



## The 2<sup>nd</sup> International Conference on Disaster Risk Management for Strengthening Resilience and Sustainability in Communities 2026 (ICDRM2026)

*Theme “Integrating Disaster Management through Transdisciplinary Approach via Disaster Platform to Develop from Resilience and Normality towards Anti-fragility”*

### 1. Background and Rationale

Over the past decade, the intensifying climate crisis has placed the world at risk of failing to meet the goals of the Sendai Framework by 2030. Although improved preparedness systems have helped reduce mortality rates, the number of affected individuals and the scale of economic losses have surged exponentially. Thailand remains in a high-risk group for multi-hazard disasters, as evidenced by the severe flooding in the southern region in late 2024, which caused immense loss of life and property. This situation reflects deep-seated structural vulnerabilities and the limitations of current management systems, which still lack standardized protocols and effective data integration—particularly in fragile and complex border areas. Consequently, there is an urgent need to develop innovative shelter management and integrated humanitarian support systems through multilateral cooperation. This transition is essential to elevate disaster management from mere resilience to "anti-fragility," enabling communities to grow through crises and achieve long-term sustainability under international standards.

Under the context of increasingly severe and complex disaster challenges across all regions of Thailand, a nationwide academic network of 14 universities—comprising Prince of Songkla University, Yala Rajabhat University, Princess of Naradhiwas University, Surin Rajabhat University, Pibulsongkram Rajabhat University, Sakon Nakhon Rajabhat University, Nakhon Sawan Rajabhat University, Nakhon Ratchasima Rajabhat University, Uttaradit Rajabhat University, Rajamangala University of Technology Lanna (Lampang), Nakhon Phanom University, Chiang Rai Rajabhat University, Ubon Ratchathani University, and Thaksin University—has elevated its cooperation from provincial-level area-based initiatives to a national-scale disaster network. This collaboration serves as a vital mechanism for fostering Resilience, emphasizing the role of higher education institutions as a "Transdisciplinary Disaster Platform" that integrates knowledge, innovation, and working mechanisms with multilateral partners, including civil society and government agencies, to reduce socio-economic vulnerability in disaster-prone areas nationwide. This movement marks a transition from fragmented operations to an integrated regional synergy aimed at addressing poverty and income loss caused by disasters. Utilizing Area-based Development as a foundation, the network covers pre-disaster preparedness, crisis management, and sustainable Livelihood Restoration. This international networking not only focuses on developing accurate risk databases but also aspires to create disaster management models that transcend Normality, moving toward Anti-fragility to concretely enhance the security and quality of life for citizens in all areas.

Current higher education institutions play a pivotal role as central mechanisms linking knowledge, technology, and operations to systematically address poverty and disaster management. From the mobilization of this nationwide university network, it is evident that regional institutions have co-developed innovations that significantly address real-world local contexts. In the Southern region, Yala Rajabhat University has showcased success in its "Shelter Management Best Practice," which integrates the Faculty of Nursing to systematically manage the health and welfare of displaced persons. Meanwhile, Princess of Naradhiwas University (PNU) has developed the "Smart Wi-Fi Rescue Boat," a crucial tool for flood situations designed to reach inaccessible areas, provide internet signals, charge communication devices, and efficiently evacuate victims; this innovation has already been delivered for active use to the Friends in Need (of "Pa") Volunteer Foundation, Thai Red Cross Society. Furthermore, other regional networks complete the disaster management puzzle: Ubon Ratchathani University and Uttaradit Rajabhat University excel in database systems and the integration of Hardware, Software, and Peopleware, while Rajamangala University of Technology Lanna has developed sub-watershed management and early warning innovations in collaboration with national agencies such as GISTDA and Hydro - Informatics Institute (Public Organization). This nationwide academic cooperation is not merely "research on the shelf" but a collective effort to synthesize best practices into tangible Policy Recommendations, focusing on preserving "life capital" and the grassroots economy to transform Thai society into strong, anti-fragile communities.

Building upon the success of the 1<sup>st</sup> ICDRM2025, which convened researchers and experts from over five countries and featured more than 20 academic presentations, several key success factors were identified: accurate area-based data, effective coordination among network partners, and strong trust between communities and academic institutions. However, lessons learned also highlighted significant constraints in local administrative structures, such as a lack of systemic connectivity and overlapping institutional mechanisms. Academic institutions must step in as the "missing jigsaw piece" to bridge these gaps and create unity in disaster response. This has led to the expansion into The 2<sup>nd</sup> International Conference on Disaster Risk Management for Strengthening Resilience and Sustainability in Communities 2026 (ICDRM2026). The conference aims to unite higher education networks, multilateral partners from all regions, and international collaborators to synthesize concrete knowledge and innovation. The goal is to transition from traditional Resilience (adapting and returning to normality) to Anti-fragility (growing stronger through crisis) to ensure community sustainability. This event is more than just an academic exchange; it is a transdisciplinary space for generating validated Policy Recommendations that serve as a compass for designing the nation's disaster security strategy, aligning with the Sustainable Development Goals (SDGs) and leading Thai society toward a safer and more robust future in every dimension.

## 2. Objectives

1 . To establish a Transdisciplinary Disaster Platform as an international hub for integrating knowledge and innovation, including the design and connectivity of shelter systems and humanitarian support systems in fragile areas—particularly border regions—to bridge systemic gaps and create concrete collaborative mechanisms between academics, practitioners, and communities.

2. To disseminate and exchange proactive disaster management research and strategies, including innovations in sheltering and humanitarian systems aimed at transitioning from traditional adaptation (Resilience & Normality) toward building model communities that thrive through crisis (Anti-fragility).

3. To promote seamless communication and collaboration by exchanging Best Practices and integrating modern technology with local wisdom, thereby enhancing the efficiency of emergency management and humanitarian assistance at all levels.

4 . To synthesize lessons learned and innovations into actionable Policy Recommendations that preserve "life capital" and the grassroots economy, ultimately elevating security and sustainable area-based development.

## 3. Participants

The conference expects to host approximately 200 participants, including domestic and international faculty members, researchers, and academics, alongside students, community representatives, and civil society members. The event will also bring together government officials, domestic and international experts, and members from the network of 14 universities nationwide dedicated to disaster management, as well as interested individuals from both public and private sectors.

## 4. Date, Time, and Venue

The conference will be held from July 6–7, 2026, at Hor Prem Dontri (Prem Music Hall), Thaksin University, Songkhla Campus, Mueang District, Songkhla Province, and virtually via Zoom Webinar.

## 5. Conference Format

- The conference features oral research presentations categorized into five strategic sessions: 1) Empowering Communities and Local Wisdom for Disaster Resilience 2) Innovation and Transdisciplinary Disaster Platform for Achieving Anti-fragility 3) Climate Change Adaptation: Moving Beyond Normality for Sustainability 4) Governance and Policy Recommendation for Multi-Stakeholder Collaboration and 5) Innovation in Shelter Management and Humanitarian Support Systems in Fragile Border Contexts. The event will be conducted as a Hybrid Conference, combining an on-site presence with an online platform to provide all stakeholders with limitless access to knowledge.

- Beyond the academic sessions, the event features an exhibition of Empirical Disaster Management Innovations and Technologies. This exhibition is organized under the four key

pillars of the Disaster Management Platform: Preparedness, Prevention, Response, and Recovery. The focus is on demonstrating tangible innovations and local database systems developed by university networks to facilitate Innovation & Technology Matching, bridging the gap between research and practical application by local operational agencies.

- Furthermore, there will be knowledge-sharing forums to exchange Best Practices from all four regions of Thailand. These sessions include panel discussions with executives from Local Administrative Organizations (Provincial Administrative Organizations and Municipalities) and the Department of Disaster Prevention and Mitigation (DDPM). These discussions aim to extract lessons learned from on-the-ground operations, synthesizing them into Policy Recommendations and fostering multilateral cooperation. This collective effort is designed to elevate communities from a reactive stance to a state of sustainable resilience and growth in the face of crises.

## 6. Event Schedule

Duration Time	Activities
Now – May 31, 2026	Registration for participation and submission of research papers for oral presentation via the website: <a href="http://icdrm2026.tsu.ac.th">icdrm2026.tsu.ac.th</a> There are 3 publication channels available as follows: Channel 1: Publication of full papers in the conference proceedings. Channel 2: Publication in the ASEAN Journal of Scientific and Technological Reports (AJSTR), indexed in Scopus (Q4), via the ThaiJo system. Channel 3: Publication in the Geomatics, indexed in Scopus (Q1, Impact factor 2.8, CiteScore 5.1), within the MDPI database.  <b>Note:</b> Publication fees for the AJSTR (4,000 Baht or 150 USD) or the Geomatics (1200 CHF) must be paid directly by the authors through each journal's submission and payment system.
June 15, 2026	Notification of paper acceptance results via the website: <a href="http://icdrm2026.tsu.ac.th">icdrm2026.tsu.ac.th</a>
June 25, 2026	Deadline for presenters to submit revised papers based on peer review feedback
July 6, 2026	Publication of the proceedings book via the website: <a href="http://icdrm2026.tsu.ac.th">icdrm2026.tsu.ac.th</a>
July 6 – 7, 2026	Conference Dates

## 7. Submission Procedures

Presenters submit full papers via the website: [icdrm2026.tsu.ac.th](http://icdrm2026.tsu.ac.th)

## 8. Academic Session Categories

The international conference is divided into 5 sessions

1) **Empowering Communities and Local Wisdom for Disaster Resilience** consisting of participatory mechanisms for citizens and vulnerable groups in disaster risk reduction; the application of local wisdom and cultural capital to strengthen resilience; the role of community leaders and civil society groups in local emergency management; household and community perception and response to early warning information; lessons learned from community-based disaster management (CBDM); the development of community networks for sustainable self-reliance; risk communication processes for household behavior change; the utilization of social capital and community relationships for rescue and relief efforts; as well as approaches for developing new generations of community volunteers to sustain disaster management skills and other related issues in the context of community-level disaster management.

2) **Innovation and Transdisciplinary Disaster Platform for Achieving Anti-fragility** consisting of the development of a Transdisciplinary Disaster Platform to link interdisciplinary data; the application of AI, IoT, and GIS innovations in precise forecasting and early warning systems; the development of area-based disaster risk applications and databases linked to national systems; the integration of modern technology with multi-source data systems and local innovations; Decision Support Systems (DSS) for practitioners in crisis situations; the application of Blockchain technology for transparency in humanitarian resource management; the development of simulation models and digital twins for disaster planning and scenario testing; the integration of modern technology with geospatial data systems to support proactive disaster management; and other related issues.

3) **Climate Change Adaptation: Moving Beyond Normality for Sustainability** consisting of the assessment of ecosystem vulnerability and risk to disasters; the analysis of the adaptive capacity of the grassroots economy and food security under extreme climate variability beyond normal patterns; the study of the effectiveness of Nature-based Solutions (NbS) in mitigating disaster impacts; the integration of environmental knowledge to support long-term adaptation; the study of the impacts of climate change on long-term well-being and quality of life; the development of resilient economic models and lifestyles to sustainably maintain the balance of natural resources; and other related issues.

4) **Governance and Policy Recommendation for Multi-Stakeholder Collaboration** consisting of the synthesis of area-based research and lessons learned into policy recommendations; the development of governance frameworks, budget management, and sustainable funding for disaster management; the role of local government organizations in formulating integrated strategic plans; multilateral cooperation mechanisms between the public, private, academic, and community sectors in managing systemic risks; the development of monitoring systems and success indicators based on international standards; the analysis and development of laws and regulations that facilitate seamless inter-agency collaboration; the development of ethical frameworks and human rights protection in disaster data management and disaster policies; and other related issues.

5 ) **Innovation in Shelter Management and Humanitarian Support Systems in Fragile Border Contexts** consisting of the development of innovative shelter management for emergency situations and the evacuation of civilians affected by unrest; the design and planning of temporary shelters that are hygienic, safe, and appropriate for the local context; the application of logistics knowledge to establish supply chain systems for food and basic necessities during crises; the role of higher education institutions and local networks in skill rehabilitation and temporary job creation to generate income and reduce stress for displaced persons; health care and psychosocial support for affected individuals in fragile areas; coordination of multilateral assistance to meet actual needs; as well as the synthesis of lessons learned from field operations into Standard Operating Procedures ( SOPs) and policy recommendations for border humanitarian management to be submitted to relevant agencies; and other related issues.

## 9. Conference Registration

The general public, including students, faculty members, researchers, and academics from both within and outside Thaksin University, can register for the conference via the website [icdrm2026.tsu.ac.th](http://icdrm2026.tsu.ac.th). For further inquiries, please contact Assistant Professor Dr. Chokchai Mueanmas at the Institute of Research and Innovation, Thaksin University, Phatthalung Campus, via mobile at 08-3536-6199 or email at [chokchai@tsu.ac.th](mailto:chokchai@tsu.ac.th).

## 10. Expected Benefits

1. The concrete implementation of a Transdisciplinary Disaster Platform that integrates knowledge from academics, practitioners, and communities, while linking data systems and innovations in shelter management and humanitarian support for fragile areas to bridge systemic gaps and establish new international disaster management standards.

2. Participants will disseminate knowledge and proactive disaster management strategies, including innovations in shelter and humanitarian systems that focus on transitioning from normality to building anti-fragile communities that thrive through crises, facilitated by the international exchange of research and innovation.

3. The establishment of seamless collaboration networks and communication among multilateral stakeholders—including academic institutions, the public and private sectors, civil society, and border humanitarian networks—leading to the integration of modern technology with local wisdom to enhance emergency management efficiency at all levels.

4. The acquisition of innovative prototypes and Best Practices that can be applied to solve disaster-related issues in real-world contexts, helping to preserve lives and secure the grassroots economy for sustainable community stability.

5. The development of Policy Recommendations and Standard Operating Procedures (SOPs) synthesized from research and local lessons learned, which relevant agencies can adopt as regulations or strategic plans to elevate regional safety and sustainability at the policy level.

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