then the city at that time was the port. During that time, port was the place where the Malay rulers lived and ruled and was as the center of economic and cultural activity.

In the interest of technical purposes, the term "port city" will be added with the word "traditional" so that it becomes a "traditional port city." There were many "traditional port cities" in East Sumatera, like Tanjung Pura in the Sultanate of Langkat, Labuhan in the Sultanate of Deli, Rantau Panjang in the Sultanate of Serdang, Tanjung Beringin in the Sultanate of Bedagai, Bandar Khalifah in the Sultanate of Padang, Tanjung Balai in the Sultanate of Asahan, and Siak Sri Indrapura in the Sultanate of Siak. The location of the ports generally located on the river banks, either large or small. Thus, Tanjung Pura was located in Langkat River, Labuhan in Deli River, Rantau Panjang in Serdang River, Tanjung Beringin in Bedagai River, Bandar Khalifah in Padang River, Tanjung Balai in Asahan River, and Siak Sri Indrapura in Siak River.

Deli River was the most significant river in Deli. Many people used it as mode of transport. In addition, there were also many residents who built their houses close to the river and carried out their agricultural activities there. The cooperations like trade relations with the overseas countries were also connected through this river (Edi Sumarno, 1998). It was also through the Deli River that the relations between England and Deli were built. It began with Anderson's sailing trip to the upper reaches of the river, an area that no other westerner had ever visited. Shallow coastal conditions forced Anderson to drop anchor offshore and continue on a small boat into the rivers and hike along the riverbank visiting village after village. On January 16 1823, Anderson landed on Deli. In his observations, Anderson noted that, many people had been skilled at making boats and ships in Deli (Anderson, 1840).

Not only visited the Deli, Anderson also stopped off to Sultan of Kejeruan Muda in Langkat, Sri Sultan Ahmat in Bulu Cina, Sultan Besar from Serdang, Bendahara in Batubara, Yang di Pertuan of Asahan, and Sultan of Siak. All these sultanates or regions still exploited river as an important mode of transport. Although there were already paths, river as a mode of transport still held a significant role. Rivers in the southern area for example, a wide and deep river from where many boats or canoes went back and forth to transport commodity products from the hinterland which then bartered to the downstream of the river. Asahan River, Silau River, Bilah River, Kualuh River and Barumun River were among the wide and deep rivers crowded with trading activities at that time. Many residents' houses overlooked the rivers. Apart from being a mode of transport, the rivers were also used as a source of life such as bathing, washing and so forth (Anderson, 1971).

### 4 THE ESTABLISHMENT OF LAND TRANSPORT AND ITS IMPACTS

Transporting with canoes actually hampered the planters for they only managed to ship out a small amount of goods which took a long time and a great cost. This was certainly inefficient for them; therefore, by the end of the 19th century, onderneming parties-built highways. The construction of highways, especially in cultuurgebied, was pioneered by onderneming parties intended for their self-interest. These highways divided in the middle of a plantation to facilitate the planting and shipping of crops. One of the onderneming parties who built their own highway was Deli Maatschappij, which in the 1880s had built a 10 KM road from Medan to Sunggal and a 20 KM road from Lubuk Pakam to Bangun Purba.

The road constructions were then continued by the government. Until 1918, the government had built

more than 500 KM of main road connecting important cities in cultuurgebied. They built a 107 KM road from Medan to Pangkalan Berandan through Binjai and Tanjung Pura, 81 KM road from Medan to Tebing Tinggi, 115 KM road from Tebing Tinggi to Tanjung Balai and continued to the border of Kualuh in Asahan, 22 KM road from Medan to Belawan, 79 KM road from Medan to Kabanjahe, 92 KM road from Lubuk Pakam in Serdang to Seribu Dolok in Simalungun, 53 KM road from Tebing Tinggi to Pematang Siantar, 46,5 KM road from Pematang Siantar to Parapat, and Kabanjahe passed through Seribu Dolok in Simalungun to Lake Toba. In addition, they also built connecting roads with other areas, such as from Kabanjahe to Kotacane, as well as from Parapat to Tapanuli (Broersma, 1992).

The constructions of these highways naturally facilitated the flow of goods in and out; especially the plantations in Afdeling Deli en Serdang no longer had problems to transport the crops which were later exported through the Port of Belawan. This transportation development increased the activity in Belawan for the transported goods kept growing and increasing. It indicated that the constructions of highways did not inhibit the activities in the port because generally when the Dutch colonial government built the highways, the port cities had already suffered a setback.

The Dutch colonial government through the private sector built not only the highways, but also the railway network. The progress and development of transportation forced people to constantly try to find ways how to organize transportation quickly and smoothly. The government had finally developed a railway network that was able to ease the burden in its driving force so as to be able to transport more plantation products. This policy immediately put through the railway companies to take parts in building transportation facilities in the plantation area (Indera, 1996).

The area of East Sumatra became well-known after the government established this area as a plantation area whose crops were then exported to Europe and America. Trains served as main transportations in the rural areas of plantation so as the goods could be placed in ports to be transported by ships. This policy was the answer to the planters need for transportation. The railway network built in the late 19th century aimed to serve the rapidly expanding colonial export and import business (Indera, 1996). The realization of the construction of railway network in East Sumatra initially focused in three areas; Deli, Serdang and Selesei. These areas were very suitable for railway network due to its flat ground condition and were also close to Medan. For 37 years starting from 1886 to 1937, *Deli Spoorweg Maatschappij* (DSM) had built 553,254 KM railway network (Indera, 1996). The construction had very a positive impact on the economic development of the plantation. This positive impact could be seen with the large volume capacity; therefore, it did not have to repeatedly transport the crops which costed a lot of money. On the other hand, the construction also had a negative impact, especially on the development of river transportation which prior to the presence of trains was a key and important mode of transport in East Sumatra.

The expansion of *onderneming* in East Sumatra was pioneered by Nienhuijs who tried to grow tobacco in Deli in 1863. Although initially less successful, the expansion went on a large scale after (Stoler, 2005). In 1873, there had been 15 onderneming; 13 in Deli and 1 each in Langkat and Serdang. This number continued to grow, until it reached 86 onderneming in 1884; 44 in Deli, 20 in Langkat, 9 in Serdang, and 3 in Padang Bedagai (Volker, 1918). The expansion of onderneming in some areas certainly took up a large area and spread out in some areas in East Sumatra. For example, in 1915, the rubbers planted by onderneming took up 103.112 ha. In the same year, they used over 6531 ha of land to plant tea and palm. These figures did not include the land used for tobacco plants and other crops (Edi Sumarno, 2006).

The distributions of land used were not spread evenly. They did not utilize the Northern Langkat afdeling, Sourthern Asahan afdeling, and almost the whole area of Bengkalis afdeling. It was uncertain of why the onderneming party was less interested in expanding into these areas. It was most likely due to the incompatibility of land, climate, and the surrounding for the development of the plantation industry. The uneven distribution of land controlled by various onderneming in various regions had a great influence on the distribution of highway and railway construction. Since the construction of the roads was intended primarily to support the plantation industry, it was only conducted in places where there were plantation areas and buffer zones. Therefore, the railways were not constructed in areas where there was not *onderneming* area or other area that could not manage to support this plantation industry. Thus, in the southern of Asahan and Bengkalis afdeling, the river transportation still held an important role.

The construction of highways and railways in the inland areas and its urgency in support of the growth of the plantation industry had resulted in the role of traditional ports which at the same time were also the center of traditional power, was slowly changing. Only the ports in Bengkalis *afdeling* and Southern of Asahan continued to survive. The other ports suffered setbacks as the "modern" Port of Belawan became the major port in East Sumatra. This happened because many export businesses conducted through this port with supporting facilities such as highways and railways. Along with this, import activity also mostly took place at the same port. From there, the imported goods were then distributed to many areas in East Sumatra (Edi Sumarno, 2006).

### 5 THE EXISTENCE OF THE RIVER AFTER THE ESTABLISHMENT OF LAND TRANSPORTATION

The rapid development of plantations in East Sumatra had an impact on the development of land transportation. The establishment of land transport was the effort from the planters to transport the crops effectively and efficiently. To that end, the planters urged the Dutch colonial government in East Sumatra to build cross-government roads that connected the regions in East Sumatra. The roads were needed considering the fact that the roads built by the planters were merely a road connecting one plantation to another plantation.

The demand from the planters was fulfilled by the government. They built roads from the hinterlands followed by a large highway stretching parallel to the coast from the border of Aceh to Rantau Parapat. The roads stretched from north-south to east-west, from mountains to shore. However, until the end of 1928, some big *onderneming* still did not get the access to the road built by the government; most of which were plantations located in the southern part of East Sumatra. Most of the plantations still shipped their goods by using canoes through Labuhan Bilik Port, by the Bilah River estuaries and Negerilama (Arsip BOW No. 2656).

The southern part of East Sumatra still utilized river as a mode of transport as well, for instance, Merbau River. The river was used to support the ship of plantation goods. The colonial government with the help of the public works agency (BOW) built a pier, a field to pile up the goods and a waiting room with a budget of f 9.855. The construction of the pier was on the banks of the Merbau River that connected tributaries such as Sipare-pare, Pangkailan and Lubuk Rampah. Not only the construction, the government also kept the conditions of the rivers so as not to be shallow and could be traversed by canoes and largescale ships by placing one bagermolen (dredging maching/ mud suction) at each of the river bases (Arsip BOW No. 2656).

From the statements above, it can be concluded that river transportation continued to play significant roles even though the establishment of land transport continued to develop. With the attention of the government who still used the river as a mode of transport, the existence of the river transportation also continued to survive. The reason behind it, especially in the southern region of East Sumatra, was due to its wide and deep river. This was in contrast to rivers located in the northern regions of East Sumatra such as Serdang, Deli and Langkat, where the rivers were not as wide as the ones in the southern region and continued to undergo silting and narrowing, making it impossible to keep using as a mode of transport.

#### 6 CONCLUSION

The development of the plantation business had both positive and negative impacts. The positive impact was the development of more adequate, effective and efficient mode of transports. In addition, with the construction of highways and railways, the distribution of goods was spread more evenly and eventually became a new embryo of economy. Not only the positive impacts, the development of transportation facilities also had a negative impact, especially in terms of the decreasing role of the river as a mode of transport for it was considered ineffective and inefficient. However, although the development of land transport was growing, the role of the river transportation was still maintained, especially in the southern region of East Sumatra. The rivers in the southern area also underwent developments as the government built supporting facilities and infrastructures to ship the plantation goods.

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