

Miyagi Prefecture's Restoration and Reconstruction Efforts



Miyagi Prefecture
November 11, 2020

1 Overview of 2011 Great East Japan Earthquake Disaster

(1) Overview of the Earthquake Disaster

- ① Date/Time: March 11, 2011 (Friday), 14:46
- ② Epicenter: Sanriku Coast (N38.1, E142.5) *130 km east of Oshika Peninsula
- ③ Depth: Approximately 24 km
- ④ Size: Magnitude 9.0
*4th largest earthquake recorded in the world since 1900
(source: US Geological Survey (UGGS))
*Largest recorded earthquake in Japanese history
- ⑤ Largest recorded seismic intensity: Seismic Intensity 7 (Kurihara City)
- ⑥ Land Subsidence: Total area of land subsided below sea level - 56 km²
(3.4 times the area of land below sea level prior to the disaster)
Total area of land that is flooded at high tide – 129 km²
(1.9 times the area of land flooded at high tide prior to the disaster)
- ⑦ Tsunami
Port of Sendai: 7.2 m (Reported by Japan Meteorological Agency on April 5, 2011)
Ayukawa, Ishinomaki City: 8.6 m (Reported by Japan Meteorological Agency on June 3, 2011)
*Reference: Highest tsunami recorded by tsunami tracing method conducted by the Public Works Department, Miyagi Prefectural Government)
 - Shizugawa, Minamisanriku Town: 20.2 m
 - Onagawa Town: 34.7 m
 - Utatsu, Minamisanriku Town: 26.1 m



(2) State of Damage (as of October 31, 2020; damage costs are as of September 30, 2020)

- ① Human Casualties : Deaths: 10,567 Missing: 1,218 (Approx. 50% of human casualties nationwide)
- ② Damage to Residences: Destroyed: 83,005 Heavily Damaged: 155,130 (Approx. 60% of damage to residences nationwide)
- ③ Damage Costs (as of February 28, 2018): 9.968 trillion JPY
- ④ Evacuation (at peak: March 14, 2011): No. of Shelters: 1,183 No. of Evacuees: 320,885 (Approx. 15% of residents in Miyagi)

3 Development of Earthquake Disaster Recovery Plan

Full recovery is expected to take approximately 10 years with the goal for completion set in Fiscal Year 2020. The 10-year recovery plan is broken down into three stages – “Restoration,” “Reconstruction” and “Development.” Projects carried out in the Restoration Stage will include the restoration of the livelihood of the disaster victims and public facilities. The Reconstruction Stage will focus on fulfilling the construction of infrastructure, and the Development Stage will promote strategic projects created for the future prosperity of this region.



■ Basic Principles of Recovery

- 1) Developing a disaster-resistant and secure community
- 2) Each citizen is a key player in recovery efforts; utilizing all available resources
- 3) Drastic “restructuring” that does not simply stop at “restoration”
- 4) Progressive community development that will help solve modern-day social issues
- 5) Constructing a model that outlines the steps from catastrophic damage to full recovery

■ Recovery Issues

- 1) Constructing a Miyagi disaster-resistant community development model
- 2) Rebuilding Miyagi’s fisheries industry
- 3) Building progressive agricultural and forestry industries
- 4) Rebuilding the manufacturing industry promptly to achieve a prosperous Miyagi
- 5) Revitalizing Miyagi’s attractive tourism industry
- 6) Reconstructing the health, medical and welfare fields comprehensively throughout the region
- 7) Developing “eco-towns” that utilize renewable energy
- 8) Promoting a disaster-resistant prefecture and nation
- 9) Developing human resources for the future
- 10) Building a framework for financial resources, systems and cooperation that will support recovery efforts

4 Recovery Efforts in Miyagi: Before/After (1)

Sendai Airport



Sendai Station



Before/After (2)

Port of Sendai



Shin Kitakami Ohashi Bridge (Ishinomaki City)



Before/After (3)

Agricultural Industry (Ishinomaki City)



Agricultural Industry (Yamamoto Town)



Before/After (4)

Fishing Industry (Fish market in Kesennuma City)



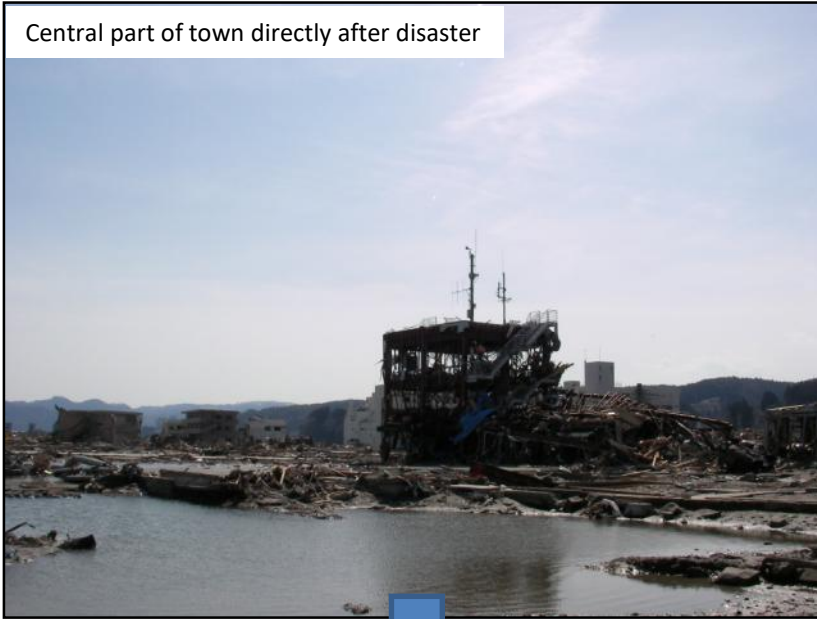
Fishing Industry (Fish market in Onagawa Town)



Before/After (5)

Shopping area in Minamisanriku Town

Central part of town directly after disaster



Temporary shopping area



New shopping area

Recovery Efforts in Miyagi: Infrastructure 1

●Ports and Harbors

**Amount of Container Freight Handled
Approx. 134% Restored**

Before disaster: 216,345 TEU
(Jan. 2010 – Dec. 2010)
After disaster: 289,000 TEU
(Jan. 2019 – Dec. 2019)

State of Operations (as of September 30, 2020)

- Overseas container routes: 4, total 10
- China route (Shanghai, Lianyungang Port, etc.)
: 1 per week
- China/South Korea route (Shanghai, Busan, etc.)
: 6 per week
- South Korea route(Busan): 2 per week
- Russia Far East route (Vladivostok, Vostochny): 1 every week
- Overseas feeder routes : 5, 10 per week
Sendai – Keihin



Loading cargo to container ships
(Takasago Container Terminal,
Sendai Port area)



Sendai-Shiogama Port
(Takasago Container terminal,
Sendai Port area)

●Airport

**Sendai Airport Passenger Recovery Rate:
International routes: approx. 145%
Domestic routes: approx. 136%**

No. of international passengers:

▪ Before disaster: 271,932; after disaster: 393,043

No. of domestic passengers:

▪ Before disaster: 2,554,345; after disaster: 3,462,275
(Before disaster: Jan. 2010-Dec. 2010 After disaster: Jan. 2019-Dec. 2019)

* State of Operations (as of October 31, 2020)

International Routes (pre-disaster round trip flights per week)

Seoul	7 (7)	Shanghai	2 (3)
Guam suspended (4)		Dalian/Beijing	2 (2)
Taipei	14 (2)	Changchun	suspended (2)
Bangkok	3 (0)		

Total: 28 round trips a week (20)

Domestic Routes (pre-disaster roundtrip flights a day)

Sapporo	15 (13)	Narita	2 (2)
Chubu	6 (5)	Okinawa	2 (1)
Itami	15 (13)	Kansai	3 (0)
Kobe	2 (0)	Hiroshima	2 (1)
Fukuoka	7 (4)	Izumo	1 (0)

Total: 55 round trips a day (39)



Air China began service between
Sendai and Dalian/ Beijing
(November 2, 2019)

Recovery Efforts in Miyagi: Infrastructure 2

Miyagi Prefecture is working hard to cultivate Miyagi's soil in order to develop the prefecture, overcome the effects of the disaster, and nurture the livelihood and lives of our citizens. We do so with the belief that sustainable soil cultivation will pass on the natural bounty of Miyagi to future generations.

As of end of October, 2020

Roads and bridges (restoration construction) Approx. 99% Completed

Damaged roads: 1,411 sites
Damaged bridges: 123
Restoration construction completed: 1,516 sites

River facilities (restoration construction) Approx. 90% Completed

Damaged: 273 sites
Construction completed: 247 sites



State of reconstruction work on Sunaoshi River
(Tagajo City)

Coastal preservation facilities (restoration construction) Approx. 78% Completed

Damaged: 73 sites Completed : 57 sites

Port facilities (restoration construction) Approx. 91% Completed

Affected : 280 sites Completed : 254 sites



State of reconstruction work on Kojirahama Shore
(Matsushima Town)

Recovery Efforts in Miyagi : Housing

○Prefabricated Temporary Housing

Occupied units: 12 units, occupants:22
(as of November, 2020)

※ 47,861units, occupants : 123,630
(During peak period at the end of April, 2012)

○Evacuees outside the prefecture : 98

(as of November, 2020)

※ 9,206
(During peak period at the end of April, 2012)



○Disaster Public Housing Construction

Completed building all disaster public housing in the end of March,2018
(15,823 units)



Disaster Public Housing (Yuriage, Natori City)



Yanaginome area (Higashi-Matsushima City)

Recovery Efforts in Miyagi: Community Development

Construction situation of Recovery Community Development Projects (as of August 31, 2020)
Disaster resistant community development that takes the characteristics of tsunami at each disaster-affected area into account.

**Disaster Prevention Collective Relocation
Promotion Project**
100% of prepared land is ready for construction

No. of areas where construction is planned: 195
No. of areas where land is ready for construction: 195

Land Readjustment Project
Approximately 97% of prepared land is ready for construction

No. of areas where projects are planned: 35
No. of areas where land is ready for construction: 34

**Tsunami Recovery Central
Construction Project**
100% of prepared land is ready for construction

No. of areas where projects are planned: 12
No. of areas where construction has commenced: 12



Construction carried out in hills of northern Nobiru
(Higashi-Matsushima City)



Construction carried out in Shizugawa-Higashi area
(Minamisanriku Town)

Recovery Efforts in Miyagi: Commerce/Industry

State of Restoration of Affected Businesses Approx. 98.7% restarted

Number of disaster-affected businesses: 9,735
Number of businesses restored: 9,602
(as of March 31, 2020)



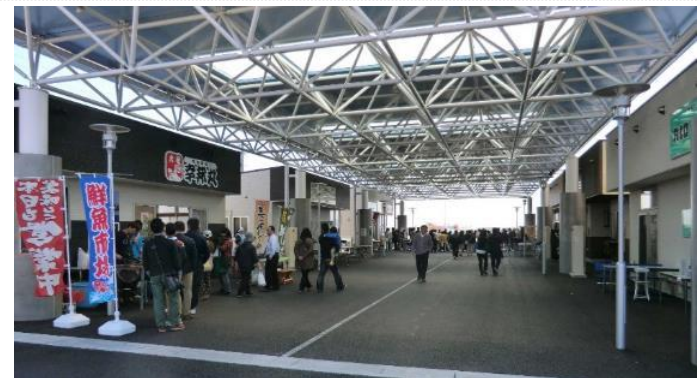
Hama Terrace, Seapalpia Onagawa (Onagawa Town)
Opened in December 2016

Reconstruction of business facilities using Group Subsidies

Miyagi Prefecture worked with the national government to make use of the “Measures to Support Facility Reconstruction for Small and Medium-sized Businesses and other Groups” (Group Subsidies) to provide support for early restoration of production infrastructures at disaster-affected businesses.



Example of a business entering a new field by making use of the Group Subsidies
[Installation of CLT (cross laminated timber) production line]



Nigiwai-kairo shopping street at Arahama, Watari Town. This facility was built using Group Subsidies.

Recovery Efforts in Miyagi: Tourism

Tourists: approx. 111% have returned compared to 2010

2010: 61,290,000 2019: 67,960,000

Efforts to Promote Tourism Recovery

Measures to attract tourists	<ul style="list-style-type: none">Government and private sectors cooperate to promote public awarenessBring in more tourists from Kansai area through cooperation with airline companiesPromote "Recovery Tourism" and educational travelAttract tourists under the theme of Keicho European Envoy Departure 400-Year Anniversary (UNESCO Memory of the World Registered Heritage)
Information and Press	<ul style="list-style-type: none">Disseminate information to dispel harmful rumors and to keep Miyagi in people's mindsPromote Miyagi together with Musubimaru (Sendai and Miyagi tourism mascot)
Inbound	<ul style="list-style-type: none">Tourism promotion and attraction in 4 important overseas markets (especially Taiwan)Expand into possible markets (Southeast Asia)Promote educational travel from other countriesReinforce the system for welcoming foreign tourists

Miyagi "Recovery Tourism" Project

Bringing a link to the inland and coastal regions, "Recovery Tourism" is being promoted to allow visitors to learn about the current state of recovery efforts through guides who share their experience of the disaster as well as visiting temporary shopping districts in coastal regions. Visitors can also experience what the region has to offer through local foods, natural landscapes, and hot springs.



Guided tour by March 11 disaster storyteller

Attraction of Foreign Tourists

The Miyagi Prefectural Government is taking steps to attract more foreign tourists by collaborating with the region's various tourism organizations and the Tohoku region as a whole. We hope that by doing so we can rid the area of the stigma that resulted from the 2011 Great East Japan Earthquake disaster and the Fukushima nuclear power plant incident.



Tourist PR event by "Bangkok Top-sales Promotion Project"

Official Tourism website of Miyagi Prefecture

[Visit Miyagi]



Recovery Efforts in Miyagi: Agricultural and fishing industries

● Agricultural Industry

Farmland (including salt removal)
Approx. 99% Completed

Affected: approx. 13,000 ha
Completed: approx. 12,996 ha
(as of end of October 2020)

Horticulture (restored greenhouse area)
100% Restored

Affected: approx. 178 ha
Restored: approx. 178 ha
(as of end of November 2019)



Recovered Farmland and Demonstration Rice Reaping at Test Field (Higashimatsushima City)

● Fishing Industries

Fishing Ports (restoration work)
Approx. 91% work completed

Affected : 1,251 sites Completed : 1,135 sites
(as of end of October 2020)

Fishing Boats (no. in operation)
100% in operation

Before disaster: approx. 9,000
Now: approx. 8,800
*Repair or replacement of all fishing boats requested by owners has been completed.



Support Received in Miyagi

1. Volunteer Activities in the Reconstruction (as of September 30, 2020)

- No. of social welfare council accepting disaster volunteers :
13 located across 8 cities and 5 towns
- No. of volunteers: 777,031 people (March 12, 2011 – September 30, 2020)

2. Donation Money (for Disaster Victims) (as of September 30, 2020)

27.28 billion JPY (206,110 separate cases)

Breakdown - Domestic: 27.02 billion JPY (205,894 separate cases) Overseas: 260.6 million JPY (216 separate cases)

3. Donation Money (for Recovery Efforts) (as of October 30, 2020)

34.87 billion JPY (13,717 separate cases)

Breakdown - Domestic: 18.55 billion JPY (13,651 separate cases) Overseas: 16.32 billion JPY (66 separate cases)

4. Donations for Children Orphaned by the Great East Japan Earthquake (as of October 31, 2020)

12.07 billion JPY (19,523 separate cases)

Breakdown - Domestic: 12.04 billion JPY (19,442 separate cases) Overseas: 21.21 million JPY (81 separate cases)