

**Speech on behalf of Under-Secretary-General/Executive Director of the
United Nations Environment Programme to the IAEA Ministerial Conference on
Nuclear Safety, 20-24 June 2011, Vienna, Austria**

President, Excellencies, Ladies and Gentlemen,

On the 26th April 1986 the accident at Chernobyl in present-day Ukraine showed that an accident at a nuclear power station had global impact:

- radioactivity was measured across the world;
- populations in other countries were exposed;
- rates of thyroid cancer increased among children in the region;
- long-lived radioactivity appeared in all components of the environment;
- farming practices as far away as the United Kingdom and Scandinavia were affected and remain so even today;
- land use changed dramatically, and trade and tourism was disrupted;
- there were dramatic socio-economic costs of extensive protective actions, including population resettlement, decontamination, countermeasures for agriculture and forestry, aquatic and wild food products, and restriction of access to recreation areas;
- and many communities continue to suffer distress and anxiety about their future with impact on their health and well-being.

Many of us thought that we would never see such an accident again in our lifetimes. Yet, ironically when we were preparing to mark the 25th anniversary of the Chernobyl accident and its continuing impact, we witnessed the devastating earthquake and tsunami in Japan.

The United Nations Environment Programme expresses again its solidarity with the government and people of Japan, and stands ready to work together with Japan in overcoming the major environmental impact of the tsunami, including assessing and addressing significant chemical and other environmental hazards created.

In addition, damage to the Fukushima-Daiichi nuclear plant led to serious releases of radioactive material to the environment, exacerbating the challenges presented by the natural disaster itself.

Yet again what was a serious national disaster became one of global impact: significant discharges of radioactive material to the ocean, raising concerns among nations of the Pacific, impacts on trade and tourism, widespread concerns about food, public health and the wider environment.

We can anticipate similar issues from the Chernobyl experience with respect to public distress and anxiety, concerns about the long-term implications, concerns about nuclear safety and emergency preparedness and response arrangements.

With regard to assessment of the radiological consequences of the accident, the work of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), for which UNEP provides the secretariat, can provide an independent authoritative assessment of the long-term implications of radiation exposure from the radionuclides in the environment.

In order to carry out this work, the Committee will need the support of United Nations Member States and international organizations.

The radiological consequences are only one part of the necessary work.

There will be a need to evaluate the broad environmental impact of the accident and the response to it over the longer term, in terms of land use change, impacts on livelihoods, and the socio-economic costs.

UNEP has developed and used methodologies for assessing such impacts in the context of other disasters and conflicts, and these could be used to good advantage here.

In the debate about the role of nuclear power in the global energy mix, the economics for comparing options are often complex.

External or full life-cycle costs can sometimes be hidden or not explicitly taken into account in the analysis. This has been a problem with carbon emissions for many decades, and UNEP has played a role in encouraging mechanisms for internalizing those costs.

I would like to suggest to the nuclear community represented here that perhaps an opportunity exists now to consider internalizing the costs associated in this case with nuclear accidents.

In most countries taking the benefits of nuclear power, the risks of a serious accident and its potential consequences are presently often underwritten by government, along with extensive regulation and inspection.

However, would it not be appropriate to consider moving further towards a more market-based approach for offsetting accident risks by encouraging greater involvement of the commercial insurance sector, as is done for the risk of major oil-spills, for example?

The involvement of the commercial insurance sector would surely be relevant to extending any nuclear liability regime. Moreover, this would allow insurance premiums to be internalized into the economics and allow more transparent comparisons that could better inform public and political opinion.

The IAEA has done much to encourage the adoption of safety standards by its Member States, and to provide for the application of those standards on request.

However, it is also a fact that many of the countries most concerned about the Fukushima accident such as small Pacific Island countries, are not Member States of the IAEA.

Moreover discharges into the atmosphere and oceans have impact beyond national borders, and influence the long-term health of the global environment. I submit that the legitimacy of those safety standards related to emergency response and to discharges to the environment, and their wider acceptance as global references, could be significantly enhanced.

UNEP stands ready to assist in the further development of such standards in cooperation with the IAEA with the support of member states.

UNEP has also played a role in operating under the international arrangements for response to a nuclear emergency. The Inter-Agency Committee on Response to Nuclear and Radiological Emergencies (IACRNE) has proved a useful mechanism for coordination.

The Joint Plan of the International Organizations, while only a set of practical arrangements, has also proved useful. It is perhaps time that these mechanisms be reviewed and refined to deal with lessons identified.

Key issues include:

- the IAEA providing improved insight for other organizations on the implications of plant conditions for off-site consequences;
- the sharing amongst the secretariats of organizations of their insights and assessments that can better inform their actions;
- improvements in addressing the immense demand for public information;
- and improvements in monitoring and assessment capabilities.

Improvements in response can only be achieved by commitments to increased preparedness, including training and exercising.

I also believe that UNSCEAR and other organizations can contribute much to providing better background information about radiation and its effects.

The Fukushima accident thankfully has not led to any immediate deaths among the population and workers, despite the large death toll and environmental impact of the earthquakes and tsunami themselves.

Nevertheless while significant recovery from the earthquakes and tsunami will be a key priority over the next few years, the effects of long-lived radioactive material in the environment will likely be an issue of concern for many years to come.

These are important challenges for the global community to which we must respond in a coordinated and inclusive manner. I welcome the development of an action plan to address these issues and commit UNEP to providing the necessary input in order to maximize the quality and forward-looking character of these strategies.

Thank you.

As delivered by Malcolm Crick on behalf of UNEP

21 June 2011