



SUMMARY

RECOVERY POSTPONED: The long term plight of people displaced by the 2011 Great East Japan Earthquake, tsunami and nuclear radiation disaster

INTRODUCTION

- The unprecedented disaster resulting from the combined impacts of the massive earthquake and tsunami on 11 March 2011, followed by radiation leaks from the crippled Fukushima Daiichi nuclear power plant, internally displaced over 470,000 people from their homes.
- Almost six years on, despite the overall good recovery progress in many devastated municipalities, some areas have lagged behind and 134,000 evacuees continue to live in displacement.
- Prolonged and protracted displacement has had profound and disproportionate impacts on the move vulnerable members of society, particular older people, and delayed the full recovery of people affected and the country as a whole.

DISPLACEMENT DRIVERS: EXTREME EVENTS AND TESTING PREPAREDNESS

- Reconstruction of the disaster-affected regions is central to government policy for national economic development, with thirty-two trillion yen (US \$263 billion) secured to meet needs in the affected areas making this one of the costliest disasters in history in economic terms.
- Nineteen thousand people lost their lives and 279,067 houses were damaged, with Miyagi, Iwate and Fukushima prefectures in the Tohoku region worst affected.
- Evacuation plans for a major disaster of this nature were not in place, initial tsunami warnings were significant underestimations or went unheeded in some cases and evacuations were delayed or interrupted.
 At the same time, instructions to the residents of areas exposed to nuclear radiations were confused.
- "Voluntary" evacuees, so-called because their homes were located outside the officially designated evacuation zones in Fukushima, also felt compelled to evacuate, fearing health impacts particularly on young children. Some 10,000 evacuated children from Fukushima, around half of whom were "voluntary" evacuees, had not returned as of March 2016.
- Public safety concerns continue around the decommissioning of the damaged reactors in Fukushima and the re-starting of reactors in other areas, including lack of provision for the safe evacuation of residents.

DISPLACEMENT PATTERNS AND TRENDS

- Uncertainty in the data suggests that the overall scale of displacement of 470,000 people may have been significantly under-estimated.
- Different patterns of displacement evolved in the differently-affected areas overall among household members according to age and gender.
- Many people displaced moved away from their rural or small home town communities and became dispersed across more than 1,200 municipalities around the country, weakening community ties and access to normal support networks.
- Forty-seven per cent of Fukushima evacuees surveyed at the end of 2011 said that they had already had to move three or four times and 36 per cent five or six times.
- If the overall slow rate at which evacuees have been able to find permanent settlement is not substantially improved, there will still be over 100,000 people living in displacement in 2021, 10 years on.

THE IMPACTS OF PROLONGED OR PROTRACTED DISPLACEMENT

- Prolonged displacement has had serious consequences for the health and social well-being of evacuees, related to the impacts of the earthquake, tsunami and nuclear radiation accident, as well as to "fear and stigma related to the perceived risk of exposure to ionizing radiation".
- "Radiation stigma" towards Fukushima evacuees has created additional stress, including the bullying at school of evacuee children from Fukushima.
- Five years on, many evacuees from both inside and outside official evacuation zones were suffering from sleeping disorders, anxiety, loneliness and depression and the phenomenon of 'Kodokushi' (or people dying in isolation) among displaced people living in temporary housing has increased.
- Immediately after the disaster, higher mortality rates among displaced older persons were reported in all areas, while sheltering *in situ*, rather than evacuation, may have minimised health risks to nursing home residents in Fukushima. While communication has improved, the government's handling of information provision and consultations with the public was widely criticised as contributing to stress and undermining affected peoples' decisions to make informed decisions about their lives.
- Long lasting psychological stress and mental health impacts were worse among evacuees from radiation exposed areas, but mental health problems amongst residents of Miyagi and Iwate also remained above the national average, with some women in temporary housing complexes suffering from significantly higher rates of post-traumatic stress disorder (PTSD) and insomnia
- In Fukushima, indirect deaths associated with displacement exceeded direct deaths caused by the disaster
- Several years following the disaster, lower employment rates and earnings were observed among people who remained displaced, while the financial circumstances of around a third of residents from the evacuation zones in Fukushima continued to be worse than "normal", with almost 11 per cent in a "tough" situation.

LOOKING AHEAD: OBSTACLES TO DURABLE SOLUTIONS

- The government has struggled to recognise and respond to evacuees' shifting attitudes to return. Displaced populations should not be coerced into returning and they have the right to make a voluntary decision on the settlement option they wish to pursue.
- After the passage of more than five years, the desirability and sustainability of return has become less likely, even where it is physically possible or permitted. Only about 10 per cent of official evacuees from four municipalities around the nuclear plant are hoping to return home.

- Relatively little attention has been given to enabling evacuees to explore options to locally integrate in the areas they are displaced to or to relocate elsewhere rather than return.
- Timeframes for reconstruction have tended to be unrealistic, leading to evacuees' hopes being repeatedly let down by delays to progress. Long completion timeframes are still foreseeable for many evacuees requiring different options, including collective relocations, large-scale public housing construction and the decontamination of exclusion zones.
- Collective relocations of vulnerable coastal communities to higher ground have suffered delays, rising costs and numerous complications, including land scarcity issues and processes that left some communities divided. Planned relocation schemes were only about 50 per cent complete as of August 2016.

CONCLUSIONS

Almost six years on, the prolonged uncertainty and slow progress for people still displaced across multiple prefectures has maintained their marginalisation from normal life and had profound and debilitating socioeconomic and psychological consequences. This case shows that obstacles and delays to durable solutions can be great, even where national capacity and resources are relatively very high, with lessons that are likely to have relevance across diverse disaster contexts worldwide.

- This case highlights the importance of:
 - Clear, comparable and accessible displacement data and analysis to inform policy responses within and beyond disaster-affected areas.
 - ♦ "Soft" protection measures that boost mental, physical and socio-economic resilience during displacement complement "hard" investments in infrastructure and reconstruction.
 - Early prioritisation of needs of vulnerable people such as older people.
 - Ensuring internally displaced people are engaged from the beginning in identifying and developing solutions to their displacement.
- Evacuees, the media, NGOs, independent researchers and local authorities are continuing to call attention
 to the on-going displacement situation and the overriding responsibility of government to prioritise public
 safety over other interests.

The full publication is available here.