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# Risk Awareness and Education on Natural Catastrophes

## *OECD Stocktaking*

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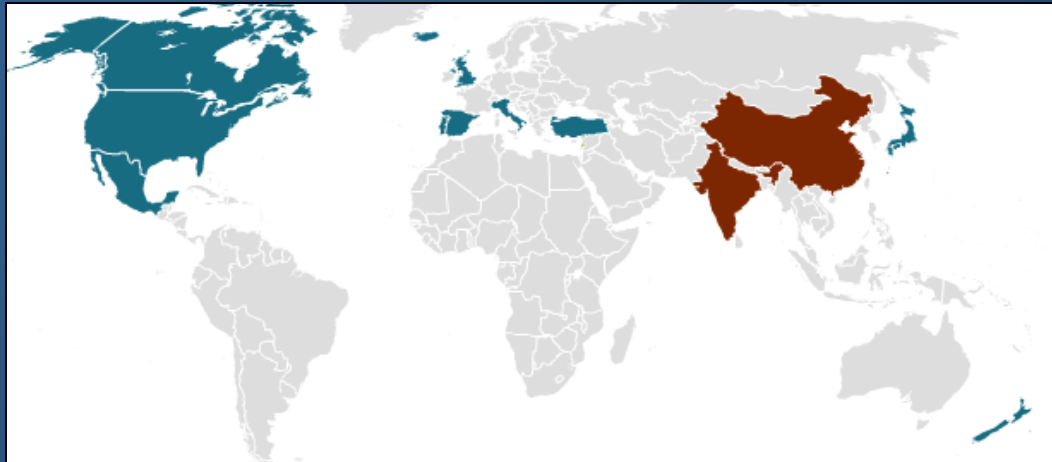


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# Stocktaking Scope and Context

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- Focus: Public awareness and education on natural catastrophe risk and risk reduction measures
- Scope: 11 OECD countries, China and India



- Complimentary efforts:
  - OECD International Network on the Financial Management of Large-Scale Catastrophes
  - OECD project on financial education and risk awareness
  - UN/International Strategy for Disaster Reduction and the Hyogo Framework for Action (2005-2015)

# Why Risk Awareness and Risk Reduction Education?

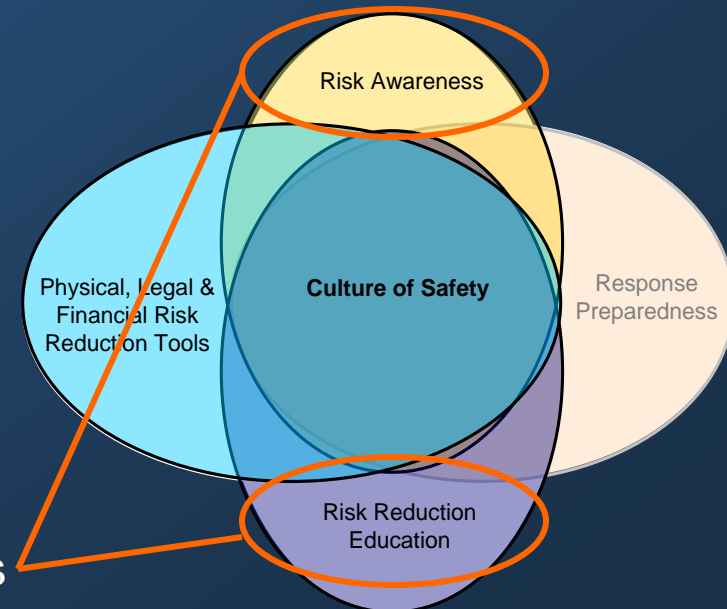
- Growing international recognition natural catastrophes are rooted in human decisions

**Natural Hazards** – Environmental phenomena that can negatively impact humans

**Vulnerability** – Human conditions that increase our susceptibility to these hazards

**(Natural Hazard) Risk** – Probability of harmful consequences resulting from the interactions between hazards and vulnerable human conditions

- Movement away from a “culture of reaction”
- Movement towards a “culture of safety”
- Public awareness and education key components



# Risk Awareness and Risk Reduction Education

## - Research on Effectiveness

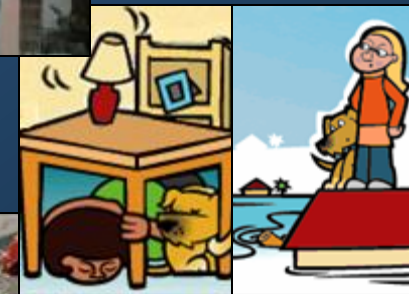
- Elements that **hamper** learning
  - Over emphasis on physical science, technical explanations
  - Sensationalism of damage and destruction
  - Over emphasis on emergency response



Photo Credit: Sandy, www.fishindog.com



Photo Credit: Mid-America Earthquake Center, University of Illinois, Urbana-Champaign



<http://www.whatstheplanstan.govt.nz/mcdem/index.html>



[http://english.peopledaily.com.cn/200608/08/eng20060808\\_291009.html](http://english.peopledaily.com.cn/200608/08/eng20060808_291009.html)

**“Nature is too powerful.  
Destruction is inevitable. I am a  
victim and all I can hope for is  
rescue.”**

# Risk Awareness and Risk Reduction Education

## - Research on Effectiveness

- Elements that **enhance** learning

- Personalization of risk



Interactive flood maps, Environmental Agency, UK



Community risk mapping for young children, General Insurance Association of Japan



Avalanche risk compared with other societal risks, Icelandic Meteorological Office

- Emphasis on effective risk reduction strategies



Building strengthening brochure, USA



Mason training, India



Disaster resistant construction posters, Turkey

- Building a sense of self-efficacy



Institute for Business and Home Safety, "I Did It" Gallery, USA

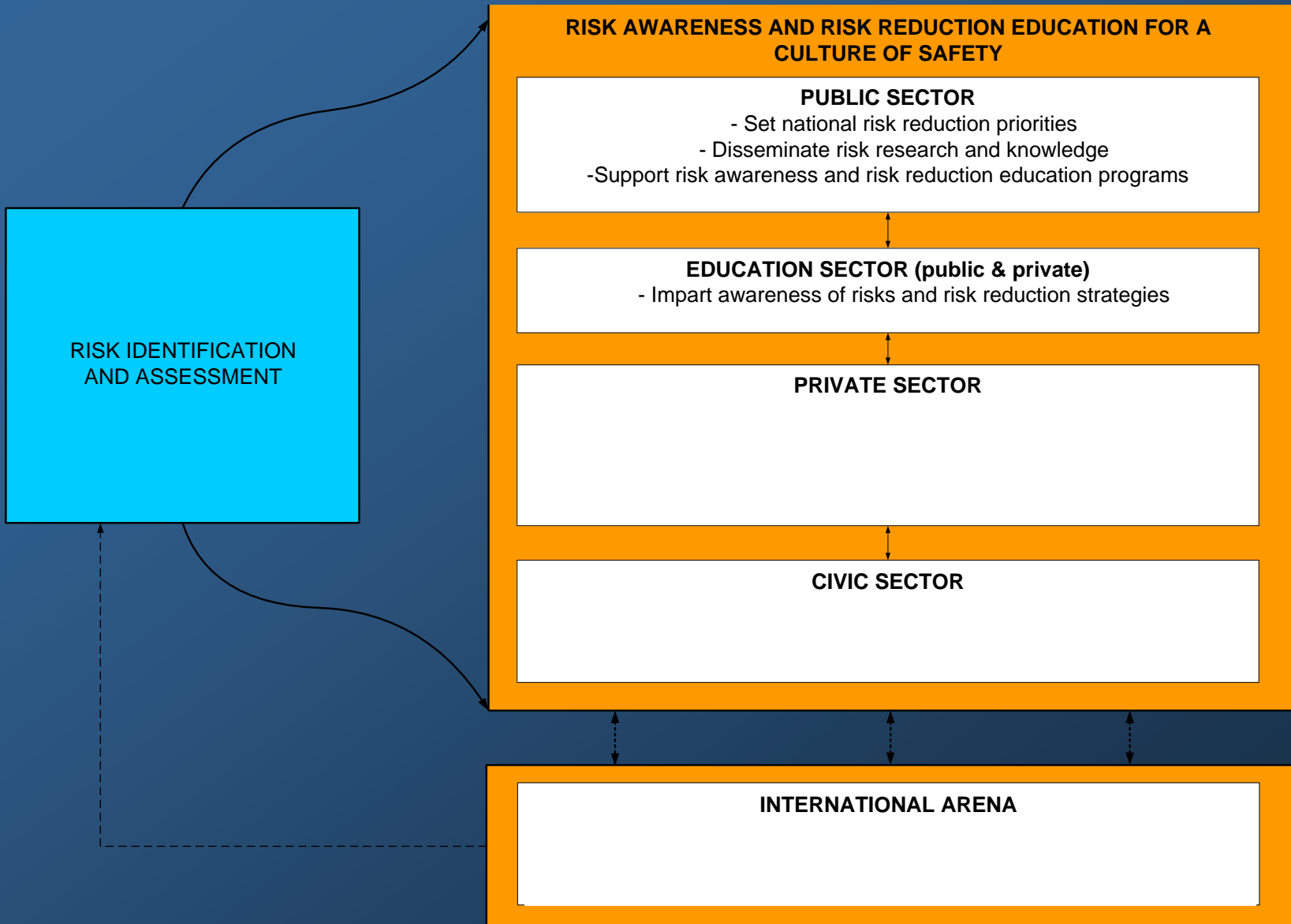


Fire suppression practice, Shizuoka Prefecture Earthquake Preparedness Education Center

**“People like me can reduce risk. It is not too hard and it will be effective.”**

# OECD Stocktaking

## - Public Sector/Education Sector





# OECD Stocktaking - Public Sector

## Some current activities

- Public awareness campaigns/events
- Disaster parks and museums
- Cross-sectoral dissemination of public education material

National Preparedness Day, Japan



<http://www.kokuminhogo.go.jp/en/measures/exercises/20060929.html>

Evacuation Drills, Tokyo



<http://www.japantoday.com/jp/picture/2108>



<http://www.kokuminhogo.go.jp/en/measures/exercises/20060929.html>

Virtual Earthquake Museum, China



Mass disseminated brochure, California, USA



House evacuation sign and education tool, Iceland



Risk reduction education for weather forecasters, USA



# OECD Stocktaking - Public Sector (Education)

## Co-curricular education

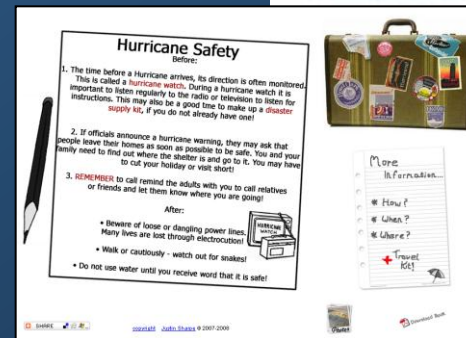
- China, India, Japan, Mexico, New Zealand and Turkey
  - Education modules added to geography, science, and civics education
  - Student involvement in community risk mapping, and risk reduction activities



Mandatory curriculum, New Zealand

## Voluntary programs

- Canada, Italy, United Kingdom and United States
  - Cross-sectoral collaboration (e.g. Insurance industry + Red Cross + government agencies)
  - Often innovative, high quality but lower penetration



Voluntary high school program, United Kingdom



Red Cross volunteers introducing "Expect the Unexpected", Canada



# OECD Stocktaking - Preliminary Conclusions

## Effective Risk Awareness and Risk Reduction Education:

Who:

- Targeting of multiple audiences
- Public, policy maker, knowledge disseminators

What:

- Clear, consistent message
- Non-technical language
- Positive, empowering and accurate examples
- **Strong emphasis on risk reduction**

How:

- Engaging, innovative formats
- Employ a multiplicity of dissemination strategies



UNISDR Stop Disaster! Video game and education tool



"Dare to Prepare" Earthquake Country Alliance, USA



Interactive quiz on NW Cable Network, USA



Preparedness mascot for school education, New Zealand

# OECD Stocktaking

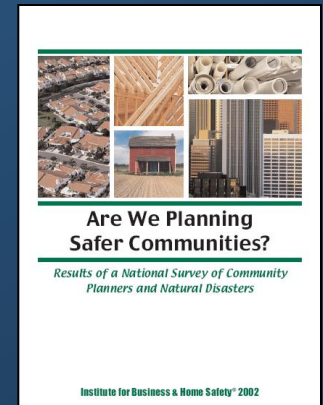
## - Preliminary Policy Recommendations

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### Strategies for Scaling Up Risk Awareness and Risk

#### Reduction Education:

- National-level guidelines
- Promote cross-sectoral collaboration
- Encourage community participation and grassroots initiatives
- Integrate in compulsory education
- Improve current programs through assessment and evaluation



#### A Culture of Safety:

- Increase **voluntary and incentivized adoption** of risk reduction strategies
- **Greater acceptance** of compulsory risk reduction policies, where applicable.

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**Thank You**