PRODUCTION OF NUCLEAR MEDICINES

1422. SHRI PRADEEP KUMAR SINGH:
          SHRI SHIVAKUMAR C. UDASI:
          SHRI SUDHAKAR TUKARAM SHRANGARE:

Will the PRIME MINISTER be pleased to state:

(a)   whether the Bhabha Atomic Research Centre (BARC) has evolved a design of Research Reactor for production of nuclear medicines;

(b)   if so, the details thereof; and

(c)   the steps taken by the Government to make India self reliant in key radio isotopes used in medical and industrial applications?

ANSWER

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

(a)   Yes, Sir.

(b)   Bhabha Atomic Research Centre (BARC) has finalised the design of a Research Reactor for production of radioisotopes for nuclear medicines. The Research Reactor & associated facilities are envisaged to be built under Public Private Partnership. In this partnership, Government, through the Department of Atomic Energy, proposes to extend support to the investors for processing and production of radioisotopes and radiopharmaceuticals both for diagnosis and therapy of cancer as well as functional evaluation of organs. The proposed reactor would be one of the largest in the world in terms of volume of radioisotopes that can be produced both for medical and industrial purpose. This ensures that it meets the country's demand and also offers potential for export.

(c)   The 30MeV Medical Cyclotron at Variable Energy Cyclotron Centre (VECC), Kolkata is operational for regular production of radioisotopes, like Fluorine-18 (FDG), used for the diagnosis of cancer. Other radioisotopes like Gallium-67, Gallium-68, and Thallium-201 have been already produced on experimental basis and commercial production will start soon.

Efforts have been made to make India self-reliant by production and supply of 18F-FDG ([18F]-Fluoro deoxy glucose) and 18F-NaF ([18F] - Sodium fluoride) to different hospitals.

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