

Revitalization Of the Fish Market Area in Muara Angke

Chintami Handayani Passat¹, Syaiful²
{chintami.passat64@gmail.com¹, syaiful65@gmail.com²}

Universitas Borobudur, Jakarta, Indonesia

Abstract. Jakarta is a metropolitan city that has a fairly rapid population growth so that it indirectly also encourages the need for food, especially fish. Fish include basic and primary needs. This is evidenced by the increasing price of marine products and the increasing demand for fish from all fish producers in Jakarta, one of which is the Muara Angke fisheries area with fish contributing 10% of fish production in North Jakarta. The Muara Angke fishing area is in a very strategic location, making it easier for distribution networks in the city of Jakarta to increase fish yields from the area. Apart from being a place for fishing, there are also functions in the Muara Angke fishery area. So that more and more people are in need of jobs. Additional functions in the area include the emergence of stalls, seafood restaurants, markets and street vendors both around and in the Muara Angke fishing area. This causes this area to become irregular so that it interferes with the main function of the area, namely as a fishing area. So that the inconvenience factor arises from each user of the Muara Angke fishing area facility. Therefore, to anticipate these problems, it is felt necessary to develop and rearrange the facilities of the area as an effort to improve the main function in the field of fisheries. In addition, this area has the potential to support development plans for the tourism object sector in the coastal area of North Jakarta. The concept of revitalization is the right way to organize and rebuild the area so that it can be used optimally according to its main function. The objectives of planning the development and revitalization of the Muara Angke Area in Pluit Village, Penjaringan Subdistrict, North Jakarta Region are to:

1. Equip the fish market facilities and facilities needed to support the main functions of the area.
2. Provide a place that can provide hygiene and health factors for users of the fish market building and surrounding activities in the area.
3. Implement a good circulation system to facilitate ongoing activities so as to create comfort in the area.

The plans that will be presented regarding the Fish Market project in Muara Angke Jakarta include:

1. Rearrangement of appropriate regional patterns to revive the area, including making predictions on the need for complete facilities.
2. Rearrange the appearance of the building, both new buildings that become additional facilities and buildings that are maintained according to the planning theme and concept.
3. Planning/arrangement of facilities in the form of existing and additional buildings is only up to the building model stage, including one of the facilities for slum settlements.

Keywords: Revitalization Of The Fish Market Area In Muara Angke

1 Introduction

Based on past history, Jakarta was built by the Dutch starting from the seaside which was formerly known as Batavia. Community activities at that time were centered in this area so that it gave a special characteristic to the city of Batavia, which was better known at first as the Sunda Kelapa area. But then gradually expanded to the south. Now the city of Jakarta is a metropolitan city that has a fairly rapid population growth so that it indirectly also encourages the need for food. In addition to the food needs are supplied from the mainland, also supplied from the waters and marine products. Fish is an urgent and very primary need of the people of Jakarta. This is evidenced by the increasing price of marine products and the increasing demand for all fish producers in Jakarta. This urges the Jakarta government to encourage fish producers to contribute according to the needs of the city in Jakarta.

One way to do this is to pay special attention to optimizing the quantity and quality of products from the fisheries sector. Fish-producing areas for the city of Jakarta, one of which is in the Muara Angke fishery area with a fish contribution of 10% of fisheries production in North Jakarta. The fishery area in Muara Angke is in a very strategic location, making it easier for distribution networks in the city of Jakarta to increase fishery yields from the area.

On the other hand, apart from being a fishery, the development of the Muara Angke area is gradually increasing its function. This is partly due to the increasing number of people who need jobs. Additional functions in the area include the emergence of kiosks, seafood restaurants, markets and street vendors both around and in the Muara Angke fishing area. This causes this area to become irregular so that it interferes with its main function, namely as a fishing area. So that the convenience factor can hardly be obtained from each user of the Muara Angke fishing area facility.

Therefore, to anticipate these problems, it is felt necessary to develop and rearrange the facilities of the area as an effort to improve the main function in the field of fisheries. In addition, this area has the potential to support plans for the development of tourism objects in the northern coast of Jakarta.

The emergence of these topics and themes departed from the problem where the need for development and rearrangement of the Muara Angke fish market area aimed at rejuvenating the area. So, the concept of revitalization is the right way to change the area so that it can be used optimally according to its main function.

Revitalization or revitalizing is an effort to give new vitality to the area so that it can again make a positive contribution to the city's economic environment. Rejuvenation of the area is not always an effort that is only aimed at revitalizing or an effort to give new vitality to an area that is experiencing environmental degradation. Regional rejuvenation is also practiced to increase the vitality of an urban area, whether it is experiencing a decline or progress, so that conditions no longer exist. able to accommodate the existing development pressures. For this reason, through the process of rejuvenation, the capacity of an area can be increased so that it can accommodate existing development pressures (Danisworo, 1988, p. 6).

The purpose of the revitalizing process basically includes three main things, namely:

- a. Gives new vitality
- b. Increase existing vitality
- c. Revive long-faded vitality.

Given its large role as a fishery activity that sells one type of trade, namely fish, it has great attraction and potential to become a strong economic base. So that by increasing the vitality and quality of the environment, it is hoped that it can contribute in a positive direction to city life

both in terms of economy, social, culture, visuals and character development of the fish market complex area.

Apart from being a fish market area, Muara Angke is planned by the government to develop into a tourist area in accordance with the development plan for the North coast of Jakarta. It is also expected to optimize its main function.

2 Research Methods

The method used in the design of the Fish Market Revitalization in Muara Angke starts from a field study which is used as qualitative data to collect data, in order to determine the activities of market users. Then presents data that can support the object of design into the development of the field of tourism in the North coast of Jakarta. In addition, the Behavioral Architecture approach is carried out by observing objects and observing the behavior of fish market users. The data, both physical and non-physical, were obtained, then analyzed and applied to the Revitalization of the Fish Market in Muara Angke. From the results of the analysis, so that optimal fish market planning and design will be achieved and in accordance with user convenience.

3 Results and Discussion

Physical Analysis

1. Analysis of Environmental Conditions in Muara Angke Fishery Area

Muara Angke with an area of 65 hectares, is located in the Muara Angke delta. Administratively, it is located in Pluit Village, Penjaringan Subdistrict, North Jakarta Municipality. The Muara Angke area is bordered by:

- a. In the West and South: Kali Angke
- b. On the East : Pluit Street
- c. To the North : Sea
- d. Currently, the current Muara Angke Fisheries area is:
 - 1) Some of the buildings have decreased visual and physical quality, thereby reducing the vitality of the area (fish market buildings, fisherman's inns, fisherman's canteens and restaurants)
 - 2) Limited road sections plus the presence of street vendors and the number of vehicles parked on the side of the road, thus narrowing the road to be traversed.
 - 3) The Muara Angke fishery area contributes to the food needs of the city of Jakarta, so it is very important to fulfill the needs of the city of Jakarta.

2. Regional Building Layout Analysis

By accommodating various types of different activities with their own characteristics in the Muara Angke area, the building layout of the Muara Angke area will vary, among others, seen from several aspects such as height and building style.

a. Building height

Based on field observations, the height of the buildings in the Muara Angke fishing area ranges from 1-2 floors, except in the PLTU electrical installation area which has a special height in accordance with its operational requirements. Taking into account the needs of the area, the proposed land capacity and skyline that match the height of the Muara Angke building is a

maximum height of 2 floors intended for housing functions and a height of 3-4 floors intended for trade and service functions as well as public facilities.

b. Building style

The buildings contained in the Muara Angke plan have different architectural characteristics. In the Muara Angke Fishery area, some of the buildings are characterized by tropical architecture without highlighting the architectural features with significant aesthetics.

3. Analysis of Regional Connecting System

The Fish Market area in Muara Angke must be equipped with a well-organized regional liaison system, to improve the smoothness and effectiveness of the various activities accommodated in it.

Sistem Sirkulasi di luar tapak dan di dalam tapak

a. Off-site circulation systems.

Off-site circulation is divided into 2, namely:

Circulation on land, 15m wide road with 2-way circulation system. It is a neighborhood road, but the circulation outside the site is quite congested because there is a secondary bus pool around the household needs market.

Circulation at sea is the circulation of fishing vessels that will land their catch. The location is quite strategic because it has direct access to the refueling dock, ship parking and ship repair shops.

b. Circulation within the site

There is a unification between the circulation of supporting vehicles, service vehicles and pedestrian circulation. This lack of separation of circulation creates a chaotic area with a high level of traffic density, thereby reducing the level of comfort in carrying out activities, especially on the site.

Achievement

The achievement of entering the Muara Angke TPI area should determine the location of the Main Entrance and Side Entrance, as well as the clarity of direction, smoothness and ease of movement of activities within the site. Achievements in the site are divided into 2 groups, namely:

- a. Achievement from land: Achievement of visitor vehicles, pedestrians and achievement of services and goods.
- b. Achievements from the sea, carried out by fishermen.

Parking

The parking area is inadequate, because it is located on low land and prone to flooding. In addition, the parking for service vehicles and visitors becomes one without clear boundaries, so that parking conditions become irregular and uncomfortable.

Pedestrian System

Not equipped with adequate pedestrian facilities. This can be seen by the unavailability of special lanes for pedestrians, resulting in crossing with vehicle lanes. Crossing that often occurs, especially in the retail market area to the wholesale market. Therefore, considering the linkage of activities in the site, it is necessary to rearrange the pedestrian system to support the effectiveness of activities in this area.

4. Grouping of activity actors and their characteristics

Thus, the Muara Angke Fish Market is divided into 3 types of activities, namely:

a. Main Activities

It is an activity that is characteristic of the area's land use. The main activities in the Fish Market area in Muara Angke are divided into:

- 1) Fish auction
- 2) Fish Wholesale Market
- 3) Retail Market
- 4) UPT management office. PKPP & PPI
- 5) Fisherman's Cooperative Office
- 6) Harbormaster's Office

b. Support Activities

These are activities that support the main activities in this area. These supporting activities are divided into:

- 1) Pier
- 2) Fish packing place
- 3) Cold Storage and ice factory
- 4) Dual Function Gas Station

c. Complementary Activities

Complementary activities serve as a service for the existence of the Fish Market Area in Muara Angke, for the benefit of all users. Consist of:

- 1) Floating Restaurant (Cafe Pier)
- 2) Fisherman's Inn
- 3) Kiosk
- 4) Fish Grill
- 5) Fishing spot

Non Physical Analysis

1. Analysis of Functions and Space Requirements

a. Fish Auction Activities

- 1) Fisherman
- 2) Coming from catching fish, reporting to Kantib, parking the boat, unloading the catch, recording auction transactions and waiting for the payment of the auction results. All activities are carried out in the port area and fishing inn.
- 3) Headquarters Officer
- 4) Supervise incoming ships and these activities are carried out at the guard post/office.
- 5) Syah Bandar
- 6) Checking the documents for the completeness of the ship and these activities are carried out at the guard post/office.
- 7) Cooperative Officer
- 8) Prepare and rent trays, manage trays rental administration and provide for fishermen's needs. These activities are carried out in the office.
- 9) Lori Transport Officer
- 10) Transports fish and requires a circulation path.

1. Weigher
Weigh and record the results of the scales and require a weighing room to carry out these activities.
2. Auctioneer
Have activities to announce the auction, lead and determine the winner of the auction. This activity is carried out in the auction room.
3. Bidders
Register, participate in the auction and wait for the results of the auction. These activities are carried out in the auction room.
4. Bakul Bookkeeper
Recording auction transactions and carried out in the auction room.
5. Computer operator
Record transactions that take place and are carried out in the computer room.
6. Cashier
Manage the finances of the auction results, call the auction winner for administrative purposes and do it at the counter

Market Activities

1. Trader
The activities carried out are coming and selling. Requires stall/lost space.
2. Buyer
The activity carried out is to come and buy. Needs shopping area space.

Management Office

1. Manager
Activities carried out is to come and work. Requires workspace or office
2. Visitor
The activity carried out is to come and look for information. Requires a reception area.
3. Seafood restaurants and stalls
Employees of restaurants and seafood stalls
If the employee is part of the cooking department, the activities carried out are starting from cleaning, processing, cooking, serving and storing food ingredients.
If the employee is part of the administration. The activities carried out are organizing finances and managing books.
4. Visitors
The activity carried out is to come and instruct how to cook Analisa Bentuk Massa

Mass Form Analysis

The basic form of mass that currently exists in the Muara Angke Fish Market area:

1. The basic shape is a quadrilateral majority
2. Circulation patterns, spatial relationships and between buildings are currently unclear, thus reducing the quality.

4 Conclusion

Based on the results of the analysis that has been carried out, the following facilities will be developed:

1. Expanding area to accommodate more and more fish traders

2. Arrangement of circulation for Wholesale Market, Retail Market, Floating Restaurant and Food Court activities from the aspect of visitors, vehicles and pedestrians
Environmental management is important in efforts to revitalize the Muara Angke Fish Market area. With a good environmental arrangement, it will give more and positive value to the area. There are several things that should be considered in structuring the environment:

The meaning of a place (Place)

The Muara Angke fishing area is one of the oldest fish auction areas in Jakarta and is also a place for traditional fishermen's settlements. So what is already contained in this area cannot be removed even though it revitalizes the area. So that the design of the area must still pay attention to the main function, namely as a fish market place.

Edge (edge)

Provide clear boundaries in the Muara Angke Fish Market area. These boundaries can be created with open spaces and also in the form of massive walls and so on.

Utilization of coastal area principles into buildings

1. Water oriented recreational activity, can be done by:
 - Facing the front of the building to fishery and recreational activities, so that this makes visitors directed to enjoy visually directly to the recreational activities in the ocean. Suitable for building grilled fish stalls, open spaces and promenade.
2. Interface between land and water
 - There is a load of active activities at the meeting between land and water so that visitors get their own perception of the coastal environment. And facilitate the relationship between fishery buildings such as crossings, packing and so on with fish loading and unloading docks.
 - Existing active activity content such as:
 - Place for selling fish
 - The distance between the fish landing site and its supporting facilities such as the fish packing and auction place must be able to facilitate its implementation.
 - Wharf auction processing and marketing
 - Grilled fish shop
 - Visitors can dine and eat seafood while enjoying the beach atmosphere, such as the circulation of ships at the pier and other activities.
 - Promenade Area
 - Pavement in the waterfront area for walking while enjoying the water view in accordance with the north coast planning development program. In addition, it serves to prevent the erosion of land by sea water.
 - Outdoor
 - In the form of a park or plaza that is strung together in one space with the waterfront area. Because according to the regulations the community has the right to enjoy the beachfront space.
3. United Water – Oriented Recreational Activities with Adjacent Amenities
 - Unite the main activity facilities with supporting facilities. The main facilities are a fish market as well as a restaurant and a beach pier.

Area link system

The purpose of this arrangement is to increase land capability through improving the level of achievement in and out of the area as well as achievement between functions within the

area. To achieve this goal, the system linkage arrangement is arranged in the following way:

Pedestrian,

It is necessary to have a wide enough separation between the lanes of human circulation, especially the lanes of vehicles and people in the fish retail/wholesale market section in order to create a comfortable atmosphere for pedestrians.

There is a need for additional Retailer Market facilities to accommodate fish retailers so that they do not use the circulation route as a place to sell. For this reason, it is necessary to create a clear boundary between the pedestrian path and the market place.

To make pedestrians attractive, it is necessary to design with street furniture facilities.

To support pedestrian comfort, every 180 m distance (pedestrian comfort limit) is provided a resting place equipped with a seat or the like.

Circulation and parking system

Eliminate parking on the side of the road by creating parking areas/pockets. For this reason, a clear and easy-to-achieve pattern of circulation and entrance and exit is planned. And also don't forget to clearly separate the vehicle and pedestrian paths.

Creation of areas/places for loading and unloading fishery activities so that they do not interfere with other activities.

Circulation with a grid system makes it easier to connect between buildings functionally

Blending the old circulation with the new.

Zoning within the area

1. Main activity facilities
Auction place, retail market and wholesale fish market
2. Supporting activity facilities
Pier, fish packing area, dual function gas station, cold storage and ice factory
3. Office facilities
Management office, fisherman's cooperative, fish exporter branch and harbormaster's office
4. Tourist facilities
Cafe wharf, grilled fish stalls, kiosks and fishing spots.

References

- [1] Danisworo M, 1988 "Konseptualisasi Gagasan Dan Upaya Penanganan Proyek, Peremajaan Kota" Laporan Akhir ITB Bandung
- [2] Neufert, Ernst 1993 "Architect Data I And II", Friedrieoh Vieweg & Sohn Verlagsgesellschaft Mbh.
- [3] Sirvani, Hamid, 1985, "The Urban Design Process" Van Nostrand Reinhold Company, NY
- [4] Rencana Terinci Kota Muara Angke, Jakarta Utara
- [5] Rudiatin, Endang, 1997, "Kepercayaan Dan Kesetiaan Bantuk Dan Fungsi Jaringan Social Nelayan Muara Angke Pantai Utara Selatan", Tugas Akhir Magister Antropologi, PROGRAM PASCASARJANA STUDI ANTROPOLOGI UI.
- [6] Rencana Tata Ruang Wilayah (RTRW) DKI Jakarta 2006-2010
- [7] Dinas Kebudayaan Dan Permuseuman, 2002, Pengklasifikasian Bangunan Cagar Budaya Wilayah Jakarta Utara
- [8] Dinas Museum Dan Pemugaran Propvinsi Daerah Khusus Ibukota Jakarta, 1999-2000, Bangunan Cagar Budaya Di Provinsi DKI Jakarta
- [9] Kelurahan Pluit Kecamatan Penjaringan Kotamadya Jakarta Utara, Februari 2005, Laporan Hasil Pembinaan Dan Kegiatan Pemerintah Kelurahan.

- [10] Dinas Peternakan, Kelautan Dan Perikanan Provinsi DKI Jakarta UPT. Pengelola Kawasan Pelabuhan Perikanan Dan Pangkalan Pendaratan Ikan Muara Angke, 2006, Potensi Kawasan Pelabuhan Perikanan Dan Pangkalan Pendaratan Ikan Muara Angke.
- [11] Dinas Tata Kota DKI Jakarta, Kecamatan Penjaringan Jakarta Utara.