

History of Fire Management in Medan during the Dutch Colonial Period

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Abstract

Fire is a disaster that often occurs anywhere regardless of place and time, especially in areas with dense residential concentrations such as urban areas. Therefore, handling fire disasters is an important thing to be done properly so as not to cause casualties and minimize the damage that can result from the fire. Medan during the Dutch colonial period was a city with quite rapid growth in it, especially at the beginning of the 20th century. The increasing number of residents and buildings that stand in Medan is certainly a potential for situations that can cause a fire disaster at any time. Therefore, to be able to provide a sense of security to the residents of Medan from the threat of fire disasters, the Medan City government at that time formed a fire department in 1907 to be able to cope with any fire disasters that would occur in the middle of the city. The fire extinguishers in Medan during the Dutch colonial period certainly had their own challenges and methods based on the conditions and technology at that time in an effort to extinguish every fire that existed. This paper discusses how to handle fires carried out by the Medan City fire department during the colonial period. How to see their ways in anticipating fire disasters and see what resources they have in supporting their work to extinguish fires in the middle of Medan City at that time.

Keywords

fire disaster; medan city; dutch colonial



I. Introduction

Indonesia's National Development aims to create a prosperous and just society; however, in order to realise these objectives the government strives to make various policies and development programs which are oriented either towards village development or towards city development (Badaruddin et al, 2020). Kariono et al (2020) states that in this era of development, local wisdom cannot be separated from the socio-economic demands that must be met. Development is a long-term educational process that uses systematic and organized procedures that managerial study of conceptual and theoretical knowledge to achieve general goals (Thoha in Sulasmi, 2020). Development according to Suprianto as quoted by Mankunegara (2003) is an activity to improve the ability of employees by increasing knowledge and understanding of general knowledge including increasing mastery of theory, decision making in dealing with organizational problems. (Ridwan, F. et al. 2020)

An urban area is a densely populated area that has a high potential for fire disasters. Fires that often occur in urban areas are usually caused by human negligence itself which begins as an electric short circuit, stove explosion and other activities related to the use of fire (Widiyana Riasasi, Fitria Nucifera, 2019). The development of urban areas is highly correlated with the increasing potential for fire disasters. Several things that caused it all,

such as the increase in population which is also directly proportional to the increase in the number of residential buildings and not matched by the existing land so that people choose to occupy areas that are prone to fire disasters such as buildings that are close to each other (Widiyantoro, 2016).

The condition of Medan City during the Dutch Colonial period had problems with population growth and the increase in the number of settlements and buildings. It can be said that the city of Medan at that time also had problems with the level of fire disasters in the middle of the city. As a result of the success of the tobacco plantation business in the Deli area, the Medan community continues to grow with the arrival of people from outside Medan. Recorded in 1900 there were a total of 12,724 people and increased to 36,180 people in 1915, all of which consisted of indigenous people, Europeans and foreigners and other easterners (Alamsyah, 2019). As a result of this situation, the center of Medan at that time in the Kesawan area and its surroundings contained many buildings such as houses, shops, hotels, cinemas, markets etc. It should be noted that Medan at that time also contained slums in some suburban areas. Slum houses themselves have a tendency to be prone to fire disasters due to building conditions that are usually not sturdy and made of flammable materials (Evans Oktaviansyah, 2012). In the early years of the twentieth century Medan experienced frequent fires, one of them in 1904 as reported in the newspaper that 2 shops burned in the city of Medan and several other fire cases (Deli Courrant, 06-01-1904).

II. Research Methods

This research uses historical research methods with various stages carried out, namely heuristics, verification, interpretation and historiography. The data used was obtained through literature study, by collecting primary data such as archives and monographs of the Dutch colonial period regarding the Medan fire department. In addition, this study also conducted data searches in various libraries in Medan City such as the University of North Sumatra Library, Medan State Library, North Sumatra Province Library and Tengku Luckman Sinar Library to obtain books and scientific publications similar to the topic of research discussion. The data collected is then verified, interpreted and written down.

III. Result and Discussion

3.1. Fields and Fire Disasters in the Colonial Era

After the success of tobacco plantation businesses in the Deli area, which was then followed by the changing of Medan as the administrative center of the Residency of East Sumatra and the center of the economy, this had an impact on the development of Medan in many ways. Something that is clearly visible from the development of Medan itself is the increasing number of residents followed by the increase in the number of settlements and buildings. In addition, many infrastructures and public facilities were also built such as roads, transportation facilities, health facilities, etc. (Sinar, 1999). The situation of Medan City at that time could be said to be a fairly developed urban area during the Dutch colonial period. As is the case in urban areas which continue to experience an increase in population, the possibility of disasters will be even greater. Especially fire disasters. The fire disaster itself is actually closely related to human existence, especially in dense areas. The high level of activity of the urban population becomes a big potential in the occurrence of fire disasters (Widiyantoro, 2016). If you look at the activity and density in Medan, of course the

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settlements. In addition, if you look at slum settlements in Medan, it will not be difficult to find them in other areas of Medan. The high level of activity of the urban population becomes a big potential in the occurrence of fire disasters (Widiyantoro, 2016). If you look at the activity and density in Medan, of course the Kesawan area is a place that is the center of the economy or the heart of Medan City. Many buildings stand there such as hotels, restaurants, shops, cinemas and dense settlements. In addition, if you look at slum settlements in Medan, it will not be difficult to find them in other areas of Medan. The high level of activity of the urban population becomes a big potential in the occurrence of fire disasters (Widiyantoro, 2016). If you look at the activity and density in Medan, of course the Kesawan area is a place that is the center of the economy or the heart of Medan City. Many buildings stand there such as hotels, restaurants, shops, cinemas and dense settlements. In addition, if you look at slum settlements in Medan, it will not be difficult to find them in other areas of Medan.

Fire disasters in urban areas usually burn existing buildings such as houses, so the level of safety or anticipation of existing buildings is closely related to how large a fire disaster can occur and the possibility of minimizing the occurrence of fires is very decisive (Asmaniprojo, 2008). In fact, Medan during the colonial era was a city that did not completely have buildings of good quality in terms of health and safety. From 1911 to 1929 the City Building Supervision Service noted that more than 700 buildings did not have a feasibility standard in the city of Medan (Suprayitno, Sinuhaji, Alamsyah, 2020). From this data, we can again see how the potential for fires in buildings in Medan City at that time was.

During the period 1918-1926, based on the Medansche Vrijwillge Brandweer report which can be seen in table 1, there were 33 cases of fires that occurred in Medan during that period. If you look at the location of the incident, Kesawan is the area with the most frequent fire cases. Actually this is not surprising because as previously explained that Kesawan is the most densely populated area in Medan. In addition, other places such as locations on the streets mentioned such as Jalan Antara, Jalan Petisah, Jalan Kereta Api and others are still a core part of Medan City. For the Padang Boelan road, it is actually a road that leads to the suburbs where there are villages there and the village areas in Medan at that time became an area that seemed quite risky to fire disasters. In addition, it seems that buildings that can be said to be large at that time such as hotel buildings and movie theaters were not spared from the fire.

Table 1. Fire Cases in Medan in 1918-1926 (Source: Verslag Betreffende De Gemeente Medan Over Het Jaar 1918-1926 Medan, Varekamp & Co.)

Year	Number of Cases	Location
1918	3	Medan Hotel, Jalan Istana, Station Complex.
1919	9	Gg Mantri, Padang Bulan Street, Cremer Street, Pasar Baru, Petisah Street, Antara Street.
1920	3	Masjid Street, Kesawan, Deli Proof Station.
1921	3	Kesawan (6), Hongkong Street, Tjong yong Hian Street
1922	2	Kruger Street, Emma Street.
1923	1	Jalan Padang Boelan
1924	6	Kesawan, Railway Road, Masjid

		Street, Padang Boelan Street, Medan Hotel, DSM Complex
1925	1	Tjong Koen Tat Cinema
1926	5	Shanghai Road, Palace Road, Bitch Rivet, Railway Road, Petersbrug . Road

The question that arises regarding the cases of fires that often occurred in Medan at that time was what caused the fire itself. Because as previously explained, the fire disaster is closely related to the activities of the community itself. Some of the causes of fires can be divided into 3 things, the first is electrical installation, and namely how to use electricity that is not safe, second is cooking utensils such as stoves using gas and oil, and then third is the behavior of householders who often neglect their daily lives. Related to the use of fire such as candles and other flammable materials (Ramli, 2010). The cause of fires like this is something that is often found in cases of fires in Medan during the colonial period.

In several cases of fires that occurred in 1919 it was stated that negligence in the use of gasoline was the main factor in the occurrence of fires that year. In 1920 one of the cases of fire that occurred was caused by a high-voltage electric current and in 1921 carelessness in throwing away matches and using iron became several causes of fires (Verslag Betreffende De Gemeente Medan Over Het Jaar, 1919-1921). From the available data, it can be seen that the cause of the fires that often occurred in Medan during the colonial period. The factor of human negligence is the main factor in the occurrence of existing fires.

3.2. Fire Handling and the Establishment of the Colonial Field Fire Fighting Unit

Handling fires is an important factor to protect the city from blazes because improper handling of fires is one of the factors that cause large fires (Dragan, Dane, Vladirimir, 2012). This work is not something that can be done simply, therefore many cities in the world have formed their own fire brigade units to be able to deal with fires that may occur in the community. In this case, the government, especially local/municipal governments, has an important role in making policies, especially the formation of firefighting units and various facilities that can support their duties.

To be able to provide a sense of security for the cities that existed at that time, the Dutch Colonial Government gave permission for each local government to create their own fire unit and this was also related to the decentralization policy which began to be implemented in 1903 where every local government was given the right to regulate their respective territories autonomously. The fire fighting unit in Medan was formed on March 5, 1907 based on the decision of the Afdelling Council (Afdellingraad). The Medan fire department is under the orders of the Afdelling Council but since Gemeente Medan was formed in 1909 this fire department has been under the Gemeenteraad (City Council) and this fire fighting unit is named Medansche Vrijwillge Brandweer. Previously, the fire department itself had existed since 1887 in the East Sumatra region. however, the fire department was under the direct control of the Residency of East Sumatra (Wellan, 1912). So it can be interpreted that the establishment of a special and separate Medan fire department is an effort to maintain Medan as the center of government and the center of the economy in East Sumatra.

The Medan City fire department is led by a commander and assisted by a secretary and several brandmeesters. each brandmeester has its own representative. Each brandmeester leads a group with one fire fighting vehicle which is placed in several posts located around the Medan area. There are six locations that serve as the location of each group of

firefighters. The first is located on Lieutenant street, Soekamoelia, Oude Mark or old market, Vleeschmark or meat market, Pakhuisweg or warehouse street, and the last one is Calcutta street. In addition, there was also a group that took care of the stairs to facilitate the work of firefighters (Verslag Betreffende De Gemeente Medan, 1923). The placement of six fire fighting groups in several areas of Medan seems to be a strategy used to work efficiently. Each group occupies their respective post and is expected to be able to handle fires in their area without having to wait for other groups to come. If the fire department is only in one location, it will certainly take a long time to reach the location of the fire so that fire management is not carried out efficiently. The fire stations guarded by each group seem to have been really calculated based on the area they really want to cover from fires. The division of the task area for each group is as follows: Each group occupies their respective post and is expected to be able to handle fires in their area without having to wait for other groups to come. If the fire department is only in one location, it will certainly take a long time to reach the location of the fire so that fire management is not carried out efficiently. The fire stations guarded by each group seem to have been really calculated based on the area they really want to cover from fires. The division of the task area for each group is as follows:

1. The first group was led by Brandmesster FW Dijkman. The post is located on Jalan Lieutenant and the area that becomes the assigned area is the southern part of Medan, east of the railroad, in the north it is bordered by Jalan Bali and in the east by Pacuankuda and Jalan Wilhelmina.
2. The second group led by Brandmesster JP Hellinx. The post is located in Soekamoelia and the task area is the territory of the southern part of Medan, west of the railway line, is bounded to the north by the Oude Markt or the old market and Jalan Tepekong and to the west by the Deli River.
3. The third group led by Brandmeester H. Zietlin. The post is located in the old market or Oude Markt with the task area being the northern part of Medan, west of the railroad, in the south bounded by Oude Markt and Jalan Tepekong and in the west by the Deli River.
4. The fourth group led by Brandmeester WF Michielsen. The post is located in Vleeschmark or the meat market with the duty area being the eastern part of Medan, in the north bounded by the Raceterrein/race track and Malakastraat, in the south by Masoem City and in the west by Jalan Wilhelmina.
5. The fifth group led by Brandmeester LF Van Hell. The post is located on Pakhuisweg or Jalan Gudang with the duty area being the northern part of Medan, east of the rail, in the south it is bordered by Jalan Bali, Raceterrein/trajectory and Jalan Malacca.
6. The sixth group led by EH Gerritsen. The post is located on Jalan Calcutta with the duty area being the Medan Section, west of the Deli River.

For the Medan Fire Brigade personnel every year the commander recruits several people to become members because in fire fighting operations, not a few people are needed, especially to hold hoses and operate water sprays. Each eligible member will be accepted to join the Medan City Fire Department and they are only given one year of work time before a decision will be made on whether they will be extended as firefighters in the following year. Because work as a firefighter is a dangerous job and quite heavy, the criteria for personnel who are allowed to join are not more than 45 years old.

In addition to firefighters, the role of the community in efforts to handle fire disasters is important because basically the community is a partner for firefighters in efforts to prevent and handle fires. There are eight levels of community roles in fire management namely manipulation, healing, providing information, consultation, appointment, partnership, delegation power and control of society (Hadi, 1999). Involving the community is one way that the Medan Fire Department does. In fire handling procedures, the community has a role

as a provider of information to the firefighters. When a fire occurs, the community is expected to be able to quickly press the fire alarm and immediately call the firefighters which is usually carried out by high-ranking officials or ethnic leaders or community groups around the incident area. The fire brigade commander himself is required to be able to communicate with every leader of the existing community groups, whether from indigenous groups, Chinese, Orang Keling and other groups (Wellan, 1912).

One of the important things in supporting the work of firefighters is the availability of water sources. The water used is flowed through hydrants which are usually made on the corners of city streets. For water needs, the Medan Fire Brigade was provided by a water company in Medan at that time called Waterleiding Maatschappij Ajer Beresih. This water company is a private company that is required by the government to be able to provide water for hydrant facilities as well as provide several hydrants throughout Medan for free. In 1930 this water company had installed 227 hydrants and 305 were directly owned by the city government (Jaarverslag Der Waterleiding Maatschappij Ajer Beresih, 1930). The large number of hydrants in Medan at that time showed how the Medan City government was very serious in dealing with fire disasters. The presence of this hydrant will certainly greatly facilitate the work of Medansche Vrijwillige Brandweer in every task of extinguishing fires.

In addition to the need for water, the equipment used by firefighters is an important factor in supporting the performance of firefighters in the field. In general, the equipment technology used is very simple based on technological developments at that time. For the most important equipment, namely the fire pumps used in Medan are made in the Netherlands because 80% of the market for fire pumps for the Dutch East Indies is owned by them. The pump engine used is a pump that is driven by steam power to be able to shoot water strongly. The engine is placed on top of a four-wheeled vehicle and is usually pulled by horse or propulsion engine. (Bikker&zoon, 1915).



Figure 1. Medan Fire Pump Steam Pump (Source: A. Bikker&zoon, 25 Jaar Brandspuitmaker 1890-1915, IMMIG, 1915)

The management of the fire disaster in Medan during the colonial period seemed to be running well, this can be seen from what the city government had done with the fire brigade that existed at that time. Organizationally, the fire department was able to run well by organizing all its personnel to several points to cover the entire Medan area. In addition, the support provided by the city government such as equipment and other supporting facilities such as hydrants and water was very helpful in handling fire disasters at that time.

IV. Conclusion

The problem of fire disasters in urban areas has become a problem that was handled seriously by cities during the Dutch colonial period. Handling the fire disaster in Medan as an advanced colonial city in its time can illustrate that the Medan city government is very serious about providing a sense of security against fire disasters. Many things are done, such as forming a fire fighting unit, establishing fire handling support facilities such as hydrants, which are a form of seriousness. That fire cases still occur almost every year is indeed a difficult thing to avoid because basically fire disasters are caused by the behavior of the people themselves.

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References

- Alamsyah, Deo Widika. (2019). *Waterleiding Maatschappij Ajer Beresih 1905-1942*, Medan, Fakultas Ilmu Budaya USU
- Bikker., Zoon., (1915). *25 jaar brandspuitmaker 1890-1915.*, immig.
- Dragan. M., Dane. N., Vladimir. J., (2012) *Fire and Rescue Service in the World: Status And New Challenges*, *Riešenie krízových situácií v špecifickom prostredí*, *Fakulta špeciálneho inžinierstva ŽU, Žilina*, 30. - 31. *Deli Courrant*, 06-01-1904
- Hadi, Sudharto P. (1999). *Peranserta Masyarakat dan Keterbukaan Informasi dalam Proses Amdal*. Makalah pada Seminar Partisipasi Masyarakat dan Keterbukaan Informasi dalam Proses Amdal. Jakarta 3 – 4 Pebruari 1999.
- O.Evan. (2012). *Penataan Permukiman Kumuh Rawan Bencana Kebakaran Di Kelurahan Lingkas Ujung Kota Tarakan.*, *Jurnal teknik sipil perencanaan.*, Vol.14 No.2
- Ramli, Soehatman. (2010). *Petunjuk Praktis Manajemen Kebakaran (Fire Management)*. Jakarta: Dian Rakyat
- Riasasi. W., N. Fitria. (2019) *Kesiapsiagaan Bencana Kebakaran Masyarakat Permukiman Padat Penduduk Kelurahan Pringgokusuman Kota Yogyakarta*, *Prosiding Seminar Nasional Geotik*. ISSN: 2580-8796
- Ridwan, F. et al. (2020). *Strategy for Development of Ecological Citizens by Walhi Yogyakarta through Community-Based Education in Communities Gunung Sewu*. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. P. 1095-1104.
- Suprayitno., Sinuhaji. W., Alamsyah., D. W., (2020). *Public Housing in Medan during the Dutch Colonial*. *Konfrontasi Journal: Culture, Economy and Social Changes*, 7 (3), 217-227 ISSN: 1410- 881X, 2716-2095
- Sinar, Tengku Luckman. (1991). *Sejarah Medan Tempo Doeloe*. Medan: Perwira
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1919*, (1920). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1920*, (1921). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1921*. (1922). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1922*. (1923). Medan, Varekamp & Co.

- Verslag Betreffende De Gemeente Medan Over Het Jaar 1923. (1924). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1924. (1925). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1925. (1926). Medan, Varekamp & Co.
- Verslag Betreffende De Gemeente Medan Over Het Jaar 1926. (1927). Medan, Varekamp & Co.
- Wellan. J.W.J. (1912).Verzameling van reglementen en keuren van politie in de residentie oostkust Sumatra. Hallerman.
- Widyantoro, B. A. (2016). Analisis Tingkat Resiko Bencana Kebakaran Di Kecamatan Mariso Kota Makassar Berbasis Sistem Informasi Geografis (SIG), Plano Madani: Jurnal Perencanaan Wilayah dan Kota ISSN Print: 2301-878X ISSN Vol. 5, No.1
- Zes En Twintigste Jaarverslag Der N.V. Waterleding Maatschappij Ajer Beresih Te Amsterdam. (1930)