

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.1546
TO BE ANSWERED ON 27.12.2017

URANIUM RESERVES

1546. SHRI K.N. RAMACHANDRAN:
SHRI JAYADEV GALLA:

Will the PRIME MINISTER be pleased to state:

- (a) whether the current annual production of Uranium in the country is enough to meet the annual fuel requirement of all the operational uranium based Nuclear Power Plants and if so, the details thereof;
- (b) if not, the reasons therefor and the steps taken/being taken by the Government to explore alternative fuel/technologies/ imported fuel for the said purpose;
- (c) the time by which the country is likely to become self-reliant in terms of atomic fuels;
- (d) whether the Government has signed any MoU with foreign countries with regard to the import of Uranium/atomic fuel and if so, the details thereof; and
- (e) the amount spent by the Government on importing uranium/atomic fuel during each of the last three years and the current year, country-wise?

ANSWER

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

- (a) Yes, Sir. Out of 22 Nuclear reactors presently in operation, 8 reactors with aggregate capacity of 2400 MW are fuelled by indigenous uranium. These reactors are now being operated close to their rated capacity. 14 reactors with an aggregate capacity of 4380 MW are under IAEA Safeguards and use imported uranium.
- (b), (c) & (d) Presently, there is no short fall in Uranium supply. To meet the future demands, the Government has taken measures to augment domestic uranium supply by opening of new mines and processing

facilities and importing fuel for reactors under international Atomic Energy Agency(IAEA) Safeguards.

Consequent upon the Civil Nuclear Cooperation Deal, Department of Atomic Energy (DAE) has been importing Uranium to meet the fuel requirements for Safeguarded Nuclear Power Plants. The details of quantities of Uranium imported so far since the year 2009 and the anticipated supplies during the year 2017-18 is as follows:

Sr. No.	Firm/Country	Date of entering into Contract	Total Quantity to be procured as per Contract	Total Quantity received up to 19.12.2017	Anticipated deliveries in 2017-18
1.	M/s. AREVA, France	17.12.2008	300 MT of Natural Uranium Ore Concentrate.	299.88 MT	Nil
2.	M/s. PJSC TVEL Corporation, Russia	11.02.2009	2000 MT of Natural Uranium Oxide Pellets.	2005.88 MT	Nil
		11.02.2009	58 MT of Enriched Uranium Oxide Pellets.	58.30 MT	Nil
		03.03.2015	42 MT of Enriched Uranium Oxide Pellets.	42.15 MT	Nil
3.	M/s. Navoi Mining & Metallurgical Combinat, Uzbekistan	28.09.2013	2000 MT of Natural Uranium Ore Concentrate.	Nil	Nil
4.	M/s. Cameco, Canada	15.04.2015	The Contract permits procurement of a minimum of 2750 MT and maximum 5500 MT of Natural Uranium Ore Concentrate.	2473.87 MT	Nil
5.	M/s. JSC NAC KazatomPro, Kazakhstan	12.11.2009	2100 MT of Natural Uranium Ore Concentrate.	2095.9 MT	Nil
		08.07.2015	The Contract permits procurement of a minimum of 3750 MT and maximum 7000 MT of Natural Uranium Ore Concentrate.	2667.08 MT	2076 MT*

*inclusive of part consignment of around 576 MT pertaining to the Calendar Year 2016 and 1500 MT pertaining to the Calendar Year 2017. Both the consignments are expected to be received during the Financial Year 2017-18.

- (e) the amount spent by the Government on importing uranium/atomic fuel during each of the last three years and the current year is as follows:

No.	Agency source/Country	Description	Expenditure incurred during the year	Expenditure incurred in ₹(Crore)
1	M/s. JSC TVEL, Russia	Fuel Pellets	2014-15	541.55
		Fuel Pellets	2015-16	868.81
		Fuel Pellets	2016-17	395.29
		Fuel Pellets	2017-18	Nil
2.	M/s. Cameco, Canada	Uranium Ore Concentrate	2014-15	Nil
		Uranium Ore Concentrate	2015-16	158.28
		Uranium Ore Concentrate	2016-17	534.51
		Uranium Ore Concentrate	2017-18	373.82
3.	M/s. JAC NAC Kazatomprom, Kazakhstan	Uranium Ore Concentrate	2014-15	216.93
		Uranium Ore Concentrate	2015-16	Nil
		Uranium Ore Concentrate	2016-17	590.01
		Uranium Ore Concentrate	2017-18	332.52
