

# The Level of Community Participation in Maintaining Environmental Health in Fishermen's Settlements, Cilincing sub-district, North Jakarta

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Informasi artikel	ABSTRAK
<i>Sejarah artikel</i>	The fishermen's settlement in Cilincing Village, North Jakarta is a densely populated settlement. The role of the community in maintaining environmental health is very necessary to prevent the spread of disease. In 2020 the number of healthy and larva-free houses in RW 04 Cilincing Village is still low. This study aims to determine the level of community participation in maintaining environmental health in fishermen's settlements, Cilincing Village, North Jakarta. This research method is descriptive research with a survey approach. The results showed that the level of community participation at the planning stage had a score of 43.62% (medium), the level of community participation at the implementation stage had a score of 50.16% (medium), and the level of community participation at the evaluation/monitoring stage had a score of 46.46% (medium). Based on the results of the analysis of the 3 stages of participation, the overall level of community participation has a score of 47.25% or it can be concluded that the level of community participation in maintaining environmental health in the fishermen's settlements, Cilincing Village, North Jakarta is included in the medium category. The main thing that causes the level of community participation to be in the moderate category is due to the uneven distribution of information, as well as the lack of public awareness in preventing dengue and waste management.
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Keywords:	ABSTRACT
Community Participation Environmental Health Fishing Settlement	Permukiman nelayan di Kelurahan Cilincing, Jakarta Utara merupakan permukiman padat penduduk. Peran masyarakat dalam menjaga kesehatan lingkungan sangat diperlukan untuk mencegah penyebaran penyakit. Pada tahun 2020 jumlah rumah sehat dan bebas jentik di RW 04 Kelurahan Cilincing masih rendah. Penelitian ini bertujuan mengetahui tingkat partisipasi masyarakat dalam menjaga kesehatan lingkungan di permukiman nelayan Kelurahan Cilincing, Jakarta Utara. Metode penelitian ini adalah penelitian deskriptif dengan pendekatan survei. Hasil penelitian menunjukkan tingkat partisipasi masyarakat pada tahap perencanaan memiliki skor sebesar 43,62% (sedang), tingkat partisipasi masyarakat pada tahap pelaksanaan memiliki skor sebesar 50,16% (sedang), dan tingkat partisipasi masyarakat pada tahap evaluasi/monitoring memiliki skor sebesar 46,46% (sedang). Berdasarkan hasil analisis dari 3 tahap partisipasi, tingkat partisipasi masyarakat secara keseluruhan memiliki skor sebesar 47,25% atau dapat disimpulkan tingkat partisipasi masyarakat dalam menjaga kesehatan lingkungan di permukiman nelayan Kelurahan Cilincing, Jakarta Utara termasuk dalam kategori sedang. Hal utama yang menyebabkan tingkat partisipasi masyarakat termasuk kategori sedang yaitu disebabkan oleh penyebaran informasi yang tidak merata, serta kurangnya kesadaran masyarakat dalam pencegahan DBD dan pengolahan sampah.

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## Introduction

As the nation's capital, DKI Jakarta is never free from environmental problems. Socio-economic activities are one of the factors that

cause environmental problems. Population growth is also followed by residential growth. The high number of population growth causes the

development of settlements that are not controlled. The development of settlements that are not well planned and have low quality, and lack of attention to facilities and infrastructure, such as location, sanitation, drainage or sewerage, availability of clean water, and waste disposal systems can lead to an unhealthy residential environment.

In Indonesia, only 24.9% of the Indonesian population owns a house according to healthy housing standards. This shows that the condition of the residential environment in Indonesia is still an unhealthy environment. In addition, there are still many people who are affected by various kinds of infectious diseases such as vomiting, malaria, dengue fever, and so on, indicating the low quality of the environment (Kementerian Kesehatan RI, 2012).

The fishermen's settlement in the Cilincing sub-district, North Jakarta is a residential area located on the coast of DKI Jakarta and adjacent to the KBN industrial area. The fishermen's settlements in Cilincing Village are mostly inhabited by people who work as fishermen, and most of them are densely populated settlements.

Based on the results of observations made by researchers, namely in March 2021, the condition of the houses in the fishermen's settlements in Cilincing Village are close to each other and relatively tight. Irregular and semi-permanent building conditions, as well as poor road conditions make the atmosphere of the fishermen's settlements in Cilincing Village, North Jakarta look shabby and prone to fires. The fishermen's settlements in the Cilincing Village are very dense and there is no longer any vacant land. Almost every house does not have a yard because the remaining yard is used for drying fish and clothes.

The existing drainage channel looks full of garbage. A lot of household waste is directly dumped around residential areas and even thrown into the sea. This greatly facilitates the outbreak of various diseases.

Based on environmental health data in 2020, the number of unhealthy houses in RW 04 Cilincing Village is 451 houses. This puts RW 04 in the second position with the highest number of unhealthy houses in Cilincing Village (Puskesmas Kecamatan Cilincing, 2021). Meanwhile, houses that are not larvae-free in 2021 in Cilincing Village are still relatively high with a total of 197 houses (Puskesmas Kecamatan Cilincing, 2022).

Based on these data, the level of unhealthy housing is still quite high. It is very feared that it can interfere with the health of its residents. Therefore, the purpose of this study was to determine the level of community participation in the fishing settlements of Cilincing Village, North Jakarta in maintaining environmental health, especially the residential environment.

### **Theory of Community Participation**

According to Notoatmodjo (2003), community participation is the participation of all community members in solving community problems. Community participation in the environmental field means the participation of all members of the community in solving environmental problems, especially the environment in which they live. Meanwhile, according to Sumarto (2003), community participation is a process when citizens, as individuals as well as social groups and organizations, take part and influence the process of planning, implementing, and monitoring policies that directly affect their lives.

According to Sulaiman in Hidayatullah, (2006), based on the form of participation is divided into five forms, namely:

- a) Direct participation in physical and face-to-face joint activities
- b) Participation in the form of contributions of goods or money Participation in the form of contributions of goods or money
- c) Participation in the form of funds and facilities
- d) Participation in the decision-making process
- e) Participation in support

According to Davis, Keith (1967) in Sastropoetro (1988) there are three stages of participation, namely:

1. Planning stage

The manifestation of this stage is by attending meetings to determine the program, contributing to ideas, discussions and responses or rejection of the program.

2. Stages of implementation

The manifestation of this stage is participation in resources, funds, administration, socialization, execution and supervision of the program.

3. Stages of evaluation/monitoring

The manifestation of this stage is to pay attention to every program development and also to provide criticism and suggestions for managers and the community.

Community participation is influenced by two factors, namely internal factors and external factors. Internal factors in this case are related to the ability of the community to participate in development, while what is meant by external factors are related to the duties and roles of the government or related formal institutions. Success or failure in community participation can be influenced by various factors (Turnip & Ali, 2014).

The level of participation according to Sumarto (2003), judging from the practical experience of participatory planning in several regions of Indonesia, Sumarto classifies the level of community participation into three parts, namely:

1. High

- Starting from the planning stage, implementation to monitoring carried out independently by the community.
- The programs to be implemented are determined and formulated by the community.

2. Medium

- The community has participated, but in practice it is still dominated by certain groups.

- The community can voice their aspirations, but it is still limited to daily problems.

3. Low

- People only watch project activities carried out by the government.
- The public can provide input either directly or through the mass media, but only for consideration.
- The community is still very dependent on funds from other parties so that if the funds stop, the activities will stimulantly stop too.

### Theory of Environmental Health

According to Notoatmodjo (2011) environmental health is essentially an optimum environmental condition or condition so that it has a positive effect on the realization of optimal health status as well. Meanwhile, according to the World Health Organization (WHO), environmental health is an ecological balance between humans and the environment in order to ensure the health of humans (Fitriany et al., 2016).

In Indonesia, the scope of environmental health is explained in Undang-Undang Nomor 23 Tahun 1992 Pasal 2 Ayat 3 concerning health, 1992. There are 8 scopes of environmental health, namely:

1. Water and air health
2. Solid waste/garbage security
3. Safeguarding liquid waste
4. Gas waste protection
5. Radiation protection
6. Noise protection
7. Disease vector protection
8. Health and other safeguards, such as post-disaster conditions

According to Supardi (1985) environmental health criteria include:

1. Availability of good and clean water for drinking, cooking and washing.
2. Availability of good waste disposal sites, in the form of garbage or feces by making good latrines and dirt places so that they do not become nests for mosquitoes, flies, and other germs.

3. The condition of the environment and settlements or yards that are maintained.
4. Circumstances that do not cause the gathering or nesting of mosquitoes and other parasites.
5. Availability of good drainage and sanitation that meets the requirements.

According to Indasah, (2017) there are factors that affect the health of the community's environment, namely:

1. Disparities in health status
2. Double burden of disease
3. Low service performance
4. People's behavior that does not support clean living
5. Low environmental health conditions

### Characteristics of Fisherman Village Settlements

#### 1. Location and Position

According to Dimitra & Yuliastuti, (2012) fishing settlements are settlements that inhabit island areas, along the coast including lakes and along rivers. According to Hani et al. (2014) also stated that usually the location of fishermen's houses is very close to their main source of livelihood, namely the river or the beach.

#### 2. Settlement Pattern

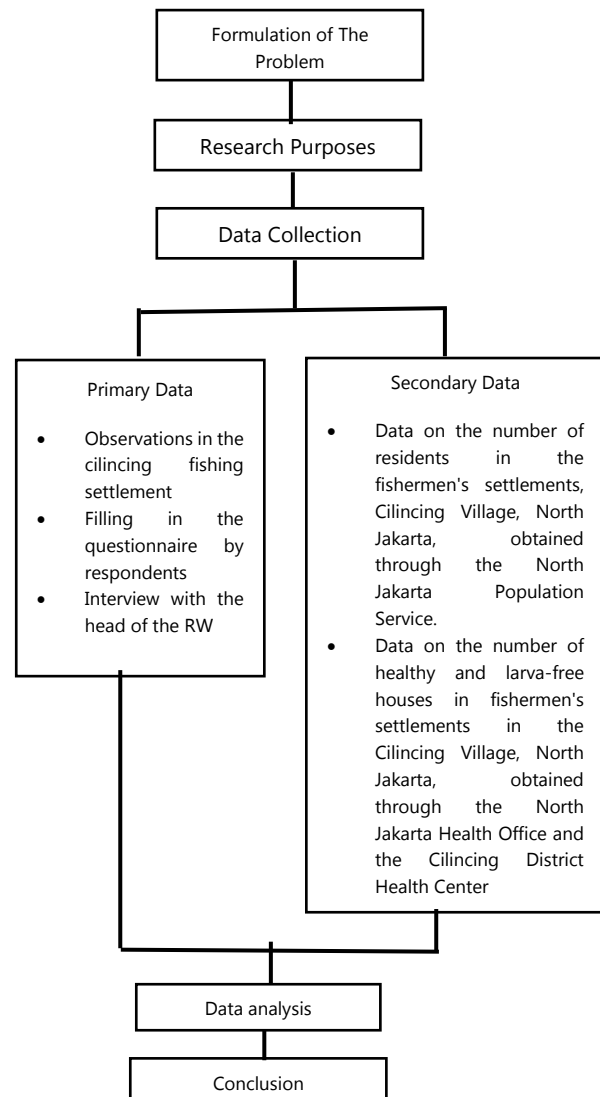
According to Hani et al., (2014), in general, settlement patterns will follow a socio-cultural system based on patterns of human activity. The settlement pattern of fishing villages will usually follow the coastline (linear) with conditions that tend to be homogeneous, closed and develop certain traditions so that they have the characteristics of settlements.

The characteristics of fishermen's settlements can be seen in the pattern of placement of each building mass that is directly related to the place of production, namely waters or the sea and the needs of their activities. Fishermen's residential areas are identical to their lives, where most of the population depends on aquatic natural resources, which are commonly referred to as aquatic environmental settlements.

### 3. Supporting Components

According to Egam & Rengkung, (2017), the character of coastal settlements can be captured by the presence of boat facilities, the availability of boat mooring space, fishing activities (going to sea), and storage space for nets and other equipment.

### Method



**Picture 1.** Research Flowchart

The method used in this study is a descriptive method with a survey approach. The population of this study is the people who live in fishermen's settlements, namely the people of RT 3, RT 5, and RT 12 totaling 3,170 people, which are grouped into 955 families. Sampling using the slovin formula with an error rate of 10%, so that a

total sample of 91 families was obtained. The data analysis used is percentage analysis, namely:  
Explanation:

$$P = \frac{F}{N} \times 100\%$$

- P = Answer percentage
- F = Answer frequency
- N = Number of respondents
- 100% = Fixed number

The scale used to measure the level of community participation is the Likert scale, the following is the formula for calculating the level of community participation in maintaining environmental health:

Explanation:

$$\frac{(A \times 1) + (B \times 2) + (C \times 3)}{\text{Skor Maksimum}} \times 100\%$$

- A = Never with a weight of 1
  - B = Sometimes with a weight of 2
  - C = Always with 3 weight
- Maximum Score = Highest score x number of respondents x number of questions

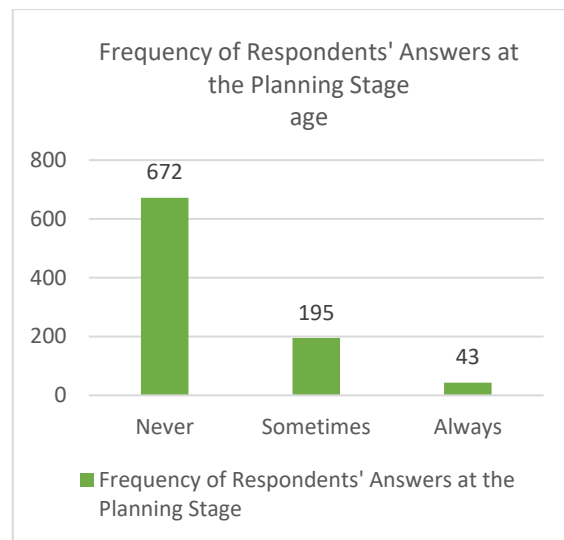
**Table 1.** Classification of Participation Levels

No.	Persentase (%)	Hasil
1.	61 – 100 <sup>a</sup>	High
2.	41 - 60	Medium
3.	< 40	Low

<sup>a</sup>Riduwan, 2002

## Results and Discussion

The level of community participation in maintaining environmental health in fishermen's settlements, Cilincing Village, North Jakarta at the planning stage can be seen in the following diagram:



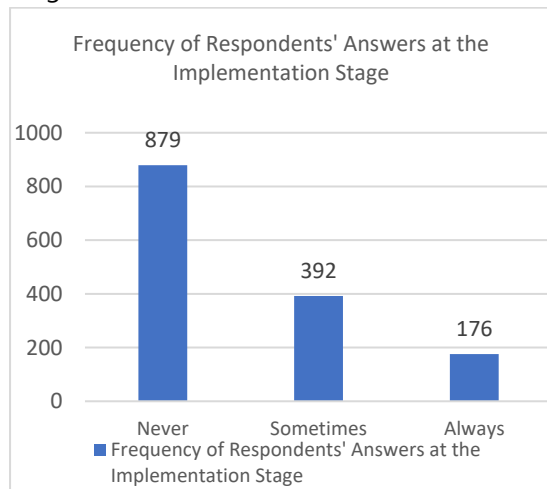
**Picture 2.** Frequency Diagram of Respondents' Answers at the Planning Stage

Based on the data in Figure 1, it can be seen that the frequency of respondents' answers at the planning stage of 91 respondents and 10 statements mostly answered 'Never' with 672 answers, 'Sometimes' with 195 answers, and 'Always' with 43 answers. After being analyzed, it can be seen that the level of community participation in the fishing settlements of Cilincing Village, North Jakarta in the planning stage of environmental health activities has a value of 43.62% which is included in the medium category.

The thing that causes the level of community participation at the planning stage is included in the moderate category, namely community participation in meetings and counseling as well as providing opinions/ideas on activities to maintain environmental health is still lacking due to the uneven distribution of information on holding meetings, as well as information dissemination on outreach activities. So that some people do not know about the implementation of the meeting and counseling. In addition, most of the community cannot attend meetings or counseling activities because they are busy working, in conveying opinions/ideas are also still lacking because most of the people have fully trusted the RT and RW administrators.

The level of community participation in maintaining environmental health in fishermen's settlements, Cilincing Village, North Jakarta at the

implementation stage can be seen in the following diagram:

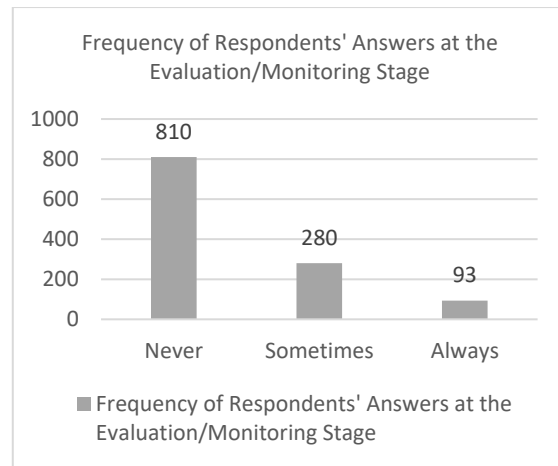


**Picture 3.** Frequency Diagram of Respondents' Answers at the Implementation Stage

Based on the data in Figure 2, it can be seen that the frequency of respondents' answers at the implementation stage of 91 respondents and 16 statements mostly answered 'Never' as many as 879 answers, 'Sometimes' as many as 392 answers, and 'Always' with 176 answers. After being analyzed, it can be seen that the level of community participation in fishermen's settlements in Cilincing Village, North Jakarta in the implementation stage of environmental health care activities gets a value of 50.16% which is included in the medium category.

The things that cause the activities to maintain environmental health are still less than optimal in this implementation stage, namely the low participation of the community in community service activities, lack of awareness in preventing the spread of dengue fever, lack of information about waste bank activities so that many people do not know about the existence of waste bank activities. The problem is the low segregation of organic and inorganic waste due to the feeling of being bothered/saturated, the lack of information about the waste recycling program.

The level of community participation in maintaining environmental health in fishermen's settlements, Cilincing Village, North Jakarta at the evaluation/monitoring stage can be seen in the following diagram:



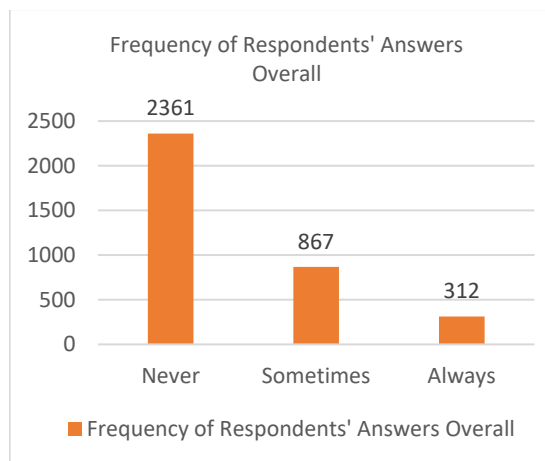
**Picture 4.** Frequency Diagram of Respondents' Answers at the Evaluation/Monitoring Stage

Based on the data in Figure 3, it can be seen that the frequency of respondents' answers at the evaluation/monitoring stage of 91 respondents and 13 statements mostly answered 'Never' with 810 answers, 'Sometimes' with 280 answers, and 'Always' with 93 answers. . After being analyzed, it can be seen that the level of community participation in the fishermen's settlements in Cilincing Village, North Jakarta in the implementation phase of environmental health activities has a value of 46.46% which is included in the medium category.

The things that cause the level of community participation at the evaluation/monitoring stage to be in the moderate category are that there are still many people who have not felt the results/benefits of environmental health care activities, because there is still a lot of garbage piled up in water ditches and there are still people affected by dengue disease. The low level of socialization in the waste management program makes people do not know how to process waste properly, there is an inappropriate mindset for some people in terms of reprimanding people who litter for fear of being seen as looking for a fuss, lack of public interest in giving criticism and suggestions if there are discrepancies. in environmental health activities.

The level of community participation in maintaining environmental health in fishermen's

settlements, Cilincing Village, North Jakarta as a whole can be seen in the following diagram:



**Picture 5.** Frequency Diagram of Respondents' Overall Answers

Based on the data in Figure 4, it can be seen that the overall frequency of respondents' answers from 91 respondents and 39 statements divided into three stages of participation, the number of respondents who answered 'Never' was 2361 answers, 'Sometimes' was 867 answers, and 'Sometimes' Always' as many as 312 answers. After being analyzed, it can be seen that the level of community participation in maintaining environmental health in fishermen's settlements, Cilincing Village, North Jakarta, has a value of 47.25% which is included in the medium category.

The level of community participation as a whole from the planning, implementation, and evaluation/monitoring stages is in the medium category. At the planning stage, community participation in meeting activities is still lacking due to the uneven distribution of information, and most of the respondents' occupations are IRT (64.8%). This is one of the factors that affect community participation in attending meetings. Lack of participation from IRT which is dominated by women because they are busy taking care of housework and busy taking care of children. Based on the last education level of the respondents, at most 47% were elementary schools (SD). The low level of education affects community participation in conveying ideas/opinions during planning meetings. This is due to a lack of knowledge about

environmental health, so that most of the community fully trusts the RT and RW administrators.

At the implementation stage, community participation in community service activities, prevention of dengue fever, and waste management (waste bank) is still lacking. The respondent's occupation as housemaid (64.8%) and fisherman (16.5%) is one of the factors influencing community participation in community service activities. This is because IRT, which is dominated by women, usually only helps prepare food or drinks during community service activities, while the lack of participation of fishermen in community service activities is because most fishermen are going to sea during community service activities. The distribution of information on community service activities is also uneven, making many people not aware of the existence of community service activities.

The most recent education level of respondents is 47% elementary school graduates. This causes a lack of public knowledge about how to prevent the spread of dengue mosquitoes. Community participation in waste processing activities held at the waste bank is also still lacking. This is due to the uneven distribution of information, so that many people do not know about the existence of waste banks. The lack of knowledge of the community in waste management also affects community participation in managing waste.

At the evaluation/monitoring stage, there are still many people who have not felt the results/benefits of environmental health care activities, because there is still a lot of garbage piled up in water ditches and there are still people affected by dengue disease. The low level of socialization and lack of knowledge in waste management programs make people do not know how to process waste properly. There are still many people who throw garbage carelessly and process waste by burning. There is an inappropriate mindset for some people in terms of reprimanding the public for fear of being seen

as looking for a commotion. The low level of education makes people less interested in giving criticism and suggestions if there are discrepancies in activities to maintain environmental health.

### Conclusion

Based on the results of research that has been done regarding the level of community participation in maintaining environmental health in the fishermen's settlements, Cilincing Village, North Jakarta, the researchers can draw the following conclusions:

1. The level of community participation in the planning stage is in the medium category, namely 43.62%.
2. The level of community participation in the implementation stage is in the medium category, namely 50,16%.
3. The level of community participation in the evaluation/monitoring stage is in the medium category, which is 46.46%.
4. The level of community participation as a whole is in the medium category, namely 47.25%.

### Recommendation

From the conclusions that have been described, the researchers will provide several suggestions, namely:

1. RW administrators and RT administrators in fishing settlements should work together to take part in the socialization of activities to maintain environmental health clearly and equitably.
2. RW administrators and RT administrators in fishing settlements are expected to provide a special place for storing waste bank goods.
3. The community should remind each other about meeting activities, community service activities, dengue prevention programs, and waste management and be more daring to reprimand other people who litter or who have never participated in community service activities.

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