

## **Kajian Potensi Implementasi *Natural Flood Management* sebagai Strategi Mitigasi Banjir DAS Kamoning, Kabupaten Sampang**

**<sup>\*1</sup>Gading Dita Indasari**

<sup>1</sup>Magister Manajemen Bencana, Sekolah Pascasarjana, Universitas Gadjah Mada

### **INTISARI**

Banjir merupakan peristiwa dimana suatu daerah tergenang air akibat luapan air yang melebihi kapasitas. Salah satu daerah yang identik dengan banjir adalah Kabupaten Sampang, khususnya di Daerah Aliran Sungai (DAS) Kamoning. Banjir Kabupaten Sampang dipengaruhi oleh letak wilayah yang berada pada daerah cekungan dengan elevasi di bawah permukaan laut. Penelitian ini bertujuan mengidentifikasi distribusi spasial indeks bahaya banjir berdasarkan karakteristik fisik dan sosial wilayah, mengevaluasi efektivitas strategi mitigasi banjir yang sudah diterapkan oleh pemerintah, serta mengkaji potensi implementasi pendekatan *Natural Flood Management* (NFM) sebagai strategi mitigasi banjir di DAS Kamoning. Penelitian ini secara keseluruhan banyak menjabarkan data kuantitatif, terutama untuk memberikan gambaran terkait kondisi fisik dari lokasi penelitian, kemiringan lereng, topografi, hingga jumlah kejadian banjir beserta dampaknya. Data kualitatif digunakan untuk menganalisis gambaran terkait mitigasi yang telah dilakukan hingga potensi implementasi konsep NFM (*Natural Flood Management*) sebagai strategi mitigasi banjir di Kabupaten Sampang. Implementasi konsep NFM menunjukkan adanya peluang optimalisasi dengan skema kerjasama lintas sektor dengan menekankan solusi berbasis alam sebagai fokus ataupun pertimbangan utama. Penguatan fungsi kawasan juga dapat lebih ditingkatkan melalui pengenalan dan sosialisasi konsep NFM dengan melibatkan komunitas lokal. Distribusi spasial indeks bahaya banjir berdasarkan karakteristik fisik dan sosial wilayah di DAS Kamoning menunjukkan indeks kelas tinggi banyak berada di hilir DAS sementara kelas rendah berada di tengah-hulu DAS. Strategi mitigasi banjir yang sudah diterapkan oleh pemerintah Kabupaten Sampang menunjukkan 90% kebijakan telah terealisasi, meskipun intensitas kejadian banjir masih fluktuatif serta keberlanjutan program dinilai belum optimal. Implementasi pendekatan NFM sebagai strategi mitigasi banjir di DAS Kamoning memiliki potensi yang cukup besar, mengingat beberapa program pengurangan risiko bencana banjir Kabupaten Sampang telah memiliki visi yang sejalan dengan konsep NFM, oleh sebab itu dibutuhkan kerjasama antara pemerintah dan masyarakat untuk mewujudkan konsep tersebut.

**Kata Kunci:** *Banjir, DAS, Natural Flood Management*

## **Study of the Potential Implementation of Natural Flood Management as a Flood Mitigation Strategy in the Kamoning Watershed, Sampang Regency**

*<sup>\*1</sup>Gading Dita Indasari*

<sup>1</sup>Magister Manajemen Bencana, Sekolah Pascasarjana, Universitas Gadjah Mada

### **ABSTRACT**

Flood is an event where an area is inundated due to overflow of water that exceeds capacity. One area that is synonymous with flooding is Sampang Regency, especially in the Kamoning River Basin (DAS). Floods in Sampang Regency are influenced by the location of the area which is in a basin area with an elevation below sea level. This study aims to identify the spatial distribution of the flood hazard index based on the physical and social characteristics of the area, evaluate the effectiveness of flood mitigation strategies that have been implemented by the government, and examine the potential for implementing Natural Flood Management (NFM) approach as a flood mitigation strategy in the Kamoning Watershed. This research as a whole describes a lot of quantitative data, especially to provide an overview regarding the physical conditions of the research location, slope, topography, the number of flood events, and their impacts. Qualitative data is used to analyze descriptions related to the mitigation that has been carried out to the potential implementation of the NFM (Natural Flood Management) concept as a flood mitigation strategy in Sampang Regency. The implementation of the NFM concept shows that there are opportunities for optimization with cross-sector cooperation schemes by emphasizing nature-based solutions as the main focus or consideration. Strengthening the function of the area can also be further enhanced through the introduction and socialization of the NFM concept by involving the local community. The spatial distribution of the flood hazard index based on the physical and social characteristics of the area in the Kamoning watershed shows that many of the high class indices are in the downstream watershed while the low class are in the middle of the upstream watershed. The flood mitigation strategy that has been implemented by the government of Sampang Regency shows that 90% policies have been realized, even though the intensity of flood events is still fluctuating and the sustainability of the program is considered not optimal. The implementation of the NFM approach as a flood mitigation strategy in the Kamoning watershed has considerable potential, bearing in mind that several flood disaster risk reduction programs in Sampang Regency already have a vision that is in line with the NFM concept, therefore collaboration between the government and the community is needed to realize this concept.

**Keywords:** *Flood, Watershed, Natural Flood Management*