

Challenges and Issues of Establishing Transdisciplinary *Approach*

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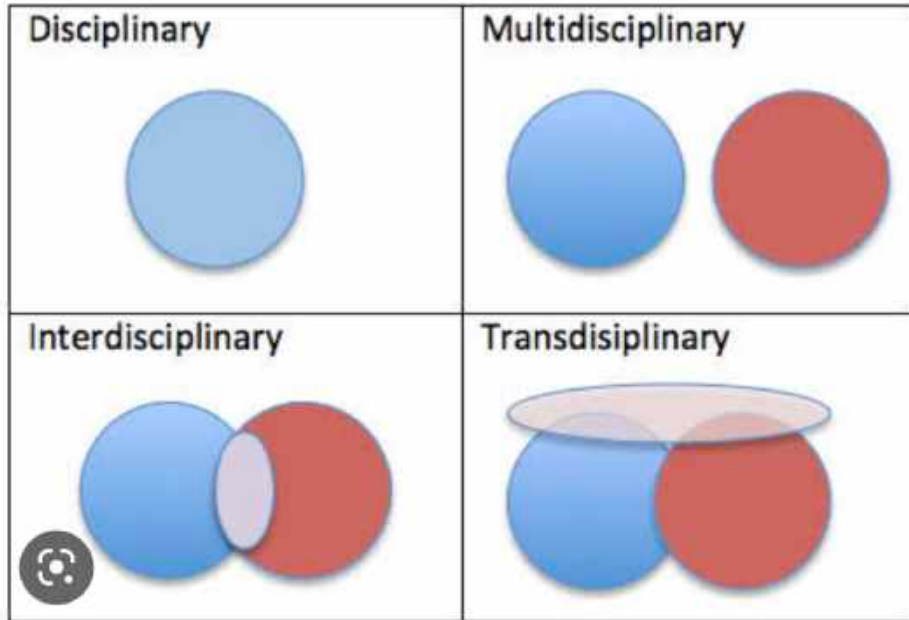
Academia

Science Policy interface

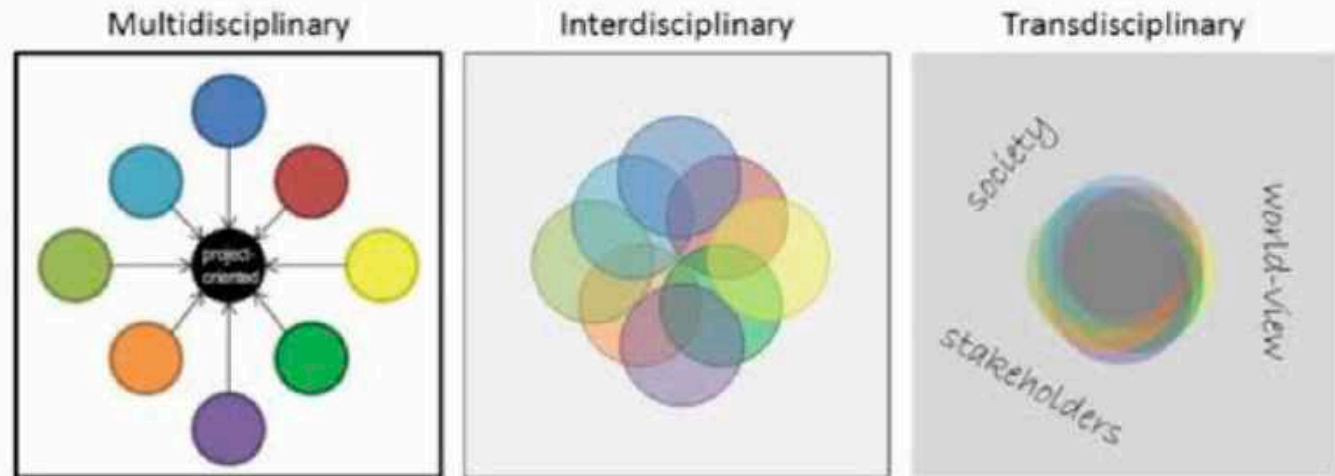
Start-up and innovation

NPO / NGO

Defining *Trans*-disciplinary

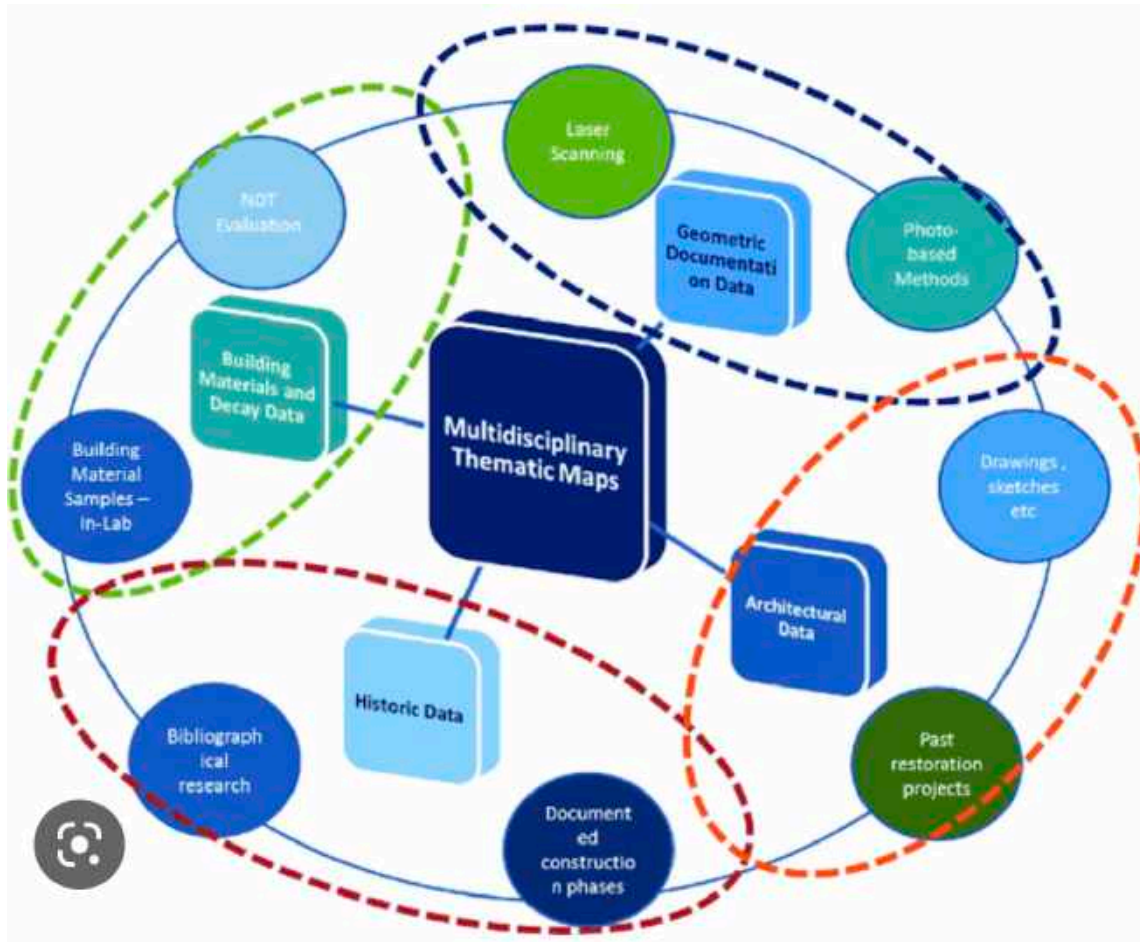


Multi- → Inter- → Transdisciplinary



Differentiation between Interdisciplinary and Transdisciplinary Concepts

Multi and Trans-disciplinarity in Disasters



Going beyond the academia

Trans-disciplinary and Trans-stakeholders

Being “accountable” and “responsible” for our research





Being socially responsible and accountable

Survey of 3,500 researcher around the world

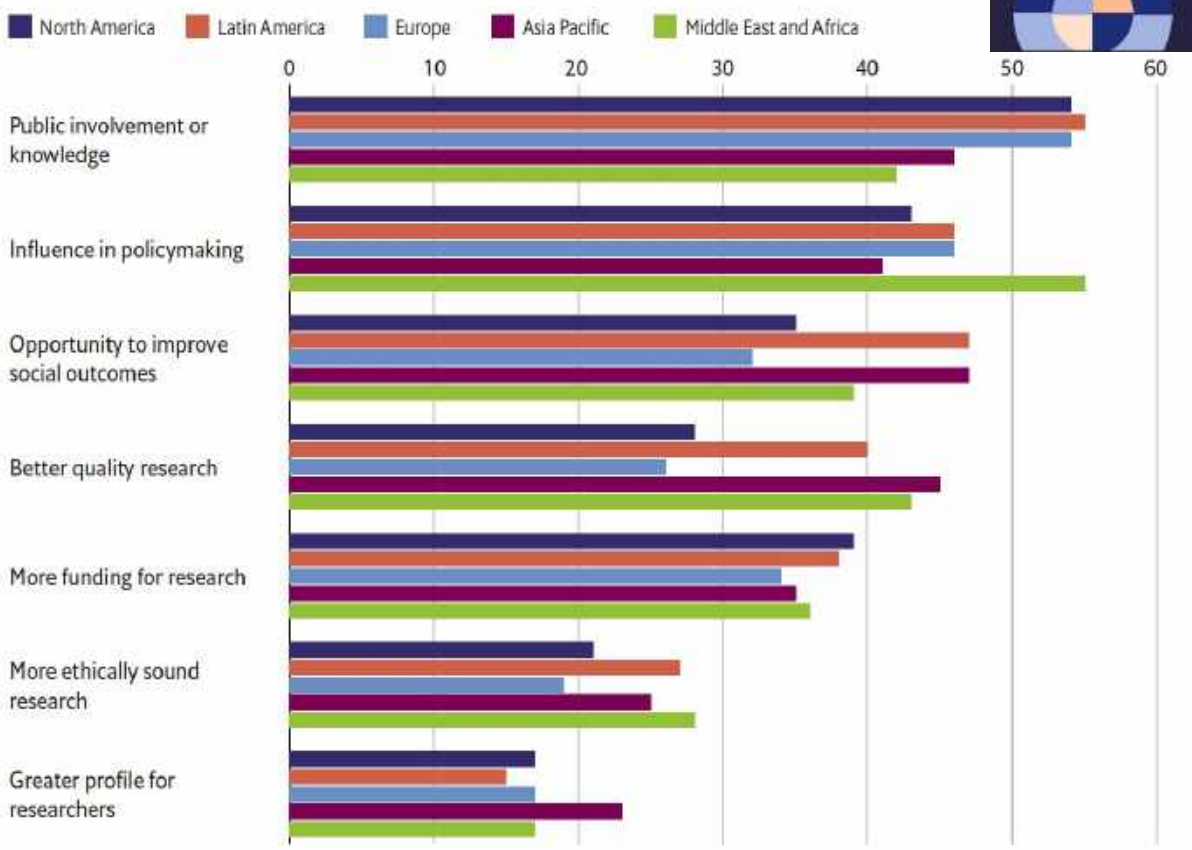
- 18 Findings
- 19 The impacts of the pandemic: exacerbating existing inequality and misinformation concerns
- 31 Conducting research in public view: a more public-facing researcher
- 39 Confidence boost: supporting researchers to take on a more public role
- 47 Key takeaways and areas for action **Inequality, misinformation**
- 49 Addressing misinformation **Public trust / Researcher's public role**
- 51 Building public trust and understanding
- 53 Preparing researchers for a public-facing role
- 56 Tackling inequality

- Formalize communication training
- Establish communication intermediaries
- Formalize science advisory institutions



Figure 8: Benefits of public attention by region

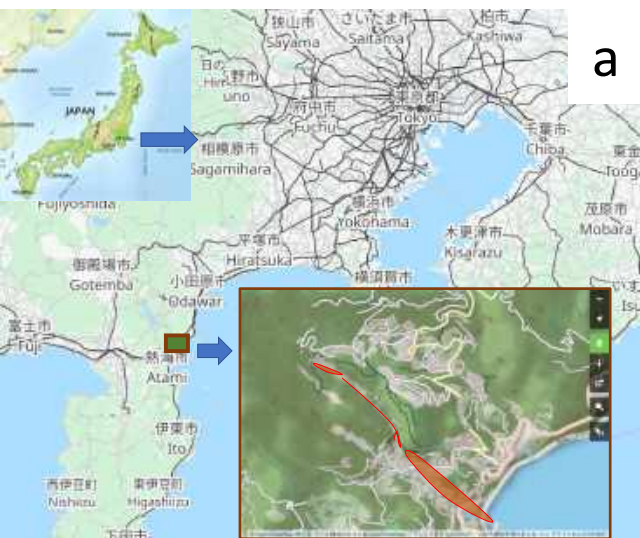
Percentage of respondents selecting as one of the top 3 benefits.



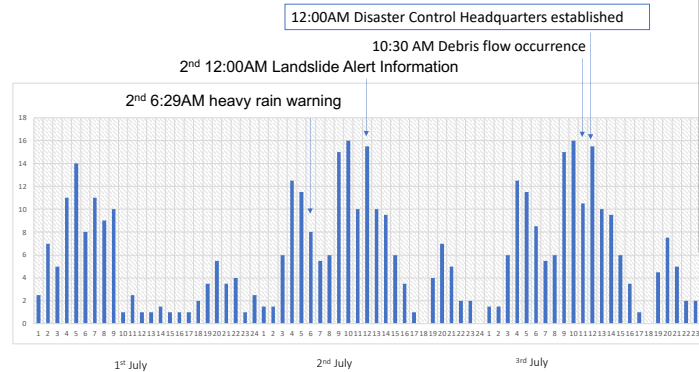
For researchers surveyed in the Middle East and Africa, the pandemic could be an opportunity to reach their target audiences more effectively. 55% of these researchers selected influencing policymaking as a top benefit, compared with the global average of 44%.

Note: Sample size (N), weighted: North America (N = 849) Latin America (N = 126) Europe (N = 817) Asia Pacific (N = 1163) Middle East and Africa (N = 189)
 Significant differences (at 95% confidence levels) when comparing the sub-group against the overall mean (% selecting agree). An Asterisk (*) indicates the subgroup result is higher than the overall mean while a Dagger (†) indicates it's lower.

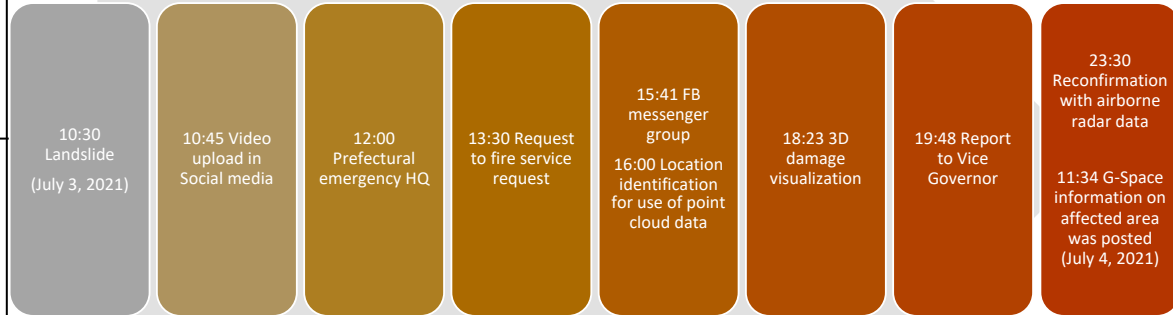
Atami Landslide July 2021



a



b



c



d

Experts of:

Drone, Big data (Data Science),
Remote sensing,
Point cloud data analysis (xR)

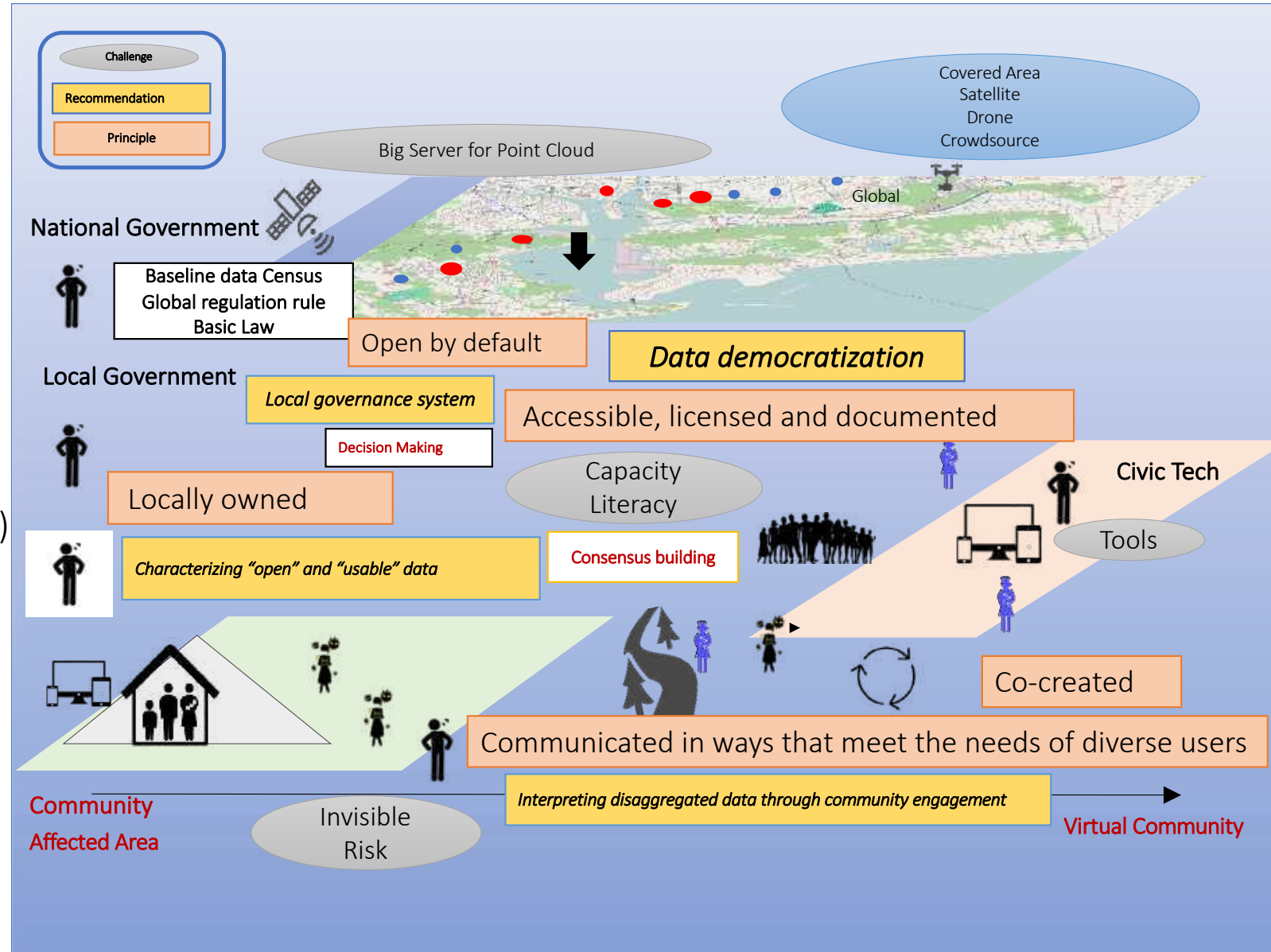
Disaster Risk Reduction Regime in Japan:
An Analysis in the Perspective of Open Data, Open
Governance (Kanbara and Shaw)

Sustainability 2022, 14, 19

<https://www.mdpi.com/2071-1050/14/1/19>

Open Data, Open Governance

- Characterizing “open” and “usable” data
- Local governance system
- Co-creation to co-delivery (data sharing, analysis, interpretation)
- Data democratization (grass-roots approach of data management)
- Interpreting disaggregated data through community engagement



Trans-disciplinary approach (TDA): issues and challenges

- Trans-disciplinary approach starts with a specific **field problem** which needs to be addressed
- The **concept of disciplines** is also evolving: traditional versus emerging disciplines
- “Data” often becomes a key barrier: **open data, open governance** is the critical
- Focusing on **young** researchers and young practitioners is critical to lead innovation in TDA
- Being a **socially responsible researcher** is the key to TDA and it needs some specific ecosystem with incentives to foster TDA