

ABSTRAK

Penelitian ini bertujuan mengevaluasi resiliensi material *hardscape* dan *softscape* pascabanjir di Taman Kota Pidie Jaya, menganalisis hubungan karakteristik banjir terhadap tingkat kerusakan material, serta merumuskan rekomendasi material yang lebih adaptif terhadap risiko banjir. Penelitian menggunakan pendekatan kualitatif deskriptif dengan dukungan data kuantitatif deskriptif melalui observasi lapangan, dokumentasi, wawancara mendalam, dan penilaian kondisi elemen taman. Analisis data dilakukan menggunakan model interaktif Miles, Huberman, dan Saldaña, sedangkan evaluasi resiliensi mengacu pada indikator *Robustness*, *Rapidity*, dan *Resourcefulness*. Hasil penelitian menunjukkan bahwa tinggi genangan, durasi genangan, kecepatan aliran, dan kandungan sedimen merupakan faktor utama yang memengaruhi tingkat kerusakan material. Elemen *hardscape* mengalami sedimentasi, penurunan fungsi drainase, retakan, dan penurunan permukaan, sedangkan elemen *softscape* mengalami kematian vegetasi, kerusakan sistem perakaran, dan penurunan kualitas media tanam. Secara umum, *hardscape* memiliki tingkat resiliensi sedang hingga tinggi, sementara *softscape* menunjukkan tingkat resiliensi lebih rendah akibat sensitivitas terhadap genangan berkepanjangan. Penelitian ini merekomendasikan penggunaan material permeabel, vegetasi toleran genangan, peningkatan sistem drainase, serta strategi pemeliharaan adaptif untuk meningkatkan ketangguhan Taman Kota Pidie Jaya terhadap banjir di masa mendatang.

Kata kunci: Banjir, Hardscape, Resiliensi Material, Softscape, Taman Kota

ABSTRACT

This study aims to evaluate the resilience of *hardscape* and *softscape* materials after flooding in Pidie Jaya City Park, analyze the relationship between flood characteristics and material damage, and formulate recommendations for more adaptive materials to reduce future flood impacts. The study employed a descriptive qualitative approach supported by descriptive quantitative data collected through field observations, documentation, in-depth interviews, and landscape condition assessments. Data were analyzed using the interactive model of Miles, Huberman, and Saldaña, while material resilience was evaluated based on the indicators of Robustness, Rapidity, and Resourcefulness. The findings reveal that flood depth, inundation duration, flow velocity, and sediment content are the primary factors affecting landscape material damage. *Hardscape* elements experienced sediment deposition, reduced drainage performance, cracking, and surface settlement, whereas *softscape* elements suffered vegetation mortality, root system damage, and deterioration of planting media quality. Overall, *hardscape* materials demonstrated moderate to high resilience, while *softscape* elements exhibited lower resilience due to their sensitivity to prolonged inundation. The study recommends the use of permeable materials, flood-tolerant vegetation, improved drainage systems, and adaptive maintenance strategies to enhance the long-term resilience of Pidie Jaya City Park against future flooding.

Keywords: Flood, Hardscape, Material Resilience, Softscape, Urban Park