

# Integrated DRM

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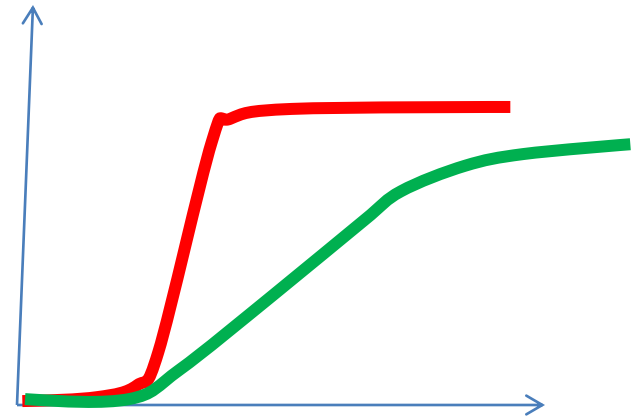
- Part1
  - Lessons Learnt from Previous Disasters
  - Special Issues for Integrated Disaster Mitigation
  - Local Issues for Global Issues
- Part 2
  - What should we do as Research Institutes for DM?
  - How to cope with Issues in Part 1
  - How to strengthen Collaboration between Institutions and Countries/Regions

# Initial Discussion

- Tatano

- Summarized GEJE effects

- Energy
    - NPPs
    - “cliff-edge fragility” problem (Kameda, 2011)
    - Reno
    - Renovation plan for Sendai City ( $10^{-2}$  vs  $10^{-3}$ )
    - Questions:
      - What is a rational method for achieving integration?
      - How to introduce extreme events in our planning?



## DISCUSSION

- Kawase
  - NPP prohibited from addressing extreme events because NPP “100% safe” (!!)
- (“Emperor’s clothes”)
- Kovacs:
  - Slovac et al: difference between prevention and reduction (notice in DPRI P=prevention)
  - Communicating risk is difficult
- Scawthorn
  - Need for risk governance – how to achieve that?
- Collins
  - what is acceptable risk? on what basis is it being judged acceptable? Economic, social, psychological...?
  - How to communicate risk?
- ??
  - Nuclear energy is not as cheap as public is being told (include risk cost!)
- Okada
  - IDRiM advocates integration is needed, integration is needed, integration is needed...
  - Scenario making should be more creative
  - Holistic discussion is needed by different parties
  - DRM needs to be integrated with urban planning, and better utilize adaptive management
- Shaw
  - GET (Governance, Education, Technology)
- Scawthorn
  - Let’s talk about the Global Network!

# Discussion

- Kovacs
  - People waiting for scientific knowledge
  - Desire for evidence-based mgmt of risk
  - Integration
    - Cross-hazard, not in isolation
    - Economic analysis carries weight in govt decisions – scientific knowledge has to be translated for govt decisionmakers
- Okada
  - Integrated DRIM (IDRiM) requires patience, but is gaining ground
- Saseoka (sp?)
  - Need to shift risk to informed consent
- Scawthorn
  - Black swans, limits to probabilistic approach, ‘fat tails’
- Kawase
  - 869 event may not have been a precedent (???)
- Hsu
  - Critical infrastructure risk difficult to evaluate
- Wee (sp?)

# Collaboration

- Scawthorn
  - Create a secretariat or union of DRRI's
    - Many opportunities
- Kovacs
  - Understand research plans of each DRRI, integrate

# Intl DRRIs collaboration

- International Union or Council
- Internationalize Japan's Natural Disaster Research Council
- Start task force to define more organized research
- Start with collaborative projects
- DPRI take lead, organize annual summits, review research plans....evidence of research utilization.... (ie, secretariat)