Recovering from Nuclear Disaster — Issues Facing Okuma Town Today

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1. Overview of Okuma Town

Overview of Okuma Town

- A township located in the center of Fukushima Prefecture's Hamadori region with the population of 11,500 (as of March 11, 2011) and land area of 78.7 square kilometers (*as compared to the 63 square kilometers of area inside Tokyo's Yamanote circular train line).

- Main local produce include fruit (pear, kiwi), wine made of pear or kiwi fruit, and farmed flounder.

Exterior view of the Okuma Town Office

Inviting the Fukushima Daiichi Nuclear Power Station

- Under the initiative of government and Fukushima Prefecture, the township accepted the development of TEPCO's Fukushima Daiichi Nuclear Power Station. Its Unit 1 went operational in March 1971.
- Many local residents were involved in business operations related to the power station, thereby making frontline contribution to the nation's energy policy.

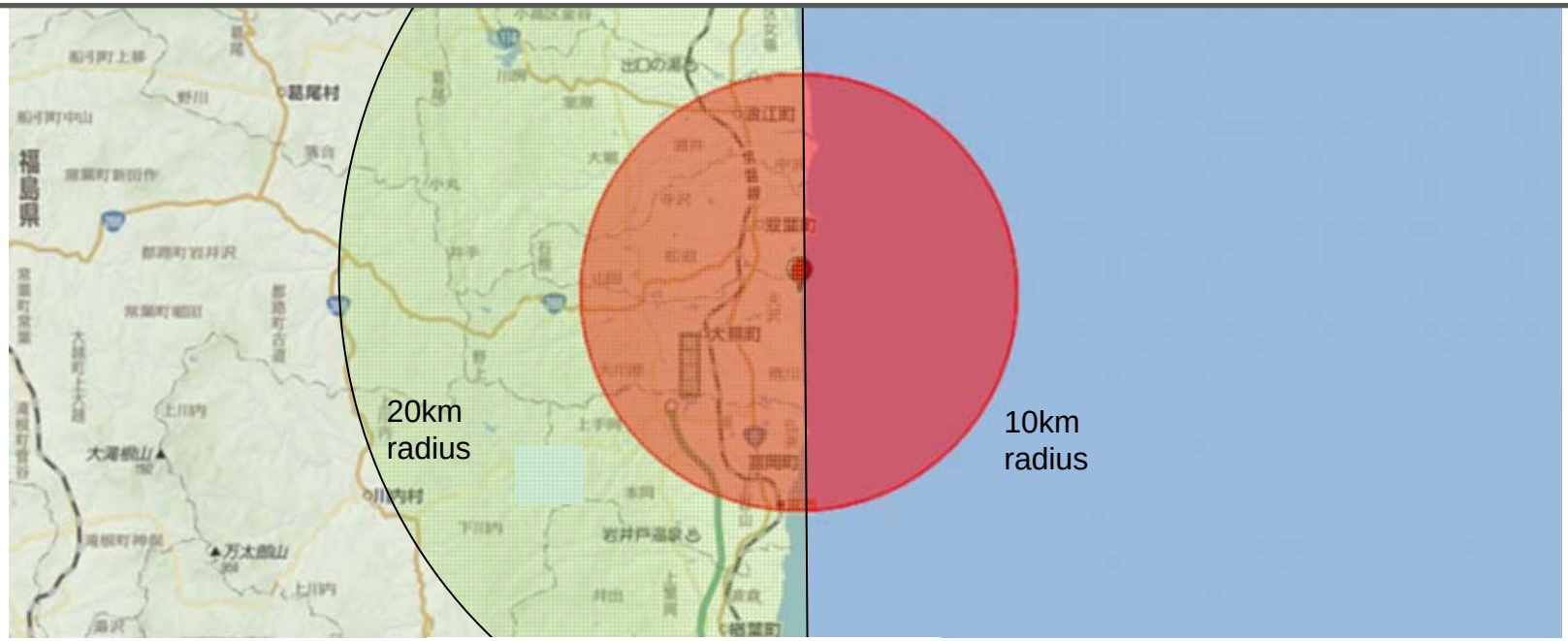
(Source:
Nuclear Regulation Authority website)

2. Nuclear Disaster and Local Residents

Nuclear disaster (situations at Okuma Town)

■In addition to direct damage from the earthquake and tsunami, the township suffered the accident at the Fukushima Daiichi Nuclear Power Station, forcing its entire population to evacuate.

- In the morning after the earthquake (5:44 on March 12), people who live within a 10km radius of the Fukushima Daiichi Nuclear Power Station began evacuation under an instruction from the Prime Minister.
- At 15:36 on March 12, a hydrogen explosion occurred at the power station's Unit 1, which led to the expansion of the evacuation zone to areas within a 20km radius.
- At 23:00 on March 12, the evacuation of all local residents was completed.



Evacuation status immediately after the accident (reference)

Friday, March 11, 2011

- 14:46 The earthquake struck.
- Around 15:40 The first waves of tsunami arrived.
- Past 16:00 “Station Blackout” reported under Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness
- Around 16:50 “Inability to inject water into ECCS” reported under Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness
- **Around 21:20** **The Prime Minister ordered “evacuation of residents within a 3km radius and indoor evacuation within a 10km radius”.**

Saturday, March 12

- **5:44** **The Prime Minister ordered “evacuation of residents within a 10km radius”.**
- Around 6:30 Evacuation started. Confusion was reported on site with SDF standing by to wait for HQ instructions and police instructing the use of home vehicles for evacuation, despite the official instruction to “evacuate all residents by bus”.
- 7:47 TEPCO reported the start of plant ventilation.
- **15:36** **Hydrogen explosion at Unit 1 (Residents who have missed the evacuation bus waited until 17:00 but were ordered to evacuate immediately.)**
- Around 17:00 The Emergency Response HQ was set up at the Tamura City General Gymnasium.
  （At the time, 6,000 people were evacuated to six sites in Tamura City. Following evacuation from other municipalities, evacuees were distributed to 27 evacuation centers in Tamura, Miharu, Ono and Koriyama.)
- **18:25** **The Prime Minister ordered “evacuation of residents within a 20km radius”.**
- Around 19:00 Evacuees at the Furumichi Gymnasium and Furumichi Elementary School Gymnasium were transferred to the Funehiki Elementary School Gymnasium and Tamura City Culture Center.
- **23:00** **Evacuation completed**

A temporary town office was set up in Aizuwakamatsu on April 4 to resume town office duties and start confirming the status of Town residents in evacuation at various sites.

Influence of the nuclear disaster (Status of Okuma Town (1))

Aquaculture Center

After the disaster

Shopping mall

Influence of the nuclear disaster (Status of Okuma Town (2))

- Swarms of livestock on the loose
- Stone fences collapsed in the earthquake

Influence of the nuclear disaster (Status of Okuma Town (3))

Okuma Town Office

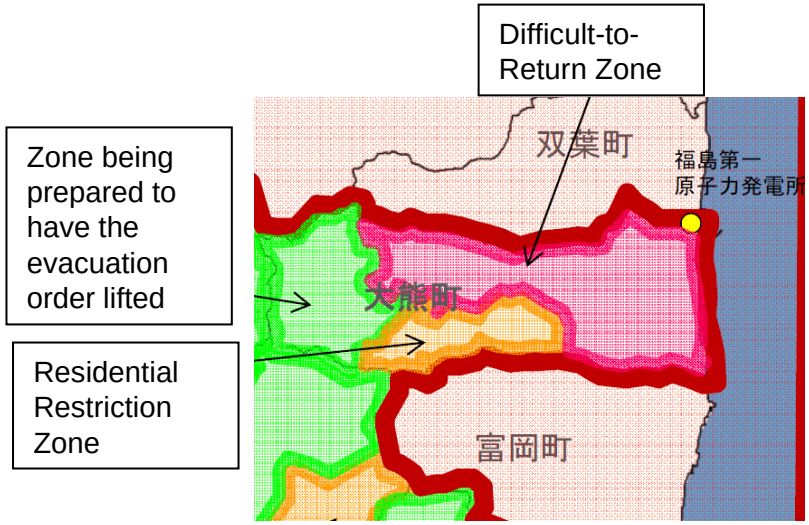
- Town office still left abandoned after the earthquake
- The broken clocks showing the time of the earthquake

Long-term damage from the nuclear accident

■Review of the designated evacuation zones
Last December, areas where 95% of the town's population lived were included into the Difficult-to-Return zone. The town assembly subsequently adopted a 5-year no return policy.

■Progress of decontamination
Advance decontamination work began in the Okawara district in December last year.

■Temporary access
Residents were allowed temporary access for the 7th time since February this year.



(Source: METI website)

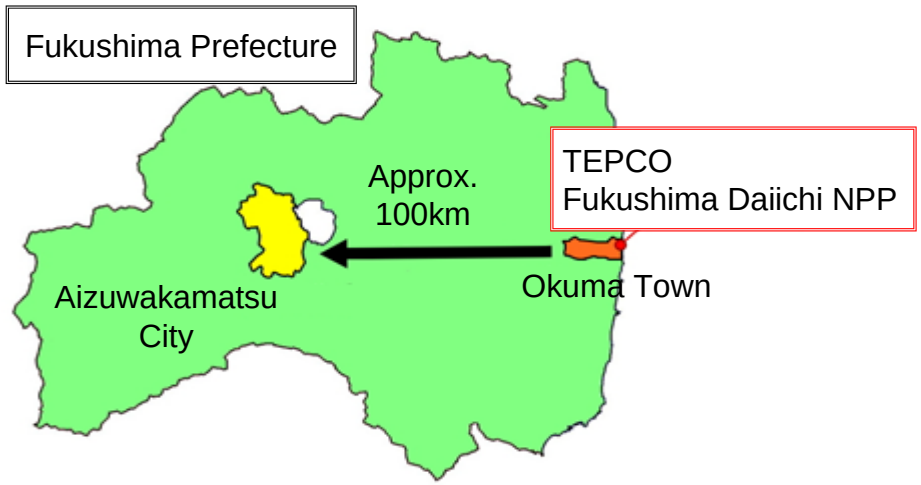
Current living arrangement of town residents

■Evacuation locations: Approx. 6,400 people in Aizuwakamatsu and Iwaki Cities (around 60% of all evacuees)

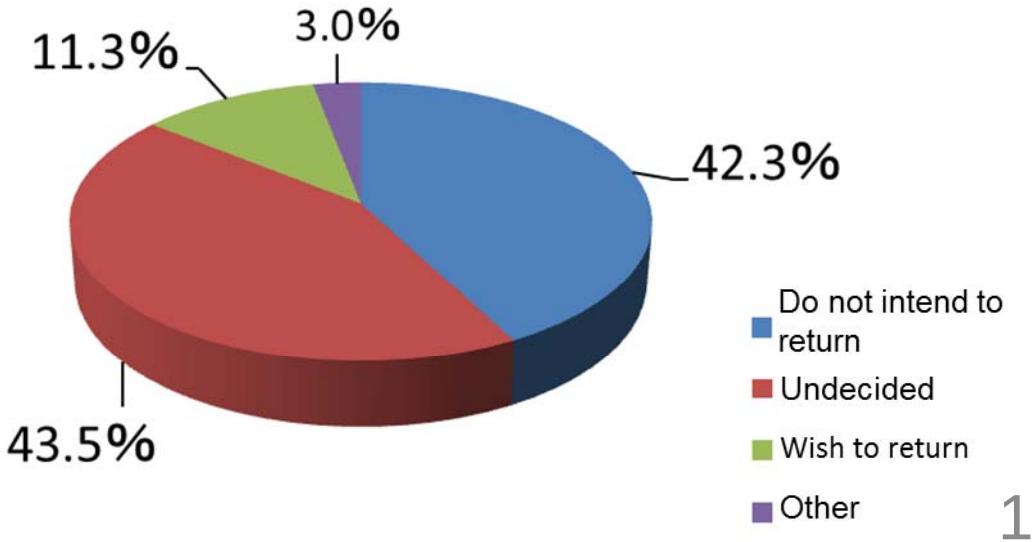
■Schooling function: Branch kindergarten, elementary school and junior high school were opened in Aizu (April 2011), with the registration of 472 students in total (30% of all applicable-age children)

■Status of temporary housing: A large number of residents live in temporary and rental housings. Development work is currently underway for prefectural restoration housings, but the majority of people are seeking to gain their own houses.

■Restoration plan: The First Okuma Town Restoration Plan was drawn up in September last year. Meanwhile, a survey found that around 40% of residents do not intend to return to the town.



Intention to return to Okuma Town



Matters that residents face

＜Short-term matters＞

■ Compensation

Amount of money that allows residents to regain the previous standard of living even in a different location.

Criteria are unclear for majority of cases (in terms of mortgage, farming equipment, etc.)

■ Residential assurance

Public restoration housings (rent assistance, development of educational, medical and welfare services)

Amidst the protraction of life in evacuation, some people have opted to buy their own house, and suffer double debt.

■ Damage from unfounded rumors

Establishment of national consensus on radiation dose standards for health, foods etc.

＜Long-term matters＞

■Decontamination, interim storage, decommissioning

… Closely linked to the town's restoration. Time limit to be determined urgently

■Municipal functions ("out-of-town communities" including schooling)

… Challenge for all the people affected by the nuclear accident

3. Challenges toward restoration

Challenges toward restoration

- Difficulty in setting a timeframe
- Scientific yardstick for radiation dose
- Bringing the nuclear accident under control and clarifying the decommissioning schedule
- Addressing a multitude of sentiments among town residents

Challenges toward restoration (1)

■ Difficulty in setting a timeframe

∗Town residents are starting new lives at their respective evacuation communities. Faced with practical issues such as housing purchase and new project launch, there is no timeframe that can be a guide for rebuilding and designing life in the town.

∗It is necessary to present specific time limits for miscellaneous challenges to clearly present to town residents as to what the town's situations will be like by what timeframe.

Challenges toward restoration (2)

■ Scientific yardstick for radiation dose

∗There is no national consensus on radiation dose standards concerning living environment, health, foods, etc., resulting in failure to establish the sense of security among residents and farmers.

∗The final decision to return to the town rests on individual residents, but there should be objective and scientific basis that they can refer to in making their decision (especially for women and children).

Challenges toward restoration (3)

■ Bringing the nuclear accident under control and clarifying the decommissioning schedule

∗The first tasks should be to decide on the final method and location for processing high-level radioactive waste from reactors, including debate on the issue of the nuclear fuel cycle.

∗For Units 1 – 4, it is necessary to draw up a safe and steady decommissioning schedule to establish a sense of security among town residents.

Challenges toward restoration (4)

■ Addressing a multitude of sentiments among town residents

∗The protraction of residents' life in evacuation is causing diversifying issues that they face, e.g. their future contribution to the cost of makeshift and rental housings (currently offered free), the placement of residential registry in relation to education and parenting, and prejudice in evacuation communities. Each issue should be dealt with carefully to address the sentiments of town residents.

Okuma town’s restoration vision and plan

- Restoration vision (10. 2011)
- First restoration plan (9. 2012)
- Stage 1 implementation plan (3. 2013)

Thank you very much.