GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:1655
ANSWERED ON:03.12.2014
USE OF ATOMIC ENERGY
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Will the Minister of ATOMIC ENERGY be pleased to state:

(a) the areas where Atomic Energy is being used;

(b) the details of the projects of this nature and cost of each such project; and

(c) the status of Indo-Japan Co-operation in civil nuclear energy?

Answer

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

(a)&(b) In India, atomic energy is being used for large number of applications in the following fields:

i. Nuclear Power;

ii. Nuclear fuel cycle, which includes all operations from mining to fuel manufacture, reprocessing and disposal of spent nuclear fuel after vitrification;

iii. Production of radio-isotopes in research reactors, followed by their applications in health care and industry;

iv. Development of indigenous technologies for purification of water by removal of salinity and hazardous chemicals and the transfer of such technologies to Indian industry;

v. Development of mutant breeder seeds and deliveries for meeting various objectives, including higher productivity, disease resistance, drought resistance etc.

vi. Development and application of advanced technologies in the field of electronics and instrumentation, computers, accelerators, lasers etc.;

vii. Research, education and health care in the field of cancer;

viii. Research and education covering basic sciences, higher mathematics;

ix. Research, development and deployment in areas pertaining to national security;

x. Delivery oriented applied research in scientific and technological domains relevant for the programmes of Department of Atomic Energy (DAE).

In order to support the above mentioned fields of activities, a large number of projects are being implemented throughout the country. Details of some of the major sanctioned projects in the country, costing more than ` 300 crore are provided below:

S.No..	Name of the Project	Approved Cost (Rs.in crore)
1.	Kudankulam Nuclear Power Project Units 1&2, Kudankulam	17270
2.	Kudankulam Nuclear Power Project Units 3&4, Kudankulam	39747
3.	Prototype Fast Breeder Reactor at Kalpakkam	5677
4.	Rajasthan Atomic Power Project units 7 & 8, Rawatbhatta	12320
5.	Gorakhpur Haryana Anu Vidyut Pariyojana, Gorakhpur	20594
6.	Kakrapar Atomic Power Project Units 3&4, Kakrapar	11459
7	Fast Reactor Fuel Cycle Facility (FRFCF), Kalpakkam	9589
8.	Integrated Nuclear Recycle Plant (INRP), Tarapur	6657.56
9.	Nuclear Fuel Complex, Kota	2011
10.	Additional BARC Complex, Visakhapatnam	1079
11.	Homi Bhabha Cancer Hospital and Research Centre, Mohali	480
12.	Homi Bhabha Cancer Hospital and Research Centre, Visakhapatnam	400.93
13.	National Hadron Beam Therapy Facility, Mumbai	425

(c) The subject matter of India-Japan co-operation in civil nuclear energy is at discussion stage between the two countries.