

# Community Participation to Promote Disaster Risk Reduction in Yogyakarta, Indonesia: A Qualitative Study

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## COMMUNITY PARTICIPATION TO PROMOTE DISASTER RISK REDUCTION IN YOGYAKARTA, INDONESIA: A QUALITATIVE STUDY

**Abstract:** Ledoksari is one of the areas where natural disasters often occur, primarily floods every year. Therefore, the government designated the area as a disaster-resilient village to Promote Disaster Risk Reduction. Active community participation is needed for the success of the program. An evaluation program is required to explain this. The purpose of this study is to explore community participation in developing a Disaster-resilient Urban Village. This study is a qualitative method with in-depth interviews as data collection. Fifteen people were selected as research subjects by the purposive sampling technique. The study results show that the steps of activities in Ledoksari as a Disaster-resilient Urban Village are preparation, profiling, and disaster risk analysis. Then, the movement continued with mapping, community action plan, simulation, and review. Participation in planning, implementing, evaluating, and utilizing the results is formed community participation. Meanwhile, the lack of public awareness to be actively involved in each activity was claimed as a barrier. The community has participated well and actively in the implementation and utilization of the results. But, the study shows the whole community has not been completely involving in the planning and the evaluation process.

**Keywords:** Disaster-resilient Village, Community Participation, Community Empowerment, Health Promotion

### Introduction

Indonesia is a disaster-prone country. Disaster is a series of events that threaten and disrupt human life caused by natural and non-natural factors and human factors resulting in casualties, environmental damages, property losses, and psychological impacts (Kemenkes RI, 2016). Geographically, Indonesia is an archipelago located at the four-tectonic plate meeting, namely the Continent of Asia, the Continent of Australia, the Indian Ocean, and the Pacific Ocean (Kemenkes RI, 2016). According to data obtained by the National Agency for Disaster Management (BNPB) in 2018, there were 2,853 disasters in Indonesia. Four thousand eight hundred and fourteen dead and missing victims, 21,083 injured, and 10,333,309 affected and displaced victims (BNPB, 2018).

The Special Region of Yogyakarta is one of the provinces in Indonesia which has also often been hit by disasters. According to the data from BNPB, there were twenty-five disasters in the Special Region of Yogyakarta in 2018. One of the areas affected by the disaster in the Special Region of Yogyakarta is namely Yogyakarta City. The Regional Agency for Disaster Management in Yogyakarta announces that Yogyakarta has twelve threatening disasters, such as Mount Merapi eruption, strong winds, earthquakes, tsunamis, abrasions, landslides, floods, droughts, technological failures, epidemics, and social conflicts (Yogyakarta, 2018). Yogyakarta was hit eight times by many catastrophic events that occurred in 2014- 2018. Some were floods, landslides, and tornadoes (BNPB, 2018). The Yogyakarta government has developed a disaster-resilient village to reduce the impact of natural disasters and has been running since 2013. That program focuses on active community participation (Yogyakarta, 2018).

A disaster Resilient Village is a village that can identify potential disasters. It aimed to reduce the potential for catastrophe and organize all elements in the community to participate in disaster. As for the shape, the capacity of Disaster Resilient Village comes through with existing development

planning that contains various efforts on prevention of potential disasters, preparedness, and post-disaster risk reduction (Julius *et al.*, 2020). In 2018, 101 Disaster Resilient Villages were successfully formed, Jagalan Ledoksari Village (Yogyakarta, 2018).

Jagalan Ledoksari Village is located at the banks of River Code. Based on the preliminary study, the Head of Jagalan Ledoksari Village stated that the area was once submerged in a flood that also destroyed the Sayidan Bridge in the '80s. The floods occur every year by heavy rain, and the big flood cycle occurs every four years. River silting occurs due to the eruption of Mount Merapi. So, the river flows are unable to accommodate the increased water flow during the rainy season. After that, earthquakes, strong winds, and wildfire often occurred in this area. Then, the Disaster Resilient Village was formed in 2014. For five years, the Ledoksari Disaster Resilient Village has continued to carry out a series of activities to this day. All the activity steps of the program have been done by the community. For example, a flood disaster simulation was held on March 17, 2019. It was played directly by the community and members of the Yogyakarta Regional Disaster Management Agency.

The community is the leading actor in every step of activity in the Disaster Resilient Village program. They have an essential role and vice versa. So, there is a requirement for efforts that can also increase the active participation of each community. Community participation is a reliable force, especially during adversity, such as when a disaster occurs. This kind of strength needs to be nurtured, developed, and increased in knowledge and capacity with elements of disaster management institutions that are manifested (Edyanto, 2019). Another study mentioned that the development of a Disaster-resilient Village would only run well with the support and the participation of the whole community. Participation is involvement in the decision-making process, program implementation, obtaining the benefits and performance of the program evaluation (Uphoff, Cohen, & Goldsmith, 1979). Thus, it can ascertain that community participation is the involvement of the community in the development and the implementation of a thing or program carried out in the community (Irene, 2015). To measure the resilience of a society depends on how the community is conceptualized and operationalized. The measures to strengthen the resilience of a particular community should be different depending on what the focal community is (Räsänen, Lein, Bird, & Setten, 2020).

Yogyakarta Regional Disaster Management Agency is responsible for the program. It is considered that community participation plays an essential role in every step of the activity. But, it must evaluate the program to find the barriers and the problems. So, the study aimed to explore the community participation in developing the Disaster-resilient Village to reduce the disaster risks at Ledoksari.

## **Method**

This study is a qualitative method with a descriptive approach. Fifteen people were selected with the purposive sampling technique as an informant. They consist of a facilitator from the Yogyakarta Regional Disaster Management Agency, a community leader of Jagalan Ledoksari Village, and a leader of Ledoksari Disaster-resilient Village. Besides, four community members of Ledoksari and eight people from outside Ledoksari were also as an informant. Data collection was conducted by an in-depth interview with interview guidelines, cameras, and recorders. The interview guidelines explored every activity step in Disaster Resilient Village, such as from a history, planning until

evaluation. Source triangulation was selected as a question of validity and reliability—data analysis using content analysis. The data analysis steps were collecting the raw data, transcribing the interview results, and making the coding. Thus, concluding the result in the narrative form, analyzing the results by referring them with the theories from the previous studies.

## Findings

This study aimed to explore the participation of the Jagalan Ledoksari community in developing a Disaster Resilient Village. Fifteen people were selected as informants for this qualitative study with a descriptive approach. The informants were divided into two categories; the key informants and the triangular informants. Essential informants consist of four people from Ledoksari Disaster Resilient Village community members and eight people from outside. Triangular informant is a stakeholder from a Yogyakarta Regional Disaster Management Agency, a community leader of Jagalan Ledoksari Village, and a Ledoksari Disaster Resilient Village leader. An in-depth interview with interview guidelines conducted data collection. It explored every step of activity in Disaster Resilient Village, such as from a history, planning until evaluation. Content analysis is used to analyzing the data.

### *A History*

According to Government Law, Number 24 of 2007 concerning Disaster Management, the Government and the Regional Government are responsible for implementing disaster management. This program is named Disaster resilient villages, and Ledoksari is one of the Disaster resilient villages developed by the Yogyakarta Government. Located on the bank of River Code, this village has repeated floods every year and big floods cycle every four years. Other disasters also occurred, such as strong winds and earthquakes. The following informant's statement supports this condition:

*"..... The disasters happen every year. For example, River Code is in flood every year....." (JA, 52 years old)*

*"Because, this area, Ledoksari, mmm... is frequently attacked by the flood. Mmm... There is a..., if it happens every four to five years, it is called 5-year flood cycle....." (Y, 66 years old)*

There are nine activity steps to developing Disaster Resilient Village, start from preparation until review. However, data collecting in this study began with the development history of Ledoksari Disaster Resilient Village (Figure 1).

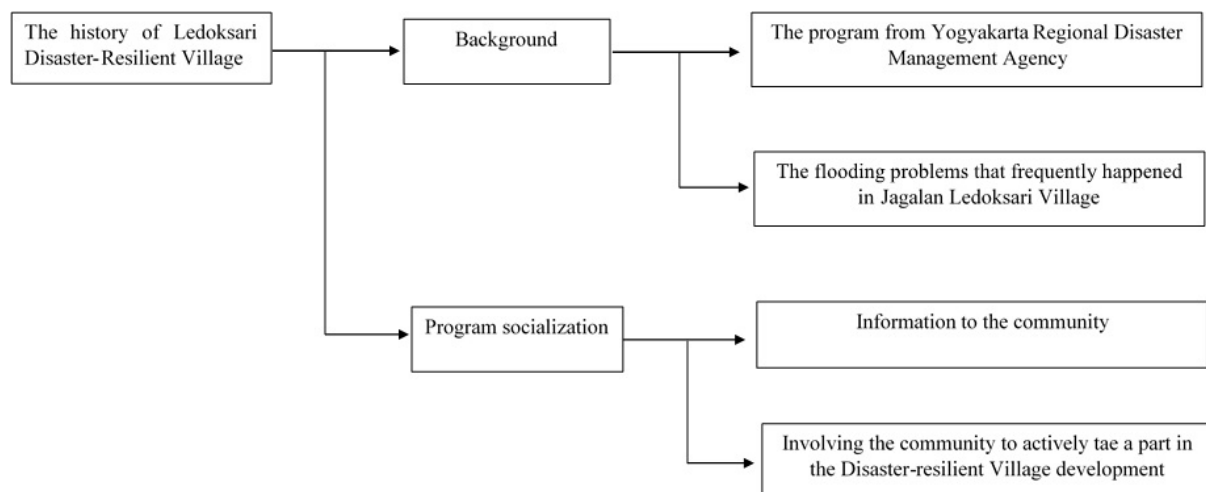


Figure 1 The history of the development of Ledoksari Disaster-resilient Village option

Figure 1 shows that the history of Jagalan Ledoksari Village as a disaster-resilient village. It is one of the programs from the Yogyakarta Regional Disaster Management Agency. It was initiated in 2014. The first step of the activity carried out was outreach to the community. Increasing public interest and interest in the program is one of the objectives of the socialization activity. In addition, improving residents' understanding of the various activities that will be carried out to create a disaster-resilient village is a supporting goal of the initial activity. It is hoped that awareness and active support from the community will grow.

Assessment indicators are needed to monitor the success of a program. There are three indicators; input indicators, process indicators, and output indicators. Input indicators are all resources used as input for program implementation. First, human resources are viewed from knowledge, skills, and community capability towards disaster management. Second, facilities and infrastructure to supporting the program. Then, policies and funding to implement the program on the village strategic plan. The last cross-sectoral partnership for the smooth running of the program.

Next, the definition of process indicator is the effectiveness of community efforts in program implementation. It is seen from the independence of social action; it consists of preventive measures, mitigation actions, and disaster risk reduction actions. This action is a sign that the community has a concern about disaster risk reduction in their area. The forms of community social action for disaster risk reduction include preparation of an early warning system, preparation of contingency plans, preparation of standard operating procedures for Disaster Management, preparation of evacuation route maps and strategies, and simulations.

The last indicator is output indicators; to measure the success of the program that has been implemented. It consists of community capacity building and includes knowledge, skills, and efficacy towards disaster risk reduction. Besides, increasing operational, organizational, networking, and coordination capacities are also assessed as output indicators.

Community participation is the key to the success of this program. This study found four types of community participation, includes participation in planning, implementation, program evaluation, and the utilization of program results.

### ***Participation in Planning***

Planning Participation is community involvement in every planning process implemented for the development of Ledoksari Disaster Resilient Village. The form of these activities includes meetings and coordination between Yogyakarta Regional Disaster Management Agency and stakeholders, as expressed by the informant bellow:

*".....Yes, that is the stakeholder of the village, especially the community leaders, members, and member of Yogyakarta Regional Disaster Management Agency" (JA, Chairman of Ledoksari Disaster resilient village, Male, 52 years old).*

In the initial planning meeting, an organizational structure was formed, which consisted of communities not affected by flooding. It is quite practical considering that in the event of a flood disaster. The affected people will be busy saving themselves and their homes. Furthermore, the meeting also discussed facilities, infrastructure, and training. The following informant stated this:

*"...the criteria for the management of the Ledoksari disaster-resilient village are those who are not affected by the disaster....." (Y, Community leader Jagalan Ledoksari Village, Male, 66 years old).*

The study identified a form of planning participation and active community participation (Table 1).

*Table 1. The form of Community Planning Participation in Ledoksari Disaster Resilient Village*

<b>Type of participation</b>	<b>Involved Subject</b>	<b>A form of participation</b>
Planning participation	Yogyakarta Regional Disaster Management Agency	Hold regular meetings with Ledoksari Disaster resilient Village
		As an observer in meetings
	Chairman of Ledoksari Disaster resilient Village	Attend every meeting held by Yogyakarta Regional Disaster Management Agency
		Inviting the community to attend the meeting
		As a place for conveying ideas from the community who are not present at the meetings
	Community leader Jagalan Ledoksari Village	Attend every meeting held by Yogyakarta Regional Disaster Management Agency
		Presenting ideas/feedback during the meeting
	Administrator community of Ledoksari disaster-resilient village	Attend every meeting
		Become part of the organizational structure
		Presenting ideas/feedback
Non-Administrator community of Ledoksari disaster-resilient village	No participation	

Source: Primary Data

Table 1 showed that there was no participation from community non-members of Ledoksari Disaster resilient village. They assumed that the activity was only for members and there was no invitation letter for them. Then, the study found that every subject involved in meetings must be attended and recommended for the planning. As a facilitator, Yogyakarta Regional Disaster Management Agency arranged the meetings and controlled the master plan was created by the community.

### ***Participation in Implementation***

Implementation participation is the participation of the people of Jagalan Ledoksari Village in simulation activities held by the Yogyakarta City Regional Disaster Management Agency. This stage focuses on flood disaster simulations that the whole community must follow. Each community plays its role, as explained by the informant.

*"...So refugees, bring children, take grandchildren to find their father. His father doesn't know where he is anymore....." (TJ, Community Non-Members of Ledoksari Disaster resilient village, Female, 53 years old).*

*"I am security. security, so for example, when a flood occurs, people are not allowed to enter the alley..." (S, Community members of Ledoksari Disaster resilient village, Male, 55 years old).*

The various roles played by members of the Ledoksari Disaster Resilient Village. They played as health workers in the First Accident Rescue section, communication section, shared kitchen section, early warning section, equipment and logistics, transportation section, and security section. In contrast, the chairman is tasked with providing command and direction. The study also identified a form of Participation in implementation and community which was active in participation (Table 2).

*Table 2. The form of Community Implementing Participation in Ledoksari Disaster Resilient Village*

<b>Type of participation</b>	<b>Involved Subject</b>	<b>A form of participation</b>
Participation in implementation	Yogyakarta Regional Disaster Management Agency	Establishing disaster simulation activities
		As a scenario writer with the community
		As a director and coordinator during the simulation activity
	Chairman of Ledoksari Disaster resilient Village	As a community director and coordinator during the simulation
		Participate in simulation activities
	Community leader Jagalan Ledoksari Village	Develop scenarios with Yogyakarta Regional Disaster Management Agency and the community
	Administrator community of Ledoksari disaster-resilient village	Develop scenarios with Yogyakarta Regional Disaster Management Agency
		Participate in simulation activities
		Performing roles in simulation activities according to positions in the organizational structure
	Non-Administrator community of Ledoksari disaster-resilient village	Participate in simulation activities
Perform roles according to the instructions and directions from the Chairman of Ledoksari Disaster resilient Village and the Yogyakarta Regional Disaster Management Agency Facilitator		

Source: Primary Data

The administrator community of Ledoksari Disaster resilient village plays a role by their position in organizational structure. Table 2 showed that each community position has a vital role in implementing each simulation activity, except for the Non-Administrator community of Ledoksari disaster-resilient village. They perform functions according to instruction and direction from the Chairman of Ledoksari Disaster resilient Village and the Yogyakarta Regional Disaster Management Agency Facilitator. Then, they play a role as a community affected by the flood disaster. The flood

disaster impacts include losing their husband or wife and children, Losing valuables, and Running to save themselves from the flood.

***Planning in Evaluation***

Evaluation participation is assessed from community participation in monitoring and evaluating activities that have been implemented. This stage participation is in identifying achievements, successes, and obstacles during the implementation of activities.

The community was asked to repeat the information that had been done. There was a re-check for the data that needs to be changed, as explained by the following informant:

*".....reviewed, repeating that. Keep looking at it, checking the maps, they need to be updated, right....." (Y, Community leader Jagalan Ledoksari Village, Male, 66 years old).*

This evaluation is the final activity of the structural activity schedule that has been determined by the Yogyakarta City Regional Disaster Management Agency.

*Table 3. The Form of Community Evaluating Participation in Ledoksari Disaster Resilient Village*

<b>Type of participation</b>	<b>Involved Subject</b>	<b>A form of participation</b>
<b>Planning in evaluation</b>	Yogyakarta Regional Disaster Management Agency	Conducting review activities
		Guide the review activities
		Receive suggestions and input during activities
	Chairman of Ledoksari Disaster resilient Village	Participate in review activities
		Submitting suggestions and input from the community
		Inviting the public to participate in review activities
	Yogyakarta Regional Disaster Management Agency	Participate in review activities
		Submit suggestions and feedback
	Administrator community of Ledoksari disaster-resilient village	Participate in review activities
		Reiterate understanding related to activities that have been carried out previously
		Submit suggestions and feedback
	Non-Administrator community of Ledoksari disaster-resilient village	No participation

Source: Primary Data

The review activity was organized by the Yogyakarta City Regional Disaster Management Agency (BPBD). The parties involved in this activity are the people who are included in the organizational structure of Ledoksari Disaster Resilient Village only. People who are non-members of the organizational structure are not involved in the evaluation process (Table 3).



**Planning in Results Utilization**

Participation in the utilization of the results is a condition of the community who feel the benefits received by the existence of the Disaster Resilient Village. The study showed that the people of Jagalan Ledoksari Village claim to have benefited from the fact of a Disaster Resilient Village. As stated by the following informant:

*"...So, you know how to deal with disasters such as floods, so how to anticipate them..." (F, Community Non-Members of Ledoksari Disaster resilient village, Male, 17 years old).*

Some of the benefits felt by the community include increased knowledge about disasters, faster disaster evacuation processes, and increased collaboration between communities (Table 4).

*Table 4. The Form of Community Utilizing Participation in Ledoksari Disaster Resilient Village*

Type of participation	Involved Subject	A form of participation
Planning in Results Utilization	Administrator community of Ledoksari disaster-resilient village and Non-Administrator community of Ledoksari disaster-resilient village	Increased knowledge and understanding related to disaster
		Fostering collaboration between communities
		The disaster evacuation process is more responsive
		Increase social sense by helping each other
		Increasing the sense of family among the community

Source: Primary Data

**Barriers in Community Participation**

Barriers to community participation are assessed from the obstacles experienced during realizing active community participation in each activity stage. The data showed the various types of barriers in (Table 5).

*Table 5. The Type of Barriers in Community Participation*

Type of Community	The form of Barriers
Planning Participation Barriers	The community that did not match the number of invitations to the planning meeting
	Non-members of the Ledoksari Disaster Resilient Village do not participate in the planning meeting
Barriers to Implementation Participation	No barriers
Barriers to Participation Evaluation	The community that did not match the number of invitations to the planning meeting
	Non-members of the Ledoksari Disaster Resilient Village do not participate in the evaluation meeting
	Reorganizing the organizational structure makes evaluation activities takes time
Barriers to Participation in result Utilization	No barriers

Source: Primary Data

The data in table 5, non-members of Ledoksari Disaster resilient village are not involved in the planning and evaluation process. However, in the process of simulation and utilization of the results are very actively involved.

### **Discussion**

Ledoksari Disaster Resilient Village is one of the community-based disaster risk reduction efforts. It aims to reduce the threat of disaster and community vulnerability. In addition, increasing the preparedness capacity planned and carried out by the community as the leading actor. Another study stated that community-based disaster risk reduction activities were formed to further enhance and strengthen the community's role in planning and implementing disaster risk reduction independently (Pradika, Giyarsih, & Hartono, 2018).

Jagalan Ledoksari Village was selected as Disaster resilient village because it is affected by floods every year. Flood disasters that occur every year continuously cause people to get used to them. However, it is undeniable that the threat of flooding can pose a significant risk to the settlements of the surrounding population at any time. The study reports that flooding becomes a threat if the flood-prone plain has been developed into residential, urban, agricultural, and other designated areas. The more places are affected by flooding, and the higher the area is inundated, the higher the level of danger in that area. In addition, the longer floods drown an area, the longer the activities of the community will be disturbed (Fristyananda & Idajati, 2017).

The first step of activity implemented to realize a disaster-resilient village is program socialization. Program socialization is the starting point that determines the success of the program in achieving its goals. If the socialization process has received more support and attention from the community, then community participation will be directly proportional. The study reported that the socialization activity was attended by the Yogyakarta City Regional Disaster Management Agency, the stakeholders, the community leaders, and community members of Jagalan Ledoksari Village. Socialization is an activity that is very important for communication and dialogue with the community. The goal is to increase the understanding of the community and related parties about a program. The socialization process will determine the community's interest to play a role and be involved in the program (Hadiyanti, 2008). So, it can say that this socialization process can identify the initial commitment of stakeholders and the community regarding participation in realizing a disaster-resilient village. Community participation is an essential factor in the implementation of a program. This study found four types of participation in the Ledoksari disaster resilient village community: participation in planning, implementation, planning in evaluation, and planning in result utilization.

Planning is described as an activity made for a better future. It was considering the circumstances in the present and the cases in the Development planning is the process of formulating alternatives or decisions based on the data or facts used as material for carrying out a series of activities/activities of society, both physical, to achieve a better purpose (Maripah & Sujianto, 2017). Participatory development planning is a form of planning that involves community activities ranging from problem identification, formulation of the problem, the search for alternative solutions to problems (Hidayat & Rasadi, 2020).

The form of community participation in planning includes attendance at meetings, discussions, contributions of ideas, responses, or rejection of the programs offered (Irene, 2015). Community involvement is vital in the program planning process to capture, absorb and obtain aspirations. So, as to create a sense of belonging to the program being implemented. The community who attended the meeting provided support and input in the program planning process (Hermawan & Suryono, 2017). Participation in planning is shown by the people of Kampung Jagalan Ledoksari in attendance at every meeting, involvement in conveying ideas during planning activities, and involvement in the organizational structure. But, not all communities are involved at this stage. The planning stage only involves the Yogyakarta Regional Disaster Management Agency, stakeholders, and administrator community of Ledoksari disaster-resilient village. Meanwhile, the non-administrator community of Ledoksari disaster-resilient village is not engaged because they are communities affected by flooding. It is impossible to be involved as program planners and executions when a disaster occurs.

After participation in planning, the study explains participation in implementation. Community involvement in implementation is by preparing everything before the program starts until the program has been completed. The form of activity at this stage is a simulation, which is implemented three times. Participation in the implementation of the Jagalan Ledoksari Community is in the form of labor or services. This simulation activity was attended by all communities, Yogyakarta Regional Disaster Management Agency, Center for Disaster Mitigation Studies from the Universitas Pembangunan Nasional Yogyakarta, Head of District, and stakeholders. It collaborates with the Puskesmas to assist in the evacuation process and the provision of ambulances. The study reveals that all the community plays a role in their responsibilities and positions at this stage. The community is more organized in terms of activities and is more valued in terms of activities implementation of a program launched by a government agency (Sembiring & Lorenza, 2019). The strengthening of the urban resilience capacity of affected people with flooding threats becomes the priority of organizing the community-based disaster risk reduction program in selected subdistricts or cities from the participative risk studies or social mapping (Hidayati, Ismail, Shuhaimi-Othman, & Sulaiman, 2018; Sulistyowati, MC Dibyorini, & Tyas, 2017).

Participation in evaluation is the third finding in this study. This stage assesses community involvement in program monitoring and evaluation. One form of activity is review. It aimed to find out if the program is running as planned or not, including the identification of barriers (Irene, 2015). This study reports that the parties involved in this stage are the same as those involved in the planning stage. It means that the non-administrator community of Ledoksari disaster-resilient village is not affected. The purpose of this stage is to assess the increase in knowledge and skills of stakeholders and the administrator community of Ledoksari disaster-resilient village. The description of the review activities includes the repetition of disaster material provided by the resource persons during the planning stage. It is used to assess the increase in the knowledge and skills of the target. Yogyakarta Regional Disaster Management Agency entirely carries out this review activity. The stages of action do not just stop until the review. But there are follow-up activities. The community is given various disaster training from Yogyakarta Regional Disaster Management Agency. Some of the training that has been given are communication training, training on the use of personal protective equipment, and

fire training. In addition, the community is still required to report every day at certain hours, such as writing the water level of the Code River.

As the party responsible for the development of Ledoksari Disaster Resilient Village, Yogyakarta Regional Disaster Management Agency supports the program's sustainability. This support includes financial aid, human resources, and infrastructure. Then, for example, the provision of generators, chainsaws, water pumps, tricycle motors, rigging, personal protective equipment, and handy talkies as a form of supporting facilities and infrastructure. In addition, Yogyakarta Regional Disaster Management Agency also ensures that there is policy support. The legality of the policy from the agency that proclaimed it is essential for the sustainability of the KTB program (Sembiring & Lorenza, 2019). One of the successes of the program can be seen from the benefits felt by the community. This study report that the community has greatly benefited from establishing a disaster-resilient village. The benefits are reflected in the increased awareness of the community to be more alert and responsive when disasters occur by providing early warnings for catastrophe. In addition, to lighten the burden of victims with lots of help from their neighbors and outside communities.

However, fostering community participation in the formation of disaster-resilient villages may not run smoothly. They identified some of the barriers as coming from the community itself. They found barriers in the planning and evaluation stages. Community participation in both phases is considered very minimal. That situation is seen as a barrier. The solution is to invite more community representatives to be involved in these activities. Another study explains the awareness of the public is one of the significant barriers. The program will not run if the community is still unaware and it is difficult to move their hearts to a caring environment. The best solution is to cooperate with the relevant agencies (Sembiring & Lorenza, 2019).

The theory explains that participation in community development must create maximum involvement with the aim that it can actively involve all communities in community processes and activities (Nasdian, 2014). Community engagement in disaster preparedness is crucial because individual involvement from disaster-prone communities is insufficient; community participation, aided by non-governmental organizations and government agencies, is needed. When a disaster occurs, community involvement will assist residents in identifying their available resources, expertise, and adaptations for emergency response (Arifin, Wicaksono, Sumarto, Martitah, & Sulistianingsih, 2021). Organizational development and strengthening crisis coping skills are two critical components to improving participation participation (Valibeigi et al., 2008). In general, the results of this study illustrate the success of the community in establishing a disaster-resilient village through an active participation process. The community has found solutions to various obstacles. This is enough to be a positive signal for the sustainability of this program.

### **Conclusion and Recommendation**

Community participation in the Ledoksari disaster was considered good. Active community participation can be seen from every activity stage, namely planning, implementation, evaluation, and utilization of results. The organizational structure is the key to successful communication and coordination flows. Barriers during the activity can be immediately found a solution. However, it needs even higher awareness from the community and cooperation from various cross-sectors, including from the education sector.

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