

GOVERNMENT OF INDIA
MINISTRY OF MINES
LOK SABHA
UNSTARRED QUESTION NO. 2376
ANSWERED ON 15.03.2023

AERO GEO-PHYSICAL MAPPING PROJECT

2376. SHRI JAYANT SINHA:

Will the Minister of MINES be pleased to state:

(a) the salient features of the National Aero Geo-Physical Mapping Project to gather information on deep seated minerals;

(b) the details of the targets of the Project based on terrain types including the achievements made, till January 2023;

(c) whether any crucial information has been gathered about the minerals in Jharkhand; and

(d) if so, the details thereof?

ANSWER

THE MINISTER OF MINES, COAL AND PARLIAMENTARY AFFAIRS
(SHRI PRALHAD JOSHI)

(a): Geological Survey of India (GSI) is executing national project of regional aero-geophysical survey titled "National Aero-Geophysical Mapping Programme (NAGMP)" since 2017 to acquire uniform magnetic (horizontal gradiometry) and gamma ray spectrometer data initially over priority areas of 7.78 lakh sq.km Obvious Geological Potential (OGP) areas (in 12 blocks) through outsourcing using NMET fund in Phase-I. Other areas will be covered in phase-2.

The acquisition of seamless high resolution, regional data gathered through 80m flying height is aimed to delineate concealed, deep seated structure / litho-units that may host mineralization, to delineate extension of the existing mineralized zone and understating of shallow crustal architecture in the context of mineral occurrence and prognostication of suitable areas for mineral targeting.

As part of Phase-I study under NAGMP, 5 blocks covering 2.68 lakh sq. km area have been completed and 150 potential areas have been identified for further stage of detailing to launch future mineral exploration programme.

(b): The details of completed/ongoing blocks are given in Annexure-1 & 2.

(c) & (d): A total of 4,453 Sq. km area of Jharkhand has been covered by NAGMP and selected potential areas have been identified in parts of Palamu and Garhwa districts, Jharkand for further ground validation through systematic survey & exploration.

Annexure-1

The details of NAGMP project based on terrain types and the achievements made in the completed survey Blocks:

Survey Block No.	Target Area Sq. Km.	Target Line Km	Status	Total identified prospective Potential exploration target areas	Geological Domain
Block-1	52,700	1,93,234	Completed	13 areas	Main supergroups: Aravalli Supergroup Delhi Supergroup Marwar Supergroup Malani Igneous Suite . Beside these four supergroups following individual domains are described: Sendra-Ambaji & Erinpura granites, Barmer Basin & Mesozoic sediments of Lathi & Fatehgarh formation & Mundwara and Sarnu-Dandali alkaline complex.
Block-2	43,822	1,60,681	Completed	18 areas	Paleoproterozoic Bundelkhand Granitoid Complex, Vindhyan platformal sediments, Bundelkhand Gneiss Complex and Deccan Trap
Block-3	39,144	1,43,530	Completed	50 areas	Mahakoshal group, Mesoproterozoic Vindhyan supergroup, Chhotanagpur gneissic complex, Gondwana Supergroup, Cretaceous Deccan Trap and Paleoproterozoic granitoids
Block-4	44,861	1,64,490	Completed	29 areas	Bastar Craton, Dharwar Craton, North India Craton, Godavari Graben, Central Indian Shear zone, Deccan Trap and Gondwana Supergroup
Block-11	87,429	3,20,488	Completed	40 areas	Archean Sargur Group, Peninsular gneiss complex, Eastern Ghat Mobile Belt, Cuddapah basin, Gondwana sediments and Southern Granulite Terrain
Total	2,67,956	9,82,423	Completed	150 areas	

Annexure-2

The details of NAGMP project based on terrain types and the achievements made till 31st January, 2023 of the ongoing survey Blocks:

Survey Block No.	Target Area Sq. Km.	Target Line Km	Status	Geological Domain	Remarks
Block-6	76,049	278,846	13,747 Line Km (till 31.01.2023)	Dharwar, Calc-alkaline Closepet Granite, comprises of Granites – greenstone terrain and Bundelkhand & Bastar, Granite Pluton and Granitic Gneiss covered by younger sediments	Aero-geophysical Survey operation has commenced from Chandrapur air base on 05th December, 2022. Survey operation is in Progress. A total of 13,747 Line Km survey has been completed as on 31.01.2023.
Block-8	87,914	322,351	88,166 Line Km (till 31.01.2023)	Dharwar, Calc-alkaline Closepet Granite, comprises of Granites – greenstone terrain	Aero-geophysical Survey operation has commenced from Puttaparthi air base on 30th November, 2022. Survey operation is in Progress. A total of 88,166 Line Km has been completed as on 31.01.2023.
Total	1,63,963	6,01,197	1,01,913 L. Km.		
