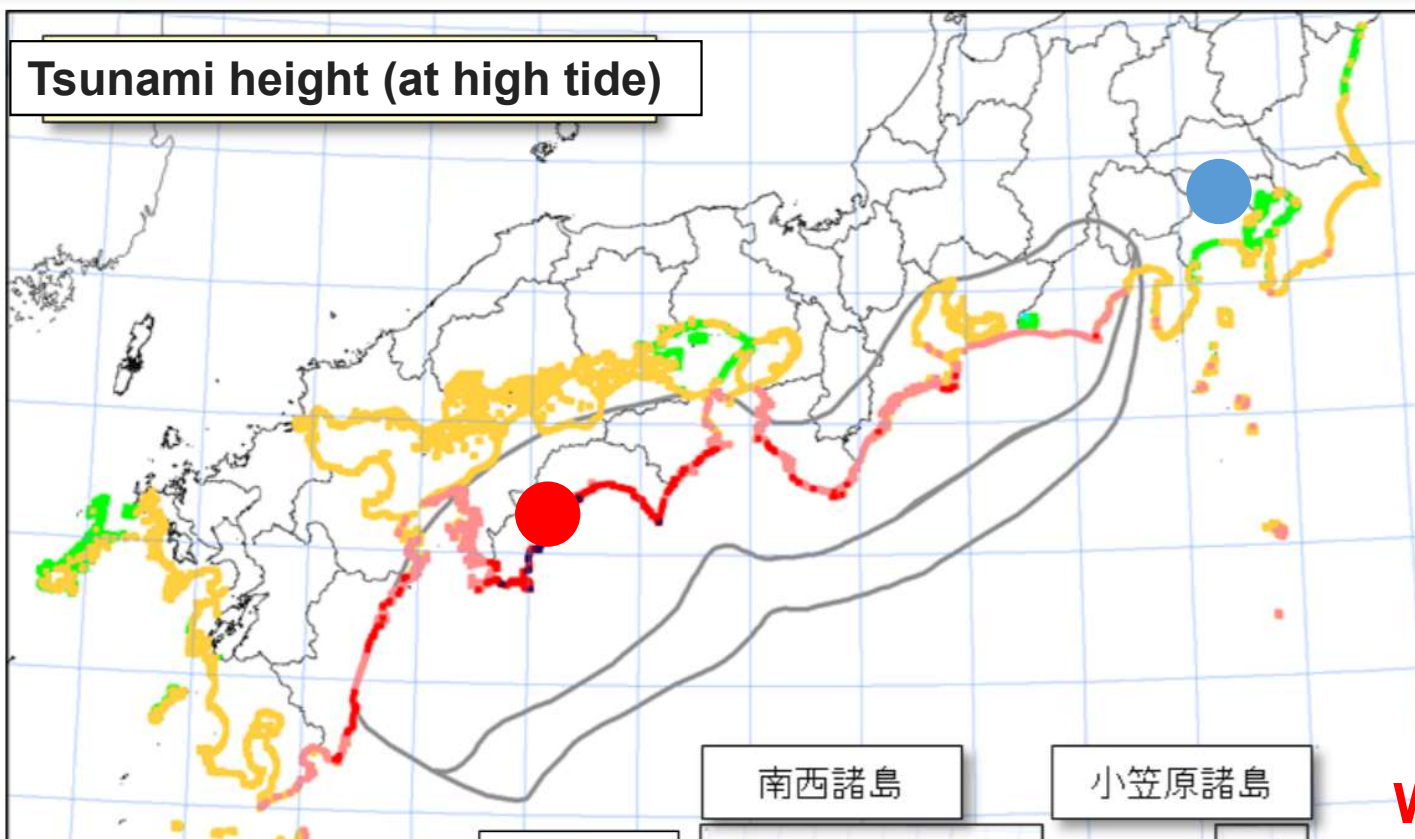


Tsunami disaster risk reduction activities through the collaboration among school, community and local government -Japanese experience

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Potential Nankai Trough Earthquake and Tsunami



1605 Keicho Earthquake

102 years

1707 Hiei Earthquake

147 years

1854 Ansei-Nankai Earthquake

92 years

1946 Showa-Nankai Earthquake



When next earthquake occur?

- Next 30 years with a 70 to 80% probability
- Estimated tsunami height: 34 m
- Arrival of the first tsunami wave: a few minutes after the earthquake



Okitsu community, Shimanto Town, Kochi Prefecture.

"Gurumi Group" ("gurumi" means "among all.")

Okitsu Community
Voluntary Disaster
Prevention Organization
(Local residents) .

Okitsu Primary
school

Shimanto town
gov't

Kyoto University

Elaboration of BOSAI map each year



- The fifth and sixth graders elaborate the BOSAI map each year for 20 years
- Students think about the necessary tsunami evacuation measures from the perspective of the residents (elderly, small children, etc.).
- Students share the BOSAI map with residents and local government through the presentation.





| Year of production | Subject |
|--------------------|--|
| 2003 | Elaborate the first BOSAI map |
| 2005 | Identify tsunami evacuation sites |
| 2009 | Identify tsunami height of each place |
| 2010 | Identify landslide and landslide risk |
| 2011 | Measure the time required for evacuation. |
| 2015 | Find out the risk on the evacuation route (day and night version). |
| 2018 | Turn the map into a game. |

Multiple impacts of BOSAI map



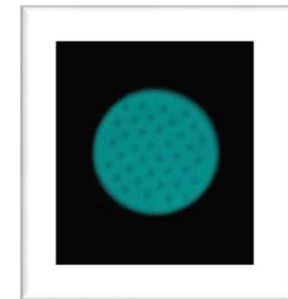
Retrofitting of the bridge over evacuation route



Increased percentage of parents participating in drill



**Placement of phosphorescent markers on the evacuation route
→ They glow at night**



Transfer to high places of day care center and nursery school



**Improved evacuation signage
Indication of tsunami arrival time**



**Storage
(Local gov't + Community)**



**Construction of the tower
(Local gov't)**



**Elaboration of the evacuation center
operation manual
(Local gov't + Community)**



**Construction of evacuation
routes (Local gov't)**



**Subsidy for seismic reinforcement of
brick walls and housing
(Local gov't)**



**Evacuation drill
(Local gov't + School + Community)**

Okitsu community, Shimanto Town, Kochi Prefecture.

"Gurumi Group" ("gurumi" means "among all.")

**Okitsu Community
Voluntary Disaster
Prevention Organization
(Local residents)**

- Promote DRR measures of the local community to protect the lives
- Linking school, municipality and expert

**Okitsu Primary
school**

- Educate students to protect themselves from earthquakes and tsunamis.
- Promote their proactive learning through DRR education
- Encourage exchange between students and community

**Shimanto town
gov't**

- Carry out infrastructure improvements taking into account the opinions of schools and residents.
- Provide specialized information on seismic and tsunami disaster risk

Kyoto University

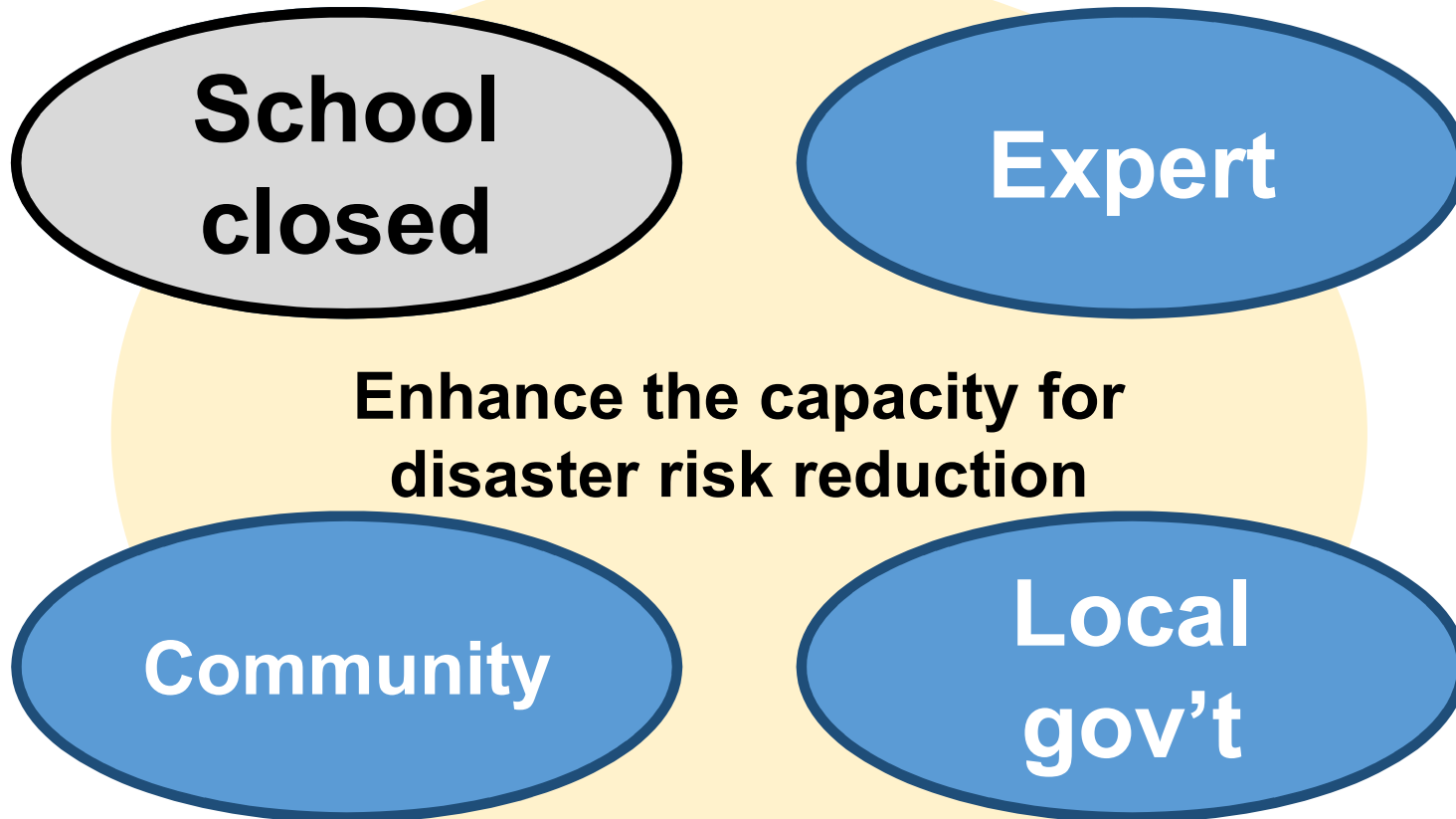
- Provide specialized information on seismic and tsunami disaster
- Support DRR education in school and community

Keywords: Collaborative model / School-centered disaster risk reduction activities / Disaster risk reduction education

However

Collaborative model

Primary school and junior high school are closed at a rate of 100 and 50 schools respectively each year due to depopulation



From “School-driven” to “Community-driven”



<https://youtu.be/YiE7-EmEr34>

Passing the torch of DRR from children to community

Thank you very much

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