

SOME EXAMPLES OF PLAN AND ACTIVITY IN RE-CONSTRUCTION FROM THE 2011 GREAT EAST JAPAN EARTHQUAKE

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Abstract

This report is trying to introduce some plans and actual activities in re-construction from the disasters caused by the 2011 Great East Japan Earthquake. Some plans to recover from Tsunami damage and Liquefaction damage etc. would be reported based on the officially disclosed materials.

Introduction

Almost 1.5 years has passed after the Great East Japan Earthquake occurred on 11th March, 2011, and now it might be the time for the actual execution of those plans. Here we would like to review how was the recovery plans and try to understand its implementation through the website of Ministry of Land, Infrastructure, Transportation and Tourism (MLIT) and other published information.

Recovery Plans

After the earthquake, "MLIT Recovery and Rehabilitation Plan in response to the Great East Japan Earthquake" had been posted from June 2011 on the website of Ministry of Land, Infrastructure, Transportation and Tourism (MLIT).

Recovery Steps-1,2,3

The Plan is at first mentioning "Steps from emergency response to recovery and rehabilitation" as follows.

- Step-1 Emergency Response
Rescue, Save lives and Transport routes
- Step-2 Immediate Rehabilitation
Infrastructure, Housing and Preliminary survey for recovery
- Step-3 Recovery and Rehabilitation Plan
 - 3-1 Support for livelihood recovery of disaster victims
 - 3-2 Rebuilding communities under new concept
 - 3-3 Revival of regional industries and economies, and urban and transportation infrastructure
 - 3-4 Reconstruction of disaster-resilient national structure

According to the published information and the news resources, Most portions of Step-1 and Step-2 are being completed. Based on the plan, the work shall be transiting to Step-3 gradually now, and Step-3 is described as follows.

Step-3 Recovery and Rehabilitation Plan

Step-3 consists of 4 items as follows.

3-1 Support for livelihood recovery of disaster victims

- Securing safe and stable housing



- Preservation of community units
- Sustaining public transportation

3-2 Rebuilding communities under new concept

It is said that the new concept shall be built considering;

- Low and higher areas
- Cannot be protected from extremely-large-scale tsunami
- Hard and soft measures

As results, they created Policy Directions as;

- Tsunami-resistant community development through multiple defense lines integrating hard and soft measures



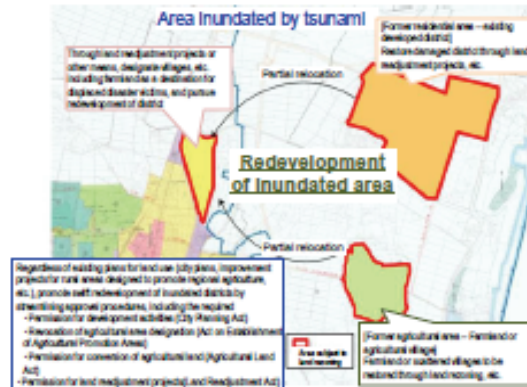
Evacuation route



Evacuation tower

- Urban and rural land use coordination and project execution

Integrated redevelopment of residential and agricultural areas:
Streamlining of administrative procedures



- Support for tsunami affected local government and communities (Personnel, technology, information fronts)

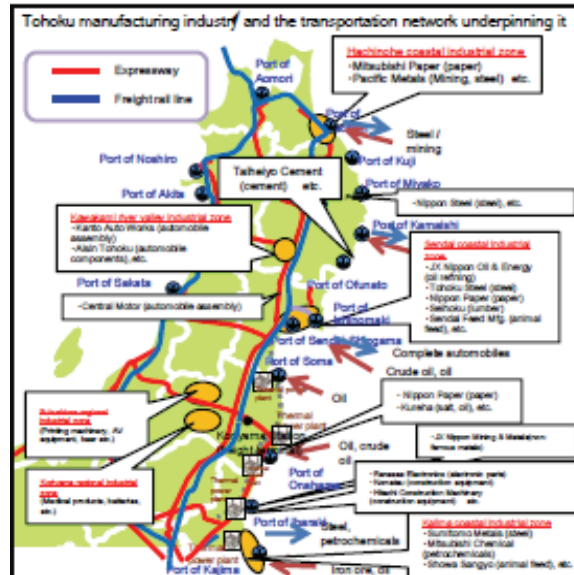
3-3 Revival of regional industries and economies, and urban and transportation infrastructure

As the driving force for recovery, the following directions are established.

- Immediate rehabilitation of transport infrastructures and businesses for regional industries
- Rebuild urban and transportation infrastructure for the region

The Sanriku Jukan Expressway was spared from tsunami damage





- Tourism promotion

3-4 Reconstruction of disaster-resilient national structure

Comprehensive targets for reconstruction are;

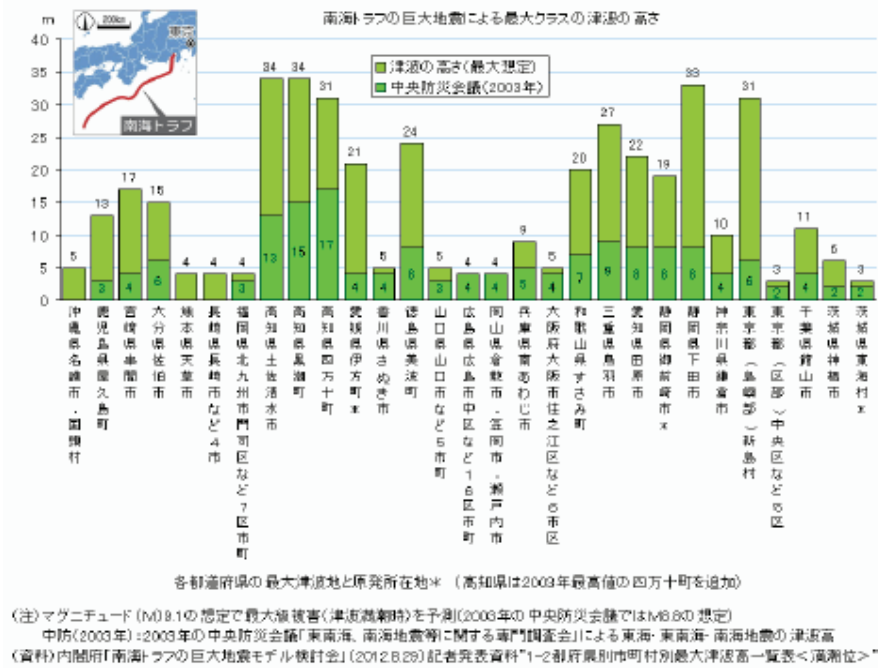
- Disaster resistant national land structure
 - Strengthening regional infrastructure and facilities and obtain more disaster resistant structure
 - Prepare the secure system for building flexible and resilient society
- Rethinking of national development policy
 - Revision and promotion of Tohoku regional development plan

Actual activities

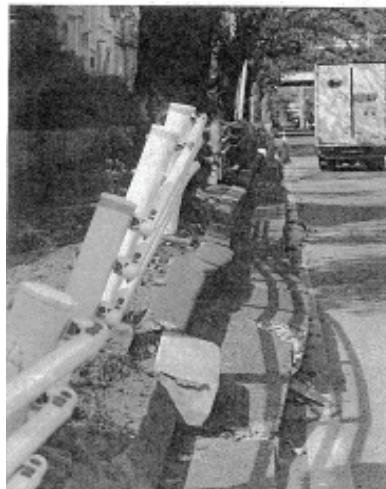
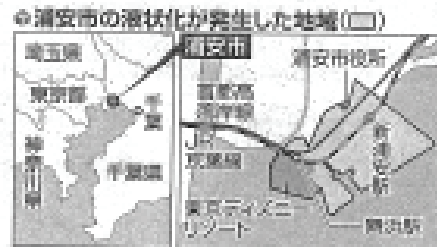
Publicly observed actual activities, concerning building and which the plan is reflected to are;

- Evaluation of damages from the earthquake and tsunami (BRI, etc.)
- Anti tsunami design (BRI, etc.)
- Expected tsunami height (Cabinet Office)

南海トラフ巨大地震の津波の高さ(最大想定)



- Expected earthquake motions and Long period earthquake motions (BRI etc.)
- Liquefaction recoveries (NPO bodies)



Conclusion

It seems that we have the plan for recovery and already obtained the results in engineering or technical fields as above. Although we need more time for rebuild the community with the safe and workable town policy and city planning because there should be people's lives and also politics and budget.

References

MLIT, June 2011, "MLIT Recovery and Rehabilitation Plan in response to the Great East Japan Earthquake", MLIT HP