STRATEGI PERENCANAAN PERKOTAAN BERKELANJUTAN UNTUK PENGURANGAN RISIKO BENCANA DI KAWASAN PERMUKIMAN KUMUH PESISIR KOTA PADANG (STUDI KASUS KELURAHAN RIMBO KALUANG DAN FLAMBOYAN BARU)

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INTISARI

Kota Padang yang berada di sepanjang zona **Megathrust** Sunda yang aktif di Sumatra Barat memiliki tingkat kerawanan tinggi terhadap gempa bumi dan tsunami. Permukiman kumuh pesisir seperti Rimbo Kaluang dan Flamboyan Baru menjadi kelompok paling rentan akibat kepadatan permukiman informal, keterbatasan infrastruktur, serta kondisi sosial-ekonomi yang termarjinalkan. Meskipun kebijakan nasional pengurangan risiko bencana (PRB) telah tersedia, implementasinya di tingkat komunitas, khususnya di kawasan perkotaan informal, masih belum optimal.

Penelitian ini bertujuan mengkaji peran perencanaan perkotaan berkelanjutan dan pengurangan risiko bencana berbasis komunitas *(Community-Based Disaster Risk Reduction/CBDRR)* dalam memperkuat ketangguhan permukiman kumuh pesisir. Metode penelitian yang digunakan adalah pendekatan campuran dengan mengombinasikan survei rumah tangga, wawancara informan kunci, diskusi kelompok terfokus, observasi lapangan, serta lokakarya partisipatif *Disaster Imagination Game (DIG)*. Analisis difokuskan pada hubungan antara kondisi fisik lingkungan, karakteristik sosial-ekonomi, dan faktor kelembagaan dalam membentuk tingkat kerentanan, kesadaran, kesiapsiagaan, serta partisipasi masyarakat dalam *CBDRR*.

Hasil penelitian menunjukkan adanya kesenjangan antara tingkat kesadaran bencana dan kesiapsiagaan nyata, yang ditandai oleh rendahnya partisipasi pelatihan, minimnya perencanaan darurat rumah tangga, serta lemahnya koordinasi antar lembaga. Namun demikian, terdapat kapasitas ketangguhan lokal yang kuat melalui mekanisme informal seperti komunikasi berbasis masjid, inisiatif pemuda, dan pertukaran informasi yang dipimpin masyarakat. Di sisi lain, keterbatasan spasial berupa gang sempit, jalur evakuasi yang tidak jelas, dan ketiadaan tempat evakuasi resmi masih menjadi hambatan utama.

Penelitian ini menegaskan pentingnya integrasi *CBDRR* ke dalam perencanaan perkotaan yang berkelanjutan dan inklusif guna meningkatkan ketangguhan bencana, sekaligus memberikan masukan praktis bagi pelokalan Kerangka Sendai di kota-kota pesisir rentan lainnya.

Kata kunci: Perencanaan Perkotaan Berkelanjutan, Pengurangan Risiko Bencana Berbasis Komunitas (CBDRR), Permukiman Kumuh Pesisir, Ketangguhan Masyarakat, Perencanaan Partisipatif

SUSTAINABLE URBAN PLANNING STRATEGIES FOR DISASTER RISK REDUCTION IN COASTAL SLUM AREAS OF PADANG CITY (A CASE STUDY OF RIMBO KALUANG AND FLAMBOYAN BARU SUBDISTRICTS)

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ABSTRACT

Padang City, located along the highly active Sunda Megathrust in Western Sumatra, is exposed to significant earthquake and tsunami hazards. Coastal slum areas such as Rimbo Kaluang and Flamboyan Baru are particularly vulnerable due to dense informal settlements, inadequate infrastructure, and socio-economic marginalization. Although national disaster risk reduction (DRR) policies exist, their implementation at the community level remains limited, especially in informal urban areas.

This study examines how sustainable urban planning and community-based disaster risk reduction (CBDRR) can strengthen resilience in coastal slum settlements. A mixed-methods approach was employed, integrating household surveys, key informant interviews, focus group discussions, field observations, and a participatory Disaster Imagination Game (DIG) workshop. The analysis highlights how physical conditions, socio-economic characteristics, and institutional factors shape disaster vulnerability, community awareness, preparedness, and participation in CBDRR activities.

The findings reveal a persistent gap between disaster awareness and actual preparedness, reflected in low participation in training, limited household emergency planning, and weak institutional coordination. Despite these challenges, strong informal resilience mechanisms, such as mosque-based communication, youth initiatives, and community-led information sharing, demonstrate significant local capacity. However, spatial constraints, including narrow alleyways, unclear evacuation routes, and the lack of designated shelters, continue to hinder effective evacuation and risk reduction.

The study concludes that integrating CBDRR into sustainable and inclusive urban planning is essential for enhancing disaster resilience in coastal slum areas. Strengthening community capacities, supporting grassroots initiatives, and improving institutional collaboration can reduce vulnerability and improve disaster governance. These findings provide

practical insights for localizing the Sendai Framework and informing DRR strategies in similarly vulnerable coastal cities.

Keywords: Sustainable Urban Planning, Community-Based Disaster Risk Reduction (CBDRR), Coastal Slum Settlements, Community Resilience, Participatory Planning