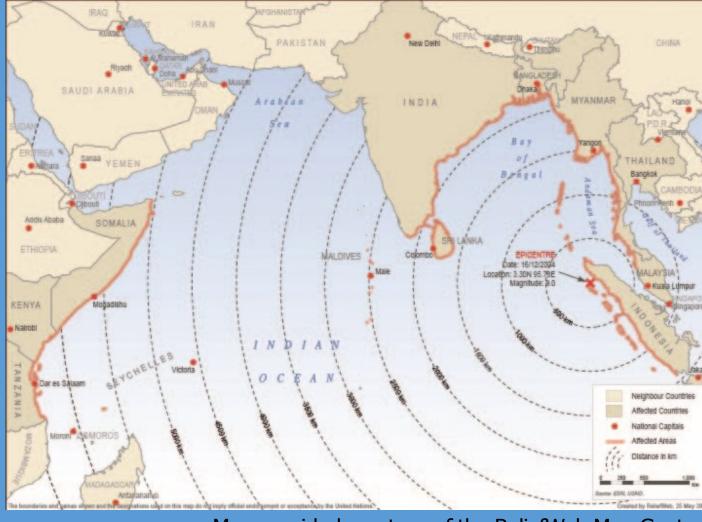


# **Promotion of Tsunami Disaster Risk Reduction**

#### World-Shaking Great Tsunami Disaster: 2004 Indian Ocean Earthquake and Tsunami (GLIDE:TS-2004-000147-XXX)



Map provided courtesy of the ReliefWeb Map Centre, United Nations Office for the Coordination of Humanitarian Affairs

On 24 December 26 (at 7:58 A.M., local time), an earthquake of Magnitude 9.1 (Mw) (source: USGS) was occurred with an epicenter off the west coast of northern Sumatra, Indonesia (depth around 10 km). Tsunami triggered by the earthquake severely affected the coastal areas of Indonesia, Thailand, Malaysia, India, Sri Lanka, Maldives, and other countries surrounding the Indian Ocean. 14 countries including countries in Africa, such as Somalia, Tanzania located more than 5,000 km far from the epicenter was heavily damaged by the disaster. Total number of death and missing was approx. 228,000, destroyed houses was approx. 500,000 and economic damage was approx. US\$13.5 billion.

The cause of the unprecedented damage was pointed out as; 1) the scale of the earthquake was the world largest in history, 2) Tsunami early warning system in the coastal area of the Indian Ocean was not effectively developed, and 3) the residents of the most of the affected areas did not have enough knowledge about Tsunami and could not take appropriate evacuation actions.

# Damages Caused by Tsunami (Source: Field Survey by the ADRC)



ADRC has been promoting Tsunami DRR in Asia in cooperation with various organizations and institutions.

#### Survey and Sharing of Lessons Learned from **Disasters**

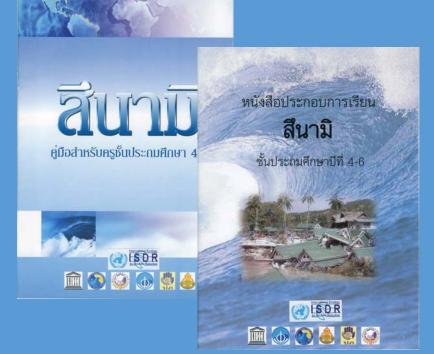




Multi-National Mission to the Affected Area

Questionnaire Survey on DRR in the Affected Area

# ◇ Promotion of Tsunami DRR in Schools









Sri Lanka: A Train was Rolled Over in Hikkaduwa

Indonesia: A Ship was Swept Away to Inland in Ache



Thai: A Resort Area was Flattened by the Tsunami Wave in Phang-nga

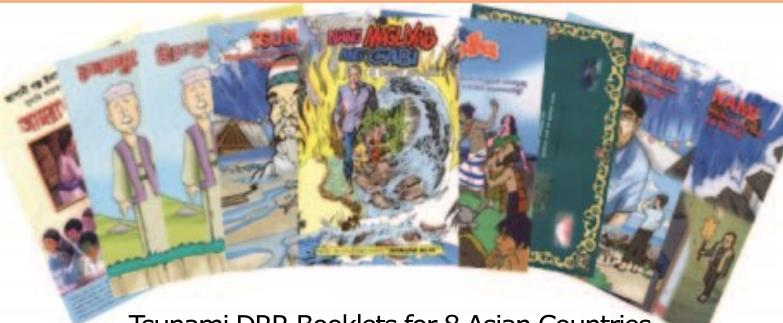
# Wide Dissemination of Japanese Tsunami DRR Education "Inamura-no-hi" Story

"Inamura-no-hi" story was compiled as Tsunami DRR educational material based on the historical novel created by Lafcadio Hearn. In Japan, the story was used in the Japanese language textbook of elementary school and well known to the people in prewar and postwar period.

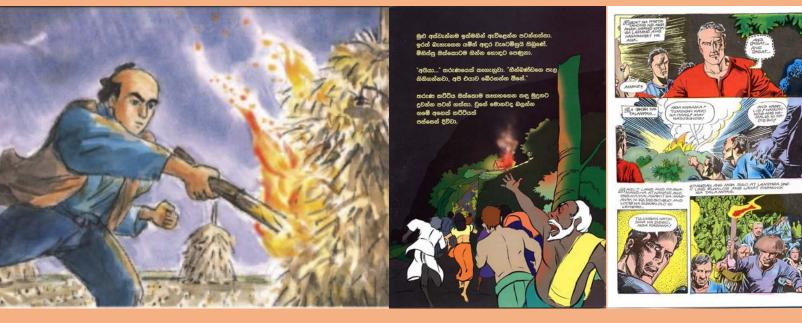
In the second World Conference on Disaster Risk Reduction held in Kobe on 18 January 2005, Prime Minister Junichiro Koizumi (at that time) introduced the story in his speech to the DRR experts and stakeholders. He presented the story tells us the importance to keep the knowledge and lessons on disaster in our minds, and to make decision and take actions promptly in case of a disaster. He also underscored that the lessons learnt from various disasters can be shared internationally for DRR.

With this background, the ADRC developed Tsunami educational booklets to introduce the "Inamura-no-hi" story and proper Tsunami knowledge in eight countries in Asia commissioned by Cabinet Office (in charge of DRR).

#### **Dissemination of the Booklets**



#### Tsunami DRR Booklets for 8 Asian Countries



Support Activities for Tsunami DRR Education in a School in Thailand (Development of Educational Materials and Trial Lessons)





Support Activities for Tsunami DRR Education in a School in Sri Lanka (Development of Educational Materials and Pilot Lessons)

### OPRIMITY Promotion of Community-based Tsunami DRR Activities







Dissemination in a Community in Indonesia

The booklets of two versions (for adult and for children) were developed for eight Asian countries: Bangladesh, India, Indonesia, Malaysia, Nepal, Philippines, Singapore, and Sri Lanka. The French version was also created afterward.

The booklets are available at the ADRC website;

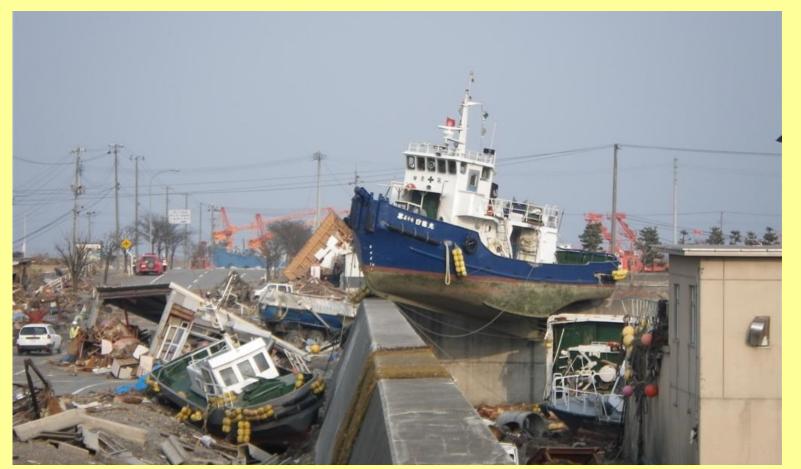
http://www.adrc.asia/publications/inamura/top.html

Community Tsunami DRR Awareness Program in Sri Lanka (DRR Town-Watching)



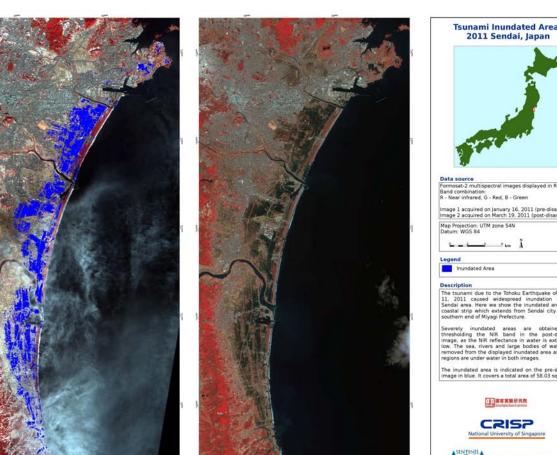
Community Tsunami Evacuation Drill based on the DM Plan in Indonesia (Source: The Project for Enhancement of the Disaster Management Capacity of BNPB and BPBD in Indonesia)

# Wide Dissemination of Lessons and Countermeasures of the Great Tsunami: **Great East Japan Earthquake (March 2011)**



On 11 March 2011 (around 2:46 P.M., local time), an earthquake of Magnitude 9.0 (Mw) (source: JMA) was occurred with an epicenter offshore of Sanriku, Iwate Prefecture, Japan. Tsunami triggered by the earthquake wreaked devastating damages to various areas of the Pacific side of east Japan. Total number of death and missing was approx. 22,000, destroyed houses was approx. 100,000 and economic damage was approx. US\$14.3 billion.

Since before the Great Tsunami, ADRC had introduced Tsunami countermeasures and efforts of the Sanriku area where Tsunami disasters were repeatedly occurred and has been living with Tsunami risks. After the Tsunami, ADRC has provided the report of the field survey of the affected areas as well as the training program and/or field survey mission for the foreign researchers and ADRC visiting researchers of the Tsunami-hit areas.



### (GLIDE: EQ-2011-000028-JPN)

#### **Remains of the Great Disaster:** Handed down for the Next Generations



Damage in Kuji City, Iwate Prefecture



Emergency Observation of Inundated Area by Sentinel-Asia

Remains of the Disaster Management Office of Minami Sanriku-cho, Miyagi Prefecture

## Field Trip of Affected Areas (Source: ADRC Field Survey/ Training in the Affected Areas)



Field Survey in Taro Area, Miyako city, Iwate Prefecture before the Tsunami

Field Survey in Taro Area, Miyako city, Iwate Prefecture after the Tsunami



Field Survey in Ishinomaki city, Miyagi Prefecture



Field Survey of Temporary Housing in Kamaishi city, Iwate Prefecture



Remains of the Arahama Elementary School, Sendai city, Miyagi Prefecture

ADRC Field Survey Report is available at; http://www.adrc.asia/documents/disaster\_info/2011March11\_EastJapan\_EarthquakeReport\_%20final.pdf

#### Asian Disaster Reduction Center (ADRC)

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