

**Gender Summit 10 Asia Pacific 2017**

**Parallel Session 1**

**Participation from Women's Participation in Science, Technology and  
Innovation**

**Importance of Women's Perspectives for the  
Re-union of Community  
after the Great Disasters**

**May 25, 2016**

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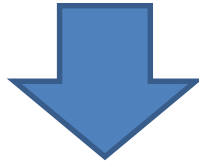
# Gender in Town Planning

Gender in City & Regional Planning is one of the basic issues in our society. Especially, when great disasters occurred, it will take significant roles for surviving community.

The author will talk about six years' experiences about the community-based reconstruction from Great East Japan Earthquake Disaster which was occurred in March, 2011.

The target town is Iwanuma City , Miyagi-pref.,Japan.

# The community -based reconstruction



the process of social, environmental, and cultural reconstruction for community, carried out by disaster survivors with the support by municipality and others.

# Great East Japan Earthquake

## Great East Japan Earthquake

Date: March 11, 2011  
dead 15,879  
missing 2,712

Completely  
destroyed Houses  
130,000  
Partially  
destroyed Houses  
265,000



Radiation  
Accident  
Fukushima



Many  
traditional  
Local  
Communities



# The Great East Japan Earthquake (March 11, 2011)

## Iwanuma City, Miyagi Pref.



	人口	死者数	不明数
名取市	72,106	952	40
岩沼市	44,138	186	1
亘理町	34,832	282	6
山元町	15,269	698	18

**Problem : Alluvial Flats area  
No higher land to escape**



# Method

## ① Time

Analyze the reconstruction process based on time.

## ② Stakeholders and Activity

Clarify stakeholders in each stage, and analyze its roles and activities.

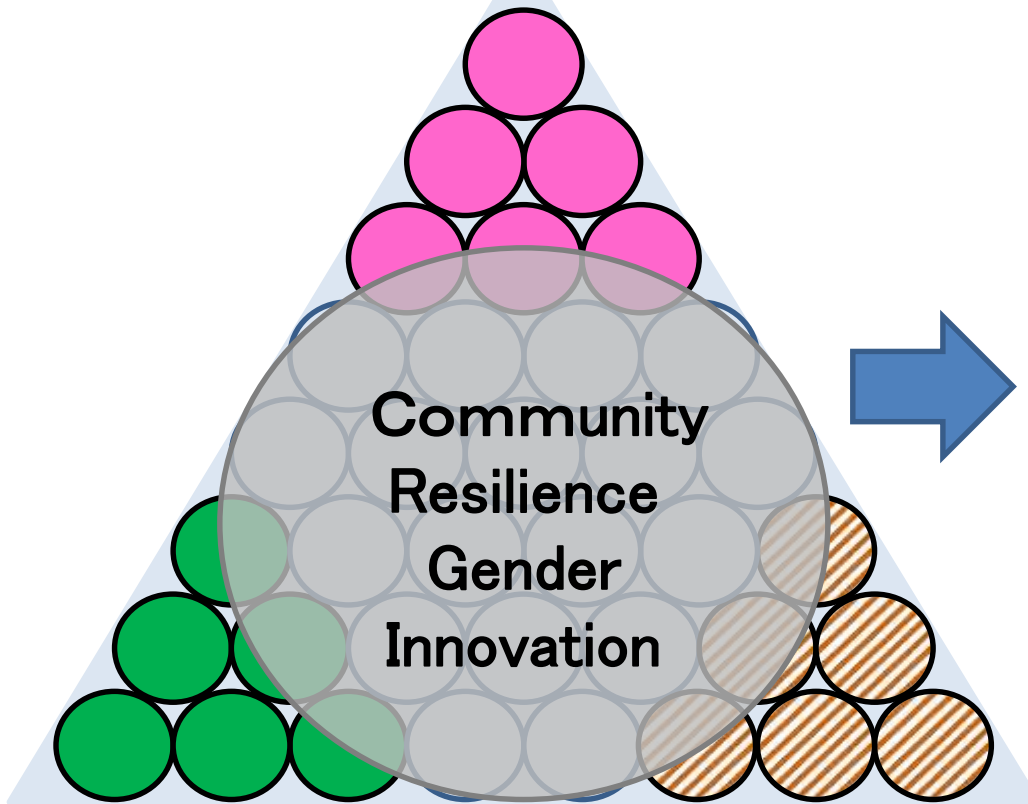
## ③ Planning & Design

Environmental, social and cultural aspects.

## ④ Implementation

Clarify women's roles for the reconstruction of community.

**Social Resilience**



**Sustainable  
Society**

**Environmental  
Resilience**

**Cultural  
Resilience**

**Social Overhead Capital**



# Reconstruction Process and Roles of Different Stakeholders

	Immediate Action	Stage 1 Grand Design	Stage 2 Citizen Workshop	Stage 3 Formal Committee	Stage 4 New Machizukuri	Stage 5 Innovative Community Activities
<b>Period</b>	March 11-31 2011	April-Sept. 2011	Oct. 2011-June 2012	June 2012-Nov.2013	Jan.2014-July 2015	Aug.2015-present
<b>Survivors</b>	Communal Support	Join to the Reconstruction Committee	Free Participation	Join to the formal Committee run by City	Create new Community Association	Develop Community Activities
<b>Role of City</b>	Set up Refugee Center based on traditional community	Support Coordinate	Observer	Organizer	Observer	Supporter
<b>Role of Various Stakeholders</b>	Various Support from All over Japan & International Society	University: Leading role to create grand design	University: Leading role to run WS Active support on Agriculture	University : Adviser Active supports on Agriculture, Creating forest	Collaborator	Collaborator
<b>Gendered Innovation</b>	Women's Association for Preventing Disasters took immediate action	Equal representatives to committee  Starting Small Agriculture	Free Participation  Active work on Small Agriculture together with IT supporters	Lead the dual decision making system between formal committee and traditional community	<ul style="list-style-type: none"> <li>• Start to create new community activities in removed site</li> <li>• Greening small parks, gardens, Igune (Community forest)</li> <li>• Communal activities for elders</li> </ul>	<ul style="list-style-type: none"> <li>• Establish new Women's Preventing Disasters Association</li> <li>• Start to create new forest in sea shore, where they lived before</li> <li>- Helping other community , utilizing their Knowledge</li> </ul>

## Immediate Action

**Mach 11- April 11, 2011**

**City: Set up the Refugee Center based on the traditional community**

### **Women's Activity**

- 1.Support the family ,especially children , elders and handicapped people.**
- 2.Women's Association for Preventing Disasters took the immediate action for providing food.**

**<7 Goals>**

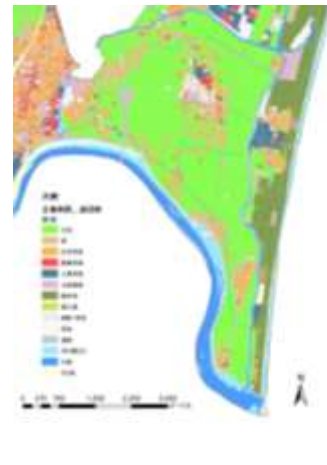
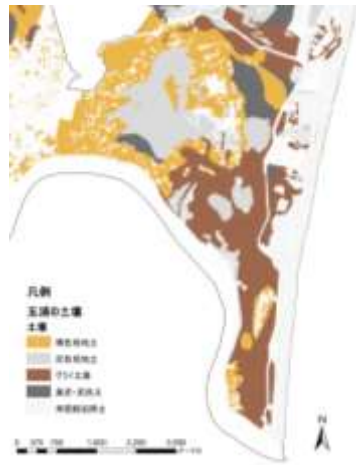
- 1: To Setting up temporary houses as soon as possible for the survivors.**
- 2: Finding a suitable location to for the re--establishment of the six villages**
- 3: Revitalizinge agriculture as a first priority**
- 4: Create new employment using the advantages of the city's airport**
- 5: Promote natural energy projects**
- 6: Develop a system of multiple defense system against tsunami by creating a “Hill of Hopes for Thousand Years\_Hill of Hope” on coast**
- 7: Revitalizinge the cultural landscape as the city's identity.**

**Gendered Innovation**

- 1.Equal Representatives to the Reconstruction Committee**
- 2.Promoting Small Agriculture as a first step**

# To find the appropriate place to move, based on the experience of tsunami and scientific analysis

**Micro Geography** is essential for weakening the power of Tsunami  
Based on the hearing of many experiences of survivors from Tsunami  
Identify the landscape unit for the principals of land use plan

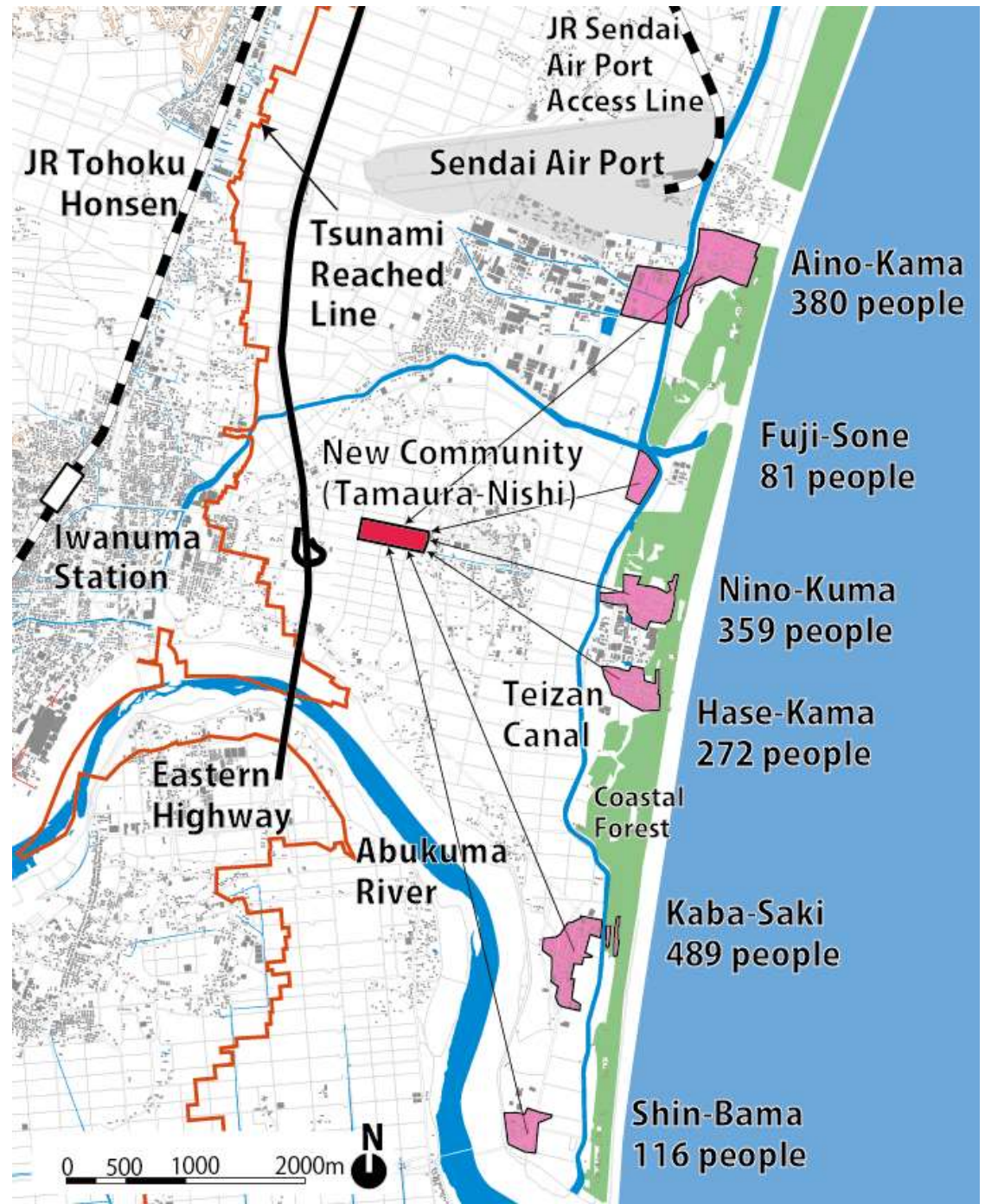


Micro geography

Soil

Vegetation

Iwanuma  
City  
Miyagi Pref.  
Japan



# Small Agriculture for Tomato

**震災復興／塩トマト**  
皆さんでトマトを植えよう  
東日本大震災の津波によって海水が入って  
しまった畑にトマトを植えよう！  
主催：NPO法人農地再生センター（旧マイファーム）  
新潟ロータリークラブ／新潟大学OCOCの共催  
協力：新潟県ロータリークラブ  
15期1会09 | NPO法人農地再生センター 新潟ロータリークラブ



# Stage 2 Free Workshops (Oct.2011-June 2012)

## Survey



## Workshop : Discussion & Presentation



Completely free workshop, run by the University.  
Many women had a chance to speak out their opinion.

# Free Workshops



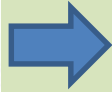


# Stage 3 Formal Committee & Many Activities ( June 2012--Nov. 2013)

## 1. Discussion in Formal Committee

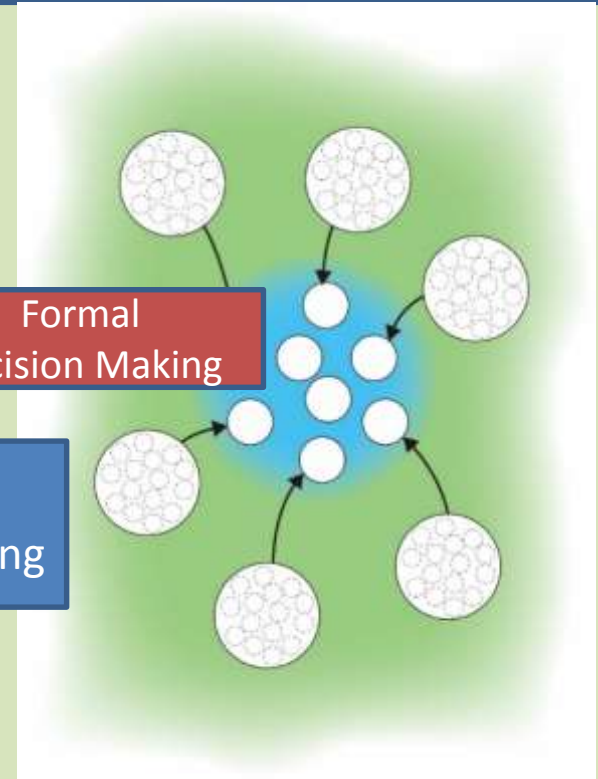


Plan proposed from  
City



Traditional  
Decision Making

Formal  
Decision Making



## 2. Gender Innovation

### Dual Decision Making System

Modern system and Traditional system work together.

In both system, women took the important roles.

However, especially in traditional decision making system,  
women took the initiatives.

**Creative Activities  
For community  
Opening  
“Everybody’s  
House” July, 2013**

Small Agriculture  
Meeting Place for mothers  
and children



# Multi-Defense System for safe city



Community

Canal

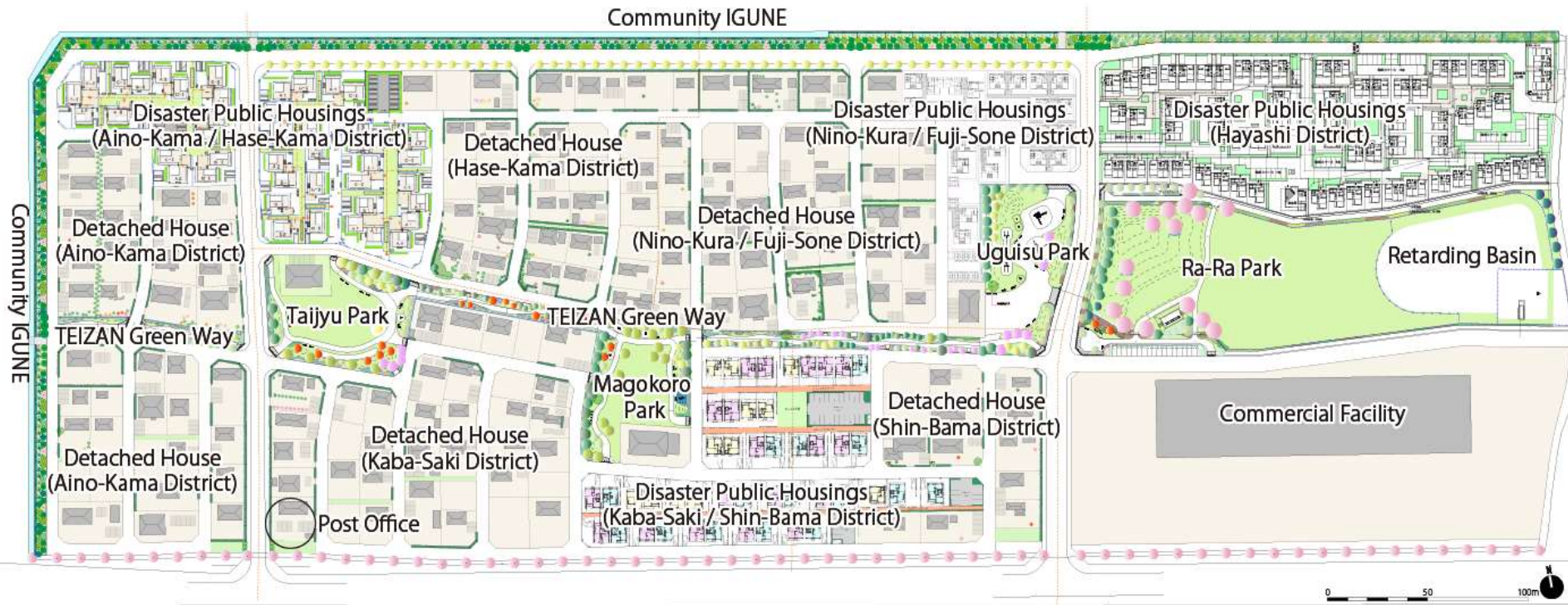
Hill

Coastal Forest

Multi- Defense System  
Planting Coastal Forest  
Thousand year hill of Hope  
June 9, 2013

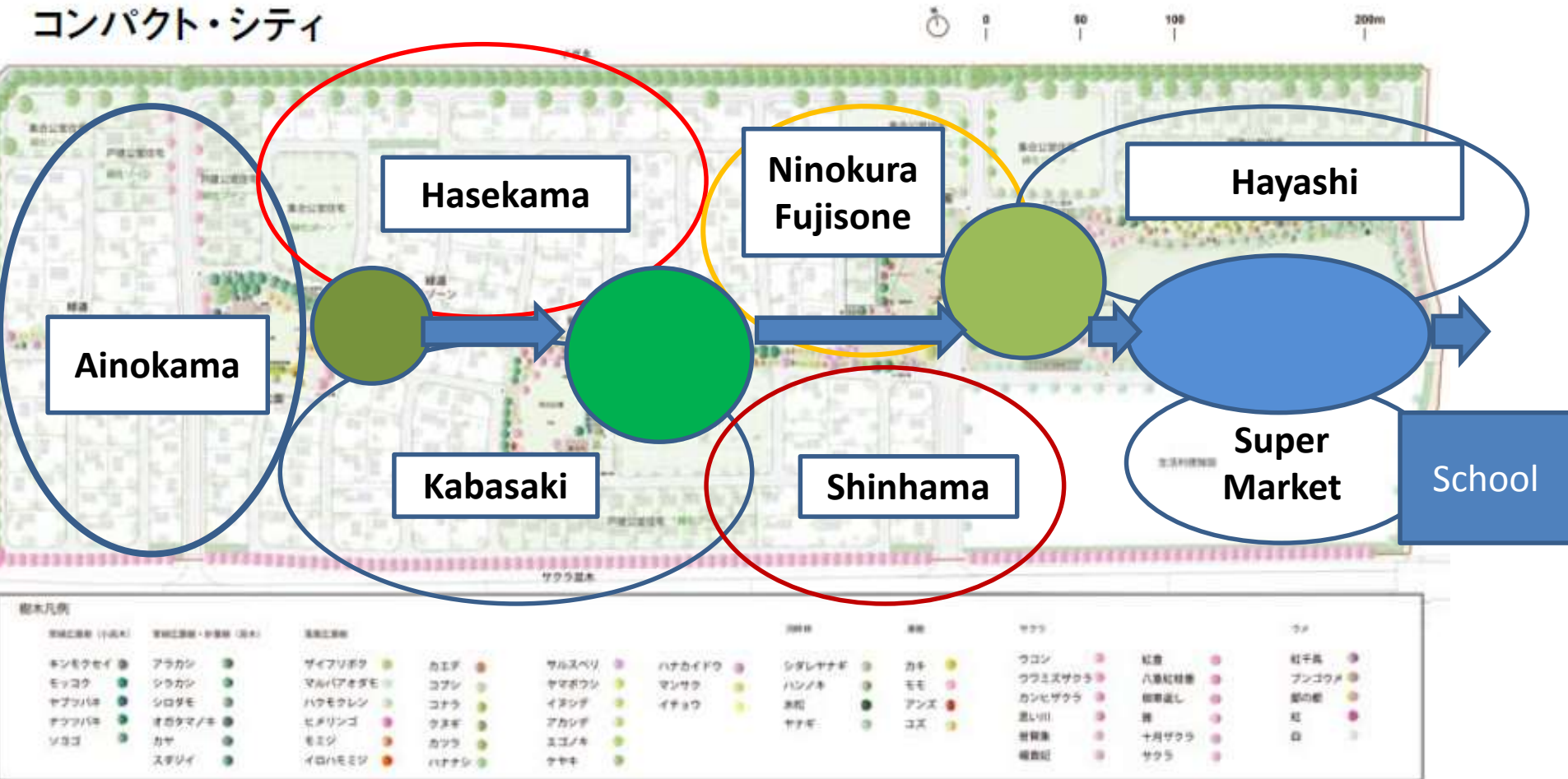


# Stage 4 New Machizukuri (Town Planning) (Jan. 2014~July 2015)



# Keeping the tie of Community

コンパクト・シティ



# Creating Commons

Aug. 31, 2014

July 26, 2015



# Creating Community Festival by Children



April 2015

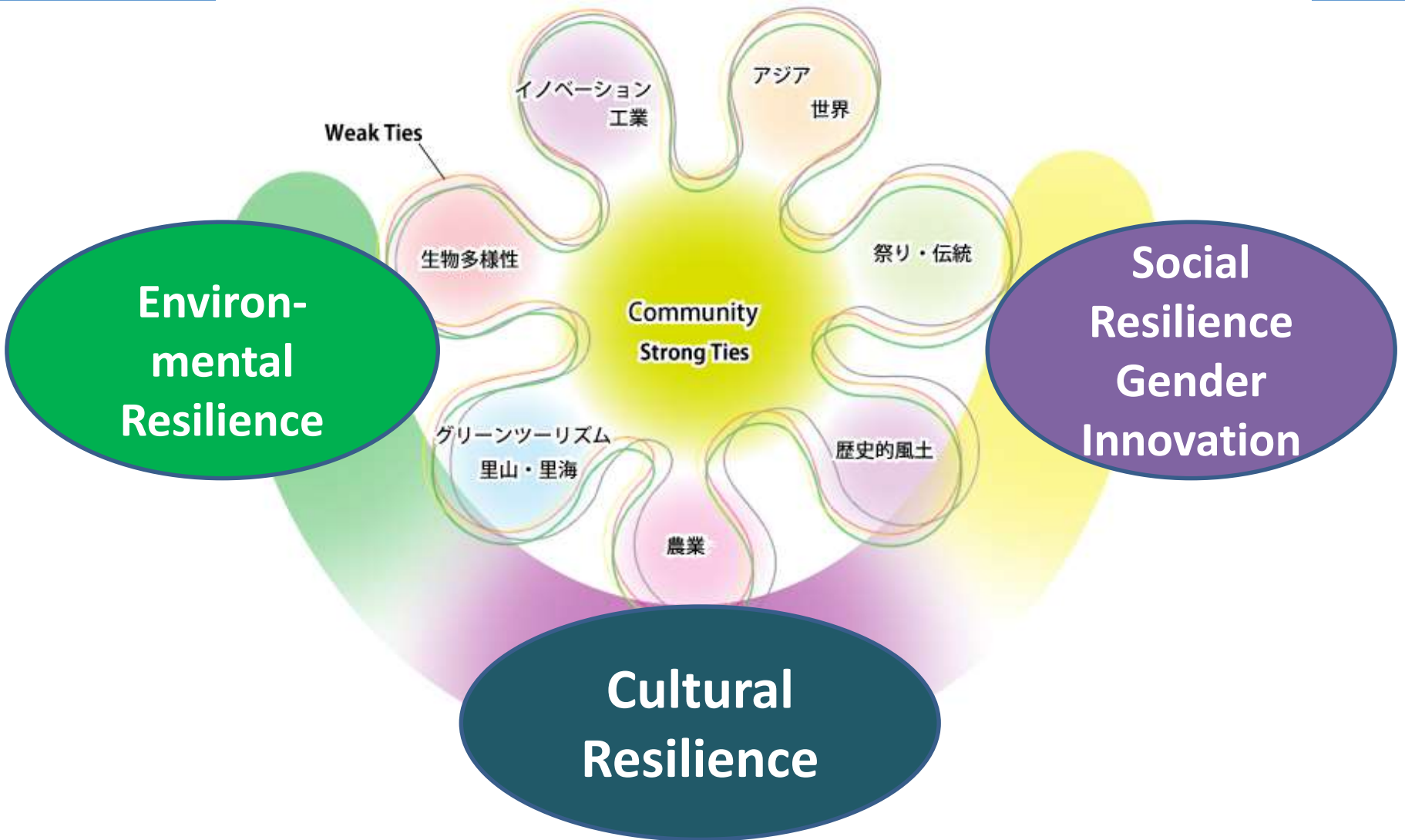
July 2015



## Stage 5 Innovative Community Activities (Aug. 2015~)

1. Many activities, utilizing Commons
2. Re-establishment new Women's Preventing Disasters Association
3. Creating new forest in sea-shore where they lived
4. Helping other community

# Iwanuma Model



**Various Gender Innovation in each stage works**

# Conclusion

- In this presentation, I have analyzed the characteristics of the community-based reconstruction from the Great East Japan Earthquake, carried out by disaster victims with the support of the municipality and others and clarified the characteristics and evaluated them through the lens of gendered innovation.
- As a result, this research has clarified the process in immediate stage and following five stages. The first stage is the establishment of grand design; the second is citizen free workshops; the third is the formulation process carried out by the municipality, the fourth is the creation of a new Machizukuri (town planning) , and the fifth is diverse community activities.
  - In each stage, gendered innovation was introduced to play diverse roles. When the community faced huge crisis, the most important things were to set the proper goals, to figure out means of implementation, and to create a system of consensus building, and to reach real implementation
- Finally, the gendered innovation took the significant roles on social resilience. The combination of environmental, social, cultural resilience would produce the power of community, and which leads the sustainable society