

Aichi Prefecture (Toyohashi City)



Cherry tomatoes

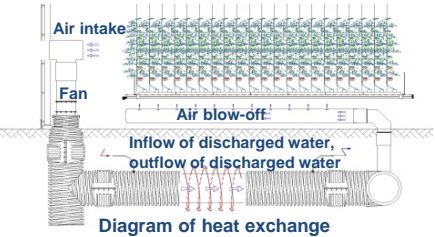


Sewage treatment plant
Heat from treated water

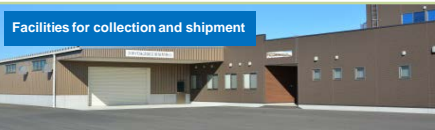
- Realization of stable production of cherry tomato yield up to 21t/10a with air-conditioning and environmental control in root area.
- Reduce fossil fuel usage by more than 30% with utilizing heat energy from discharged water out of from sewage treatment plants.



Mechanism of energy supply facilities



Facilities for collection and shipment



Venlo Greenhouse



Facilities for cultivation



Long-term multi-stage cultivation of cherry tomatoes

Names of consortium and its members

Name	Consortium of the Next-Generation type of Greenhouse Horticulture in Aichi Toyohashi
Members	Inochio Mirai Inc. / Inochio Tsunagu Inc. / IDEARU·ATORE Co.,Ltd. / Aspen Food Planning Co.,Ltd. /Kawamura Shoji Corporation / Inochio Agri Inc. / SCIENCE CREATE Co.,Ltd. /JA Toyohashi / JA Aichi-Keizairen / Toyohashi University of Technology / Aichi Prefecture /Toyohashi City

Crops	Area	Yield (goal)
Cherry tomatoes	3.6ha	726t (21t/10a)

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 (4) facilities for collection and shipment
Technological demonstration	(1) Demonstration of high-quality and high-yield cultivation by compound environmental control (vapor-pressure deficit control by mist, supply of carbon dioxide, root zone environmental control, etc.) (2) Demonstration of warming technology utilizing heat energy from discharged water
Other programs	Establishment of regional brands and fostering of future horticulture farms by accepting training for successors of agriculture and new entrants into agriculture

Hyogo Prefecture (Kasai City)



Tomatoes



Cherry tomatoes



Wooden biomass

- Establishment of new agricultural business models with by introducing system of integrated environmental control ,etc.
- To realize year-round, stable, high yield and 4 fixed (fixed time, quantity, quality, price) production.
- Local production for local consumption of energy with local woody biomass.



long-term cultivation



Wooden chip boiler



Facilities for collection and shipment



Over the counter sales

Names of consortium and its members	
Name	Consortium of the Next-Generation type of Greenhouse Horticulture in Hyogo
Members	Hyogo Next Farm Co., Ltd. / Saladbowl Co., Ltd. / Higashibaba Farm Co., Ltd. /Jardin Co., Ltd. / Kansai Super Market Ltd. / Kobe University /JA Hyogomirai / Kasai City / Taka Town / Hyogo Midori Public Corporation /Hyogo Prefecture

Crops	Area	Yield (goal)
Tomatoes	1.8ha	630t(35t/10a)
Cherry tomatoes	1.8ha	360t(20t/10a)

Category	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	(1) Integrated environmental control technology (application of CO2, water supply control, etc.) (2) Application of CO2 using combustion gas utilizing an LPG boiler
Other programs	(1) Nurturing of human resources with fulltime employment to learn know-how for facilities management (advanced cultivation technology, labor control, etc.) (2) Popularization and education of year-round cultivation technology utilizing integrated environmental control technology, etc.

Kochi Prefecture (Shimanto Town)



Tomatoes



Wooden biomass

- Reduce fossil fuel consumption with introducing large-sized woody biomass boiler using sawdust.
- Cooperate with the adjoining training center of prospective farmers to extent the results of the base to farmers.



Venlo greenhouse



High-eave greenhouse (tomatoes)

Names of consortium and its members		
Name	Consortium of the Next-Generation type of Greenhouse Horticulture in Kochi	
Members	Shimanto Mihara Farm Co.,Ltd. / Best Grow Co.,Ltd. / Shimanto Tomato Co.,Ltd. /Shimanto Blue sky Farm Co.,Ltd. / Akatsuki Industrial Co.,Ltd. / Shimantocho Forestry Association /JA Shimanto / Kochi Prefectural Federation of Horticultural Cooperative Associations / Faculty of Agriculture, Kochi University / Kochi University of Technology / Shimanto Town / Kochi Prefecture	
Crops		Yield (goal)
Tomatoes		1,651t (38.4t/10a)
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	(1) Demonstration of high-quality, high-yield technology by compound environmental control (CO2 generation device, fine mist device, etc.) (2) Demonstration of cultivation for reduction of production costs by utilization of aerial work platform and nutriculture cultivation device, etc.	
Other programs	(1) Leaning of technologies through technological and management seminars, etc. (2) Stable shipments and sales matching needs among actual users, etc.	



Wooden biomass boiler

Oita Prefecture (Kokonoe Town)

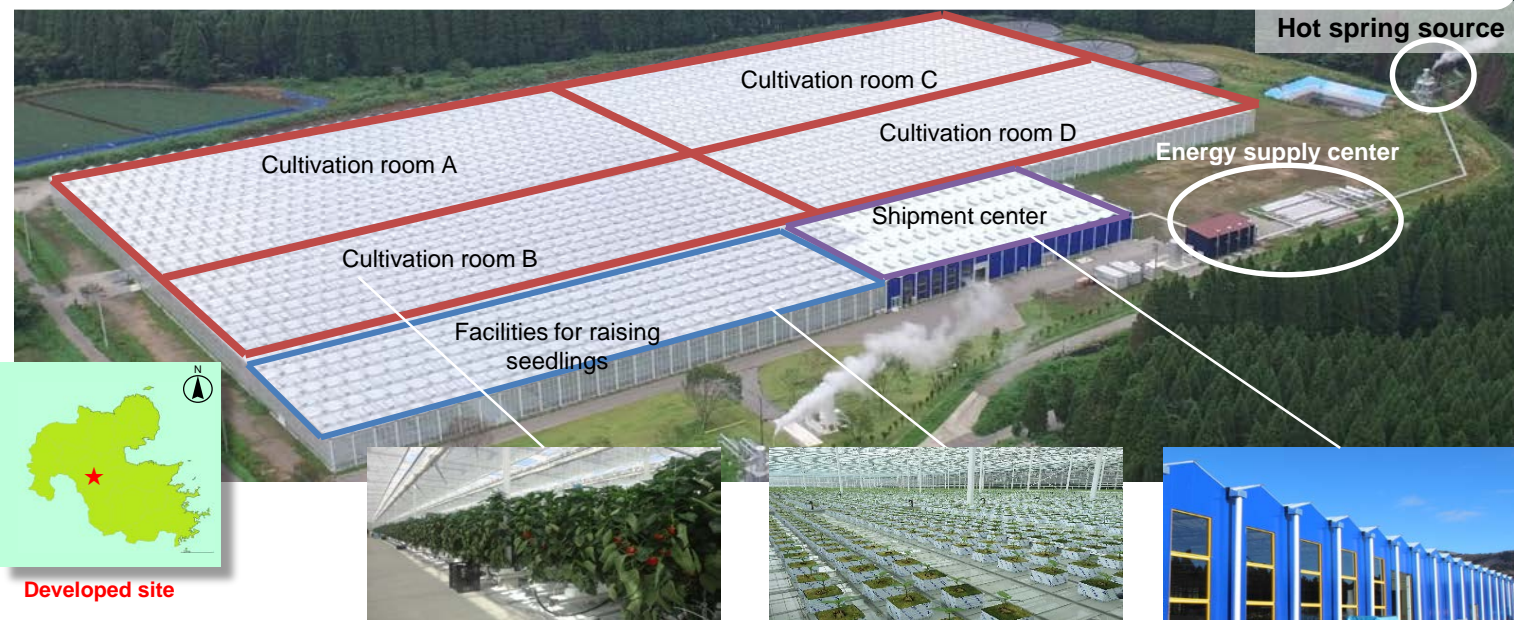


Red/yellow bell peppers



Hot spring heat

- Practice of large-scale Greenhouse farming utilizing heat from hot spring as a regional energy.
- To supply domestic paprika stably in year-round with advanced environmental control technology.



Utilization of geothermal energy



Venlo greenhouse



Cultivation of red/yellow bell peppers

Names of consortium and its members

Name	Consortium of the Next-Generation type of Greenhouse Horticulture in Oita
Members	Takahiko Agro-Business Co.,Ltd. / TAKAFUJI Co.,Ltd. / Kokonoe Town / Oita Prefecture /Shinsankyo Foods Distribution Center Co., Ltd. / Co-op oita / JA kujukonoe

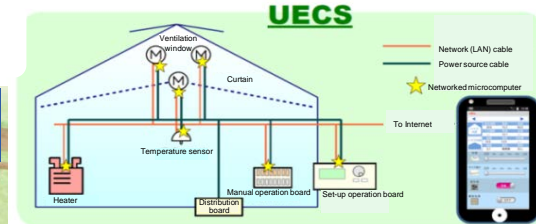
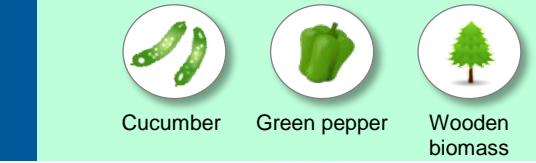
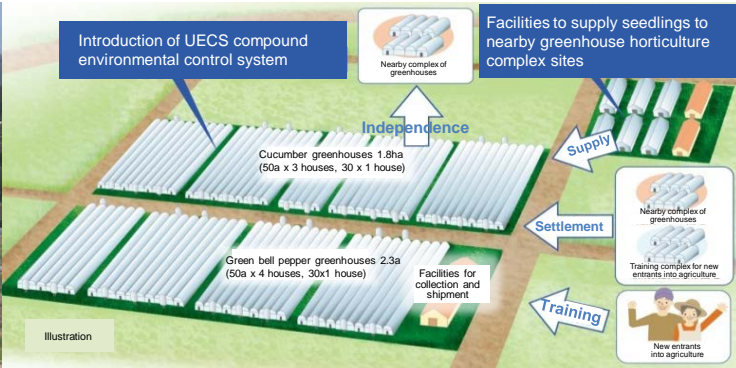
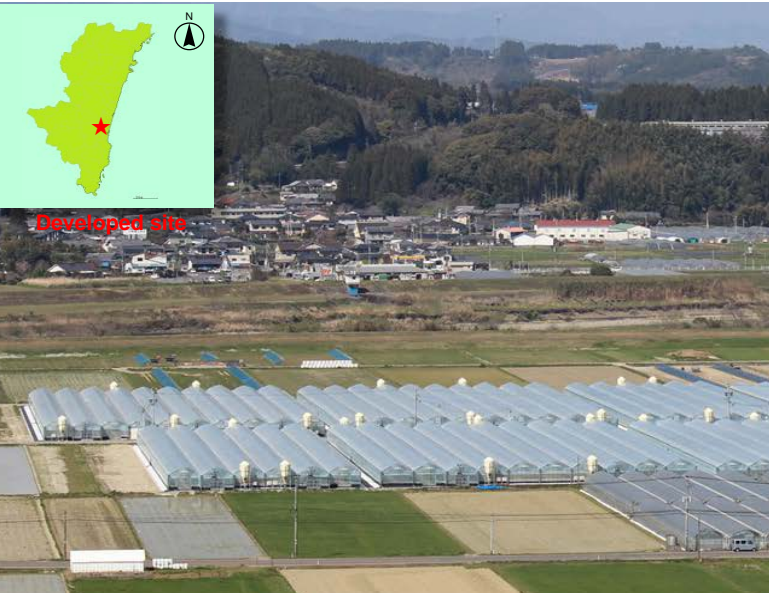
Crops	Area	Yield (goal)
Red/yellow Paprika	2.4ha	393t (16.3t/10a)

Overview of project

Category	
Facilities at base	(1) greenhouse (2) hot spring heat supply center (supply of geothermal water via heat exchanger) (3) facilities for production of seedlings, (4) facilities for collection and shipment
Technological demonstration	(1) Advanced environmental control system (2) mist cooling (3) carbon dioxide application technology, etc.
Other programs	Development and expansion of sales routes and development of products to secure contract sales, etc.

Miyazaki Prefecture (Kunitomi Town)

- To construct cultivation management system with high productivity utilizing advanced ICT technology.
- Extend to the region as a model for large-scale intensive farming by cooperating with JA's training system of prospective farmers.



Conceptual diagram of UECS



Wooden pellet heater



State of cucumber and green bell pepper production



Use of base as training venue

Names of consortium and its members		
Name	Consortium of the Next-Generation type of Greenhouse Horticulture in Miyazaki	
Members	Kyushu Olympia Kogyo / Suncool System / Fujitsu / JA Miyazaki Chuou / JA Farm Miyazaki Chuou / JA Miyazaki Chuou-Kai / JA Miyazaki Keizairen / Miyazaki Prefecture / Miyazaki City / Kunitomi Town / Miyazaki Agriculture Public Corporation	
Crops	Area	Yield (goal)
Green pepper	2.3ha	345t (15t/10a)
Cucumber	1.8ha	450t (25t/10a)
Overview of project		
Facilities at base	(1) greenhouses, (2) wooden biomass boiler, (3) facilities for production of seedling, (4) facilities for collection and shipment	
Technological demonstration	Introduction and demonstration of "integrated greenhouse horticulture production support system," centered on a ubiquitous environmental control system and combining (1) advanced high-yield cultivation technology, (2) cost reduction technology making effective use of a wooden biomass heater, etc. and (3) advanced production management system incorporating cultivation management records and growth data.	
Other programs	Practice of environmental protection-oriented agriculture such as cultivation to utilize natural predators to cut use of agricultural chemicals	