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## Driyorejo Market Analysis Based on Environmental Health Principles and Supporting Infrastructure

Tiara Indrawati Sumarno<sup>1</sup>, Achmad Syafiuddin<sup>2</sup>, Eka Mayluna Kencana<sup>3</sup>

<sup>1,2</sup> Universitas Nahdlatul Ulama, Surabaya, Indonesia

<sup>3</sup> Puskesmas Driyorejo, Gresik, Indonesia

Coressponding Author. E-mail:

<sup>1</sup> tiaraindrawati048.km19@student.unusa.ac.id

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### Abstract

The market is a place for public to meet and the occurrence of relationships between individuals, in the market there are various kinds of buying and selling transaction activities and it is also a meeting place for many people so it is very vulnerable to the transmission of various diseases. The Driyorejo Market which is located in the Driyorejo District area is not included in the category of healthy markets that have market sanitation that meets health standards. Purpose of this study aims to describe the level of sanitation at the Driyorejo market in 2022. This research is a quantitative study conducted on March 21, 2022. The focus of the variables studied are location, market building, sanitation, sanitation management, community empowerment and behavior clean and healthy living, security and supporting facilities by utilizing market sanitation inspection instruments. The research results show that 2022 Driyorejo Market Sanitation does not meet the requirements. Driyorejo market sanitation does not meet the health standard requirements of healthy market sanitation.

**Keywords:** Market, Sanitation, Inspection

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## INTRODUCTION

The market is a place for buying and selling transactions by sellers or producers to consumers in fulfilling their daily needs, the market is used as a place to carry out various activities that involve many people which are carried out directly (Umaroh & Kurniawati, 2017). The market is also a means that can help trading activities in the community (Arianty, 2014). As a place where many people meet and where various activities occur, it is hoped that a clean and healthy environment will exist. A healthy environment is not only in residential areas, but also in places where people do work such as offices, entertainment venues and other public facilities including markets (Roat, et al., 2019). Public settlements like this are the capacity of the environment which should be healthy and provide comfort (Fibrianti, et al., 2022).

The market as a public facility that has facilities and amenities has the potential for cases of the spread of various diseases as a result of an unclean environment (Fatmawati, et al., 2018). Markets also have greater potential for the spread of various diseases and viruses compared to other public facilities (Widodo, 2020). The market as a gathering place for many people and sometimes it is also crowded, often causes various health problems (Girsang, et al., 2020). A person or community should have awareness and concern for the health of the environment which is used as a place for public activities, this aims so that people can get a healthy, clean environment and can achieve optimal health standards (Husnia & Megatsari, 2020). However, in reality, data found that there are still many markets that do not have good sanitation, which will cause various diseases that can be transmitted to humans.

The lack of maintenance of the cleanliness of the market environment as well as sanitation and health standards that have not been optimally implemented, thus making the market a public facility with high potential for transmitting diseases that endanger the community (Girsang, et al., 2020). There are several types of diseases that have the capacity to emerge from the market, such as diarrhea and cholera, which are correlated with poor sanitation (Arrazy, 2020). Sanitation is a way to do this by prioritizing attention to environmental health. Sanitation is an effort to maintain health in the community by carrying out supervision from various sectors such as the

market environment (Rauntu, 2021). Sanitation is a method that is used to protect a person, both from consuming food, in the workplace and from pollution caused by bacteria (Nafita, et al., 2022). Then what is meant by market sanitation is an effort made to pay attention, be persuasive, control and manage environmental quality against the transmission of various diseases (Bili, 2021). Sanitation in market areas is important to be prioritized for attention from various parties and circles, because that is where buying and selling transactions such as direct use of goods and services are (Gusti, 2020). The ideal market sanitation is: 1) market location (according to the general spatial plan, not located in a disaster-prone area, not located in an accident-prone area, not located in a former landfill area, and has clear boundaries), 2) has market buildings (arrangement of trade space, management office space, places to sell groceries and food, parking areas and construction), 3) have market sanitation (clean water, bathrooms and toilets, waste management, drainage, hand washing areas, food quality and foodstuffs, and market disinfection), 4) clean and healthy lifestyle, 5) market security and 6) other facilities (Nurchahya, 2014).

The Driyorejo market is also not spared from market sanitation inspections which aim to see the quality of the health of the healthy market. Sanitation in the market environment is an important variable in efforts to deal with it by including monitoring and measuring the impact of the market, as well as disease transmission (Nabila & Mandagi, 2021). From the results of observations made by the author at Driyorejo Market, it was found that the market environment was still poorly maintained in terms of sanitation, as seen from the large amount of accumulated garbage and the large number of flies, the absence of hand washing facilities, clogged sewage channels and the large number of standing water in the area. market. The health inspection of the market area is carried out by environmental health officers using the Market Sanitation Inspection Instrument obtained from the Gresik District Health Office. The purpose of this study is to obtain data regarding the sanitary condition of the Driyorejo Market in 2022.

## METHODS

The type of research applied in this research is quantitative research. Quantitative is

data in the form of numbers, from this data the researcher will be able to interpret and provide analysis (Muhson, 2006). Quantitative research is by analyzing data and is factual and has the aim of abstracting the findings from the research data conducted (Abdullah, 2015). Quantitative research was applied aiming to describe the sanitary conditions of the Driyorejo market in the Driyorejo District area in 2022.

The location of this research was carried out at the Driyorejo Market which is in the Driyorejo District area. Location of the Driyorejo Market as seen in Figure 1.



Figure 1 Location Map of Driyorejo Market

This study uses a descriptive observational approach. Descriptive method is a method that is carried out by describing data that has been put together in the form of numbers, pictures. The descriptive method focuses on solving real and concrete problems and explaining them coherently (Tanjung & Nababan, 2018).

The population in the research conducted was the Driyorejo Market which is in the Driyorejo District area. The sample in this study is the Driyorejo market in the Driyorejo District area. The sampling technique in this study is using a total sampling technique, which is a technique by including all populations into the research sample (Arikunto, 2002).

The 2022 Driyorejo Market Sanitation inspection research uses data collection techniques by making observations, interviews with several sources, documentation and utilizing market sanitation instruments.

Analysis of the data that has been collected is carried out by means of descriptive analysis, namely by carrying out an actual description of the data, which is compiled, processed and analyzed.

## RESULTS AND DISCUSSION

### Results

The findings from the research that has been carried out are that several facts in the field are found objectively and factually related to the

2022 Driyorejo Market sanitation inspection, after which the data that has been obtained and processed is carried out for review and review. The research results are as follows:

The criteria used as a reference when conducting observations regarding the identification of market sanitation include market location, market building, clean and healthy lifestyle, market security, other facilities and assessment of market sanitation status based on Decree of the Minister of Health Number: 519/Menkes/Sk/Vi/2008 (Nurchaya, 2014). The location of the Driyorejo Market shows that the general spatial plan category, is not located in a disaster-prone and accident-prone area, has clear boundaries that have fulfilled all the requirements in the Driyorejo Market location variable with a total score on the location variable is 5 shown in Table 1 below This:

Table 1 Location of Driyorejo Market

| CATEGORY                                       | SCORE    |
|--|----------|
| According to the general layout plan           | 1        |
| Not located in a disaster-prone area           | 1        |
| Not located in an accident prone area          | 1        |
| Not located at the final waste management site | 1        |
| Have clear boundaries                          | 1        |
| <b>AMOUNT</b>                                  | <b>5</b> |

The Driyorejo Market building shows that it has a trading room arrangement, has a manager's office space, has a place to sell wet food ingredients, has a place to sell dry food, has a place to sell cooked food, has a parking area, has a roof, walls, floors, has indoor air quality. room and lighting. The Driyorejo Market building shows that it has fulfilled all the existing requirements with a total score of 32, shown in Table 2:

Table 2 Driyorejo Market Building

| CATEGORY                  | SCORE |
|---------------------------|-------|
| Trading space arrangement | 3     |
| Management office space   | 3     |
| Wet groceries store       | 6     |

|                             |           |
|-----------------------------|-----------|
| Store selling dry groceries | 1         |
| Places selling cooked food  | 1         |
| Parking area                | 6         |
| Roof                        | 3         |
| Wall                        | 2         |
| Floor                       | 2         |
| Indoor air quality          | 4         |
| Lighting                    | 1         |
| Door                        | 0         |
| <b>AMOUNT</b>               | <b>32</b> |

Driyorejo Market Sanitatu shows that it has water for sanitation hygiene needs, has bathrooms and toilets, has waste management, has sewerage channels, has WWTP, has a place to wash hands, has vector control and diseasecarrying animals, has quality food and ingredients food and have market disinfection. Driyorejo Market Sanitation shows that it has fulfilled all the existing requirements with a total score of 38, shown in Table 3

Table 3 Driyorejo Market Sanitation

| CATEGORY  | SCORE     |
|---|-----------|
| Water for sanitation hygiene needs              | 6         |
| Bathroom and toilet                             | 7         |
| Waste management                                | 5         |
| Waste water drains                              | 4         |
| IPAL  | 1         |
| Hand washing facilities                         | 1         |
| Control of vectors and disease-carrying animals | 5         |
| Quality of food and ingredients                 | 8         |
| Market disinfection                             | 1         |
| <b>AMOUNT</b>                                   | <b>38</b> |

Driyorejo Market Sanitation Management shows that it has waste management, has waste water, drainage, WWTP, has toilets and water, has market cleaners. Driyorejo Market Sanitation Management shows that it has fulfilled all the existing requirements with a total score of 4, shown in Table 4

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Table 4 Driyorejo Market Sanitation Management

| CATEGORY                   | SCORE |
|----------------------------|-------|
| Waste management           | 1     |
| Waste water, drainage,IPAL | 1     |

|                   |          |
|-------------------|----------|
| Toilets and water | 1        |
| Market cleaner    | 1        |
| <b>AMOUNT</b>     | <b>4</b> |

Community Empowerment and Clean and Healthy Living Behavior Driyorejo Market shows that it has traders and workers, has visitors, managers and LOKJA. Community Empowerment and Clean and Healthy Living Behavior Driyorejo Market shows that it has fulfilled all existing requirements with a total score of 14, shown in Table 5:

Table 5 Community Empowerment and Clean and Healthy Living Behavior

| CATEGORY              | SCORE     |
|-----------------------|-----------|
| Merchants and workers | 4         |
| Visitors              | 2         |
| Manager               | 3         |
| POKJA                 | 5         |
| <b>AMOUNT</b>         | <b>14</b> |

Driyorejo Market Security shows that it has fire and security. Driyorejo Market Security shows that it has fulfilled all the existing requirements with a total score of 4, shown in Table 6

Table 6 Driyorejo Market Security

| CATEGORY      | SCORE    |
|---------------|----------|
| Firefighter   | 3        |
| Security      | 1        |
| <b>AMOUNT</b> | <b>4</b> |

The Driyorejo Market Supporting Facilities show that there are health service posts and first aid in accidents (P3K). The Driyorejo Market Supporting Facilities show that they have fulfilled all the existing requirements with a total of 1, shown in Table 7:

Table 7 Driyorejo Market Supporting Facilities

| CATEGORY  | SCORE    |
|---|----------|
| There are health service posts and first aid in accidents | 1        |
| Separate access for goods and people is available         | 0        |
| <b>AMOUNT</b>   | <b>1</b> |

## CONCLUSION

In order to become a healthy market, several standards must be met, one of which is a market that has sanitation. Sanitation is a

procedure carried out by various parties in an effort to maintain cleanliness and environmental health so that it remains hygienic. As for the results of research conducted on sanitation in Driyorejo Market, it was found that from the seven variables studied, namely location, market building, sanitation, sanitation management, community empowerment and clean and healthy living behavior, safety and supporting facilities have met the requirements. This means that if you are guided by Regulation of the Minister of Health Number 17 of 2020 concerning Healthy Markets, then it is in accordance with the standards that have been set, namely in the context of creating markets that have good hygiene, provide peace and also hygiene will be able to succeed in organizing healthy cities.

This can be interpreted that they already have awareness and also a sense of community care for a healthy, safe and comfortable market. That there have been public awareness that the market is a public means of carrying out various buying and selling transactions and various other activities that involve the gathering of many people so that cooperation from various parties is needed to keep the market clean (Efendi & Syifa, 2019). From the observations made by the researchers, the Driyorejo market already has a market building with area divisions, there is labeling for the market area, it has a place for washing hands which is equipped with soap and also running water, then there is also a garbage disposal every 10 meters. meters in the market area.

Driyorejo market sanitation also has clean water, there are regular measurements and assessments of clean water and waste water, because the presence of waste and stagnant water in the market will cause unpleasant smells and a breeding ground for bacteria (Efendi & Syifa, 2019 ). If there is wastewater that is not cleaned up, it will become a breeding ground for vectors that will cause discomfort in the market area, such as fleas, flies and cockroaches which will carry various kinds of diseases if they infest various merchandise of sellers in the market. For this reason, awareness and sanitation inspections are urgently needed, especially in the Driyorejo market. Based on the results of research conducted by Nurcahya (2014) it shows that Tanjung Market is included in the criteria for an unhealthy market such as meat/poultry traders, fish do not use personal protective equipment, there are no regular health checks for traders at

least once every 6 months, and managers have never attending courses/training in the field of food and food sanitation and hygiene, no water hydrants available, the location of fire fighting equipment is not easy to reach and there are no instructions for rescue wine, so, it is hoped that the Tanjung Market manager can further improve Tanjung Market sanitation so that it complies with applicable regulations .

The next step is to continue to maintain the Driyorejo market, especially market sanitation. Both from the location, market building, sanitation, sanitation management, community empowerment and clean and healthy living behavior, security and supporting facilities that are in the category of fulfilling the requirements, maintenance, supervision and care are always carried out. Clean and healthy living behavior will provide an overview of their daily behavior as well as the health status of a community in the area, even though a market already has good facilities and amenities, if it is not supported by other variables such as healthy living behavior it will be difficult to become a friendly and comfortable healthy market (Seviana & Aryana, 2021).

## REFERENCES

- Abdullah, M. R. (2015). *Metode Penelitian Kuantitatif*. Sleman: Aswaja Pressindo.
- Arianty, N. (2014). Analisis perbedaan pasar modern dan pasar tradisional ditinjau dari strategi tata letak (lay out) dan kualitas pelayanan untuk meningkatkan posisi tawar pasar tradisional. *Jurnal Ilmiah Manajemen dan Bisnis*, 13(1).
- Arikunto, S. (2002). *Prosedur Penelitian, Pendekatan Praktek*. Rineka Cipta: Jakarta.
- Arrazy, S. (2020). Persepsi Masyarakat tentang Higiene Sanitasi Pasar Tradisional Kota Medan. *Contagion: Scientific Periodical Journal of Public Health and Coastal Health*, 2(1), 1-13.
- Bili, I. M., Riwu, Y. R., & Landi, S. (2021). Gambaran Sanitasi Lingkungan di Pasar Oeba Kecamatan Kota Lama Kota Kupang. *Media Kesehatan Masyarakat*, 3(2), 128-137.
- Efendi, R., & Syifa, J. N. A. (2019). Status Kesehatan Pasar Ditinjau dari Aspek

- Sanitasi dan Perilaku Hidup Bersih Sehat (PHBS) pada Pasar Ciputat dan Pasar Modern BSD Kota Tangerang Selatan. *Jurnal Kesehatan Indonesia*, 9(3), 122-128.
- Fatmawati, D., Sulistyani, S., & Budiyo, B. (2018). Analisis Aspek Kesehatan Lingkungan Di Tempat Wisata Taman Margasatwa Semarang. *Jurnal Kesehatan Masyarakat (Undip)*, 6(2), 122-132.
- Fibrianti, B. S., Khadafi, M., Rahayu, E. W., & Sutrisna, I. G. U. H. (2022). Ketersediaan Fasilitas Kesehatan Di Perumnas Tanjung Karang Permai. *Jurnal Sangkareang Mataram*, 9(1), 53-59.
- Girsang, V. I., Harianja, E. S., & Purba, I. E. (2020). Pencegahan Covid-19 Pada Pedagang Pasar Karya Wisata Kelurahan Gedung Johor. *Jurnal Abdimas Mutiara*, 1(2), 206-213.
- Gusti, A. (2020). Sanitasi lingkungan pasar tradisional di Padang dan Payakumbuh. *Jurnal Keselamatan, Kesehatan Kerja dan Lingkungan*, 1(1), 3-11.
- Husnia, Z., & Megatsari, H. (2020). Gambaran Promosi Kesehatan di Tempat Umum Supermarket Sakinah Surabaya. *Jurnal Promkes: The Indonesian Journal of Health Promotion and Health Education*, 8(1), 66-78.
- Muhson, A. (2006). Teknik Analisis Kuantitatif. *Universitas Negeri Yogyakarta. Yogyakarta*, 183-196.
- Nabila, S. L., & Mandagi, A. M. (2021). Gambaran Sanitasi Pasar Desa Impress Pujasera Di Banyuwangi Tahun 2018. *Preventif: Jurnal Kesehatan Masyarakat*, 12(1), 1-16.
- Nafita, M. N., Oktavidiati, E. O., Pratiwi, B. A., & Angraini, W. A. (2022). Analisis Penerapan Sanitasi Di Pasar Panorama Kota Bengkulu. *Avicenna: Jurnal Ilmiah*, 17(1), 61-68.
- Rauntu, M. R. R. V. (2021). TINJAUAN SANITASI PASAR SENTRAL. In *SemanTECH (Seminar Nasional Teknologi, Sains dan Humaniora)* (Vol. 3, No. 1, pp. 154-159).
- Roat, C., Barens, W. B., & Kawatu, P. A. (2019). Gambaran Kesehatan Lingkungan Sekolah di Wilayah Kerja Puskesmas Tongkaina Tahun 2018. *KESMAS*, 7(5).
- Seviana, N. P. V., & Aryana, I. K. (2021). Tinjauan Keadaan Sanitasi Pasar Umum Blahbatuh Di Kecamatan Blahbatuh Kabupaten Gianyar Tahun 2021. *Jurnal Kesehatan Lingkungan (JKL)*, 11(1).
- Tanjung, H. S., & Nababan, S. A. (2018). Pengaruh penggunaan metode pembelajaran bermain terhadap hasil belajar matematika siswa materi pokok pecahan di kelas III SD Negeri 200407 Hutapadang. *Bina Gogik: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 3(1).
- Umaroh, L., & Kurniawati, N. (2017). Dominasi ilokusi dan perlokusi dalam transaksi jual beli. *Lensa*, 7(1), 21-34.
- Widodo, A. (2020). Pandemi dan Bentuk Diskriminasi Baru: Sebuah Kritik Terhadap Perilaku Masyarakat Dalam Menghadapi Wabah Covid-19. *Jurnal Pendidikan Sosial Keberagaman*, 7(2).
- Nurchaya, K., Moelyaningrum, A. D., & Ningrum, P. T. (2014). Identifikasi Sanitasi Pasar di Kabupaten Jember (Studi di Pasar Tanjung Jember)(Identification of Market Sanitation In Jember (Studies in Tanjung Market Jember)). *Pustaka Kesehatan*, 2(2), 285-292.