The Whole Society's Involvement in Disaster Risk Management in Taiwan

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The "Whole Society's Involvement" is vital for showcasing Taiwan's comprehensive disaster preparedness and resilience approach. This evolving process brings together government officials, private sector leaders, non-governmental organizations (NGOs), community activists, and academics to emphasize the importance of a holistic disaster risk management (DRM) strategy. The primary objectives include enhancing stakeholder collaboration, promoting advanced technologies, raising public awareness, and strengthening policy frameworks.

Key achievements include:

(1) Technological Advancements in Disaster Informatics: A central theme is the application of advanced technologies in DRM. The National Science and Technology Center for Disaster Reduction (NCDR) demonstrated high-resolution disaster informatics, showing how quality data improves preparedness, response, and recovery efforts. In active response to upcoming trends, artificial intelligence (AI) and machine learning (ML) applications would transform disaster informatics. The assistance of technologies enables real-time data analysis, facilitating quicker and more accurate decision-making during disasters.

(2) Community Engagement and Public Participation: Community engagement and public participation are critical to effective DRM. Since the 1999 Chi-Chi Earthquake, many projects and plans have implemented successful community-driven initiatives enhancing public resilience. Strategies include educational campaigns, volunteer programs, and local emergency response teams to empower communities for better emergency preparedness and response.

(3) Policy Development and Implementation: Robust policy frameworks are essential for effective DRM. In the last quarter century, many government policies have facilitated developing and improving policies that empower all levels of society, integrate technological advancements, and encourage community participation. Policymakers have emphasized adaptable policies that evolve with changing disaster risks and comprehensive evaluation mechanisms to assess policy effectiveness.

Case Studies and Success Stories

A notable example is the collaboration between NCDR and LINE, which uses Over-the-Top (OTT) services to disseminate location-based disaster alerts to millions of subscribers. This ensures timely and relevant information reaches the public and reduces misinformation and panic during disasters. Other success stories include using high-resolution disaster informatics to improve decision-making processes. These cases show how accurate and timely information can significantly enhance emergency responses, saving lives and reducing property damage in Taiwan.

Conclusion

The paper underscores the critical role of multi-sector collaboration in enhancing disaster resilience. Taiwan sets a benchmark in DRM by integrating advanced technologies, engaging communities, and developing robust policies. The event inspires continued efforts to improve disaster preparedness and response capabilities, aiming to build a more resilient society.