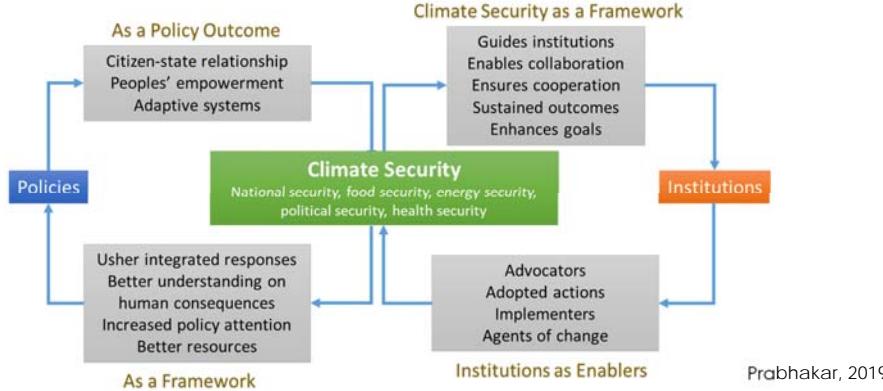


Maximizing the Climate Security Benefits of External Emergency Assistance

S.V.R.K. PRABHAKAR, K. TAMURA, AND M. IKEDA

INSTITUTE FOR GLOBAL ENVIRONMENTAL STRATEGIES, HAYAMA, JAPAN

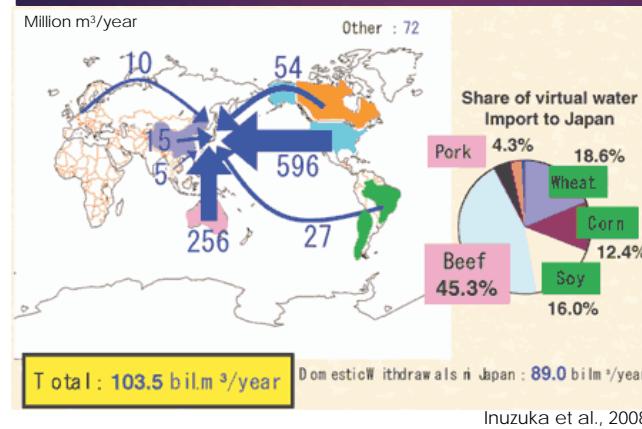
Climate Security is Both a Decision Framework and an Outcome



Climate Security

- ▶ **Security** refers to the political, institutional and social environment where individuals, societies and countries have freedom to decide their current and future wellbeing.
- ▶ **Climate security** refers to the threats posed by the climate change to the security of individual human beings, societies and countries.
- ▶ Climate security is an important issue for both the developed and developing countries.

Climate Security is Pervasive: Japan

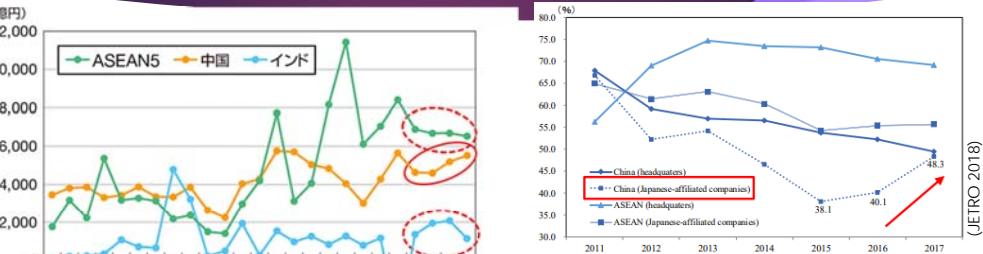
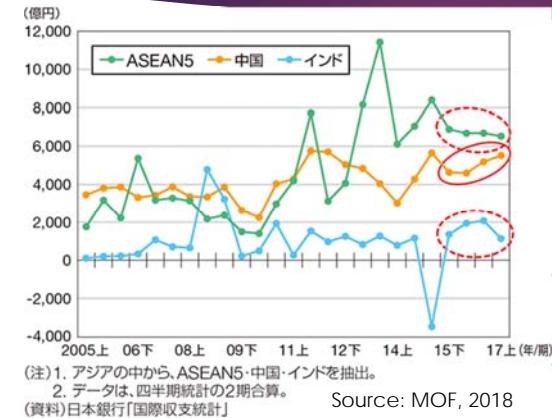


- ▶ Japan's climate security concerns originate both from within and across its borders.
- ▶ **Food and water:** Japan imports more freshwater than the water withdrawn within its borders.
- ▶ Japan saves nearly 20 km³ of water by importing food.
- ▶ Climate change impacts on countries from where Japan imports food means food and water insecurity for Japan.

Impact of Bangkok floods (2011) on Japan

- ▶ A total estimated loss of 47 billion USD 90% of the losses were accrued to Japanese companies and related investments.
- ▶ More than 550 Japanese affiliate firms were affected by these floods, production facilities such as buildings and machinery were severely affected.
- ▶ As these firms provide supplies to other factories in Malaysia, Vietnam and Indonesia and other parts of the world, the production of these factories were also affected due to the shock to the supply chains.
- ▶ The loss borne by the Japanese insurance companies stood at about 1.8 billion USD.
- ▶ The impact on the industrial production of the world was estimated to be 2.5% (Haraguchi & Lall, 2015).

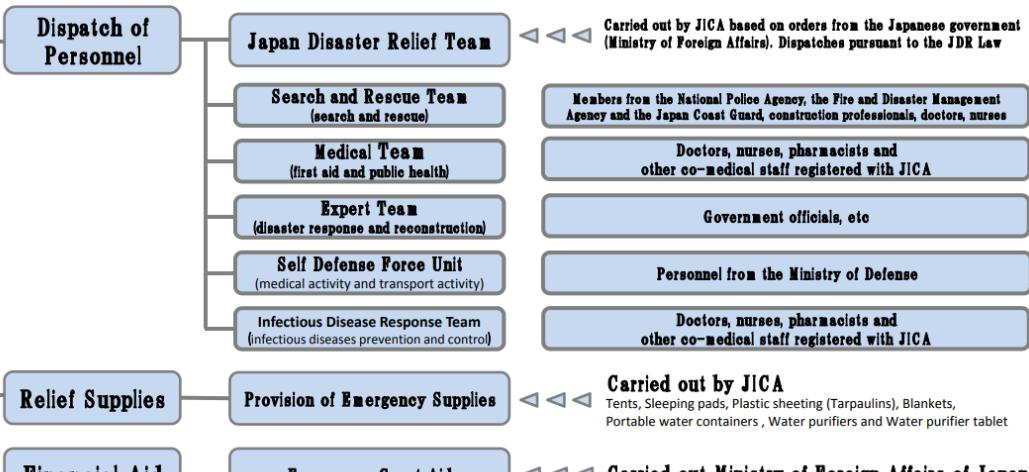
Japan's FDIs have been increasing in the ASEAN Region and will increase in the future



Japan's FDI outflows to Asian countries have been increasing in the past decade. FDI have increased especially in Thailand after a brief decline aftermath 2011 floods

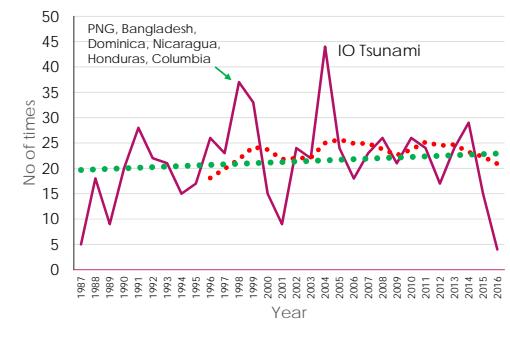
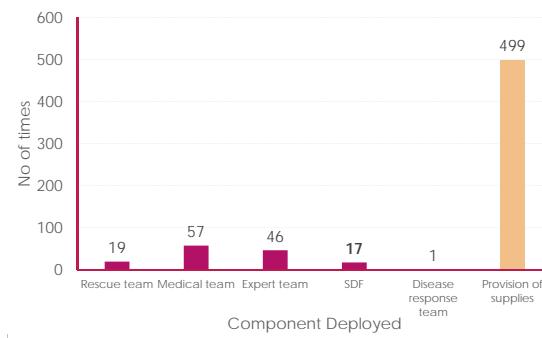
There are projections for more Japanese companies to increase investments in ASEAN and China (JETRO 2018)

Japan is an Important Emergency Relief Provider

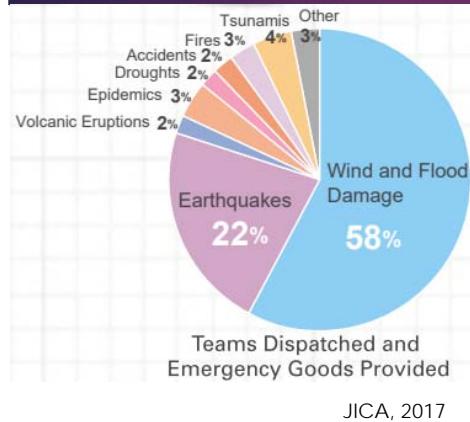


JICA, 2016

Japan's Disaster Relief Team & Relief Material Deployment



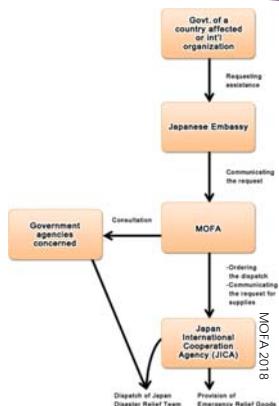
Japan's External Emergency Relief Burden Can Grow in the Future



- ▶ Overall losses due to extratropical cyclones will increase, with possible decreases or no change in some areas (medium confidence)
- ▶ Likely increase in average tropical cyclone maximum wind speed
- ▶ Future flood losses in many locations will increase (high agreement)

IPCC SREX 2012, IPCC 2015

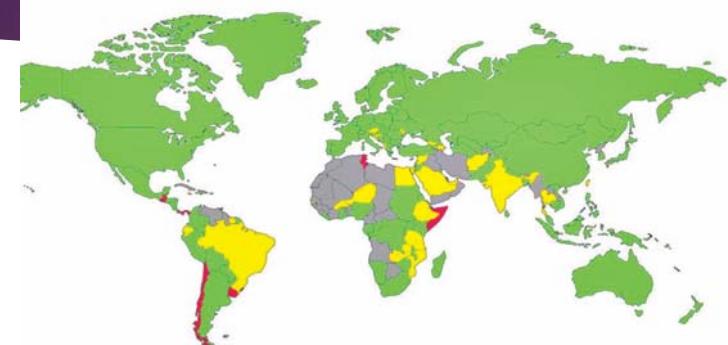
Institutional Costs of External Emergency Assistance



- ▶ In addition to the direct costs of deploying the relief assistance, several arms of the Government of Japan are involved from the time the external emergency assistance request is received to the time the assistance is deployed.
- ▶ These costs are often not accounted into the cost of EEA deployment which could be significant.
- ▶ These costs are accrued both on the recipient side and on the donor side.

How Climate Change Threatens National Security?

- ▶ More than 70% of countries' militaries have humanitarian assistance and relief as a critical mission.



Green – Climate is a national security threat
Yellow – Climate is an environmental issue
Red – Climate is not a defined concern
Grey – No information available

Important Considerations for Japan to Ensure Climate Security Outcomes of EEA

- ▶ Increased efficiency of deployment of emergency assistance
 - ▶ Quick assistance
 - ▶ Appropriate assistance
 - ▶ Strategic assistance
- ▶ Increased overall benefits from external emergency assistance
 - ▶ Prioritize assistance to countries and locations where Japan's strategic interests rest (countries with significant Japan's FDI?) = **Not Humanitarian!**
 - ▶ Connect short-term EEA engagements with long-term risk reduction investments in affected countries? **Currently there is no evidence**

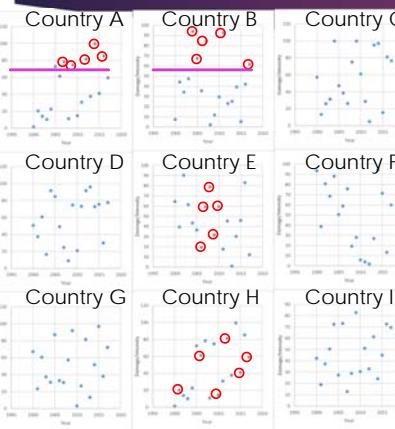
Critical Thresholds Concept

► **What it is?** Critical thresholds refers to the lowest level of hazard (either by intensity/duration/magnitude), or level of local capacities or a combination of both that result in a call for external assistance by a country.

► What it can help achieve?

- Help better understand the nature of impending assistance needs
- Help deliver appropriate assistance (amount, kind, duration etc.)
- Better understand the assistance preparedness needed
- Design assistance keeping in view the immediate and long-term needs for maximizing the climate security

Identifying the Critical Threshold of Assistance for Vulnerable Countries



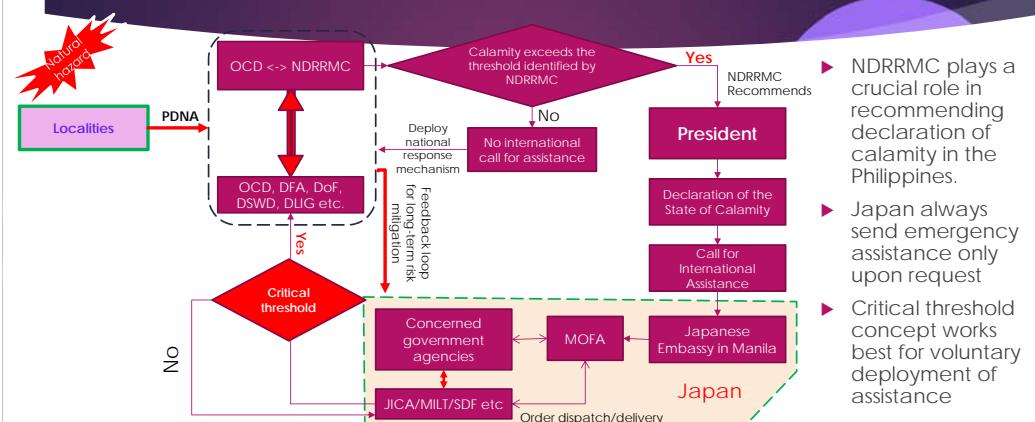
- Country assistance requirement = $f(\text{damage threshold, current year GDP, disaster preparedness, ...})$
- Some countries will have a reliable damage threshold-assistance relationships (e.g. Country A and B), where the concept of critical thresholds for Assistance work well.
- Countries where such function is not clear (e.g. Country E and H), due to varied capacities within the country, critical threshold should be further specialized to take into country circumstances.
- The research need to identify such circumstances for reliable estimation of assistance thresholds for these countries that also works for all other countries. One approach is to have a high resolution of the threshold i.e. to have sub-regional thresholds for these functions to work well.

Connect Short-term EEA Engagements with Long-term Risk Reduction



- R&R is constituted of short period of time where large sums of resources will be spent.
- Much of these expenditures may not lead to long-term risk mitigation benefits.
- Linking experiences and lessons from engagements related to EEA and ploughing back into other phases of DRR spiral could enhance the value of resources employed during the emergency phase.

The Operational Framework of the External Emergency Assistance between Japan & the Philippines



- NDRRMC plays a crucial role in recommending declaration of calamity in the Philippines.
- Japan always send emergency assistance only upon request
- Critical threshold concept works best for voluntary deployment of assistance

Structure of Discussion Session

- ▶ Round 1: Experiences with the external emergency assistance (EEA)
- ▶ Round 2: Long-term benefits of external emergency assistance
- ▶ Round 3: Future EEA needs
- ▶ Round 4: Pre-empting the EEA needs and deployment
- ▶ Round 5: Critical threshold-based decision support system (DSS), for pre-empting the EEA