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Natural Disaster Prediction and Early Warning System

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Abstract: *Natural disasters ranging from earthquakes and floods to cyciones and wildfres-pose significant threats to human life, infrastructure, and economic stability Effective disaster management, coupled with mbuat eady warming systems is crucial in minimizing the impact of such events. This paper explores the integrated approach to natural disaster management, focusing on preparedness, response, recovery, and mitigation strategies Emphasis is placed on the role of early warming systems which combine real-time montonng, data analysis, communication technologies, and community engagement to provide timely alerts. These systems are vital in enabling at-rak populanons to take protective actions, reducing casualties and damage. The study also highlights challenges such as technological imitations, lack of awareness, and coordination gaps among stakeholders By strengthening early warming mechanisms and investing in restent infrastructure and public education, sobeties can better withstand and recover from natural disasters ultimately saving lives and safeguarding development.*

Keywords: Natural disasters, Early warning system Disaster preparedness Risk, assessment, Real-time alerts, Mitigation strategies, Hazard detection Emergency response, Climate change.

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