

## **Statement by India**

### **Ministerial Conference on Nuclear Science and Technology: Addressing Current and Emerging Development Challenges**

Mr. Chairman, Excellencies, Ladies and Gentlemen, Good Morning/  
Good Evening to all of you.

At the outset, I wish to convey the sincere appreciation and congratulations on behalf of India to the Director General, Mr. Amano and his team, and the eminent Co-Chairs of this conference, for designing this important conference with vision and commitment.

I stand here representing a country of 1.3 billion. The Government of India has a huge mandate to address the needs, hopes and aspirations of these countrymen. There is no doubt that scientific advances and technological innovations play a crucial role in accelerating the socio-economic development of the nation. In this context, the nuclear community can be proud of our achievements in Nuclear Science and Technology over the last six decades.

India was one of first nations to realize the importance of this sector and embarked upon a holistic programme for the development of Nuclear Science and Technology, with the establishment of the Atomic Energy Commission in 1948. We have since built capacities in almost all spheres of Nuclear Science and Technology in a steady manner. India is today one of the few nations to have mastered all aspects of the nuclear fuel cycle. We

have 22 operational nuclear power plants, 9 under construction and 12 more are in the pipeline. India is today one of the few countries having the capability to design, build and operate thermal as well as fast reactors and is also actively developing technology for thorium utilization. The use of radiation technology has found wide spread acceptance in India, whether it is nuclear agriculture-where we have produced 42 new crop varieties, nuclear medicine- which we use to diagnose or treat over half a million patients every year, food preservation to tackle the humungous wastage caused by spoilage, water treatment solutions to provide clean water to the millions of Indians, or urban waste management to treat sewage sludge and produce organic manure.

The activities of the Department of Atomic Energy have been a catalyst for breeding a culture of scientific research and technological innovation across a variety of domains. One of the significant attributes of the Indian atomic energy programme has been that Research & Development activities have not merely been restricted to the core area of power production, but have spawned across diverse fields such as plasma research, particle physics, laser and accelerators, genetic research, robotics, radiochemistry, materials research etc. Science and Technology developments in each of these spheres have eventually led to finding solutions for the mission programs of the department- advanced indigenous production routes for nuclear materials, lasers for fabrication, robotics for fuel recycling, genetic research for radiation mutation breeding and so forth. India is also actively participating in mega-science projects such as CERN, LIGO, ITER etc. We have a firm belief that such global efforts are necessary to find solutions to global issues such as climate change.

We are now forging ahead with renewed vigour and are actively implementing a broad based vision plan for uranium mining to enhanced nuclear power production. For India, nuclear science and technology is a crucial area for development, to address the growing demand of clean and green power, mitigate climate change and improve the quality of life of its citizens through innovations in healthcare, food preservation and agriculture. We have a vast ecosystem of scientific research and technological innovation available for this purpose and I am confident that India will continue to be a major contributor to the developments in all the above domains.

At the end, I would like to stress on enhancing the collaborative synergy in the nuclear science and technology to find robust and sustainable solutions for issues such as enhanced safety, advanced materials, waste management etc., leading to even wider acceptance of nuclear energy and radiation technology across the globe. Such an effort would find worldwide resonance and vindicate the stand of the 'Atoms for Peace' proponents that the atom serves as a benefactor of mankind.

We wish the conference all success.

Thank You