Current Status and Issues of support for the reconstruction of fisheries in Otsuchi Town

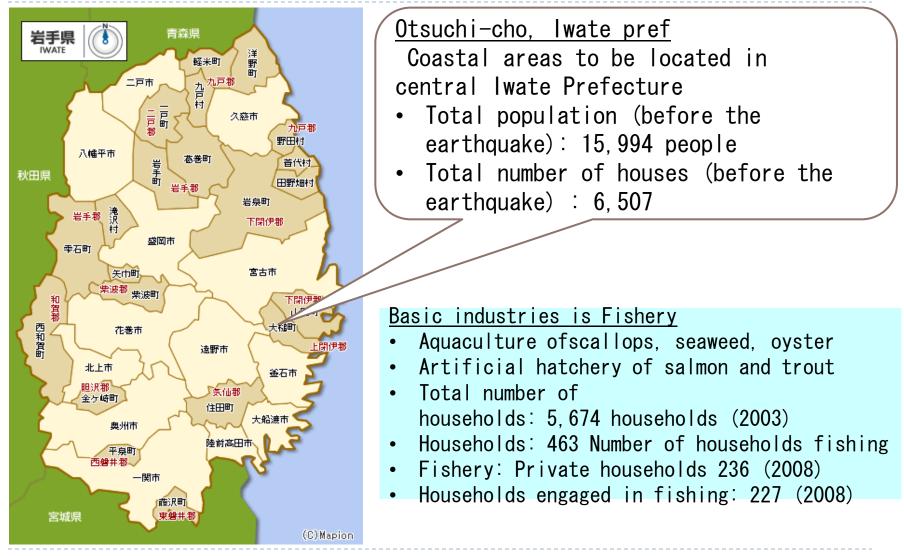
Hiromi KAWAGUCHI:Chairman, The Council of the reconstruction of Akahama Yoshihito SENDA: Ocean Alliance, University of Tokyo

2012. 5. 14

2011.3.11 Tsunami, Otsuchi-cho, Iwate pref



Overview of Otsuchi town before the earthquake



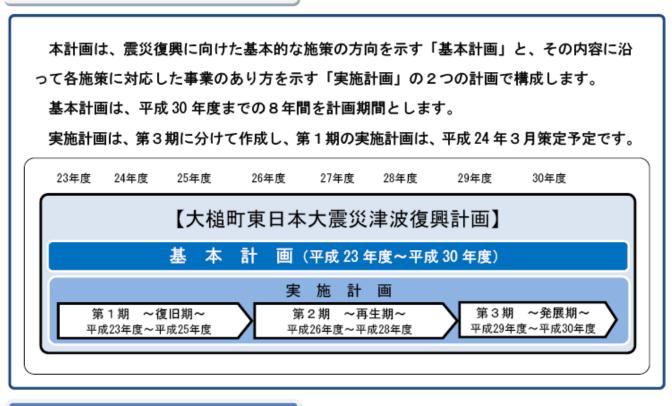
Damages

- People suffering (2012/3/31)
 - 782 people deaths
 - the number of people dead bodies 803
 - Accommodated 475people missing
- Changes in population
 - ▶ 13, 249 $(2011/3/11) \Rightarrow 15, 99420(12/3/31)$
 - ▶ 17.2% decrease in the population
- Property damage
 - 3,092 houses destroyed
 - 786 houses partially destroyed
 - 431ha area inundated
 - flooded residential rate:52%, permeability commercial land: 98%
- Amount of damage fisheries
 - 1,505 billion yen total damaged / industry about 51.2 billion yen

⇒34%

Reconstruction plan for tsunami earthquake disaster of Otsuchi town

計画の構成及び期間



まちの将来像

海の見えるつい散歩したくなるこだわりのある「美しいまち」

In the basic plan, indicatin g the direction of the basic measures for ea rthquake disaster reconstruction.

- Implementation plan indicate measures that correspond to each busines s along the basic plan. Planning
- Period consisti ng of recovery per iod, reproducti on period, dev elopment period

Basic measures of reconstruction

1. Ensuring safety and security

- Establishment of a system Disaster Reduction through cooperation
- Development of the living environment
- Social infrastructure disaster resilient
- Strengthening of protect the lives of residents

2. Reconstruction of the living

- Life rebuilding support for victims
- Promotion of health and welfare
- Life and environmental infrastructure improvement
- Use of renewable energy and ICT (Information and Communication Technology)

3. Revival of local economy

- Promotion of recovery and reconstruction of fisheries
- Promotion of recovery and reconstruction commercial, industrial and tourism
- Promotion of agriculture and forestry

4. Development of educational environment

- Improve the educational environment of children
- 6 Promotion of cultural and sports activities

Promotion of recovery and reconstruction of fisheries

1. Early recovery of production infrastructure

- Installation of temporary facilities as soon as possible(Fish market, ice storage facilities, etc.)
- Fishermen's cooperative conduct the recovery of fishing vessels and aquaculture facilities
- 2. Management support fisheries and fishermen's cooperative
 - Assist in the management side as fishermen can be obtained sufficient income
 - Development of an environment prone to new entries
 - Efforts to support high value-added production
 - Support the management of fishery cooperative stabilization

3. Development of a new marine product processing complex

Promoting the development of marine product processing complex

Roadmap

	recovery period (2011s-2014s)	reproduction period (2015s-2017s)	Development period (2018s-2019s)
1. Early recovery of prod uction infrastructure	Reconstruction and maintenance of facilitie s of fishermen's <u>cooperative</u> Reconstruction and maintenance of fishing vessels and aquaculture facilities		
2. Management support fisheri es and fishermen's cooperative	Management support fishermen, distributors and processing industry Start-up Study Group for the realization of high value-added production Development of marine product processing complex		
3. Development of a new marine product processing compl ex		Attract companies	moving into marine product essing complex

Activities of The Council of the reconstruction of Akahama





- Amongthe approximately 960 residents, 45 pe ople dead, 48 people missing, a total of 93 people were killed in Akahama(10% of the population
- Established in August
 - 2011, "Board consider the reconstruction of Akahama" as chairman Kawaguchi.
- Building reconstruction plan has been made by residents.

Discussion for formulating the basic plan by residents

- Discussion of reconstructi on measures were carried out by all residents.
- Using the 3D landscape model made by students of the University of Tokyo, to discuss the land-use planning.
- In October 2011, residents have proposed to the draft of the basic plan of Akahama
 reconstruction to Otsuchi town

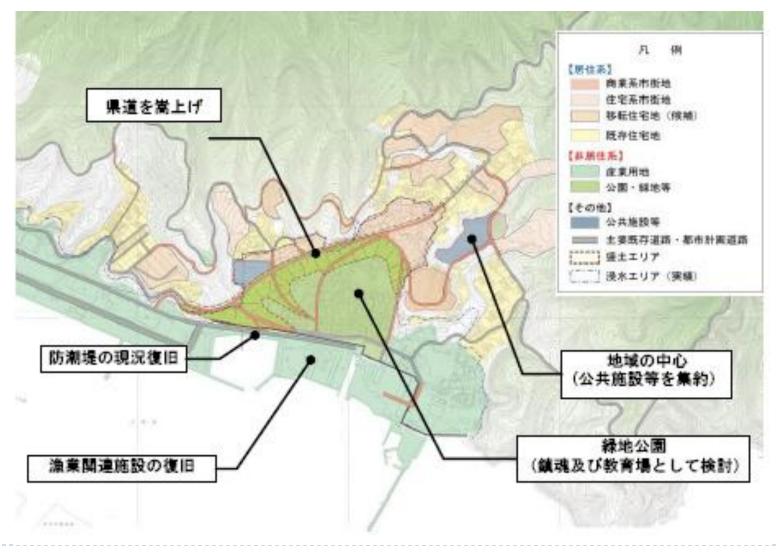


Discussion for formulating the basic plan by residents

- The residents claimed that "such a huge structure sea disappear I do not want".
- The residents kept the policy of "6.4 meters is sufficient" basis for the proposal that the embankment of 14.5 meters, lwate Prefecture showed.
- Proactive efforts of the residents of Akahama, was inspired by the town Authorities.
- The town authorities had established a council to 10 area in the town,
 - and entrusted toresidents ma
- ▶ 1king district plan.



The basic plan of Akahama Reconstruction



12 basic policies

1. Development of strong human resources to disaster

- 2. Breakwater
- 3. Change of route
- 4. Reclamation to a residential area on the hill
- 5. Wide evacuation road

6. Development of a robust power infrastructure facilities

- 7. Park use in the disaster area
- 8. Integration of public facilities
- 9. Construction of emergency shelters
- 10. Construction of public housings
- 11. Early restoration of the Horai island
- ▶12. Reconstruction cost burden by the government

12 basic policies

1. Development of strong human resources to disaster

- In order to reduce the victims, human resource development with enhancedawareness of disaster reduction
- Enlightenment awareness of disaster prevention in the school curriculum

2. Breakwater

- Anti-typhoon, storm surge is a breakwater. Protect life and property it is the embankment. These two types should be established.
- Breakwater to recover repair existing facilities. Embankment will be installed in the15m-18m above sea level.
- 3. Change of route
 - Change of route as described in the plan
- 4. Reclamation to a residential area on the hill

3D image reconstruction plan

