

**Disaster Risk Management Through Sustainable Environmental Solutions in Opol,
Misamis Oriental**

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Abstract

As climate change accelerates the frequency and intensity of natural disasters, adopting environmentally sustainable practices that reduce risk and promote long-term ecological balance becomes imperative. This study examined disaster risk management (DRM) strategies through sustainable environmental solutions in Opol, Misamis Oriental. Using a descriptive correlational design, data from 374 respondents, including residents, local officials, and community stakeholders, were gathered through surveys, interviews, and focus group discussions. Findings showed that while the community engaged in sustainable practices such as tree planting and waste management, there were gaps in fully integrating these into formal DRM plans. The research concluded the moderate impact of environmental solutions on community resilience and stressed the importance of local participation, government support, and climate-resilient infrastructure for effective DRM. The regression model; s adjusted R² value of 0.706 demonstrated the effectiveness of disaster risk management initiatives in reducing environmental degradation, enhancing ecosystem resilience, waste reduction, and community participation.

Keywords: *Disaster risk management, sustainable solutions, community resilience, environmental sustainability, Opol, Misamis Oriental*