

Challenges in Local Communities and Management of Recovery and Support in an Era of Population Decline and Megadisasters

Insights from Fieldwork and Research Findings of the
Institute for Sustainable Community and Risk
Management, Waseda University

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Overview of the Institute for Sustainable Community and Risk Management

Background and Mission

Background of Establishment

- Escalating & Complex Disasters and Social Challenges
 - **Severe Recent Disasters:** Great East Japan Earthquake (2011), Noto Peninsula Earthquake & heavy rain disaster (2024), Kumamoto Earthquake (2026), and overseas events like the floods in Valencia, Spain (2024) and fires in European countries (2022, 2026).
 - **Beyond Physical Recovery:** Growing demand for approaches from social science and community perspectives, rather than relying solely on physical reconstruction.

Background of Establishment

- **Socio-Structural Changes: Population Decline & Inequality**
 - **Broader Social Challenges:** Issues like population decline, community depopulation, and widening inequality impact Japanese society as a whole, not just emergency response.
 - **Manifestation in Disasters:** These structural vulnerabilities directly worsen disaster vulnerability and deepen social disparities during the recovery process.

Background of Establishment

➤ Establishing an Interdisciplinary & Continuous Research Framework

➤ **Beyond One-Off Research:** Moving past isolated, short-term surveys to foster sustained investigation.

➤ **Knowledge Hub:** Serving as a platform to accumulate and disseminate long-term insights on recovery processes and crisis management.

Three Key Missions

1. Building Sustainable Communities

Aiming to create disaster-resilient communities and realize resilient local societies capable of swift, effective recovery in the wake of disaster.

2. Practical Research on Crisis Management & Recovery Processes

Emphasizing field research (fieldwork) to clarify social-scientifically tailored "optimal solutions" for specific local challenges.

3. Global & Domestic Research and Practical Network Hub

Promoting the sharing and societal application of knowledge through collaboration with domestic and international researchers, local governments, and civil society organizations (NPOs, volunteers, etc.).

Main Research Themes and Key Achievements

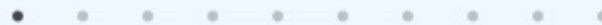
1. Major KAKENHI Projects (Core Research Domain)

◆ 【FY2019–2023】 Research on Recovery from Large-Scale Disasters (Grant-in-Aid for Scientific Research (A))

- ◆ Project Title: A Comprehensive Study on Regionally Optimal Solutions for Recovery from Large-Scale Disasters (Principal Investigator: Masaki Urano)
- ◆ Key Achievements: Longitudinally tracked the recovery process of the Great East Japan Earthquake and other major disasters; modeled and systematized "optimal solutions" for recovery policy and livelihood reconstruction tailored to regional conditions (demographics, industrial base, community structure).



2019～23年度 科学研究



【FY2019–2023】 Research on Recovery from Large-Scale
Disasters (Grant-in-Aid for Scientific Research (A))

Main Research Themes and Key Achievements

1. Major KAKENHI Projects (Core Research Domain)

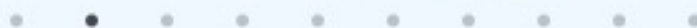
◆ 【FY2024–2027】 Research on Population-Declining Society and Social Structure (Grant-in-Aid for Scientific Research (A))

◆ Project Title: A Study on the Process of Widening Disparities and Their Social Consequences in a Population-Declining Society (Principal Investigator: Tatsuto Asakawa)

◆ Objectives & Content: Empirically examining how social disparities expand in regions experiencing population decline, and analyzing its impact on disaster response capabilities and community sustainability.



2024～27年度 科学研究



【FY2024–2027】 Research on Population-Declining Society and Social Structure (Grant-in-Aid for Scientific Research (A))

Main Research Themes and Key Achievements

2. Field Surveys and Recovery Support Research

◆ Response to Domestic Disasters (e.g., Noto Peninsula Earthquakes, Heavy Rain Disasters)

- ◆ Fieldwork Conducted: Executed field surveys (site visits) in affected areas, including those impacted by the Noto Peninsula Earthquakes in 2024 and 2025.
- ◆ Documentation & Dissemination: Recorded and published official reports detailing challenges faced by disaster-affected regions, such as evacuation life in aging communities, community preservation, and infrastructure restoration.

◆ International Crisis Management & Flood Disaster Research (e.g., Valencia Floods, Spain)

- ◆ Global Academic Collaboration: Conducted field surveys (Phase 1 & Phase 2) on flood risk management in Valencia, Spain, in collaboration with international researchers, including Research Fellow Carmen Grau Vila.
- ◆ Knowledge Exchange & Dissemination: It compiles insights on Japan's crisis management systems and flood control measures and actively issues recommendations to strengthen disaster risk reduction at the local level in Europe.

Main Research Themes and Key Achievements

3. Building Research Networks & Disseminating Findings

◆ Sustained Hosting of the "Disaster Research Exchange Network Meeting"

- ◆ Annual Symposia: Hosting annual research exchange meetings (the report for the 12th Exchange Meeting is currently in preparation for publication).
- ◆ Multi-Stakeholder Dialogue: Providing an open forum for knowledge exchange among researchers, practitioners, and civil society actors.

◆ Publications, Research Papers, and International Dissemination

- ◆ Academic Output: Publishing scholarly books, research papers, and digital content authored by institute members.
- ◆ Global Outreach: Disseminating research findings internationally via an English-language website.
- ◆ International Collaboration: Promoting global academic dialogue and joint research initiatives with overseas scholars.



震災問題研究交流会

Disaster Research Exchange Network Meeting

Summary & Future Prospects

➤ Comprehensive Approach

- Driven by twin pillars: Sustainable Community and Risk Management.
- Broad research coverage:
 - Inheriting lessons from the Great East Japan Earthquake
 - Analyzing current domestic & international disasters
 - Addressing structural challenges (e.g., population decline)

➤ Future Outlook

- Fieldwork First: Continuing to place high value on primary data collected through site surveys.
- Societal Impact: Translating academic findings into actionable disaster risk reduction policies and real-world recovery solutions.

Challenges in Local Communities and the Management of Recovery & Support in an Era of Population Decline and Megadisasters

Insights from Fieldwork and Research Findings of the Institute for Sustainable Community and Risk Management

Presentation Topics

1. Community Challenges and Resilience in a Depopulating and Aging Society
2. Post-Disaster Livelihood Recovery and Community Regeneration
3. Support Frameworks for Vulnerable Populations and the Role of Local Communities

Topic 1: Community Challenges and Resilience in a Depopulating and Aging Society

Grant-in-Aid for Scientific Research (A): "Research on the Process of Widening Disparities and Its Social Consequences in a Population-Declining Society" (Principal Investigator: Tatsuto Asakawa)

1. Population Decline and Widening Social Disparities

◆ Structural Transformation of Local Communities

- ◆ Population decline does not occur uniformly; rather, it widens economic and social disparities between urban and rural areas, as well as among different districts within the same region (the core focus of the Institute's KAKENHI research theme).

◆ From "Everyday Challenges" to "Vulnerabilities During Disasters"

- ◆ Decline of Mutual Help Organizations: A shortage of active leaders and members is causing the decline of community-based mutual aid networks, such as neighborhood associations, resident councils, and local volunteer fire department.
- ◆ Impact on Emergency Response: The weakening of everyday community functions directly translates into failures in evacuation actions and initial response efforts when a disaster strikes.

2. Redefining "Resilience" in Local Communities

◆ Shift from "Restore" to "Adapt & Rebuild"

- ◆ Redefining Resilience Under Depopulation: Resilience in an era of shrinking populations is not about reverting to past scales or organizational structures. Instead, it is the flexibility to accept demographic shifts while reorganizing, rightsizing, and maintaining essential community functions.

◆ Phase-Free Approach: Seamless Integration of the Everyday and the Extraordinary

- ◆ Shifting from Special to Everyday: Rather than treating disaster preparedness as an isolated or special activity, it is necessary to embed a disaster readiness perspective directly into daily welfare services, urban planning, and community events.

3. Complementing Local Capacity via External Networks

- ◆ Moving Away from Isolated Communities

- ◆ Building Broad Support & Acceptance Systems: Rather than relying solely on internal resources within the community, it is essential to establish framework systems for receiving and utilizing assistance through regional platforms, including support NPOs, universities/research institutions, and the "Disaster and Society" research network.

Topic 2: Post-Disaster Livelihood Recovery and Community Regeneration

- KAKENHI Grant-in-Aid for Scientific Research (A): "Comprehensive Research on Regionally Optimal Solutions for Recovery from Megadisasters" (Principal Investigator: Masaki Urano)
- Field Surveys: On-site investigations of affected areas from the 2024–2025 Noto Peninsula Earthquakes
- Comparative Research: Field surveys on flood risk management in Valencia, Spain (International Comparative Study)

1. Diversifying and Long-Term Challenges in Livelihood Recovery

◆ Interconnectedness of Housing, Livelihoods, and Health:

- ◆ Recovery requires multifaceted support—moving beyond mere housing reconstruction to encompass the restoration of local industries, agriculture, and fisheries, as well as mental health care and isolation prevention for survivors.

◆ Polarization Among Disaster Victims:

- ◆ Recovery speeds vary significantly depending on age, housing tenure (homeowners vs. renters), financial capacity, and family structure, creating a risk of social division within local communities.

2. Pursuing "Regionally Optimal Solutions" in Disaster Recovery

◆ Limitations of Standardized Recovery Models:

- ◆ Rather than applying uniform approaches like large-scale infrastructure development, it is vital to select and form "optimal solutions" tailored to a community's history, culture, interpersonal networks, and projected future population size (derived from Masaki Urano's KAKENHI research findings).

◆ Mitigating Community Fragmentation:

- ◆ Thoughtful planning is required during temporary housing allocation and relocation to public disaster housing to preserve pre-existing neighborhood ties and village-level interpersonal relationships.

3. Citizen-Led Community Regeneration and International Comparisons

◆ Resident-Centric Recovery Processes:

- ◆ Shifting affected residents from passive recipients of support to active leaders by facilitating collaborative forums (such as workshops and future-oriented community planning) where they can shape their community's future vision.

◆ Insights from International Cases (e.g., Valencia Floods):

- ◆ Drawing on European crisis management frameworks for flood and megadisaster responses to highlight the vital importance of multi-tiered collaboration between municipal governance and civil society/volunteers.



2026年

2025年

2024年

2023年

More Before

カルメン・グラウ・ヴィラ 2025/11 スペイン出張での活躍 を掲載しました。

『研究プロジェクト：スペイン・バレンシア洪水関係プロジェクト』につきまして、カルメン・グラウ・ヴィラ氏の2025年11月のスペイン出張での活躍を掲載しました。

当研究所招聘研究員のカルメン・グラウ・ヴィラ（CARMEN GRAU VILA）さん、スペイン出張でバレンシアの地元メディアや現地市町村・大学などのコンファレンスで大活躍（地元メディアから「ジェンダーの視点を軸にした災害研究に活躍する研究者」として表彰を受ける）。 

上記のリンクから閲覧いただけます。

またTOPページ「研究活動」の『研究プロジェクト：スペイン・バレンシア洪水関係プロジェクト』内『カルメン・グラウ・ヴィラ 2025/11 スペイン出張での活躍』からご覧いただくことができます。
ぜひご自由にご参照ください。



Insights from International
Cases (e.g., Valencia Floods)

Topic 3: Support Frameworks for Vulnerable Populations and the Role of Local Communities

- Field Surveys: On-site research in disaster-affected areas including the Noto Peninsula Earthquake (investigating depopulated areas, elderly survivors, and evacuation shelter environments)
- On-the-Ground Reporting & Practitioner Dialogue: Field reports and inter-supporter discussions presented at the "Disaster Issues Research Exchange Conference" (Shinsai Mondai Kenkyu Koryukai)

1. "Social Vulnerabilities" Exposed by Disasters

◆ Disproportionate Structural Impact:

- ◆ Individuals in socially vulnerable positions during normal times—such as the elderly, people with disabilities, foreign residents, low-income households, and single-person elderly households—are more likely to be left behind during evacuations, information gathering, and the recovery process.

◆ Realities Revealed by Field Surveys:

- ◆ Case studies from the Noto Peninsula Earthquake highlighted the harsh realities of evacuation life in depopulated and aging regions, as well as the complex living challenges associated with secondary and wide-area evacuations.

アーカイブ

2025年

2024年

2023年

More Before

2025/8/27

令和7年能登半島地震被災地巡検 報告を公開しました。

研究プロジェクト：能登半島地震・豪雨災害に関するプロジェクトにつきまして、令和7年能登半島地震被災地巡検の報告を公開しました。

[こちらのページ](#)から閲覧いただけます。

TOPページ「研究活動」の『令和7年能登半島地震被災地巡検 報告』からもご覧いただくことができます。

ぜひご自由にご参照ください。



Case studies from the Noto Peninsula Earthquake

2. Effective Individual Evacuation Plans and Community Monitoring

◆ Moving Beyond Simple Roster Creation:

- ◆ It is crucial to operationalize "Individual Evacuation Plans" rooted in everyday interpersonal relationships—clearly defining who will support whom, by what means, and to which evacuation location.

◆ Integrating Welfare and Disaster Management:

- ◆ Establishing systems where commissioned welfare volunteers (Minsei-iin), social welfare councils, care managers, and neighborhood associations collaborate during normal times to share risk information.

3. Building Inclusive Communities

- ◆ From "Receiving Support" to "Active Community Members":

- ◆ Rather than treating vulnerable individuals merely as "targets of protection," it is crucial to create spaces (*ibasho*) where they can maintain active roles and involvement (Inclusive Disaster Risk Reduction).

- ◆ Community Roles and Multi-Stakeholder Collaboration:

- ◆ Establishing a daily, comprehensive support network that does not rely solely on local governments, but integrates NPOs, volunteers, welfare facilities, and local residents.

Conclusion

Implications for Sustainable Communities & Disaster
Management

1. Synthesis of the Three Topics

➤ Community Resilience:

- Acknowledging the everyday disparities and functional declines brought by depopulation, aiming for "Adaptation & Rebuilding" rather than simple "Restoration."

➤ Regionally Optimal Solutions in Recovery:

- Moving away from uniform, infrastructure-driven approaches toward context-specific recovery models that align with local history, culture, and population scale while preserving community ties.

➤ Inclusive Disaster Preparedness Framework:

- Addressing social vulnerabilities exposed during disasters through everyday integration of welfare and disaster management, supported by multi-stakeholder monitoring networks.

2. Message to Next-Generation Disaster Management Leaders

➤ Prioritizing Fieldwork and Primary Data:

- Directing empirical insights gained from on-site fieldwork into local disaster risk reduction and recovery policies.

➤ Cross-Border Knowledge Sharing:

- Collaborating to build international platforms that flexibly address diverse disaster risks through comparative analyses of cases across Japan, Taiwan, Europe, and beyond.