

A Snapshot View of Building Code Enforcement and Dissemination

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UNCRD project on housing safety

Housing Earthquake Safety Initiative

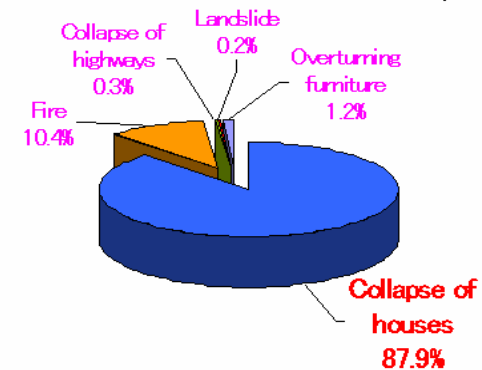
Anti-Seismic Building Code Dissemination (ABCD) in 2007

- Target country:
Algeria, Indonesia, Nepal & Peru
- Duration:
2007 – 2009
- Funding source:
Ministry of Land, Infrastructure and
Transport, Japan

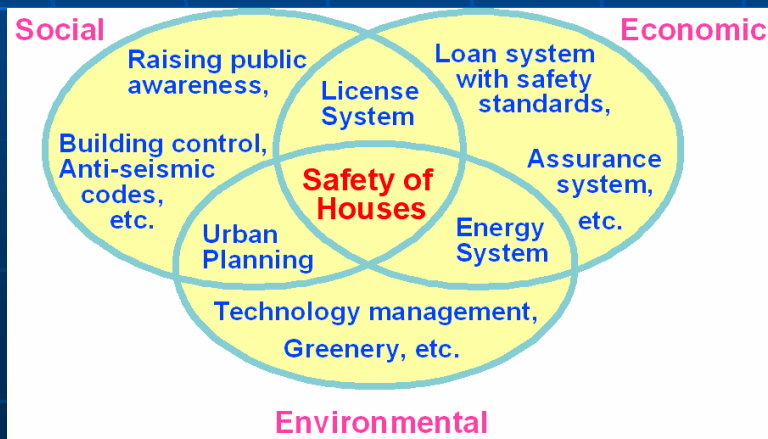
Why Building Code?

1. Close to 90% of victims of the Kobe Earthquake in 1995 lost their lives due to collapse of houses.

Causes of deaths in the Great Hanshin-Awaji Earthquake (1995)



2. Building code is one of the most effective and efficient policy tools for housing safety.



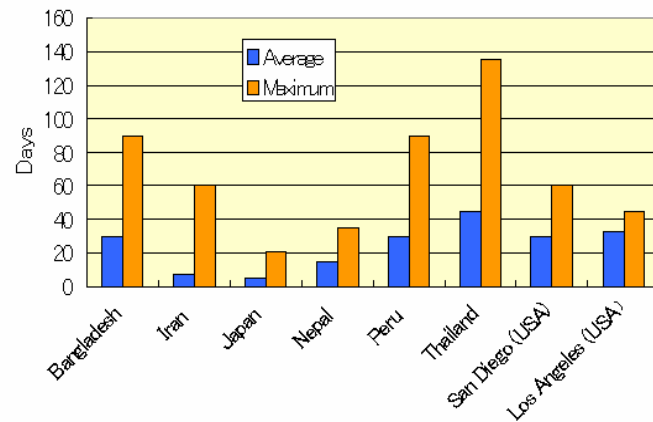
Evaluation criteria	Effectiveness for safety	Economic efficiency	Administrative feasibility	Total Policy Evaluation
Code	High	High	High	Best
Subsidy	High	Low	Middle	Middle
Rating	Middle	High	Middle	Middle
Manual	Middle	High	High	Better
R&D Fund	High/Low	Low	High	Middle

HESI Questionnaire

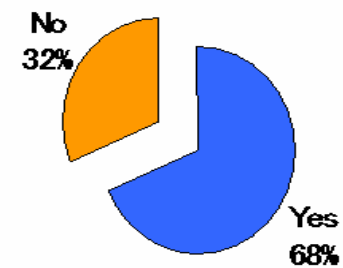
- Questionnaire period:
October – December 2006
- No. of replies:
20 (11 under national jurisdiction, 9 local governments)
- Respondent countries
Algeria, Bangladesh, Djibouti, Gaza, Indonesia, Iran, Japan, Nepal, Peru, Romania, Thailand & USA

Selected Facts

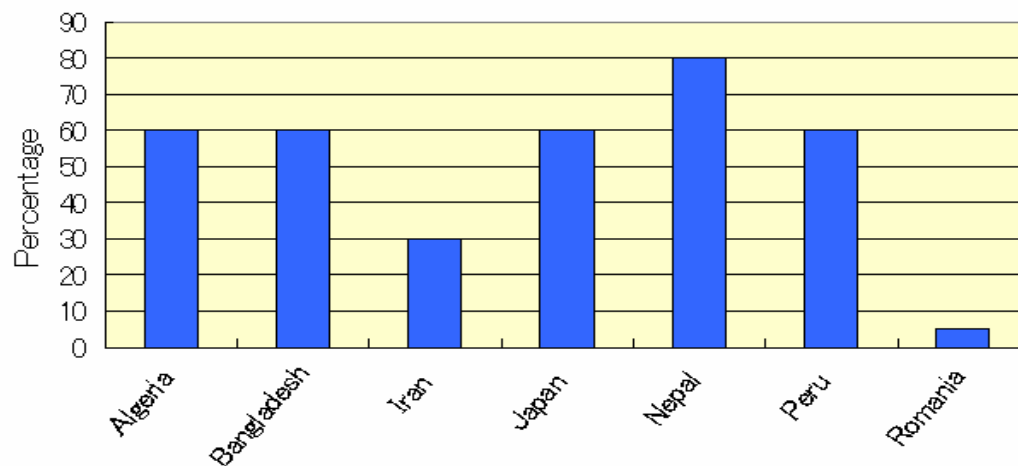
Time for permit process



Guidelines/manuals for non-engineered construction



Ratio of non-engineered buildings in total building stock



Problems in effective enforcement of Building Code

Implementation system

- Absence of technical supervision
- Partial geographic coverage
- Insufficient penalty system

Building code

- Need for simplification
- Unsatisfactory coverage
- Need for revision
- Too frequent change of codes

Problems in effective enforcement of Building Code (cont'd)

Capacity of local governments

- Inability to evaluate performance based design
- Insufficient training of technical personnel

Capacity of Stakeholders

- No opportunity to learn code
- Lack of motivation among professionals

Socio-economic obstacles

- Lack of knowledge about code
- Negligence and unwillingness of house owners to apply earthquake safe techniques
- High cost of retrofitting