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"Empowering Community For Health Status Improvement"





# Analysis of Quality Sanitation Market In The Block C Market of Wonokromo City of Surabaya Year 2019

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## **ABSTRACT**

Sanitation of Public Places is organizing the effort being made to environmental health through supervision and improvement of the quality of the environment by the main target public places. The purpose of this research is to analyze the quality of the sanitary market in block C Market Wonokromo Surabaya Kepmenkes Number 519 based on the year 2008 on Guidelines Healthy Market of organizing.

This research uses descriptive design research with qualitative approach. Informant research by as much as 15 people. Data collection covers the field observations, interviews, and documentation. Data analysis using the technique of triangulation method. Sanitary components market assessment include the provision of clean water drainage, bathrooms, hand-washing place, SPAL, waste management, where sales of food ingredients, disinfection, and animals penular disease.

The results obtained from the research aspects of the provision of clean water (50.0%) have been met. Bathroom requirements have been met (54.5%). Aspects of drainage and SPAL there are three criteria are met (50.0%). Assessment of waste management there are four aspects of assessment indicators (57.1%) have been met. Component sales place foodstuffs meet the requirements (75.0%). Hand-washing place aspect has not been fulfilled (100.0%). Assessment of penular animal diseases there is one of the indicators are met (50.0%). There is one indicator of the disinfection component assessment are met (50.0%). Sanitation in block C of Surabaya Wonokromo Market status is good enough.

Efforts are being made to improve sanitation include doing coordination and collaboration with interested parties and stakeholders related to the holding of a healthy market, reactivate the means of sanitation facilities that have not been are met, as well as the improvement of the management of waste management.

**Keywords:** sanitation, Sanitation, Healthy Market Market

# 1. Background

Indonesia is a country with an agricultural country, it is in line with the majority of its people the most cutting edge to make ends meet as a farmer. Natural resources resulting from the Earth the next Indonesia serve as the source of the fulfillment of the basic needs of the community. Overall in the fulfillment of basic needs, people prefer shopping at traditional markets. The fundamental reason the community prefer the traditional market as a means of fulfillment of basic necessities, owing to the diversity of choices of goods and price offered very affordable. Mukono (2006) [1] suggested a public sanitation is one of the public health problem that is quite urgent. Sanitary condition of a bad market encourages the emergence of disease-based environment, due to the impact of market environment that is dirty, seedy and semerawut (Nainggolan and Supraptini, 2012) [2]. This happens due to mix the

sale of poultry and livestock to market in a number of traditional food that reflects the still low level of attention to local governments or community on health).

Traditional market Wonokromo is one of the markets that are under the management of the Central Region owned enterprises (BUMD) i.e. the regional Solar Markets Company (PDP) the city of Surabaya. Located in the South part of Surabaya and situated right on the main road that connects the region with Wonokromo Ngagel impact on market conditions as well as the overcrowded slum was impressed. Initial survey results obtained by researchers at a market stall in Wonokromo block c. wet animal foodstuffs, it is known that already applied to Division of block/zoning based on the type of material of dollars traded. Division blocks of stalls is not accompanied with a good quality of sanitation means so that the impact on the incidence of problems of sanitation market be the inadequate drainage system for waste from discarded stalls so that the less savory odor and interfere with your comfort as well as spatial and irregular, landfills that always accumulate and are not directly transported, as well as the condition of the State of the toilets are inadequate.

Based on the description above, the background to the emergence of a statement that environmental sanitation conditions are poor will have an impact on the transmission of the disease agent based deployment environments. The need for assessment activities, monitoring, and mitigation efforts as one of the improvement of environmental health. The reason for that is the basis of researchers interested in doing research to analyze the quality of sanitation market at block C in Wonokromo, Jagir Village Market, the city of Surabaya.

## 2. Research methods

This research uses descriptive design using qualitative approach. Implementation of the method in this research is the observation, interviews, and documentation. The subject of this research consists of Chief Manager of 1 person, and environmental hygiene team of 4 people and merchants amounted to 10 people, with a total of of the subject amounts to 15 people. This research subject retrieval method using non probability sampling by using purposive sampling technique. Checking the validity of the data in this study using the technique of triangulation method.

## 3. Results and Discussion

## 3.1 Characteristics of the informant

Here's an overview of respondents which include age, gender, length of work, division of work and last education.

Table 1: Overview of respondents

Respondents overview		Frequency	Persentase
Age	17-25 years	5	33,3
	26-35 years	4	26,6
	36-45 years	5	33,3
	46-55 years	1	6,6
Gender	Male	11	73,3
	Female	4	26,7
Length of work	1-5 years	7	46,6
	6-10 years	4	26,7
	>10 years	3	20,0
Division of	Trader	10	66,7

Respondents overview		Frequency	Persentase
work	Cleaning service	4	26,7
	Head manager	1	6,7
Last education	Elementary school	6	40,0
	Secondary school	4	26,7
	High school	4	26,7
	Bachelor	1	6,7

Source: Primary Data, 2019

From table 3.1 can know that the informant (33.3%), the largest research aged 17-25 years and 36-45 years. The informant-sex most men (73.3%), with the old work (46.6%) during the 1-5 years. Most informants of this research work as traders (66.7%) and education last informant (40.0%) be the primary school.

## 3.2 Overview of Wonokromo market sanitation

No	Sanitation assessment	Assessment result		Score
	variabels	Fulfilled	Unfulfilled	
1	Water supply	2	2	200
2	Bathrooms	6	5	262
3	Waste management	4	3	200
4	Wastewater disposal	3	3	200
5	Place of sale materials	6	2	320
6	Hand washing facilities			
7	Infectious animals	0	2	0
8	Disinfection	1	1	200

Source: Primary Data, 2019

## 3.3 Discussion

# 3.3.1 Water supply

The results of the observation component of clean water on the market, there are 2 Surabaya Wonokromo indicators (50.0%) of the four indicators that the assessment meets the requirements of being. Water used in block C use water supplied from PDAM who has fulfilled the requirements of physical water, that is colorless,

odorless, tasteless and not. The provision of clean water in block C means the previous capacity of the piping in the water, but the tandon amount of water used per day is still lacking to meet the needs of every trader i.e. 40 liters per trader. The amount of water available no more than 35 liters. Traders usually like the water shortage by buying water in Jerry cans or barrels for every day.

Pipelines are used to drain the water covered in soil to prevent water contaminated with foreign matter. Clean water is used in block C of the market it's not doing the examination Wonokromo special quality of clean water have been determined for 6 months. Water that does not meet health requirements is the media of transmission of disease. The provision of clean water is one of the efforts made in the improvement of public health degrees specifically related to environmental health (Selviana & Yunanda, 2015) [3].

Based on the results of the research on the aspect of the bathroom in the block C market Wonokromo Surabaya Most of the bathroom or toilet has fulfilled the health requirements of as much as 66.7% (6 indicators) and 33.3% (3 indicators) do not qualify and percentage Overall as much as 60.0%. Referring to the health Minister regulation needs of toilets in the market Wonokromo block C with the number of traders as much as 43 traders need a toilet as much as 2 toilets, based on the observation of the number of toilets in block C has enough need of 4 Toilet, but the condition of the toilet is not accompanied by markers or separators between male and female toilets. No bathroom separation is given due to the behavior of market visitors who used to use toilets without having to distinguish toilets.

The observation of the bathroom or toilet in block C of Wonokromo market is not available for hand washing and soap facilities. The user of the bathroom usually wash hands directly water in a water shelter using a scoop and without the use of soap, it is at risk in transmission of stool contamination to the hands and affects the transmission of disease. The condition of bathroom in block C has been contained trash but the available trash has not fulfilled the health criteria. Trash is available only one type and made of plastic material that is easily damaged and not equipped with a cover, this has an impact on the garbage pile in the bathroom is scattered and cause unpleasant odor.

There is ventilation as an air exchange in the bathroom but the type of ventilation available is covered with glass and only partially open so that the circulation of air exchange in the bathroom is not maximal. Poor air circulation creates an unpleasant odor in the bathroom room. This is due to the floor of the toilet that makes the air is not fresh or smelly and also affects the temperature rise of the bathroom. The smell in the bathroom is also caused by the low quality of the Sanitari equipment used (Mandala, 2017) [4].

# 3.3.3 Waste management

The amount of garbage produced in block C Market Wonokromo  $\pm$  15 m3/day. The enormity of the waste that is generated every day is not worth the effort of cleanliness that is deployed that is as much as 4 a janitor with a scheduling shift work into two shifts, namely morning and afternoon. A janitor on duty with the operational standards that apply in the market, i.e. ranging from garbage collection of merchant stalls, the transport of waste to below to the TPS market until the transportation of garbage from lanfill headed to polling stations in cooperation with the parties 3.

Penangganan pewadahan process begins from garbage is garbage while holding effort from each source. Traders usually use plastic pouch as temporary containers of garbage. The use of a plastic pouch as a container while independent junk rated unqualified health, this is due to the easy tear and can lead to garbage strewn (Rondiyah & Sulistiyani, 2014) <sup>[5]</sup>.

The condition of the TPS market circumstances there is only one shelter in garbage containers of the condition is not well maintained with many scattered garbage in the area the location of Polling Stations it is odor less succulent invite vector to be the place perindukan. The lack of a janitor who was deployed as well as lack of awareness of the people who throw garbage directly into the TPS market is also aggravating the conditions of TPS became increasingly run-down.

Transport is the process of bringing waste that will be disposed of to landfill. Hauling trash from the TPS Market Wonokromo Surabaya done by using equipment dump truck with the frequency of the transport is done twice in a day. The transport of waste from the landfill to the market polling done in no more than 1 x 24 hours to prevent a heap of garbage. Wonokromo Market officials handled the part Kasubsi Hygiene partners with third parties in regard to the transport of waste to landfill.

Solid garbage that is not managed properly simply discarded without any ongoing process will impact on public health. Solid garbage in the form of food is highly liked flies, flies will be hinges and laying on the garbage heap. Garbage containing animal or human impurities can cause disease transmission. Solid garbage piled on moist soil is also a good place for pathogenic worms that endanger humans, such as whip worms and bracelet worms (Machfoedz, 2008) <sup>[6]</sup>.

## 3.3.4 Wastewater disposal

The results of the researchers at Wonokromo Market in particular block C is known that the drainage or waste water drain condition has fulfilled the criteria of market health requirements only 3 indicators (50.0%) Of the 6 indicators that are the assessment, namely the drainage in closed state, drainage channels have been equipped with the lattice of metal and not the building above the drainage channel. The market managers have carried out the management and moved the merchants above the drainage channels.

Waste water flow in block C is also often blocked. This is because the location of block C with poultry cutting place adjacent to one drainage channel is the same, so the dirt and fur of animals that accumulate in the water line plus garbage dumped by any visitor market so Make the flow of waste water stuffy. There are drainage channels in every stall, but the size of the waterways in each stall are not too deep in impact on wastewater in every stall that often overflows to flood the floor. The normal depth for the manufacture of aqueducts is 40 cm and there are no sand deposits or soils therein.

IPAL is a technical equipment and equipment that processes or processes the remaining fluids of the production process so that it deserves to be discharged into the environment (Rahmawati, 2014) <sup>[7]</sup>. The use of SPAL (Waste water management system) has also been implemented by the market manager, but based on the results of the interviews researchers found that SPAL conditions in the market C block of Wonokromo are largely damaged. There are eleven sampit (waste water filter before entering IPAL) which is used overall in damaged condition, so that solid garbage can enter the discharge and enter the IPAL. The damage of IPAL components due to the waste water generated in the animal block is hard and corrosive, to be able to damage the machine device components in the IPAL. The Market Manager uses portable manual pumps to assist IPAL work in absorbing wastewater.

#### 3.3.5 Place of sale materials

Based on the research on the height of food sales table has qualified health requirements, namely > 60 cm with a strong and sturdy material and equipped with ceramic, but the condition of curamg table is maintained. Usually in the cleaning of tables, traders use only water without the use of soap as a cleanser so that the remaining waste of trade is still stuck and left on the sidelines of ceramics. The absence of drain holes and also flat table position affects the waste water from the stall that is difficult to flow, causing a puddle.

Based on the results of the research, it is known that most of the meat carcasses used by merchants in rusty conditions and never replaced. It affects the contamination of foreign bodies that can stick to meat. The cutting mat used by the trader still does not meet the health criteria, which is still using wood-made cutting mat. Wood cutting mat is very susceptible to absorb Salmonella sp bacteria from raw materials so as to potentially contaminate other foodstuffs. Wood-made cutting mat absorb Salmonella sp from raw materials, bacteria can permeate and settle into it. The use of wood-based cutting boards also enlarges the potential of mushroom growth (Wilmcow, 2012) [8].

## 3.3.6 Hand washing facilities

Handwashing is a facility for supporting facilities in public places facilitated by the organizer. In addition to the lack of budgeting, the absence of support facilities is also due to the low patterns of market usage behavior that lacks the cleanliness of hygiene. Usually, visitors wash their hands after making contact with animal food using only cloth, or only using water, not infrequently using only clothes worn. This enlarges potential exposure to germ infections. Washing hands using soap and running water can reduce the transmission of diarrhea disease to 45% (Herdiyanti, 2009) [9].

The absence of hand washing facilities can facilitate the spread of disease, moreover, not infrequently visitors and traders make contact with each other directly by hand (Yunanda & Selviana, 2015). In accordance with the purpose of washing hands, namely removing impurities and microorganisms. The habit of handwashing without using soap can not protect any individual from bacteria and viruses that are on the hand optimally. If you wash your hands not with water flowing. Habit of hand washing by using containers equal to let germs stick to the hands (Kemenkes RI, 2014) [10].

## 3.3.7 Infectious animals

The infected animal (vector) is a vertebrate (invertebrate) animal that acts as a disease agent from a hospital host who is ill to another vulnerable, (Wijayanti, 2008) [11]. Based on the observation, it is known that there is a

component of assessment that has been done but has not fulfilled the required criteria i.e. animal control activity of the disease by spraying.

Based on the results of interviews to the informant is known that the activity of animal control of the disease has been carried out in block C market Wonokromo Surabaya with the cooperation of the Livestock Service Office and Livestock Department. The manager of Pasar Wonokromo also does not have a special program related to animal control of the snake, only that the organizer has established cooperation with the related parties to tackle the control issues Beast.

Activities conducted in the framework of animal control of the disease is spraying insecticide, but the technical time of the implementation has not been in accordance with the required of two times in a year. Spraying is only done within once a year with the schedule set by the relevant Dinas. The organizer said that it is not the domain of the management's responsibilities in the control of the beast, but the organizer does not immediately remove the hand.

## 3.3.8 Desinfection

Referring to the decree of the Minister of Health of the Republic of Indonesia No. 519/MENKES/SK/VI/2008 on healthy market requirements, market disinfection aspect requirements, including market disinfection should be done thoroughly 1 day in a month and The disinfectant used does not pollute the environment. The interview is known that there is one aspect of evaluation of market disinfection has been carried out. The implementation of disinfection or thorough cleaning is conducted by offices that have been in cooperation with the Central maintainer for the implementation of disinfection, the internal management of the market only as a facilitator and monitoring Smooth activities. The internal market does not have a special program in regard to disinfection, this is because disinfection is not the responsibility of the management party.

## 4. Conclusions and Recommendation

The results of the sanitation health assessment conducted in the C block of Pasar Wonokromo Surabaya, indicating that the acquisition of value is in the status of unhealthy 1,532 points. The sanitation aspect of the Wonokromo market in its specialty in the C block has been fulfilled, but lack of maintenance and poor officers have an impact on the many damaged components. The need to repair sanitary facilities components is one of the ways that maintainers can do both internal and external markets to optimize market health.

Advice for the head of market manager to provide a different special path between the entry and exit lines intended for poultry transport cars that do not pass through the bathroom, so as not to disturb the comfort and cleanliness of the facility facilities sanitation, re-activating sanitary facilities that do not meet health requirements, improving waste management management starts from the level of early traders to the final disposal and making policy regulations In accordance with the conditions of the TPS, coordinate and cooperation in a sustainable manner with stakeholders and stakeholders related to the implementation of healthy markets.

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