Outline of Collaborative R&D Project for Disaster Mitigation on Network of Research Institutes

Thematic International Workshop 2007 on Feasible and Affordable Seismic Constructions

July 18, 2007
World Bank Tokyo Development Learning Center, Tokyo, Japan

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Off Chuetsu Earthquake in Niigata on July 16, 2007

- Sincere condolences and sympathy to people and communities affected by the earthquake

- Bulletin information (as of 4pm, July 17)
  Date and time: 10:13 July 16, 2007
  Epicenter: off Joetsu district in Niigata prefecture, at the depth of 17km
  Magnitude (Mj): 6.8
  Max. Intensity (JMA): 6- (around MM 10)
  Max. Acc. Recorded (K-NET NIG018 N-S): 667.9cm/s/s
  Fatalities: 9
  Missing: 1
  Severely injured: 57
  Slightly injured: 1,036
  Heavily damaged houses: 342
  Damaged houses: 630

- We re-recognize that mitigation of earthquake disasters is a keen issue common in earthquake prone areas including Japan and we are eager to learn from collaboration with participating institutes
Background of R&D

- Earthquakes cause serious damages to human societies
Serious Damages to houses

- Developing countries are more vulnerable because they cannot afford to be prepared.
- Conventional housing should be focused because it is the main cause of human losses and needs more to be done to be safer.
New R&D in 2006 - 2008

<Collaborative R&D Project for Disaster Mitigation on Network of Research Institutes in Asia>

- Term of R&D
  three years
  (2006-2008)

- Funds
  - The Asia S&T Strategic Cooperation Promotion Program prepare by MEXT
  - BRI budget
Research Topics of Collaborative R&D Project for Disaster Mitigation on Network of Research Institutes in Asia

- R&D focuses on realization of mitigation of disasters
- To concentrate conventional houses which is the main cause of human losses
- To prepare complete proposal of strategies without “missing ring”
- Propose three major topics
  - Feasible and Affordable Seismic Constructions
  - Strategies for Dissemination of Technologies to Communities
  - Risk Management System
Basic scheme of R&D

- Platform for collaboration among participating institutes
  - mutual visits
  - events for sharing information and discussion
  - communication by IT tools like video conference system, internet

- R&D components for collaborative work
  - proposals by any people/institutes
  - elaboration of work plan
  - implementation with contribution of all the participating countries
  - achievements should be shared through the Platform and other channels
Kick off events for launch of the New R&D Project

- **Plenary Meeting** on Nov. 22
- **Group Discussion** on Nov. 23 on five countries (Indonesia, Nepal, Pakistan, Turkey and Peru)
- connecting **nine sub venues in five countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Sub Venuess</th>
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<tr>
<td>Japan</td>
<td>Tsukuba</td>
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<tr>
<td>Indonesia</td>
<td>Jakarta, Bandung, Banda Aceh</td>
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<td>Nepal</td>
<td>Kathmaudu</td>
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<td>Pakistan</td>
<td>Islamabad</td>
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<td>Turkey</td>
<td>Istanbul, Ankara</td>
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Platform of R&D activities

Relevant events (KTT Session 2006) to Workshop

- Kobe, Tokyo and Tsukuba Session 2006 for Safer Housing (KTT Session 2006)
  - Thematic workshop on “Aseismic Building Technology Acceptable to Communities”
  - Series of events of special lectures, briefings and discussions
  - Technical visits
  - Thematic discussion on each research topic
  - Duration of fourteen days (Nov. 15 to Nov. 28)
Platform of R&D activities

International Workshop on Seismic Isolation

- Activities for R&D Component 2-3
  “Development of Simple and Affordable Seismic Isolation”
- February 8, 2007
- World Bank Tokyo Development Learning Center (TDLC)
  - connecting six sub venues in four countries
    - Indonesia – Jakarta, Bandung
    - Nepal – Kathmandu
    - Pakistan – Islamabad
    - Turkey – Istanbul, Ankara
- Web Streaming Services
- for internet access
Seven components (R&D Activities Programs)

- **Topic 1 Risk Management System**
  - Component 1-1
    - Contrivance for Seismic Risk Recognition by Communities
  - Component 1-2
    - Compilation of Available Information/Data on Seismic Risks

- **Topic 2 Feasible and Affordable Seismic Constructions**
  - Component 2-1
    - Study on Feasible and Affordable Seismic Constructions through Full Scale Shaking Table Experiments
  - Component 2-2
    - Bridge between Engineering and Construction Works
  - Component 2-3
    - Development of Simple and Affordable Seismic Isolation

- **Topic 3 Strategies for Dissemination of Technologies to Communities**
  - Component 3-1
    - Comprehensive Study on Strategies for Dissemination of Technologies to Communities
  - Component 3-2
    - Compilation of Manuals/Guidelines/Leaflets for Safer Housing
Thematic International Workshop 2007 on Feasible and Affordable Seismic Constructions on July 18, 2007 at World Bank Tokyo Development Learning Center (TDLC)

• Discussion on three R&D components under Topic 2 “Feasible and Affordable Seismic Constructions”
  <Session 1>
  Component 2-1
  **Study on Feasible and Affordable Seismic Constructions through Full Scale Shaking Table Experiments**
  <Session 2>
  Component 2-2
  **Bridge between Engineering and Construction Works**
  Component 2-3
  **Development of Simple and Affordable Seismic Isolation**

• Video Conference connecting seven sub venues in five countries
• Web streaming services for internet access
Activities of Platform for R&D in FY2007

• Major activities in FY2007
  - Full scale shaking table experiment for Component 2-1
    December 2007 at NIED in Tsukuba
  - Shaking table experiment for seismic isolation
    for Component 2-3
    February 2008 at BRI in Tsukuba
• Plenary Workshop for all the three topics
  January 24, 2008 on VC system connecting five countries
• Group Discussion on Indonesia, Nepal, Pakistan, Turkey and Peru
  Coordinator for each country is to arrange the agenda and date
  on VC system connecting CP country and Japan
• Thematic Workshop on “Risk Management System” and
  “Strategies for Dissemination of Technologies”
  Coordinator for each Topic is to arrange the agenda and date
  on VC system connecting five countries
Announcement

- All the coordinators of Components welcome comments/proposals for activities programs and active participation for R&D activities

- All the coordinators of CP countries and Research Topics also welcome proposal of the agenda and date for Group Discussions and Thematic Workshops on VC system
BRI and the partners expect active participation and contribution of researchers, engineers and people in practice in the world for safer built environment.

Thank you.