## Report of Working Groups 1, 2, 3

The Fifteenth Dialogue
October 1–2, 2016
Kawauchi Village

# Working Group 1 Day 1

## What was your experience during the accident

- Quite varied experience during the accident
- The accident:
  - seemed unreal
  - put people in a state of shock
  - "Not Again why Japan"
  - No data
- Large information gap: affected people had little radiation knowledge, lots of confusion

## What do you want for the future? What would you like to see to live better

- More support for people in higher dose areas
- Don't change working-level people so often, or at least have a long-term policy
- Reduce Worry and Concern
  - Criteria seen as too strict (e.g. public housing)
  - Criteria seen as too unclear (e.g. some think 20 mSv is ok to go home, some think 5)

## What is needed to go home

- Need data from all affected areas for experience, for giving reference points
  - But some say no data because it will give them and their region a bad image – others say data will show improvement
  - Some detectors show very different readings need good calibration
- Need to understand what is "Safe"
- Need to understand what data means (e.g. ambient dose rate, annual dose, etc.) The knowledge and understanding will grow
- Need to move waste piles from places where people would like to return, and need not piles everywhere – final disposal
- Need data for now and need to continue to collect long into the future

- Need to "feel good" this will involve compromise
  - Use reference points to see that things are improving (e.g. dose rate before and after decontamination)
- Young people should be included in recovery, Friends all going back inspires friends to return, Make villages attractive to attract the young back
- People need to work together
  - Residents and researchers
  - Residents and municipal government
- Need to see the future to have recovery, Government should take the lead to show the future path

- Situation will not go back to the old situation
- Recovery is not going back, its about feeling ok
- For this, there are lots of things to consider, not only radiation
  - Infrastructure: hospitals, schools
  - Shopping
  - Jobs
- Need to address issues from before the accident that the accident made worse (e.g. the young leaving the Prefecture)
- For preparation:
  - Need data from before any accident
  - No one is really prepared
- From Belarus, recovery has been never ending

### **Key Points**

- Each region is different
- The government must care for people, but people must care for themselves
- Need to give everyone a voice the majority does not speak up or come to meetings
- Gap between affected people and people in Tokyo
  - People traveling to fuku to visit see higher doses on the highway than where people livee

# Working Group 1 Day 2

### Decontamination

#### 3 Questions

- 1. What Actions have there been in your town?
- 2. What about the waste? How much? Your opinion?
- 3. What about waste storage?

### Compensation

- Some anger about evacuees who get compensation but this can cause them to lose incentive to work
- Compensation is a very important issue

## Waste Regulations

- Should waste be allowed to leave the prefecture where it is produced?
- Regulations about waste are complicated, and strict (e.g. about what can be done with waste depends on activity level)

## When to Stop

- View that more decontamination is needed has decreased over the years, particularly in places where decontamination has been done a lot
- The dream of decontaminating to lower and lower dose rates is fading

## Dialogue

- There has been no or little shared vision of what should be achieved by decommissioning
- There is no exit strategy
- Culturally in Japan, dialogue is difficult
- Municipalities have lots of different experience to share, but do not talk to each other enough

#### **Trust**

- The central government is seen as making topdown decisions, providing no explanation to affected people
- The central government should listen to people's concerns
- Waste storage is becoming long-term: should discuss this
- The situation in Fukushima Prefecture is vary non-uniform, but the image outside is uniform

#### **Emotions**

- Large piles of waste bags are a daily, visible reminder of the accident
- No research has been done on what this does to the psychology of residents, particularly children
- The medical community is strongly in contact with the public, and can help to transmit good information to address people's concerns

#### **Initiative**

- Good example of starting new enterprises
   (e.g. charcoal) need government support for such initiatives
- Obstacles can be hard to overcome, but should be addressed

#### Tired

- Some residents are getting tired of dealing with the event, the pace of progress can be slow
- Focus may be getting less, for example research grants seem to be decreasing
- The situation is long-term: should not lose focus

## Chernobyl vs Fukushima

- In Chernobyl there has been great loss
  - Villages have been condemned
  - Waste is "lost"

- In Fukushima there has been great cost
  - Huge decontamination effort
  - Massive waste volume to manage

#### **Group 2 Day 1**

Main measures implemented or to be put in place in the future to ensure a return to acceptable living conditions in our town

Dialogue in Kawauchi
'The rehabilitation of living conditions in the Futaba region'

01-02 October 2016

#### In the medical field

- A lack of medical services and personal. Need to wait or to go elsewhere
- Problem for elderly people, children, women who want to be pregnant, in case of emergency
- It is a frustration, a major concern, in particular during night

## In the field of housing

- Still many people in temporary housing. Building of houses is increasing. Situation different according to the area.
- Each village has its own policy for housing.
- Return is depending on many factors. Support is necessary. Compensation is an issue.
- Return means break the new community
- Concern about size of the population (e.g. in case of fire, not enough people)

#### In the educational field

- Government is refurbishing schools and several are reopened
- But many children are still are not returned
- It is the choice of parents/adults who want to protect children (how to better take into account the voice of the children?)
- Graduates tend to leave the prefecture

#### In the economic field

- Difficult to maintain the community without jobs , shops and services
- Need to recover economical activity and living together.
   Difficult to reconstruct a new sustainable life.
- Shops need customers
- Agriculture is a major concern but should not mask the other aspects
- NPP was a major economic pillar. Now decommissioning. But new workers. Merging with population may be difficult
- Economy should be attractive to young people, from Fukushima or outside

## In the social field (1)

- People do not seem to be lost anymore. They better know what they want
- Difficult for residents to express themselves. Too shy. System not fully adapted. Officials not always listening
- Difficult to get information and explanation (e.g. fear about incinerator but only people in the area have information)
- Officials are changing every 2 years and transmission of information is difficult

## In the social field (2)

- Liaison people are mobilized but it is not sufficient
- Some resident NGOs were created
- Broad discussion about the community and the home-town. Is it a matter of place or of relationship? We will never refund the same than before.

#### In the cultural field

- Culture is very important
- Events, festivals have to be (re)organised (e.g. Jangara)
- Opportunity to create jobs
- To be again together
- No conflict of interest with culture.

#### **Group 2 Day 2**

The implications of the decontamination and the challenges of waste management

Dialogue in Kawauchi
'The rehabilitation of living conditions in the Futaba region'

01-02 October 2016

#### Decontamination

- Area of Kawauchi seems to be attractive for retired people; also volunteers
- Fear and questions about mountain and forest:
  - 20 m radius is it sufficient?
  - Can we use wood for heating and cooking?
  - What about wild products (mushrooms)?
- Is decontamination justified?
  - Long process, costly
  - Not sure to be efficient (just moving contamination)
  - Production of waste
  - Decontamination of forest unrealistic

#### Decontamination

- What is the sense of 0.23μSv/h?
- Technology exists but how to be sure it is properly done?
- However, it is important for farmers
- Contaminated soil has to be removed
- Risk of dissemination of Cs, risk of transfer
- A matter of balance between advantages and disadvantages; ethical values

#### Measurements

- We never paid attention of dose before
- We want to know the level of the contamination
- Dosimeters are provided by government
- Self-measurement of external dose, foodstuffs
- Radioactivity become visible but:
  - Long-term effort
  - Are mobile devices reliable? (2 devices -> inconsistency)
  - Is it the role of population to make monitoring?
- Important to control food, ashes
- Some wild products are not controlled

#### Measurements

- Results should be available (cf. incinerator)
- Many data is already available (TV, newspapers...) but explanation is needed too
- Experts are needed. But sometime they have controversial opinions. How to get trust? A better liaison with experts is expected
- Japanese people should be more educated
- Comparison may be useful (natural background, cosmic radiation in aircraft) but not sufficient
- Measurements are variable (it is normal but calibration is needed)

#### Measurements

- What means safe?
- A matter of perception. It is emotional
- Even if the level in Fukushima is lower than in Tokyo, it is contamination

#### Waste

- A lot of flexible containers everywhere (cf. road 288).
   They should be removed
- Fear about potential dose, quality of environment, leaks
- The step by step process is complex (big-bags + ISF + final disposal)
- Is it realistic?
  - Time: temporary become long-term
  - Transportation (too much material)
  - Site acceptance
- There is a lack of information the detailed evolution along the time

#### Waste

- Some people are against ISF but not the majority
- For the siting ISF, only 10% of land owners have already contracts with government; they are wishing to cooperate but they need proper information
- A better cooperation between municipalities is needed
- Prefecture of Fukushima should be involved, with better liaise with municipalities
- It is importance to reduce volume; but some fears about reuse and recycling

## Waste

- Not only the problem of Fukushima but of Japan and even world wild
- Solidarity is needed

# Day 1 Report session 2 Working group 3

## How they live the five years since the accident?

- There were few people knowing what happened at the reactor at the time of the accident
- Learning from researchers how to measure the food. I found that many vegetables are eatable. I have no more concern with food
- I was concerned to stay outside the community and was concerned to participate and do something to the community
- I really learn from Dialogue seminars. It change my view
- There is a large difference between being an expert and living in the situation

- Question on whether or not we want to live in the area is a difficult question
- Different reasons reported:
  - Natural environment
  - Job constraints
  - Family reasons
  - **–** ...
- Find a compromise for the decision to live or not with different aspects (type of risk-assessment)
- Generation gaps including the tendency for young generations to move to bigger cities. How to reverse the situation?

- For young generations, radiation was the reason for mothers to move from the region and difficult to come back
- But now the decision to return while the order of evacuation is lifted is not mainly a radiation issue
- Distance and transports are different from the past:
  - For jobs and schools
  - For the access to medical infrastructure for elderly people
- Beauty of the village and the natural environment, as well as dignity and proudness of the village are crucial for some inhabitants
- Importance of history and legacy/heritage of the village

- A dilemma: Why to build a school if there is no or very few children? But how to make the village attractive without building the school?
- There is a need to do at least small things to allow the improvement of the situation and favour the return of population one day or another
- Medical infrastructure have been reinforced after the accident but still a problem of distance for access to specialised medical installations
- Need to develop training of health professionals for coping with the situation

- Concerned with short time and some other longer time.
  - Living environment (decontamination) this is short term.
  - For a longer term, need to develop economic activities.
- Currently there are many reconstruction activities creating jobs.
- For attracting the young generations there is a need to have a longer term perspective creating other jobs opportunities and not only reconstruction works.
- Usefulness to have a 5 years vision and a programme clearly identified and shared by the inhabitants

#### **Issues on incinerators**

- Concern on the risk associated with the presence of incinerator in the village
- Not really good to have it in our backyard but at the same time necessary to install it
- Lack of visibility on the risk and limited discussion with authorities on this issue: is it safe or not for young people?
- No real discussion on alternative options

#### **Future**

- No possible to come back to the previous situation
- Need to create projects for the future
- Need for a new direction
- Importance of community: largely disturbed after the accident
- Need to maintain the history and traditions and reconstruct the community
- Importance of restoring the leadership within the community for the future

# Day 2 Report session 3 Working group 3

# Actions taken for the decontamination of your town

- In most of the cases, a significant role for municipalities (outside the 20 km zone)
- First priorities by the municipality for school yard
- A large part performed by citizens themselves at the very beginning with general information from the media but without advices from municipality services
- People wanted to confirm if it was possible to live or not
- Significant cost for each house
- Different behaviour: decontamination or not when the contamination level is rather low

# Actions taken for the decontamination of your town

- Difficulty to understand what is correct or wrong
- Decontamination was the process to put away the contaminated material- no scientific way but put away the contaminated material
- Problem with leaves and trees to treat the soil for decontamination
- All people want to be treated fairly and want their area to be decontaminated to ensure safety even if the implementation took more time than expected (several years for certain locations)

# Actions taken for the decontamination of your town

- Timeline for decontamination after the accident
  - In some places, decontamination is done 4-5 years after the accident
- Today there is a certain knowledge but still stick on the procedures developed in 2011

#### Forest decontamination

- Forest decontamination is different from region to region
- 20 m from the house is planed to be decontaminated but if surrounded by forestry sometimes difficult to get significant results
- People with children do not trust it will be sufficient
- It is necessary to have a better consideration of specific situations

### Waste management

- Depending on the municipality the plastic bags were put together or kept at home
- Transportation is just started in Fukushima city for example
- People want to see the plastic bags to be moved as soon as possible but they have only little concern for safety about them
- In some cases, the location for interim storage took a long time to be selected and residents were aware about this situation
- On the opposite, some evacuees don't want to come back because they consider plastic bags as really dangerous

### Waste management

- Discussion on the incinerator: not well known. People are anxious about incinerator of waste
- The impact may occur several years later think about the radioactivity of the waste
- Incinerating material, most of the people are against
- When it comes to reuse it may be dangerous to human and need to be considered seriously
- People never had information on the reuse of materials
- Psychologically this is quite sensitive
- There is a lack of information on this issue and it makes people uncomfortable and they can't make their own judgement