Risiko Bencana Kekeringan Pertanian, Mitigasi dan Adaptasi Berbasis Kearifan Lokal di Kabupaten Grobogan, Provinsi Jawa Tengah

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INTISARI

Kejadian kekeringan pertanian dicirikan dengan menurunnya kandungan lengas tanah, yang menyebabkan stres pada tanaman akibat kekurangan air serta lebih jauh akan menimbulkan penurunan produktivitas pertanian. Penelitian ini bertujuan (1) menganalisis tingkat risiko kekeringan pertanian di Kabupaten Grobogan, (2) menganalisis mitigasi kekeringan pertanian di Kabupaten Grobogan dan (3) menganalisis bentuk adaptasi berbasis kearifan lokal yang dilakukan masyarakat Kabupaten Grobogan dalam menghadapi bencana kekeringan pertanian. Penelitian ini menggunakan metode campuran dengan desain *explanatory sequential mixed methods*. Pada tujuan pertama, menggunakan metode kuantitatif berbasis data spasial, kemudian pada tujuan kedua dan ketiga menggunakan metode kualitatif. Sumber data primer berasal dari Citra Landsat 8 dan SRTM yang diolah dengan 5 parameter fisik lahan serta wawancara mendalam terhadap petani di Kabupaten Grobogan. Pemilihan informan dengan *purposive sampling*. Teknik analisis data melalui analisis spasial untuk pemetaan risiko dan analisis domain terhadap data hasil wawancara mendalam. Hasil penelitian menunjukkan bahwa 8.750,39 hektar lahan (4,32 %) wilayah di Kabupaten Grobogan memiliki risiko tinggi dan sangat tinggi terhadap kekeringan pertanian. Adapun wilayah dengan risiko tinggi dan sangat tinggi tersebar pada kawasan perbukitan maupun pegunungan yang merupakan rangkaian dari Pegunungan Kapur Utara di bagian utara dan Pegunungan Kendeng di bagian selatan. Masyarakat Kabupaten Grobogan memiliki 17 bentuk mitigasi dalam penanggulangan kekeringan pertanian baik struktural diantaranya yaitu pembuatan biopori, tempat penampungan air, dam parit dan *long storage* maupun nonstruktural diantaranya yaitu pemberian edukasi penanggulangan kekeringan pertanian, penanaman pohon, koordinasi dengan berbagai *stakeholder* dan pemberian masukan komoditas budidaya. Kemudian terdapat 15 jenis adaptasi berbasis kearifan lokal yang masih dilakukan secara turun temurun dalam menghadapi bencana kekeringan pertanian di Kabupaten Grobogan berupa penggantian mata pencaharian, ilmu *titen*, penanaman varietas khusus, sistem *methuk*, *ko'ak*, *tajuk*, *tumpangsari*, *bancak'an*, *munggahan*, sedekah bumi, memiliki pekerjaan sampingan, *ngocor*, mengganti tanaman komoditas, penyimpanan hasil panen di lahan pertanian dan kearifan lokal masyarakat Samin.

Kata Kunci: Kekeringan Pertanian, Risiko, Mitigasi, Adaptasi, Kearifan Lokal

DISASTER RISK OF AGRICULTURAL DROUGHT, MITIGATION AND ADAPTATION BASED ON LOCAL WISDOM IN GROBOGAN REGENCY, CENTRAL JAVA PROVINCE

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ABSTRACT

The occurrence of agricultural drought is characterized by a decrease in soil moisture content, which causes stress to crops due to water scarcity and further leads to a decline in agricultural productivity. This research aims to (1) analyze the level of agricultural drought risk in Grobogan Regency, (2) analyze agricultural drought mitigation in Grobogan Regency, and (3) analyze the forms of locally-based adaptation conducted by the community of Grobogan Regency in facing agricultural drought disasters. This research uses a mixed-methods approach with an explanatory sequential mixed methods design. For the first objective, a quantitative method based on spatial data is used, then for the second and third objectives, a qualitative method is employed. Primary data sources come from Landsat 8 and SRTM imagery processed with 5 land physical parameters, as well as in-depth interviews with farmers in Grobogan Regency. Informants are selected through purposive sampling. Data analysis techniques include spatial analysis for risk mapping and cross-tabulation analysis of in-depth interview data. The research results show that 8.750,39 hectares of land (4,32%) in Grobogan Regency have high and very high risk levels of agricultural drought. The areas with high and very high risks are distributed in hilly and mountainous regions, which are part of the Northern Kapur Mountains in the northern part and the Kendeng Mountains in the southern part. The community of Grobogan Regency has 17 forms of mitigation in agricultural drought mitigation, both structural, such as making biopores, water reservoirs, dam ditches, and long storage, and non-structural, such as providing education on agricultural drought mitigation, tree planting, coordination with various stakeholders, and providing input for cultivation commodities. Furthermore, there are 15 types of locally-based adaptations that are still practiced generationally in facing agricultural drought disasters in Grobogan Regency, including changing livelihoods, traditional knowledge (titen), planting special varieties, methuk system, ko'ak, tajuk, intercropping, bancak'an, munggahan, sedekah bumi, having side jobs, ngocor, changing commodity crops, storing harvests in agricultural land, and local wisdom of the Samin Community.

Keywords: *Agricultural Drought, Risk, Mitigation, Adaptation, Local Wisdom*