GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA

UNSTARRED QUESTION NO-1559

ANSWERED ON 31/07/2024

ENHANCEMENT OF ELECTRICITY POWER GENERATION THROUGH NUCLEAR ENERGY

1559. SHRI KARAN BHUSHAN SINGH SHRI JUGAL KISHORE SHRI E T MOHAMMED BASHEER

Will the PRIME MINISTER be pleased to state:-

- (a) Whether the Government has taken steps or formulated any schemes for enhancing electricity or overall power generation through nuclear energy and if so, the details thereof;
- (b) whether the Government has taken any steps to reduce dependency on import of nuclear fuel; and
- (c) if so, the details thereof?

ANSWER

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

- (a) A capacity addition programme to increase the installed capacity to 22480MW by 2031-32 from 8180MW at present is under implementation.
- (b) & (c) Yes. Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy (DAE), has the mandate to identify, evaluate and augment mineral resources of uranium in the country. To ensure unhindered indigenous supply and speedy augmentation of uranium resources, AMD is carrying out integrated and multi-disciplinary exploration (including heliborne and ground geophysical surveys, ground geological, geochemical and radiometric surveys and drilling) in identified thrust areas of the country by utilising state-of-the-art technology. As on **June**, 2024, AMD has established 4,23,222 tonne (t) *in-situ* U₃O₈ resource in 47 uranium deposits located in Andhra Pradesh, Telangana, Jharkhand, Meghalaya, Rajasthan, Karnataka, Chhattisgarh, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Maharashtra. Statewise details of the uranium resource are given in **Table 1**.

Uranium Corporation of India Limited (UCIL) a Public Sector Undertaking under Department of Atomic Energy (DAE) is actively perusing the opening of new deposits in the states of Jharkhand, Andhra Pradesh, Karnataka and Rajasthan to increase the supply of indigenous nuclear fuel for the reactors. The planned increase in production of domestic uranium will reduce the dependency on foreign uranium supplies. The preproject activities for the opening of new deposits in the states of Jharkhand, Andhra Pradesh, Karnataka, and Rajasthan are in different stages of implementation.

Table 1. State-wise Details of in-situ Uranium Oxide Resource as on 30.06.2024

State	District	Name of the deposit	U ₃ O ₈ Resource (tonne)	Status
Andhra Pradesh	YSR	Tummalapalle Group	2,49,459	Existing mine (Under investigation)
	Guntur	Koppunuru	2,761	Under investigation
	Sub-total:		2,52,220	
Telangana	Nalgonda	Lambapur	1,450	Planned mining centre
		Peddagattu	7,585	Planned mining centre
		Chitrial	9,515	Planned mining centre
	Sub-total:		18,550	
Jharkhand	East Singhbhum	Jaduguda	8,038	Existing mine
		Jaduguda North - Baglasai - Mechua	20,857	Under investigation
		Bhatin	1,700	Existing mine
		Narwapahar (NWP) + NWP Extn.	11,780	Existing mine
		Narwapahar Deeper	10,723	Extension of existing mine
		Singridungri- Banadungri	9,856	Extension of existing mine
		Turamdih Group	11,510	Existing mine
		Banduhurang	6,489	Existing mine
		Bagjata	1,860	Existing mine
		Mohuldih	3,330	Existing mine
		Garadih	1,270	Small deposit
		Kanyaluka	3,170	Small deposit
		Nimdih	815	Small deposit
		Rajgaon	1,200	Small deposit
		Rajdah	1,019	Under investigation
		Kudada	3,565	Under investigation
	Saraikela- Kharswan	Bangurdih	1,785	Small deposit
	Sub-total:		98,967	

State	District	Name of the deposit	U ₃ O ₈ Resource (tonne)	Status
Meghalaya	South West Khasi Hills	KPM (Domiasiat)	9,500	Planned mining centre
		Wahkyn - Wahkut	9,764	Exploratory mining planned
		Gomaghat- Phlangdiloin	1,000	Small deposit
		Tyrnai	600	Small deposit
		Lostoin	869	Small deposit
		Umthongkut	1,535	Small deposit
	Sub-total:		23,268	
	Sikar	Rohil	8,813	Exploratory mining centre (Under investigation)
		Rohil (West)	1,086	Under investigations
Rajasthan		Geratiyon Ki Dhani	1,902	Under investigations
	Jhunjhunu	Jahaz	3,570	Under investigation
	Udaipur	Umra	1,160	Small deposit
	Sub-total:		16,531	
Karnataka	Yadgiri	Gogi	4,267	Exploratory mining centre
		Kanchankayi	2,194	Under investigation
		Hulkal	800	Under investigation
	South Canara	Walkunji-Yellakki	415	Small deposit
	Sub-total:		7,676	
	Rajnandgaon	Bodal	1,530	Small deposit
	Kajiiaiiugaoii	Bhandaritola	518	Small deposit
Chhattisgarh	Surguja	Jajawal	1,438	Small deposit
		Dumath - Dhabi	500	Small deposit
	Sub-total:		3,986	
Uttar Pradesh	Sonbhadra	Naktu	785	Under investigation
	Sub-total:		785	
Uttarakhand	Rudraprayag	Pokhri-Tunji	100	Small deposit
	Sub-total:		100	
	Una	Rajpura	364	Under investigation
Himachal Pradesh	Shimla	Kasha-Kaladi	200	Small deposit
	Mandi	Tileli	220	Small deposit
	Sub-total:	1	784	
Maharashtra	Gondia	Mogarra	355	Small deposit
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	Grand tot	al:	4,23,222	