



STATEMENT BY MR. VIJAYA R. ALAMPADAN, MEMBER OF PARLIAMENT AND
MEMBER OF THE INDIAN DELEGATION, ON AGENDA ITEM 29: EFFECTS OF
ATOMIC RADIATION AT THE FOURTH COMMITTEE OF THE 61ST SESSION OF
THE UN GENERAL ASSEMBLY ON OCTOBER 30, 2006

Mr Chairman,

India reiterates its recognition of the importance, significance and scientific value of the work of UNSCEAR (United Nations Scientific Committee on the Effects of Atomic Radiation) and congratulates the Committee on the 50th anniversary of its first session.

The mandate of UNSCEAR is to undertake broad reviews of the various natural and man-made sources of ionizing radiation and their effects on the health of humans and the environment. The Committee's work has immense implications for the health and well-being of thousands of occupational radiation workers, patients undergoing radiation treatment or radiodiagnosis and even people living in the high natural background radiation areas of the world, like Kerala and Tamil Nadu in India. The UNSCEAR assessments are equally consequential to the environment and non-human biota.

We note with appreciation that the UNSCEAR report this year has five scientific annexes, based on the Committee's assessments of:

- A) Epidemiological studies of radiation and cancer.
- B) Epidemiological evaluation of cardiovascular disease and other non-cancer diseases following radiation exposure.
- C) Non-targeted and delayed effects of exposure to ionizing radiation.
- D) Effects of ionizing radiation on the immune system, and
- E) Sources to effects assessment of radon in home and work places.

Mr Chairman,

Cancer remains the main concern among radiation induced health effects. However, there is increased awareness that this multi-factorial disease can be influenced by several other factors such as life-style, diet, smoking, etc. As far as effect on cancer incidence following radiation exposure is concerned, the risk estimations, based primarily on Japanese Atomic Bomb survivors, are greatly affected by the sample size and statistical power of different studies. Other contentious issues are dosimetric inconsistencies, extrapolation from the moderate dose, high dose rate exposures to low doses, extrapolation of risk to end of life and transfer of risk across populations. Most estimates in the low dose region are found wanting in these attributes and may lead to a substantial overestimation of risk.

Mr. Chairman,

It is generally believed that an important source of information on the influence of low dose radiation on cancer incidence would come from the data on the population living in high level natural radiation areas as in Kerala and Tamil Nadu. The Committee may use such data for its assessment of risk of cancer at low doses of radiation.

Other multifactorial diseases or defects also need to be paid attention to. Congenital malformations belong to this category. These may be a part of the non-targeted effects of radiation. There are some very interesting data from the studies done in India and China on the incidence of congenital malformation which show no significant difference in the population living in the high level natural radiation areas and their corresponding normal level natural background controls.

Mr. Chairman,

The **Linear No Threshold (LNT)** concept of radiation dose response has been the cornerstone of all international regulation related to the radiation exposure limits set forth for nuclear power plants and other nuclear installations. The stringent requirements of the present regulatory regime impose huge and unreasonable costs the countries harnessing nuclear power for generation of electricity. However, there are numerous studies on low dose radiation effects, including those on immunological aspects, longevity and cancer incidence, which would question the scientific acceptability of the generalized LNT hypothesis. With the changing global scenario emphasizing the inevitability of nuclear energy as a viable economical and environment friendly option, such data need to be carefully analyzed. A scientific debate was triggered last year following the reports of the French and US National Academy of Sciences. The scientific conflict of opinion can be resolved by more vigorous and rigorous studies.

Mr.Chairman,

Some uninformed individuals/agencies have tended to use the UNSCEAR estimates of risk coefficients and collective doses to the population to predict the number of deaths following accidental radiation exposure. Such an approach is scientifically incorrect and will result in overestimation and spread panic among the people of the affected nations, as happened following the recent report of the Chernobyl forum. It will encourage radiophobia. It is in this context that the attributability of specific health effects to radiation needs to be debated at length.

Medical radiation exposures constitute a major component of man-made radiation exposures. There is a need to collect authentic information on various radio-diagnostic and therapeutic procedures followed in different countries – at least in the member states of UNSCEAR and exposures resulting from them. We hope that the Committee will succeed in ataloguing this information and present it as a scientific annexure to its next year's report to the UNGA.

The Committee has, for the first time, come out with an analysis of the risk of non-cancer diseases, especially cardiovascular diseases following relatively high dose of radiation exposure. Likewise, the Committee has also, after a considerable gap, analyzed the effect of radiation on the immune system. We are pleased that the Indian delegation was able to contribute significantly to the development of this annexure.

Another important feature of this year's report is the assessment of the effects of exposure to radon in home and work places. The pooling of residential case control studies in Europe and North America now provide a direct method of estimating risk of long term exposure to residential radon.

It is important to emphasize that the Committee's work is highly scientific and the technical details are handled very carefully. The Committee's scientific analyses guide the regulatory agencies such as ICRP. It is, therefore, necessary that the United Nations Environment Program (UNEP) accords utmost importance and priority to UNSCEAR'S work.

Mr Chairman,

UNSCEAR has suffered from lack of adequate resources for the last several years. Consequently, it is not in a position to hire competent and reputed consultants to prepare its documents and undertake methodical analysis of the extent of radiation exposure. This year, its budget was not even enough to pay for the travel of all the representatives. India strongly supports a substantially

increased budget for the 2008-2009 biennium pursuant to the resolutions 60/98, 59/114, 58/88 and 57/115 of the UNGA.

Thank you, Mr Chairman.

[BACK TO TABLE OF CONTENTS](#)