10.27.2015 5th International Forum on the "FutureCity" Initiative



Creating "FutureCities" to invigorate localities

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# Development of Toyama's Own Style of City Management with a Compact City Strategy



<Current state of regional cities and the challenges they face>

Population decline, super aging, increased CO<sub>2</sub> emissions, fiscal austerity, growing administrative costs such as maintenance and management costs, etc.

# Toyama presents one vision for the future regional city that will meet these challenges

### 1. Compact city building centering on public transport

Revitalization of public transport, concentration of urban functions in the city center and along public transport routes

#### 2. An appealing, high quality lifestyle for the community

Creating a walkable city, lifestyles with a high degree of culture, creating opportunities for senior citizens to be active outside the home, fostering social capital

#### 3. Promotion of industries that make use of local assets

Maximum use of Toyama's pharmaceutical industry, use of renewable energy, attraction of enterprises, creation of new industries

By creating sustainable cities,

achieve cities "where everyone wants to live" and "everyone has vitality"

### Compact City Building Centered on Public Transport – Toyama's Vision



Revitalize railways and other public transport networks and concentrate urban functions, such as housing, commerce, work and cultural facilities, along their routes, to <u>build a compact city centered on public transport hubs</u>

**Conceptual Drawing** 

Toyoma's Aim of "Ball-and-Chain" Urban Structure

Chain: Public transportation above a

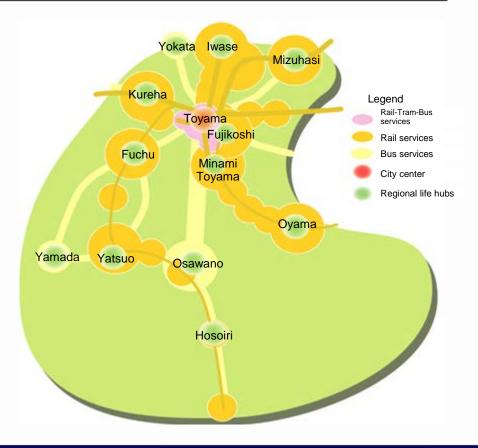
certain service level

Balls: Walkable areas connected by public

transport

Three Pillars Need to Achieve This Aim

- (1) Revitalization of public transport
- (2) Promotion of housing in areas along public transport routes
- (3) Revitalization of city center



### Revitalization of Public Transport – Establishment of LRT Network



Through the establishment of a LRT network, effect change to lifestyle patterns that are over-dependent on cars, and create a walkable city.



## Revitalization of Public Transport – Connection of northern and southern tram services



With the launch of the Hokuriku Shinkansen, the northern and southern city tram services will be connected under the elevated railway tracks at Toyama Station.

#### 2013

- Rail Transport Advancement Plan approved
- Southern tram tracks built under elevated Shinkansen tracks

#### 2015

- Hokuriku Shinkansen commences service (3/14/2015)
- Southern tram starts service from under elevated Shinkansen tracks (new tram stop under Shinkansen tracks)

#### Scheduled for end of FY2019

 Northern tram to start service from under elevated conventional railway tracks (North-south connection realized)



▲Tram departs from Toyama Station's South Exit

### Revitalization of City Center – Toyama Glass Art Museum and Library Complex

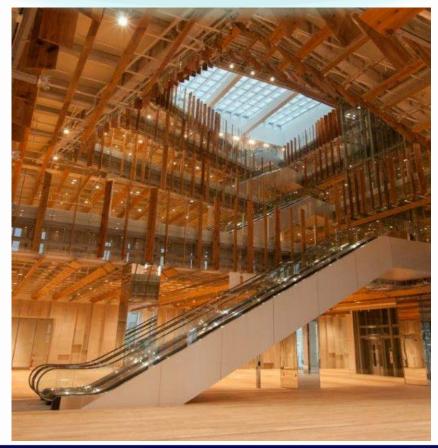


Development of a complex in the city center to house the Glass Art Museum, Municipal Library, etc. The Art Museum exhibits the glass art of American National Living Treasure, Dale Chihuly.

Façade is open to the town, projecting delicate shadows and a sense of transparency



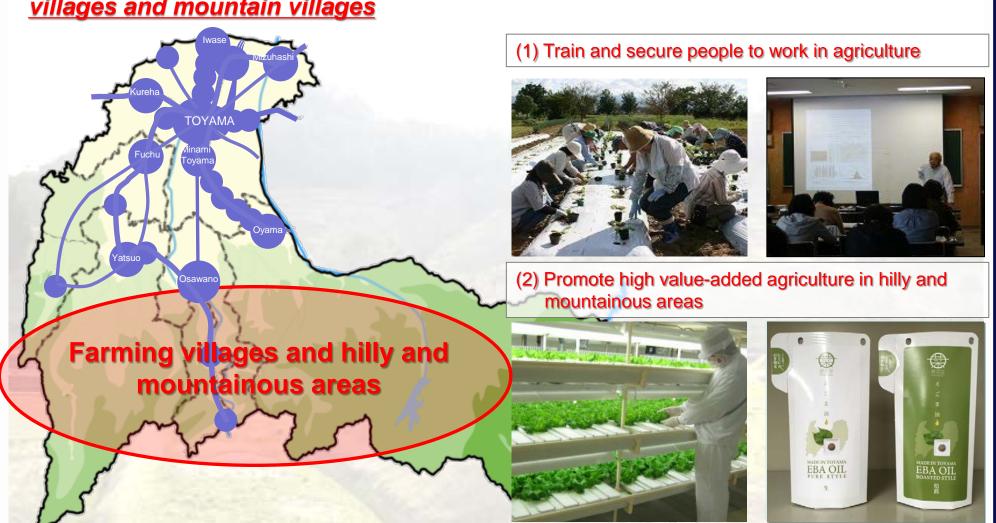
Spiral passage emanates a sense of warmth through the use of locally grown timbers and other natural materials



### Maintenance and Revitalization of Farming Villages and Mountain Villages



Promotion of compact city building and <u>maintenance and revitalization of farming</u> <u>villages and mountain villages</u>



### Train and secure people to work in agriculture – Toyama Rakuno Gakuen



### Overview of Toyama Rakuno Gakuen (center for learning agricultural skills)

To increase the sustainability of agriculture, a "farming support" scheme was established as a mechanism to connect farmers, who are getting older and have nobody to take over the farm for them, with non-farmers who wish to be involved in farming as farm supporters.

The Toyama Farming Support Center was established as the hub for such activities in 2008. The Center trains farm supporters through lectures and practical training at the Toyama Rakuno Gakuen, equipping enthusiastic non-farmers and senior citizens with farming skills.

#### **Role of Farming Support Center** Problems faced by Urban residents' wishes farmers **Trains supporters at** Requests **Toyama Rakuno Gakuen** · Advanced age making work in · Want to help on farms for support high places, harvest of heavy Want to eat vegetables they vegetables, etc. difficult **Toyama** have grown themselves Nobody to take over the farm **Farming** Want to grow flowers Support Increase in idle and uncultivated land due to Center inability to manage land **Engage in farm work as farm supporters**

#### Train and secure people to work in agriculture – Toyama Rakuno Gakuen



Established **Toyama Rakuno Gakuen** to increase non-farmers' knowledge of cultivation of farm produce through lectures and practical training, and to train people to engage in farming as support for farmers.

### <Farming Skills Acquisition Support>

As of April 2015

#### Farming 101 Course

Builds skills through practical activities for people considering starting a farm or existing farmers planning to introduce different crops.

Lectures for corporates entering agriculture

<Held twice a year>

Assists corporates to acquire the basic knowledge needed to enter the agricultural industry

#### Farm Supporter Course

- <2 year course>
- Vegetables
- Orchards
- Flowers
- <1 year course>
- · Rice paddies

#### Home Gardening

<1-year course>

Step-up courses and family courses, with a focus on growing vegetables







Farm support provided by a total of 2,442 people (as of end of FY2014)



616 "graduates"
(as of end of FY2014)

### Promotion of high value-added agriculture in hilly and mountainous areas

Perilla project



Starting with the production of perilla leaves at a plant factory and production of perilla seeds and oil through open-field cultivation on abandoned fields, etc., the high value-added farming of perilla will be promoted in an integrated manner, with the aim of revitalizing the regional economy and creating jobs, while also promoting healthier, longer lives through the consumption of perilla.

#### Perilla leaves



Plant factory using hot spring heat, etc.

- Cultivation using heat from hot springs, solar power generation, LED lighting, etc.
- Use of hydroponics to produce safe and reliable perilla



# Perilla seeds and oil



Expansion of open-field cultivation

 Use of abandoned fields, etc. to grow perilla, to expand production of perilla oil

Juice with added



Integrated promotion of high value-added farming (production, processing, distribution/sales, etc.)



Turn into health supplements at soft capsule factory

School and hospital meals



Cakes, biscuits and sweets containing perilla

s, biscuits and

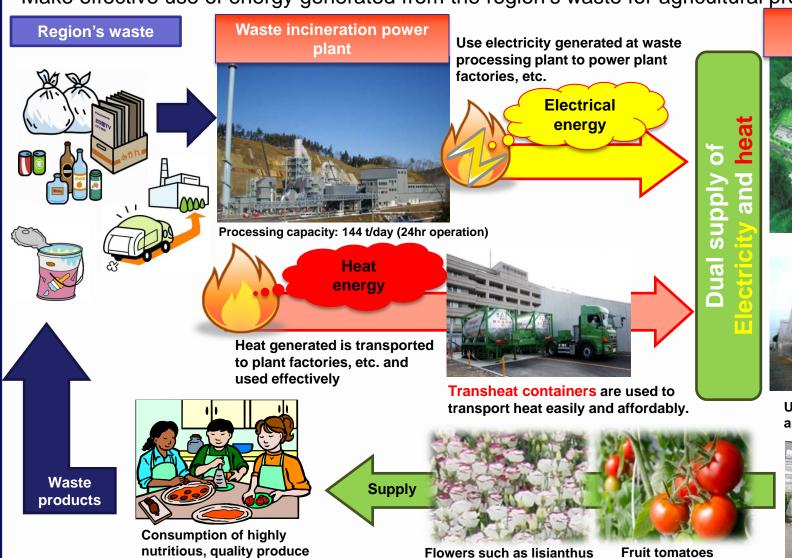


### Promotion of high value-added agriculture in hilly and mountainous areas

- Effective use of energy from waste products



Make effective use of energy generated from the region's waste for agricultural production









Used for greenhouse lighting and air conditioning to cut costs

