Lessons from tripartite disasters in the northeast Japan

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Damages of Recent Disaster in Japan

- **Casualties** (as of March 1st)
  - Death   15,854
  - Missing  3,276
  - Injured   6,023
  - Total    25,153

- **Estimated Damage on Properties** *
  - Private Properties 10.4 trillion Yen ($134 billion)
  - Lifelines  1.3 trillion Yen ($17 billion)
  - Infrastructures 2.2 trillion Yen ($28 billion)
  - Agriculture, Forestry, Fishery  1.9 trillion Yen ($24 billion)
  - Total    Approx. 16.9 trillion Yen ($217 trillion)

* Excluding effects of nuclear power plants accident
Japan: Heavily Mitigated, but…..

- Japan is located on 4 different plates and more than 2000 active earthquake fault lines.
- Therefore, long history of investment on hardware such as Coastal Levees
- Developed forecasting and alert systems
- Periodical evacuation drills were conducted in local schools and communities
What we have learned

- It is impossible to perfectly eliminate damages caused by disasters, but we can still minimize.
- Relief Aid of inter-municipality was found timely and flexible.
- Needs in the affected area varies: Information technologies work effectively to capture different demand of aid.
- Coordination of NGOs, municipalities, and volunteers is important for effective relief, but challenging.
What we should have done:

- Develop more functioning inter-municipality/community disaster aid system
- Central Government’s supporting roles
- Neighborhood ties rediscovered
- Timely financial support for local businesses and livelihood
Inter-municipality support: A case of Kurihara City

- Past Experience: Iwate-Miyagi Nairiku Earthquake in 2008 (Richter scale 7.2)

- Strong leadership of the mayor:
  1) Strengthening Jichikai (neighborhood linkage)
  2) Introducing technologies (supported by Keio University)
  3) From ‘supported’ to ‘supporting’
  4) Introducing and coordinating external organizations (e.g. Israeli rescue teams, International NGOs, etc.)
Use of Quasi-Investment:

- Oyster Farming

Fund was established to support oyster farmers in the affected area. The fund sells “reconstructed oysters beforehand” 1 share costs 10,000 Yen (approximately US$80) for 20 oysters sometimes in the future. Currently collected US$3.2 million in 5 months. The proceeds will be used for ships, equipments (oyster sorting facilities, septic tanks), aquaculture materials (timbers, ropes, baskets, etc.), and seed oysters.

http://sanriku-oysters.com/index.html
Use of Quasi-Investment:

- Efficient Use of Internet for local small businesses

Local small businesses in the affected area face difficulty to collect financial support for reconstruction. This project is open for small business in need. The web page introduces various small businesses such as Rice wine brewers, food processors, and retailers. Each business describe its rehabilitation plan and financial plan of the fund. Supporters can receive their products in a few years.

http://oen.securite.jp/
**Significant Lesson 1**

- The best way to manage disaster hazards is with a community based and pro-poor approach using local knowledge.
- Lessons from Japan can be relevant in how to mobilize communities in local decision making at various stages of disaster risk reduction planning.
Significant Lesson 2

- Constant and sustainable information sharing of risk communication and crisis management is vital to strengthen people’s awareness, preparedness, and cooperation not only for national government but also for prefectural and local government as well as local communities.
Significant Lesson 3

- Long-term partnerships, twinning, and coupling/pairing between local governments, NGOs, schools, expertise, and business sectors are a useful tool to respond in the case of disaster; nonetheless, how to coordinate them varies. It is necessary for each area, country, and region to consider coordination mechanism in advance.
Significant Lesson 4

- In Asia, where is vulnerable to natural disaster, establishing disaster fund is in need and it should consider the distribution to the people and businesses.
- Quasi-investment scheme is helpful to provide financial aid for designated people and businesses; nonetheless, target of investment is limited.
And more...

- Although disaster risk reduction and adaptation to climate change are usually discussed in isolation, they are intertwined.
- Policy frameworks and financial schemes of relief aid need to be revised in view of increasing climate-related disasters.
Thank you for your attention.