Fresh Breeze of Change in Agriculture Starts Here

Agriculture in East Sendai: Chronicle of Recovery Summary



Recovering from the huge disaster

After viewing the muddy streams crisscrossing the devastated farmland in the aftermath of the tsunami, everyone had the same thought, "How could we ever farm on this land again?" Without reconstruction and recovery of agriculture in the eastern Sendai, people's lives in the coastal area could not have been restored. "If we make the best of our wisdom and experience, the farmland will certainly revive." With this strong belief to sustain us, we addressed the challenge of restoration and recovery from this unprecedented disaster.



Disaster Strikes

Vork

Aerial photo of Wakabayashi Ward, Ido area

The eastern area of Sendai is a large farm area that supplies agricultural products such as rice, vegetables and flowers to the citizens of Sendai. About 78% of the farmland in the area was damaged by the massive tsunami, and countless agricultural equipment and facilities were either washed away or sustained major damage.

Reconstruction work was begun with the strong wish, "We must make every single day count so that we can recover at the earliest possible time."

In order to start reconstruction work, it was necessary to drain the seawater that had flowed into the farmland at the earliest possible time. Unable to use the drainage pumping station that had been totally destroyed, we used a temporary pump to drain the seawater. In accordance with the restoration plan, debris removal was also started.



Removal of debris with heavy machinery was extremely difficult.



Salt removal work continued in spite of bad weather.



Delivery ceremony of agricultural machi and nursery boxes on March 27, 2013



Groundbreaking ceremony of Sendai-Higashi Land Improvement Project on October 25, 2013

With the cooperation and collaboration of various groups, reconstruction got under way. On March 25, 2011, brine damage survey

began at the seawater-covered farmland. The "Agricultural Disaster Reconstruction Liaison Meeting for the Eastern Sendai Area" was set up on April 5 with the collaboration of Sendai City, Sendai-Higashi Land Improvement District, and JA Sendai, and led the efforts for recovery.

Salt damage inspection team accompanied by Mayor of Sendai City at Arahama, Wakabayashi Ward, on March 25, 2011

In May 2012, farmers were finally able to resume farming and begin a new challenge.

After the resumption of farming, farmers began raising crops on about 500 ha of farmland. With the support of projects headed by Sendai City such as the "Special Zone for Promoting Agriculture and Food Frontier," disaster-stricken farmers took the first step toward rebirth of agriculture in the area.



Members of the Okada Producers' Association reopened miso bean paste





After overcoming countless obstacles, rice planting started again.





Rice plants flourished, and farmers were able to reap an excellent harvest.



Restoration work advanced steadily.



Farmland consolidation makes firm progress



Business meeting between representatives of agriculture, commerce and industry

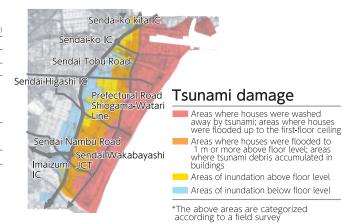
Damage from the Great East Japan Earthquake

Outline of earthquake

Name of Earthquake	The 2011 Tohoku Earthquake off the Pacific coast (Great East Japan Earthquake)
Date	March 11, 2011 at 14:46
Epicenter	Off of the coast of Sanriku (latitude 38°6.2′N, 142°51.6′E)
Scale	Magnitude 9.0
Seismic intensity in Sendai on the Japanese scale	Intensity of 6 plus, Miyagino Ward Intensity of 6 minus on the Japanese scale, Aoba Ward, Wakabayashi Ward, Izumi Ward Intensity of 5 plus on the Japanese scale, Taihaku Ward
Tsunami	On March 11, 14:49, Major tsunami warning was issued for the Pacific coastal region
Height of tsunami	Sendai-Shiogama Port 7.2 m (Estimate)

*Maximum aftershock: April 7, 2011 at 23:32; Magnitude 7.1 off the coast of Miyagi Prefecture

Intensity of 6 plus on the Japanese scale, Miyagino Ward
Intensity of 6 minus on the Japanese scale, Aoba Ward and Wakabayashi Ward
Intensity of 5 plus on the Japanese scale, Izumi Ward
Intensity of 5 minus on the Japanese scale, Taihaku Ward



Damage in the eastern Sendai area

Inundation disaster area

Area population	21,966
Area households	8,086
Land area	4,633 ha
Number of buildings	12,277

Amount of damage in agriculture, forestry and fishery industries 73.4 billion yen

Damage in agriculture (1)Farmland (2)Machines and facilities used in agriculture (3)Land improvement facilities	10.6 billion yen	Damaged farmland: ca. 1,800 ha (Rice paddies: 1,600 ha, vegetable fields: 200 ha) Plastic greenhouses, grain elevators, etc. Drainage pumping stations (4 locations), water channels, farm roads, etc.
2. Damage in forestry industries	0.07 billion yen	23 forest road lines
3. Damage in fishery industries	1.3 billion yen	Fishing boats, laver culture facilities, tide embankments, joint facilities, etc.

Constructing a collaboration system

Agricultural Disaster Reconstruction Liaison Meeting for the Eastern Sendai Area

In order to help farm operators to resume farming, Sendai City launched the "Agricultural Disaster Reconstruction Liaison Meeting for the Eastern Sendai Area" in collaboration with the Sendai Higashi Land Improvement District and JA Sendai on April fifth, about a month after the Great East Japan Earthquake.

The Liaison Meeting set up five task teams in its organization. They were made up of the "public relation task team," "salt damage task team," "community issues task team," "farmland restoration task team" and "reconstruction planning team,"

with each of the teams engaged in their respective tasks. The first meeting was held on April 5, 2011. Later, the Tohoku Regional Agricultural Administration Office and Miyagi Prefectural Government joined the Liaison Meeting. The 16th and final meeting was held on July 16, 2013. During the series of meetings, talks and discussions were held on policies for restoration and reconstruction as well as the content and progress status of each task team, thus playing an important role in moving forward with the disaster restoration plans.



Collaboration with universities, research institutions and financial institutions

■Soil investigation of the salt-damaged farmland

In collaboration with Tohoku University, Miyagi Prefectural Government and JA Sendai, Sendai City investigated the status of salt damage to the farmland.



Mayor of Sendai makes an on-site inspection observing damage to agriculture (soil analysis).

Place: Arahama, Wakabayashi Ward (soil profile survey of one site) Participants: Sendai City: Mayor, Director, Agriculture and Forestry

Department, and other members of the city office Tohoku University Graduate School of Agriculture: Professor Makie Kokubun (Crop Science), Professor Masami Nanjo (Soil Science)

Investigation of salt damage to farmland

Date: March 29 and 30, 2011
Place: 170 sites at Rokugo and Shichigo in Wakabayashi Ward and Shiromaru in Taihaku Ward (soil EC test)
Investigating Team: Sendai City Government, Sendai Agricultural Extension Center of Miyagi Prefecture, and JA Sendai

Collaboration with Tohoku University Graduate School of Agriculture

A Collaboration Agreement was concluded on September 3, 2012 toward restoration of agriculture, food and other-related industries that sustained damaged from the disaster. The city is making efforts to review approaches to farmland management and create a model for agricultural reconstruction.



Rape Blossoms Project

Outline: Tohoku University conducted a demonstration test in selecting rape blossoms with a high salinity tolerance. Their effort was accepted by the Japan Science and Technology Agency (JST) as one of its projects.

Farmland used for demonstration testing: Sendai City Agriculture and Horticulture Center (FY 2012 and 2013)

Project leader: Professor Yutaka Nakai (Sustainable Environmental Biology)

Arahama Project

Outline: Reviewing of management approaches toward realizing a highly productive and

profitable agriculture Project leader: Professor Fusao Ito (Agricultural Economics and Farm Management Science)

Collaboration with Japan Finance Corporation, Sendai Branch

A collaboration agreement for businesses in agriculture, forestry and fisheries was concluded with the Japan Finance Corporation on March 28, 2013 toward fostering young farmers and improving their agricultural management skills.



Content of agreement

- Management of human resources development programs
 Joint management of the programs targeting young farmers
- 2)Sponsoring joint business meetings and other related events Sponsoring joint business meetings, business "matching" seminars and other related events
- 3)Collaboration in the specialist dispatching program Implementation of the specialist dispatching program through mutual collaboration by sharing information of dispatching candidates and cooperating in selection of specialists

Sendai City Earthquake Disaster Reconstruction Plan Vigorous revitalization of agriculture

Agriculture and Food Frontier Project

The "Agriculture and Food Frontier" project is being undertaken to support recovery from the disaster and development of agriculture in the East Sendai Agricultural Zone

The project is centered on four targets: 1) Farmland consolidation and improvement, 2) Supporting farmers in enhancing their management base, 3) Promoting the "cross-industry diversification" (namely, the diversification of agriculture by integrating farming with related industries such as food processing and sales,) and 4) Improving support center facilities.



1. Farmland consolidation and improvement

1 Restoration and recovery of farmlands

Removal of debris from farmlands

The clean-up efforts included removal of damaged buildings, woody debris and cars that had been swept into farmlands, farm roads and irrigation channels. In collaboration with the Sendai Higashi Land Improvement District and JA Sendai, debris removal was carried out by employing farmers who were victims of the disaster and, in total, 1,202 of them were hired for the task,

Restoration of damaged farmlands and drainage pumping stations

Soil desalination and restoration of irrigation and drainage channels were conducted by the central government and the Miyagi Prefectural Government, and about 80% of the farmlands that had been damaged from the disaster were restored by the end of March 2013, making it possible for farmers to resume farming. The quality of the rice harvested was at a level equal to that before the disaster and the land is steadily returning to its former rural landscape.

All 11 drainage pumping stations were temporarily restored by June 2012 with the central government playing a leading role, assuring a drainage pumping capacity of ca.19 m3/s, a level equal to that before the disaster. At present, full scale restoration is being carried out with construction of the drainage pumping stations while taking into account the degree of ground subsidence (ca.50 cm).

Debris removal

- Beblis Telliovat	
Period of Project	From July 1, 2011 to December 28, 2011
Area	ca.1,800 ha (flooded farmland)
Employment of farming victims	Total of 1,202 people employed with 64 people registered for employment

Soil desalination

Period of Project From March 25, 2011 to April 30 2014 (planned)

Area 1,860 ha

Temporary restoration of drainage pumping stations
 Period of Project From May 2011 to June 2012

Facilities Takasago-Nambu, Ohori, Nigohori, and Fujitsuka (four locations)

Area where farming has resumed

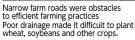
Fiscal year	Area where farming has resumed (ha)	Degree of Progress (%)
2012	560 (60)	30
2013	1,460 (60)	78
2014 (planned)	1,860 (60)	100

^{*}The figure in parentheses represents the area where farming has resumed

2 Promotion of farmland consolidation project

The "farmland consolidation project" currently being promoted by the central government and the Miyagi Prefectural Government involves readjusting small traditional farmland plots to form new, larger ones. It attempts to convert the conventional agricultural environment to a more productive and competitive one while raising the efficiency of farming practices with larger plots.









Aerial photo of Wakabayashi Ward (Sendai Tobu Road)

on September 28, 2013

Improved farm roads have raised the efficiency of farming practices. Improved drainage has made it possible to plant wheat, soybeans and other crops. Borrowing and lending of farmland plots progresses smoothly.



East Sendai District Farmland Consolidation Project

Operating body	Ministry of Agriculture, Forestry and Fisheries
Area of the district	2,244 ha (including farmlands, roads and irrigation/drainage channels)
Operational expenses	19.7 billion yen
Area for improvement	1,979 ha
Period of Project	From FY 2012 to FY 2016 (planned)
Ratio of consent for farmland con	by landowners solidation 94.6%

Natori District (Shiromaru area) Farmland Consolidation Project

- Natori District	(Shiromaru area) Farmiand Consolidation Project
Operating body	Miyagi Prefectural Government
Area of the district	809 ha (including 100 ha of the Shiromaru area)
Operational expenses	10.6 billion yen (including 1.36 billion yen for the Shiromaru area
Area for improvement	708 ha (including 91 ha of the Shiromaru area)
Period of Project	From FY 2013 to FY 2015 (planned)
Ratio of consent for farmland con	by landowners solidation 98.8% (100 % for the Shiromaru area)

3 Reviewing new approaches for accumulating farmlands

Concept of farmland accumulation

Promotes accumulation of farmlands by leasing them to current or future farm operators. This practice is implemented in conjunction with the government's re-plotting plan that is included in the farmland consolidation project.

Arranges a new scheme in collaboration with JA Sendai so that both "lender farmers" who own and lease out their farmlands and "borrower farmers" who borrow farmlands for cultivation may feel secure about doing this.

Main approaches to accumulating farmlands

Buying and selling of farmlands

Accumulates farmlands by transferring the farmland ownership based on buying and selling.

Re-plotting by exchanging farmlands

Accumulates farmlands by constructing the right of farmland use through implementing farmland consolidation.

Lease (establishing the right of farmland use) Accumulates farmlands based on the contract to commission farming between the "lender farmer" and the "borrower farmer."

Commissioning of farm work

The "borrower farmer" is commissioned to cultivate rice in paddy fields from plowing dry soils, tilling irrigated soils and transplanting rice seedlings to harvesting rice.

Main approaches to accumulating farmlands

Since April 2013, as part of its efforts to promote farmland accumulation, the city has introduced a new approach to bulk management of farmland in collaboration with JA Sendai. Sendai City and JA Sendai act as intermediary by implementing bulk

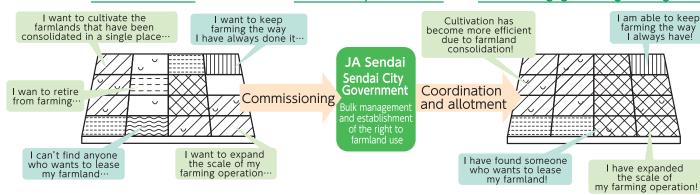
lease management practices of farmlands in the relevant areas so that "borrower farmers" are able to cultivate the farmlands that have been consolidated in a single place according to the scale of their farming and the status of their farming operation.

■Bulk management approach to farmlands (image)

Farmland owners

Intermediary coordinator

Farmers engaged in regional agriculture



4 Promoting the accumulation of farmlands

Support for farmland accumulation Sendai City Agricultural Infrastructure

The city has created the "Sendai City Agricultural Infrastructure Enhancement Plan (Master Plan for Resuming Agricultural Management)" based on the talks and discussions held at communities and areas in the 14 districts of Sendai, including the East Sendai district. To put this plan into action, a variety of support measures are provided to "lender farmers" and "borrower farmers."

Future vision for regional agriculture

Enhancement Plan

- Reorganizing regional agriculture so that farmers who operate large farmland plots can play a central position.
- Encouraging associations for rice-crop diversion practice to form group-farming organizations based on integrated cultivation of rice and other crops.
- Fostering community-based incorporated farming bodies as a model by establishing the right to bulk use and re-allotting farmlands to farm operators.

With the Ido district and the Arahama district as model districts, measures to establish the right of bulk use and re-allotment of farmlands to farm operators were started in 2013. Based on the positive experiences obtained, farmland accumulation will be promoted in all relevant areas.

The plan process

- Discussions are held by farmers independently on the community or area basis to determine what is included in the plan.
- A district-specific original plan is created by summarizing what was discussed at meetings.
- 3 Review meetings are held and attended by related organizations and representatives of farmers.
- 4 Sendai City formally decides the "Sendai City Agricultural Infrastructure Enhancement Plan."

Support funding (2013)

Farm accumulation support fund (central government)

Support funds are given to farmland owners who are listed in the "Sendai City Agricultural Infrastructure Enhancement Plan" when they newly commission JA Sendai to lease their farmlands, giving them full authority.* "Here, "giving full authority" means that the lender gives JA Sendai a contract without designating a borrower.

Project to promote accumulation of farmlands for use (Sendai City Government)

Concerning the tsunami-affected farmlands recovered for farming on or after April 1, 2012, subsidies are offered to both "farm lender disaster-victims" and "borrower farmers" when they have made new contracts that extend over a period of three years or longer for leasing farmland or commissioning farming.

2. Support measures for farm management

Comprehensive support project for agricultural restoration in disaster-stricken areas (Leasing)

Through the Reconstruction Grant Project, community farming organizations can lease free of charge, large machines (such as tractors, rice planters, combines, etc.) and facilities such as plastic greenhouses for raising seedlings in the disaster-stricken farmlands, thus making it possible for farmers to resume farming.

The organizations who use this system gave comments such as, "We gained a positive outlook toward farming because the program that allowed us to lease items free of charge," (Arahama Community-Based Group Farming Association) and "We were able to start planting rice with various forms of support such as the leasing program." (Nambu Agricultural Association)

Outline for FY 2012

Okada (Shinhama, Minami-gamo), Yotsuya, Sasayasaki, Kamiyashiki, Fujita, Arahama, Sambontsuka, Futaki, Ido, Nambu (Tanetsugi, Fujitsuka) Target area

Agricultural machinery

43 tractors, 24 rice planting machines, 32 combines, rotaries, harrows for soil puddling, seeders, plastic greenhouses for raising seedlings, wells, and various other machines required for farming

*FY 2013: Large agricultural machines, attachments, plastic greenhouses for raising seedlings, wells, storehouses for agricultural machines, etc. (leased)









Well

Plastic greenhouse for raising seedlings

Storehouse for

The Great East Japan Earthquake Subsidy for Agricultural Production Measures

The national, prefectural, and municipal governments have been offering financial support to groups which are organized by farmers, agricultural producers' cooperative corporations, etc., so that they can install common facilities, do repairs and renovations, and lease agricultural machines and materials.

The farmers who used this system said, "When we first saw the devastated farmland, we believed we would have to give up farming, but after we found out about the leasing program, we changed our mind and believed that we could resume farming by utilizing the system." (Kizuna Association), and "With this financial support, we were able to construct a grain drying and processing facility and we were very glad of this. We felt that we should view the future of agriculture from a long-term perspective including that of training people to succeed us in farming." (Sendai Chuo Agri Service)

Outline for FY 2011-2012

Subsidy ratio Less than 82.5 % (country, prefecture, city) Number of [2011] 51 projects [2012] 28 projects including carrying-over projects

Total project cost [2011] 787 million yen [2011] 603 million yen Amount of subsidy [2011] 603 million yen [2012] 1,528 million yen

*FY 2013 budget 1,386 million yen







Measures for project subsidy/aid

Emergency installation of plastic greenhouses Project to support disaster-stricken for vegetables and flowers

When disaster-stricken farmers (farming groups, certified farmers, ecofarmers, etc.) install plastic greenhouses to resume farming, the city government subsidizes a part of the expense depending on the size of the land area.



Outline for FY 2011-2012

Subsidy ratio	Less than 50% of project cost with a limit of 2,650 yen per 1 m ² .
Number of projects	[2011] 15 projects [2012] 11 projects *Including farming groups
Area	[2011] 11,769 m2 (78 buildings) [2012] 24,172 m2 (135 buildings)
Amount of project	[2011] 55.5 million yen (Amount of subsidy: 26.5 million yen) [2012] 139.9 million yen (Amount of subsidy: 62.5 million yen)

*FY 2013 budget 66.3 million yen

farmers to resume farming

This project provides subsidies to farmers who jointly establish a recovery association to remove fine debris, weeding or cleaning so that farming can be resumed.

Outline for FY 2011-2012

Target areas(Areas where recovery associations are established) [2011] 4 areas (Takasago, Shichigo, Rokugo, Nakada) [2012] 3 areas (Takasago, Shichigo, Rokugo)

Area of coverage Farmland in tsunami inundation area Number of farmers [2011] 1,573 [2012] 1,085 Total amount [2011] 641 million yen [2012] 401.6 million yen of grant aid Rice Paddy 35,000 yen Vegetable field 40,000 yen Unit price of grant

*FY 2013 budget 141.3 million yen

Promoting diversification of agriculture by integrating it with related industries such as food processing, distribution and sales

1 Promoting collaboration between agriculture, commerce and industry

We are aiming to promote regional industries based on agriculture by supporting activities to develop high value-added products and services in addition to supporting efforts to boost demand. We believe this can be done with the collaboration of agriculture, commerce and industry and mutual utilization of their resources, technologies and networks.



Farm operators

Commerce and industry operators

Arranging business "matching" opportunities
 Supporting development of new products and services to start businesses



Effective utilization of mutual management resources and technologies

Development and production of new, high value-added products and services

Support measures

Seminar for promoting collaboration between agriculture, commerce and industry

Support for development of new products: 4 in 2012; 4 in 2013

Project for support of the model to employ farmers based on collaboration between agriculture, commerce and industry: 3 in 2011; 3 in 2012; 1 in 2013

Diversification of agriculture through integration with related industries such as food processing, distribution and sales

In an effort to develop high value-added and sophisticated agricultural products, measures are being carried out to promote diversification of agriculture by integrating it with related industries such as food processing, distribution and sales. Specifically, farmers independently enter the businesses of food processing, distribution and sales and collaborate with members of the secondary and tertiary sectors of industry to produce and develop new and market-competitive products and to provide new services. In addition, we are aiming to foster young farmers who will play a major role in management in the cross-industry diversification of agriculture.



(primary sector) x (secondary sector) x (tertiary sector) = (cross-industry diversification)

Production

Food processing

Distribution

Sales

The "Project to Promote the Creation of Agriculture and Food Frontier," provides support for the development of high value-added and sophisticated agricultural products by promoting the "cross-industry diversification" of agriculture.

Support measures

Fostering human resources capable of developing the "cross-industry diversification" of agriculture. Support measures for promoting the "cross-industry diversification" of agriculture: 3 in 2012, 4 in 2013

Special Zone for Promoting Agriculture and Food Frontier

As part of the central government's special reconstruction zone program, the "Special Zone for Promoting Agriculture and Food Frontier" project has been set up in the East Sendai area. This project allows farm operators in the area to receive special tax provisions so that they can acquire agricultural machinery and facilities, start new incorporated businesses and other projects without much difficulty. Presently, 18 operators are developing businesses which have been designated for the special zone project.



Target area Agricultural promotion area of ca. 3,000 ha covering the tsunami-affected area and



Number of designated businesses

Number of operators: 18; Number of businesses: 20

Target businesses

Such businesses include incorporated entities or small independent companies that contribute to creating employment opportunities and promote agriculture or operate businesses that correspond to cluster industries in the approved zone.

Type of industry

Agriculture

Agriculture-related:

Food processing-, distribution-, and sales-related industries Renewable energy-related industry Research and testing-related industry

Special measures

Special tax provisions

Tax credit or special depreciation against national taxes (income tax and corporate tax) Exemption from prefectural tax (corporate tax and real property acquisition tax) Exemption from municipal tax (fixed assets tax)

Renovation and remodeling of support center facility

Newly rebuilt support center facility

Renovations are under way to establish the Sendai City Agriculture & Horticulture Center as a support center to promote the "Agriculture and Food Frontier" project that actively aims to revitalize agriculture. In the "Agriculture and Food Frontier" project, the eastern Sendai area is regarded as a base for expansion of agriculture and related industries. In line with this, proposals to develop "new foods that are safe and secure" will be provided by farmers who are engaged in agriculture with high expectations for the future.

Introducing the vitality of the private sector

The energy and vitality of the private sector is introduced in the changes made at the Agriculture & Horticulture Center. By using specialists' know-how and accurately understanding market needs, the center conveys information to the public on the progress being made in the recovery of eastern Sendai and the revitalization of agriculture in the city as well as information on residents' new involvement with agriculture.

Shipping building Vegetable greenhouse Processing building Vegetable greenhouse Processing building Vegetable greenhouse Processing building Vegetable greenhouse Processing building Vegetable greenhouse greenh

The center supports the development of lucrative agricultural businesses by providing training sessions to develop diversification and integration of the agriculture industry into other industries and multiple management in agriculture. It also exhibits the operation of its horticulture and food processing facilities, fosters human resources and releases information on its various activities.

Exchange center for hands-on experiences with agriculture

The center's facilities include an allotment garden, direct sales shop, open areas, and restaurants. A variety of events are held here, attracting visitors to the Center where visitors can have hands-on experience with agriculture and have opportunities to speak with farmers.

A "frontier spirit" is fostered among farmers in Sendai

A new path to the future

Three years have passed since the disaster, and people from all walks of life have gathered to offer their support to create a brighter future for agriculture, especially through cross-industry diversification of agriculture.



Okada Producers' Association

Before the disaster, they had been selling miso processed from rice and soybeans grown on their farmland. In April, 2012, they moved inland and started making miso again. In 2013, they started cultivating rice, wheat and soybeans according to the 2-year 3-crop rotation system. Their 2014 schedule includes group farming where, for non-rice fields, the commissioned farmland is divided for cultivation among its members, and, for rice fields, a three-group system is employed for working collectively, thus making the work more efficient and profitable.





- Date of establishment: April 17, 2008 Location: 107-3 Minami-zaike, Okada,
- Miyagino-ku
- Representative: Geniiro Endo, President
- Date of designation: December 28, 2012 Subsidy utilized: The Great East Japan Earthquake Subsidy for Agricultural Production Measures

Receiving the "6th Oryza Grand Prize" (November 19, 2012) Receiving the "Grand Prize" from "Miyagi Prefecture Awards for Meritorious Women's Groups for Revitalization of Agriculture and Rural Communities - 2012" (February 4, 2014)

Agricultural Producers' Cooperative Corporation "Sendai Eastcountry"

In an effort to recover from the disaster, Sendai Eastcountry launched a long-held plan to "Process and Sell Products with Our Own Hands." They set up a food processing facility and a farmhouse restaurant. They presently produce and ship miso (soybean paste), rice balls and other items made at their food processing facility and serve dishes made from their products at the farmhouse restaurant to add high value to their agricultural products. Employing young people in the divisions of agricultural production, food processing and the restaurant is helping to alleviate the local employment issue.





- Date of establishment: January 15, 2008 Location: 224 Kamiyashiki, Árai,
 - Wakabayashi-ku
- Representative: Hitoshi Sasaki, Representative Director
- Date of designation: July 20, 2012 Subsidy utilized: The Great East Japan Earthquake Subsidy for Agricultural Production Meas

Michisaki Co., Inc.

Michisaki is an incorporated agricultural organization. Its name means "Continuing to light the way for agriculture to go forward." There was a business opportunity involving an Italian restaurant chain, and they started growing tomatoes, strawberries and other vegetables through hydroculture on a large scale basis. From the perspective of continuous employment and avoidance of weather risks, they believe it important to promote agriculture by combining conventional, seasonally restrictive land-using agriculture with hydroculture which does not depend on the seasons and therefore allows produce to be shipped 365 days out of the year.





- ■Date of establishment: July 3, 2012 Location: 63 Hosokawa, Gamo, Miyagino-ku Representative: Mamoru Kikuchi, President
- Date of designation: June 27, 2013 Subsidy utilized: The Great East Japan Earthquake Subsidy for Agricultural **Production Measures**

Receiving the "Kizuna (human ties) Award" by the eco japan cup & revive japan cup -2012 (February 22, 2013)

KARUCHE Co., Ltd.

With an intent to develop a "far-sighted strategy for agriculture in the future,' young farmers in the local area established KARUCHE Co., Ltd. They are growing leafy vegetables using generous amounts of organic fertilizer since it grows effectively with less labor and is in high demand at restaurants.

They opened a "farmhouse restaurant" in Kokubuncho which is Tohoku's largest shopping and entertainment district. They are very eager to make KARUCHE vegetables well known in Sendai, Tohoku's most prominent city, and developing high-quality, brand-name vegetables that Sendai will be able to boast about to other regions.





- Date of Establishment: October 18, 2011 Head office: 7-35-30 Okino, Wakabayashi-ku
- Representative: Takanori Aihara. President
- Subsidy utilized: Emergency installation of plastic greenhouses for vegetables ar

Eastern Agriculture and Forestry Reconstruction Office, Agriculture and Forestry Department, Economic Affairs Bureau, City of Sendai

9F Sendai Park Building, 6-1 Kokubuncho 3-chome, Aoba-ku, Sendai-shi, Miyagi-ken 980-8671 Japan Phone: +81-(0)22-214-732 Facsimile: +81-(0)22-214-8338

With the cooperation of: Tohoku Regional Agricultural Administration Office, Ministry of Agriculture, Forestry and Fisheries (Tohoku MAFF), Miyagi Prefectural Government, Sendai Higashi Land Improvement District (Sendai Higashi Midori-Net), and Japan Agricultural Cooperatives Sendai (JA Sendai)

Produced by: Toppan Printing Co., Ltd.

Project: Emergency Job Creation Program (Emergency employment measures in disaster areas)

"Production Project for Agriculture in East Sendai: Chronicle of Recovery"

The information shown in this brochure is as of March 31, 2014.



World Conference on Disaster Risk Reduction