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“Enhancement of urban disaster resilience through activities of local participatory platform” in Kathmandu and Yangon

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Background and Objective

Background

- Hundreds of thousands of people are frequently killed by catastrophic natural disasters.
- Urban disaster risk is on the rise due to rapid urban growth.

Enhancement of urban resilience against natural disasters is one of the urgent and important global issues.

Objectives

To enhance resilience of cities against natural disasters through capacity buildings of the stakeholders in cities,

(1) Pilot projects will be conducted in Kathmandu, Nepal and Yangon, Myanmar.

(2) A universal model will be developed at a multi-disciplinary approach.

Goals

- To contribute to 2030 Agenda for Sustainable Development agenda
- To attain effective and robust science-policy interfaces at local level
- To contribute to Sendai Framework for Disaster Risk Reduction 2015-2030, adopted by 2015 UN World Conference on Disaster Risk Reduction (WCDRR)

Participating organizations

- Kyoto University
  - Graduate School of Global Environmental Studies (GSGES)
  - Disaster Prevention Research Institute (DPRI)
- Global Earthquake Model Foundation (GEM, an international NPO)

- Kathmandu and Yangon
  - Municipality(s): will manage the platform in which local stakeholders participate
  - University: will provide technical advice to the platform and conduct some joint researches
  - NGO: will provide technical advice to the platform and conduct some community-based projects.

Participating organizations in the pilot cities

Kathmandu

- Municipalities of Lalitpur and/or Karyabinayak
- Centre for Disaster Studies (CDS), Institute of Engineering (IOE), Tribhuvan University
- National Society for Earthquake Technology-Nepal (NSET)

Yangon

- Yangon City Development Committee (YCDC)
- Faculty of Engineering, Yangon Technological University (YTU)
- Myanmar Engineering Society (MES)

Activities

- Pilot project
- The two cities will establish a local platform, in which local stakeholders for disaster reduction will participate.
- The participating stakeholders work together to assess the disaster risk of the city, estimate probable damages, and develop action plans.
- The counterpart universities or NGOs and the Japanese researchers will conduct some joint researches.
- Particularly in Kathmandu, the pilot project will try to contribute to "Build Back Better" after 2015 Gorkha Earthquake.

- Development of the model

  The model will describe how to conduct similar projects to enhance the resilience against various natural disasters

The project will be conducted from August 2015 to March 2018 for 2 years 7 months. The total cost of the project will be US$ 250,000.

Participating experts

Japanese researchers

- GSGES, KU
  - Kenji Okazaki : Project Leader
  - Junji Kiyono, Aiko Furukawa: Seismic risk assessment
  - Rajib Shaw, Koichi Shiwaku: Disaster education and action plan
  - Hirohide Kobayashi, Chiho Ochiai: Risk perception and safety of reconstructed houses
  - Makoto Usami: Social fairness of policies and action plans
- DPRI, KU
  - Masahiro Kurata, Kazuyoshi Nishijima: Practical seismic diagnosis methods reflecting variation in building quality

International expert

- GEM
  - Carlos Villacis (Dr), Regional Project Manager: Risk management

Technical and financial assistance to the pilot cities

- The two cities receive technical support from Japanese experts
- The two cities receive financial assistance to cover part of actual expenses as a kind of seed money.

  US$20,000 (Kathmandu) + US$20,000 (Yangon) = US$40,000
- Particularly for risk assessment and damage estimate of earthquakes and capacity development, GEM will assist the two cities.

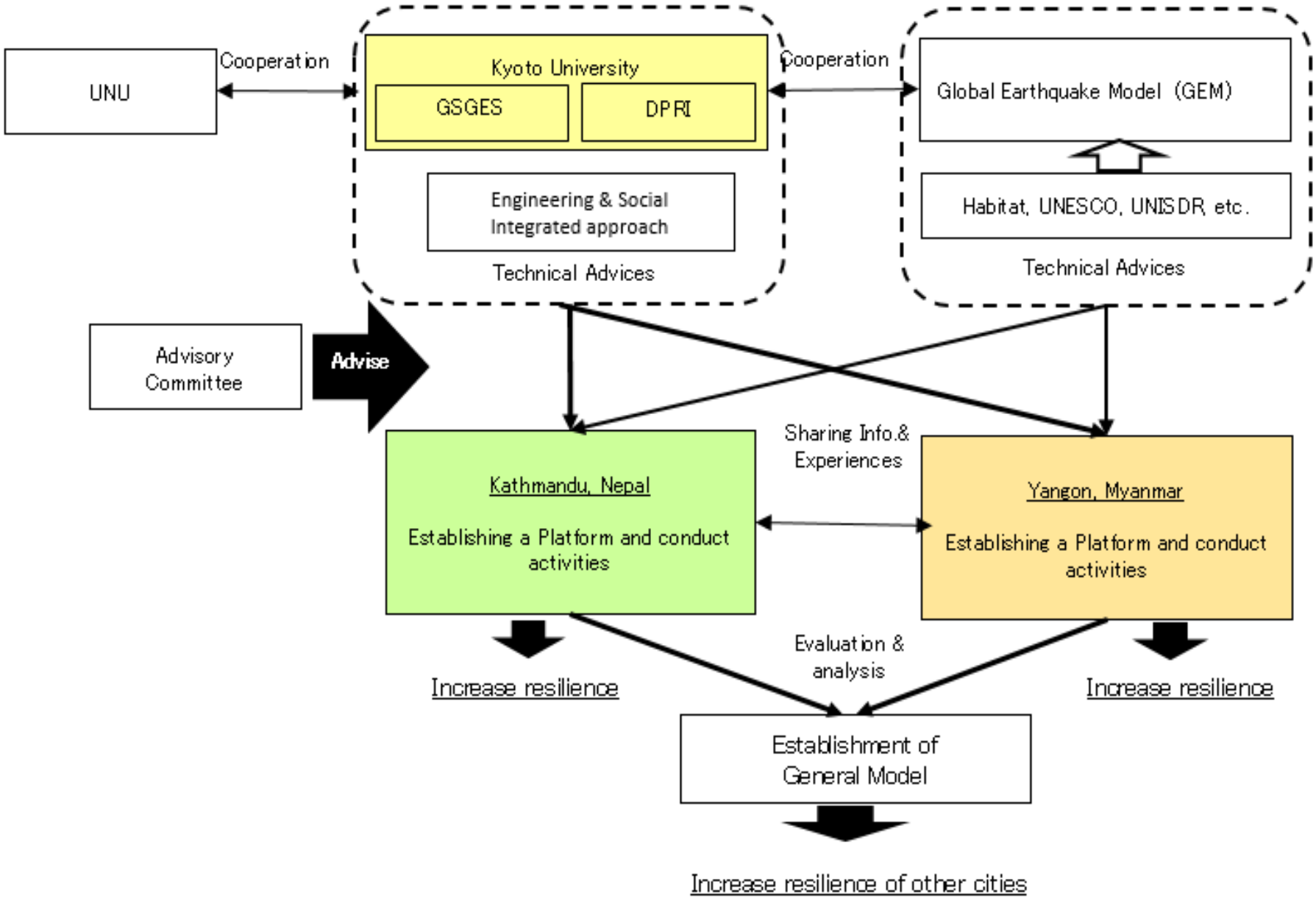
  International experts from GEM and supporting international organizations such UN/Habitat and UNESCO will provide technical assistance.
- Some experts of the two cities are invited to international trainings and conferences to learn and exchange information.
  - GEM training workshops (October and February)
  - 3 Experts of Yangon ➡ Kick-off conference in Kathmandu (2015)
  - 3 Experts in Kathmandu ➡ Closing conference in Yangon (2018)

Global Earthquake Model Foundation (GEM)

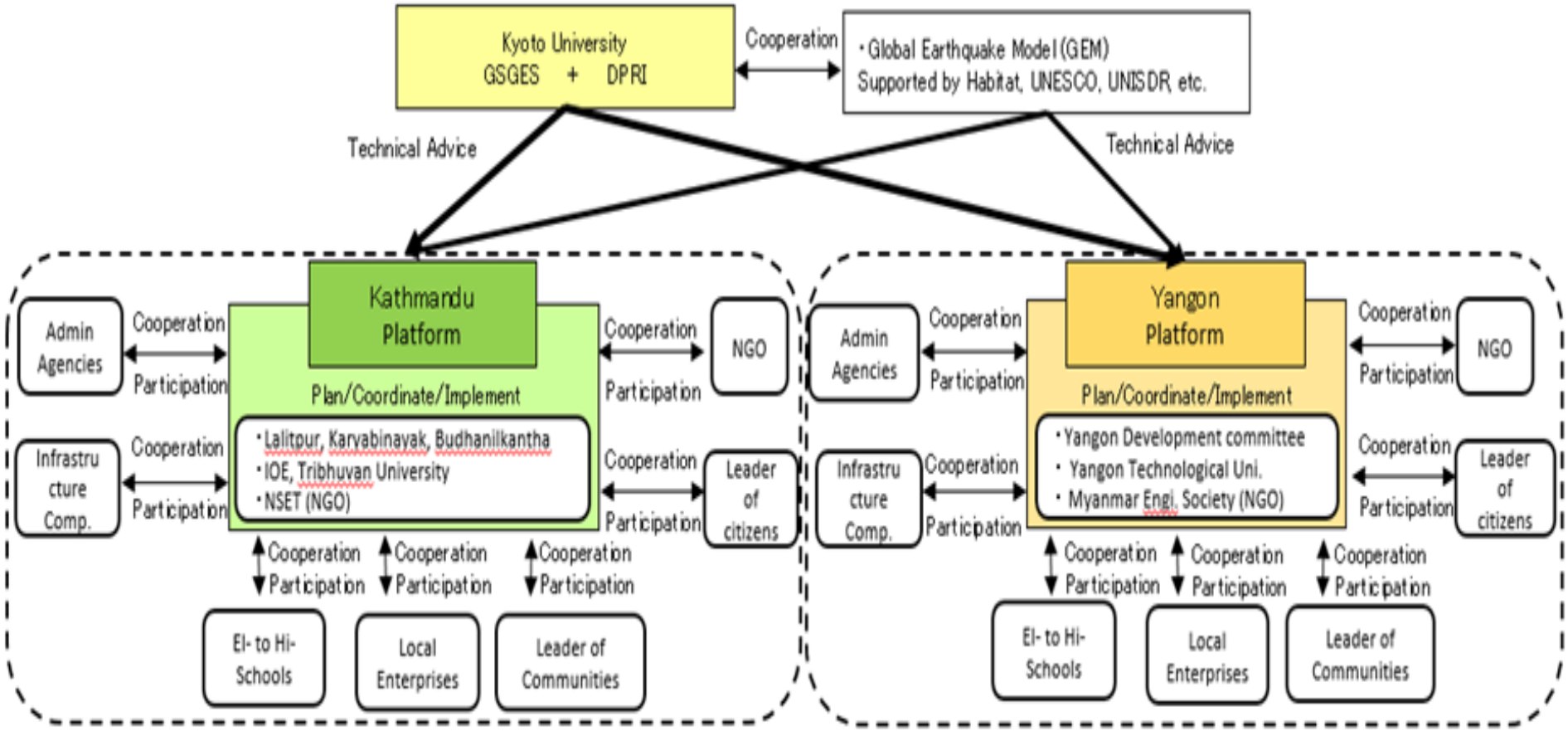
- The GEM Foundation is a public-private partnership that drives a global collaborative effort to develop high-quality resources for assessment of earthquake risk and to facilitate their application for risk management

- It provides:
  - models of earthquakes and their consequences
  - tools and data to advance the science of seismic risk assessment
  - International projects with leading experts
  - Regional collaboration with local experts
  - Open Source software development

Participating organizations and project plan/structure



Platform and participating stakeholders



Schedule of the project

Planned Activities	2015 FY (Aug. 2015 - Mar. 2016)	2016 FY (Apr. 2016 - Mar. 2017)	2017 FY (Apr. 2017 - Mar. 2018)
1. Conducting Pilot Project in each city			
(1) Establish a local platform	★ Each city Kick off meeting		
(2) Conduct risk assessment and damage estimate of earthquakes (Using GEM)			
(3) Make disaster reduction policies and action plan			
(4) Conduct disaster education, preparedness project			
2. Establishing a general model for increasing urban disaster resilience			
(1) Extracting general method for establishment of the general model			
(2) Standardization of study results from each sector			
(3) Establishment of the general model			
3. Information/data sharing and networking	★ Kick off international meeting		★ International conference

Thanks for your attention!

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