

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 4620**  
TO BE ANSWERED ON 24.03.2021

**URANIUM RESERVES IN INDIA**

4620. SHRI PRATHAP SIMHA:  
SHRI D.M. KATHIR ANAND:

Will the PRIME MINISTER be pleased to state:

- (a) the total amount of uranium reserves in India, State-wise;
- (b) the measure being taken by the Government to harness Thorium reserves in India; and
- (c) the measures put in place to avoid Nuclear disaster?

**ANSWER**

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

- (a) The total amount of Uranium reserves in India as on February, 2021 is 3,50,438 tonne (t) *in situ* U<sub>3</sub>O<sub>8</sub> (2,97,170t U). State – wise details of uranium deposits are given in Table 1.
- (b) In India, thorium is available in Monazite, a Prescribed Substance as per the Atomic Energy Act 1962. Monazite is found in association with suite of six other atomic minerals.

Development of technologies pertaining to utilisation of thorium has been a part of ongoing R & D activities in Department of Atomic Energy so that a mature technology is in place, well before the beginning of the large scale deployment of the thorium based reactors. With sustained efforts over the years, India has gained experience in different areas of thorium fuel cycle. Large scale thorium utilisation is contemplated after a few decades of large scale deployment of Fast Breeder Reactors (FBRs). In order to develop and demonstrate technologies for thorium based fuel, Advanced Heavy Water

Reactor (AHWR) has been designed by Bhabha Atomic Research Centre (BARC). It is also having advanced safety and passive engineered systems which enhance its safety. Efforts are currently on to enlarge the present thorium related R&D work and activities to a bigger scale and towards development of technologies for the third stage of our nuclear power programme.

- (c) Highest priority is accorded to safety in all aspects of nuclear power viz. siting, design, construction, commissioning, and operation in line with codes and guides of Atomic Energy Regulatory Board (AERB). State of the art safety measures are provided to ensure safe shutdown, cooling of the core and robust containment to prevent release of radioactivity in all situations. All nuclear power plants are designed to withstand extreme natural events like earthquakes, flooding, storms, tsunamis, etc likely at the respective sites. They are constructed to highest safety and quality standards and the operations are performed adopting well laid out procedures by highly qualified, trained and licensed personnel. The safety of nuclear power plants is continuously monitored and reviewed by the AERB.

In addition, emergency preparedness plans incorporating effective measures are also put in place for the unlikely event of an emergency.

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**Table -1 State-wise details of the Uranium resources**

State	District	Name of the deposit	Resource (tonne)		Status
			U <sub>3</sub> O <sub>8</sub>	U	
Andhra Pradesh	Kadapa	Tummalapalle Group	1,98,066	1,67,960	Existing mine (Under investigation)
	Guntur	Koppunuru	2,761	2,341	Under investigation
	<b>Sub-total</b>		<b>2,00,827</b>	<b>1,70,301</b>	
Telangana	Nalgonda	Lambapur	1,450	1,229	Planned mining centre
		Peddagattu	7,585	6,432	Planned mining centre
		Chitrial	9,515	8,069	Under investigation
	<b>Sub-total</b>		<b>18,550</b>	<b>15,730</b>	
Jharkhand	East Singhbhum	Jaduguda	8,038	6,816	Existing mine
		Jaduguda North	6,810	5,775	Under investigation
		Bhatin	1,700	1,442	Existing mine
		Narwapahar (NWP) + NWP Extn.	11,780	9,989	Existing mine
		Narwapahar Deeper	8,034	6,813	Extension of existing mine
		Turamdih Group	11,510	9,760	Existing mine
		Banduhurang	6,489	5,503	Existing mine
		Bagjata	1,860	1,577	Existing mine
		Mohuldih	3,330	2,824	Existing mine
		Garadih	1,270	1,077	Small deposit
		Kanyaluka	1,970	1,670	Small deposit
		Nimdih	815	691	Small deposit
		Rajgaon	1,200	1,018	Small deposit
		Singridungri-Banadungri	12,575	10,664	Under investigation
	Rajdah	1,019	864	Under investigation	
Saraikela-Kharswan	Bangurdih	1,785	1,514	Under investigation	
<b>Sub-total</b>		<b>80,185</b>	<b>67,997</b>		

<b>Meghalaya</b>	South West Khasi Hills	KPM (Domiasiat)	9,500	8,056	Planned mining centre
		Wahkyn - Wahkut	9,764	8,280	Exploratory mining planned (Under investigation)
		Gomaghat-Phlangdiloin	1,000	848	Small deposit
		Tyrnai	600	509	Small deposit
		Lostoin	869	737	Small deposit
		Umthongkut	1,535	1,301	Small deposit
<b>Sub-total</b>			<b>23,268</b>	<b>19,731</b>	
<b>Rajasthan</b>	Sikar	Rohil	8,610	7,301	Exploratory mining centre (Under investigation)
		Rohil (West)	955	810	Small deposit
		Jahaz	3,570	3,027	Under investigation
	Udaipur	Umra	1,160	984	Small deposit
<b>Sub-total</b>			<b>14,295</b>	<b>12,122</b>	
<b>Karnataka</b>	Yadgir	Gogi	4,267	3,618	Exploratory mining centre
		Kanchankayi – Hulkal	2,621	2,223	Under investigation
	South Canara	Walkunji-Yellakki	415	352	Small deposit
	<b>Sub-total</b>			<b>7,303</b>	<b>6,193</b>
<b>Chhattisgarh</b>	Rajnandgaon	Bodal	1,530	1,297	Small deposit
		Bhandaritola	518	439	Small deposit
	Surguja	Jajawal	1,438	1,219	Small deposit
		Dumath - Dhabhi	500	424	Small deposit
	<b>Sub-total</b>			<b>3,986</b>	<b>3,379</b>
<b>Uttar Pradesh</b>	Sonbhadra	Naktu	785	666	Under investigation
	<b>Sub-total</b>			<b>785</b>	<b>666</b>

<b>Uttarakhand</b>	Rudraprayag	Pokhri-Tunji	100	85	Small deposit
	<b>Sub-total</b>		<b>100</b>	<b>85</b>	
<b>Himachal Pradesh</b>	Una	Rajpura	364	309	Under investigation
	Shimla	Kasha-Kaladi	200	170	Small deposit
	Mandi	Tileli	220	186	Small deposit
	<b>Sub-total</b>		<b>784</b>	<b>665</b>	
<b>Maharashtra</b>	Gondia	Mogarra	355	301	Small deposit
	<b>Sub-total</b>		<b>355</b>	<b>301</b>	
<b>Grand total</b>			<b>3,50,438</b>	<b>2,97,170</b>	