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Implementation of hygiene and sanitation in processing food products for catering businesses in Ciora Village, Cilegon

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ABSTRACT

Catering services are business activities that order food for certain banquet events. More and more people are interested in this business, one of which is the food service business in Ciora Village, Grogol District, Cilegon City, which is multiplying. Hygiene and sanitation elements are essential but have not been given special attention to food service industry owners, "Dapoer Umi Ewi" has several problems that need to be considered, including the layout of the production house and placement of equipment that has not paid attention to the elements of hygiene and sanitation. Hence, it is still possible for this to occur. Contamination of food products can harm consumers. Modifications made to the "Clean Production House Model" in Ciora village include a "Processing Room," which helps carry out the production process, and an "Equipment and Raw Material Washing Area" for cleaning cooking utensils and raw materials which require clean water and a suitable place. Away from the bathroom and keep it clean. In this case, the human factor or the element of food handlers is also crucial because humans are the actors in the production house process. The human factor as a workforce must be clean. Changes to the space layout, where a raw material storage area was added next to the dishwasher. This area has facilities such as storage shelves with a minimum height of 15 cm from the floor and 60 cm from the ceiling.

ABSTRAK

Jasaboga merupakan kegiatan usaha yang melayani pemesanan berbagai macam makanan untuk keperluan jamuan acara tertentu. Usaha ini semakin banyak peminatnya, salah satunya adalah usaha jasaboga di Desa Ciora Kecamatan Grogol Kota Cilegon yang berkembang sangat pesat. Unsur hygiene dan sanitasi merupakan hal yang sangat penting tetapi belum menjadi perhatian khusus bagi pemilik industri jasaboga, "Dapoer Umi Ewi" memiliki beberapa permasalahan yang perlu diperhatikan diantaranya adalah tata letak rumah produksi dan penempatan peralatan belum memperhatikan unsur hygiene dan sanitasi sehingga masih dimungkinkan terjadinya kontaminasi produk makanan dan dapat merugikan konsumen. Modifikasi yang dilakukan pada "Model Rumah Produksi Bersih" di desa Ciora diantaranya terdiri dari "Ruang Pengolahan" yang berguna untuk melakukan proses produksi, dan "Area Pencucian Peralatan dan Bahan Baku" untuk membersihkan alat masak dan bahan baku yang memerlukan air bersih dan tempat yang jauh dari kamar mandi serta tetap terjaga kebersihannya. Dalam hal ini faktor manusia atau unsur penjamah makanan juga sangat krusial karena manusia sebagai pelaku dalam proses rumah produksi tersebut. Faktor manusia sebagai tenaga kerja wajib dalam keadaan bersih. Perubahan tata letak ruang, dimana ditambahkan area penyimpanan bahan mentah yang berada di sebelah tempat cuci piring. Area ini dilengkapi dengan fasilitas seperti rak penyimpanan dengan ketinggian minimal 15 cm dari lantai dan 60 cm dari langit-langit ruangan.

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1. Introduction

Cilegon City is famous as a steel city because it contains the largest steel factory in Southeast Asia, PT Krakatau Steel. The factory had a significant influence on economic development in Cilegon City. Cilegon City has eight subdistricts, one of which is the Grogol Subdistrict. Grogol Subdistrict has several villages, including Ciora, Cipinang, Kubangkori, and Cikebel. Ciora Village has many branch names: Ciora Kwista, Ciora Tengah, Ciora Jaya, Ciora Wetan, and Ciora Gede. This village is about 5.7 km from the center of Cilegon city. Ciora Village has an area of 1,734.28 km² [1] and a population of 1,435,003 people. Most Ciora Village residents are household assistants, farm laborers, and factory workers.

Geographically, Ciora Village has fertile land and a large plantation area. The location supports Ciora Village in increasing agricultural and plantation production. However, production results can be of low quality due to the influence of the economic crisis experienced by Indonesia. Most residents in Ciora Village are farmers, and some use it to open small businesses. Some people in Ciora Village open food business opportunities, such as opening food stalls and opening stalls at home.

Ciora village has a well-known catering business among the people around Cilegon called "Dapoer Umi Ewi," located in central Ciora. "Dapoer Umi Ewi" is a business in the food sector that has been established for many years. "Dapoer Umi Ewi" produces and markets traditional food products. Most of the "Dapoer Umi Ewi" consumers come from the Cilegon area because the sales system is done at home to produce food and utilize social media to sell. "Dapoer Umi Ewi" has a lot of food menus and follows the development of the times where the food is made very creatively and full of inspiration and follows the story of modern times, various kinds of food menus including rice bowls, shredded chicken, fried eggs, sambal matah, baso aci, melted brownies, green banana ice, and many other menus. "Dapoer Umi Ewi" also provides food in the form of tumpeng rice for Aqiqah events, thanksgiving events, and birthday events. Figure 1 below shows some food products at "Dapoer Umi Ewi."



Figure 1. Several products from "Dapoer Umi Ewi".



Figure 2. Food packaging at "Dapoer Umi Ewi".

"Dapoer Umi Ewi" and several other catering providers in Ciora Village have a food production site at the owner's residence. Therefore, this production site has a dual function. Like a residence, the parts of the house have a bathroom, kitchen, sink, and adequate drainage facilities. Analysis occurs at every process stage, from production to packaging and marketing. The catering industry in Ciora Village is relatively clean but needs to meet hygiene and sanitation standards according to government regulations. Figure 1 shows a small part of the documentation for presenting processed food products in the "Dapoer Umi Ewi" catering industry.

Figure 2 shows that the packaging process is carried out on the floor, and the workers prepare the product presentation in a sitting posture, which could be more ergonomic. Placing it on the floor allows physical contaminants such as fine dust and hair to enter. The floor used visually looks clean, but fine dirt can be blown by the wind and get into food packaging. The condition could be more desirable for consumers who order. Hygiene and sanitation elements are important but have yet to be a particular concern for food service industry owners [2]. Therefore, more comprehensive knowledge is needed among the public in general and catering business actors regarding the impacts that arise if these standards are met. Food products, a primary human need, should be processed carefully and free from all physical, chemical, and biological contaminants [3]. Contamination of food products at the production, storage, and distribution stages will have fatal consequences, including nausea, vomiting, and diarrhea. In the long term, it can even cause damage to vital organs in the human body [4]. The negative impact can be felt by consumers and producers, who will also experience losses due to the potential for reduced buyer interest and decreased turnover on future occasions. The industry could even go out of business.

Seeing the increasing increase in the catering industry, especially in Ciora Village, it is necessary to carry out community service activities focusing on food processing hygiene and sanitation issues. Increasing the knowledge of the village community is hoped to provide benefits in developing food service businesses while maintaining food safety and public health. Based on the situation analysis that has been carried out, it can be concluded that the people of Ciora Village still have various problems that need to be resolved in the fields of education, social culture, economics, and entrepreneurship. The following is a description of the issues experienced by Ciora Village:

1. Education Sector. Some of the people in Ciora Village have a low level of education. This low level of education results in people's mindset being a little behind even though the location is close to the city.
2. Economic Sector. Most heads of families in Ciora Village work as farm laborers and factory workers. At the same time, mothers seek additional income as household assistants to meet their daily needs, and some do small business.
3. Entrepreneurship. Some residents of Ciora Village still do not have high motivation in terms of entrepreneurship, although there are a few who have started small businesses with limited capital. The people in this village still need to be given sufficient motivation and knowledge in entrepreneurship to raise their standard of living. The business sector that the people of Ciora Village are starting to start is culinary.
4. Socio-Cultural Sector. Low levels of education also have an impact on the social and cultural life of society. Few people still hold old thoughts that are difficult to eradicate, making it challenging to provide innovation or change. The people of Ciora Village are still reluctant to participate in community activities such as youth and young women's associations, PKK women, or other meetings, and tend to live their daily lives in a matter-of-fact and very static way.

Especially for "Dapoer Umi Ewi," there are several problems that need to be considered, including: The layout of the production house and the placement of equipment do not pay attention to hygiene and sanitation elements, so it is still possible for food product contamination to occur, which can be detrimental to consumers. Not knowing the standard standards of cleanliness in the production house can confuse workers and disrupt the production

process. The aim is to provide an excellent understanding to food service business actors to pay more attention to health elements in producing food products. Implementing hygiene and sanitation standards by government regulations can significantly contribute to public health. It will further advance the food service business "Dapoer Umi Ewi" and other industries operating in the food sector.

2. Method

The application of hygiene and sanitation in the food processing industry in Ciora Cilegon Village is carried out by combining several appropriate methods. In this program, business actors are given a persuasive approach through socialization and counseling regarding hygienic food processing. After business actors understand the existing standards, assistance is provided to implement the applicable rules according to their respective places of business. Specifically for "Dapoer Umi Ewi" and the catering industry in Ciora Village, the spatial layout in the production house area was re-arranged, and a model of the production house was made using descriptive methods through sketches/models in the form of pictures so that they were easier to understand [5].

2.1. Society target

The target of this program is catering business actors or industries providing food or similar foodstuffs, especially those in Ciora Village, Grogol District, and Cilegon City. The target market for catering businesses is people in the Cilegon area and surrounding areas as consumers, especially households and offices that often hold meetings or banquets, as well as several industries that provide daily consumption for factory employees.

2.2. Stages of activity

This activity was carried out in several stages, namely starting with collecting information data using a direct survey of food service production houses in Ciora Village and interviews with business owners, followed by making a model of a hygienic food service production house and a production house model that is clean from contamination. The last is socialization and assistance in creating a healthy catering production house.

2.3. Technology applied

In this case, development technology focuses on the production system and layout in the production house. In production systems, it is recommended to use a production layout to minimize disease so that food hygiene is better maintained. The public is also introduced to the sterilization system for equipment and maintaining the cleanliness of human workers to ensure the safety of the food products produced.

3. Results and Discussion

3.1. Production house model

Clean production aims to increase productivity by increasing the efficiency of using raw materials and energy, as well as reducing sources of pollution, according to [6-10]. In industrial processes, clean production means increasing the efficiency of using raw materials energy, preventing or replacing the use of hazardous materials and toxic, and reducing the amount and poisonous level of all emissions and waste before leaving the process. In the production process at DS Ciora, a model was implemented to achieve a clean, hygienic production house. This model was formed after conducting interviews and observations within one month to get maximum results.

The model depicted above explains that the production house model at DS Ciora includes a processing Room, which helps carry out the production process and requires clean cooking utensils and raw materials. Tool and raw material washing facilities allow clean cooking utensils and raw materials that are hygienic and free from bacteria requiring clean water and a place far from the bathroom to remain clean. The human factor is needed because humans are the actors in the production house's running process. The human factor as a workforce must be clean. In human labor, clean clothing is required, washing hands every time you carry out activities, work safety is needed in the production process, and a clean culture is necessary to implement the production process.

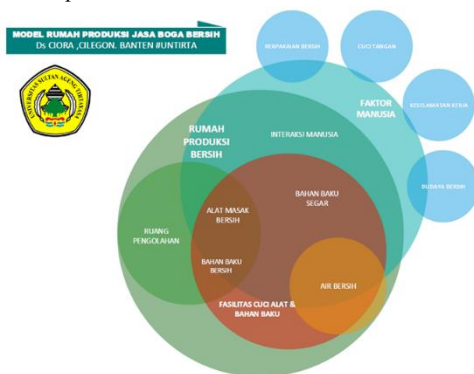


Figure 3. Clean production house model.



Figure 4. The old layout of the "Dapoer Umi Ewi" production house.

3.2. Spatial planning

The principle of food and drink sanitation hygiene is the control of places/buildings, equipment, people, and food ingredients that can or may cause health problems or food poisoning [3]. Many efforts can be made to meet the Standard of Food Processing Sanitation Hygiene to avoid various sources of

contamination that can cause food damage, one of which is spatial planning. For example, the case of a catering business in Ciora Village is "Dapoer Umi Ewi," which already has building facilities or premises used for food processing. The layout of the rooms at "Dapoer Umi Ewi" is shown in Figure 4. The building facilities owned by the catering business "Dapoer Umi Ewi" have two floors. The 2nd floor is for living quarters, and the 1st floor is a catering production area.

Based on Figure 4, the production area (cooking food) is close to the equipment washing area and bathroom. It is necessary to pay attention to the placement of the toilet facing the food processing area to prevent contamination. At "Dapoer Umi Ewi," fresh raw materials and frozen products are stored in the refrigerator, and dry ingredients with a long shelf life are placed in cardboard boxes on the edge of the production area. Food materials should not be placed on the floor or against walls because this will increase humidity and make it easier for animals such as ants, mice, and cockroaches to enter. To improve food sanitation hygiene at "Dapoer Umi Ewi," changes were made to the layout of the space, where a raw material storage area was added next to the dishwasher. This area has facilities such as storage shelves with a minimum height of 15 cm from the floor and 60 cm from the ceiling.

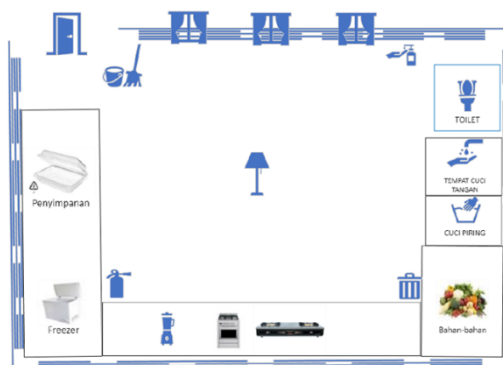


Figure 5. New layout of the "Dapoer Umi Ewi" production house.

In Figure 5, the latest design has quite significant changes, including: Addition of trash bins and fire extinguisher, addition of hand washing facilities, a place for washing dishes and raw materials that are separated from the toilet/bathroom, a further distance for food processing is around 5 meters from the bathroom, separate storage area for raw materials and finished materials, add ventilation to circulate air in the room, attach health and safety information, and bright lighting and diffused lighting in all directions.

4. Conclusion

The conclusion that can be drawn from this activity is that implementing a hygienic and sanitary production house in Ciora Village, Cilegon city, is implemented with a clean production house model, and the layout of the production house is according to government regulations. The results obtained in this activity can be used as evaluation material for food service entrepreneurs to understand more about cleanliness in production.

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