

# Ethical considerations on the empowerment of people living in contaminated areas after a nuclear accident

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# Introduction

- Fukushima as previously Chernobyl highlighted the **importance of involving the population** with the support of national and local authorities and experts to ensure the effectiveness and sustainability of protective actions
- The empowerment of inhabitants is a key for the success of this involvement but is **strongly questionned** → that leads to important **ethical questions** addressed in this presentation with a focus on the lifting of the evacuation order

# The stakeholder involvement process in PA situations

- After the Chernobyl and Fukushima accidents, stakeholder involvement processes have been implemented in a few communities:
  - mapping of the local contamination by inhabitants
  - monitoring of individual exposures (external and internal)
  - monitoring of local foodstuff
  - **sharing measurements results within the local community**
- The measurements allow to **make radioactivity visible and to talk about it with others** (family, friends, neighbours): where, when, how are we exposed? can we improve the situation?
- **People build progressively their own reference and regain power to make choices** (e.g. decision on eating or not products from the forest)
- **Ethical challenges for authorities and experts**
  - Implement the conditions allowing respect of freedom and justice
  - Making available an effective stakeholder involvement process

# Measuring, sharing, exchanging in Fukushima



## Stakeholder involvement process is strongly questionned

- Involving stakeholders in the post-accident management raises **questions** such as:
  - Does the involvement of stakeholders lead to a risk of disengagement of authorities and experts?
  - Is this a strategy to let inhabitants alone to face the post-accident situation?
  - Is there a risk of manipulation inasmuch as being involved, individuals would be forced to live in contaminated areas ?
  - What about the people who do not benefit of such a process ?

# Values at stake in the empowerment process

- Six years after the Fukushima accident the dilemma for affected people is :
  - **to leave or to stay** where it is allowed to live
  - **to return or not** for those who have been evacuated
- **This is an individual and/or family decision** involving many factors (private, social, economic, political, ethical, ...), radiation protection and health issues being not the only aspects
- **The empowerment of affected people** through their direct engagement in the evaluation of the local situation is the condition for each individual:
  - **to regain control** on her/his radiological situation
  - to restore her/his autonomy of decision, her/his freedom to make choices i.e. **to restore her/his dignity**

## Ethical challenges at the time of lifting the evacuation order

- **Ethical challenges** have to be dealt with by authorities and experts in the long term :
  - Ensuring sufficient protective measures be implemented by authorities to **avoid unacceptable individual risk** taking into account the remaining uncertainties on the effects of radiation at low doses (**accountability**)
  - Ensuring **justice and equity** between individuals and communities
    - Between people who want to return and not
    - Between people who want to make measurements and not
    - Within the community
    - Between communities

## Returning or not ? (1)

- Within evacuated people how to ensure **equity** between those willing to return home and those who don't want ?
  - It's in the contaminated areas that RP professionals are needed to accompany people monitoring their exposure and regaining control of their life
  - But people who do not want to return need also support from RP experts
    - long term health survey of people having left the contaminated areas
    - information about the long-term monitoring of environmental and food contamination of their former home (**transparency**)
- What about the new residents coming from outside the contaminated areas ?
  - Which role for RP experts ? Promotion of measurements ? Diffusion of practical radiological culture ?

## Returning or not (2)

- Ethical challenges regarding **people empowerment**
    - How preventing the risk of manipulating people to make them return in their village ?
    - How people can be trustful to support their own decision with experts supporting the lift of evacuation orders ?
  - Experts have to learn to
    - Help people to position themselves to the radioactivity and be fair about risks when people have doubts
    - Support people but not decide without (against ?) them
- Importance of the participation process  
in the preparation to return phase
- Respect of individual decision  
regardless the motivations of each person

# Sharing measurements within the community

- What about **a fair access to measurements**, monitoring and information
  - Should the experts and authorities encourage every people to make their own measurements ?
  - Should the local or national authorities make free and available the devices ?
- What about the **freedom of those who do not want to do their own measurements** ?
  - How can they have access to experts support ?
  - How give/share information also with them while respecting confidentiality of individual measurements ?
- And also
  - How **to organize the overall vigilance** and ensure radiation monitoring and health surveillance of the population to ensure respect of non maleficence and **share the results with every one** ?

## Supporting communities

In addition to the restoration of the capacity for each individual to take informed decisions, the main challenge is to **support communities in their self assessment with justice and equity**

- RP experts should
  - contribute to a **joint assessment of the radiological situation by inhabitants and experts**
  - help people to identify the room for manoeuvre to improve this situation taking into account the prevailing circumstances for the individuals and the community (**co-expertise**)
- However the number of RP experts is limited and they can't be everywhere
  - How to guarantee the access to participation and empowerment process of the communities willing to implement it ?
  - How to share and disseminate the results also with communities which do not implement it ?



**Chernobyl  
1997**

**Fukushima  
2014**



## Concluding remark

The actions taken by authorities and experts play a key role to address people's concerns with respect to ethical values

Experts have two important complementary roles :

- Giving advices to the authorities and government about the safety of life in decontaminated areas and the lifting of evacuation orders
  - Accompanying people to protect themselves and take their own decision
- To be successful they must **involve themselves in co-expertise processes** aiming at contributing to the **well-being** of the inhabitants in which RP is only one aspect

**A key challenge for RP professionals is to  
prepare themselves to this role**

To make your own opinion

Look at the webdoc

[www.fukushima-dialogues.com](http://www.fukushima-dialogues.com)

available on internet since March 2017

(and see the poster in the conference)

