

"A man is
great by
deeds, not by
birth"
-Chanakya

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Multi Objective Optimization of Logistics in Simultaneous Disaster Scenario

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Multi Objective Optimization of Logistics in Simultaneous Disaster Scenario

Abstract:

This research introduces a multi-objective stochastic model to manage simultaneous disasters, filling a gap in existing humanitarian logistics literature. By integrating economic, environmental, and social factors, including volunteer coordination and psychological distress, the model optimizes resource distribution and recovery. Validated through the 2018 South Indian flood case, the findings demonstrate that centralized planning and region-specific logistics effectively balance cost reduction, emission control, and rapid response.



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