

## ABSTRAK

### **MODEL PENGELOLAAN RISIKO BENCANA BERBASIS KOMUNITAS KAWASAN KARST GOMBONG, SUB-KAWASAN KALISIRAH, KABUPATEN KEBUMEN PROVINSI JAWA TENGAH**

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Karst Gombang ditetapkan sebagai Kawasan Bentang Alam Karst (KBAK) berdasarkan Kepmen ESDM 3873K/40/MEM/2014, tetapi belum mencakup seluruh kawasan karst. Kawasan yang belum masuk dalam KBAK rentan terhadap ancaman pertambangan batugamping yang dapat merusak tata air kawasan karst. Salah satu Kawasan yang belum masuk adalah Karst Kalisirah di Kecamatan Buayan. Karst Kalisirah terdapat beberapa sungai bawah tanah dan banyak mataair yang menghidupi ribuan masyarakat seperti Mataair Kalisirah dan Ledeng/Banyumudal. Keberadaan mataair ini sebagai potensi daerah sekaligus merupakan kerentanan kawasan apabila kelestarian mataair ini terganggu.

Penelitian ini bertujuan untuk mendeskripsikan keberadaan sungai bawah tanah, Kawasan hulu dan tangkapan sumber air, ketergantungan warga terhadap mataair, kerentanan air tanah, hubungan antara indikator prasyarat sebagai kawasan lindung dan kondisi faktual kawasan Karst Kalisirah serta model pengelolaan Risiko bencana berbasis komunitas. Metode yang digunakan adalah deskriptif kualitatif, melalui survei speleologi, kerja partisipatif (PRA), analisis EPIK.

Hasil penelitian menunjukkan daerah penelitian telah berkembang mataair permanen dan sungai bawah tanah. Tinggian di sekitar Gua Pucung merupakan kawasan hulu dan merupakan daerah tangkapan air sistem sungai bawah tanah Karst Kalisirah. Masyarakat di sekitar sangat tergantung terhadap sumber air yang berasal dari kawasan karst. Air tanah Karst Kalisirah mempunyai kerentanan yang tinggi. Indikator prasyarat sebagai kawasan lindung dan kondisi faktual kawasan Karst Kalisirah layak untuk diusulkan dalam penambahan KBAK. Model pengelolaan Risiko bencana berbasis komunitas di kawasan karst Karst Kalisirah dimulai dari penyamaan persepsi, pelatihan dan kegiatan mandiri pendataan eksokarst dan pola konsumsi (pemahaman); FGD dan sosialisasi dengan tambahan materi dari hasil penelitian dan kegiatan lapangan pemuda (kesadaran kritis); dilanjutkan rencana aksi mewujudkan kawasan konservasi.

Kata Kunci: air, EPIK, karst, KBAK, mataair, speleologi.

**ABSTRACT****COMMUNITY-BASED DISASTER RISK MANAGEMENT MODEL KARST  
GOMBONG AREA, SUB-REGION KALISIRAH,  
KEBUMEN DISTRICT CENTRAL JAVA PROVINCE***by:***Arif Jauhari  
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*Karst Gombong is determined as a Karst Landscape Area (KBAK) based on Ministry of Energy and Mineral Resource Decree 3873K/40/MEM/2014, but does not cover all karst areas. Areas that are not yet included in KBAK are vulnerable to the threat of limestone mining which can damage the karst area water system. One area not yet included is the Kalisirah Karst in Buayan District. The Kalisirah Karst has several subterranean rivers and many springs that support thousands of people such as Kalisirah and Ledeng / Banyumudal Springs. The existence of these springs is a regional potential and at the same time is a regional vulnerability if the sustainability of these springs is disrupted.*

*This study aims to describe the existence of subterranean rivers, upstream areas and catchment of water sources, people's dependence on springs, ground water vulnerability, the relationship between prerequisite indicators as protected areas and factual conditions of Kalisirah Karst area and community-based disaster risk management models. The method used is descriptive qualitative, through speleology surveys, participatory work (PRA), EPIK analysis.*

*The results showed that the research area had developed permanent springs and subterranean rivers. The height around the Pucung Cave is an upstream area and is a catchment area of the Kalisirah Karst subterranean river system. The surrounding community is very dependent on water sources from the karst area. Groundwater Karst Kalisirah has a high vulnerability. The prerequisite indicators as a protected area and the factual conditions of the Kalisirah Karst area are feasible to be proposed in the addition of KBAK. The community-based disaster risk management model in the Karst Kalisirah karst area starts with the unification of perception, training and self-supporting data collection activities and consumption patterns (understanding); FGDs and socialization with additional material from the results of research and youth field activities (critical awareness); continued with action plans to realize conservation areas.*

*Keywords: EPIK, karst, KBAK, springs, speleology. water*