



# CONNECT WITH THE WORLD AND REVITALIZE COMMUNITY

~Higashimatsushima City  
in Cooperation with JICA~



# Preface

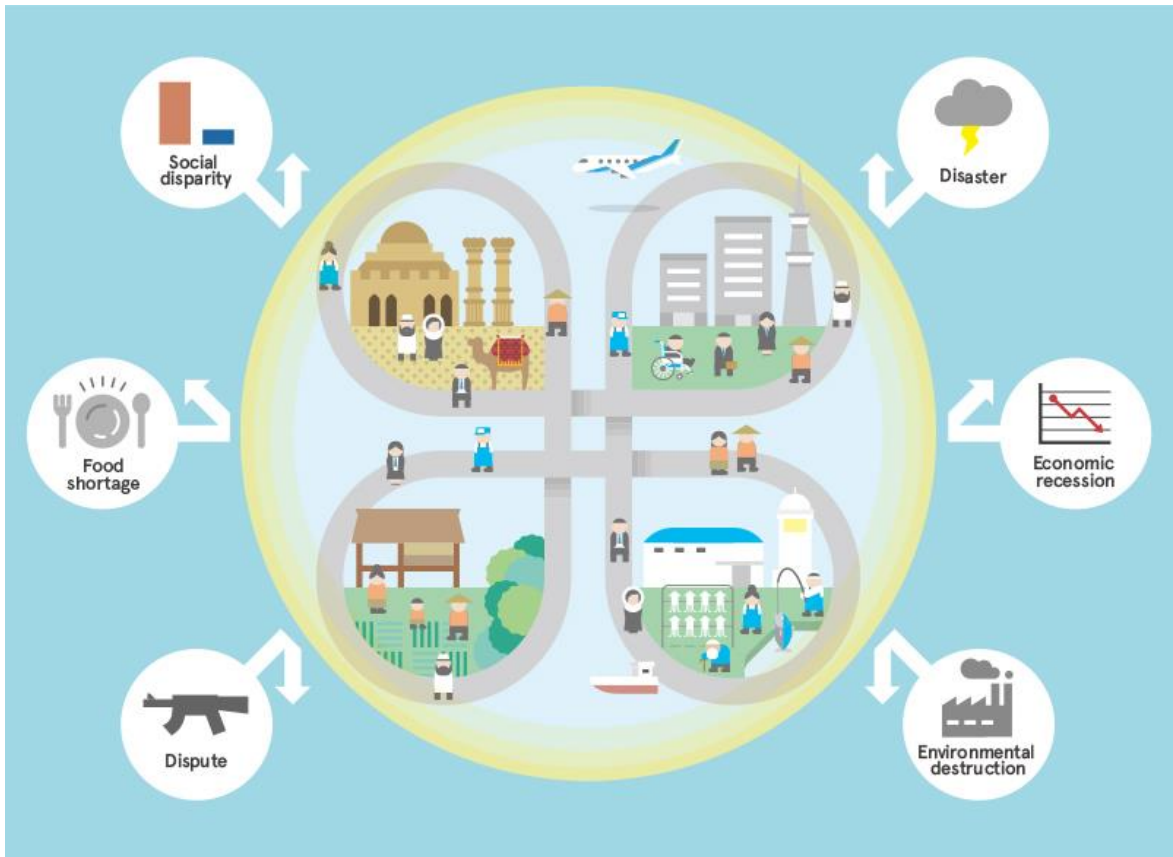
Higashimatsushima was one of the most devastated cities in the Great East Japan Earthquake on March 11, 2011. However, with warm support from the world, Higashimatsushima was able to take significant steps toward reconstruction and recovery. Through JICA, the city widely spread the lessons learned from the disaster while also expressing its sincere gratitude for the assistance and encouragement it received from people worldwide.

Many government officers, researchers and NGO staff visited Higashimatsushima, including delegates from Banda Aceh of Indonesia, which suffered from the 2004 Indian Ocean earthquake and tsunami, and from the Philippines, which experienced major damage from Typhoon Yolanda in November of 2013. In just 4 years, over 400 officers participated in training programs in Higashimatsushima.

On July 31, 2015, Higashimatsushima and JICA signed a Memorandum of Cooperation, as the city strives to seek an inclusive reconstruction and disaster prevention model led by resident-led community leadership.

This booklet summarizes the reconstruction process of Higashimatsushima; what they learned together with the international community, and the lessons from reconstruction and recovery both JICA and Higashimatsushima are delivering to the world.

JICA Tohoku



## 【Striving Toward “Resilience through Resonance among Diversified Societies”】

When we reconstruct our society from disaster, we must pursue a kind of society that allows for various enrichment of life. Reconstruction cannot be achieved through application of uniformed processes, but rather must be attained by a development path that can bring out the uniqueness of individual regions. The world, including Higashimatsushima, is comprised of various local regions where each region possesses distinctive features in terms of people, culture, tradition, value systems, nature etc. We can share knowledge and perspectives to acquire clues for creating a new society when interacting with other, likewise, unique people with different value systems. We believe that real resilience against various risks such as disasters, recessions, disputes and climate change can be collectively achieved when respective regions autonomously proceed toward inclusive societies that mobilize the full potential of the people.

# Higashimatsushima City

Higashimatsushima is a coastal city located in central Miyagi Prefecture with a population of 40,193. It was formed when 2 small towns, Yamoto and Naruse, merged in 2005.

In the Great East Japan Earthquake of March 2011, 11,054 houses were destroyed. This is approximately 73% of all residential homes in the area. Though the damage was severe, the city was able to process and recycle 97.2% of the debris in the rebuilding effort, using a unique method, called the "Higashimatsushima Method". This was possible because of the town's previous effort to enable the community and the local government to collaborate in cases of emergency. As a result, the town successfully saved 15 billion yen in 3 years, compared to the initial estimate. In addition, the effort generated over 800 new jobs.

In December of 2012, the Japanese government selected Higashimatsushima to be one of the model cities in the "FutureCity" Initiative, directed by the Cabinet Secretariat. The project is aimed to establish a sustainable society, capable of managing socio-economic issues such as the environment, rapid aging and disaster preparedness. Experts from public and private sectors collaboratively established an organization called Higashimatsushima Organization for Progress and Economy, Education, Energy (HOPE) to lead the effort to create a model for sustainable local development.



# Tsunami Damage and Recovery



Ono district of Higashimatsushima after recovery



Tsunami damage in Ono district

Tsunami damage



## Severity of the Earthquake

Magnitude: 9.0  
(Level 6 plus on the Japanese seismic scale)  
Height of Tsunami:  
10.35m (Nobiru Beach)

## Lives Lost (As of Jan. 1, 2014)

Confirmed Dead: 1,110  
Missing: 24  
Evacuees: 15,185

## Residential Damage

(As of Dec. 31, 2013)

Total Loss: 5,513  
Partial Loss: 5,560  
Minor Damage: 3,506  
Sum: 14,529 buildings  
% of total/partial damage 73.4%  
(highest of all tsunami affected areas)

## Infrastructure Recovery Time

Power: approx. 2 weeks for full recovery (5 months in Miyato district)

Water and Sewer: 2 weeks to 5 months

Landlines: 2 weeks to 3 months

Cell Phones: 7 days to 6 months

Japan Rail Senseki Line:  
from April 5, 2011, partial operation between Ishinomaki and Yamoto station  
Bus line between Yamoto and Matsushima Kaigan station  
Full operation resumed on May 30, 2015

## Temporary Evacuation

Sites: 106 locations  
All sites were closed on Aug. 31, 2011

## Post-Disaster Debris:

1,098,000 tons  
Equal to 100 years of waste  
Sorting completed on Dec. 20, 2013

# JICA's Assistance in Higashimatsushima

JICA deployed Japan Overseas Cooperation Volunteers (JOCV) to evacuation shelters in Higashimatsushima, immediately after the 311 earthquake. Later on, JICA placed reconstruction facilitators to survey and take part in the reconstruction effort. Currently, 2 reconstruction facilitators are continuing work in the area.

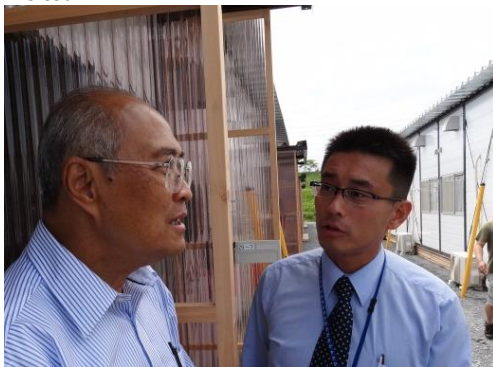
Higashimatsushima has hosted training courses for government officials and NGO staff from developing countries, with the purpose to share the experience of post-disaster recovery effort.

In December of 2014, during the fourth "FutureCity" Initiative International Forum, hosted by the Cabinet Secretariat, the mayor of Higashimatsushima Abe sent a message that individual, public, and community assistance are the foundation of the city's reconstruction.

## Timelines

### 2011

- March 11 The Great East Japan Earthquake
- March 25 JOCV (Niger) sent to shelters
- April 8 Watanabe, Director General of JICA visited
- May 27 Kuntoro Mangkusubroto, former chairman of Ace-Nias Rehabilitation and Reconstruction Agency (RRB) of Banda Aceh in Indonesia visited



- June 16 Oshima, Senior Vice President of JICA, visited
- Aug 19 Community Reconstruction Facilitators are deployed
- Sept 8 Ogata, President of JICA, met with Abe, Mayor of Higashimatsushima



- Oct 24 Domichi, Senior Vice President of JICA, was appointed to be a consultant to HOPE
- Oct 17 11 officers from 9 countries (Tonga, Timor Leste and others) visited the Community Reconstruction Facilitators
- Dec 8 JICA national staff training (14 officers from 14 countries in Middle East and Africa)
- Dec 10 6 officers from South Africa Development Bank visited

### 2012

- Jan 23 5 officers from UNESCO Indonesia visited
- Feb 22 Eddy Purwanto, former Deputy Director of Aceh-Nias RRB, the chief of Macedonia Emergency Operation Center and 3 other officers visited
- Feb 23 47 officers from 21 countries (Laos and others) participated in the "FutureCity" Initiative International Forum



- Feb 26 Invitation Program of Media Representatives to Japan (12 representatives from 9 countries including Bangladesh and others)

- July 4 Senior Vice President Domichi visited reconstruction sites
- July 10 6 officers from NGOs in 4 countries (Afghanistan and others) visited
- July 17 16 officers from vocational training management fields in 11 countries (Angola and others) visited
- July 19 Eddy Purwanto, former Deputy Director of Aceh-Nias RRB visited
- Aug 9 Illiza Sa'aduddin, vice mayor of Banda Aceh visited



- Nov 11 Higashimatsushima and JICA jointly surveyed Banda Aceh
- 2013**
- Jan 23 Vice President Watanabe and Kurokawa accompanied officers from the House of Councillors Special Committee on ODA and Related Matters, and visited Higashimatsushima
  - March 6 Higashimatsushima and JICA jointly surveyed Banda Aceh



- March 10 Higashimatsushima accepted 2 officers from the city of Banda Aceh as trainees
- Sept 17 13 NGO officers from 4 countries (Timor Leste and others) visited
- Oct 23 39 officers from 19 countries (Chile and others) participated in the "FutureCity" Initiative International Forum
- Nov 27 JICA President Tanaka visited Higashimatsushima
- Dec JICA Partnership Program began in Banda Aceh and Higashimatsushima

**2014**

- Jan 19 Deployed the first investigative team to the Philippines after Typhoon Yolanda
- Feb 4 JICA Vice President Kuroyanagi reported on the assistance for Typhoon Yolanda
- Feb 21 21 officers from 9 countries (Turkey and others) visited reconstruction sites



- June 18 14 officers from 11 countries (Rwanda and others) visited
- Aug 27 35 officers from 11 countries (Fiji and others) visited
- Oct 16 11 officers from 10 countries (Malaysia and others) visited
- Oct 25 11 officers from Turkey visited
- Nov 25 12 officers from 12 countries (Pakistan and others) visited
- Dec 4 9 officers from the Ministry of Home Affairs in the Philippines participated in the "FutureCity" Initiative Forum
- Dec 4 Accepted trainees for recovery effort from Typhoon Yolanda

**2015**

- Jan 14 14 officers from 8 countries (Nepal and others) visited
- Jan 28 Accepted 11 trainees affected by Typhoon Yolanda
- July 31 Signed a Memorandum of Cooperation





# JICA and Higashimatsushima Collaborative Projects

## JICA Partnership Program

Higashimatsushima partners with Banda Aceh in Indonesia through the JICA Partnership Program (JPP) in its effort to achieve full recovery from the 311 tsunami. Banda Aceh has also experienced devastating damages from the Indian Ocean earthquake and tsunami of 2004. The two cities strive together to rebuild and establish natural disaster resilient communities. With aid from HOPE, the two cities provide training opportunities for its staff to exchange ideas related to community disaster preparedness, business models utilizing local resources, and organizing effective public administration systems. In addition, the city facilitates community meetings to discuss new ideas such as “blue tourism (basket fishing and tourism)” and “organic waste recycling and production of farmed cat fish food.” These new ideas are created during meetings with community leaders, fishermen, and experts in waste management, and are already being practiced as model programs, to revitalize the local economy.



On a fishing boat with local fishermen



Community business workshop in Banda Aceh



Learning how to recycle market waste

# 2015 UN World Conference on Disaster Risk Reduction

On March 15, 2015, JICA hosted a public forum titled, "Disaster Reconstruction and Rural Revitalization – Generating Regional Changes through Global Interaction and Facilitation."

At the event, the mayor of Higashimatsushima, Hideo Abe, and the vice president of JICA, Hideaki Dodo, made appearances to share their experiences in the disaster reconstruction process. Over 100 people attended the event, including the mayor of Banda Aceh, Illiza Sa'aduddin Djamal.

Abe explained how empowering the community to lead disaster preparedness efforts became the foundation for the recovery and reconstruction after the 311 tsunami. He continued to say that providing assistance to Banda Aceh and the Philippines contributed to and accelerated Higashimatsushima's own recovery. He hopes to spread the lessons learned from these events for disaster risk reduction and prevention throughout the world.



UN World Conference on  
Disaster Risk Reduction  
2015 Sendai Japan



# Reconstruction Facilitators

Immediately following the earthquake, JICA deployed reconstruction facilitators to organize a model project aimed to rebuild the city led by resident-led community leadership. Currently the second generation of facilitators are in action.

## AKIYAMA Chie, SAITO Hiroki



Left: AKIYAMA, Right: SAITO

JICA Reconstruction Facilitator

**AKIYAMA Chie:** Participated in JOCV and engaged in rice cultivation instruction in Rwanda. She is currently working on rebuilding the local community on Miyato Island in Higashimatsushima City, Miyagi Prefecture, through cooperation with the community business, "Genchan House" which the local residents started with the hope of bringing revitalization into the area.

**SAITO Hiroki:** Participated in JOCV and worked as a computer instructor at a school in Ethiopia. He is currently focusing on local community reformation in Nobiru district in Higashimatsushima City, Miyagi Prefecture. Through his work, he is supporting the publication of "Nobiru Reconstruction Newspaper" in order to share information with the local residents on what is new in Nobiru.

**AKIYAMA:** A very visible challenge in Miyato district is the declining birthrate coupled with the aging population. I am hoping to support the residents who are proud to live in this area to retain an environment where they can be fully motivated and enjoy themselves. For example, we can make our community restaurant "Genchan House" into a PR hub to showcase the cuisine of Miyato women which has great richness in variety and taste.

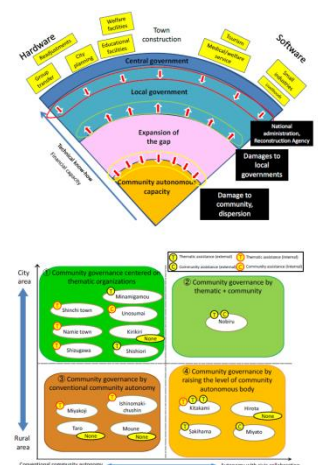
**SAITO:** In Nobiru, there are people who are relocating to higher ground and those who are remaining in the same place regardless of disaster damage. Since these people have different needs, the reconstruction process is progressing in different ways. Such situations could easily incur a gap in information about reconstruction progress between the two parties. To solve the problems, I am supporting the publication of "Nobiru Reconstruction Newspaper" in the hope of promoting the smooth formation of a new community. In addition, we have added a new column to the newspaper on the history of Nobiru. Sometimes local people do not know much about their own. I would like to make use of my viewpoint as an outsider, to disseminate what to appreciate about Nobiru for future generations.

## Study

JICA, in conjunction with Tohoku University International Research Institute of Disaster Science, the Fukko Coordination Centers in Miyagi, Iwate and Fukushima, conducted a study on the assistance approach for disaster reconstruction.

In Tohoku, rapid aging and depopulation are problems that required urgent attention since before the earthquake. The communities have been seeking new ways to develop and revitalize the region. Now the region faces 2 issues: rapid recovery and sustainable regional development. Its reconstruction process is complex, and difficult to understand from outside.

In this study, the reconstruction process was divided into 4 community governance styles, categorized by region and theme. By doing so, it facilitates further understanding of the situation, and stimulates discussion in the disaster affected areas over the reconstruction process. The hope is to spread the lessons of the event both domestically and internationally.



# Joint Effort by Higashimatsushima and JICA

## Study Tour

Study Tour was created to spread what Higashimatsushima learned during the reconstruction process. JICA trainees from all over Japan are expected to participate in the tour to take back the lessons from Higashimatsushima, and utilize them in their own disaster recovery and reconstruction policies.



## I Disaster Prevention

Learn about regional disaster prevention methodologies to build disaster resilient communities

### Program1 Disaster Preparedness

### Community Disaster Prevention Plan "Stockpile Plan" and Voluntary Organization for Disaster Preparedness



※The contents of the program are under construction and may change.

## II Disaster Reconstruction

Learn about different approaches for providing continuous support for the victims and building disaster resilient communities. The modules include recovery planning, rebuilding of community participation model, community assistance and community business.

### Program 1 Reconstruction Policies

City Planning in Reconstruction Process

Tour of Tsunami Affected Areas and Reconstruction Sites



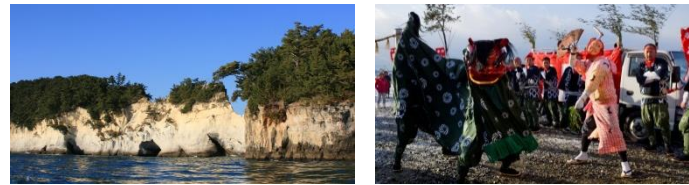
### Program2 Community Reconstruction

Community Business

“Kizuna” Preservation Project

Learning from the Past Experience

Recovery of Sightseeing Business



Guided Tour by Volunteers

## III Community Governance

Higashimatsushima has always valued resident-led community governance. This module explores how the city strengthened community governance and sought civic cooperation, and how these attempts bolstered the reconstruction process. In addition, it explores the city's attempt to solicit diverse actors and establish sustainable society, as one of the selected members of the “FutureCity” Initiative.

### Program1 Civic Cooperation

Consensus Building

Community Support



### Program2 City Building Actors

Private, Public and Academic Actors



# JICA's Public-Private Partnerships toward Regional Revitalization

JICA supports experimental projects to investigate the use of commercial products and technologies that could contribute to development of emergent nations.

## Partnership with Japanese Small and Medium-Sized Enterprises

The program aims to resolve developmental issues while assisting domestic companies to expand opportunities abroad, by matching the needs of developing countries and private companies with outstanding technologies and products.

**Partnership Promotion,  
Feasibility, Verification  
Survey**

JICA will assist private enterprises considering business opportunities overseas with training personnel.

## Public-Private Partnerships Volunteers

JICA sends staff from private companies to developing countries through JOCV/SOCV programs and assists them train knowledgeable staff in the field.

**① Development of  
Human Resources  
② Building Networks  
③ Market Research**

### Examples of Projects in Tohoku

Category	Projects	Who May Apply	Requirements	Past Projects	Related Projects
Volunteer	Junior Overseas Cooperation Volunteer	Anyone	20-30 years of age	738 participants from Miyagi as of April 2015	Youth Volunteers for Nikkei Communities
	Senior Overseas Cooperation Volunteer	Anyone	40-69 years of age	96 participants from Miyagi as of April 2015	Senior Volunteers for Nikkei Communities
Developmental Education	Study Tours for Teachers	School teachers and administrators	Interested in developmental education	deployed 10 teachers to Rwanda deployed 7 teachers to Paraguay	
	Lectures	Schools, universities and other organizations	-	33 schools including Ayukawa Elementary in Ishinomaki, Tohoku Gakuin Junior High, and Miyagino High School	
	Junior High and High School Essay Contest	Junior and senior high school students	Junior and senior high school students	1,569 entries from Miyagi pref., 1 JICA President's Award and 2 Special Awards	
JICA Partnership Program	Partner	NGO, NPO, universities and other organizations	Minimum 2 years of experience providing assistance in developing countries	Enhance Community Health Workers' (CHW) activities through SISCa in Hatolia sub-district: Global Stage	
	Support	NGO, NPO, universities and other organizations	Minimum 2 years of experience domestically or overseas	Assistance for self-sufficiency for the disabled in Kigali through computer education : Tohoku Fukushi University	
	Local Government	Community governments	-	Project for community based irrigation management in Malawi : Miyagi pref.	
Partnership with Japanese Small and Medium-Sized Enterprises	SME Partnership Promotion Survey	Small and Medium-Sized Enterprises	-	Reducing greenhouse gas using WindWill: Air Conditioning Enterprise	
	SME ODA/Feasibility Survey	Small and Medium-Sized Enterprises	-	Turning seawater into drinking water: Ichigo Holdings	
	SME Verification Survey	Small and Medium-Sized Enterprises	-	Computer controlled strawberry cultivation: GRA	
Partnership with Japanese Private Sector	BoP Business Promotion Survey	Private Sector	Interested in BoP	Project for developing rehabilitation model and human recourse training on rehabilitation, with application of pedaled wheelchair, in Vietnam : TESS	PPP Infrastructure, Increasing private sector presence
Training	Group and Region Focus	NGO, NPO, private sector and other organization	Experience with similar projects	Medical Quality Management, Training Course of Teachers, Post Harvest for Rice	
	Youth	NGO, NPO, private sector and other organization	-	Economic Administration, Employment Training, Tourism Promotion, Rural Development, Fisheries using Resource Management Approach	

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