

Reality of Disaster Damage Sustained by Minamisanriku Town in Miyagi Prefecture and Challenging Efforts to Reconstruct the Town

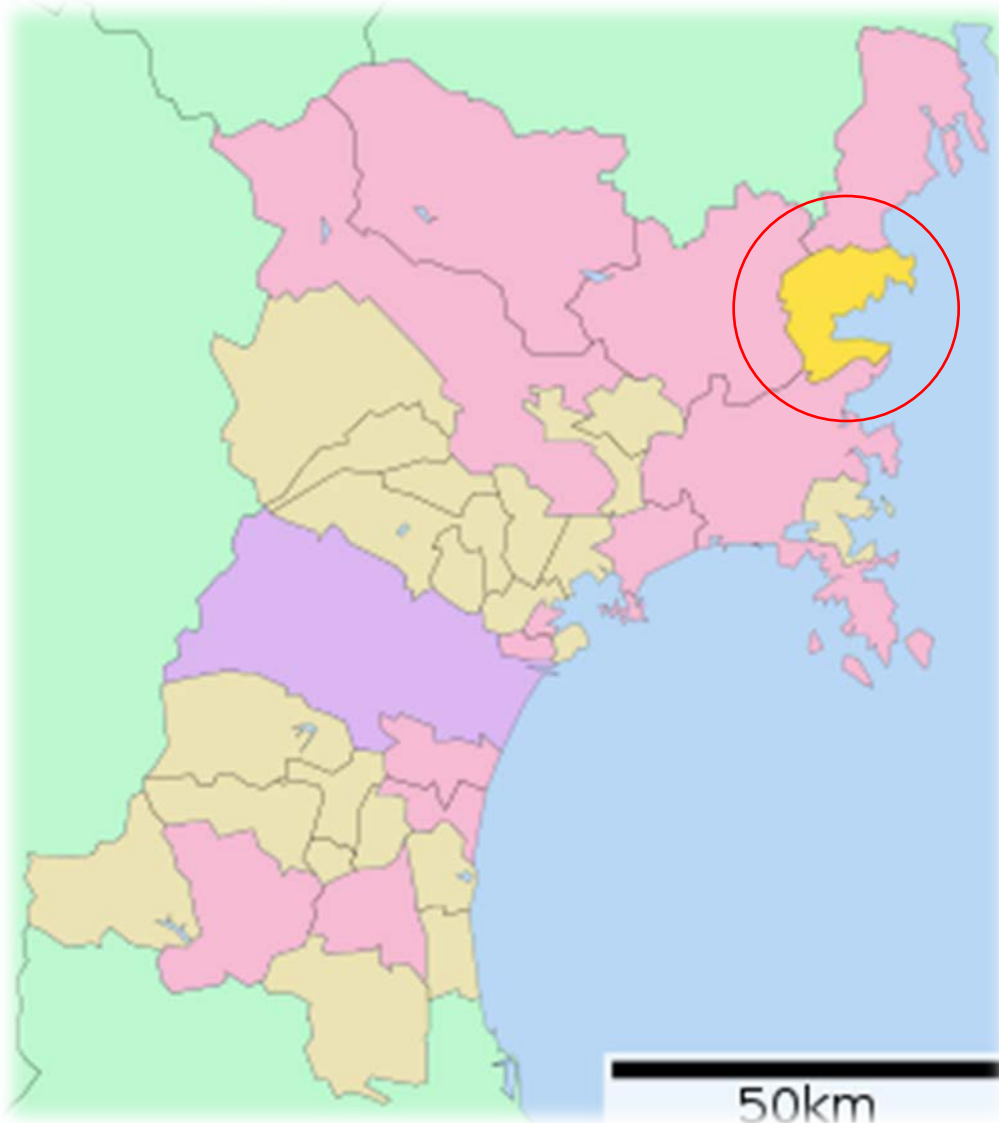
Mayor, Minamisanriku Town, Miyagi Prefecture Jin Sato

Simultaneous Session, EROPA Conference 2013

**Local Autonomy College, Ministry of International Affairs and
Communications, Tachikawa, Tokyo**

17 October (Thurs.), 2013

■ Basic Data



<u>Location</u>	Located in northeastern Miyagi Pref., with the Pacific Ocean to the east, Kesennuma City to the north, Ishinomaki City to the south, and Tome City to the west.
<u>Area</u>	163.74 km ² (roughly 18 km east-west, 18 km north-south)
<u>Temperature</u>	Yearly average 11.5 °C (2009) (High 32.0 °C, low -5.4 °C)
<u>Precipitation</u>	Yearly 1,559 mm (2009)
<u>Population</u>	17,815 (end of March 2010) (8,720 men, 9,095 women)
<u>Households</u>	5, 365 households (end of March 2010)
<u>Elderly rate</u>	29.3% (end of March 2010)
<u>Town GNP</u>	39,905 million (FY 2007)
	Primary industry 11.9% (fishery 9.1%)
	Secondary industry 15.9%
	Tertiary industry 74.5%
<u>Town finance</u>	(FY 2009 general accounting)
	Revenue ¥8,610,568,000
	Expenditure ¥8,333,499,000



Blessings of the Sea



Calendar of seasonal delights

April	May	June	July	August	September	October	November	December	January	February	March
					Saury/scallops					Horsehair crab	
		Conger			Salmon			ワカ	Seaweed/Raw oysters/Codfish		
Clam-digging		Raw sea urchin/Coho salmon/Sea pineapple				Raw oysters/Japanese codling					
	Wild vegetables							Shizugawa octopus/Live abalone			
					Seafood noodles						



Tourism

Roughly **1 million** tourists a year



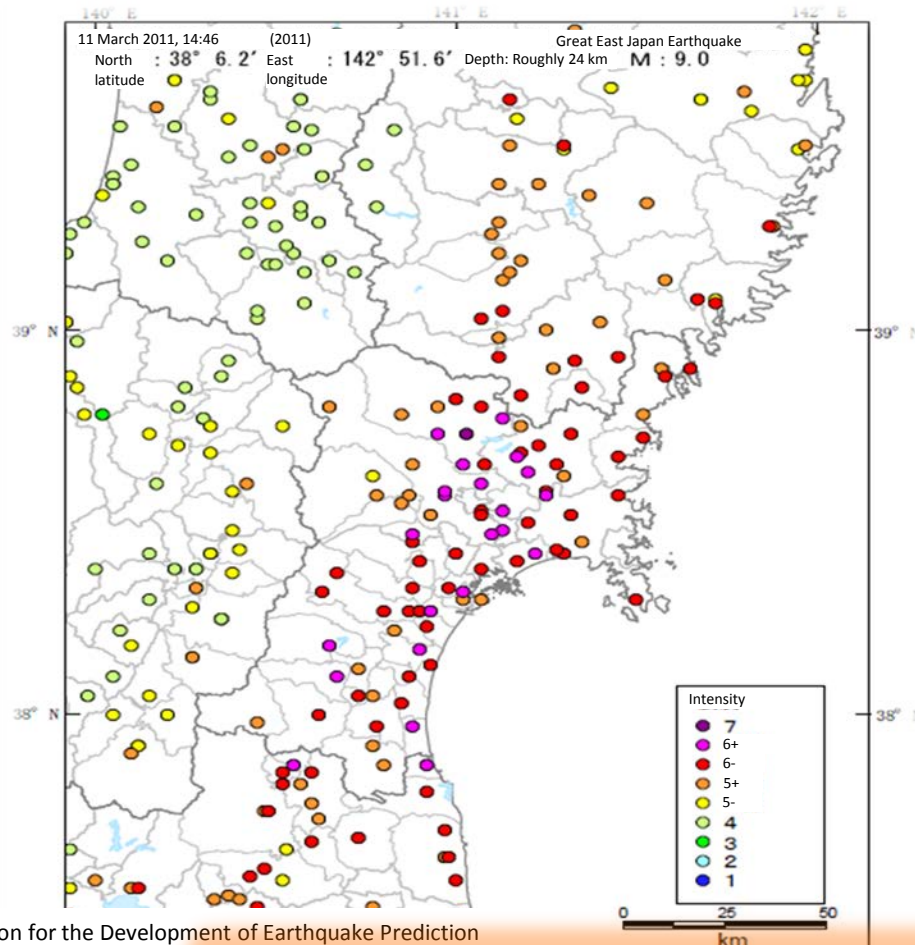
PRE-DISASTER SHIZUGAWA AREA



POST-DISASTER SHIZUGAWA AREA



Summary of earthquake and tsunami damage ①



Date and time 2:46 pm, 11 March 2011

Hypocenter Sanriku sea

Scale Magnitude 9.0

Local intensity 6.0- intensity Shizugawa, Utatsu

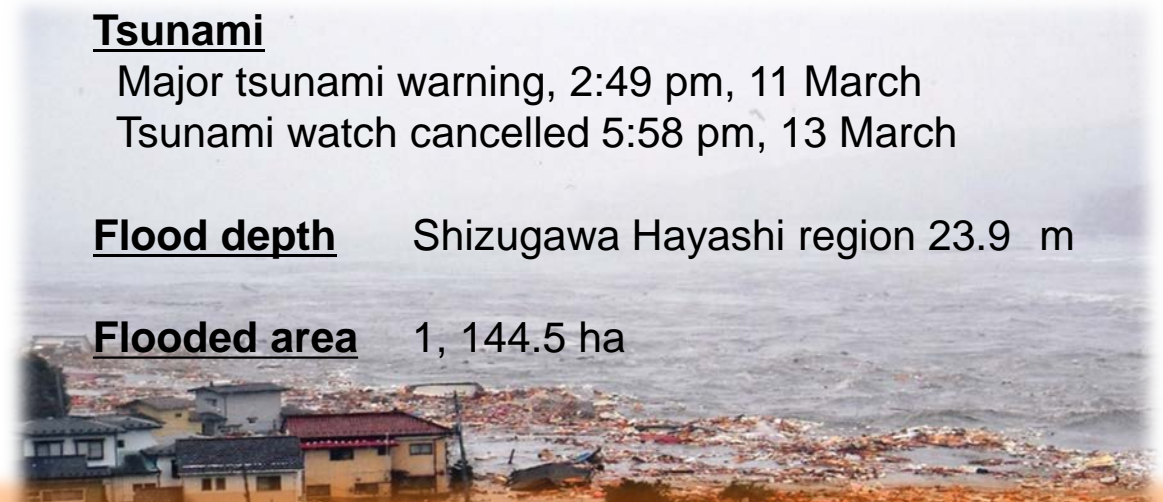
Tsunami

Major tsunami warning, 2:49 pm, 11 March

Tsunami watch cancelled 5:58 pm, 13 March

Flood depth Shizugawa Hayashi region 23.9 m

Flooded area 1, 144.5 ha



Importance of first warning

Magnitude 7.9, predicted tsunami height 6 m

Magnitude 9.0, predicted tsunami height 10 m

■ Summary of earthquake and tsunami damage②

**Missing 10,000 reported
(± 12 hours)**

□ Human damage

Dead 601 residents (3.4% of population as of end of February 2011)

Missing 223 residents (1.3% of same)

Total 824 residents *848 (611 dead, 237 missing) when including nonresidents

*Population as of end of February 2011 17,666

(As of 31 May 2013)

□ Physical damage

Damaged housing 3,301 households

*Over half destroyed. Including tsunami damage, 3,263 households.

Damaged farmland Roughly 462 ha (damage rate 33%)

Damaged woodland Roughly 12 ha

Damaged fishing boats 2,022 vessels (damage rate 94%)

*Pre-disaster registered fishing boats: 2,152 vessels



Primary shelters

- Bayside Arena(physical education facility)
- Elementary/junior high schools
- Village halls, temples etc.
- Temporary employment from 7/1 (shelter management)



【Town temple (Daioji), August 2011】

Peak no. of refugees 9,500 people



【Bayside Arena shelter, April 2011】



【Shizugawa JHS shelter, August 2011】



【Shizugawa HS shelter, August 2011】

Secondary shelters (in town and elsewhere)

- Gyms
- Spa hotels, leisure centers etc.

Secondary refugees 1,800 people



【Tome City Tsuyama Youth Gym, July 2011】



【Osaki City Senshokan Spa, July 2011】



【Guest room, hotel in town】

Temporary housing *As of 31 May 2013

58 estates, 2,195 households (5,678 people)



【Within public facilities】

1 Temporary housing

(1) Shizugawa area	22 locations	648 units	1,756 people (580 households)
(2) Utatsu area	16 locations	644 units	1,799 people (521 households)
(3) Iriya area	7 locations	161 units	390 people (149 households)
(4) Tokura area	7 locations	256 units	710 people (229 households)
(5) Tome City	6 locations	486 units	1,023 people (428 households)
Total	58 locations	2,195 units	5,678 people (1,907 households)



【Privately owned land】

2 Privately rented housing (considered temporary housing)

(1) Within Minamisanriku Town		55 units
(2) Within Miyagi Prefecture	12 cities, 12 towns	532 units
(3) Outside the prefecture	32 prefectures	86 units
Total		673 units



【Temporary housing outside town】

Considered temporary housing
(Hokkaido to Okinawa)
32 prefectures, 86 households

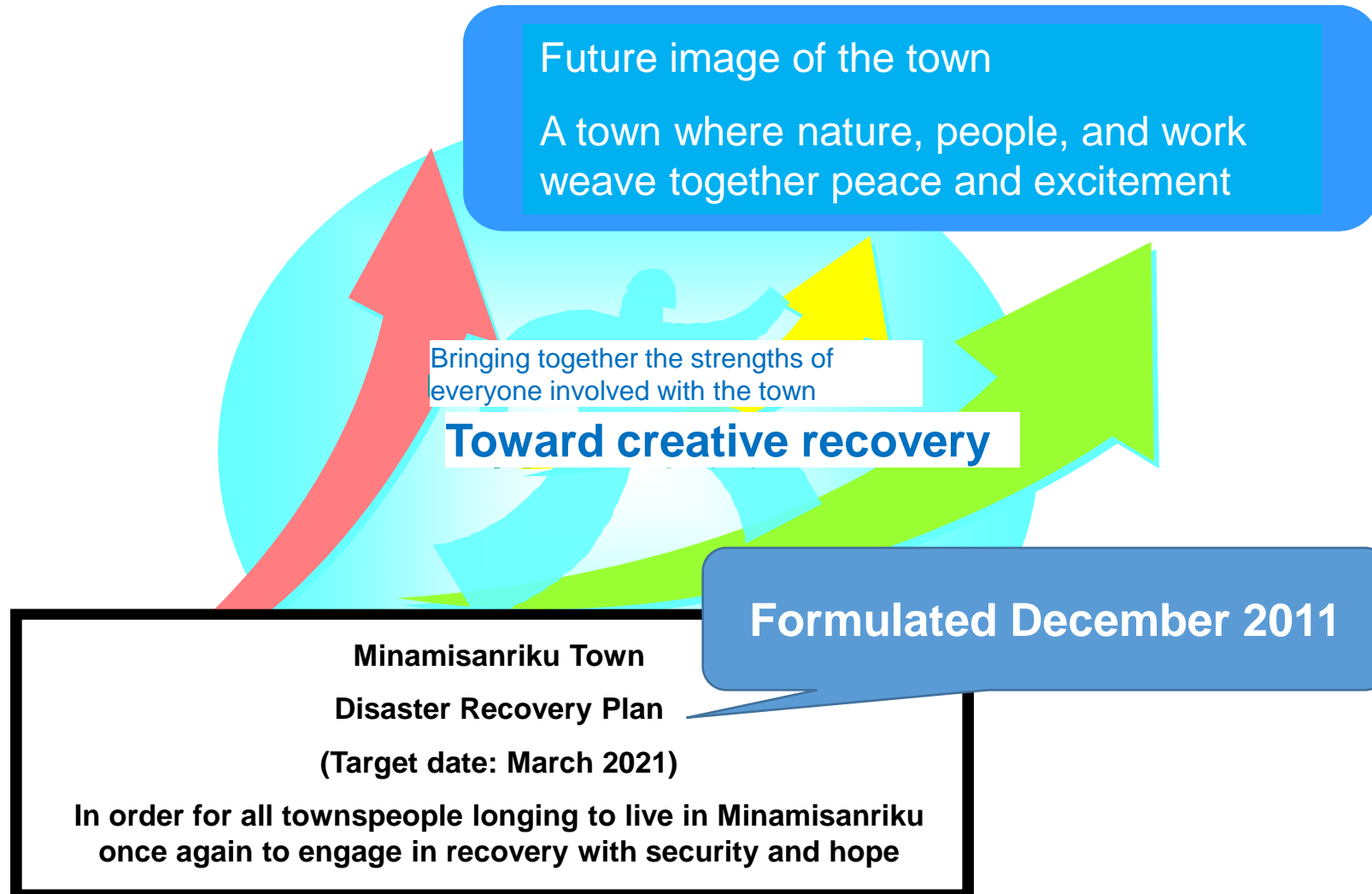
673 households
***As of 31 May 2013**

【Schoolyards】



■ Basic principles of recovery

Creative recovery toward “a town where nature, people, and work weave together peace and excitement”



■ Recovery Goals (three goals)

Goal 1

Security in continued life in the town: community building

- **Protect human lives** from any and all disasters

Goal 2

Nature and coexistence in community building

- Never forget to hold nature in awe
- Appreciate the bountiful blessings of sea and land
- Pass on culture and tradition to generations to come

Goal 3

Work and excitement in community building

- Rebuild fishing and tourist industries, bringing back jobs
- Create new industries
- Keep lively dialogues going among generations and regions

Debris secondary disposal work

Period: April 2012 ~ March 2014

Projected disposal
quantity 540,000 tons





Temporary town hall completed



APRIL 2012

Prefab clinic



Minamisanriku Town



APRIL 2011



Temporary clinic completed



Minamisanriku Town

Minamisanriku Public Medical Clinic





Tasks for Recovery

Continued personnel sources

Local authorities from around the country have dispatched a total of 73 people long-term (as of 1 January 2013) for recovery work. As projects move into full-on phase, further sourcing of manpower will be required.

Long-term temporary housing

- Concerns over illnesses based in inactivity
- Send support personnel to all temporary housing

Population drain

- Display estimates for rebuilding housing
- Important to show townspeople the process of reconstructing industry base

Speed is especially essential

Railroad (JR) restoration

- Reason is that government funding (railway recovery funds) cannot be given to JR, “a company in the black”
- **Temporary restoration through BRT**

Land use in commercial zones



Existing systems are barriers to recovery...

Restoring the status quo is the basis

The current national assistance system cannot cope flexibly with “creative recovery projects” looking to the town’s future.
→Flexible use of the existing systems is essential

Flexible use of land readjustment projects

Town planning area damaged by the disaster, becoming “non-residential area.” →Fails to fulfill conditions for assistance that “**nighttime population be 40 people/hectare or more,**” and funds for regrading are then...

Land regrading projects for non-town planning areas not covered by existing assistance systems

Creation of new systems is essential

Planning for memorial park is not on subsidy menu

Existing town park plans are entirely “from the viewpoint of tsunami disaster prevention/mitigation.”
→To organize facilities including “the viewpoint of memorialization” of disaster recovery, flexible use of the systems is essential



What we want to convey

- 1 Mayor's leadership
- 2 From disaster prevention to mitigation
- 3 The importance of disaster drills
- 4 Traffic control for support from around the country
- 5 Preparations against lifelines being cut
- 6 Securing information and communication methods
- 7 Disaster support agreements with faraway local authorities
- 8 Taking women's point of view
- 9 Envisioning loss of administrative functions



**To bring back a shining
Minamisanriku Town, ten years
from now...**