

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:2147
ANSWERED ON:02.12.2009
PEACEFUL USE OF ATOM
Rathod Shri Ramesh

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether the Government is using the power of the atom wisely for universal good;
- (b) if so, the details thereof during the last three years and the current year; and
- (c) the steps being taken for peaceful use of nuclear energy for applications in agriculture, food production and preservation, medicine and water desalination?

Answer

THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS (SHRI PRITHVIRAJ CHAVAN)

(a) Yes, Sir.

(b) & (c) Details of benefits from Atomic Energy are as follows:

i) Electricity generation capacity

Operational 4120 MWe In 17 Nuclear Power Plants

Under Construction 3160 MWe In 6 Nuclear Power Plants

Recently approved projects 2800 MWe In 4 Nuclear Power Plants

ii) Agriculture

Crop varieties developed using radiation induced mutation and cross breeding developed at BARC and notified by Ministry of Agriculture for commercial cultivation (Details are shown in the annexure) 37

Varieties developed during last three years out of above 11

iii) Food preservation

Number of radiation processing plants for food products 10

Number of plants set up during last three years out of above 3

iv) Medicine

Tata Memorial Centre, an autonomous institution under Department of Atomic Energy runs a comprehensive programme on treatment, training, research, technology development and outreach in the treatment of cancer.

A state of art teletherapy machine, Bhabhatron has been developed and 12 such machines are operational in different parts of the country.

v) Water Desalination

Desalination plants have been set up as detailed below.

Trombay, Maharashtra 4 Plants

Rajasthan (in cooperation with DRDO) 2 Plants of 30,000 ltrs per day

Tamil Nadu 3 Plants of 5000 ltrs per day in 3 different villages
2 Plants (45 lakh litres p.day - thermal and 18 lakh ltrs per day Reverse Osmosis (RO) at Kalpakkam. #

24 lakh litres p.day RO Plant at Kudankulam Residential Township.

102 lakh litres perday plant at Kudankulam Project. #

Set up during last three years.