

Reconstruction planning of “Ohtsuchi-chyo”

- Small town in Sanriku coast: area size 200.59km², 15,994 people, (2011.02)→13,404 people (2011.11)
65 years older : 5,069(31.7%)→4,028(30.1%)
- Damage of disaster: dead 802 p. & missing 479 p. (2012.03), destroyed houses 3,878 houses (59.6%) (2011.09), most urban area was attacked by Tsunami and big fire
- Main industry : fishery and marine products industry, commercial & public service, close relationship with Kamaishi



Damaged Area by Tsunami in Ohtsuchi & Kamaishi

Source: Geospatial Information Authority of Japan

Townscape from former Ohtsuchi castle

【大槌城趾より市街地俯瞰景】

(被災前)



(被災後)



Central area 2011.06.08



Temporarily office of municipality





Former railway station 2011.06.13



Guest-huse in Namiita
area 2011.06.08



浪板地区民宿エリア



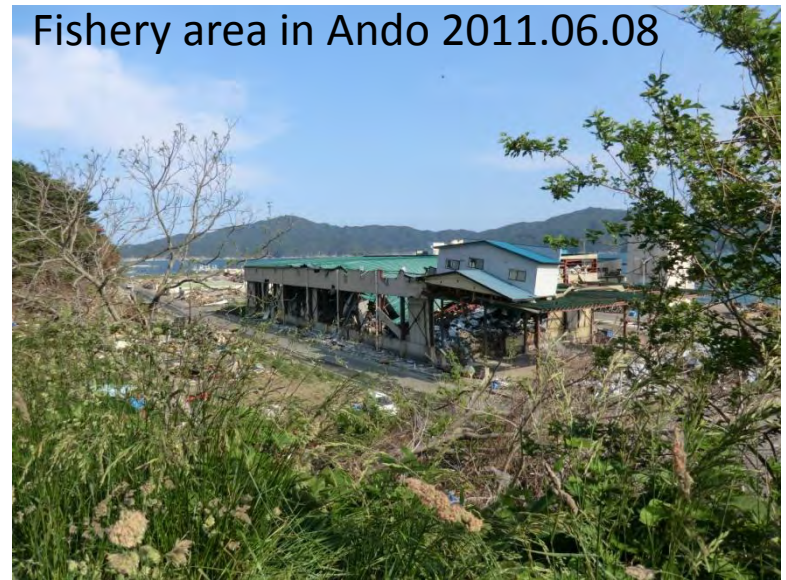
Kiri-kiri area 2011.06.08



吉里吉里地区



赤浜地区東大海洋研究所

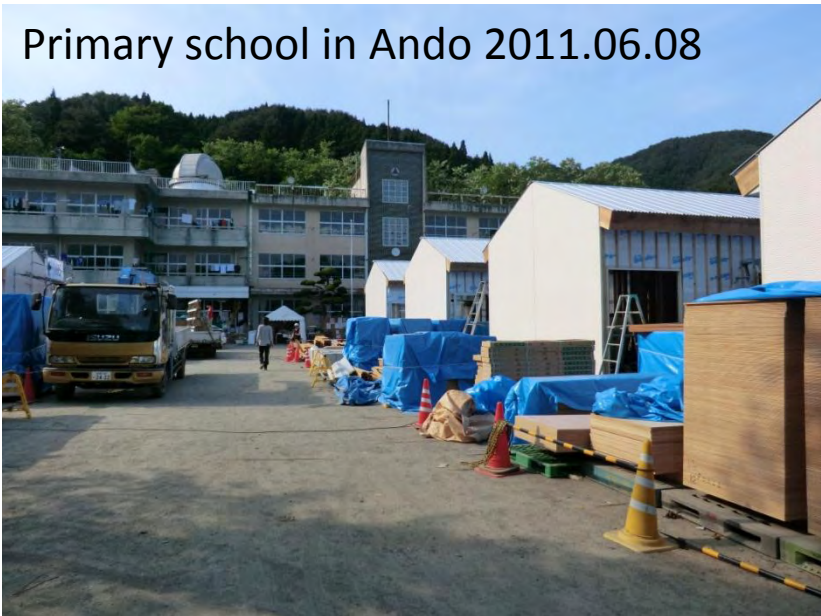


Fishery area in Ando 2011.06.08

安渡地区



Primary school in Ando 2011.06.08



Ando area 2011.06.08



Process of Reconstruction Planning

- 1st Step: Emergent recovery of minimum standard of life system of residents
 - Recovery of municipal administration function
 - Grasp of the information of damage and security of residents
 - Recovery of life line infrastructure: water, electricity, medicine, sanitary condition,
 - Construction of temporally housing

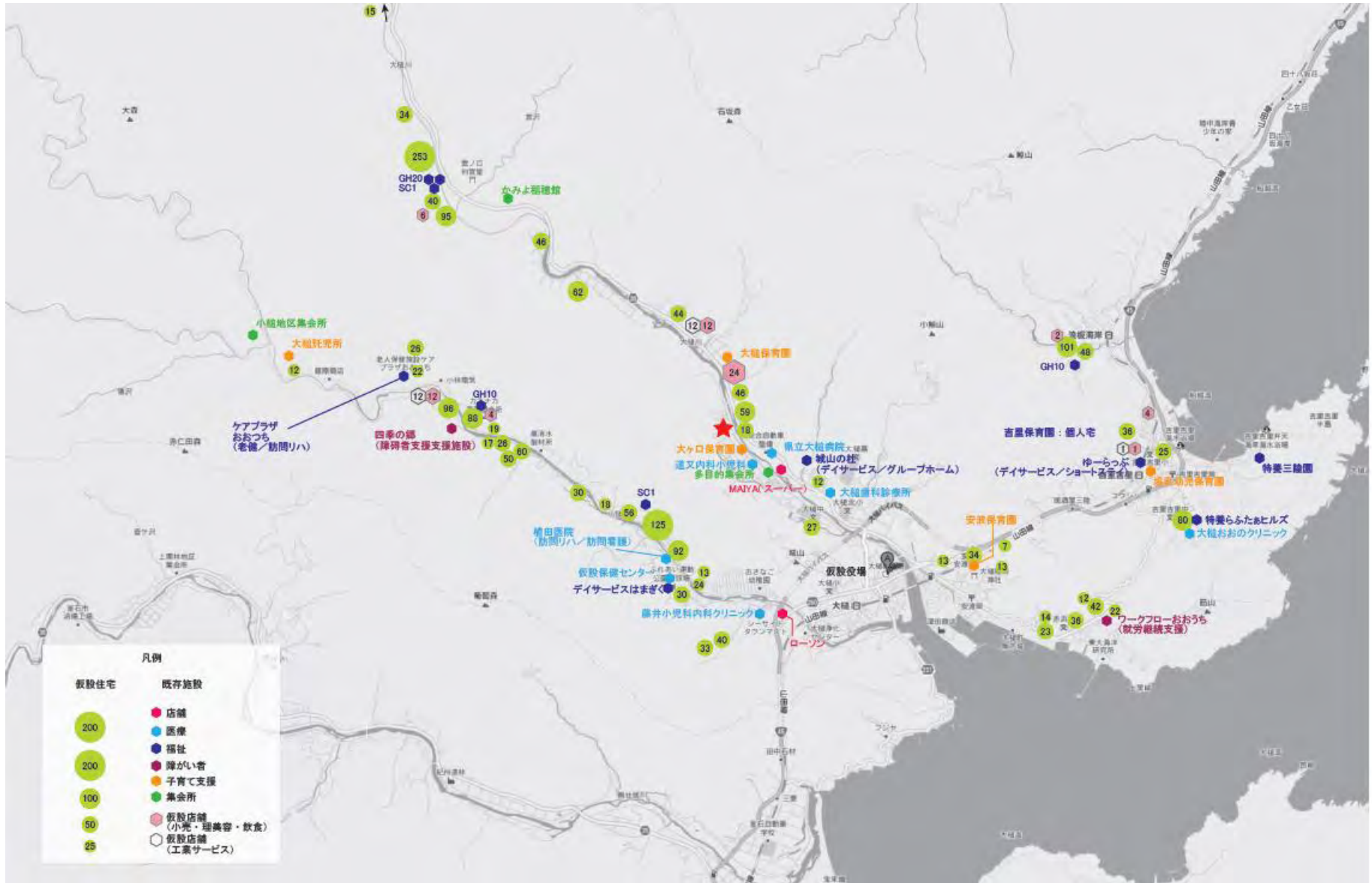
Process of Reconstruction Planning:2nd Step

- Start up of planning team supported by central government (MLIT) from June 2011 till March 2012
- Detailed survey on the situation of damage of disaster, life condition of residents
- Life care consulting
- Implementation of temporally housing project

Temporally housing project

- First priority: quick secure for demand, difficulty of finding of housing site
- Quantitative demand was secured by Aug. 2011
 - 48 settlements with 2106 housing unit (7 units — 100 units/ settlement)
 - 2080 households with 4762 people are living
 - Lack of social infrastructure, inconvenience of shopping, long commuting problem, transportation problem, isolation of residents
 - Proposal for upgrading of community life in temporally housing area

Location of temporarily housing settlement



Proposal for upgrading of temporarily housing settlement

2011/6/24

1

ver. 01

2

アップグレード方式によるコミュニティ・ケア型仮設住宅

「工夫でできる」改善

○デッキ設置による
バリアフリー化・コミュニティの促進

・玄関前や、住棟間をデッキでつなぐことで、碎石敷き、高低差のある仮設住宅地内におけるバリアフリー化をはかることができる。

○緑のカーテン・緑の庇の設置による
夏の日差し対策

・住棟の西側に「緑のカーテン」、住間に「緑の日足」を設置することで、夏の日差し対策が可能となる。

自治会の立ち上げの手順



まちづくり課題マップづくりの例



デッキ、緑のカーテン・屋根



「掃き出し口側にデッキを設置した時のイメージ」：
車いす用出入口、バリアフリー化



敷地内に高低差のある仮設住宅地の例 (山を切り開いて仮設住宅地を創出した場合など)



「デッキ上部に屋根を設置した時のイメージ」：
半屋内化、バリアフリー化



「住棟間に緑の屋根をかけた時のイメージ」：
日差しを遮る、玄関前の半屋外化

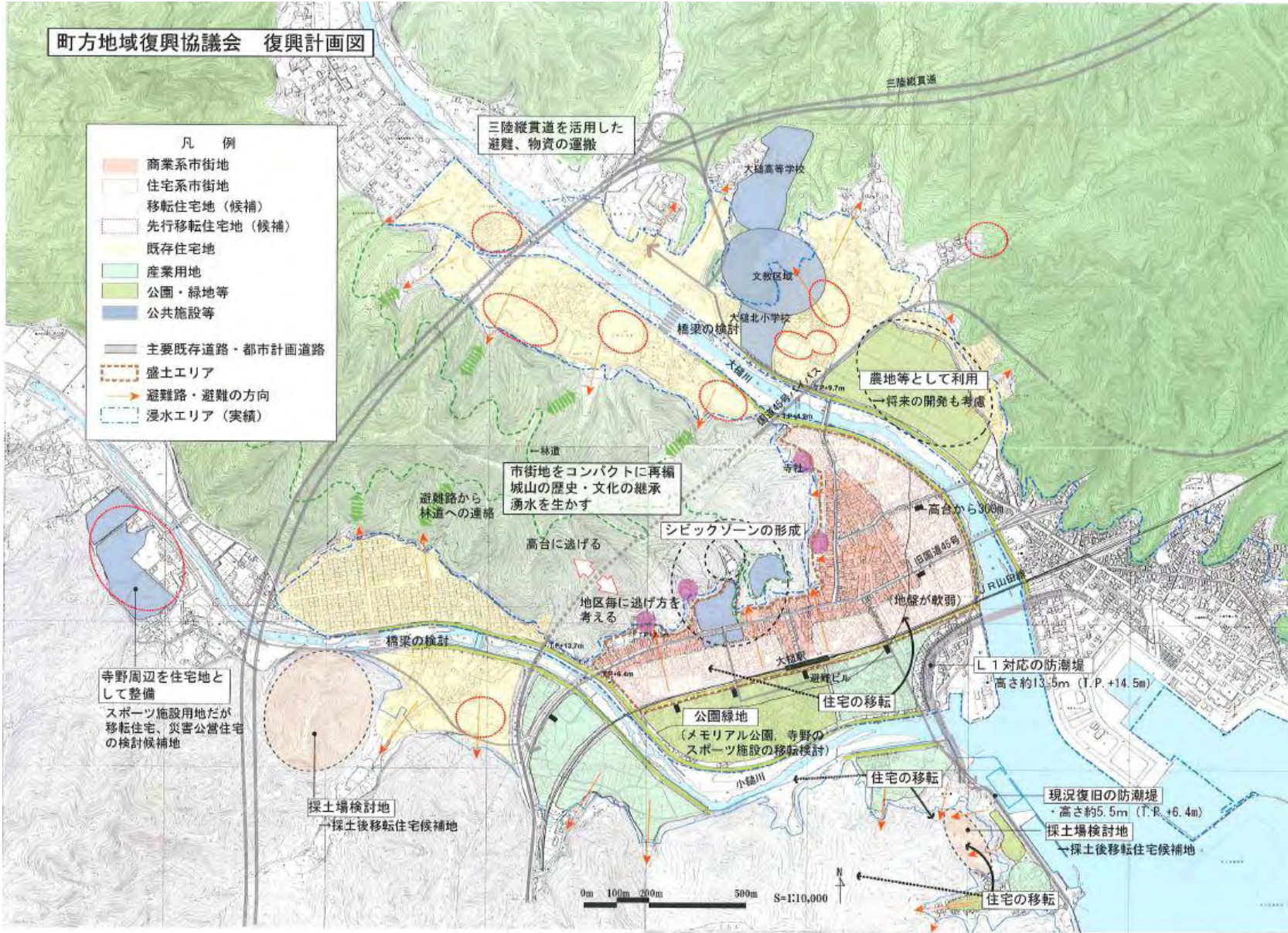


「階棟間に緑のカーテンをかけた時のイメージ」：
日差しを遮る

Mater Plan for Reconstruction of Ohtsuchi-chyo (2012.01)

- Planning term & character of planning
 - 1st term: restoration process 2011-2013
 - 2nd term: reconstruction & rebirth process 2014-2016
 - 3rd term: development process 2017-2018
 - Character of planning: general plan including social care aspects
- Basic planning policy
 - 1. secure of peace of mind, safe & security, 2. reconstruction of life system, 3. rebirth of local economy, 4. reconstruction & upgrading of educational and cultural environment
- Reconstruction guideline for 10 area: several times meeting for inhabitants with experts on the contents of reconstruction plan of each area

Reconstruction Plan Draft for central area in Ohtsuchi-cho



Otsuchi primary school in cetral area 2012.02.24



Dinning hall operated by NPO 2012.02.24



After the disaster, there was no dining opportunity for the inhabitants in Otsuchi. After 4 month, the voluntary group of inhabitants with help of experts started to operate dining hall for the inhabitants, workers and visitors to support reconstrucion.





Situation of central area 2012.02.24

There are some activities to start local economy, but most area is still no land use and in the ruins.



Tasks and hurdle for realization of reconstruction planning

- Reality and realization process of seawall for Tsunami prevention
- Treatment for dangerous area in case of Tsunami: land use control for building prohibition
- Relation of fishery and marine products industry to sea side
- Delay of infrastructure restoration and reconstruction: ex. Railway, fish harbor, raising of ground sinkage
- Dependence danger for public subsidy

Tasks and hurdle for realization of reconstruction planning

- Long term continuation of temporally housing
- Housing reconstruction: location and housing type, possibility & problem of collective relocation, site problem: highland or on the present site, financial problem of self reconstruction, flexible treatment of public housing, treatment of personal financial problem (ex. double housing loan)
- Possibility of compact town under the condition of demographic change and shrinking of industry
- Possibility of human resource and power: formation of active citizens group, innovative idea and action of NPO, support of professional and expert

Perspective for reconstruction, revitalization and sustainable development

- New planning paradigm under changing socio-economic and environmental conditions: not only for reconstruction for damaged area, but also for resilient national land to reduce the damage of disaster
- Rethinking of national planning and regional planning: from monopolistic centralization to multiple decentralized national land , balanced and resilient society
- Support for innovative project and experimental project : smart city project, new agricultural experimental project, renewable energy, tourism in connection with reconstruction process