






震災に備えた耐震建築基準の普及戦略

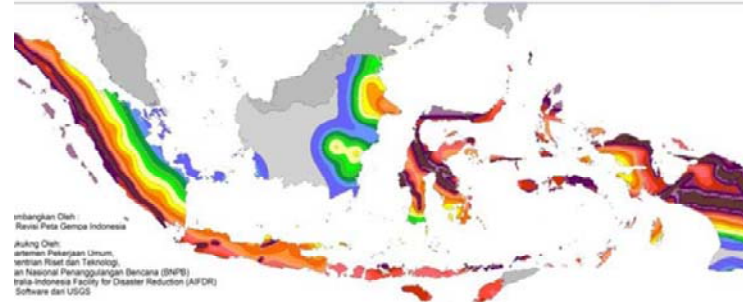
Dissemination Strategy for Standard on Earthquake Resistant Building for Better Preparedness on Earthquake Disaster

2012年6月、日本 東京
 Tokyo, Japan 25 June 2012
 アニータ・フィルマンティ インドネシア公共事業省
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 The Republic of Indonesia




Introduction
(earthquake hazard map)

はじめに (地震ハザードマップ:危険度分布図)



Dibagikan Oleh:
 Renvi Peta Geomca Indonesia
 Rukung Orah
 ataman: Pekerjaan Umum,
 vertian Riast dan Teknologi,
 an Nasional Penanggulangan Bencana (BNP)
 Itala-Indonesia Faculty for Disaster Reduction (IAIDR)
 Software dan USGS

Earthquake Evidence in Indonesia
インドネシアの地震

Last earthquake : 04 June 2012 at 18.18 Sukabumi area with 24 km depth and energy 6.1 Richter Scale

Aceh case

Year 2007 :	27 times > 5 s/d 6,3 SR (6,3 SR: 1) 27/4/07 8:02:49.6
Year 2008 :	27 times > 5 s/d 7,5 SR (7,5 SR: 1) 20/02/10 8:08:30.
Year 2009 :	28 times > 5 s/d 5,8 SR 5,8 SR: 4/1/09 20:22:34.0)
Year 2010 :	15 times > 5 s/d 7,2 SR (7,2 SR: 1) 9/5/10 12:59:41.0 dan 2) 12/6/10 02:26:16.0)
Year 2011 :	5 times > 5 s/d 5,7 SR (5,7 SR: 1) 18/01/11 18:33:43)
Year 2012 :	26 times > 5 s/d 8.5 SR
2012年	26回 リヒタースケール 5以上 最大 8.5

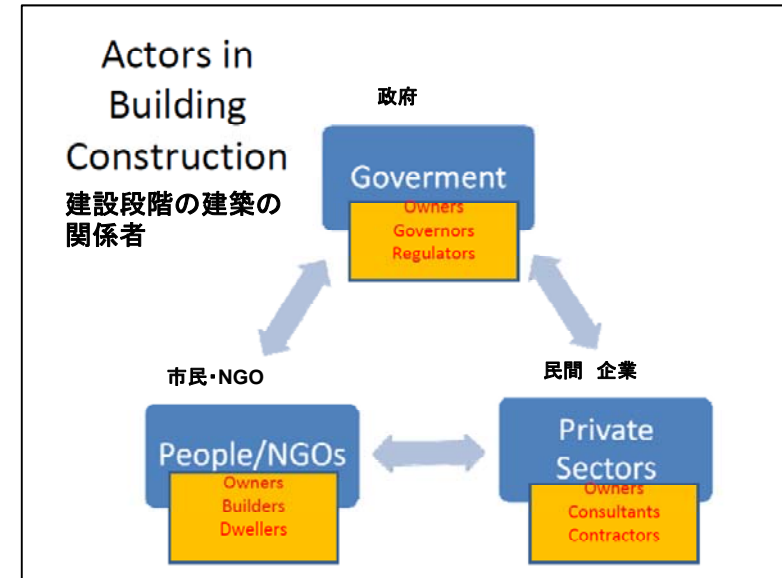
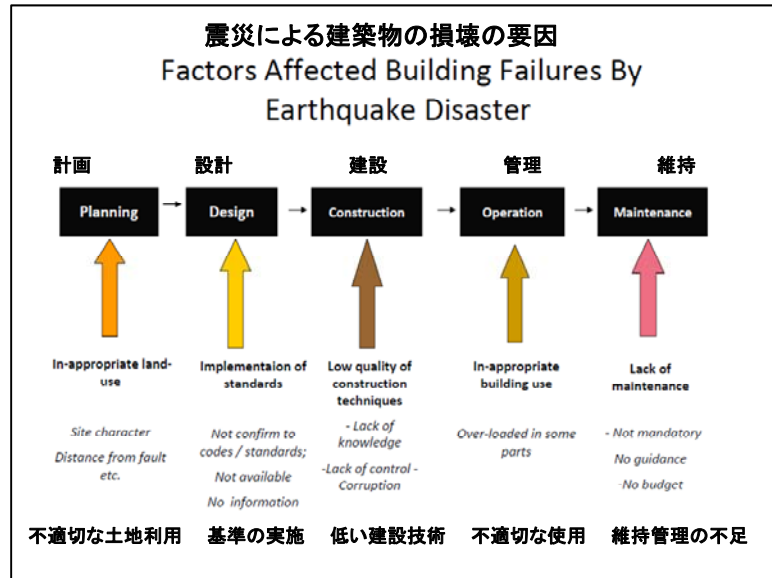
Sumber: BMKG & Personal Report, Munirwansyah, 2012

震災後の被害
Damages after Earthquake Disaster



How to decrease the risks?
Increase the awarress
どのようにリスクを減らすか? **How????**

意識を高めるか
市民と関係者の教育
Educate the people and stake holders



- ### 人間居住研究所の役割 Roles of RIHS
- R & D for producing technologies & draft of policies
 - Establishing Standards, guidance & manuals;
 - **Dissemination of technologies & Standards, guidance & manuals;**
 - Giving technical advices.
 - 生産技術の研究開発と政策の原案
 - 基準、マニュアルなどの作成
 - 基準やマニュアルの普及
 - 技術の指導



対象とするグループ Target Groups

- Central & Local Government officials
 - Consultants including universities;
 - Contractors;
 - Student in any level;
 - NGOs
 - Ordinary peoples.
- 中央と地方政府の職員
 - 大学を含むコンサルタント
 - 建設業者
 - あらゆる段階の学生
 - NGO
 - 一般の人々

戦略のプロセス Strategy Process

- Methods of Raising Awareness
 - Methods of Raising Interest
 - Methods of Moving Individuals to Seek Out Information
 - Methods for Decision-Making
 - Methods to Move Individuals to Action.
- 意識の向上方策
 - 関心の向上方策
 - 情報を探す動機付け
 - 判断の方法
 - 行動を起こす方法

意識の向上方策

Methods of Raising Awareness

メディア、印刷物、テレビなどを通じた社会化

- Socialization through media, printed, television etc.

- Focus on the importance of following standards, application of appropriate technologies;
- Wide range of target groups;
- Using more popular language than technical/scientific sentences;
- More animations.



意識の向上方策

Methods of Raising Awareness

- 地震地帯の都市の関係者へのプレゼンテーション
- Presentation for stake holders in earthquake hazardous cities;

- Focus on the importance of following standards, application of appropriate technologies;
- Selected range of target groups;
- Using more popular technical/scientific language
- More technical presentation.



Methods of Raising Interest

関心の向上方策

- Improving the dissemination materials with a more practical examples
- より具体例を使った普及の改善



関心の向上方策

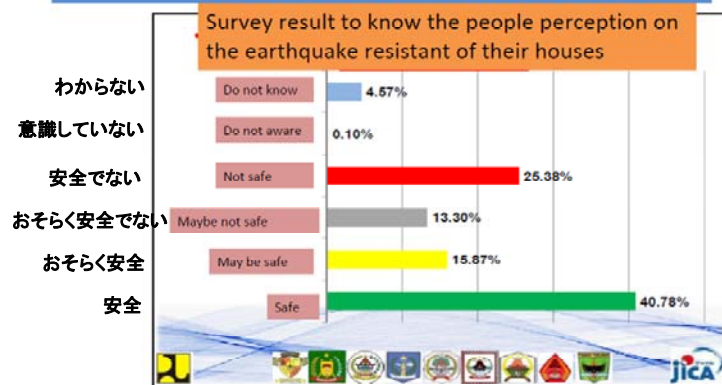
Methods of Raising Interest

- Getting closer to the target groups, understanding the problems and try to solve together
- 対象グループと一緒に問題を理解し、解決を模索する。
地震地帯における社会化



情報を探す動機付け

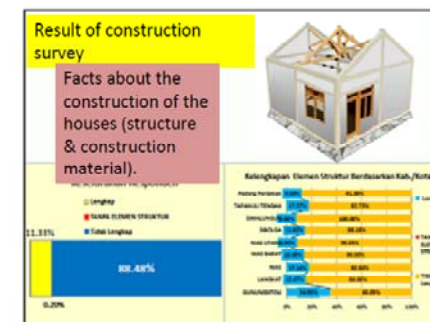
Methods of Moving Individuals to Seek Out Information



自宅の耐震性を市民はどのように認識しているかの調査結果

情報を探す動機付け

Methods of Moving Individuals to Seek Out Information



住宅建設(構造と建設材料)の実態調査の結果

情報を探す動機付け

Methods of Moving Individuals to Seek Out Information



After people understand, they propose to get building permit, government approved the proposals

判断の方法

Methods for Decision-Making

- Bottom-up Vs Top-down
- More democratize
- Involvement of informal leaders



- ボトムアップとトップダウン
- より民主的に
- インフォーマルな指導者の参画

行動を起こす方法

Methods to Move Individuals to Action.

- Intensive training
- 集中的なトレーニング



Transfer the knowledge from experts to the government officials, consultants, contractors in the form of Training for the Trainers

行動を起こす方法

Methods to Move Individuals to Action.

- Consistency on guidance
- 指導の一貫性



行動を起こす方法

Methods to Move Individuals to Action.

- Consistency on guidance
- 指導の一貫性



行動を起こす方法

Methods to Move Individuals to Action.

- Apply together & give intensive technical advices
- いっしょに適用し、集中的に技術指導する。



Assist the carpenters and workers in applying good building construction system

耐震住宅のモデル例

Some model earthquake resistant houses



Kab. Bantul

Kab. Tanah Datar



Kota Yogyakarta

Kab. Agam

おわりに

Closing Remarks

- Since Indonesia lies in the earthquake disaster prone area, technologies, standards, guidance as well as draft of policy had been developed to support the earthquake safer condition;
- Since the target groups are various, the dissemination strategies developed are different from one to each other target group in the step of raising awareness, raising interest, moving individuals to seek out information, decision making and move individuals to action;



Thank you どうも ありがとう ございます

Domo arigatou gozaimasu

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