

6.3.1. Kesenuma

We met Miura Tomayuki a community worker in Oya District who lost his home and is managing the Amagasawa temporary housing site on a hill near the sea. The following are notes of his verbal presentation (Tomayuki, 2013).

We visited what had been a beautiful beach south of Kesenuma, at Ohyakaigan and a second beach at Koizumi, at the mouth of the Suja River. At both beaches the pine trees and the beach were washed away, but the sand came back after six months to one year. The height of the tsunami in these areas was quite extreme (>15 metres).

We climbed the 3m temporary beach embankment at Ohyakaigan built of 1 ton black ballast bags. The main issue is the height of the proposed embankment – 9.8m high and 40m wide that will separate the community from the beach. Looking from an embankment less than a third of the proposed height we could appreciate his concern. The beach is the symbol of their identity and they feel connected to the sea. Most of the residents oppose the new embankment but some people were so traumatised that it is hard to get consensus. The population of the district is 3,500, 1,324 of whom signed a petition to the mayor asking the government to halt the plan and to reflect the comments of residents.

But the Oya beach is managed by three different organisations – the Municipal Agriculture and Fisheries Department is in charge of the north end where fishing used to be, the National Forestry Department is in charge of the middle section that used to be a pinewood and the Civil Engineering Department of the Prefecture is in charge of the southern end at the river mouth. Six of Kesenuma's districts are in a similar position and there is a similar level of concern about losing access to the beaches.

In the town centre we met Akihiko Sugawara, owner of Otokoyama Honten, a Sake Brewery, Vice President of the Chamber of Commerce and Member of Strategy Committee of Municipal Government. He was accompanied by Toshihiko Abe, Senior Research Fellow at the Institute of Urban and Regional Studies at Waseda University. The following are notes of their verbal presentation (Sugawara, 2013).

Ohshima Island protected the harbour and by the time the wave reached the top end of the bay in Kesenuma it was much weaker and everyone managed to evacuate and there were no casualties. But the plan is to build a 5m embankment that will destroy the character of this charming seaside harbour. The people in the neighbourhood are against the plan because they think the plan will destroy the harbour merely to protect a narrow strip of flat land from an event that may occur once every 1,000 years.

The best view of the town is from here and it is important to recover the tourist industry. The problem is people are worried about the delay and think that a high embankment will destroy the scenic value of the place. People are against this kind of structure because it will separate them from the sea and change the character of the area. Although embankments are meant to protect lives and property the proposals will destroy lives and sustainable living conditions and people may leave. The embankment may also give a false sense of security and it might be better if people are aware of the sea and are ready to evacuate. No one died in the neighbourhood because people are aware of the tsunami risk and evacuated immediately.

There used to be many shops in the town centre but recovery will take 5-6 years and many of the shops and restaurants may not return. There has been discussion about speeding up the procedure – how to recover the housing and how to recover the commerce. It had been hoped to rehouse people quickly and recover lives but 9,000 people from across the city are still in temporary housing. Many shops are in temporary accommodation and want to come back to the area. The dilemma is how to speed up decision-making to recover livelihoods. It would be better if the Japanese legal system helped resolve this kind of issue, but the system is bureaucratic and authority budgets are divided and segmented.

We visited Shibitachi, a fishing village of 260 households and interviewed a group of eight fishermen from a cooperative of retired men who fish in an amateur way for abalone and sea urchins in the gulf.

The village is set in a beautiful bay of Karakuwa. The wave here was 9m and a costly 9m sea wall has been proposed. When the warning came people ran up the grass slope behind their homes and practically everyone was able to evacuate easily. Only nine people died. Of these, one was in a wheelchair, some were elderly and some went back to collect something. They believe evacuation is the best measure here.

They said that the residents and city government are in conflict with the Prefecture because people's lives will be ruined if the seawall is constructed and they are separated from the sea. The government plan is for a 9m high wall 40m wide at the base that will fill most of the flat area at risk.

We met Ogata Takeshi, an Assembly Member and fish processing plant owner, together with his wife. They lived in the Ogata House a large traditional style house (thatched) built in 1810 that was destroyed by the tsunami and has been adopted by Japan's National Trust. The following are notes of their conversation (Ogata, 2013).

The priority of the Government's Six Year Reconstruction Plan published in October 2011 is to build hard protective structures and to relocate people. After that there are other priorities. The Mayor of Kesenuma is lobbying for a share of the budget. Families have three options: they can reconstruct their own house, they can move into public housing or they can move to another place. Some people are opposed to plans to build embankments and in the assembly there is as yet no consensus. The government has proposed a 7.2m embankment in front of where their house used to be. Around a third of their house has been recovered and materials transported in Yamanashi prefecture for restoration and storage. Japan's History and Folk Museum (in Sakura-shi, Chiba prefecture) is making a replica of their house. The Ogatas have not yet decided where they will rebuild their traditional house.



Figure 6.10 (Left) Ogata House before the tsunami.



Figure 6.11 (Right) Ogata House after the tsunami.

6.3.2. Kamaishi

We met three community planning professionals from the Iwate Prefecture: Yuki Kawaguchi, Hiroaki Yagi and Atsushi Onodera. The following are notes of their presentation (Kawaguchi *et al.*, 2013).

The city lacks resources and they are here to support the city. The Prefecture is responsible for infrastructure at various levels for example embankments and roads.

The 2011 tsunami topped the barriers and embankments and the new embankment is designed for a Level 1 hundred-year return period tsunami event and evacuation measures are planned for a Level 2 1000 year return period tsunami event. Evacuation routes and temporary camps have not yet been determined and they are still thinking about road design and hazard zoning. They plan to raise the land for living and working.

The concept for public housing is increased density and people will be less self-sufficient on smaller plots and further from the sea. In principle, people will be relocated as close as possible to their previous homes and neighbours. The variety of public housing depends on the land availability. Single

units are expensive. Prior to the tsunami 40 percent of the population rented their housing and 80 percent of this was private. Potentially, some of these people will be moving from private to public housing.

Public housing is seen as a last option but not a change of status. It's called disaster housing so it carries less of a stigma. In fisherman villages most people own their own homes; in the city more people rent. There was a survey in the city asking people if they wanted to live in public housing or not. The qualification is based on income level.

The first issue for planners is balancing speed with reaching consensus. The second is securing land because it is difficult to identify who owns the land because some people are missing and there is inaccurate cadastral information. The city has a schedule for recovery but is facing so many issues that it is impossible to say how long it will take. The biggest industry is Nippon Steel which was not badly affected. But the main employer is fishing and the priority is on getting the fishing industry back into production.

We met Junicho Kano, founder of a community NGO in Kamaishi called RIAS. The following are notes of their presentation (Kano, 2013).

Place making is important to Kano and he had decided to help the recovery by building a meeting space that is open to the community and where they hold concerts and piano recitals and try to respond to what people want.

In the first two weeks the defence force cleared the roads and access was the first priority.

Kano received government funding to manage the centre until the end of March 2013 and now gets some support from the private sector. The centre is also for shop owners and stallholders whose property was washed away. It provides a place at the centre of the old town and is a symbol of regeneration, a beacon of hope and a resource for community activity.

The younger generation want to go to Tokyo. Even if there were higher education in the town there are still no jobs and there is an expectation that jobs can only be provided by large corporations. Small business owners did not get much support and many people have had to leave the city.

The local newspaper has a full-page information sheet twice a week, but people would like to know about the phasing and timing of recovery in the economy, homes, property and safety program. But the Municipal authority only provides piecemeal information and there is no comprehensive strategy. Coordination and leadership in the city council by the mayor and his staff feels inadequate. Few Japanese cities have strong local community associations and traditionally people want government to decide for them. Non-profit organisations like this centre have to provide coordination by sharing information.

6.4. Conclusions

One of the key issues is how much room for adaptation there is in the application of the central government's template for recovery and reconstruction. Japan is a compliant society and there may be more flexibility than bureaucrats or residents realise. But no one has any inkling about the cost-benefit of the huge investment. This is a national response to disaster, but there is a disconnect in the local area in terms of priorities and decision-making. The government feels that it is doing what is right in saving towns that have been here a long time. But there is a time limit for people to decide what to do as the government has set deadlines for spending.

We visited the International Recovery Platform, UNISDR in Kobe and spoke to Sanjaya Bhatia, Knowledge Management Officer; Yoshiyuki Akamatsu, Senior Researcher; and Recovery Experts Shingo Kouchi, Gerald Potutan and Gulzar Qayyum. The following are notes of their conversation. (Bhatia et al, 2013)

The Reconstruction Agency was established by the Prime Minister's Office. It advises government on all basic strategies based on quick lessons. But hard solutions give a false sense of increased security and early warning is an issue. The reaction of government has been self-critical. Instead of defending the system they have been frank about what failed and it is in the character of Japan to always review and look back and learn lessons. For example, ideas about evacuation are changing.

Japan national broadcasting has changed the way it announces the early warning. Rather than giving precise information that is open to error and misinterpretation it will from now on give much simpler direct warning to evacuate immediately.

To date the focus has been on relocating housing and safety measures, whereas the imperative is to to strengthen the local economy and address economic and demographic decline. Measures that would strengthen existing local businesses, city centre shops, attract new industry and encourage young people to the city might also have been considered. One thing the central government might have considered is founding a college of higher education, either a new university or a branch of a university in Sendai, preferably one that focused on technology and had practical links with industry and enterprise.

There is a proposal from Kobe University to revitalise small business but people in the affected area do not have the resources or money to take action or to exploit new technology. New people would be most welcome. Do people take the initiative and accept responsibility or do they expect people to come and help solve the problem? People with initiative would be a good thing. People have been here a long time and cannot see how to fix the problem.

6.4.1. Demographic and economic issues

About half of victims of this earthquake were elderly people of sixty-five years or more. In planning it is necessary to try to anticipate the future population. Based on the statistics presented by Statistical Information Institute for Consulting and Analysis depopulation has extended over the whole region, excluding large metropolitan areas such as Sendai. Forty percent of all Municipalities will experience a population decrease of 20 percent or more. In coastal areas of Pacific Ocean population is anticipated to decrease even further since local economies were destroyed and young people will leave (Masateru, 2011).

Population emigration due to the disaster is largely occurring among young people. The International Recovery Platform pointed out the issues being faced by the affected areas following the Great East Japan Earthquake are compounded by the problem of shrinkage confronting most rural towns in Japan. In addition to issues of safety and relocating housing, population decline, ageing and economic shrinkage pose special planning challenges (International Recovery Platform, 2012).

It is hoped that tackling these issues by reording land use, improved transportation links and urban centre regeneration projects will have a positive impact on the prospects of these places as well as make them more resilient to a future disaster.

Not all places that were affected by the tsunami are the same, however. The area around Sendai in Miyagi Prefecture is a flat plain and has a strong economy, good transport links and a growing population. Further north in Iwate Prefecture there are steep slopes and fiords, a declining population and a weak economy. In each there are differences of scale with a few larger cities and towns and many more smaller settlements and villages. This suggests that different places face different issues of recovery.

These differences in socio-economic prospects, demography, topography and scale suggest that approaches to both safety issues and economic development assistance might be fine-tuned to meet local circumstances.

Table 6.6.2 Places visited classified by relative strength of economy and size.

	Large	Small
Stronger economy	Iwanuma Natori Yuriage	Villages in Iwate (part of the population commuting to city)
Weaker economy	Ishinomaki Kesenuma Rikuzentakata Kamaishi	Villages in Miyagi (dependent on fishing and agriculture)

6.4.2. Citizen involvement in decision making

In the areas affected by the 2011 tsunami, consultations between governments and communities were the rule, and community representatives were invited to serve alongside experts on recovery planning committees from the earliest stages. The most common ways of collecting residents' opinions were surveys and workshops. The central government and local governments outside the disaster-affected area helped affected Municipalities plan their recovery by conducting research, seconding staff, and hiring professionals to provide technical support. University faculty members, architects, engineers, lawyers, and members of NGOs participated in the Municipal planning process (World Bank, 2012a).

Along the Rias coast the response of the majority is that the government has already decided so they can't do anything. Some even admire the colossal infrastructure. But the younger generation, in their forties, is opposed to large embankments and tall sea walls, but they are not the decision-makers. In Japanese community associations it is elderly men who make the decisions. In Ohyaikaigan near Kesenuma the community association meets twice a month and tries to involve children as well as older people. The plan is to collectively relocate the 120 households and to have the land cleared by 2015-16. The Japanese Institute of Architects (AIJ) is considering using this as a model of participation. Unfortunately people can not wait and they are now down to 100 households and the community may fall apart because of the delay. The group decided they would not oppose the proposed embankment but suggested it be moved back. Initially the city was not happy but changed their minds after receiving the petition. The proposed Municipal plan is now for a much lower embankment further back but this needs cooperation between the Ministry of Forestry, Japan Railways, the National Highways Agency and the Prefecture (Tomayuki, 2013)

In Kesenuma the citizens' committee oppose the planned harbour embankment and they are in talks with the Municipality and prefectural government. The majority of residents are against the proposal and it is not settled yet. Planning arrangements cannot proceed while there is a dispute but city officials are making land use plans assuming the embankment will go ahead. Because there has been so much opposition a new deadline has been set for October 2013. In other places plans are proceeding more rapidly.

In Kamaishi the three community workers for the Prefecture explained that local authorities have to accept what citizens want. Ideally they would simulate different heights of embankment since communities in some places have opposed the plans. If people want something outside the government's recommended solution planners have to be careful that safety measures are in place and that the community has collectively relocated.

Partly because of citizen opposition, reconstruction of sea embankments, which suffered extensive damage, has been considerably delayed. Local governments in devastated areas cannot decide on the details of restoration plans, as discussions continue on whether to prohibit people from returning to coastal areas. Reconstruction work has started on only 31 percent of destroyed embankments. According to the Fisheries Agency, which has jurisdiction over sea embankments, the design of embankments will depend on whether people will live nearby (Daily Yomiuri, 2013).

Local governments were tasked with recovery by the National Government who asked them to develop local plans based on consultation. The problem is they lack the technical capacity, especially in effective methods of involving citizens in strategic decision making. Voluntarily urban planners and architects from all over Japan surged to provide missing capacity. Local government has lots of problems with consultation, which is time-consuming and it is not easy to convince communities to relocate. Local governments want to consolidate communities to make it more efficient and economical to deliver services, but many of these places were in decline before the tsunami. They have to provide facilities to each community so the cost is considerable (Bhatia et al, 2013). But the fundamental problem is that the authorities do not really know what size population they are reconstructing for.

6.5. References

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