Miyagi Prefecture (Ishinomaki City)

- Accelerate of re-establish farming with the Next-Generation of Greenhouse.
- To introduce advanced cultivation techniques of the Netherlands and applies local energy source such as woody biomass and ground thermal.

### Overview of project

<table>
<thead>
<tr>
<th>Category</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities at base</td>
<td>(1) greenhouse (2) facilities for wooden biomass and supply of geothermal heat, (3) facilities for seed production (4) facilities for collection and shipment</td>
</tr>
<tr>
<td>Technological demonstration</td>
<td>Demonstration of cooling and warming by means of woody biomass and geothermal heat pump, application of CO2 using LPG and other technologies</td>
</tr>
<tr>
<td>Other programs</td>
<td>Establishment of regional brands for new products, etc.</td>
</tr>
</tbody>
</table>

### Names of consortium and its members

**Name**

Consortium of the Next-Generation type of Greenhouse Horticulture in Ishinomaki

**Members**

Miyagi Prefecture / Ishinomaki City / De Liefde KITAKAMI Co., Ltd. / Richfield Co., Ltd. / DELICA FOODS HOLDINGS CO., LTD. / Ishinomaki seika Co., Ltd. / Mirai-saïen, Co., Ltd. / JA Ishinomaki

### Crops Area Yield (goal)

<table>
<thead>
<tr>
<th>Crops</th>
<th>Area</th>
<th>Yield (goal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomatoes</td>
<td>1.1ha</td>
<td>370t (34t/10a)</td>
</tr>
<tr>
<td>Paprika</td>
<td>1.3ha</td>
<td>260t (20t/10a)</td>
</tr>
</tbody>
</table>

### Developed site

- **Paprika**: 1.3ha
- **Tomatoes**: 1.1ha
- **Facilities for collection and shipment**
- **Facilities for production of seeds**
- **Facilities for energy supply**

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Venlo greenhouse

Facilities for tomato cultivation

Facilities for paprika cultivation
To aim at harvest unit crop 30 tons per 10a with a method for low height, high density cultivation of tomato.

Large scale introducing on "a system of integrated environmental control" with the ICT (information and communication technology).

### Names of consortium and its members

<table>
<thead>
<tr>
<th>Name</th>
<th>Consortium of the Next-Generation type of Greenhouse Horticulture in Saitama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members</td>
<td>Saitama Prefecture / Kuki City / Aeon Agri Create Co., Ltd. / Aeon Retail Co., Ltd. / Saitama Prefecture Headquarters National Federation of Agricultural Cooperative Associations / Saitama Next-Generation Greenhouse Horticulture Tomato Study Group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crops</th>
<th>Area</th>
<th>Yield (goal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomatoes</td>
<td>3.3ha</td>
<td>990t (30t/10a)</td>
</tr>
</tbody>
</table>

### Overview of project

- **Facilities at base:**
  
  **Technological demonstrations:**
  
  Introduction of an integrated environmental control system into low-stage, high-density planting to cut production cost, and implementation of large-scale demonstration tests utilizing ICT.

- **Other programs:**
  
  Popularization and education of planting technology making full use of integrated environmental control technology, etc., and others.

### Developed site

- **Low-stage, high-density planting**

- **Sale at mass merchandise stores**

- **Cut in fossil fuel (wooden pellets)**
Using geographical advantages such as abundant biomass, sunlight, and transportation infrastructure, to product high sugar content tomatoes by year-round cultivate and to create year-round employment.

To improve productivity by environmental control system using ICT and promote branding by formulating marketing strategy.

Shizuoka Prefecture (Oyama Town)

Names of consortium and its members

**Name**: Consortium of the Next-Generation type of Greenhouse Horticulture in Fujioyama

**Members**
SUNFARM FUJIJOYAMA Co., Ltd. / SEIWA Co., Ltd. / NEPON Inc. / FUJISOGYO Co., Ltd. / Shizutetsu store Co., Ltd. / Tokyo Seika Co., Ltd. / JA Shizuoka Keizairen Co., Ltd. / JA Oigawa / University of Shizuoka / Shizuoka Prefectural Research Institute of Agriculture and Forestry / Shizuoka Prefecture Government / Shizuoka Tobu Regional Office of Agriculture and Forestry / Oyama Town Office

<table>
<thead>
<tr>
<th>Crops</th>
<th>Area</th>
<th>Yield (goal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-sugar tomatoes</td>
<td>3.2ha</td>
<td>225t (7.0t/10a)</td>
</tr>
<tr>
<td>High-sugar cherry tomatoes</td>
<td>0.8ha</td>
<td>24t (3.0t/10a)</td>
</tr>
</tbody>
</table>

Overview of project

**Facilities at base**
1. greenhouses, 2. wooden biomass boiler, 3. facilities for production of seedlings, 4. facilities for collection and shipment

**Technological demonstration**
(Production cost cutting) Establishment of hybrid technology in combination with fuel oil to maximize the use of wooden biomass (ICT, advanced environmental control) Establishment of technology to maximize photosynthesis and increase profitability. Studies on streamlining of production and labor management by ICT

Other programs
Formulation of marketing strategy by prefectural university and users
Toyama Prefecture (Toyama City)

- Utilizing waste power generation and waste heat supplied steadily.
- Introducing large-scale Greenhouse farming as a model in rice specialized cultivation area.

**Category Overview of project**

**Facilities at base**
1. Greenhouse
2. Heat and electricity cogeneration system from boiler equipped with power source using fuel via waste
3. Facilities for production of seedlings

**Technological demonstration**
1. Demonstration to introduce an advanced environmental control system utilizing ICT
2. Demonstration of wearable devices, etc. to share knowledge processed into data

**Other programs**
1. Development of new sales routes (including exports)
2. Study sessions for cultivation technology (creation of regional jobs and nurturing of human resources)
3. Grasping needs among consumers and users

**Names of consortium and its members**

**Name**
Consortium of the Next-Generation type of Greenhouse Horticulture in Toyama

**Members**
Toyama Kankyo Seibi Co.,Ltd. / Japan Agricultural Cooperatives Aoba / Agricultural union corporation Wagouen / Smart Forest Co.,Ltd. / NTT DATA INSTITUTE OF MANAGEMENT CONSULTING,Inc / ATGREEN Co.,Ltd / Toyama Prefecture / Toyama Agriculture and Forestry Promotion Center / Toyama City

**Overview of project**

**Crops**
- Fruit tomatoes
- Flowers (showy prairie gentian, etc.)

**Area**
- Fruit tomatoes: 2.9ha
- Flowers: 1.2ha

**Yield (goal)**
- Fruit tomatoes: 505t (17.7t/10a)
- Flowers: 1.43million

**Cultivation of tomatoes with high sugar content by minimizing water, fertilizer and agricultural chemicals.**

**Supply of waste heat from industrial waste disposal facilities to greenhouse by heat storage container.**

**Cultivation of showy prairie gentian and other flowers.**

**Integration of facilities for collection and shipment of crops.**

**Integration of facilities for raising seedlings.**

**Integration of energy supply facility.**