

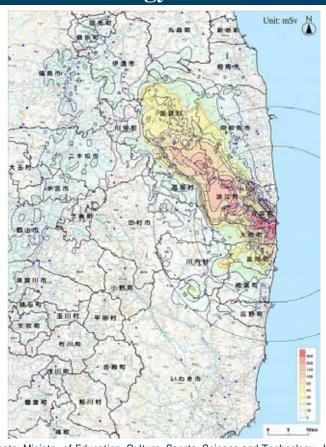
# Fukushima Action Research on

## Effective Decontamination Operation

### 24 July 2012 ISAP, Yokohama

### Dr. Hiroshi SUZUKI Prof. Emeritus, Fukushima University

## Chronology of Fukushima Daiichi NCPP Accident



 ${\bf Photo:}\ {\bf Ministry}\ {\bf of}\ {\bf Education,}\ {\bf Culture,}\ {\bf Sports,}\ {\bf Science}\ {\bf and}\ {\bf Technology,}\ {\bf Japan}$ 

#### 2011.03.11

#### Earthquake and Tsunami hits

Evacuation within a distance of 2 km from the plant (extended to 3 km after 2 hours)

#### 2011.03.12

Reactor 1: Meltdown and explosion

Evacuation expanded to

10 km

#### 2011.3.14

**Reactor 2: Meltdown** 

Reactor 3: Meltdown and explosion

#### 2011.3.15

Reactor 2: Explosion
Reactor 4: Fire damage

#### 2011. 4. 20

GOJ declared the 20 km evacuation zone

Source: Cabinet Secretariat, Japan and BBC

### **Background Information 1**

#### **Activities by National Government**

- Act on Special Measures concerning handling of radioactive pollution emitted following the nuclear power station accident caused by the Great East Japan Earthquake on March 11, 2011 (hereinafter referred as The Act on Special Measures ) passed (8. 2011)
- Decontamination Model Projects (11. 2011 ~)
- Basic Policy of the Act on Special Measures (11. 2011)
  - synthesize both domestic and international wisdoms in collaboration and cooperation with the international community
- share the experience, knowledge, and lessons learned through decontamination with the international community
- Guidelines for Decontamination Operation (12. 2011)
- Initial Decontamination Project (12. 2011 ~)
- Act on Special Measures entered in force (1. 2012)
- Opening 'Fukushima Office ' by MOEJ (1. 2012)
- Launching Reconstruction Agency (2. 2012)

#### **Activities by Prefecture and Municipalities**

- Fukushima Prefecture Reconstruction Vision (8. 2011)
  - synthesize both domestic and international wisdom in collaboration and cooperation with the international community
- Manuals on Developing Decontamination Plan by Fukushima Prefecture(12, 2011)
- Decontamination Strategies are being developed by each municipality

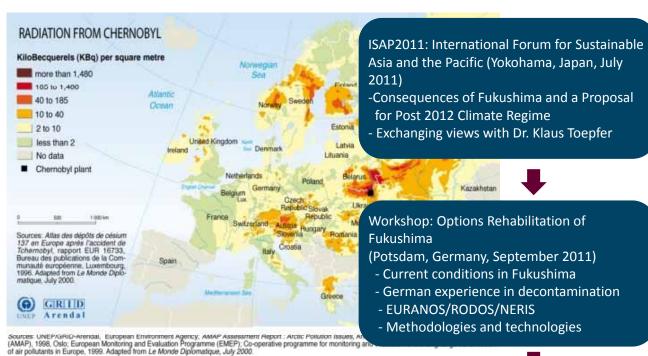


Decontamination in agricultural land/roofs (Photo: Fukushima Minpo)

Needs for practical measures synthesizing domestic/international wisdoms
Implementation of Action research
Utilization of international knowledge
Dissemination of research findings to international society

3

## **Background Information 2**



#### Initial idea for FAIRDO developed

- Participation of European experts with decontamination experience
- Development of decontamination methodologies applicable to local conditions in Fukushima

# Fukushima Action Research on Effective Decontamination Operation (FAIRDO)

#### RESEARCH COMPONENTS

#### (1) Governance for Effective Remediation/Decontamination Operations

- Provision of recommendations based on the analyses on gaps in information exchange, financial flow, roles and responsibilities, etc. among key stakeholders including the central government, prefectural governments, local governments (city, town and villages) and local communities.
- Identification of capacity development needs for effective remediation/decontamination governance.

# (2) Development of remediation/decontamination strategies reflecting the local conditions

 Development of a Japan optimal model (decision support system) based on the existing European model for developing and/or elaborating local remediation/decontamination strategies to attain the residents' long-term additional radiation dose level lower than 1mSv/year.

# (3) Effective communications to promote collaboration with those affected in contaminated areas

 Development of an appropriate risk-communication methodology to build and enhance mutual trust among stakeholders, in particular those of local residents and communities, to central and prefectural governments, through which mutual understanding and consensus should be achieved.

5

# Fukushima Action Research on Effective Decontamination Operation (FAIRDO)

#### **Objective**

 FAIRDO aims at providing substantive inputs to the ongoing decontamination/ remediation operations, reflecting the realities of local conditions for effective designing and implementation

#### Components and mode of operation

Prof. Hiroshi Suzuki,

(2) Deve Foresing Birdsity pair of Reconstruction Committee in Fukushima wings and Institute for Advanced Sustainability Studies (IASS)

Tokyo Keizai University, Nagoya University,

mination strategy by the control of Technology (KIT)

reflecting the local conditions

Tokyo University of Agriculture and

(3) Effective communications to promote collaboration with those affected in contaminated areas

Tokyo Institute of Technology, Fukushima University, Berlin Freie Universitat.

#### Major outputs/outcomes

- Substantive inputs to the ongoing decontamination/remediation operations through relevant experts' channels
- Japan optimal mode! based on EURANOS/RODOS developed
- Guidelines for effective decontamination/remediation operations shared



Thank you very much for your attention!