

# STAKEHOLDER COMMUNICATION FOR INFORMED DECISIONS: LESSONS FROM AND FOR THE DISPLACED COMMUNITIES OF FUKUSHIMA

## 1 Context/Rationale

According to the United Nations International Strategy for Disaster Reduction's (UNISDR) Hyogo Framework for Action 2005-2015:

*"Both communities and local authorities should be empowered to manage and reduce disaster risk by having access to the necessary information, resources and authority to implement actions for disaster risk reduction."*

The immediate aftermath of the Great East Japan Earthquake, which triggered tsunamis that caused massive damages as well as a severe nuclear accident at Fukushima Daiichi Nuclear Power Plant, was characterised by a lack of information – especially for local authorities and residents of the affected communities. Confusion also prevailed at the central government level in Japan as it tried to manage the situation, and within the international community as it watched these events unfold.

Three years on, the recovery still represents a daunting process, especially for the residents and policy-makers of the communities displaced by the nuclear accident. Many of the policies aimed at the rehabilitation of these communities are based on the assumption that evacuees will return once decontamination operations have lowered radiation levels. In practice, the intention to return is fading as the evacuation period becomes increasingly protracted: many evacuees had to start rebuilding their lives elsewhere and have no plans to return, while others find it difficult to decide whether to return or relocate elsewhere. Addressing this situation requires a form of stakeholder communication between policymakers, experts and the affected communities that could empower residents of these communities to make informed decisions about whether to return or relocate, while at the same time supporting informed policymaking that respects people's choices.



Ensuring effective flow of communication – at the level of policymakers, experts, and the general public – is at the core of the Fukushima Global Communication Programme (FGC) and has been central for the Fukushima Action Research on Effective Decontamination Operation (FAIRDO). Both initiatives have focused on contributing to effective and impartial dissemination of information about the situation in Fukushima and for bringing in international expertise to spur the region's recovery.

This session focused on the topic of stakeholder communication to facilitate informed decision-making of the displaced communities and informed policymaking in the process of recovery from complex disasters, to bring in lessons both from Fukushima and relevant international experience that could be relevant for Fukushima.

## 2 Objectives

The aim of the FGC-FAIRDO joint session was to promote an exchange of views between the two projects and to draw in relevant international expertise on the role of and the challenges pertaining to stakeholder communication in facilitating informed decisions and policy-making. On the one hand, it drew on experiences from Fukushima to highlight the critical junctures where there is room for improving stakeholder communication and information provision. On the other hand, the session drew on international experiences from other disasters to understand how such critical junctures could be addressed effectively in the policymaking process. In this sense, the objective of this session was to draw on both: the lessons from as well as for the displaced communities of Fukushima.

## 3 List of Speakers

### [Moderator]

**Kazuhiko Takemoto** Director,  
United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

### [Opening Remarks]

**Kazuhiko Takeuchi** Senior Vice-Rector, United Nations University (UNU) / Director and Professor,  
Integrated Research System for Sustainability Science (IR3S) The University of Tokyo

### [Keynote Speaker]

**Rethy Chhem** Director, Division of Human Health, International Atomic Energy Agency (IAEA)  
(absent due to the unavoidable circumstances)

### [Discussants]

**Norio Kanno** Mayor, Iitate Village, Fukushima Prefecture

**Naoya Sekiya** Project Associate Professor, Center for Integrated Disaster Information Research,  
Interfaculty Initiative in Information Studies, the University of Tokyo

**Hiroshi Suzuki** Professor Emeritus, Fukushima University /  
Chair, Fukushima Prefecture Reconstruction Committee

**Atsuro Tsutsumi** Research Fellow, United Nations University International Institute for Global Health

## 4 Key Messages

**Nuclear disasters carry wide-reaching economic, social and environmental consequences. Such disasters differ from natural disasters due to, among other things, the uncertainty of when evacuees can return home, and how they can resume their livelihoods. Due to such specificities, nuclear disasters tend to deepen the divisions among and within affected families and communities.**

**Recovering from nuclear disasters require striking a balance between often divergent opinions and perspectives. Creating mechanisms for consensus-building such as local roundtables comprised of a representative group of different stakeholders, involving residents of the affected areas, public authorities and experts, as well as providing platforms for sharing information is important for improving stakeholder communication and promoting informed decision-making.**

**Learning the lessons from Fukushima and transferring these to next generations is a matter of shared responsibility of all stakeholders involved in the recovery process. Technical investigation of the nuclear accident has been performed, but greater focus needs to be placed on improving nuclear emergency responses and evacuation procedures based on the lessons learned following the accident. At the same time, improving the general public's knowledge about radiation issues should be part of the disaster preparedness strategies. Likewise, good practices and success stories from recovery efforts in Fukushima need to be shared with the public in Japan and the rest of the world.**

**Experiencing nuclear emergencies and recovering from them also entails mental health challenges. Timely and adequate provision of information is one of the keys for addressing these challenges.**

## 5 Summary of Presentation

Opening remarks were delivered by Kazuhiko Takeuchi, who noted the session theme and emphasised the need for multi-stakeholder communication to enable informed decision-making. He introduced the current situation for communities in Fukushima more than three years after the compound disaster of 11 March 2011. He drew particular attention to the continuing challenges associated with protracted displacement, loss of livelihoods, and uncertainty about when residents can return to their homes. At the same time, the loss of trust among the local communities towards the authorities and scientific community remain due to confusing information and inadequate communication since the disaster. Considering the UN World Conference on Disaster Risk Reduction to be held in 2015 in Sendai, Japan, he noted that stakeholder communication between local residents, policymakers and experts is becoming an especially topical issue, also with regard to deriving lessons from the post-disaster efforts in Fukushima, and communicating these effectively to the international community.

Next Kazuhiko Takemoto introduced the panelists, who discussed the session theme by drawing on their respective fields of expertises and experiences.

Norio Kanno shared his experience in leading the decision-making process underlying the evacuation of Iitate Village following the nuclear accident. He explained that the village authorities tried to strike a balance between considering the safety of its residents and keeping the community unscattered to maintain control over its future rehabilitation and recovery process, by deciding to evacuate to an area within a one-hour drive from the village. One of the key points he raised was the difference between community response to natural disasters, which often leads to greater cooperation, and the community response to the nuclear disaster, which he has found to be divisive. He noted that multiple divisions occur in the process of recovering from nuclear disasters due to diverging perceptions of radiation risks

within local communities as well as within families: between couples, older and younger generations, parents and children; and due to the difference in compensation levels paid to each household. He also shared his concerns that there is not enough reflection on the current development model promoting mass production and consumption that has caused people to embrace nuclear power to start with. He concluded that Fukushima's experience should serve a purpose in reconsidering what lessons to draw for the future and reflect over what we transfer to the next generations.

The next presentation was delivered by Hiroshi Suzuki, who began by explaining the differences between natural disasters such as earthquake and tsunami and the Fukushima disaster compounded by the nuclear accident. In all cases, immediate evacuation may be needed, but whereas recovery from earthquake or tsunami proceeds from emergency to support for livelihood recovery, rebuilding of towns and villages and to eventual return of communities, the emergency phase tend to last much longer in the case of nuclear disasters. Thus, the support for livelihood recovery has to be done in parallel, and often without clear idea as to when the return may take place. Within this context of uncertainty, he highlighted the dynamic nature of evacuees' return intentions, and noted that reconstruction planning is facing great difficulties in effectively reflecting such intentions. In this relation, he introduced one of the proposals generated by the FAIRDO (Fukushima Action Research on Effective Decontamination Operation) project (2012-2013), namely the creation of roundtable discussions in the areas affected by the nuclear accident that involves local residents, policymakers and experts. As an information-sharing platform, these roundtables can be a mechanism for discussing reconstruction policies and building consensus if composed of a representative group of different stakeholders.

Naoya Sekiya shared findings from his research regarding emergency evacuation processes and highlighted some of the lessons to be drawn from these experiences. He pointed out that following the Fukushima nuclear accident, considerable effort was made by various investigative committees to understand the technical issues related to the disaster, but few had looked at the process of evacuation. With the lack of information following the disaster about radioactive plumes and the best possible evacuation routes, local authorities were left to themselves in issuing and implementing evacuation orders. Nuclear disaster preparedness rests on probability-based safety assessments, thus entailing the possibility that countermeasures planned for estimated risks may be inadequate. Therefore, he emphasised that the primary lesson to be drawn from experiences in Fukushima is to always plan for potential accidents. In addition, noting that only very few people had prior knowledge about the dangers that radiation would have on effectively responding to the emergency situation (such as taking shelter, refraining from being outside and/or evacuating), he stressed the importance of raising public awareness about radiation and its risks. He also pointed out the need to address the disconnects between different administrative levels involved in disaster preparedness and the siloed structure of different government bodies to introduce an effective system for responding to emergencies.

Atsuro Tsutsumi discussed the link between nuclear disasters and mental health issues drawing on existing data. Noting the high incidence of suicides in the Tohoku region since March 2011, he highlighted that while the incidence of suicides in Iwate Prefecture, where the tsunami led to massive damage and loss of life, decreased between 2011 and 2013, the incidence of suicides has increased over the same period in Fukushima Prefecture. Incidence of mental health issues such as post-traumatic stress disorder (PTSD) and depression were also clearly higher among the residents of temporary housing facilities in Fukushima Prefecture than the national average. In the case of Tokaimura Criticality Accident in 1999 there were clear differences in anxiety levels of residents surrounding the accident site (evacuated following the accident) and those of less proximate communities. In fact, residents within the evacuation zone (8 km of the site) suffered from high anxiety levels two weeks after the accident, but their mental health situation has improved after 3 months, whereas this worsened in the communities outside the

evacuation zone during the same period. He explained that impact on mental health may be linked to the amount of information being received by these communities, and whether or not they had access to more accurate information. He noted that it is particularly important to consider mental health aspects in the case of people affected by the nuclear accident in Fukushima, given that they need to have enough information, but also that they should be in a stable mental state in order to make informed decisions on their situations.

## **6 Summary of Discussion**

The session concluded with an active question and answer session moderated by Kazuhiko Takemoto. The first point raised highlighted the importance of strengthening nuclear disaster preparedness and building a social system with the worse case scenarios in mind. In response, Norio Kanno said that he regretted his ignorance about radiation and its risks at the time of 2011 nuclear accident and noted the need to focus on raising public awareness on this matters from now on. Here too, he stressed that is important to keep a balanced perspective to actually provide people with relevant information rather than simply scaring them. Mindful of the variation between experts' views on impacts of radiation, Hiroshi Suzuki stated he has been continuously advising that Fukushima University has a role to play in assisting the general public with interpreting such variations as an institution locally representing the scientific community.

Next question from the audience asked how to approach children affected by the disaster and involve them as stakeholders, while taking into account that children's perspectives may change as they become older. Atsuro Tsutsumi agreed about the importance of involving children, and noted that they are heavily impacted by opinions of their parents. In response to this, the member of the audience asking the question encouraged him to conduct research mindful of parental bias but looking specifically on how to involve children not through their parents but through their own participation. In this respect, Hiroshi Suzuki shared an example of a successful activity in which elementary and junior high school students from Namie town were asked to write an essay about the future of their town. The essays were subsequently published in a booklet that has become a source of encouragement and inspiration for recovery plan.

In response to a question about the role of the academic community in supporting the emergency response and recovery efforts of local authorities, it was pointed out that it has added to the confusion of the communities in the immediate aftermath of the accident that there was so much variation in scientists' opinions about the impact of aerial dose. There is a need for them to come closer to a consensus to avoid such challenges, and that scientists must also conduct studies that are of practical use to communities.

Several panelists agreed with the point raised that there needs to be a focus not only on challenges and negative impacts, but also on collecting and disseminating success stories and positive, forward-looking initiatives carried out in Fukushima.

In a final round of closing remarks, it was reiterated that there is a need for collecting and analysing best practices. The issue of harmful rumours was raised (about Fukushima and its produce) and it was noted that there are evident gaps in knowledge and mindset between Fukushima and the rest of Japan, leading to stark division in attitudes which is an issue in itself. The importance was highlighted of conducting participatory roundtables with local residents not as one-off events but rooting them as continuous practices within the affected communities. Japanese society needs to draw an important lesson from the nuclear accident by reconsidering the current development model prioritising economic growth and aiming to become a "mature society".

The session was concluded and the participants were thanked for the fruitful discussion.