Community perception of flood relocation efforts in Pacitan subdistrict, Pacitan regency

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Abstract. The flood disaster that hit Pacitan Subdistrict, Pacitan Regency has caused casualties and damage in the housing, infrastructure, and educational facilities. This disaster brought several consequences in the form of settling relocation policy. This study aims to analyze community perceptions of relocation efforts and factors that influence people’s perceptions of settlement relocation efforts. Data collection techniques through interviews, observation, and documentation of respondents in Pacitan District. Data analysis using qualitative descriptive. The results showed that some people (1) refused the existence of relocation and preferred repairs to embankments, and agreed with government efforts provided they were carefully prepared, (2) Factors influencing perceptions were physical and environmental factors in the form of embankment conditions, economic factors in the form of loss of land assets and livelihood, organizational factors in the form of delivering aspirations through various activities, and socio-cultural factors in the form of education, social relations and health.

1. Introduction
Indonesia is an archipelagic country that faces various risks of natural disasters which include tsunamis, tectonic and volcanic earthquakes, floods. Disasters are a phenomenon that always occurs in the world today and can occur at any time [1]. Flood disaster seems to have been and will continue to be a problem that has no end for mankind in the whole world since now, now and even in the future. Flooding is one type of natural disaster that often occurs in Indonesia. Floods are defined as: “the overflowing of the normal confines of a stream or other body of water or the accumulation of water over areas that are not normally submerged [2].

According to the disaster data collected by the Disaster Management Agency Pacitan District (BPBD) from 2010-2018, the losses caused by the disaster were damage to settlements, agricultural land, and infrastructure. Natural disasters that have occurred in the coastal areas of Pacitan District in the past four years have been floods and landslides. But from the intensity of flood events, it is the most frequent disaster in coastal areas and recurs every year. Disasters that occurred in November 2017 were the worst floods that occurred in Pacitan District in 2017.

According to the National Disaster Management Agency, there have been 3 floods in Pacitan Subdistrict with 31 deaths, displaced and displaced around 41,929 people. In addition, this flood caused damage to homes with 2207 units of heavily damaged houses, moderate damage to 2442 units, lightly damaged 1954 units, and damage to educational facilities around 127 units. Most of Pacitan City was
affected by flooding due to the existence of several dike points damaged due to the high intensity of rain that occurred at that time and at the same time the sea level also rose so that the water flow could not go to sea and swirled in rivers and rivers could no longer accommodate the size existing stream.

Efforts to deal with floods in Pacitan Subdistrict have been carried out, but efforts these have not yet produced maximum results. A strategy for an individual community may consist of a number of measures. Examples of measures include strengthening of houses in areas prone to flooding to reduce the probability that houses will be destroyed and providing safe water supplies during flood emergencies [3].

To cope with disasters a concept called management is needed, namely collective action that covers all aspects of planning and in responding to disasters both when pre-disaster, during a disaster, and post-disaster [4]. Integrated flood management is a process of integrating flood management through approaches to land and water resources management, coastal areas, and management disaster area in a watershed with the aim of maximizing the benefits of watersheds flood and minimizing loss of life and property damage from flooding [5].

The Pacitan District Government recommends holding a relocation to the community which is affected annually by floods. The relocation discourse, in this case, has not been specifically made by the government, only when referring to article 32 of Law No. 24 of 2007 concerning disaster management, the government can establish disaster-prone areas to be prohibited areas for settlements. News about the relocation plan has so far stopped without a clear agreement between the community and the government due to the lack of response from the community.

The success or failure of a relocation program is influenced by community involvement in the planning and development process [6]. Differences in risk perceptions can cause conflicting conflicts to hamper the situation regarding the effectiveness of the effects of risk management actions [7]. The recovery and reconstruction phase (recovery and reconstruction), is a phase in the stages of management disaster that has a greater and significant opportunity to reduce risk disaster and improve adaptation to disasters [8].

Efforts are needed to uncover responses in the form of information clarity discourse relocation and public perception as a response to relocation discourse, as well as various factors that influence people's perceptions. Perception is a process where someone chooses, organizes, interprets, translates, and responds to information that comes from the surrounding environment [9]. Some authors highlight the need to take into account the perceptions of social risk in risk management because the reality perceived influences stakeholder decisions and can lead to failure in risk management actions [10]. Individual perceptions organize and interpret their sensory impressions to give meaning to their environment [11]. Without community participation in the planning and implementation process, the opportunities for various shortcomings that are felt will be even greater because they are not adjusted to the wants and needs of the community [12].

Referring to the background stated, the identification of the factors that influence the perceptions of the people of Pacitan Subdistrict towards relocation efforts is important to do. So that the discourse designed by the government can be done well and directed, besides listening to the wishes of the people. With regard to that, the researchers are interested in conducting research with the title "Community Perception of Flood Disaster Relocation Efforts in Pacitan Subdistrict, Pacitan Regency".

2. Methods
This study included descriptive research with a qualitative approach. Qualitative methods are studies that produce qualitative descriptive data in the form of written words from people and observable behavior [13]. The subject and object of this study used Village Device Informants, Population Informants, and Government informants. This research was conducted in July 2019 in Pacitan District,
Pacitan Regency which consisted of Sirnoboyo Village, Sukoharjo Village, Kayen Village, and Kembang Village.

Research Variables and Operational Definitions The variables used in the study were; 1) Perception, 2) Factors that influence the perception of the planned relocation of settlements in the form of; Physical and environmental conditions, social and cultural conditions, economic conditions, and organizational conditions.

The technique of collecting data uses in-depth interviews, observations, and documentation. The research instrument used an interview guide that had been prepared previously by the researcher. Data analysis and data validity using data reduction, then display data, and finally verification and conclusion. The validity of the data using triangulation techniques, the triangulation that the researchers chose was triangulation by utilizing sources.

3. Results
Perception is a process in which someone chooses, organizes, interprets, translates, and responds to information that comes from the environment surrounding [14]. To better understand people's perceptions of voluntary and permanent relocation, it is necessary to assess the extent to which flood events have affected their livelihoods [15]. In this study the interview data were obtained as follows:

3.1 Community Perception of Settlement Relocation Efforts
After the dam damage event, the government and the community have worked together to rebuild the embankment so that it can be used properly, but the physical environment or risk of dangers from living in vulnerable areas flooding is still not lost. Various efforts in addition to embankment rehabilitation have been carried out, including relocation efforts. Perception of relocation efforts also emerged in response to these efforts. The following are some perceptions that represent the response of the people of Sirnoboyo Village, Sukoharjo Village, Kayen Village, Kembang Village to relocation efforts;

3.1.1 Informant 1
Mr. Karman, who is a resident of Kayen Village, confirmed that he had discussed efforts to handle the incident of the embankment in Village Kayen. One result will be planned to relocate with consideration from the affected community. Mr. Karman knows that living in the riverbanks is prohibited, but he cannot just leave, because after marriage until now the house that is inhabited is a house inherited from the wife's family. Mr. Karman himself has a view that if relocation is to be carried out, his side will follow the government's advice, but for now, the embankment is better. This is similar studies of various regions located close to river bodies [16]. It is known that permanent relocation as a long-lasting solution to floods is more likely to be effective when the idea is initiated or accepted by people at risk and flood victims [17], but people prefer to settle for reasons of inheritance.

3.1.2 Informant 2
Mrs. Lastri's and family said that they were not aware of any plans relocation. The land that has been inhabited so far is the land of the village treasury which every year he pays the rent. Ms. Juimnten herself refused to relocate. He reasoned that he had lived there for a long time and was used to this kind of disaster. For him, it is not so dangerous. This is similar to the findings that the willingness of flood victims to live in flood-prone communities is also influenced by the length of stay in the community and ownership of land assets [18].

3.1.3 Informant 3
Mr. Indro said there had never been any discussion about efforts relocation in Sirnoboyo Village. He assumed that the community of neighbourhood 03 had been compact if something happened then it was
resolved together. He himself refused the relocation attempt on the grounds that if the relocation was only intended for a few houses it could not be done, but if it would be relocated to one village, according to him it could.

3.1.4 Informant 4
Mr. Sumardi said there had been a conversation with the head of a village the old Kembang regarding relocation but was only limited to the conversation. There was no follow-up until the newly appointed village head. He felt very disturbed to live in a flood-affected area if the embankment was not fixed, because at times it could collapse again. Economic factors caused him to be forced to live in the affected area. The decision to stay in the community is influenced by economic, cultural and social reasons such as income status low, protection of cultural heritage, land ownership, fear of losing sources of livelihood and the inconvenience of losing friends and relatives [19]. He had a perception that if there was a plan from the government and was ripe, he would be willing to be relocated, but he questioned whether there really was an effort to relocate.

The interview data shows that of the four informants, 2 of them stated that they did not want to be relocated even though the government had prepared carefully the relocation efforts. The informant in question was informant 2 and informant 3. Informant 2 argued that living in a flood-prone area was not feared and enjoyed life that was running, while informant 3 reasoned that the community of neighbourhood 03 Sirnoboyo Village was harmonious and compact in community, if they wanted to move one house it cannot be done so that it will damage the unity and integrity of the community of neighbourhood 03.

Other perceptions say that willingness to relocate if it is no longer possible to be inhabited and has been prepared carefully for the destination to be occupied. This statement was disclosed by informant 1 and informant 4. More details, informant 1 said that it was ready to be relocated if it had been strongly urged by the government, but for the time being, preferring to rehabilitation embankment. Informant 4 stated that it was ready to be relocated if the destination and other things had been prepared by the government, but informants 4 doubted that this would happen so they preferred to rehabilitate the embankment.

3.2 Analysis of Various Factors Affecting Community Perceptions of Efforts in Settlement Relocation
Sirnoboyo Village, Sukoharjo Village, Kayen Village, Kembang Village is part of the administrative area of the Pacitan District which is passed by the Grindulu Watershed. This potential has a significant impact on the people who live nearby. The area has a risk of danger that cannot be underestimated, such as flooding which causes damage to dikes, even though after repairs to the dikes some people still insist on staying in the area.

The collapse of the embankment on the riverbank as a deterrent to the invasion of water so that it does not enter the settlement area has caused the government to take rehabilitation measures. The relocation response also emerged as a form of attention to the people in the affected areas. It is important for the government to pay attention to environmental, economic, organizational social-cultural aspects so that the relocation efforts that will move some elements of society can be carried out properly. Next is the identification of various factors that influence people’s perceptions of relocation efforts.

3.2.1 Physical and environmental
The area around the Grindulu watershed is an area that is at risk of a disaster. Physical buildings in the area are dominated by buildings residential facing the river. The level of risk the environment has is certainly high so that at any time there can be flooding and collapse of the embankment. Variables that
are used as material for consideration in analyzing physical and environmental factors, namely, the condition of environmental facilities and infrastructure affected by flooding on community security. All informants acknowledged that the risk of living in a disaster area was dangerous, but this did not make people afraid because they were used to these conditions. Informant 2 perceived that he did not want relocation due to the absence of feelings of burdens and feeling of enjoying life in the prone flood-area. Different views with informant 4 from Kembang Village. He was worried about the existence of illegal sand miners. According to him, if dredged at frequent and large amounts of intensity, it will endanger the fate of dikes, especially areas dredged right near the embankment and only stacked. This feeling of worry made the 4 informants perceive that they would follow the relocation policy suggested by the government, especially with the condition of houses that had collapsed due to the collapse of the embankment.

Informant 1 considered that the environment that was used as a permanent residence was not too disruptive to daily activities. Informant 1 also acknowledged that living in the Grindulu River area was dangerous, but when the handling problems provided were improved, the occupancy was still safe to inhabit.

The explanation conveyed by some informants can be seen as having a variable influence on the perceptions of the community along the Grindulu River. Informants who had a perception that they did not want relocation revealed that there was no feeling of worry and enjoyed living in the vicinity of the Grindulu River. Informants 4 who had perceptions of wanting to be relocated if they were prepared said that environmental factors, especially the presence of illegal miners, were concerned about the safety of the embankment. Informant 1 who has a perception of following the orders is the government's also influenced by the state of his physical environment which is indeed dangerous so that at any time a disaster can occur.

3.2.2 Economics

Variables that are taken into consideration in analyzing economic factors towards community perceptions are respondents' concerns about land assets, and livelihoods. Most of the main occupations of the affected communities of the Grindulu River are workers in the society lower middle class. This caused the compulsion of the people to live in the area, besides officials that it was also due to the cheap rent price of the land and given residential permits by the village. Informant 4, who works as a pedicab driver, feels that he is not burdened with the rents given by the village officials because the price is still affordable. In fact, the informant 4 said that he would be more pleased if he had the assistance of new housing relocation.

Unlike the informant 2, even though economically his work was a housewife with odd jobs, but informants 2 who were directly affected by the disaster did not feel worried. He stated that the land occupied was indeed not private property, and instead, he replaced it with rent. Informant 1 who worked as a construction worker assessed that there was no concern about land assets if one day he was obliged to move. He understood because the land was not private property, while for the work he considered it would be difficult to be released because one of the factors that caused him to work was the trust of the community.

From the explanation of various informants, it can be seen that there is a relationship between economic variables and people's perceptions. Informants 4 who had perceptions of wanting to be relocated if they were provided claimed that there were no concerns about land assets because cheap rental prices and land belonging to the village treasury were actually happy when given new housing. His is similar to the results of the study highlighting that many households reduce the impact of floods by trying to minimize their impacts while maximizing social and economic resources [20]. However, reluctance to move voluntarily and permanently cannot be considered an option for everyone in the
community, especially for those who remain in the community for economic reasons. Informant 2 who perceived that they refused relocation did not feel worried about losing land assets and livelihoods. Informant 1 who perceived the government's rules admitted there were no worries about land assets but for livelihoods and additional work it was difficult to release them.

3.2.3 Organizations
The variable that is taken into consideration in analyzing organizational factors related to public perceptions of relocation efforts are ways of conveying the aspirations that the community often does and the government's response to the aspirations given by the community. It is known from the results of interviews that not many organizations were followed by affected communities. Hamlet associations are sometimes social gathering and various associations that are tentative in nature, forming a pattern of community unity towards issues related to relocation. Making the community more responsible and compact in handling a problem.

Informant 1 explained that the existence of community associations in uncertain intensity can train sensitivity to problems faced together. The meeting, which was attended by the government together with the people affected one day after the collapse of the embankment, resulting in the perception and desire of the community towards the efforts to continue the repair of the embankment. The government also responded according to the wishes and needs of the community for a while. From the above analysis, it can be seen that there is a relationship between organizational conditions and community perceptions, that how to convey the aspirations of the community is carried out by organizing, gathering, and carrying out various activities that can support various issues that develop in the community, including relocation plans that most people reject it. The government in responding to the aspiration of the community was proven by there readiness government's to deal with various problems by involving the community directly.

3.2.4 Socio-cultural
Variables used in analyzing socio-cultural relations with people's perceptions are the conditions of health, education, and social-relations cultural that are formed. Almost all people are well-behaved. There has never been a conflict that caused loss of property and life. The spirit of mutual cooperation is high, as evidenced by the enthusiasm of the community in repairing the collapsed embankments. Similar findings were highlighted by the Institute of Local Government Studies (ILGS) and the International Water Management Institute (IWMI) (2012). From a sociocultural perspective, some residents from traditional societies highlight the value they place to live in ancestral homes, which for them, is the main reason why they will not choose to move permanently [21]. For them, their ancestors lived and were buried in this land, and as a result, they could not imagine leaving their location for a reason that had existed for years.

In terms of health conditions, the informant 2 revealed that he had never used water in the river as a daily necessity, even though the condition of the river made it possible to use it. In terms of the education of informants 1, 2, and informants 4, they claimed that they did not have the opportunity to get proper education up to high school level or equivalent.

From the informant's confession, it can be seen that the socio-cultural conditions measured by social interaction, education, and public health also influence people's perceptions of relocation efforts. Informant 3 who that he perceived did not want to be relocated revealed that the social conditions of the community had been united and had a high spirit of mutual cooperation. Informant 2, who had a that he perception did not want to be relocated, also revealed that the water between the River Grindulu was never used for daily consumption, indicating that the community was aware of health.
4. Conclusions
Based on the results of the analysis and discussion that has been described, can be taken conclusions as follows; a) The perception from the community related to relocation efforts is: 1) Refusing relocation and preferring repairs to embankments, 2) Agreeing with government efforts as long as they are carefully prepared, b) Factors that influence people's perceptions are; 1) Physical and environmental factors in the form of environmental facilities and infrastructure such as dykes and illegal sand miners affect the perception of people who refuse and accept relocation plans, 2) The economy is in the form of concerns about the loss of land assets and livelihoods affecting the community in rejecting relocation plans, 3) Organizational factors such as the delivery of aspirations by the community by gathering and other activities also influence the perception of rejecting the relocation plan, 4) Socio-cultural factors in the form of social relations, health, and community education also influence people's perceptions of rejecting relocation plans.

Based on the discussion and conclusions that have been presented, the author wants to provide suggestions and input as follows; a) For the people of Pacitan Sub-District: as part of the Grindulu watershed environment to better understand the condition of the river as a place to live. Including the characteristics of the river and complying with regulations relevant government. If not allowed to stay, you should follow the advice government, b) For the Government: as a stakeholder in this case disaster, it is necessary to evaluate policies post-disaster in the Grindulu river area, so that the handling is more effective and efficient and more assertive in implementing its policies.

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