

**PENGELOLAAN BENCANA ALAM
BANJIR SEDIMEN KONSENTRASI TINGGI
DAERAH PENGALIRAN SUNGAI TANGGIK**

I Ketut Karihartha
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telah dipertahankan di depan Dewan Penguji
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ABSTRACT

Natural disaster is a phenomenon which demands attention from any sides, which are related to the problems of how to prevent (before happening), to handle (whilst happening), and to control (post happening). All of the related activities above can be called as natural disaster management. The key to determine a management strategy is difficult to find since there are different point of views. The relevant support to the competent in making the decision is very necessary to determining management strategy.

In 1994, one of the natural disasters which ever happened in East Lombok Regency, West Nusa Tenggara Province was sediment flood, which was caused by hyper concentration of sediment transport.

An analysis which is done on this study is to gain the best management alternative as a decision support system in arranging the management policy and minimizing the impact of the disaster itself, such as the loss of lives, materials, non materials, infrastructure destruction, and environmental damage.

The software which is used to analyze the selection of disaster management policy alternative in reducing the impact of disaster optimally is AHP-MAHP.

The result of this study shows that to reach the main goal, that is reducing the impact of disaster, is influenced by the criteria determined according to the level of its necessity. The loss of lives criteria (value : 0.5149) is the most important point that should be considered in disaster management, and followed by the loss of material criteria (value : 0.1613), environmental damage (value : 0.1249), the loss of non material criteria (value : 0.1093), and infrastructure destruction (value : 0.0895).

The best management alternative to get the goal in reducing the impact of disaster is alternative 1 (value : 0.4247). This means that the combination of actions on this alternative gives the biggest influence on the success of reducing the impact of natural disaster of hyper concentration sediment flood at the Tanggik river basin.

Key words : natural disaster management, hyperconcentration sediment, decision support system