



CLAWS-NDMA JOINT SYMPOSIUM

Strengthening Disaster Resilience: Future-Proofing Armed Forces Through Technology and Innovation

Concept Note

India's national security landscape is increasingly shaped by the growing frequency and intensity of natural disasters. Climate-driven extreme weather events and geophysical hazards now form a recurring part of the operational context in which the Armed Forces function. Disaster response, therefore, has direct implications for operational preparedness, logistics, mobility, and force availability.

This symposium examines disaster resilience as an emerging pillar of national security. As the Armed Forces operate across a wide range of roles—from combat preparedness to humanitarian assistance and disaster relief—their ability to respond effectively to disasters is closely linked to broader operational preparedness. The symposium seeks to explore how disaster resilience can be integrated more effectively into defence planning and preparedness frameworks, without compromising core military responsibilities.

Discussions will begin by assessing evolving disaster risk patterns, with particular attention to mountainous and other ecologically fragile regions. India's diverse terrain amplifies the impact of disasters on critical infrastructure, lines of communication, and operational mobility. Understanding region-specific vulnerabilities is essential for moving from reactive responses to more anticipatory and risk-aware planning within the Armed Forces.

Civil-military coordination will form a central theme of the symposium. Drawing on operational experience and administrative perspectives, deliberations will examine coordination mechanisms between the Armed Forces, civil authorities, and specialised disaster response agencies such as the National Disaster Response Force and the State Disaster Response Forces. The focus will be on identifying coordination gaps and improving interoperability and information sharing during large-scale emergencies.

Case studies from recent disaster response operations will ground discussions in operational reality, highlighting challenges related to logistics, communications, early warning systems, and decision-making under uncertainty. The symposium will emphasize the role of emerging technologies—such as AI-enabled forecasting, satellite-based monitoring, and resilient communication systems—in strengthening disaster resilience.

The expected outcome is a set of policy-relevant and operationally grounded recommendations that position disaster resilience as a strategic enabler of national security, contributing to a more adaptive and resilient Armed Forces within India's evolving risk landscape.