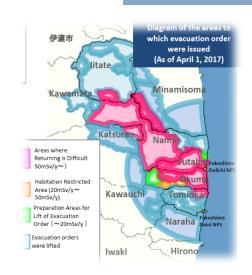
# Conditions for return of people since the lifting of evacuation orders in the territories affected by the Fukushima accident



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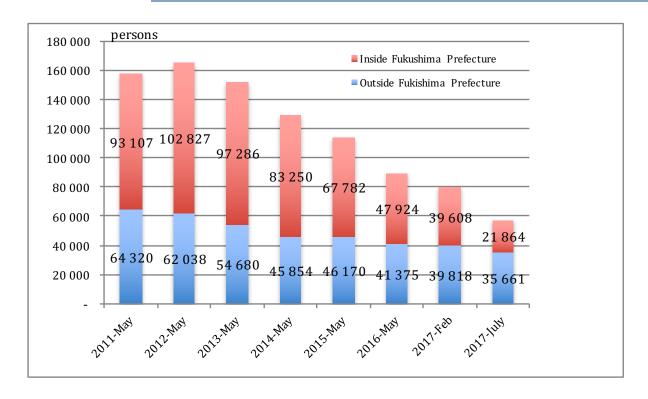


### Context and objective of the analysis

- 3 year- (2015-2017) follow-up of the issues regarding the return of evacuated people
- ~ 120 stakeholders met (~1h interview/person), at all levels of decision: national (Ministry, authorities, expert institutes, etc.), regional (Prefecture, universities) and local (Chamber of commerce, elected people and public officials of the affected municipalities, local professionals, evacuees and returnees)
- Identify issues raised and lessons to be learned that could impact the EP&R plans, principles and doctrine elaborated in France (between 2005 and 2011-12)
- Sustain exchanges with Japanese national/local organisations and stakeholders involved in the recovery and rehabilitation processes
- Focus on specific municipalities where the evacuation orders have been (or will be soon) lifted



#### Evolution of the number of evacuees



Source: Fukushima Prefecture



# Lessons learned from the analysis (1) List of topics

- Difficulties encountered with modelling (incomplete identification of affected areas, too conservative forecast of exposures, mistrust)
- Conditions of the evacuation and their social and health consequences (self vs forced evacuees, traumas, stigmas, casualties)
- Living conditions in 'temporary' houses and long term impacts of a longlasting displacement on health, family life and structure and on local communities (disrupted)



### **Living conditions in temporary houses**







# Lessons learned from the analysis (2) List of topics

- Zoning criteria, evolution with time and side-effects
- Actual vs calculated exposure levels; dose monitoring capabilities provided
- Countermeasures implemented (e.g. decontamination of rural and urban areas; control system of radioactivity in foodstuff, etc.); selection, use and pertinence of associated radiological - or of other nature – criteria (implementation and lifting)



## **Complex waste management**





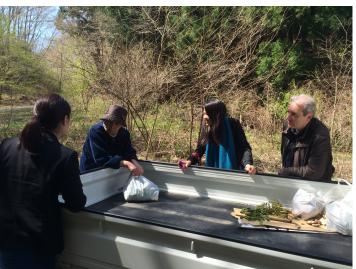






### **Collecting sansei in Kawauchi**







# Lessons learned from the analysis (3) List of topics

- Compensation system (incl. observed adverse effects)
- Consequences on health and well-being (including secondary health issues unrelated to radiation exposure), and health surveillance system
- Complexity brought by the large diversity of involved stakeholders at the local, regional and national levels
- Measures implemented to increase the revitalization and attractiveness of the affected areas



### Possible attractiveness for new citizens?







#### **Concluding remarks (1)**

Fukushima accident put for the first time the sensitive issue of the return of evacuees including radiological considerations, together with socio-economic and ethical dimensions

- Importance to better address the temporal dynamics of the post accident situations
  - Need to elaborate EP&R plans and to design exercises taking into account all phases of the accident
  - At the time of the decision taken in emergency and intermediate (transition)
     phases, need to consider as much as possible the longer term issues
  - Need to involve local populations and professionals in the decision-making and processes
- Importance of designing with local communities mechanisms of governance aiming to restore dignified living conditions



#### **Concluding remarks (2)**

- Further analysis needed on:
  - Follow up of decisions of evacuees after the end of the compensation process (since 1 April 2018)
  - Future steps of the decontamination (and waste management) strategy for inhabited areas, as well as forestry and mountain areas
  - Evolution of the environmental monitoring
  - Development and transmission of radiological protection culture in the long term
  - Sustainability of economic and social development of municipalities in the following years



# THANK YOU FOR YOUR ATTENTION