

<http://drh.edm.bosai.go.jp/>

Development of Web-based Database on Disaster Reduction Technologies:
Collaboration with DRH Project and Research on Contents Development

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Contents of the presentation

- Collaboration of DRH-Asia project and EDM research
 - DRH-Asia project
 - Proposal of "Implementation Technology"
 - Networking by DRH
 - Call for DRH contents
 - Disaster reduction technology database
 - Disaster reduction technology database: Case in DRH
 - Improvement of current database
 - Research on contents development
 - Case of Nepal
 - Case of Pakistan
 - Case of Indonesia
- DRH-Asia Project
- EDM Research

Collaboration between DRH (Disaster Reduction Hyperbase) -Asia Project and EDM-NIED

DRH-Asia Project

- Concept development of DRH-Asia (EqTAP, WCDR, Tsukuba Resolution 2006, etc.)
- Development of international network and coordination (DRH WS, DRH facilitators meeting, IPDR-WS, DRH-CASIFICA meeting, advertisement and promotion of DRH-Asia, International discussion on DRH template, and)
- Conceptualization of implementation technologies which DRH targets and development of DRH Criteria
- Construction of DRH work site and Development of DRH web site
- Development and management of DRH-Asia project site
- Development and management of DRH-Links
- Collection of DRH-Asia contents

Research of EDM-NIED

- Research on database of disaster reduction technologies
- Concretization of database and application to DRH
- Research on disaster reduction technologies/knowledge and provision to DRH-Asia as database contents
- Concretization of form to collect disaster reduction technologies and utilization as DRH template
- Concept development of user of disaster reduction technologies and application to DRH

- Collaboration works: Organizing and management of DRH Contents Meeting (2005), Publishing of the proceedings of DRH Contents Meeting (2006), International workshop of disaster reduction technologies (India and Indonesia in 2008)

Each research activity and complementary relationship is contributing to system development effectively.



1. Proposal of "Implementation Technology"

(Outcome from DRH discussions on "What is useful technology & knowledge for DRR ?")

* What is DRH ?

- + A *web-based* facility
- + To disseminate *appropriate disaster risk reduction technology and knowledge*
- + To deal with *multi hazard* disaster reduction
- + To aid disaster reduction policy in *two ways: developing & industrial countries*

"Hyperbase" because:

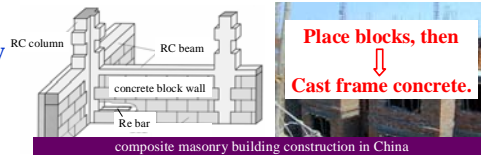
- * **Widened definition of technology "implementation technology" (IOT, PT, TIK)**
- * **Two-way information flow: developing & industrial countries**



* What are useful technology and knowledge for DRR ?

Implementation technology

- + **Implementation oriented technology (IOT):** Outputs from modern R&D that are practiced under clear implementation strategies
- + **Process technology (PT):** Know-how for implementation and practice, capacity building and social development for knowledge ownership
- + **Transferable indigenous knowledge (TIK):** Traditional art of disaster reduction that is indigenous to specific region (s) but having potential to be applied to other regions and having time-tested reliability



Place blocks, then
↓
Cast frame concrete.

+ Seismic enhancement of masonry buildings
Composite masonry method



End of Test
"Collapse" of Ordinary Model &
"Damage" in Improved Model



Traditional Earthquake-Resistant Techniques in Algeria:
The Casbah of Algiers (Foufa & Benouar, 2007)

2. Networking by DRH (Disaster Reduction Hyperbase)

("Implementation Technology" compilation and dissemination)

* DRH Project (Phase II)

"Disaster Reduction Hyperbase – Asian Application" **(Principal Investigator: Hiroyuki Kameda)**

- * **MEXT-NIED Project:** approved for 2006-2008FY (July 2006-March 2009):
- * **Major sponsor:** MEXT (Ministry of Education, Culture, Sports, Science and Technology), Government of Japan
- * **Contributions by multilateral participants:** Eight Asian countries and international institutions: cash and/or in-kind



DRH Project
Disaster Reduction Hyperbase - Asian Application

3. Call for DRH Contents proposals on the DRH project page

Call for DRH Contents proposals for Disaster Reduction Hyperbase (DRH)
(Ver. 4: 28 August 2008)

INDEX

http://drh.edm.bosai.go.jp/Project/Project_top.htm

1. Foreword
2. Background
3. Implementation Technologies
4. Focused Hazards
5. Call for DRH Contents Proposals
6. Signup for DRH Membership
7. Submit DRH Contents Proposals
8. Procedure toward Registration in DRH Database
9. Criteria for Acceptance
10. DRH Manager and DRH Facilitators
11. Merits for Registration
12. Deadline
13. Contacts

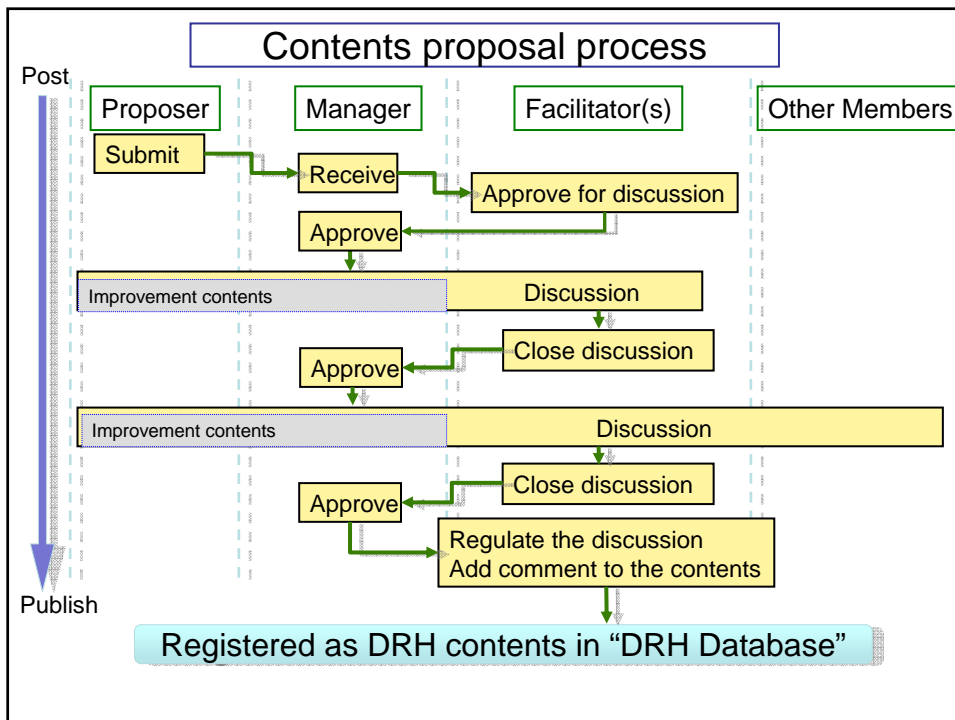
Main text

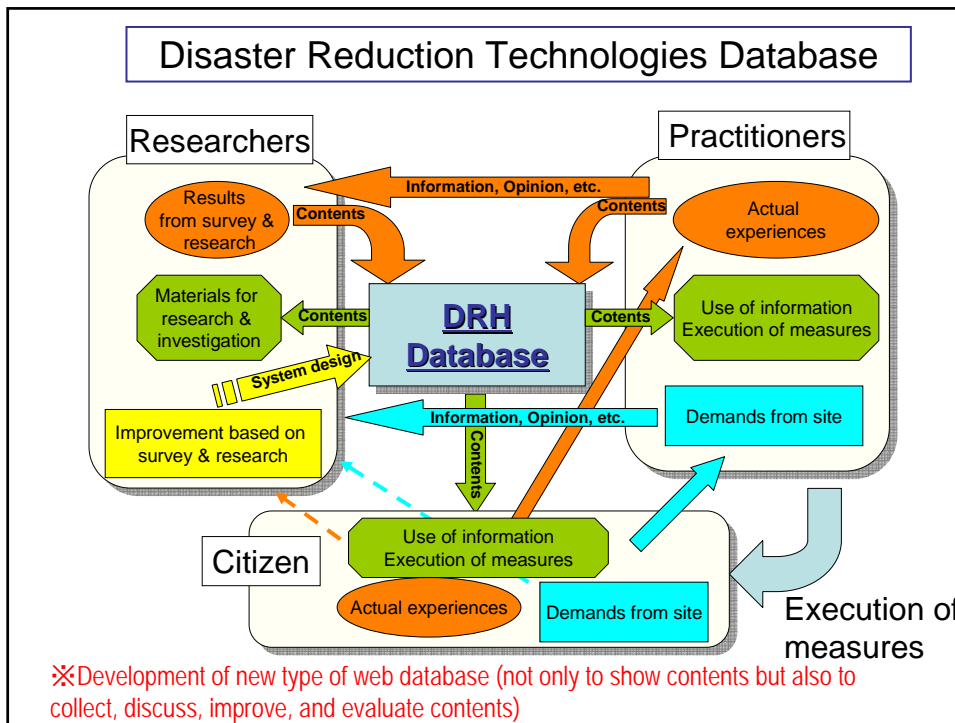
Download documents needed for preparing your proposal

- Describe your proposals using these Template
: DRH Template (Word Ver.7.1, Excel Ver.7.1, Pdf Ver.7.1)
- The Criteria for DRH Contents features are shown here
: DRH Criteria
- Manual for web-based submission of DRH Contents proposals
: DRH Contents submission manual
- Guides for web-based discussion on DRH Forum
: Discussion Manuals for DRH Contents (Ver.1) (Facilitator-Proposer discussion, Member discussion)

Manual for DRH Contents proposal submission

DRH Criteria





Top Page (1)

DRH Database

- Access to latest information and technologies, such as "Empowerment-oriented technology (EOT)", "Disaster technology (DT)", "Intelligent technology (IT)", "Disaster prevention technology (DPT)", "Disaster relief technology (DLT)", "Disaster recovery technology (DRY)", "Disaster reconstruction technology (DRY)", "Disaster mitigation technology (DMT)", "Disaster preparedness technology (DPT)", "Disaster response technology (DRT)", "Disaster recovery technology (DRY)", "Disaster reconstruction technology (DRY)", "Disaster mitigation technology (DMT)", "Disaster preparedness technology (DPT)", "Disaster response technology (DRT)";

DRH Forum

Forum for providing various DRH-related messages.

DRH Links

Quoted links to relevant DRH-related information.

DRH Project

DRH-Asia Project activities and project news. Major documents, reports, and documents are available here. All records are downloadable in PDF.

DRH Criteria

DRH Criteria: Definition and collection (DT, DT and TIC) will collect for DRH content acceptance.

DRH Template

DRH Template: You can download the DRH Template form here.

<http://drh.edm.bosai.go.jp/>

DRH Database

- Browse/Search Contents (for Users)

DRH Forum

- Post/Edit/Discuss on Contents (for Contributors)

DRH Links

- Guided links to relevant initiatives

DRH Project

- DRH-Asia Project activities

Get Account

Click "Signup"

Fill "Mail address", "Name", and "Password" then click "registration"

You get an activation E-mail automatically. Click the activation link in the E-mail.

Your account created !

Login

Click "Login"

Enter your E-mail address and password

Appear "Free Forum"

Success to Login (or show "Login incorrect" in case of fail)

"Signup" paragraph is not indicated

Login Incorrect! : Login

Database

DRH - Disaster Reduction Hyperbase - Asian Application (DRH-Asia)

What's New

- 2009/01/18(Thu) [DRH Forum Summary updated](#)
- 2008/01/27(Tue) "High Incomes" message and Email Forum Improvement
- 2008/01/17(Tue) Items on the top page are changed
- 2008/01/07(Tue) New DRH website is opened!
- 2008/04/20(Tue) [links](#)

Click

DRH Database

DRH Forum

DRH Links

What is DRH

Get membership through [Signature](#) and [New Contents](#)

DRH Database

DRH Forum

DRH Links

Discussion BBS

<http://drh.edm.bosai.go.jp/>

Database : Search

DRH - Disaster Reduction Hyperbase - Asian Application (DRH-Asia)

word search: AND Title

category: IOT PT TIK

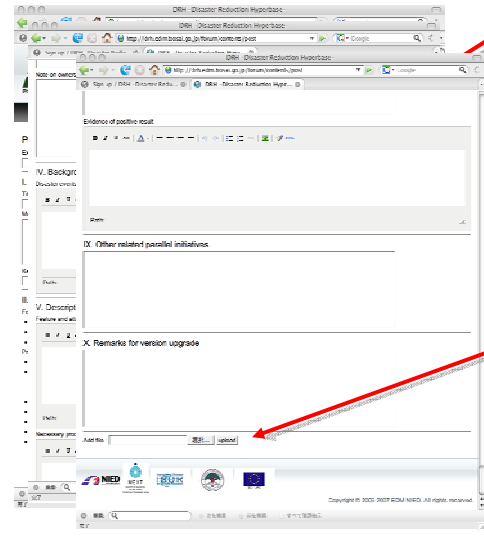
Hazard: Earthquake Tsunami Volcanic eruption Landslide Mudflow Dust storm Cold wave Heat wave Zud Cyclone/Typhoon Storm surge Flood Flash flood Glacial Lake Outburst Flood(GLOF) Snow avalanches Epidemic Wildfire Drought Desertification Climate change Land degradation Multi-hazard Other complete

Country/Region: Japan, Turkey, Mexico, America Japan Indonesia, Papua New Guinea, Japan complete

search

- Free-word search
- Category selection
- Hazard
- Country/Region (based on Section III of DRH Template)

Forum : Post new contents



The screenshot shows a web browser window displaying the 'Disaster Reduction Hyperbase' forum. The main content area contains a form for creating a new post. The form includes several sections: 'Evidence of positive result', 'Project name if available', 'Year', 'Investor', 'People involved', 'Monetary costs incurred', 'Total work/local required', 'Evidence of positive result', 'Other related parallel initiatives', 'Remarks for version upgrade', and 'Appended files'. There are 'download' and 'upload' buttons for the appended files section. At the bottom, there is an 'Add file' button and a 'submit' button. The interface is in Japanese.

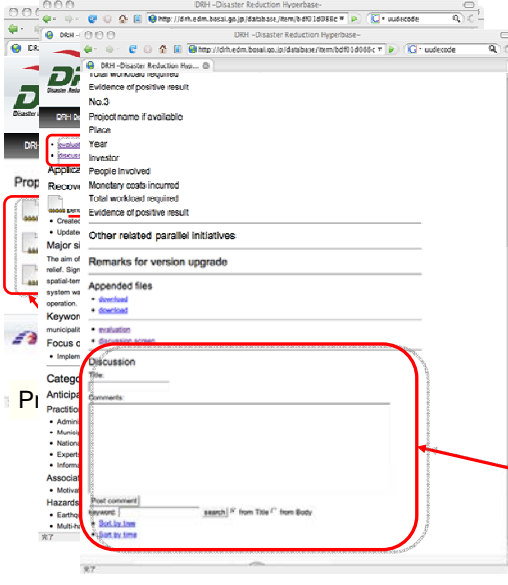
Fill & check DRH template

Hyper-text editing is available at some area

Attach any files (e.g., PDF, PPT, Word, etc.)

You can post your contents by uploading filled template file (now available only Excel)

Forum : Discussion



The screenshot shows the 'Discussion' page for a specific post in the DRH forum. The page displays the post details, including the title, project name, year, investor, and people involved. It also shows the 'Appended files' section with 'download' and 'upload' buttons. The 'Discussion' section is highlighted with a red box, showing a list of comments and a 'Post comment' button. The interface is in Japanese.

Proposer/Facilitators/Manager discuss on proposed contents on BBS of this system, and proposer/manager improve them.

Manager/Facilitators select target contents from the list.

Evaluation/discussion links (button)

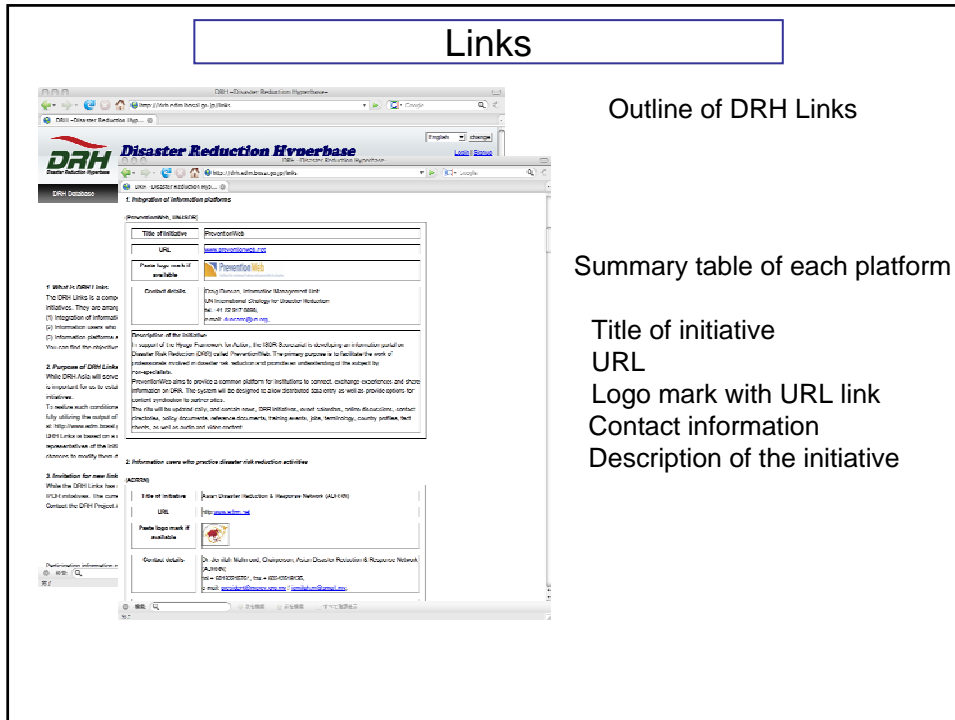
Each content has BBS at the end, and Proposer/Facilitators/Manager can have discussions

Links

Outline of DRH Links

Summary table of each platform :

- Title of initiative
- URL
- Logo mark with URL link
- Contact information
- Description of the initiative



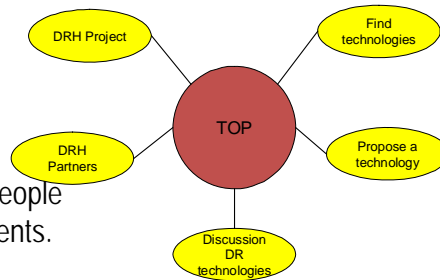
Improvement in the future

In the past....: Process from contents proposal to registration in DB (DRH Forum) was emphasized.

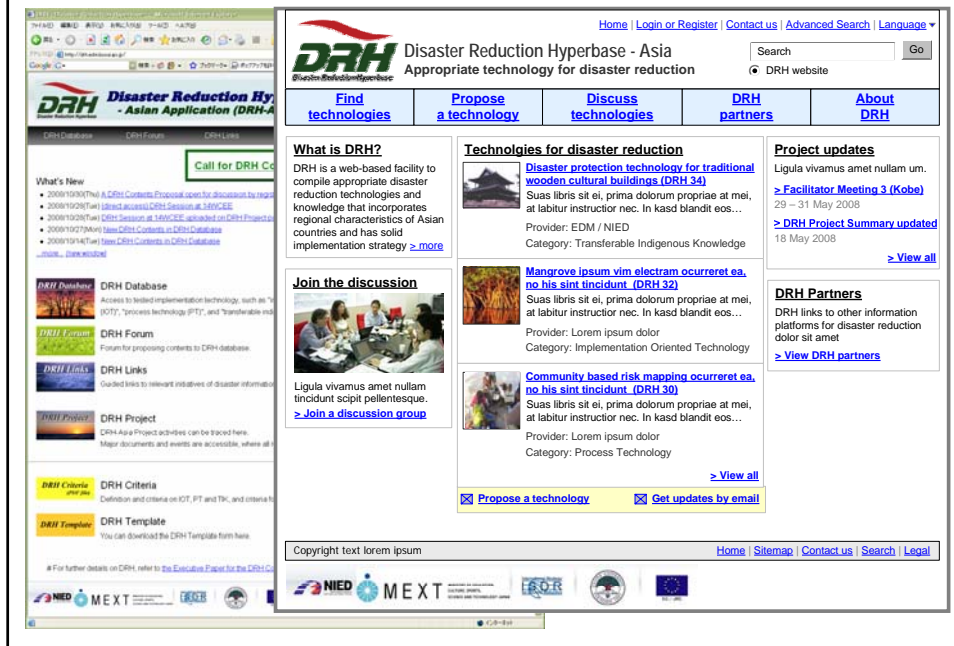
→ System development for people who propose and improve contents (for Proposer)

In the future....: Publishing contents and searching in DB are emphasized.

→ System development for people who read and search contents. (for User)

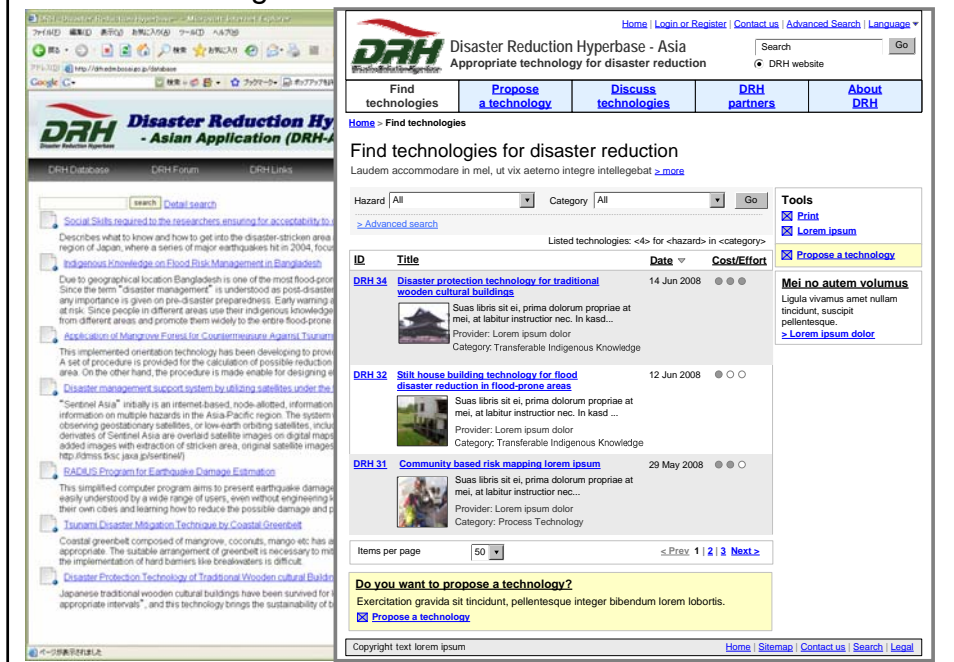


Top page



The screenshot shows the top page of the Disaster Reduction Hyperbase - Asia website. The header includes the DRH logo and navigation links: Home, Login or Register, Contact us, Advanced Search, and Language. A search bar is located in the top right. Below the header is a navigation menu with buttons for Find technologies, Propose a technology, Discuss technologies, DRH partners, and About DRH. The main content area is divided into several sections: 'What is DRH?' (a brief description of the facility), 'Technologies for disaster reduction' (listing three technologies with images and details), 'Project updates' (listing recent updates), 'Join the discussion' (with a photo of a meeting), and 'DRH Partners' (listing partner organizations). A sidebar on the left contains links to DRH Database, DRH Forum, DRH Links, DRH Project, DRH Criteria, and DRH Template. The footer includes copyright information and additional navigation links.

Find Technologies



The screenshot shows the 'Find Technologies' page of the Disaster Reduction Hyperbase - Asia website. The header is identical to the top page. The navigation menu is also present. The main content area features a search bar and a list of technologies. The list includes three entries: DRH 34 (Disaster protection technology for traditional wooden cultural buildings), DRH 32 (Stilt house building technology for flood disaster reduction in flood-prone areas), and DRH 31 (Community based risk mapping). Each entry includes a small image, a title, a date, and a cost/effort indicator. A sidebar on the left contains a search bar and a list of search results. The footer includes copyright information and additional navigation links.

Technology description

The screenshot displays the 'Disaster Reduction Hyperbase - Asia' website. The main content area is titled 'Stilt house building technology for flood disaster reduction in flood-prone areas'. It includes a metadata section with fields for ID (DRH32), Cost/Effort, Hazard (Flood, Tsunami), Category (Transferable Indigenous Knowledge), Provider (BNU (Weihoa Fang)), Country (China), Date published (14 Jun 2008), and Date updated (16 Jun 2008). A summary section follows, along with a 'Users' section and a 'Contact' section for Weihoa FANG. A 'Download technology documentation' section lists links for Full documentation, Diagram, Diagram.dolor.sit, and Photo. On the right, there are 'Tools' (Print, Email, Propose a technology) and 'Similar technologies' categorized by Hazard, Category, Provider, and Country.

Propose a technology

The screenshot shows the 'Propose a technology' page on the DRH website. The main heading is 'Propose a technology for disaster reduction'. Below it is a list of four numbered steps: 1. 'What we want from you', 2. 'Understand the approval process', 3. 'View the template', and 4. 'Start submission'. A yellow arrow points to the 'Start submission' step. On the right, there are sections for 'Print full documentation', 'Call for contribution', and 'Need help?'. The footer contains copyright information and navigation links.

Case of Nepal: Study on Development Process of NGOs' Activities and the Key Factors Influencing the Process

- ❑ **Objective: To contribute in:**
 - (1) understanding strategies of NGOs
 - (2) finding effective measures to support or work with NGOs.
- ❑ **Case study on a Nepalese NGO** that is internationally known in the field of disaster risk reduction



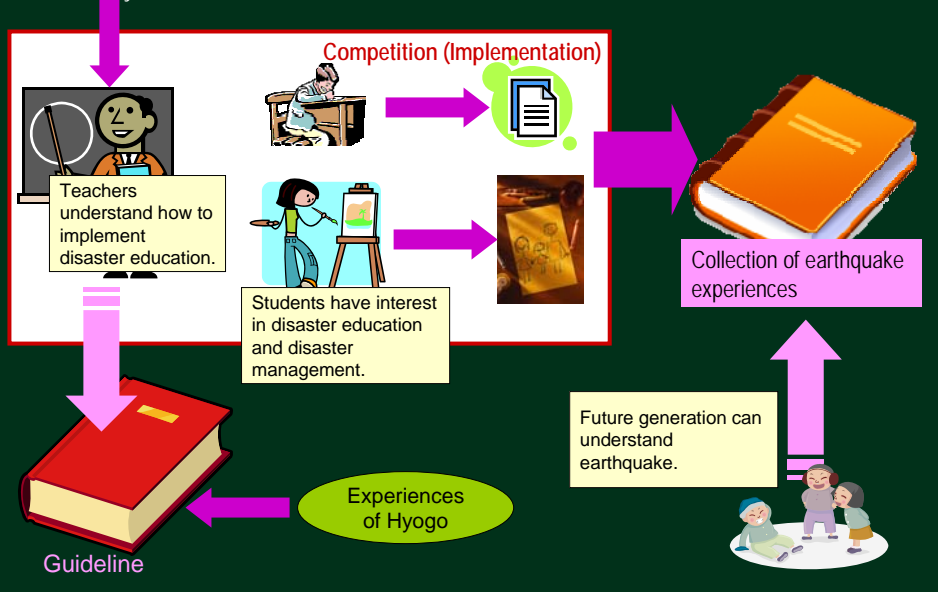
Example of their activities
(Shaking Table Demonstration)



Field survey by EDM researcher
(Impact assessment of their activities)

Case of Pakistan: Promotion of school disaster education

Instruction by STAR Foundation and EDM



Case of Pakistan: Promotion of school disaster education



Case of Indonesia: Promotion of implementation and development of new technologies

Objectives

- To share disaster reduction technology information among practitioner
- To identify problems on implementation and propose strategy to promote implementation and to develop new technology

Contents

- Importance of information sharing
- Awareness of practitioners in Indonesia (based on questionnaire conducted by CDM-ITB and EDM-NIED)
- Presentation of technology by practitioner and researchers
- Discussion
- Explanation of form to collect disaster reduction technology (DRH template)

Organized by

- CDM-ITB, EDM and Kyoto University

As possibility....

Disaster education from Islamic aspect

