On the 27th of May 2006 at 05:53:57 AM, an earthquake occurred reaching 5.9 on the Richter scale. Bantul district in Yogyakarta province was the most affected area. The existing institutions have not capable work maximally according to disaster management and it have no capability to make community give their participation, especially during emergency response period. Therefore, an integrated policy to manage the disaster, that satisfy a number of parties, is needed so that the disaster management can be done optimally.

The analysis conducted in this study was aimed to get the best alternative in handling a disaster by using Decision Support System (DSS) with Analytical Hierarchy Process (AHP) as the method. There are three alternatives that will be examined in this study, namely the formation of special office for disaster management (alternative I), the formation of society-based disaster management (alternative II) and the action of disaster management by interrelated agency with local government as the center of control (alternative III). The selection of the alternatives is performed by give assessment based on four criteria: management aspect, financial aspect, capacity aspect and policy aspect. The study was done on the disaster management in emergency responses time which conducted by SATLAK PBP of Bantul. Analysis input is result of questionnaire completion of 120 respondents which consist of the bureaucrats group of 30 respondents (the member of SATLAK and SATKORLAK PBP) and local community group of 90 respondents from nine villages of three districts. Data analysis questionnaire by giving the numeric value to each element (criterion, sub-criterion and alternative) and then compared according to the level of interest with the established comparison scale.

The result of the study show that category weight of the financial, management, policy and capacity aspect are 0.273, 0.265, 0.232 and 0.208 respectively. The best alternative of action to optimize the disaster management is alternative II with weight 0.530, the second priority is alternative I with weight 0.269; and the third priority is alternative III with weight 0.200.

Keywords: earthquake disaster, decision support system, alternative of management