GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.1316
TO BE ANSWERED ON 25.07.2018

URANIUM PRODUCTION

1316. SHRI PANKAJ CHAUDHARY :
SHRI VISHNU DAYAL RAM :

Will the PRIME MINISTER be pleased to state:

(a) whether the Government is contemplating any scheme to increase the production of Uranium in the country and if so, the details thereof;

(b) the quantum of uranium in metric tonnes produced in the country and its annual requirement for production of atomic energy;

(c) the progress made so far with regard to the possibility of finding uranium deposits in the country, State/UT-wise especially in Uttar Pradesh and Madhya Pradesh;

(d) the quantum of requirement of uranium being met through the uranium produced in the country;

(e) the quantum of uranium imported from foreign countries along with the names of those countries from which import of uranium is made;

(f) the names of the various sectors and areas in which uranium is being produced/utilized in the country; and

(g) whether the Government has formulated any scheme to become self-reliant in the case of uranium and if so, the details thereof and if not, the reasons therefor?

ANSWER

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

(a) Yes, Sir. Uranium Corporation of India Ltd. (UCIL), a Public Sector Undertaking under this Department has made a detailed plan in line with Department of Atomic Energy (DAE)'s vision to achieve self sufficiency in uranium production

with nearly ten-fold rise in next 15 years (by 2031-32). The outlined plan includes maintaining sustained production from existing facilities through debottlenecking projects, capacity expansion of some existing units and construction of new production centers (mines and plants) in different parts of the country. Considering the resources already identified in different geological basins by Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of this Department, UCIL's major production centers are envisaged in Jharkhand, Andhra Pradesh, Karnataka, Telangana, Rajasthan and Meghalaya. Capacity expansion and debottlenecking activities in existing Singhbhum and Tummalapalle operations have already been taken up. UCIL has signed agreements with AMD for exploratory mining at Rohil in Rajasthan, Singridungri-Banadungri in Jharkhand and Peddagattu in Telangana. Exploratory mining at Rohil has started.

(b) It is not in the public interest to disclose the quantity of production of uranium. The approximate requirements of uranium for Pressurized Heavy Water Reactors (PHWRs) are given below:

Unit Capacity (MW)	Annual requirement at 85% Capacity Factor (tons UO_2)
220	45
540	100
700	125

The approximate requirements of uranium for Light Water Reactors (LWRs) are as given below:

Unit Capacity (MW)	Annual requirement at 85%/90% Capacity Factor (tons low enriched uranium)
160	6(at 85% CF)
1000	25 (at 90% CF)

(c) AMD has carried out exploration and prospecting for uranium deposits in a number of prospective geological domains of the country. AMD has so far established 3,00,034 tonne (t) *in situ* U_3O_8 (2,54,429 t U) as on May, 2018 in forty four (44) low-grade uranium deposits in Andhra Pradesh, Telangana, Jharkhand, Meghalaya, Rajasthan, Karnataka, Chhattisgarh, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Maharashtra.

In Uttar Pradesh, a low-grade and small tonnage metamorphite-type uranium deposit (785 tonne uranium oxide) has been identified at Naktu in Sonbhadra district.

In Madhya Pradesh, detailed exploration including drilling are in the preliminary stage in Dharangmau – Kachhar and Khapa – Jhapri – Kalapani areas in Betul district to identify sandstone-type uranium mineralisation in Satpura Gondwana Basin.

(d) It is not in the public interest to disclose the quantity of production of uranium.

(e) Quantum of uranium imported from foreign countries is as given below:

Sr. No.	Agency Source/ Country	Description	Quantity received till date in MTU
1.	M/s. JSC TVEL, Russia	Fuel Pellets of Natural Uranium Di-oxide	2005.92
2.	M/s. JSC TVEL, Russia	Enriched Uranium Fuel Pellets	100.451
3.	M/s. JSC NAC Kazatomprom, Kazakhstan	Uranium Ore Concentrate	2095.919
4	M/s. Areva, France	Uranium Ore Concentrate	299.891

(f) It is not in the public interest to disclose the indigenous production of uranium.

(g) Yes, Sir. The Government has taken measures to augment domestic uranium supply by state-of-the-art, integrated, multi-disciplinary exploration in several prospective and potential geological domains in various parts of the country and opening of new mines and processing facilities.

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