

Medan City: Informality and the Historical Global City

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Abstract. As projected by UN that two-thirds of Indonesia's population will live in urban areas by 2050, rapid urbanization is happening in Indonesian cities. Initial research on eight Indonesian Cities (which includes Medan, Jatinegara, Bandung, Surakarta, Yogyakarta, Surabaya, Balikpapan, and Manado) by Tunas Nusa Foundation since 2012 shows that urbanization of each city has happened throughout history creating cultural, economic, and environmental networks that are distinct from one city to another. While the networks remain until today and continuously shapes the urban agglomeration pattern, not all parts of the city could undergo subsequent development that confirms the existing pattern, leading to the creation informality. Nor could it make future planning that comprehends the nature of its integrated urban dynamic beyond its current administrative authority.

In this paper, we would like to share our study for Medan, North Sumatra as it shows a portrait of a city with a long relationship to a global network since the Maritime trade era. Medan has become home to many ethnic groups which have sailed and migrated as part of a global economic agenda creating a strong economic network between port cities along the Malacca Strait. The city has kept its role in the global economic network until today, to name a few, becoming the frontier for the Indonesia-Malaysia-Thailand Growth Triangle. While we celebrate Medan's potential to become a global city with major infrastructure development as well as cultural assets as its advantage in the future, we argue that microscale cohesion supported by government policy in agreed planning documents are fundamental for the city to thrive amidst the challenges it is facing. Yet, these cultural assets, as well as micro scale cohesion in Medan City today, are still undermined. Thus, informality in Medan exists as result of ignorance and marginalization of certain socio-cultural groups, abandoning places and identity, as well as the marginalization of small economic and transactions.

The hypothesis is that the informality within an urban network and the agglomeration pattern in Medan today are evidence of external stimulation in combination with limited micro scale cohesion built throughout history. Using historical timeline analysis, we would like to identify the informality in an urban network and its relation to history. The aim is to understand the fabric of Medan city made by the trans-cultural-economical and environmental network. This study is expected to give the foundation of Medan's character as the basis of her peoples' livelihood and for a better planning/development in the future.



1. Introduction

Medan is the provincial capital of North Sumatera, Indonesia. It is the third biggest city after Jakarta and Surabaya, the largest in Sumatera Island with an area of 265,2 km² and a population of more than two million people. Medan is also known as a metropolitan city with a long history of cosmopolite community since the era of maritime trade at the beginning of the century, which made Medan hold the potential to be a global city. Even before colonization in the 17th Century, Medan has highly diverse residents which consist of Malayan, Batak, Tamil, Chinese, Arabs, Indian, Turks, Persian, Javanese, and European.

The name of Medan, however, was mentioned in around 16th century when Islam started to grow within the Malay Archipelago. Kampong Medan Baru built by Guru Patimpus at the meeting point of Deli and Babura River dated July 1st, 1590 started the formal identity of Medan. However, Deli Port in the estuarine of Deli River, or today Labuan, built by Chinese merchants to relate with their settlement of Kota Cina had predated the name of Medan in the 12th century; while a settlement of the native Batak people had already appeared in the interior of Sumatra near Toba Lake in the 3rd century. Other than that, the global trade network had brought many communities around the world to make a colony along the East Coast and West Coast of Sumatra since the first century, which in turn initiated a robust cultural atmosphere, in this focus, of Medan City today.

Medan gained its status as a city only in 1886 after it became an administrative centre for the Dutch Indies' production system of plantations in East Sumatra within the late colonization era. The rich resources and the wealth it had gained from Medan and its surrounding hinterland subsequently initiated the formal city planning for the importance of Dutch-Indies' representative in Medan City at the beginning of the 20th century.

This paper starts with the premise that Medan was a global city that has been connected to the global economic network since the ancient maritime era. Until today, it holds the legacies of a multicultural community and transnational economic network which spans at least to the extent of Malacca Strait. Yet, we argue that these legacies are potential drivers that are not, yet, well acknowledged and comprehended in the recent development scheme of Medan City. Thus, might raise the opportunity for informality and social issues.

Therefore, the objective of this study is to develop a better understanding of how the global economic network has molded and given foundation to the making of Medan City. The hypotheses are: (1) that the evidence of its connectivity to the global economic network lies in the urban network and agglomeration pattern of Medan City, which represents not just a physical entity, but also social, cultural, and economic cohesion in the making of Medan City; (2) that informality has happened throughout Medan City's formation which also is an evidence of how external factors has been a stimulant to the process. It is expected that this understanding will be a contribution towards better planning and development of Medan City.

2. Understanding the Context of Global City and Informality

2.1. Global City

The concept of a global city has been studied since the 1960s and gained more attention in the 1980s. The concept associates a city with globalization and suggests its significance in a global economy. In short, a global city is a significant production point of specialized financial and producer services that make the globalized economy run [1]. Deriving of what might entail the global economy, [2] points out that through the process of making the world economy, there have long been **cross-border economic processes** - to include within are flows of capital, labour, goods, raw materials, and tourists - in which a global city is considered as the top hierarchy of urban entity in population, networks, and sophistication of services that lead to important implication for economic development.

The criteria of “what makes a global city” is continuously evolving as the world progresses [3]. This suggests that the concept might be applied distinctively for cities in the context of ancient times, cities today, as well as cities in the future. A literature discussing cities in the ancient world suggests global cities as cities ***“where globalization takes place in much more pronounced ways than anywhere else: as economic exchange, migration, communication, technological development and political conflict, as cultures clashing and amalgamating, and also as a violent process”*** [4]. Meanwhile, The Global Cities Index poses five critical dimensions that is used to examine the performance and ranks of cities in relation to the prominence of the cities in the global economy, those are business activity, human capital, information exchange, cultural experience, and political engagement [5].

Sassen has introduced her hypotheses through which she organized the theorization of a global city model. In the hypotheses, she introduces the impact of the growing fortune of the city on the making of new urban territory and social and cultural dynamic. As a city becomes a significant specialized service firm in an economic network, it results in the strengthening of cross-border city-to-city transactions and networks which might be the beginning of **the formation of transnational urban systems** [2].

In relation to the nation-state, the independent connectivity of the city to the global economy, or at the least within the territory of the transnational urban system, might strengthen to the extent of increasingly disconnecting the city from their broader hinterlands or even their national economies. This, however, might happen in the other way around. Sassen suggests that both national and global are mutually exclusive space, yet since the **independent connectivity with the global economy and nation-state, one might begin where the other ends** [2]. Another study suggests that a global city is, however, able to meet the criteria of having far-reaching significance for only certain periods of time which can be short or long [4].

Sassen also suggests that the growing number of high profit-making and high-level professionals contributes to the raise degree of **spatial and socio-economic inequality** evident in the city [2]. **Informalization** is regarded to find an effective demand to survive under conditions in which their profit rates do not allow them to compete with the high-profit making firms at the top of the system. At this point, the growing inequalities between highly provisioned and profoundly disadvantaged sectors and spaces of the city will raise questions of power and inequality.

Sassen concludes that a focus on networked cross-border dynamics among global cities sets a more readily **growing intensity of transactions in other domains, to name it out: political, cultural, social, and criminal** [2]. She adds, *“Global cities around the world are the terrain where a multiplicity of globalization processes assume concrete, localized forms. These localized forms are, in good part, what globalization is about. Recovering place means recovering the multiplicity of presences in this landscape. The large city of today has emerged as a strategic site for a whole range of new types of operations—political, economic, “cultural,” subjective. It is one of the nexi where the formation of new claims, by both the powerful and the disadvantaged, materializes and assumes concrete forms.”*

2.2. Informality

A closer look at informality in urban space is mostly associated with the phenomenon of the process of marginality [6]. The term was firmly established in the early 1960s as an alternative to the functionalist urbanism proposed by the Congrès Internationaux d’Architecture Moderne (CIAM). It came up to address population growth and the rapid spread of spatial contestation along with the loss of certainties regarding the paradigms of urbanism and modern architecture [6]. **Informality is defined as groups of people, economic activity, spatial entity and urban growth process which are considered outside the formal frameworks by those who have power whether in the economy, social and political sector** [6][7].

Other literature state that informality has emerged as a concept in the 1970s and refers to the movement of labour to the city during 1950-1960 in which informality within urban space was often associated with immigrants and poverty which were denied access to wage employment [7]. Informality which refers to certain practices done by groups of people consists of petty traders, street vendors, coolies and porters, small artisans, messengers, barbers, shoe-shine boys and personal servants at alleyways or street sides [7][8]. The constant incoming of immigrants which participate in the trade-sector within urban space contributes to the growth of spatial entity of informality which may consist of informal trade areas that are more dynamic and slum settlements or informal housing areas which were more permanent. Informal settlements often found occupying what is considered 'terrain vague' within urban space, which may consist of interstitial land, marginal use, unmapped land, and/or the land available for change of use [7][8]. The local factor contributing to the growth of informality may consist of economic factor such as in favela, Rio; political factor in most of the Middle East, privatization of lands both in the Middle East and South East Asia and communication revolution in Karachi. However, what is similar in every case of informality in Latin America, the Middle East, and Asia is how globalization is affecting and contributing to the growth and characteristic of informality which is locally based [7].

Lutzoni names out three phases that sets the perspective towards informality. The first phase is between the 70s and 80s with dualist school predominance in which informality is seen as a group of marginal activities excluded from the formal economy. The dualist approach considers informal and formal as two different sets of activities and/or sectors, this stemmed from ILO research in 1972 regarding informality [6][7]. This approach argues that informal sectors growth as the residue of formal activity [6]. De Soto in 1989 argues that informal sectors grow because of excessive state regulation, the foundation of the legalist approach. Both approaches develop another approach regarding the relation between formal and informal. The second phase is during the 80s to 90s with legalist approach and structuralist school predominance in which; respectively; informality is seen as a set of positive forces in a formal context linked with power strategies and considering informality as an integral part of a single system yet referred solely to the economic field. The structuralist, developing its approach also from ILO research, however, while admitting there are formal and informal sectors, argue that those two are part of one system. Thus, their approach proposed that the role of the state was to equalize the difference [7]. The latest perspective is in the debate of the twenty-first century which conceived the relation of informality with globalization processes that are changing the economic, social, and political geography of the world. The relational approach that prefers to put the dichotomous view of informality into the background and explore the relationship between formal and informality [6].

As we list out the perspective towards informality, in the case of this paper, the informality in Medan city might have occurred due to diverse reasons as all paradigms suggested. The issues of informality were not only how to stop it, clean it or even legalize it. **Informality has grown as a way of survival for those which were outside the 'formal frame' and has shown its contribution to the local economy [8].** Or, using the understanding by Wirth (1938) in his essay of Urbanism as Way of Life sets a city as a "place of urbanism", an urban way of life that is no longer a mere physical entity. Urbanism is considered as the outcome of a wider system of relations deriving from variables that determine the urban condition as they interact with each other [6]. This understanding might give the foundation to an alternative point of view towards informality suggesting that the discussion should begin with an alternative way of framing **informality as a concept of hybridity, simultaneousness, and coexistence [6]. Both formal and informal order may both be considered legitimate, simultaneous ways of "making the city" [6].**

Identifying and understanding informality within urban space that grows over time through urban agglomeration is necessary since informality has the organizing logic which has become pervasive as to comprise a way of life in many cities [7]. Borrowing Al Sayyad's questions, the two important

questions to understand informality are ‘what made it happen and what is the form of vulnerability that is being endangered by these processes of informality.

3. Historical Analysis of Medan City

The discussion in this paper will be delivered as a historical analysis framing Medan in four periods of contexts which are: (1) the time of maritime trade and early settlements; (2) the time of the establishment of Islam, colonization, and the city making; (3) the time towards sovereignty to the centralized authority in the context of Indonesia as the new nation; and (4) the time of reformation to the recent era in which cities are taking back its significance in the developing economically, physically, socially, and cultural (from nation-state).

We will start the discussion with the geographical context of Medan in the Malay Archipelago, Malacca Strait, and Sumatra Island as well as the natural context with the richness that drives trade. Deriving from the literature of global city and informality as well as towards the objective of this paper, we will then identify from each period: (1) the context that suggests the driver or stimulant of the situations; (2) actors to suggest subject of cohesion and power contest; (3) urban network and/or agglomeration in the form of settlement of traders, labourers and others, office or administration cluster of firms, plantation and/or production source, ports, waterways and/or roads, railway and stations - to suggest physical evidence of the interactions between actors; (4) network of economy to suggest evidence of economic scale; as well as (5) movement, organization, and conflicts as social evidence of the interactions between actors.

3.1. The Maritime Trade Era and Early Settlements

The Maritime Trade or Spice Route was a trade route known mostly to transfer spices from China to India, Arabia, Africa, and vice versa. It occurred benefitting from the monsoon winds of the Indian Ocean. The route was initially established since 3000 BC and initiated the global trade network until today.

Connecting the Indian Ocean and the South China Sea, the Malay Archipelago was the entry point of China in the East of Asia; and India, Arabia, and Africa in the West. It was also the stop-over point where goods were exchanged in the array of ports. The archipelago itself was well known as the source of clove, mace, paper, nutmeg, cinnamon, baros, camphor, benzoin, and gold.

The gate into the Malay Archipelago was the choke point of Sea of Melayu, today Malacca Strait. A funnel-shaped waterway separates- or connects- the mainland of the Malay Peninsula and Sumatra Island. The Malay Peninsula and Sumatra Island act as a natural barrier separating the Indian Ocean and the South China Sea, creating transit havens for vessels waiting for the change of the monsoon current or to connect with the overland passage trade route through the Malay Peninsula [11]. Sumatra Island, also known as Swarnadwipa which means the Island of Gold, was the place of many traders to settle and establish colonies. Along its East Coast are rivers and lowland estuaries that connect Malacca Strait to the hinterland of Sumatra. Spanning from North East to South East in the almost centre line of the island is the mountain ridge - the source of gold and other forest virtues that gives notion to the name of Swarnadwipa. An enormous volcanic lake named Toba is located in the North portion of the mountain ridge with the drained part of its valley and ancient floodplain bequested to support life. Separated by the mountain ridge, is the West Coast of Sumatra that has been known as the source of camphor, the ingredient mostly used in incense in ancient times. Although part of the East coast was a lowland swamp, its proximity to the shallow waterway of Malacca Strait made it preferable for settlement rather than the West part of Sumatra that faces directly to the Indian Ocean.

When the maritime route was established around the 1st to the 3rd century [10], the strategic situation drove early ports and kingdoms to flourish along the Malacca Strait region. To include the

region within Central Southeast Asia¹, [12] stated Central Southeast Asia as a zone where traders brought spices and forest products in exchange for textiles and other manufacture from China and India.

Until the 15th century, the maritime trade network was self-regulated in nature where the term of trade was set by the merchants and the demands of the market [13]. However, at least within Malacca Strait, the trade was beyond the influence of a kingdom's or empire's policy until around 4th century. With the rise of the Gupta Dynasty in India, the concept of 'Negara' was introduced along with the spread of Hinduism, and subsequently Buddhism [17].

Amongst the earliest settlements was Kota Cina, located at the estuary of Deli river in the West part of Labuan Deli today. It was a settlement of Chinese traders who invited colonies and built a port settlement. At the West Coast, a port named Baros was well known since the early century for its commodity of camphor. Traders from Tamil, Arabs, Persian, and Javanese were involved in trading on the West coast of Sumatra. Later, it was mentioned as the place where Tamil traders established their first trader confederation [18]. Meanwhile, the native of North Sumatra, Batak Karo, was settled at the hinterland around Lake Toba and built their first settlement in 200 AD. Not much influence from foreign traders infiltrated the interior of Sumatra. Only the Tamil people had ventured into the interior.

In the time when Hinduism started to spread, the early Hindu Kingdom in Malacca Strait was probably Langkasuka. Established in 300 ADS in Kedah, it was then followed by Jiecha in 500 AD. The heyday of Hindu - Buddhist kingdoms, brought from China and India, was within the era of Sriwijaya kingdom around the 7th century.

The Buddhist kingdom of Sriwijaya managed to control Malacca and Sunda Strait with the trade activities along the waterways. Sriwijaya actively participated in the growing world economy by positioning itself as the 'Master of the Straits of Malacca' [11]. The kingdom of Sriwijaya was involved in commerce, compelling passing vessels to visit Sriwijayan ports and levying port dues and taxes upon them; while establishing strong economic ties with its giant neighbours, China and India [11].

The kingdom was not just the centre of commerce, but it was also the centre for Hindu and Buddhist learning, with its centre recorded varying between Palembang and Jambi today. A 7th-century Chinese monk I Qing noted the city as the place where more than a thousand Buddhist priests in its monasteries advised pilgrims from China to spend time to master Sanskrit and Pali. Since there were Indian and Chinese monks maintaining these language abilities, there must have been Indian and Chinese commercial communities maintaining the monks. Chinese trading communities are also likely to have helped manage the tributary trade between Sriwijaya and Tang China, which was so important for the commerce of the whole region [12].

In 1000 AD, the Pane kingdom was established at the bank of Pane and Baruman Rivers which generated the East-West trade corridor. Another major kingdom in Sumatra was Aru (Haru) kingdom. It was a Hindu Kingdom established as a Batak Karo polity that drew the hinterland of the Northern part of Sumatra into the network of inter-regional commerce in 1100 AD. It put Kota Cina and today's Deli Serdang Regency under its sovereignty with Kota Rentang which was suggested to be the capital city of the kingdom. In 1300 AD, the port that had been built along with the settlement of Kota Cina became the well-known Deli Port, one of biggest ports which dominated international trade at Malacca Strait. Pane and Aru, together with the kingdom of Aceh, believed to give influence to the current Batak culture. Deli Port in the other part arguably has underpinned economic connectivity that made an initial foundation for the making of Medan City.

¹ “.. it is a place in quest of a more adequate name. It is the Bangkok-Jakarta central axis of Southeast Asia formed by the world's longest peninsula, nearly blocking the shipping route between East Asia and the rest of Eurasia and Africa, the two Straits through which it obliges that shipping to pass, and the adjacent littoral. It is thus a natural place of entrepôts and meeting places, ..”

After the fall of Sriwijaya in 1025 AD, Majapahit was the next political power that managed to rule several states in Sumatra, Malay Peninsula, Borneo, Celebes, Moluccas, to the extent of some part of the Philippine archipelago [11]. Ruling from the tip East of Java Island, by the mid of the 14th century, Majapahit happened to take command of the Malacca and Sunda Straits [30] and gained its wealth from agricultural produce, particularly rice; as well as economic and political network benefitted from maritime trade [11].

By the end of 16th century, Sumatra was the location of many ports with city-states and kingdoms which included; the kingdoms of Pasai, Pedir, and Deli along the East Coast; Tiku, Priaman, Padang and Selebar along the West Coast; while Karo Simalungun and Toba Batak remain in the interior close to Toba Lake.



Medan and its regions under Srivijaya



Medan and its regions under Majapahit

Figure 1. Initial of Medan vicinity during Srivijaya and Majapahit time.

Source: <https://upload.wikimedia.org>

Reid mentioned that it (Central Southeast Asia) remains today what it has been throughout recorded history, one of the most urban-dominated zones of the world [12]. A plural community was shaped along the choke point of maritime trade, in this case, states in Sumatra and along Malacca and Sunda Straits. Cosmopolis was therefore built after successful entrepot in the zone which was governed by leaders themselves, cosmopolitan in culture and able to mediate between groups [18]. Specifically, along the East Coast of Sumatra, the trade ports flourished and, with the trader colonies, its generated cultural innovation through time to become an influence to the extent of South East Asia [18].

Reid suggested that while religion and language separate nations, the spirit of commerce unites them so that the task of cosmopolis is to mediate these two contrary impulses. He added, “the problem for cosmopolis in this part of the world was to find a form of government that would protect commercial communities rather than preying upon them; it so happened that the formula had almost nothing to do with the nation, but much with the supernatural charisma of kingship.” A system displayed by Sriwijaya as it gained its golden time from the charisma of its king who was mentioned as kind and courteous, and cared for all foreigners [18]. Arguably, even when the concept of ‘Negara’ was indicated to be the foundation of Hindu kingdom, Majapahit reached its control over the Malay

Archipelago by Mitreka Satata strategy which means, international relations with friendly countries, to include within were Cambodia, Champa, and, presumably, India.

The interactions associated with trade has underpinned the political system and notion of a cosmopolis society along the maritime road. Represented in Siam, Sumatra, Malay, to kingdoms along Java within what Paul Wheatley called the Isthmian Age, between about 550 and 1400 AD [18]. The name of the period he suggested is to be associated with the importance of little port-states along Central Southeast Asia. Within which, the economic system was run by many traders with the most powerful state as the political power to manage and secure the trade.

3.2. The Establishment of Islam, Colonization, and the City Making

Coinciding with the dawn of Majapahit was the rise of Islam in the Malay Archipelago. The new belief introduced by Gujarati traders began to flourish in the 11th century and subsequently became a new foundation for many kingdoms in the Archipelago. The first kingdom that initiated the formal spreading of Islam was Samudra Pasai. It was located at the tip of North Sumatra with the first king, Marah Silu. He converted to Islam and built a kingdom that lasted from 13th to 16th century. Following and replacing the influence of Samudra Pasai, was the Malacca Sultanate in 14th century located in the Malay Peninsula and Aceh Sultanate in the 15th century. Afterwards, there were the kingdoms of Johor, Padang, Minangkabau, Indragiri, and Jambi. However, none of these kingdoms had immense sovereignty to master the control over maritime trade in the Archipelago as Sriwijaya nor Majapahit.

At the beginning of 16th century, the maritime trade network started to become involved in the dynamic of the world's political and/or economic interest. With the advent of the political turmoil in 15th century Europe brought by the capture of Constantinople by the Ottoman Turks, the Age of Exploration brought the Portuguese to conquer Malacca Sultanate in 1511. This event marked the start of the colonization era in the Malay Archipelago. Following the Portuguese were the Spanish, Dutch, and British that anchored sails and attempted to gain monopoly control over the trade along the Malay Archipelago.

Similar to the competing atmosphere between Europeans who came to the Archipelago, the situation between kingdoms was a power contest amongst each other. Using the circumstances, during the first century of its occupation, each European state tried to make alliances with quarrelling local powers to defeat other European states and gain control over land and/or resources. Until eventually those kingdoms who were befriended by the Dutch and British gained the most control in the Archipelago.

The Dutch wrested power in Southeast Asia after establishing a trading port in Bantam, today Banten, in 1600 Sunda Strait [11]. In 1602 the government of the United Province of Dutch provinces (there was no nation of Netherland yet at the time) created a single entity to conduct trade in Asia on the principle that this would be stronger and more powerful than the sum of the provinces and named it the Verenigde Oost-Indische Compagnie, the Dutch East Indies Company or VOC [19]. To include within the strategy were to expel Portuguese from Spice Island (Banda) and take over Malacca (that was accomplished by 1606). By maintaining good ties with the Johor kingdom, the Dutch succeeded to gain control over both Sunda and Malacca Strait [11]. While Britain maintained alliances with the Aceh Sultanate in the North West of Malay Archipelago; the VOC built the Citadel of Batavia in the North Coast of Java Island, today Jakarta, as the headquarter by which the Dutch managed to grow its power Eastward in the Archipelago.

Nevertheless, none of the European states or enterprises established control over Sumatra until 19th century. Most Europeans came as adventurers and small traders who ran businesses under the administration of the Aceh Sultanate. Monopoly attempted by the Dutch was attempted in Jambi and Palembang but resulted in resentment from the natives. Moreover, the challenging nature of the mountain ridge, dense swamps along its East Coast, and proximity to open water in the West Coast kept Sumatra from pervasive European invasion in the earliest two centuries [18].

Within the period, Deli port and Kota Cina in Labuan was under Aceh Sultanate power. Sultan Iskandar Muda sent his commander, Gocah Pahlawan, to extend the power of the sultanate in the remnant of Aru. Starting from Medan Putri kampung at the delta of Deli and Babura River, Westward from the previous city centre in Kota Cina, Gocah Pahlawan was able to expand the new power to the extent of today's Percut Sei Tuan and Medan Deli districts. He established kampungs under his control such as Gunung Klarus, Sampali, Kota Bangun, Pulau Brayan, Kota Jawa, Kota Rengas Percut, and Sigara-gara with the agreement that the vassal states were to be freed from taxes through marriage with the leader's daughter. The Deli Sultanate finally commenced its sovereignty in 1669 with a capital city named Labuhan, located 20 km East-ward from today's Medan City.



Medan and its regions under Malacca Sultanate



Medan and its regions under Aceh Sultanate

Figure 2. Initial of Medan vicinity during Malacca and Aceh Sultanate time.

Source: <https://upload.wikimedia.org>

Prior to the invasion of the interior of Sumatra, the Anglo-Dutch Treaty of London was agreed in 1824 which settled the Malay Peninsula under British authority and Sumatra Island under Dutch, which divided the Malacca Strait into Britain's at Malay side and Dutch at Sumatra side. Following the agreement, an internal conflict of local kingdoms which spurred the request of support from the Europeans was eventually seen as an opportunity for the Dutch to settle agreements with local powers to safely gain territory. Other than offensive attempts of Padri War in 1830 with Minangkabau, on 1 February 1858, a political contract was signed between the Netherlands Indies government and the Sultanate of Siak Sri Indrapura which brought Siak to come under the rule of the Dutch colonial government. Subsequently in 1862, to include within Siak dependencies, Deli, Langkat, and Serdang were claimed under Dutch territory [20]. With the instalment of Sultan Sjarif Kasim Abdoeldapalit Saifoedin as the new ruler of Siak by Resident Elisa Netscher in 1864, it began the first economic relations between the native rulers at the north-east coast of Sumatra and the Western agriculture industries [20].

Far in Europe, the new wave of the age of reason generated a new motivation for invention and exploration. New commodities were explored, transferred, and introduced between colonies, from the New World of America to the Malay Archipelago, India, Africa and/or vice versa. The invention of the steam engine, and coal fuel marked the beginning of the Industrial Revolution at the beginning of

the 19th century in Europe and soon were utilized in the colonies. The published research by William Marsden about Sumatra at the beginning of the 19th century, armed the exploration towards the interior of Sumatra to find sources of commodities as well as exploring the opportunity for the newly introduced commodity from across the seas by established plantations.

The second half of the century was marked by the opening of the Chinese market, the advent of ocean-going steamships, and the dramatic reduction in the time and cost of shipping goods to Europe after the opening of the Suez Canal in 1869. The operation of the Suez Canal further boosted the growth of plantations and once again made Malacca and Singapore Straits to become the fastest route to connect Europe and the Far East [17].

This period was also marked by the establishment of the biggest wealth that generated Medan as a city later. The Deli Maatschappij established in Labuhan by Janssen, P.W. Clemen, Cremer, and Nienhuys had tobacco as its main commodity, other than coffee and tea, amplified by rubber and palm oil. The modern town Medan owes its existence to the decision of the Deli Maatschappij in 1869 to establish their administrative centre at a location at the confluence of the Barbura and Deli Rivers, about 10 km south of Labuan-Deli, known as Medan Putri [20].

In the last quarter of the 19th century, the development and expansion of the North East of Sumatra were on a quick rise. By 1874, there were twenty-two plantation companies in the North part of Sumatra with Deli Maatschappij remaining the wealthiest. More and more land was conferred from the Sultan of Deli to the Western companies, with headquarters in Europe or the US to the extent that, later on, the urban layout of Medan was mainly developed on the land concessions of the Deli Maatschappij [20].

The latest decade of the 19th century was closed with the invention of petroleum as new fuel for engines. The discovery of petroleum in the East Sumatra Regency was one that initiated the merger of The Shell Transport and Royal Dutch Petroleum Co. Ltd, today Shell company, as well as the new reason for world contesting power to set control over the archipelago in the immediate future of the 20th century.

Around 1880, eleven years after the establishment of the Deli Maatschappij, the embryonic urban grid was recognizable [20]. As much as other town components; such as the Esplanade, barracks of the military garrison, guest house, hospital, church, public auditorium, and colonial club; the urban connectivity of Medan was initiated by the Deli Maatschappij. Chosen for its administrative centre at Medan Putri, it pioneered the centrality of the area agglomerated with the Kampung Kesawan at nearby South in the West bank of Deli river and the main settlement of the Batak region, Sukapiring. Later on, with the centrality of the Chinese community role pioneered by Tjong A Fie, Kampung Kesawan was transformed into a commercial district characterized by the shophouse.

The Deli Maatschappij founded a railway company the 'Deli Spoorweg Maatschappij' in 1883 and in 1885 the railway between Medan and Labuan-Deli was inaugurated with the railway station located on the western side of the Esplanade, Lapangan Merdeka today [20]. In 1886 another railway was established, connecting Medan and the new port of Belawan as well as with the sources of production in the hinterland Southward towards the ridge, Northwest to Langkat, and Southeast to Siak. Passages towards the interior of Sumatra were also established to become the base for road development. This development impacted the shift of water-based transportation to land-based.

The urgency for efficiency and to control migrant labourers, also called coolie, and traders from China, Java, Tamil, Kling, Padang, Arab, and many regions in Asia, the settlers were organized in settlements based on ethnic group. Meanwhile, the centrality of Medan in the growing economy led to the transfer of the administration of Deli Assistance Residence from Labuhan to Medan in 1879, before finally in 1887 the capital of East Sumatra Regency was moved from Bengkalis to Medan.

In May 1891, Deli Sultanate palace was also moved from Kampung Bahari in Labuhan to Maimoon Palace in Medan. Built by the Dutch, as it was presumably a political strategy to maintain control over the local ruler. With the whole administrative and distribution centres operating in Medan, Labuhan was eventually left. Around 1900, the agglomeration pattern of Medan City shows an

organization based on groups of ethnic and social status. The Europeans lived at the northern and western sides of the Esplanade; the Chinese population mainly lived and worked in the commercial district Kesawan and in the adjacent area on the eastern side of the railway; the Indonesian population, separated into the indigenous Malay residents and immigrants mostly of Javanese origin, lived mainly in the so called 'Sultans kampungs' in the South-east area and in kampungs on the outskirts of the town; while the small group of Arabs and other Asiatics, mainly from British India, usually lived and worked on the western side of Kesawan [20].

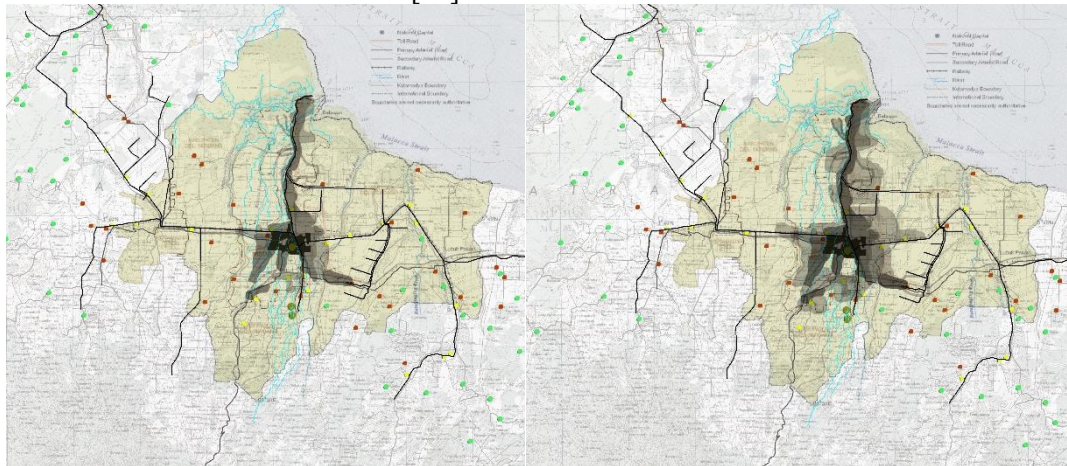


Figure 2. Comparison of Built Area in 1989 (left) and 2001 (right).

In the time when plantations were open, it had contributed to the development of settlement in Medan and the region surrounding it. The backbone of the town layout was formed in the eighties of the 19th century, and it can still be recognized very clearly nowadays. Planters and Chinese entrepreneurs gave birth to the modern city of Medan, in a turbulent process of interaction, in which the colonial administration played a subordinate role [20].

Amidst the development, most of the plantation workers and coolies had no access to land, fair compensation, knowledge, and health services. Prior to Kampong Improvement Program held by the Central Dutch Indies Government, the municipality took steps towards playing an active role in public housing and hygiene starting in 1918 [20]. Yet, with the fast-growing economy and expansion of the kampongs that was difficult to control, the municipal contribution did not make much sense with the limited financial resources and small-scale initiatives. A building model project was developed and expected to drive the kampong people to improve their own housing conditions - an idealistic point of view that was beyond the financial capability of the kampong people [20].

The time when plantations were opened, it was also the beginning of long-lasting impact to future socio-cultural tension. As Sultan of Deli started the land concessions, resistance rose from the inhabitants of the area, mainly Karo. These actions lead to the Sunggal-war from 1872 until 1897 which with the help of the Dutch, the Karo were beaten. On the other hand, although there was resistance among the Batak community in the interior of Lake Toba towards the Sultanate for Dutch authority, the missionary mission was successful resulting in more Batak communities to convert to Christianity as well as become more European educated. As they gained to be more resourceful, many of the Christian Batak communities established residences in Medan City within the first decade of the 20th century (Bruner) giving more diversity at the new urban centre of Medan City after the dominant Malayan, Chinese, Javanese, Tamil, and Arabic. Yet, transmigration policy which started during Dutch period from Java to Sumatra might be another factor that resulted to the increased tension of the socio-culture dynamic.

3.3. *In the Time towards Sovereignty to the Centralized Authority of the New Nation*

Despite the ambitious exploration during the 19th century, the beginning of the 20th century was endowed with ethical ideas of colonization and nationality. Entering the second decade of the 20th century, ideas of nationality and governance lead by common people flourished around the world, concern towards human rights was on the rise, and so was the competition to become the world's superpower. Prepared with a more educated youth within the Malay Archipelago, the occupancy of Japan in 1942 to 1945 finally provided an opportunity for the declaration of independence in August 1945.

However, the long and arduous journey of the Indonesian independence revolution and wars which contributed to Indonesia's independence from the Dutch and Japan caused a considerable amount of collateral damage. The main urban areas of the administrative centre of Dutch colonies were mostly burned; which reduced the available space to live. There were also wounded veterans, previous coolies, and workers which had lack of knowledge, economic capital, and proper health.

Further complicating the situation, the Batak which previously lived in the highland mostly went down to live in the lowland, changing the demographic dynamics in the lowland. As tensions were still high, complicated with the grudge which the mid-low people had with the sultanate family, resulted in the East Sumatra Social Revolution in 1946. During those times many sultanates were overthrown with mass killings of members of the aristocratic families. An armed group performed the purge to eliminate Dutch allies and the feudal social structure. The revolution also aimed to seize the wealth of the sultanate families.

In the early time after independence, Medan and its region were largely ignored. While local government entities tried to educate their people through access to knowledge and art by providing libraries, organized movie screenings and discussions, without support from the main Government at Java Island, the residents were having difficulties in competing with traders and scholars in Java.

During the 1950s to 1960s Medan was known as the capital of pulp fiction with its literature and art sectors flourishing. The influence was found across the Malacca Strait. However, without proper support from the central government, the development halted. Most of its dominant actors either moved to Singapore or to Jakarta, in which they established the textile and film industry. During another flood of LEKRA's, the artisans' organization initiated by a growing socialist-communist party, refugees from Java; the cultural scene in Medan became increasingly political. The army which was already considered important as they supported the literature and art movement, increased its financial support to LEKRA's adversaries to counteract LEKRA's political propaganda.

The Old Order period ended in 1966 with hard to say peaceful terms. Political turbulence that ended the regime was associated with the rivalry between the socialist-communist party, religious extremist, and national military. Not to mention groups from regions that disagreed with centralized political power in Java. After nationalization of assets, to include within were plantation, mine sites, government and administrative offices, the New Order regime began to rule the new nation of Indonesia after a military attempt to turn down the disputes. However, as the new nation was in its beginning to establish unity, it was made into the common idea that communism was to be blamed for all the instability. At this point, the Chinese community was associated with the idea of communism and any attributes that relate the community with their Chinese origin including names and celebrations were repressed.

Medan was one of the urban centres that needed to set development accordingly to the importance of central power. The beginning of the New Order regime marked the shift of the development orientation and centralized the decision-making process to the central power in Jakarta. This suggested the downturn of the potential economic network that local Medan had. Yet, economic and regional development was the core strategy during the 1970s to 1990s. With more exploration towards the forest hinterland, land concessions were continuously handed out. This time, supported by the central government towards economic development with main commodities of palm oil, rubber, and oil. Until today, this has led to the loss of forest area.

As the world economy slowly headed into crisis at the end of the first decade of the 1990s, the mandated leader, Suharto, had enabled his family to build businesses across Indonesia. One of it was the paper industry located near Lake Toba. These industries, along with the plantations which were inherited from the Dutch, contributed to the environmental damage across North Sumatra and further. In addition, the economic policies by Suharto contributed to the unhealthy finance and economy of the nation.

As the crises worsened in 1997, the price of oil and basic needs rose. Students protested in all of Indonesia's major cities; urging the impeachment of Suharto. When this turmoil happened, ethnic sentiment issue was on the rise again (or made for distraction from the impeachment). Once again, the Chinese community was made to be the subject of the sentiment. During that time, Medan was a city with the most Chinese population ratio thus becoming the first city where the riot took place, which then continued in Solo and Jakarta.

The 1998 riots in Medan showed that towards sovereignty and during heavily centralized authority of the new nation, Medan and its region was still heavily affected by global economy changes. The economy still became the rule along with the new authority in the form of the army and local government. Those which had less economic capital, knowledge, and authority, became informal. Most residents which were educated or already having a trade skill, would be able to survive within different rulers and/or condition whether through adaptation or by migrating to Java or Singapore. Those who could not would then continue to suffer. At this time, the term of informal was used to record at least 113 traders and 138 building that were not supposed to exist and were thus 'cleared' by the local government raid in 1998. However, the number raised into 258 informal traders and 503 informal buildings in 2000.

The terms 'illegal occupation' and 'houses without a legal permit' (*wilde occupatie*) were used by Dutch in Indonesia. Thus, the act of 'clearing' 'illegal' vendor and buildings were actually inherited from the Dutch. The period after independence was a period when Medan was trying to configure its identity without Dutch oppression. Limitation in knowledge, economic capital, and government support forced the populace to utilise informality as a way of survival. In Medan, the first phase of informality had started by occupying airfield peripherals and/or behind provincial buildings [9]. After it was fenced, the efforts moved to more private land to avoid eviction by the municipality. There were also cases in where informal settlements were the result of illegal subletting, such as along the railway plots in Medan. The continued efforts found through statistic records of Medan from 1998 until 2016 of eviction, showed that informality was still a means of survival.

3.4. In the Time of Reformation to the Era of Cities

As the big industry plantation industry of mainly rubber and palm oil kept on growing in Medan, the term of informality is meant to address the slum settlements which are associated with micro trading. Based on 2015 data regarding slum settlements across Medan, there are 42 sub-districts in which the government has identified and verified some of its settlements as slum settlements. The government indicator for slums consists of physical and non-physical indicators. The physical indicator consists of building regularity, building density, the physical feasibility of buildings, accessibility, drainage system, clean water, waste and grey water system and fire safety. The non-physical feasibility consists of legality, people density, resident's job, electrical usage, health services and education. Those which lacked in most of the indicators were then considered as a 'very bad' slum. From 42 settlements identified as slum, 18 of them were identified as the worst level of slum which consist of Tegal Sari I, Tegal Rejo, Polonia, Sunggal, Tegal Sari Mandala II, Gedung Johor, Pekan Labuhan, Hamdan, Aur, Labuhan Deli, Gaharu, Pulo Brayan Darat I, Bandar Selamat, Bantan, Belawan Pulau Sicanang, Bagan Deli, Belawan I, and Belawan II.

Informal settlements in Medan today are a mix of informality inherited from the pre-colonial period to the colonial period and the period after independence. Labuhan Deli, Sunggal, and Bagan Deli are

suspected as informal settlements which can be traced back into pre-colonial Medan. Tegal Sari I, Sunggal, Tegal Sari Mandala II, Hamdan, Aur, Gaharu and Bagan Deli are suspected as settlements that were established during the colonization period for plantation activity. Tegal Rejo, Polonia, and Pulo Brayan are informal settlements which is suspected to have been established during the void of formal planning after independence. While the rest of it was established even after there was a formal city planning in 1973.

Those which were established during the pre-colonial and colonial period era are located within the inner city as part of the old and/or main city centre or other parts of the city which has historical significant such as ports and previous plantation area. Most of the settlements located in the inner city will choose to locate near railway or toll/artery road. Those which were established during the void of formal planning after Indonesia's Independence are located near railway/toll road and the periphery of military bases. They are still located within the city, but not close to the city centre. Those which were established after the first formal city planning are mostly located at the periphery of the City, in between urban and rural context, which in the future might be developed into peri-urban.

Most of the slum settlements livelihood are trade, allegedly micro or even informal trade. Physically most of the settlements lack in building regularity, building density, the physical feasibility of buildings, accessibility, drainage system, clean water, waste and grey water system and fire safety. The accessibility has become a problem especially to those which are located at the periphery or port, as they will have difficulty to access basic services which are mostly available at city centres. There are also issues in lack of education, which still needs to be dealt with, as most of the efforts were physical.

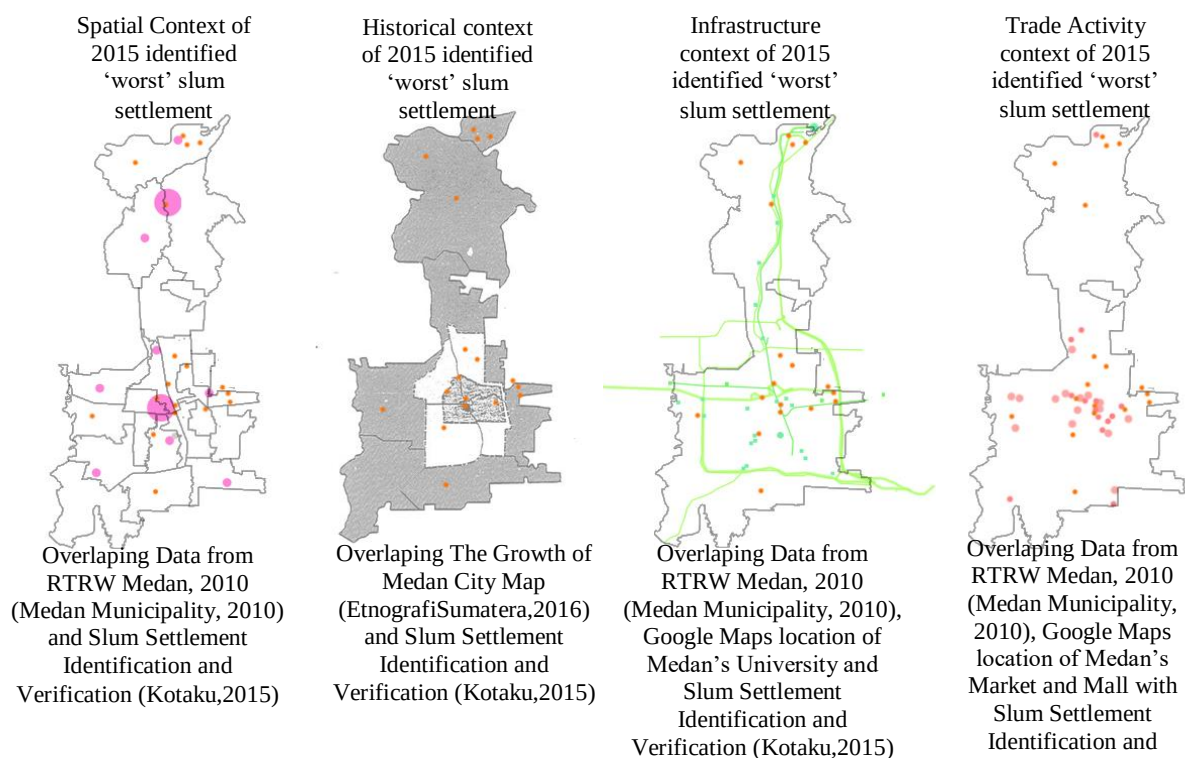


Figure 3. Spatial, Historical, Infrastructure and Trade Activity Context of Identified & Verified Slum Settlements.

While the information regarding settlements is already available, the information regarding informal trade is still lacking. Based on the information from BPS, after 1998 financial crisis and political turmoil, the number of informal trade evicted rose from 115 in 1998 up to 480 in 2005. After another change to the master plan of Medan City took place in 2005, to accommodate the changes of the governance system in Indonesia related to the implementation of the decentralisation policy, the number further rose up to 710. The increasing number of evicted informal trading might also be related to the increase of oil and gas price as the result of the policy to decrease the oil and gas subsidy. At the second half of the period the number kept on fluctuating between 42 up to 383, while the number of market stalls kept on increasing; suggesting informal trading still flourishing, even after several high-end malls were constructed and operating after 2013.

The result of USAID's quick field survey report in 2000 suggested that informality in the form of trade might be one of the factors which made Medan easily bounced back from the 1998 financial crisis. While the 1998 financial crisis contributed to the high level of unemployment in Medan, it also created new groups of educated unemployment. This group had more knowledge and social capital which benefitted them to get another job or to open their own business which started small and might be informal. The formal jobs they have consist of working in Indonesian Bank Restructuring Agency, insurance agent, electrical industry, automotive industry, developer, contractor, service such as wartel and vehicle rent, trade and renting. The rest of them worked in the informal sector until they managed to either build their own business or were accepted on another formal job.

4. Conclusion and Recommendation

Informality in Medan City evolved along with its long history and development with the economic aspect as the main driving force that was shown consistently throughout history. In terms of its early connectivity with the global economy in the pre-colonial or maritime trade era, there was no such dichotomy as informality as something that happened beyond the formality. As the economic activities were performed within the independent city-state, the activities of trade and subsequent result of the growing economic network, such as the emergence of settlements, were taken as a simultaneous way towards growing prosperity. During this time, the Cosmo polis characterized by a plural community was to be celebrated. In some early kingdoms; to name a few Siam, Majapahit, Sriwijaya, and Malacca; the plurality even adhered into the social and political organization.

In the burgeoning economy during the colonization era, the land concession made by the local ruler and aggressive investment by foreign firms driven unjust sharing of prosperity between ruler, planters or traders, and labours led to social conflict. Even when formal city planning effort was held in Medan City, it remained as an insufficient support relative to the economic development that has driven the urbanization. However, similar to other South East Asian countries, Medan's current informality was the by-product of Dutch colonialization and Dutch legacy in urban planning. Tracing back to the pre-colonial history of Medan, informality found now might be a reestablishment of the way of life before colonialization. An irregularity which might have had some regularity and rule within it. While opportunities and life difficulties during the void period after independence and before formal planning was established, new informal settlements and trades emerged to survive. Similar with informality emerging after the 1998 financial crisis which at the end has proven to be a safety net and a way for economic survival.

As [2] stated that the potential of a global city lies on its transnational network, that a city might form its own urban system, Medan shows the similar character as Sassen's statement. Its connectivity with, mainly, Malacca straits economic network built since the ancient maritime time remains thriving until today. Yet, as it also said that its connectivity to the independent urban system might dim its dependence to the nation-state; or vice versa; seems to be occurring to Medan as well. Moreover, the ignorance of this potential might become a threat to the relationship of Medan and Indonesia as its nation-state.

However, informality might give an opportunity for small or abandoned sectors to survive. With the diverse community of Medan that also has a long historical potential, informality might be a potential glue for the society. Last, as the recommendation, we argue that within the new form of globalization and the rise of importance of the city, emerging informality might be used as the indicator for urban or city planning to succeed.

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