

Potential of the Recovery Level in Rural Areas, Merapi Disaster Prone

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The research aims to develop models of the determination of the level of recovery in rural areas that Merapi Disaster Prone. The study was conducted in 91 villages spread over four districts of Sleman, Klaten, Magelang and Boyolali. The results showed that as many as 18% of villages had a high level of damage, while the level of resilience of rural areas as much as 35.16% higher. Recovery model region is determined by four main components of household economic capacity factor; factor the potential non-farm activities, agricultural potential factor, and the accessibility factor. The main determinant factor is the economic levels of society. The study recommends a priority against 11% of villages with the level of damage is high and recovery low, while the recovery of rural areas is done by economic empowerment and the potential for regional economic communities.

Keywords: recovery level, rural areas, disaster prone, disaster management



ABSTRAK

Penelitian bertujuan menyusun model penentuan tingkat daya pulih wilayah perdesaan yang berada di Kawasan Rawan Bencana Merapi, yaitu sebanyak 91 desa yang tersebar di empat Kabupaten yaitu Sleman, Klaten, Magelang dan Boyolali. Hasil penelitian menunjukkan bahwa sebanyak 18% desa mengalami tingkat kerusakan wilayah perdesaan tinggi, sedangkan tingkat daya pulih wilayah perdesaan yang tinggi sebanyak 35,16%. Model daya pulih wilayah ditentukan oleh empat komponen utama yaitu faktor kemampuan ekonomi rumah tangga, faktor potensi kegiatan non pertanian, faktor potensi pertanian, dan faktor aksesibilitas wilayah, dengan factor penentu utama adalah tingkat ekonomi masyarakat. Hasil penelitian merekomendasikan prioritas terhadap 11 % desa dengan tingkat kerusakan tinggi dan daya pulih rendah, sedangkan pemulihan wilayah perdesaan dilakukan dengan memberdayakan perekonomian masyarakat dan potensi ekonomi wilayah.

Kata Kunci : Daya Pulih, Wilayah Perdesaan, Kawasan Rawan Bencana, Manajemen Bencana

INTRODUCTION

1 . preliminary

The Mounth Merapi eruption on October 26, 2010 as the top of the largest eruptions in November 5, 2010 causing widespread damage and considerable loss in four districts of Magelang , Boyolali , Klaten in Central Java , and Sleman in Yogyakarta . The calculation of BNPB (2011) not including the effect of lava flow, estimated amount of damage and losses caused by the eruption of Mount Merapi in 2010 was Rp . 4.23 trillion , which is composed of 27% worth of damage , while 73% is the value of the loss (www.bppb.go.id/11 February 2011) . Regionally, Sleman Regency was the most affected area is estimated that approximately 65 % of the damages and losses suffered by Sleman followed by the Magelang District affected approximately 15 % by the disaster , further 6% each in Klaten and Boyolali regency.

In the disaster management cycle, then the important step is how to speed up post- disaster recovery and public areas in it until it reaches the condition as before the disaster. In the recovery process, we need a proper recovery process, based on good planning, so that the right target and to increase community resilience to the threat of future disasters . Post- disaster management process should result in the recovery of both communities , both physically , mentally , socially and economically , and to reduce the vulnerability to disaster , not exacerbate existing conditions of vulnerability that led to the disaster (De Guzman , 2002).

This study will find the level of resilience village areas that can be used to determine priorities , as well as to determine the number of determinants of resilience indicators that can be used to determine the strategic steps that can be taken to restore the state . In other words , this study is included in the category of rapid assessment in the field of post-disaster recovery .

Besides the practical aspect as disclosed above , theoretical issues are also the main reason for this study mainly because there is still a dearth of study of resilience due to Volcanic Eruption region , especially the development of indicators that can be used as a determinant of the level of resilience (recovery) as well as the use of units of analysis smallest areas (villages) in the analysis.

AIMS

- 1 . To Determine indicator or variable potential appraiserby level of resilience of rural areas post-disaster Merapi Eruption
- 2 . Examines the characteristics and spatial distribution patterns of potential resilience level rural post eruption disaster .
- 3 . Analyzing the factors that determine the potential level of resilience of rural areas post disaster Merapi Eruption
- 4 . Determine optimization measures increase resilience of rural areas after the eruption of Merapi disaster .

TEORITICAL FRAMEWORK

One of the main problems in the handling of the problem caused by the Merapi eruption is the recovery phase (recovery) . This stage after stage of disasters and emergency response phase. Stages of recovery include the scope of the two substances that recovery at the household level Merapi eruption victims and recovery areas . Recovery of victims of domestic focused on economic and social aspects of sustainability Merapi eruption victims , Where as recovery is more focused on the areas of infrastructure development. Despite having a strong bond between the two substances mentioned above , however, this research is more focused and assume the recovery in the region will accelerate the rate of recovery of household Merapi eruption victims .

In the context of post- eruption recovery linkages and regional development , the basic assumption that each region, according to the characteristics and potential of resource recovery have different levels of variance. In fact, the variance between regions or less not considered in the disaster management process , resulting in the leveling process events. This gives rise to inequality in the process of disaster management, which is visible from the concentration of disaster relief and post-disaster recovery in certain areas. Isolated areas and away from the center of aid is often overlooked, but that's the area most in need. Area in accordance with his character will have varying levels of resilience.

Figure 1. Flowchart Framework Potential in Rural Area Power Restored After eruption in Merapi disaster prone areas.

In this study the level of recovery is defined as the ability of an area (rural) with available resources to restore the condition of Merapi eruption disaster , so that the area functions can be run as objective as conditions before the eruption of Merapi , which in turn can accelerate the recovery of the victim . In general, the level of resilience of a rural region is highly

dependent on the level of damage suffered , owned regional resources (KDP UGM 1990) and the influence of external factors in the form of outside assistance in helping the recovery area. Resources in its operation areas measured by indicators of geographic location , accessibility of the area , socio-economic conditions and economic resources area . Based on the above indicators , can be determined to recover the power level of an area (rural) , which can be used as a basis for its overall development strategy for rural post eruption of Merapi .

METHOD

This is a descriptive analytic study in a way or method of analysis of secondary data and primary data . The study was conducted in all villages in the territory of Disaster Prone Areas (KRB) I, II , and III of Mount Merapi , which are scattered throughout the village (as the unit of analysis) in Sleman , Klaten , Magelang , and Boyolali , and in range 0 - 20km distance . The rural areas in accordance with the variations in the level of damage caused by the eruption of Merapi have spatial structure and regional components are quite varied , both physical and socio-economic structures that allegedly affect the variation in the level of resilience of rural areas .

Indicators and variables are used to construct models of resilience are classified into several groups , namely :

- The level of damage caused by eruption rural areas (number of fatalities , injuries , refugees , loss of property and infrastructure damage region)
- Conditions geographic region , which includes zoning KRB space , character of the area , accessibility , infrastructure , and population density and settlement
- Socio-economic conditions , social structures (work) , institutional, social , economic level , poverty , gender composition .
- Resource Economics of rural , consisting of the economic potential of rural areas which include Small and Medium Industries , potential mining , food Farming , Agriculture, Animal Husbandry , Fisheries , Tourism
- The Foreign Assistance , in the form of development assistance by outside parties (NGOs, Government Institutions, Foreign Affairs , etc.) and strategies and Handling Policy Post Merapi Eruption Victims

The data or variables were analyzed with a series of stages , namely the determination of the extent of damage caused by the eruption of Merapi rural areas , restored power variable selection , treatment with factor analysis . Classification . The next step is the analysis of the correlation between damage and potential resilience Rural areas , by way of cross-table test "

crosstab " between resilience factors and damage to the area along with the mapping (Table 1).

Table 1. Typology Damage and Resilience Resilience Potency

Potency Rural Areas *Regional Tipology*

	Low Resilience Level	Middle Resilience Level	High resilience level
High damage	1	2	3
Middle damage	4	5	6
Low damage	7	8	9