

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:6477
ANSWERED ON:06.05.2015
HARNESSING ATOMIC ENERGY
Mahato Shri Bidyut Baran

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) the plans of the Government to harness atomic energy for health, food, livelihood, security and supply of drinking water during the Twelfth Five Year Plan; and

(b) the steps taken by the Government in this regard?

Answer

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

(a)&(b) The Department of Atomic Energy (DAE) has developed and deployed technologies to use atomic energy in the areas of electricity generation, nuclear agriculture, food preservation, healthcare, isotope hydrology, research, development and deployment in areas pertaining to national security, etc. Ionizing radiation has been used to induce mutations in plant breeding to develop new crop varieties having better yield, stress resistance and early maturity. Radioisotopes have been used for clinical diagnosis and therapeutic purposes. They are also used for treating cancer and sterilizing medical products. The gamma rays emanating from radioisotopes are also used to increase the shelf life of food products. In addition, Bhabha Atomic Research Centre (BARC), a constituent unit of DAE has also developed several desalination and water purification technologies for application in rural areas. Using Isotope hydrology techniques employing radiotracer, studies are carried out for recharging the underwater resources and improving the ground water levels. In order to support the above mentioned fields of activities, a large number of projects are being implemented by the Government. An outlay of approximately Rs.1700 crore has been provided under XII Plan for projects under Radiation Technologies and their applications.