<table>
<thead>
<tr>
<th>Thailand I What have we learned from disasters so far?</th>
</tr>
</thead>
</table>

### 2004 Indian Ocean earthquake and tsunami

- The importance of building strong institutional coordination and adequate financing mechanisms
- Putting resources into hazard mitigation and emergency preparedness is perhaps the best investment a country can make.
- The need to put communities at the center of the reconstruction process.

- Inadequate research and development in earthquake and tsunami sciences in Thailand
- A lack of proper maintenance of the critical facilities for the earthquake and tsunami mitigation
- It is very difficult to maintain the level of the awareness of the people about the great danger of the earthquake and tsunami

### 2011 Thailand Mega floods

- The urgent need for institutional reforms. Neither the government nor public could say which institution was ultimately responsible. Various authorities had different views on flood management and took contradictory positions. Contradictory statements came from different institutions, which confused the public. There must be a consistent and realistic strategy for the Thai authorities to manage floods effectively and promptly.
- Real-life problems cannot always be simulated on computer. Simulating models and publishing research papers that have little relevance indicates a failure from a societal and scientific perspective.
- We need to continuously learn from mistakes and prepare for a better future. The fact that Thailand had been able to ward off previous disasters was primarily due to good fortune. The country may not be so fortunate next time.

### 2014 Mae Lao earthquake

- Our weakness is we fail to share our experiences of facing disaster in their aftermath, community memory and historical accounts of earthquakes can provide useful information to supplement scientific studies.
- The local building regulations is needed which provide for local-friendly earthquake protection and engaging the local engineering community to gaining local knowledge of risk reduction with measures design for long-term investment.
- We need to provide backup for critical facilities should remain functional after an earthquake. A clear emergency management plan should be drafted and practiced to prepare in locally for crisis mitigation or even mass evacuation
- The need to allocate authorities and responsibilities for undertaking local level DRR action, capacity development necessarily follows as local empowerment promotes DRR action.
PM2.5 Air pollution crisis

- Need of reliable, accessible and real-time information helps create momentum for reform
- Failure to provide such incentives resulted in the government developing plans but not implementing them.
- An integrated approach with effective institutions working across sectors and jurisdictions is critical. Air pollution knows no boundaries and requires an airshed-based management perspective. This in turn demands an approach that cuts across jurisdictions and authorities.

the COVID-19 Pandemic in Thailand

- Faster detection and better responses require a robust national health surveillance and an improved national wide pandemic information gathering system.
- Clearer and more coordinated scientific advice would facilitate policy decisions and public communication.
- The capacity to cope in a pandemic depends on continuous and increased investment in health systems. We should be supported to strengthen the overall resilience of health care systems as part of their recovery and resilience investments.
- A more coordinated and sophisticated approach to tackling misinformation and disinformation should be developed.

Containment strategies in Thailand for COVID-19

- Faster detection and better responses require a robust national health surveillance and an improved national wide pandemic information gathering system.
- Clearer and more coordinated scientific advice would facilitate policy decisions and public communication.

Stage 1: Imported Cases
(January – late-January 2020)
Stage 2: Limited Local Transmission
(late-January - late-March 2020)
Stage 3: Widespread Clustered Cases
(Mid-March - April 2020)
Stage X: Practically uncontrollable
(late April 2021 - present)
2021 Bangkok chemical plant explosion

• many emerging economies have experienced rapid growth in hazardous operations from expansion of particular segments of oil and gas, chemical and petrochemical and mining industries, driven by a combination of factors including increased demand in emerging economies, access to raw materials and the need to lower production costs, facilitated by a decline in trade barriers and government incentives to attract foreign investors.

• Complex nature of industrial accident risk and risk management processes
  ○ The likelihood of an incident occurring depends significantly on how well the risks are managed (the safety management system) and by decisions of the organization(s) that affect the functional effectiveness of the safety management system

• Strengthening land-use planning policies
  ○ Land-use planning is central to reducing industrial risk. Decisions on the siting of industrial facilities and the planning of surrounding land use are critical in protecting and minimizing the effects of accidents on the surrounding populations, environment and property

• Convention on the Transboundary Effects of Industrial Accidents
  ○ a multilateral legal instrument that supports countries in establishing and enhancing governance, policymaking and transboundary cooperation on industrial accident prevention, preparedness and response.
Thailand Disaster & Emergency Management

TAVIDA KAMOLVEJ, PHD
DEPUTY GOVERNOR
BANGKOK, THAILAND

July 2021