

STRATEGI VEGETATIF UNTUK PENCEGAHAN LONGSOR DI PERBUKITAN MENOREH (STUDI KASUS DI DESA GIRITENGGAH)

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INTISARI

Desa Giritengah merupakan desa di kawasan Perbukitan Menoreh yang memiliki tinggi mengalami bencana tanah longsor. Oleh karena itu, diperlukan penelitian terkait strategi untuk meminimalisir terjadinya longsor. Penelitian ini dilakukan dengan tujuan menganalisis tingkat kejadian, sebaran, dan faktor-faktor penyebab longsor, menganalisis peran vegetasi dalam pencegahan risiko longsor, dan memberikan rekomendasi bentuk strategi vegetatif dalam pencegahan risiko terjadinya tanah longsor.

Pada tahun 2015- 2021 terdapat 34 kejadian longsor di 28 lokasi berbeda. Sebanyak 4 lokasi terjadi pengulangan bencana longsor sebanyak dua kali dan 1 lokasi longsor bahkan telah mengalami longsor sebanyak tiga kali. Faktor-faktor yang menjadi pemicu terjadinya longsor yaitu kelerengan, curah hujan, jenis tanah, kedalaman solum tanah, penggunaan lahan, drainase, dan vegetasi.

Peran vegetasi dalam pencegahan risiko longsor dapat dilihat melalui pendekatan struktur dan komposisi tajuk. Terdapat 8 plot penelitian dengan hasil 63 individu dengan 15 spesies yakni mahoni, jati, sengon, kelapa, nangka, sungkai, melinjo, cengkeh, lamtoro, beringin jawa, durian, waru, kesambi, salam, dan sirsak yang dinilai berdasarkan kriteria ekologi, ekonomi, dan sosial. Berdasarkan penilaian diperoleh tiga spesies prioritas yang memenuhi tiga kriteria yakni sengon, sirsak, dan cengkeh.

Strategi vegetatif disusun berdasarkan pemetaan faktor internal dan eksternal. Dua strategi prioritas dirumuskan optimalisasi praktek agroforestri dan penanaman berkelanjutan. Optimalisasi melibatkan penerapan pola tanam yang tepat dengan mempertimbangkan kelerengan, jarak tanam, dan penataan ruang menggunakan jenis tanaman prioritas. Rekomendasi pola penataan yaitu *alley cropping* dan *tree along border*. Penanaman berkelanjutan fokus pada jenis prioritas dan tanaman yang disukai masyarakat. Strategi ini juga mencakup penanaman rumput untuk penguatan lereng dan tanaman penutup guna stabilisasi lereng.

Kata kunci : *longsor, vegetasi, strategi vegetatif*

VEGETATIVE STRATEGIES FOR LANDSLIDE PREVENTION IN THE MENOREH HILLS (CASE STUDY IN GIRITENGAH VILLAGE)

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ABSTRACT

Giritengah Village is located in the Menoreh Hills area, which is at high risk of landslides. Therefore, research is needed to develop strategies to minimize the occurrence of landslides. The objectives of this study are to identify the incidence rate and factors causing landslides, to identify the role of vegetation in reducing landslide risk, and to provide recommendations for vegetative strategies to reduce the risk of landslides.

From 2015 to 2021, there were 34 landslide events in 28 different locations. Four locations experienced repeated landslides twice, and one location experienced repeated landslides three times. The factors causing landslides include slope, rainfall, soil type, soil solum depth, land use, drainage, and vegetation.

The role of vegetation in reducing landslide risk can be observed through the structure and composition of the canopy. There are 8 research plots with 63 individuals representing 15 species, namely mahogany, teak, sengon, coconut, jackfruit, sungkai, melinjo, clove, lamtoro, banyan, durian, hibiscus, kesambi, bay leaf, and soursop. Based on the identification results, an assessment was conducted using three criteria: ecological, economic, and social. From the assessment, three priority species were identified that meet all three criteria: sengon, soursop, and clove.

Vegetative strategies are formulated based on mapping internal and external factors. Two priority strategies are proposed: optimizing agroforestry practices and sustainable planting. Optimization involves implementing appropriate planting patterns considering slope, planting distance, and spatial arrangement using priority species. The recommended planting patterns are alley cropping and tree along borders. Sustainable planting focuses on priority species and plants favored by the community. This strategy also includes planting grass to reinforce slopes and cover crops to stabilize slopes.

Keywords: *landslide, vegetation, vegetative strategy*