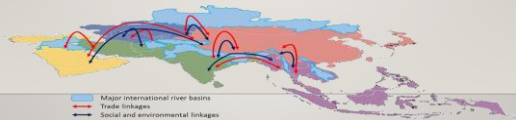
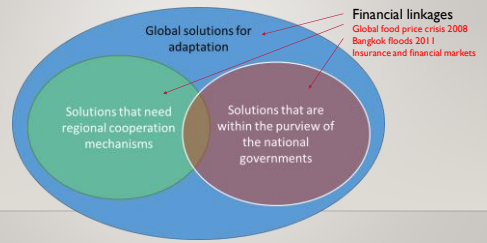


REGIONAL ADAPTATION PLANNING FOR ADDRESSING TRANSBOUNDARY CLIMATE RISKS

S.V.R.K. PRABHAKAR, IGES, JAPAN



WHY REGIONAL AND GLOBAL COOPERATION FOR NATIONAL ADAPTATION PLANNING?



GROWING INTERNATIONAL INVESTMENTS IN THE VULNERABLE REGIONS OF THE WORLD

Country	WRI (Rank)	CRI (Rank)	New-life insurance claims (million USD)	Business claims (million USD)	Economic damage (000 USD)	FDI inflows (billion USD)
Australia	4.24 (121)	42.17 (31)	22090.4	2031.9	635	47.7
Bangladesh	19.57 (5)	27 (13)	85.1	n/a	750	2.3
Canada	16.92 (8)	95.17 (11)	8.1	n/a	676	2.5
China	6.81 (80)	23.83 (12)	73942.3	41199.8	44918	134
India	7 (75)	18.33 (6)	7799.2	1889.9	2574	44.5
Indonesia	10.49 (33)	46.17 (37)	2369.5	417.8	233	3.9
Japan	13.47 (17)	57.5 (44)	45716.9	3053.0	20200	11.4
Lat PDR	5.69 (100)	109.5 (120)	n/a	n/a	0.05	1
Malaysia	6.47 (89)	65.5 (77)	3461.1	145.4	132	11.3
Nepal	5.06 (42)	57.17 (3)	n/a	n/a	17	3
New Zealand	4.42 (119)	78.17 (94)	1372.1	4200.0	3925	1.9
Pakistan	7.11 (73)	50.83 (40)	33.9	31.9	2000	2.5
South Korea	4.80 (115)	60.83 (60)	59556.0	48555.5	274	12
Sri Lanka	7.52 (63)	11.5 (4)	277.2	122.9	1220	0.9
Thailand	6.35 (91)	37.5 (25)	3709.2	1270	145	2
The Philippines	27.49 (3)	31.33 (14)	821.9	690.6	185	4.9
Vietnam	12.84 (18)	15.33 (5)	878.0	50.6	846	12.6

Prabhakar, 2019

FDI in Asia more than doubled from 1990, stood at 460 b USD in 2016. Top 20 countries of WRI and CRI have attracted an FDI of 243 and 203 billion USD resp. in 2016. The disaster losses in these countries were 1.8 and 51 billion USD resp. in 2016.

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).

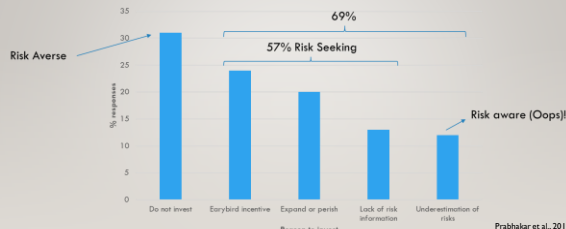
IMPLICATIONS OF RISK INSURANCE IN RISK SPREADING BEYOND BORDERS

3

- Risk insurance has been advocated as an important measure for DRR and CCA.
- In most of the cases, governments are the insurers of the last resort.
- However, in significant number of cases, as in catastrophic loss events, the risk gets transferred to international financial markets.
 - Portfolio management operations of insurance companies that invest in financial markets (through securitization, retrocession, investment banking, credit default swaps etc)
- This is a concern given that significant proportion of investments are made by insurance companies in financial markets and fluctuation in stock market prices of financial institutions as a result of catastrophic events and other shocks have serious implication for the financial viability of insurance companies and wider markets in question.

RISK ASSESSMENT AND COMMUNICATION IS THE KEY

4



Majority of foreign investing entities do not have deeper understanding of local risks!

REMAINING CHALLENGES FOR ACHIEVING A HOLISTIC ADAPTATION

7

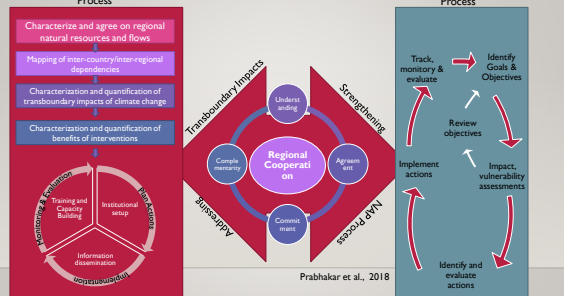
- Limited **recognition** for adaptation as a regional issue/**global good**
- Limited cooperation and institutional structures for sharing **risk information** among countries and actors (exception: ASEAN and MRC)
- Highly **fragmented risk assessments not recognizing links with other sectors** leading to limited understanding of risks and inefficient risk communication. There is a need for comprehensive and integrated risk assessments.
- **Geopolitical situation** and the '**sensitivity**' attached to sharing risk information hindering regional cooperation in certain parts of Asia

Hope that the panel discussion sheds some light on some of these limitations

Regional Adaptation Plan Process

National Adaptation Plan Process

5



6

HOW A COOPERATION FOR REGIONAL ADAPTATION PLANNING CAN HELP?

- **Strengthen research for assessing climate change risks** of a country accrued from climatic events from outside its border.
- **Facilitate sharing risk information among all the countries** on regional basis or on thematic basis (e.g. trade risks, health risks, financial market risks, food price fluctuations)
- **Establish a coordination mechanism** for planning and implementing a regional adaptation solutions.



IIGES Discussion Paper
TRANSBOUNDARY IMPACTS OF CLIMATE CHANGE IN ASIA: MAKING A CASE FOR REGIONAL ADAPTATION PLANNING AND COOPERATION

THANK YOU!

Transboundary Impacts of Climate Change in Asia: Making a Case for Regional Adaptation Planning and Cooperation



<https://pub.iges.or.jp/pub/transboundary-impacts-climate-change-asia>
 Email: prabhakar@iges.or.jp