Challenges and Issues of Establishing Transdisciplinary *Approach*

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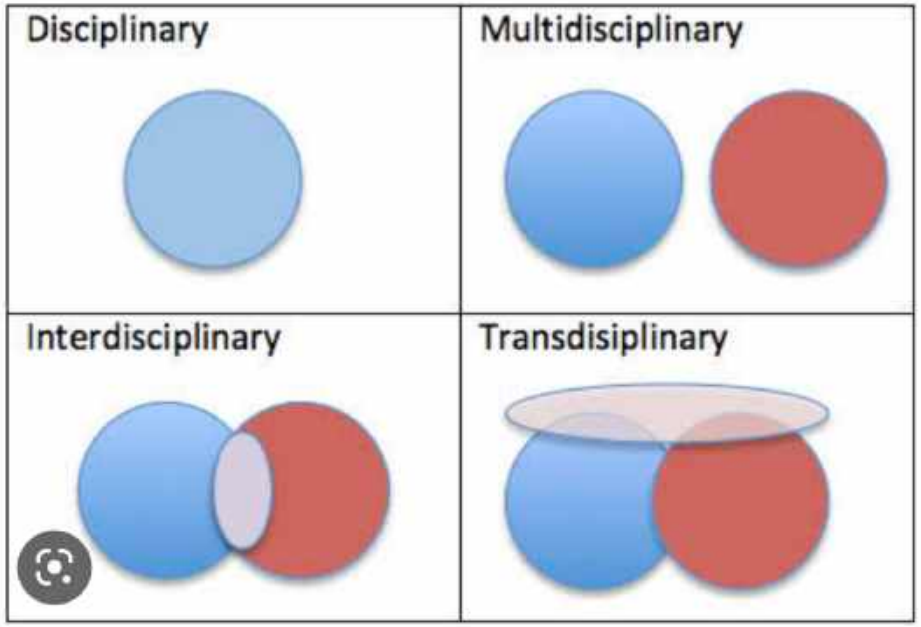
Academia

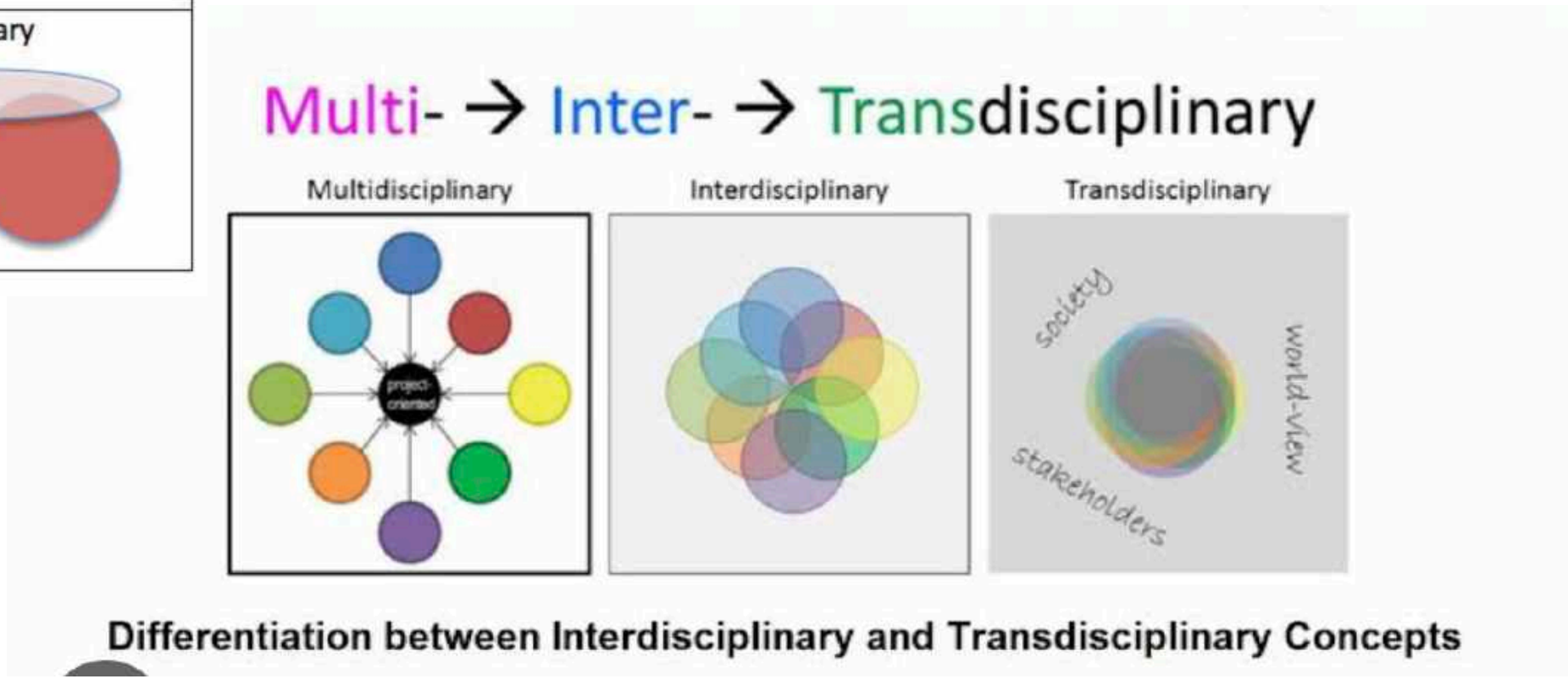
Science Policy interface

Start-up and innovation

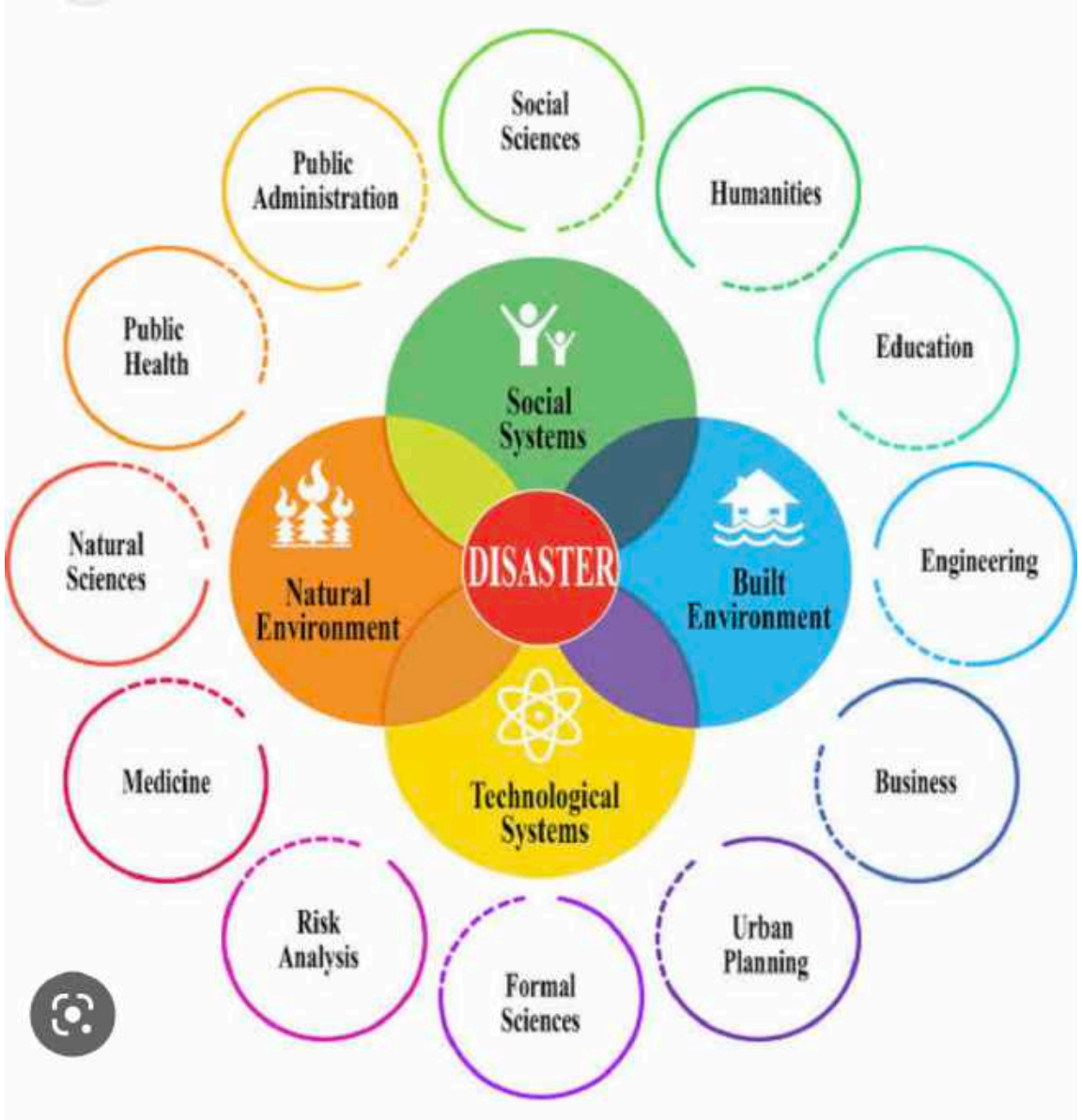
NPO / NGO

Defining *Trans*-disciplinary





Multi and Trans-disciplinarity in Disasters



Going beyond the academia

Trans-disciplinary and Trans-stakeholders

Being “accountable” and “responsible” for our research

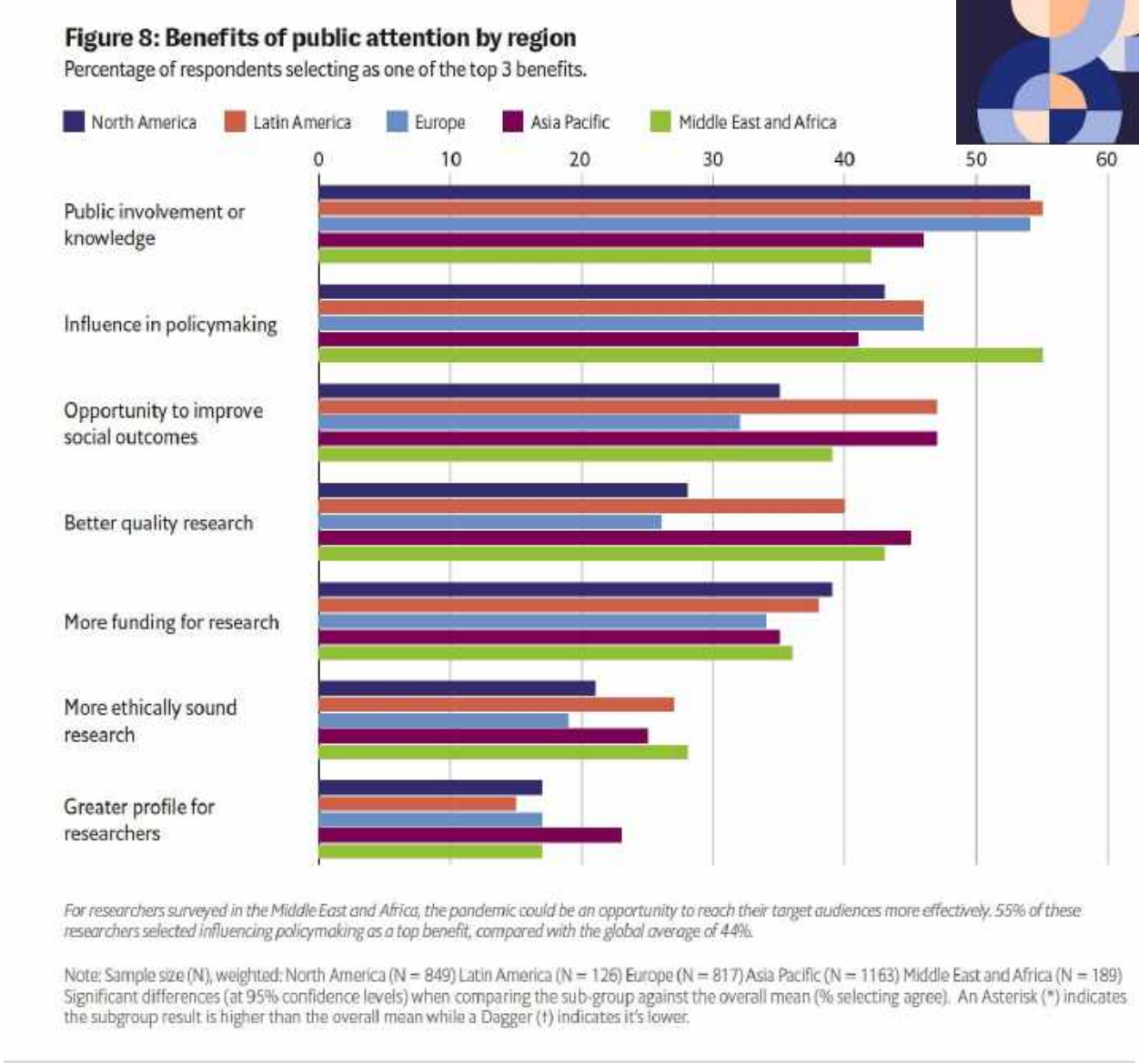
Being socially responsible and accountable

Survey of 3,500 researcher around the world

Inequality, misinformation

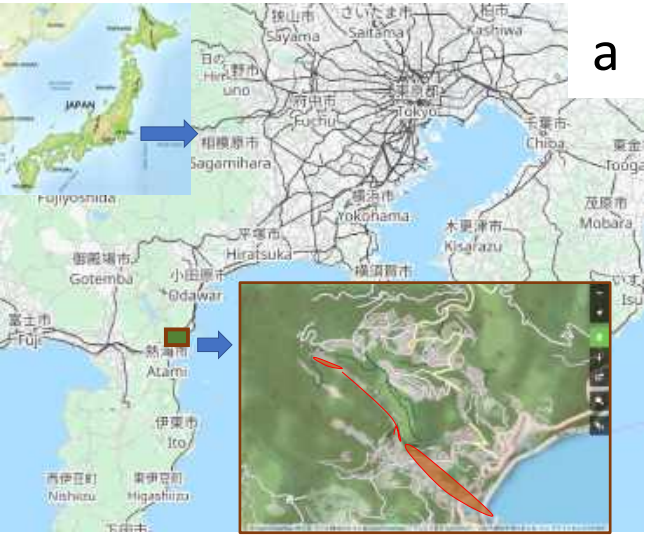
Public trust / Researcher's public role

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



Atami Landslide July 2021

a



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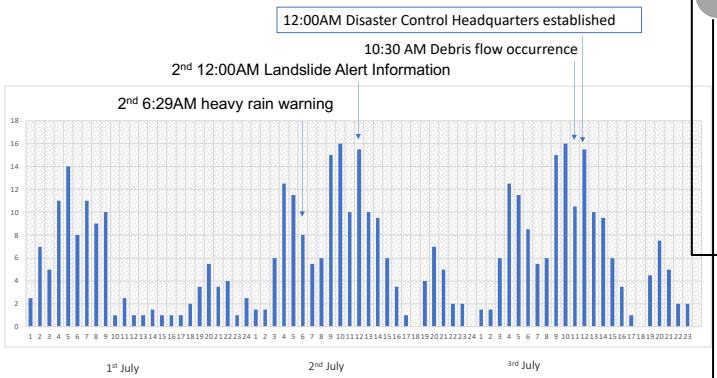


c

d

10:30 Landslide (July 3, 2021)

10:45 Video upload in Social media

12:00 Prefectural emergency HQ

13:30 Request to fire service request

15:41 FB messenger group

16:00 Location identification for use of point cloud data

18:23 3D damage visualization

19:48 Report to Vice Governor

23:30 Reconfirmation with airborne radar data

11:34 G-Space information on affected area was posted (July 4, 2021)

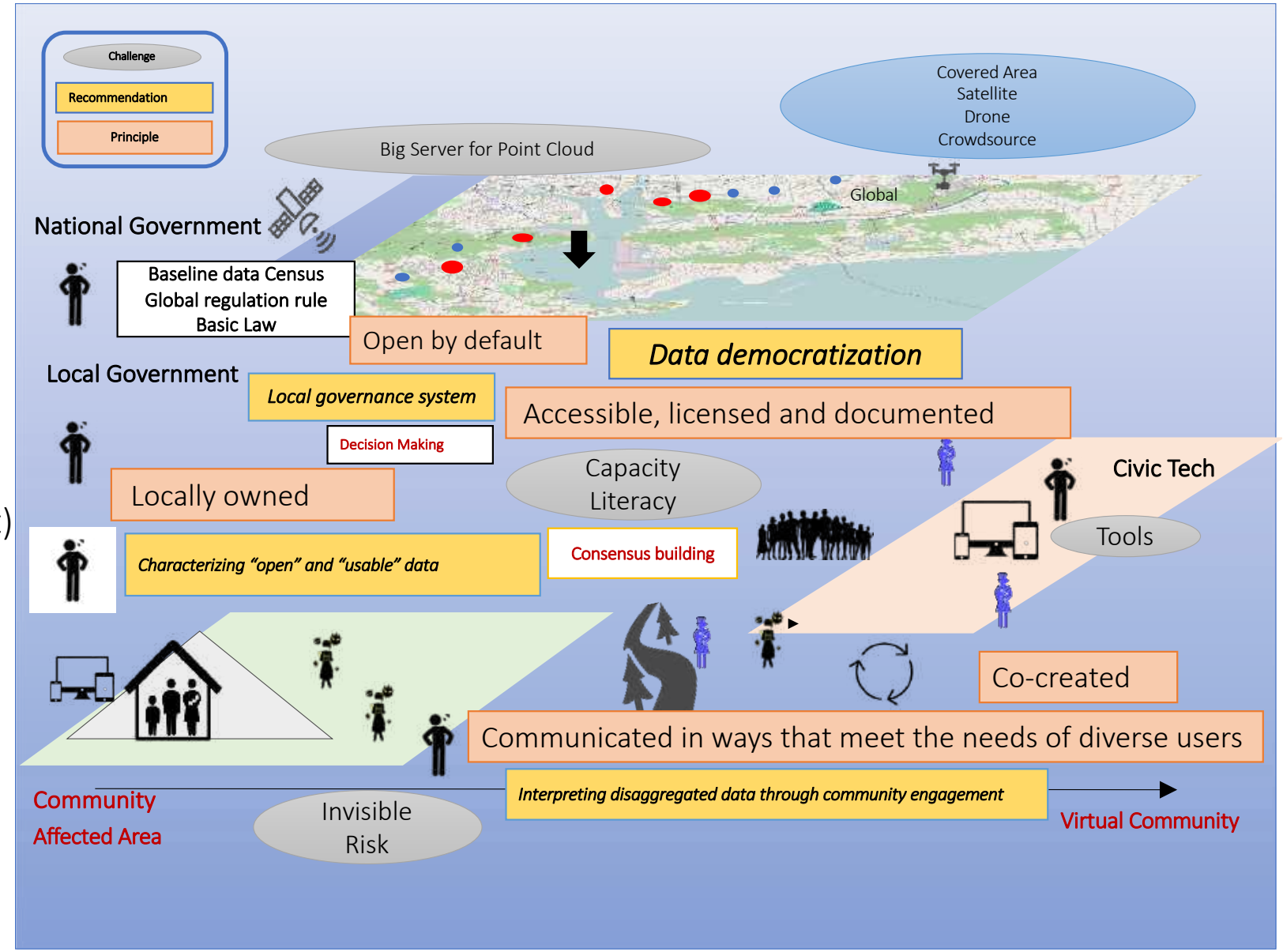
Experts of:

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