

# *Building Disaster and Climate Resilient Cities in ASEAN (CN18)*

## Outline of Guidebook

### **The Third and Forth Workshop for Urban Resilience in ASEAN**

March 03, 2017

**JICA Project Team**

## **1 . Target Groups and Objectives**

### **1) Target Groups**

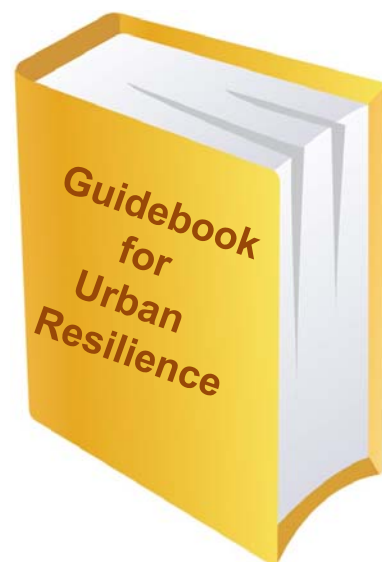
National and local government officials working for

i) Urban Planning, ii) Disaster Risk Reduction

### **2) Objectives**

The Guidebook aims to help government officials to achieve the followings :

- To understand disaster risk of their city
- To understand how to address issues and weak points for disaster risk reduction
- To mainstream disaster risk reduction in urban planning and development plan
- To learn good practices and lessons learned from other city cases



## 2. Structure of Guidebook

### --- Structure ---

#### 1. Main Part (Chapter 1 – 8)

Guidebook is formed 8 chapters and volume of main part is about 50 to 60 pages

#### 2. Appendix

- checklist
- guidance of checklist  
(definition, limitation, dissemination, etc.)
- reference for more information for urban resilience

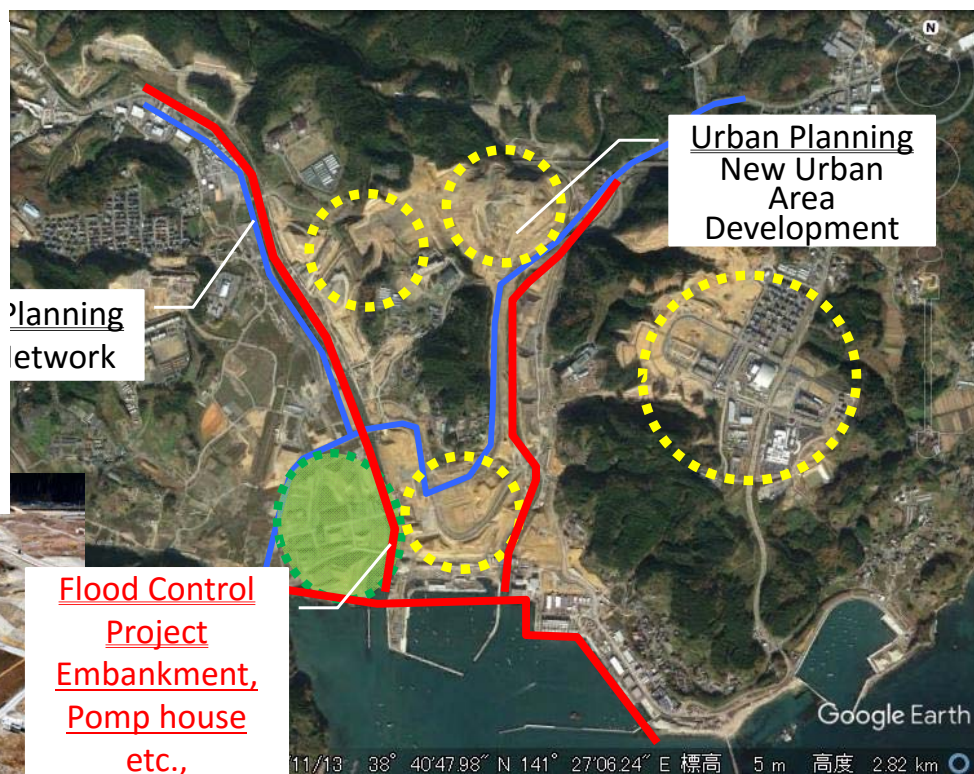
## 3. Contents of Guidebook

Chapter Title	Main Items
<b>1: Introduction</b>	Objectives of guidebook, scope of the guidebook
<b>2: Definition</b>	Definition of key words for Urban Resilience
<b>3: Why we need mainstreaming of DRR into Urban Planning?</b>	<ul style="list-style-type: none"><li>- Vulnerability at urban areas (chronic flood area, congested area of old wooden houses etc.,)</li><li>- Expected effect of urban planning in Disaster Risk Reduction (controlled urbanization area for chronic flood area etc.,)</li></ul>
<b>4: Who will do what?</b>	<ul style="list-style-type: none"><li>- Who manages the latest disaster information?</li><li>- Who knows disaster risk of the city?</li><li>- Who are involved in risk sensitive urban planning?</li></ul>
<b>5: Process for Risk-sensitive Land Use and Urban Development Planning</b>	Addressing points of mainstreaming DRR in urban planning
<b>6: Disaster Risk Assessment</b>	Methodology of Disaster Risk Assessment by Disaster Type
<b>7: Applicable Tools for Resilient Cities</b>	Introduction of Checklist, Risk curve, Hazard map, Contingency Plan, BCP(Business Continuity Plan)
<b>8: Good Practices for Resilient Cities</b>	Land use, resettlement, road network, park and greenery land, retention pond, etc. Some cases of good practices will be introduced.

## 4. Image of Guidebook (Chapter 3)

### (1) “Why we need mainstreaming of DRR into Urban Planning?”-1

Urban planning projects must be harmonized with other projects. This is Minamisanriku Village Reconstruction Project. Open space are located near seaside. New Urban Area is located inland and new road network connects New Urban Area. This is urban planning. Embankment was constructed by Flood Control Project.



Flood Control Project  
Embankment,  
Pump house  
etc.,

Minamisanriku-Village Reconstruction Project (Japan)

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### (2) “Why we need mainstreaming of DRR into Urban Planning?”-2

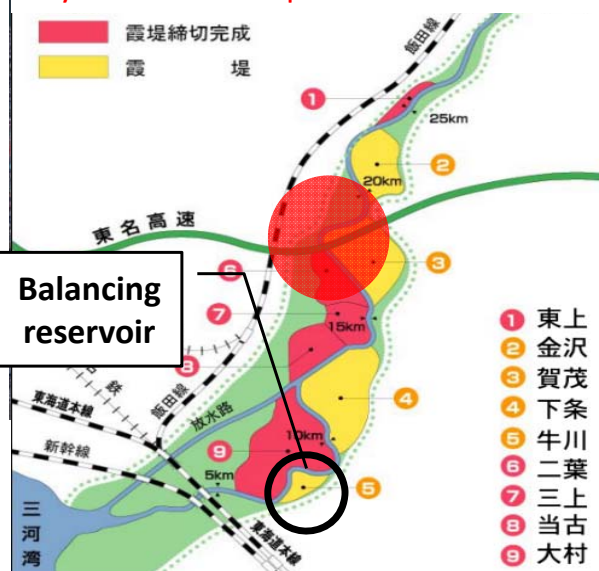
Toyohashi-City is a middle scale city in Aichi Pref. population is about 400,000. Center of this city near city hall, a large rice field is located. Urban planning and River Construction plan keep this land use.



#### Toyohashi River Development Plan

霞堤締切完成  
霞堤

Balancing reservoir



Toyohashi-shi Zoning Code (Urban Planning) Japan

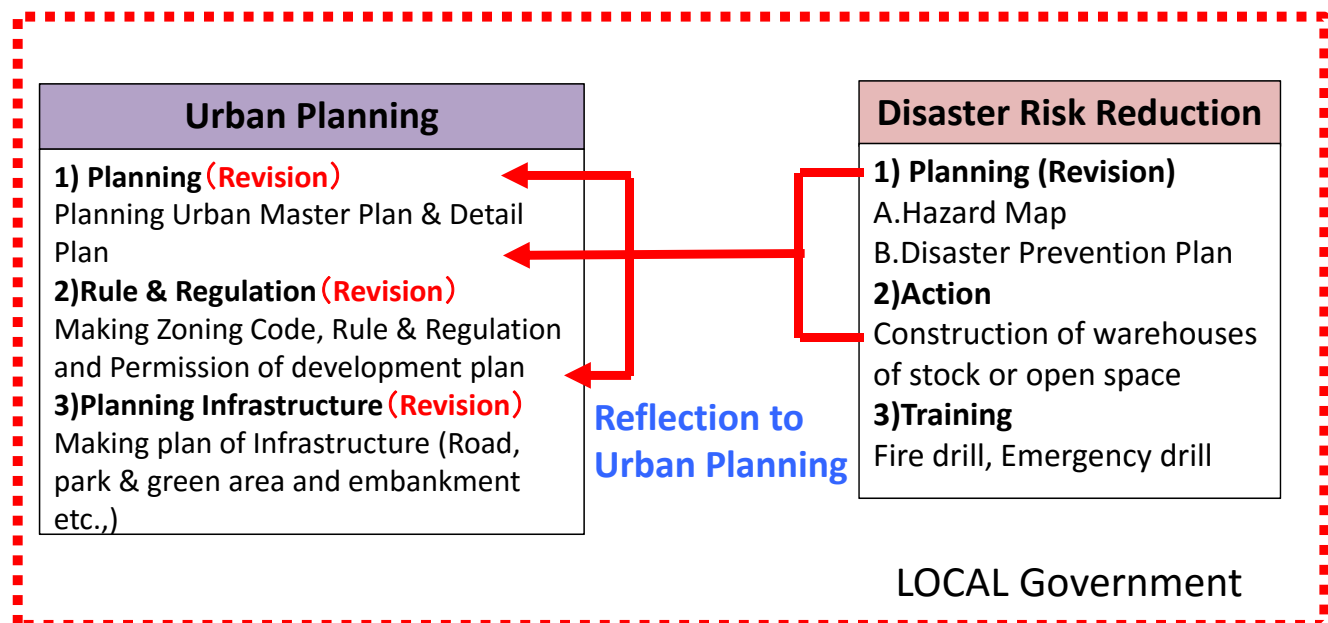
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# 4. Image of Guidebook (Chapter 4)

## “Who will do what?”

Urban Planning Section works 1) Planning and revision of Master Plan and detail plan, 2) to make zoning code and rule & regulation and permission of development plan from private sector and 3) planning infrastructure. Disaster Risk Reduction works 1) planning hazard map, prevention plan, 2) action for example, construction of warehouses for stock and open space and 3) training. For example, “Who will do what?” means sharing information of “1)” of DRR, and Urban Planning section reflects that information to Zoning Code like case of Toyohashi.



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# 4. Image of Guidebook (Chapter 8)

## “Good Practices for Resilient Cities”-1

Government official understood the weak point for disaster. And next step, we provide good practices for Resilient Cities. For example, storm surge and flooding river, Japanese traditional knowledge and simple structures named “WAJU”.

WAJU is the area surround by embankment that protect settlements and arable land from the flood. WAJU is located the lower reaches of river.



To reduce damages from floods, elevated houses called Mizuya have been built.



To minimize erosion, simple structures have been built on river banks, especially on the winding portions of the river.



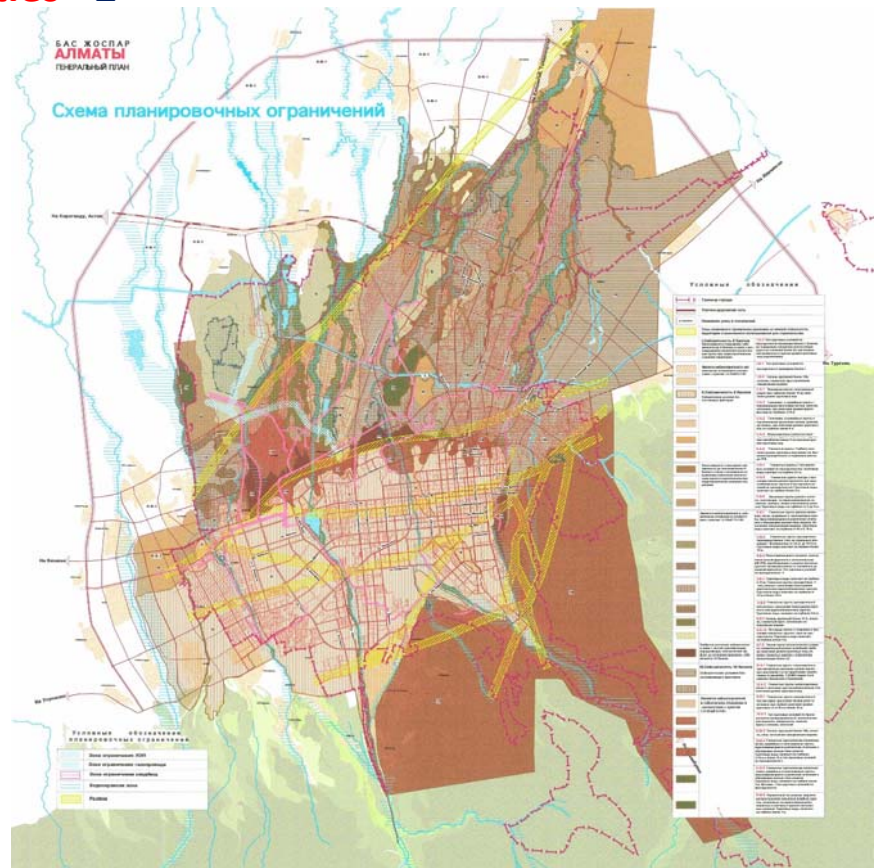
KAWAZU-City Gifu Pref.  
Japan

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## 4. Image of Guidebook (Chapter 8)

### “Good Practices for Resilient Cities”-2

This is a Zoning Code of Building Strength in Almaty Kazakhstan. Yellow Lines are location of fault. Colors of map means types of geological features. In Almaty, Building Strength is decided by geological feature and forbid to construct on yellow line. This is a one of a good practice of urban planning and earthquake hazard.



Almaty City (Kazakhstan)

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Thank you very much  
for your attention.

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