

The Analysis of Priority Flood Control Management Using Analysis Hierarchy Process

Authors : Pravira Rizki Suwarno, Fanny Aliza Savitri, Priseyola Ayunda Prima, Pipin Surahman, Mahelga Levina Amran, Khoirunisa Ulya Nur Utari, Nora Permatasari

Abstract : The Bogowonto River or commonly called the Bhagawanta River, is one of the rivers on Java Island. It is located in Central Java, Indonesia. Its watershed area is 35 km² with 57 km long. This river covers three regencies, namely Wonosobo Regency and Magelang Regency in the upstream and Purworejo Regency in the south and downstream. The Bogowonto River experiences channel narrowing and silting. It is caused by garbage along the river that comes from livestock and household waste. The narrowing channel and siltation cause a capacity reduction of the river to drain flood discharge. Comprehensive and sustainable actions are needed in dealing with current and future floods. Based on these current conditions, a priority scale is required. Therefore, this study aims to determine the priority scale of flood management in Purworejo Regency using the Analytical Hierarchy Process (AHP) method. This method will determine the appropriate actions based on the rating. In addition, there will be field observations through distributing questionnaires to several parties, including the stakeholders and the community. The results of this study will be in 2 (two) forms of actions, both structurally covering water structures and non-structural, including social, environmental, and law enforcement.

Keywords : analytical hierarchy process, bogowonto, flood control, management

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