



FOOD AND AGRICULTURE
ORGANIZATION OF THE UNITED NATIONS



IAEA
INTERNATIONAL ATOMIC
ENERGY AGENCY

FAO Coordinated Response to the Nuclear Emergency in Japan

Qu Liang

**Joint FAO/IAEA Division of
Nuclear Techniques in food and Agriculture**



Radioactive Contamination of Agricultural Products

1. Air Contamination

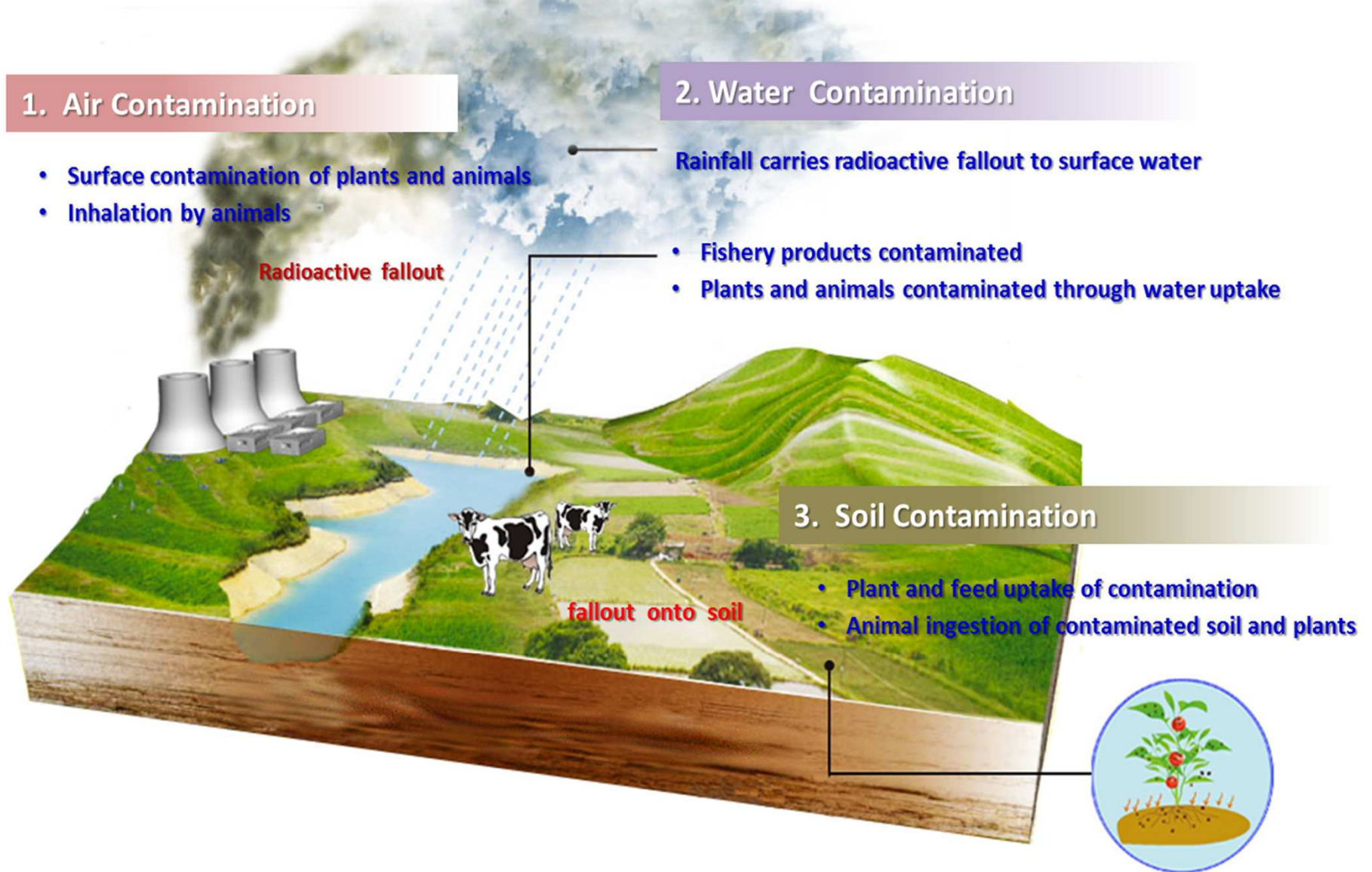
- Surface contamination of plants and animals
- Inhalation by animals

2. Water Contamination

- Rainfall carries radioactive fallout to surface water
- Fishery products contaminated
- Plants and animals contaminated through water uptake

3. Soil Contamination

- Plant and feed uptake of contamination
- Animal ingestion of contaminated soil and plants



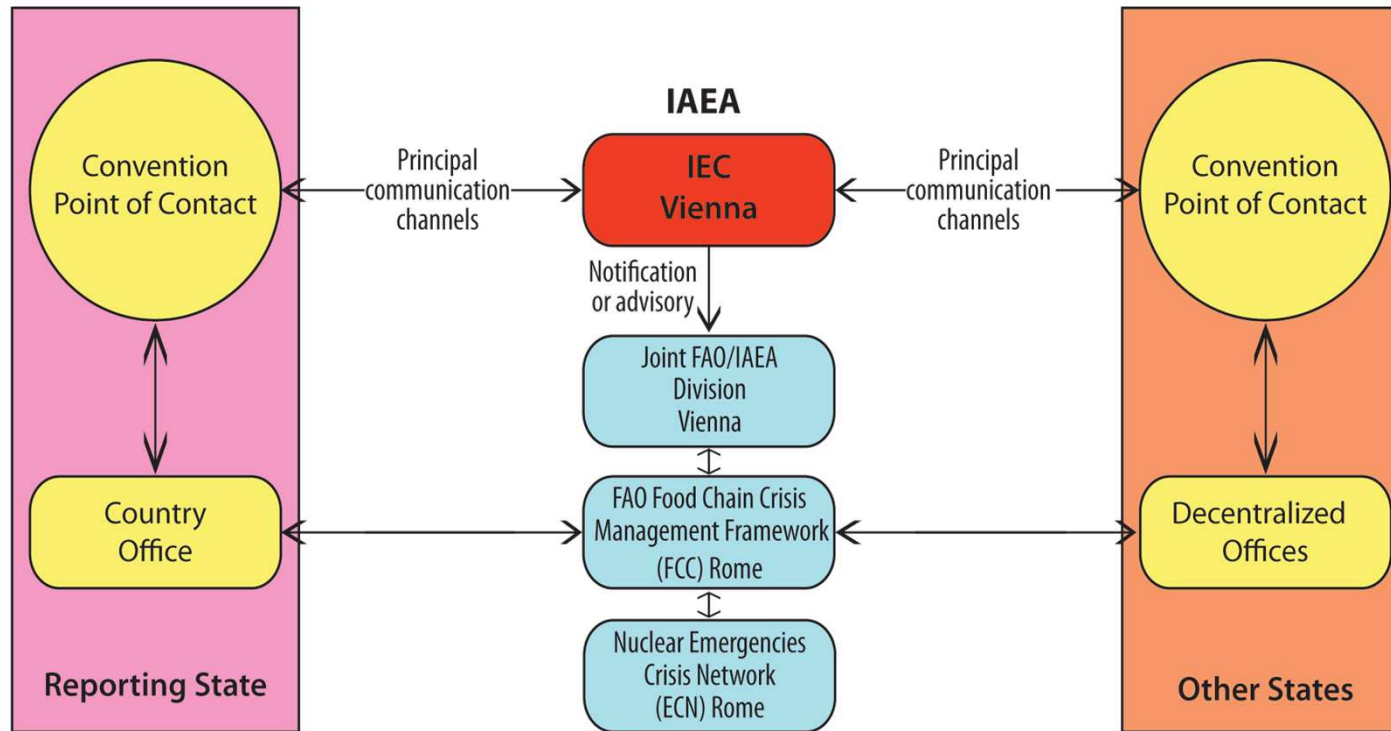
FAO mandate related to nuclear emergencies

- Prepare for and respond to nuclear and radiological events affecting food and agriculture
- Help Member States to develop and implement agricultural countermeasure to minimize the impact of nuclear emergencies on food security
- Advise government on Acceptable levels of radionuclides for agricultural products entering national and international trade

Legal framework of FAO responsibilities

- Convention on Early Notification of a Nuclear Accident
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
- Joint Radiation Emergency Management Plan of the International Organizations (JPLAN)
- Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE)
- FAO/IAEA Cooperative Arrangements
- FAO Food Chain Crisis Management Framework (FCC)

FAO/IAEA cooperation during a nuclear emergency



FAO activities related to nuclear emergencies

- Coordinated research projects
 - Development of agricultural countermeasures
 - Capacity development of Member States
 - Guidelines and international standards (including Codex)
- Technical assistance and policy advice
- Intra- and inter-agency cooperation in emergency preparedness and response
- Dissemination of knowledge and increased public awareness

FAO response and activities related to the Japan Nuclear Emergency

- Cooperation with IAEA, WHO and other international organizations
- Joint statement on food safety issues
- Manning the FAO Desk in the IAEA/IEC in Vienna
- Briefings for Member States and press conferences
- Technical assistance and policy advice
- Collection and analysis of monitoring data
- Timely knowledge and information sharing
- Joint FAO/IAEA Food Safety Assessment Mission

FAO/IAEA Joint Food Safety Assessment Mission

(Japan, 26-31 March 2011)

- Sampling and monitoring strategies
- Analytical techniques
- Data processing and interpretation
- Agricultural product protection
- Treatment of contaminated agricultural products
- Remediation strategies and methodologies



Improving response to nuclear emergencies in food and agriculture (1)

Immediate and early phase

- Rapid detection and monitoring techniques
- Sampling strategies and analytical methodologies
- Safeguarding agricultural production
- Minimizing radioactive contamination
- Decontamination techniques for agricultural commodities
- Disposal techniques for contaminated agricultural products
- Information sharing mechanisms
- Food restrictions and food trade

Improving response to nuclear emergencies in food and agriculture (2)


Short-term phase

- Minimizing radionuclide transfer
- Implementation of monitoring strategy
- Decontamination / disposal procedures for affected agricultural products
- Remediation strategies and approaches
- Policy advice on national and international trade issues


Improving response to nuclear emergencies in food and agriculture (3)

Medium- and late-term phase

- Decontamination procedures for affected soil and water
- Implementation of remediation strategies
- Application of agricultural countermeasures
- Strategies for modified or alternative land use
- Traceability mechanisms to help ensure food safety



Coordinated preparedness and response to nuclear emergencies

- Review and improve legal framework for inter-agency collaboration
 - Improve mechanisms of preparedness and response
 - Provide technical assistance and policy advice
 - Strengthen international and national capacity
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Thank you



FOOD CHAIN CRISIS
Management Framework