Joint Lunching Program on “An Integrated Approach to Enhance Urban Resilience in Bangladesh”

Outcome of CNCRP and Future Approach for Urban Resilience

Venue: BICC
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CNCRP Project
Overview

In SOD 2010, PWD have been entrusted following works in addition to its normal duties for risk reduction:

- Ensure proper execution of BNBC
- Inclusion of disaster risk in the policies, programs and guidelines of all the development work of PWD.
- Preparation of manual for seismic capacity evaluation and earthquake resistant design
CNCRP and its Purpose

- Preparation and periodically updating list of vulnerable structure
- Dissemination of technical information related to earthquake and tsunami to engineers
- Support the retrofitting works
CNCRP and its Purpose

‘CNCRP’ is a JICA Technical Cooperation Programme in association with Public Works Department (PWD) of the Ministry of Housing and Public Works, the People’s Republic of Bangladesh –

    to develop the capacity of PWD for the construction and retrofitting works of the public buildings against natural disasters, such as earthquake, cyclone, flood and high tide.
Inventory includes Book Buildings of PWD for Dhaka and Sylhet City
Introduction to Retrofitting Methods by Test Works

- RC Column Jacketing
- Carbon Fiber Wrapping
- RC Shear Wall
Introduction to Retrofitting Methods by Test Works

Steel Frame Bracing

RC Beam Jacketing

RC Column Jacketing through beam-col joint
Arrangement of Structural Test
BUET and DUET was associated in this program as part of knowledge dissemination.

Total 13 specimen was tested to understand seismic behaviour of local building.
Training and Knowledge Dissemination
Manuals Prepared in CNCRP Project
Awareness Development Program

• Web site of CNCRP in PWD
• School Disaster Management program
  – 3 schools (~ 1000 students and guardians)
• Colony Residents CBDM Program with FSCD
  – 3 colonies (Evacuation, Fire Safety & First Aid)
• Advertisement in the electronic media
Retrofitting of Public Buildings

53 years old
Tejgaon Fire Station

Before Retrofitting

After Retrofitting
Detailed Structural Assessment of RMG Factories

- Column stripping
- Core cutting
- Core sample with Carbonation test
- Foundation excavation
Structural and Fire Safety Works in RMG Factories
Future Work of BSPP

1. Dissemination of knowledge through training, seminar, workshop etc.
2. Update the present manuals through rigorous study of local buildings.
3. Preparation of manual for architect to introduce the aspect of seismic resilient buildings.
4. Preparation of manual/checklist to enhance fire safety of buildings.
5. Address sub-soil and land sliding issues.
Immediate Need

Must Stop Creating New Vulnerable Structure
- Enforcement of BNBC is urgent
- Training on new building design
- Licensing system to Engineer, ........, ..... 

Preparation of Roadmap for Existing Building
- Assessment of existing building based on some standard
- Contingency plan is needed

Retrofitting of Existing Vulnerable Building
- Training on retrofitting techniques
- Provide incentive for remediation work
Thank you