

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO.2086
ANSWERED ON 16.12.2021

USES OF ATOMIC AND NUCLEAR ENERGY

2086 # Smt. Geeta alias Chandraprabha:

Will the PRIME MINISTER be pleased to state:

- (a) whether there is any scheme to promote the use of atomic and nuclear energy in health services and agricultural programmes; and
- (b) whether atomic and nuclear energy can be the sources of green and clean energy in India, the details thereof?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH):

- (a) Yes, Sir. The Government provides all impetus to promote the use of nuclear energy in health services and agricultural programmes for indigenous development, import substitutes and also providing cost-effective treatment. Bhabha Atomic Research Centre (BARC) is involved in the development, pre-clinical evaluation and obtaining Radiopharmaceuticals Committee (RPC) approval for human use for a number of diagnostic and therapeutic radiopharmaceuticals adaptable to the existing and foreseeable demands. Technologies for the large scale production of these radiopharmaceuticals are transferred to Board of Radiation & Isotope Technology (BRIT). BRIT is producing and supplying radiopharmaceutical products across the country and serving large number of hospitals by supplying these products at their door steps. BRIT is supporting large number of irradiators by supplying Cobalt-60 pencils. These irradiators are used for food grains preservation and sterilization of medical products BARC has been carrying out development of seed varieties using gamma radiation. So far 49 seed varieties developed were notified for cultivation. Technologies were also developed for self-life extension of agricultural products. BARC has been formulating and carrying out Research & Development (R&D) projects to develop technologies/processes/radiopharmaceuticals for health services and agriculture programmes.
- (b) Yes, Sir. Nuclear energy is clean & environment friendly source of base load power available 24X7. The life cycle emissions of Green House Gases (GHGs) as gram CO₂ equivalent per kWh of nuclear power are comparable to that of renewables such as Hydro, Wind etc. It also has huge potential and can provide long term energy security to the country in a sustainable manner. Therefore, nuclear energy has an important role in the country's energy transition for meeting the goal of net zero economy.