Dynamic of behavior of the small and medium scale fisheries traders in Cilincing District, North Jakarta encountered the pandemic of Covid-19

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Abstract. The Covid-19 pandemic occurred in early 2020, precisely at the end of February. The Covid-19 pandemic is a global problem, prompting the government to implement a large-scale Social Restriction (PSBB) policy. This policy certainly has an impact on business continuity. One of them is a small-scale fishing community group that is feeling the impact of the covid-19 pandemic in Indonesia. Small-scale fishing businesses are fishermen with fleet users under 10 GT. Although they have a normal marine routine or no change, some problems are found when there is a decrease in sales and build-up of catches. This issue supports the reason why research is done. The research was conducted in July 2020, with the location of Cilincing District, North Jakarta. Data retrieval techniques are conducted in-depth interviews, while data analysis is done qualitatively supported by quantitative data. The analysis shows that the dynamics of small-scale and middle scale fishery marketers' behavior in the face of the Covid-19 pandemic are a) Lowering the price of fresh fish and b) Selling fresh fishes to fishery business of salted fish processor

1. Introduction
Pandemic of Coronavirus disease 2019 or Covid-19 is a global outbreak that demands every country to make policy changes with the aim of addressing its spread to their respective communities. The policies of each state government are in the form of restrictions on outdoor activities, as well as activities involving citizens or outside products entering their country. As with Indonesia, the government issued the Large-Scale Social Restrictions (PSBB) in order to accelerate the handling of Covid-19. This policy is intended to reduce the rate of spread of covid-19 in the community.

In accordance with the regulation of the PSBB, formal and informal institutions in each sector integrate such regulations, except for service institutions and economic sectors. Within 14 days, government and private employees are encouraged to do homework activities conditionally. Therefore, people are required to reduce outdoor activities or be known as "stay at home." The same condition is also seen in the operation of public spaces such as tourist attractions, restaurants, cafés, and food stalls scattered in the community. The operation of a public spaces and the decrease in a public activity outside the home, whether to work, attend school offline, or gather with relatives and co-workers, has resulted in a decrease in the demand for food that many people consume. One of them is food ingredients sourced from a fishing catch. The catch fisheries scale is small and medium- a scale that have a significant impact on current pandemic conditions. This is very unfortunate because small and medium-scale fisheries
business actors are contributors to the economic increase. Small scale fisheries play an important role in life communities on the north coast of Java [1]. Although small-scale and medium-scale fishing activities are still done normally, the pandemic provides a tendency towards fish build-up, and demand reduced. This problem supports the reason for the importance of the research done. The research aims to analyze the dynamics of small and medium-scale fishery business behavior in countered of the Covid-19 pandemic.

2. Materials and Methods

2.1. Time and location
The research was conducted in July 2020 in Cilincing Sub-District, North Jakarta. Cilincing is one of the coastal areas that has a heterogeneous population, with the majority of the population coming from Central Java and West Java, as well as South Sulawesi. The majority of fishermen in Cilincing are ethnic Indramayu and Bugis, and there are also fishermen from Brebes and Indramayu [2].

2.2. Sampling technique
The selection of respondents is determined directly on the marketers of small and medium fishery products in Cilincing district. The reason for the respondent's take is because Cilincing district has the majority of small and medium-sized marketers to catch fisheries. Purposive sampling is a technique to determine research samples with certain considerations aimed at making the data obtained later can be more representative [3]. Purposive sampling can be defined as sampling based on a particular consideration such as population traits or previously known traits [4].

2.3. Sample Grouping/Respondent for Analysis
Respondent of this research are small-scale and medium-scale traders in Cilincing district. Fishermen who using a vessel under 10GT sell the catch through the traders for sale to consumers by small-scale marketers or pengeteng. As for mid-scale trader are traders who supply to large traders or export traders. Cilincing district was chosen as a research site because it is one of the coastal areas with a community that has a direct impact of the Covid-19 pandemic, one of which is the traders who is a trader of small-scale fishing products and a gatherer as the medium-scale traders in Cilincing district.

2.4. Types and data collection methods
Primary data collection is conducted by disseminating open questionnaires and conducted in-depth interviews with key figures related to the necessary information, namely businesses in the form of fishermen, marketers as small-scale traders and gatherers as medium-scale traders in Cilincing district. In-depth interviews are unstructured interviews with a prepared set of questions [5]. Secondary data was obtained from the library study, also obtained from the North Jakarta Marine and Fisheries Service.

2.5. Processing and data analysis
The data analysis is related to the business behavior dynamics of small-scale and medium-scale traders in Cilincing district. This business behavior dynamic occurs, as one form of adaptation from small-scale and medium-scale traders. The analysis is about the issue of the problem that arises and the dynamics of the marketer's business behavior that is carried out to maintain life, the quality of the catch while maintaining the value of the commodities sold. The results of the interview can be analyzed qualitatively and include data reduction, data display, and conclusion drawing/verification [6].

3. Results and Discussion

3.1. Dynamics of fishery business behavior catch in the face of Covid-19 pandemic
According to the results of the study, that during the pandemic period that is the beginning of March until the end of June 2020, there has been a decrease in demand for fishery products from consumers
namely small and middle traders, and end buyers or households. The table below raises the dynamics of business behavior in dealing with the problems encountered.

**Table 1. The behavior of fishing businesses in the encountered pandemic of Covid-19**

| No. | Issue | Problem | The behavior of Fishing Businesses | Time | Source |
|-----|-------|---------|-----------------------------------|------|--------|
| Small-Scale traders in Fishing Businesses | | | | |
| 1. | Decrease of demand for fishing catches | Community activity in TPI and fish markets declined sharply; Demand for fish from processing companies is stopped for temporarily | Doing decrease the price of fresh fish commodity | March-June 2020 | Small-Scale Traders/Pengeteng/Palele in Cilincing District |
| 2. | The build-up of fishing catches | Fresh fish didn't sell | Sell fish with fresh conditions for business fishery of salted fish | March-June 2020 | Small-Scale Traders/Pengeteng/Palele in Cilincing District |
| Medium-Scale Traders in Fishing Businesses | | | | |
| 1. | The halt in demand for Blue swimmer crab commodities from the processor | The processor does not operate due to the stalled demand for processed Blue swimmer crab | Trading of Blue swimmer crab is stopped for temporarily | January-May 2020 | Medium-Scale Traders in Cilincing District |
| 2. | Demand for fishing products from exporter companies is stopped for temporarily | Demand of fishing products from importers is stopped | Doing decrease the price of fishing catch; Focus to services on small-scale local demand | February-June 2020 | Medium-Scale Traders in Cilincing District |

According to the information listed in the table above, that during the Pandemic occurred in early March to the end of June 2020. Fisheries traderson a small and medium scale has a way of making changes to business behavior, as a form of adaptation or that is linked to the dynamics of the behavior of fishing businesses from small and medium scale.

During the pandemic, small and medium-sized marketers make changes in business behavior by lowering prices during pandemics. The reduction is done by up to 50%. In accordance with the above data, that the highest change in value is in Blue swimmer crab commodity, which is 50%. Blue swimmer crab becomes a very limited commodity because in addition to the majority of the demand obtained from the processor who has stopped his business during the pandemic, also most fishermen do catch other commodities besides blue swimmer crab.

### 3.2. Average Commodity Sales Before and During Covid-19 Pandemic

The small-scale traders have reduced needs, which is about 30-40%. A near-stable need is from medium-scale traders. Traders tend to maintain demand, as they supply to large traders who export destinations to China. Data as below shows the condition.
Table 2. The fish commodity price difference before and during pandemic of Covid-19

| Commodity                  | Average of Price (Rp/Kg) | Before Pandemic (Februari 2020) | During Pandemic Covid-19 (March-July, 2020) |
|----------------------------|--------------------------|---------------------------------|---------------------------------------------|
|                            | Small-Scale Traders      | Medium-Scale Traders            | Small-Scale Traders                        | Medium-Scale Traders |
| Blue swimmer crab          | 30.000                   | 40.000                          | 20.000                                      | 15.000               |
| Island                     | 35.000                   | 40.000                          | 20.000                                      | 20.000               |
| Mackeral/kembung           | 65.000                   | 65.000                          | 40.000                                      | 40.000               |
| Pancet                     | 35.000                   | 40.000                          | 20.000                                      | 20.000               |
| Shrimp/Udangpanacot        |                         |                                 |                                             |                      |
| Api-api                    | 23.000                   | 40.000                          | 15.000                                      | 20.000               |
| Shrimp/Udangapi-Api        |                         |                                 |                                             |                      |
| Arid Catfish/Manyung Spanish | 80.000                   | 90.000                          | 65.000                                      | 60.000               |
| Black Pomfret Fish/Bawalhitam | 60.000                   | 65.000                          | 45.000                                      | 40.000               |
| White Pomfret Fish/BawalPutih | 180.000                  | 195.000                         | 135.000                                     | 130.000              |
| Kecipiring                 | 35.000                   | 40.000                          | 15.000                                      | 15.000               |
| Snapper/kakap              | 70.000                   | 75.000                          | 50.000                                      | 45.000               |
| Squid/Cumi                 | 80.000-90.000            | 85.000-95.000                   | 65.000-75.000                               | 60.000-70.000        |

Table 3. Average number of sales before (February 2020) and during the Covid-19 Pandemic (March-Early July 2020) in the small-scale traders

| Commodity                  | Average Number of Sales (kg)/week | Before Pandemic | During Pandemic |
|----------------------------|-----------------------------------|----------------|----------------|
|                            | Target of Supply                  | Target of Supply |
|                            | Middle-Scale Traders              | Processor*      | End Buyer      | Total | Medium-Scale Traders | Processor* | End Buyer | Total |
| Blue swimmer crab          | 15                                | 50             | 20             | 85    | 15                | -          | 10        | 25    |
| Island                     | 72                                | -              | 50             | 122   | 57                | -          | 15        | 72    |
| Mackeral/kembung           | 120                               | -              | 45             | 165   | 120               | -          | 30        | 150   |
| Shrimp/Udangpanacot        | 70                                | -              | 30             | 100   | 35                | -          | 5         | 40    |
| Api-api                    | 80                                | -              | 65             | 145   | 60                | -          | 20        | 80    |
| Shrimp/Udangapi-Api        |                                   |                |                |       |                   |            |           |       |
| Arid Catfish/Manyung Spanish | 130                              | -              | 45             | 175   | 70                | -          | 30        | 100   |
| Mackeral/Tengiri           | 50                                | -              | 23             | 73    | 25                | -          | 5         | 30    |
| Pomfret Fish/Bawalhitam    | 370                               | -              | 50             | 420   | 300               | -          | 20        | 320   |
| White Pomfret Fish/BawalPutih | 200                              | -              | 60             | 260   | 150               | -          | 20        | 170   |

Remark: Except fishery businesses of salted fish processor

From the above data in Table 4, it can be known that before and after the commodity pandemic, there is a significant difference in the needs of export companies and large traders. Island mackerel, shrimp, snapper, and squid commodities are lower in decline compared to commodities such as pomfret fish. Spanish mackerel, arid catfish, kecipiring, as well as Blue swimmer crab.

The Covid-19 pandemic has had a significant impact on small-scale and medium-scale fisheries. Starting from fishermen who give confidence to the marketer to sell the catch to the buyer directly, it is also experienced by mid-scale marketers who have buyers from export companies, restaurants, and...
fishery processors. While the event of a pandemic, fisheries catch mainly small-scale or fleet users under 10 GT, still doing activities normally, and did not experience a decrease in catches during seafaring. Activities and results run according to the season or as conditions before the Covid-19 pandemic. It also does not affect the readiness of supply from marketers both small-scale and medium-scale. Small-scale marketers as small-scale fishermen do direct marketing with either direct consumers or households, processors, or mid-scale collectors. Meanwhile, middle marketers sell to restaurants, processors, and export companies.

In fact, the problems are found in small-scale and medium-scale traders. In small-scale fisheries, there is a decrease in demand for catch fisheries. This is seen from the decrease in public activity in sales locations, one of which is TPI. People who are running PSBB activities are forced to reduce out-of-home activities. Other small-scale traders such as processors even dismiss certain commodity purchases due to the halt in demand from the processor, especially blue swimmer crab. These conditions encourage small-scale marketers to make behavioral changes by lowering prices by up to 50%. This is intended to provide encouragement in the form of promotions to keep buyers from purchasing fishery commodities. Another condition that occurs is that when fishermen still have normal fishery production, then the build-up of fishing results occurs a build-up. Small-scale marketers are trusted by fishermen, in addition to making behavior changes by lowering prices as well as making stronger cooperation efforts with salted fish businesses. They tend to take initiatives in solving problems and show an entrepreneurial spirit. As is the opinion of [7] that the entrepreneurial spirit is the life of life in entrepreneurship by showing the character, character, and character of someone who has the will to realize innovation into the real world creatively. The entrepreneurial spirit had a positive and significant effect on the establishment of business independence [8]. Entrepreneurship is someone who has a confident, task-oriented and outcome-oriented, reasonable risk-taker, straightforward, creative, innovation, and future-oriented leader [9]. An entrepreneur is responsible for the fate and purpose he or she is about to achieve. He is a free man and does not want to rely on others [10].

In addition to the unhealthy condition of fish, and in anticipation of even worse conditions, small-scale traders are forced to give very low prices to the salted fish processor. It is worth noting that salted fish processing has simple processing. That fish salting businesses do not require too much investment goods, as well as simple supporting materials [11].

Table 4. Average number of sales before (February 2020) and during Covid-19 Pandemic (March-Early July 2020) in middle-scale traders

| Commodity             | Number of Sales (kg) | Before Pandemic | During Pandemic |
|-----------------------|----------------------|-----------------|-----------------|
|                        | Restaurant | Export Company | Big-Scale Traders | Total | Restaurant | Export Company | Big-Scale Traders | Total |
| Blue swimmer crab     | -         | 15             | -                | 15     | -          | 15             | -                | 15    |
| Island                | -         | 72             | -                | 72     | -          | 57             | -                | 57    |
| Mackerel/kembung      | -         | 120            | 100              | 320    | -          | 100            | 50               | 150   |
| Shrimp/Udang          | -         | 70             | 50               | 120    | -          | 35             | -                | 35    |
| Arid Catfish /Manyung | -         | 80             | 75               | 155    | -          | 60             | -                | 60    |
| Spanish Mackerel /Tengiri | -         | 130            | 80               | 210    | -          | 70             | -                | 70    |
| Pomfret Fish /Bawal   | -         | 50             | -                | 50     | -          | 25             | -                | 25    |
| Kecepirin             | -         | 370            | 100              | 390    | -          | 200            | 100              | 300   |
| Squid /Cumi           | -         | 200            | 150              | 350    | -          | 100            | 50               | 150   |

Source: Primary Data (Processed, 2020)
Medium-scale targets encountered a similar problem, namely with the halt in demand for processors in the form of certain commodities, namely Blue swimmer crab and the stalled demand for fishing products from exporters and large traders. Exporters here are companies that export fishery commodities, while large traders are those who supply the needs of large processors and traders in North Jakarta. The dynamics of behavior are similar to those of small-scale traders by the lowering price of fishery commodities. Another dynamic that occurs is to shift the focus of sales to small-scale local demand. Certain commodity trading was forced to stop marketing businesses because of the need for temporarily halted processors.

The price drop can be seen from the before and after price data provided from small –scale and medium-scale traders. Blue swimmer crab commodity decreased by 50%, blue swimmer crab became a commodity that is mostly in supply to the processor. For export and household needs are still relatively low. In island mackerel commodities there is a difference between 15-20%. Island mackerel becomes a commodity that is generally the needs of households, restaurants, and medium-scale traders. During the pandemic, island mackerel remains the need that people are looking for, despite the reduction in needs. Pancet shrimp and api-api shrimp have decreased in price by about 10-15%. Shrimp commodities remain a necessity for mid-scale marketers. This is because of their need in supply to exporter companies that have cold storage. For Ariid catfish, most needs are encountered by restaurants to serve ready meals, and the needs are also still encountered from mid-scale marketers. The price drop ranges from 15-50%. Spanish Mackerel commodities have seen price declines ranging from 5-10%. This is because it has a more enduring selling value than other commodities. Spanish Mackerel has a price drop of about 5-10%. Similarly, for island mackerel types that decrease between 10-15%, snapper decreases between 2-10%, as well as squid that ranges from 10-25%. Island Mackerel, snapper, and squid are commodities that are the highest needs of mid-scale marketers to meet the needs of export companies and large traders. The previous research has explained that skipjack tuna, swordfish, wing head shark, shrimp, squid, snapper, black and white Pomfret fish commodities will have a major impact on the increase in the income of fishermen [12].

The price drop by small and medium-scale traders does not affect the stability of fishery commodity sales. Nevertheless, the drop in the price of commodities sold is one of the strategies also to be able to maintain the market. Strategy is a tool to achieve the objectives [13]. Strategy is a set of hypotheses of a model in the relationship of cause and effect which is a relationship that can be expressed with the relationship between if & then [14]. We know that under pandemic conditions, every trader face competition to get consumers down. Market pricing strategies can be used to deal with competition [15]. That is seen from the comparison of sales before and after the pandemic in March to early July 2020. In small-scale marketers, sales decreased by 70.6%, island mackerel, 41%, shrimp 9.1%, Ariid fish, 60%, Spanish mackerel 44.8%, Pomfret fish 42.9%, Kecipiring, 58.9%. snapper by 23.8%, as well as squid, 34.6%. The third-smallest level of decline in small-scale sales occurred in shrimp, snapper, and squid commodities. The decline in sales occurred also in large-scale marketers. The decreasing occurs in addition to Blue swimmer crab commodities, island mackerel commodities reached 20.8%, shrimp reached 53.1%, Ariid catfish reached 70.8%, Spanish mackerel reached a decrease of 61.3%, island
mackerel by 66.7%, Kecipiring by 50%, snapper by 23.1%, and squid by 57.1%. The chart below shows the difference in sales from small and medium-sized marketers during the Covid-19 pandemic period.

4. Conclusion
In accordance with the results of this study, it can be concluded that businesses in the form of small and medium-sized fisheries traders have almost the same way of adapting in the face of global problems in the form of Covid-19 pandemic. As business owners or organizations despite being small-scale, they are required to be responsive in the face of any changes. Organizations are not always passive in reacting to environmental changes but are also directly involved in environmental change [7]. Dynamics of business behavior of small and medium-scale traders are carried out to maintain life and maintain fishery commodities from small fishermen. That is in order to maintain the existence of the small and medium-scale industries, a change in business behavior is needed by improving business competitiveness [16]. Most of the small-scale traders as well as medium-scale traders have a primary livelihood from the sale of fishery products. Changes in business behavior are made by them, to stay afloat running their main source of income. The dynamics of business behavior are influenced by factors of knowledge, intelligence, perception, emotion, motivation, which serves to process stimuli from the outside. Thus, during this Covid-19 pandemic, fisheries businesses, especially small and medium-scale traders can still maintain the lives of their families and businesses.

Acknowledgment
We would like to thanks Research Centre for Marine and Fisheries Socio Economic that had funded this research in 2020 and also the team of the Impact of the Pandemic of the Covid-19 on Marine and Fisheries Bussiness Behavior.

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