



BRIEFING BOOK

(UPDATED UPTO SEPTEMBER, 2011)



GEOLOGICAL SURVEY OF INDIA
NORTHERN REGION
LUCKNOW

BRIEFING BOOK
(UPDATED UPTO SEPTEMBER, 2011)
EXECUTIVE SUMMARY

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GEOLOGICAL SURVEY OF INDIA

NORTHERN REGION

I. INTRODUCTION

A. BRIEF INTRODUCTION ABOUT THE REGION

Northern Region of the Geological Survey of India, covering the States of Delhi, Jammu & Kashmir, Haryana, Himachal Pradesh, Punjab, Uttarakhand and Uttar Pradesh, and Union Territory Chandigarh encompasses an area of 6,68,491 sq km. Out of the Six Regions through which the Geological Survey of India operates in the country, it is the second largest Region. Office complex spreading over an area of 12.5 acres with several peripheral buildings at Plot -2, Sector E, Aliganj, Lucknow. On 28th January 1993, the Office Complex was named as *VASUNDHARA*. As per HPC Committee, recommendation, the activities are now governed under Mission Mode.



The Northern Region office was started at Lucknow under the stewardship of Shri R. N. P. Arogyaswami, Superintending Geologist. In the year 1961, the Northern Region was elevated to the status of Directorate under Shri P. C. Hazara, as Director. To intensify and concentrate on the geological surveys in the Himalayan terrain, Himalayan Geology Division (HGD) was formed in 1963 with headquarters at Lucknow focusing the problems of the geology of Himalaya transcending the limits of the states falling in the Region. During the year 1967, the post of Regional Director was elevated to the status of Deputy Director General.

Appreciating the importance of glaciers of the Himalayan terrain and their key role in hydrological cycle of the nature, Glaciology Division with headquarters at Lucknow was created on 4th January 1974. For managing the

environment, the Environmental Geology Division was created on 1st January 1975 with headquarters at Lucknow. In 1985, Map Compilation, Publication and Information Division (MCPI) was split into two separate Divisions, viz. Map and Cartography Division and Publication Division. It was at this time that the Publication Divisions of the regions were entrusted with the responsibility of bringing out GSI publications. It is noteworthy that the Regional Library at Lucknow continues to get enriched with the scientific books, journals, unpublished departmental reports, etc. NR library possesses more than 20,500 books and 21,504 unclassified and 7066 classified unpublished reports at present, in addition to the journals. National and International Journals are being subscribed by the Library.

The Himalayan Mountain Ranges extend for about 2500 km (with an average width of about 240 km) all along the northern border of the Indian sub-continent, from Jammu and Kashmir in the west to Arunachal Pradesh in the east, constituting the Extra-Peninsular region. The Himalaya is broadly divided into (i) Foothill or Outer Himalaya, (ii) Lesser Himalaya, (iii) Higher Himalaya and (iv) Tethyan or Trans-Himalaya across its length. The major rivers that originate from the great Himalayan Mountain Ranges are the Indus, Ganges and their various tributaries. The average elevation of the Indo-Gangetic plain lying between Peninsular and Extra-Peninsular India is 150 m with a low gradient from about 300 m in the Upper Ganga plain of Punjab to at main sea level at the Sunderbans delta of Bengal.

The region exposes diverse geology with different rock types representing the complete spectrum ranging in age from Archaean metamorphites /granitoids to the youngest Quaternary alluvium. The Region is tectonically and physiographically divided into three broad domains i.e. the Peninsular India, the Extra-Peninsular India and the Indo-Gangetic Plains. Indo-Gangetic plain is sandwiched between the shield area of the Peninsular India and the highly deformed suites of the Himalaya of Extra-Peninsular India, comprising essentially the younger metasediments. The tectonic trough (foreland basin) sandwiched between peninsular shield in the south and Himalayan Mountains in the north formed due to upliftment of the latter, has been filled up by sediments derived from both sides, especially from the Himalaya. Structurally the Himalayan mountain chain occurring all along northern part of India can be divided into four contrasting longitudinal litho-cum-morphotectonic belts from south to north, viz. i) foothill belt, ii) Main Himalayan belt, iii) Indus-Shyok belt and iv) Karakoram belt. The foothill Himalaya is a 10- to 50 km wide Miocene to Recent Molasse sequence represented by Siwalik, Murree and Subathu Group of rocks. The belt is a domain of active tectonics having participated in the terminal phase of the Himalayan Orogeny. This is followed to the north by the Lesser and Higher Himalaya, represented by geological sequences of Proterozoic age with Phanerozoic cover of varying thickness in different parts. The foothill Himalaya is overlain by alluvium and separated from the Lesser Himalaya by the north-dipping fault commonly known as the Main Boundary Fault (MBF) or the Main Boundary Thrust (MBT) in Garhwal, Kumaon, Nepal, Darjeeling, Bhutan and Arunachal Pradesh Himalaya. The Main Frontal Thrust (MFT) limits the margins of the Siwalik Zone against the Ganga Plains.

The Lesser Himalaya is 60 to 80 km wide and is a discontinuous belt stretching between the MBT in the south and the Main Central Thrust (MCT) in the north. It consists of autochthonous late Proterozoic sediments, thrust over by three vast nappes that are built up successively of Palaeozoic sediments, Precambrian epi-metamorphics and mesograde metasediments. The epi-metamorphic and meso-metamorphic nappes throughout their extent are characterized by Early Proterozoic (= 1900 Ma) and Early Palaeozoic granitic bodies of large dimension. The MCT separates the Lesser Himalaya from the Higher Himalaya to its north. The Higher Himalaya marks the region of the highest peaks of the Himalaya (Nunkun, Leopargial, Kedarnath, Badrinath, Nanda Devi, Api, Dhaulagiri, Mt. Everest, Kanchanjunga), made up of 10-15 km thick Precambrian crystallines exhumed up and intruded by granites, some of which are Tertiary in age. The Indus Shyok belt / the Tethys Himalaya extends to the south of the Trans-Himalayan Karakoram belt and comprises ophiolite mélange (Indus ophiolite and associated formation) and plutonic rocks (Ladakh Granitoid Complex) of the Indus Shyok belt. These predominantly fossiliferous sediments range in age from Late Proterozoic to Eocene. Sporadic occurrences of chromite has been reported from the ultrabasic rocks associated with Dras volcanics from Ophiolite-Mélange zone. Karakoram belt, the northernmost zone, comprises Palaeozoic and Mesozoic sedimentary sequences on a metamorphic basement of unknown age. This Trans-Himalayan belt lies to the north of the Indus suture Zone in Ladakh region and extends eastward into Tibet. No important mineral occurrence is known from this belt.

B. GEOLOGY AND MINERAL RESOURCES

Geologically, under Northern Region, the states of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Uttarakhand and Uttar Pradesh encompasses diverse rock types ranging in age from the oldest Archaean metamorphites/ granitoids to the youngest Quaternary alluvium. The stratigraphic succession of the rocks exposed is given in the Map-1.

HARYANA AND DELHI

Haryana State has an area of 44,222 sq km and Delhi covers an area of 1483 Sq km. Haryana State physiographically divisible into two geomorphic domain viz. Sub-Himalayan region and the Indo-Gangetic Plain. Geomorphological features of Delhi area are represented by denudational hills and alluvial fill and sandy plains. Geologically 95% of the area of this State is covered by the Quaternary sediments and the rest 5% comprises the Proterozoic rocks occurring in south and west and the Tertiary rocks in the northeast. The proterozoic is represented by rocks of Alwar and Ajabgarh Group of Delhi supergroup exposed in parts of Haryana and Delhi state. The Alwar group is represented by Bayal Pachnota Formation. It has been divided into two units, the basal unit consisting of thickly bedded felspathic gritty and micaceous quartzite and the upper unit comprises of ripple marked massive quartzite. The Ajabgarh Group comprises predominantly of argillaceous sediment, comprising slate, phyllite & pelitic schist and limestone and quartzite. These rocks grade from calcareous facies to argillaceous facies upward. Lithologically Ajabgarh Group is divisible into five Formations, each with characteristic lithounits. These are represented by Golwa - Gangutana Formation, Deota- Dantal Formation, Thanagazi Formation, Asarwas Formation and Tasing Formation. Delhi Supergroup rocks are intruded by basic and acid magmatic rocks. The plutonic phase of acid magmatism is represented by amphibolites, granite, pegmatite and quartz veins while the volcanic phase is represented by rhyolite and hypabyssal felspar porphyry & aplite. Neoproterozoic rocks referred as Tundapathar Formation belonging to Shali Group occur in the northeastern part of Haryana along the contact between the Siwalik belt and the Palaeocene belt marking the Main Boundary Fault. The Palaeogene sediments comprising Subathu, Dagshai and Kasauli Formations occur in the northern part of Haryana. Tertiary rocks occur over the Proterozoic basement in the western part near Hissar. It is an isolated outcrop measures 300m length and 20 m wide, at Daha, 15 km northwest of Tosham. The Siwalik in Haryana are mainly represented by Lower and Upper Siwalik, stretching from Kalka in northwest to Kala Amb in the southeast. Middle Siwalik, are present in detached patches. Lower Siwalik is exposed along a NW– SE trending linear belt forming low flanking ridges near Kalka. These consist of coarse red and purple coloured gritty clay & fine to coarse-grained hard earthy sandstone. Upper Siwalik comprises red and orange in coloured variegated clays and interbedded friable grey sandstone. Around Delhi Ajabgarh Group of rocks exposed as detached hillocks and ridges trending NE-SW expose purple and white quartzite interbedded with phyllite and slate in Mathura district. This sequence traversed by quartz veins is grouped under the Barsana Formation. The Barsana Formation in the Uttar Pradesh is the northeastward continuation of the Ajabgarh Group of Palaeo to Mesoproterozoic period. The Alwar Group comprises predominantly of arenaceous sediment. They are well developed in the hill ranges of Delhi, Ferozpur-Jhirka-Bhondsi ridges in the south eastern part and around Khodana in the southwestern part of the state. Quaternary sediments cover almost the whole of Haryana and along the Yamuna River in parts of Delhi. The Quaternary has been classified as Older Alluvium Group and Newer Alluvium Group Older Alluvium is represented by alternating sequence of sand and clay layers with small grains of kankar nodules of irregular shape. In the south and south west part of Haryana and western of Delhi aeolian sediments of brown loose sand and silt are exposed. Younger alluvium comprises of loose grey sand and silt deposited along the Yamuna and Ghaghar and its tributary.

HIMACHAL PRADESH

Geologically rocks ranging from Proterozoic to Quaternary are exposed and represent classic geological sequence. Undifferentiated Proterozoic mostly confined to the Lesser Himalaya, are represented by Jutogh and Vaikrita groups. Jutogh Group comprises Panjerli, Manal, Bhotli, Khirki, Taradevi, Kanda, Naura, Badrol, Rohru, Chirgaon and Jaknoti formations comprising a thick sequence of carbonaceous phyllite, quartzite, slate, phyllite, schist and gneisses whereas the Vaikrita Group comprises Kharo, Morang, Shiasu and Chamba formations made up a thick pile of garnetiferous staurolite-kynite schists and gneisses, sillimanite gneisses, migmatites, quartzites marble, calc-silicate rocks and amphibolites.

Palaeo-Proterozoic: The Jeori-Wangtu Banded Gneissic Complex and Kulu, Naraul, Sundernagar and Rampur groups represent the Palaeo-Proterozoic in the Himachal Pradesh. The Jeori – Wangtu Granitoid Gneiss is strongly foliated with well-developed augen-gneisses, mylonitic gneiss and porphyroblastic biotite gneiss with non-foliated granitoids in the central part. The Kulu Group, one of the three principal crystalline nappes of Himachal Pradesh, comprises Khamrada, Gahr and Khokan formations consisting of schists, gneisses, quartzite, quartz schists, slates, phyllites and garnetiferous schists. The Naraul Group consists of quartzarenite phyllite, shale, slate and diamictite whereas the Sundernagar Group comprises dominantly purple coloured arenaceous sediments with argillities and characterized by interstratified basic lava flows of the Mandi-Darla Volcanics. The Rampur Group presents an association of metabasalts and metasediments dominated by clastics. It is divisible into three formations namely, Bhallan, Banjar and Manikaran. Meso-Proterozoic in the Himachal Himalaya are represented by Larji and Shali groups. The Larji Group consists of lower Hurla Formation and upper Aut Formation, broadly comprising a sequence of slate, quartzarenite, diamictite and stromatolitic carbonate rocks. The Shali Group has been divided into eight formations namely Ropri, Khaira, Khatpul, Sorgharwari, Tattapani, Makri, Parnali and Bandla consisting of shale, siltstone, quartzarenite, massive dolomite, limestone, cherty dolomite, green and purple shale, grey limestone and white quartzarenite. The upper part of Meso-Proterozoic is represented by Darla-Tattapani (Peontra volcanics) represented by quartzite, slate and basic flows. The Neo-Proterozoic era has been divided into two as Lower and Upper. The Lower Neo-Proterozoic era is represented by Jaunsar, Simla and Haimanta groups whereas the Upper Neo-Proterozoic era is represented by Guma, Blaini, Infrakrol, Krol, Manjir and Katarigali formations. The Jaunsar Group is typically developed in the Deoban structural belt and is divisible into three formations namely Mandhali, Chandpur and Nagthat. Mandhali Formation is composed of limestone, argillite, arenite and conglomerate. The Chandpur Formation is represented by alternate sequence of argillite and arenite. The Nagthat Formation comprises sandstone, arkose quartzarenite, grits, conglomerate, grey, purple and green shale, slate and phyllite. The Simla Group is divisible into four formations, Basantpur, Kunihar, Chhaosa and Sanjauli. The Basantpur Formation is characterized by the abundant interbeds of limestone and dolomite within argillite and siltstone whereas Kunihar Formation comprises lenticular interbeds of stromatolite-bearing limestone with fissile shales. The Chhaosa Formation is characterized by a thick rhythmic sequence of shale, siltstone and greywacke. The Sanjauli Formation is divisible into Lower and Upper Members, on the basis of characteristic lithological associations. The Haimanta Group comprises Batal Formation, is broadly made up of phyllite, quartzite, pyritous carbonaceous phyllite. The Krol Group is divisible into A, B, C, D and E formations. The Krol A Formation comprises alternation of greenish grey calcareous shale and argillaceous limestone with variable gradation. Krol B Formation is characterized by thinlly laminated purple to red shales with green shale intercalations and thin interbeds of thin dolomite and cherty limestone. Krol C Formation is represented by dolomite, cherty limestone and shale, Krol D Formation comprises an alternation of cherty limestone and shale whereas Krol E is the topmost lithostratigraphic unit with a dominant banded grey and pale cream white calclutite to dololutite with a rugged appearance. In the Spiti / Kinnaur and Higher Himalayas, the Cambrian rocks represented by Kunzamla and Parahio formations. The Permian in Himachal Pradesh is represented by Kuling Group in the Spiti / Kinnaur area whereas in Chamba area it is represented by Salooni Formation. The Kuling Group is divisible into fossiliferous Gechang and Gungri formations. The Gechang Formation is consisting of brown to grey, pale grey, coarse-

grained weakly bioturbated, cross bedded, calcareous sandstone with local conglomerate and / or shell lag at base. The Gungri Formation comprises black shale, calcareous silty shale, phosphatic, cherty and calcareous nodules and thin limestone. The Salooni Formation is represented by black shale, slate, calcareous slate and lenticles of limestone and is fossiliferous.

PUNJAB

The Punjab state comprises an area of 50,362 Sq km forming the part of Indo-Gangetic basin. The two broad geomorphic entity viz. the Siwalik foothills towards the northeast part of the state and alluvial fill of Indus drainage basin characterise the physiographic setting of the Punjab state. The dominant physiographic high are i) Lahore - Sargodha Ridge in the west; ii) Delhi – Jagadhari Ridge in the east; iii) Delhi – Lahore Ridge in the south and iv) Siwalik ridges in the northeast. Chandigarh covers an area of 114 km.

GEOLOGY

The Neogene and Quaternary units are classified as i) Siwalik Super Group and ii) the Quaternary alluvium comprising older alluvium and newer alluvium. The maximum depth of Quaternary sediment recorded to 4500m. The base configuration indicates that the Punjab basin appears to be deeper in the northern side and shallower southward and deepest being towards NW. The Siwalik Supergroup is classified into three groups namely Lower / Middle and Upper Siwalik Group. The rocks of Lower and Middle Siwalik Group are exposed as NW-SE trending ridges in the northeastern part of Gurdaspur district while the Upper Siwalik rocks are exposed in Ropar, Hoshiarpur and Gurdaspur districts. The Lower Siwalik Group, represented by the Chinji Formation, is chiefly composed of fine to medium grained, sporadically pebbly sandstone and chocolate to maroon claystone. The Middle Siwalik Group comprises Dhok Pathan and Nagri formations. The former is consisting of poorly sorted massive, grey, coarse grained and micaceous sandstone with minor conglomerate. The Nagri Formation comprises alternating conglomerate and red clay. The Upper Siwalik Group is made up of coarse gravel and boulder conglomerate alternating with clay bands and sandstone. Its contact with the overlying Quaternary sediments is unconformable. The Quaternary Alluvium of the state can be divided into three chronostratigraphic units viz. (i) Older Alluvium (ii) Newer Alluvium and (iii) Aeolian Deposit. The Older Alluvium is formed by the depositional processes of the pre-existing palaeodrainage of Middle to Late Pleistocene period, comprising admixture of reddish clay, silt, sand with *kankar*, grey medium to coarse calcareous sand with *kankar* and subrounded to subangular unsorted pebble, gravel and cobble beds. The Newer Alluvium is formed of present day streams, representing Holocene/Recent period. It is chiefly composed of blue to white-grey micaceous sand with alluvium interbands of purple and red clay. The Aeolian Deposits are spread throughout the Punjab, except in the areas covered by the hard rocks of Siwalik Supergroup. Broadly, these are the undifferentiated aeolian flats/dunes/sand sheet and newer dunes. Based on the degree of consolidation, these can be divided into following three categories (i) stabilized and consolidated older dunes (ii) intermediate and semi-consolidated dunes and (iii) newer, mobile and reversible dunes.

JAMMU & KASHMIR

Jammu & Kashmir State comprises three administrative regions, viz. Jammu, Kashmir and Ladakh encompassing an area of 2,22,296 Sq km. Located in the Northwestern part of Himalaya Jammu & Kashmir is a mountainous terrain, except for about a five kilometers wide stretch of Tarai zone on the southern part represented by Siwalik foothills and adjoining Indo-Gangetic Alluvial Plain. The geographical entity of J&K is represented by four tectono geomorphic domain represented by linear tectonic belts, which in the northwest take a turn to the southwest to form the western Syntaxes, the 'Jhelum Syntaxes'. These tectonic belts from north to south are (i) Karakoram belt, (ii) Indus-Shyok belt. (iii) Main Himalayan belt and (iv) Frontal fold belt. Jhelum Syntaxes and the two re-entrants, the broad Chenab re-entrant near Ramban and the sharp Ravi re-entrant near Dalhousie in H.P. are the major morphotectonic units.

GEOLOGY

The state of Jammu and Kashmir is covered by rocks ranging in age from Proterozoic to Recent. The geological lithounits / formations are described as below:

Karakoram Belt forms the northernmost sector of Ladakh and covers the southern slopes of great Karakoram Range in Trans-Himalaya exposing Palaeozoic-Mesozoic sedimentary formations of Karakoram-Tethyan basin. Karakoram granitoid occur towards north of Shyok-Nubra zone. The belt is separated from Indus Shyok belt by the main Karakoram thrust also called as South Karakoram thrust. The rocks in the belt are folded into Karakoram synclinorium and Saltoro synclinorium with a geanticline in between. The Karakoram batholith appears to be emplaced along the core of the geanticlines. Indus Shyok Belt is sandwiched between Karakoram belt in the north and Main Himalayan belt in the south, comprising mainly Cretaceous and Tertiary sediments and associated mafic, intermediate and acid magmatic rocks with imprints of Upper palaeozoic and Early to Middle Mesozoic sedimentation in Shyok belt. Wakha, Pashkyum and Shyok thrusts are the major lineaments from south to north in this belt, which have subdivided the belt into three zones viz. Sangeluma parautochthon, Indus Group- Ladakh Granitic Complex autochthon and Shyok-Nubra zone. The Sangeluma parautochthon along with Indus Group autochthon forms Indus tectonic zone, and Ladakh batholith separates it from Shyok Nubra zone. Main Himalayan belt is the most complex tectonic belt in the region and occurs between Frontal Fold belt in the south and the Indus-Shyok belt in the north, exposing the rocks ranging in age from Proterozoic to Quaternary. Parautochthonous zone, Kashmir synclinorium, Thathri dome, Chamba synclinorium, Kishtwar window, Giambal-Suru crystalline geanticline, Zanskar synclinorium, Rupshu anticlinorium and Kuling-Lilang Schuppen zone are the prominent structural features of this belt. Phanerozoic succession of Kashmir Tethyan basin is folded into a regional NW-SE trending synclinorium comprising a series of anticlines and synclines. The rocks on the southern flank of Kashmir synclinorium have moved along Panjal thrust to override the rocks of Parautochthonous zone and this part of Kashmir synclinorium constitutes Kashmir nappe. Frontal Fold Belt exposes the rocks of Sirban Limestone, Subathu Formation, Murree and Siwalik Group of rocks and the younger Quaternary sediments Foot Hill Fault, Mastgarh anticline, Mandili structural unit. Muttal-Jigni anticline, Lodhra-Lapri anticline and Panchari syncline are the prominent structural features of this belt from south to north. Murree thrust limits the boundary of the belt.

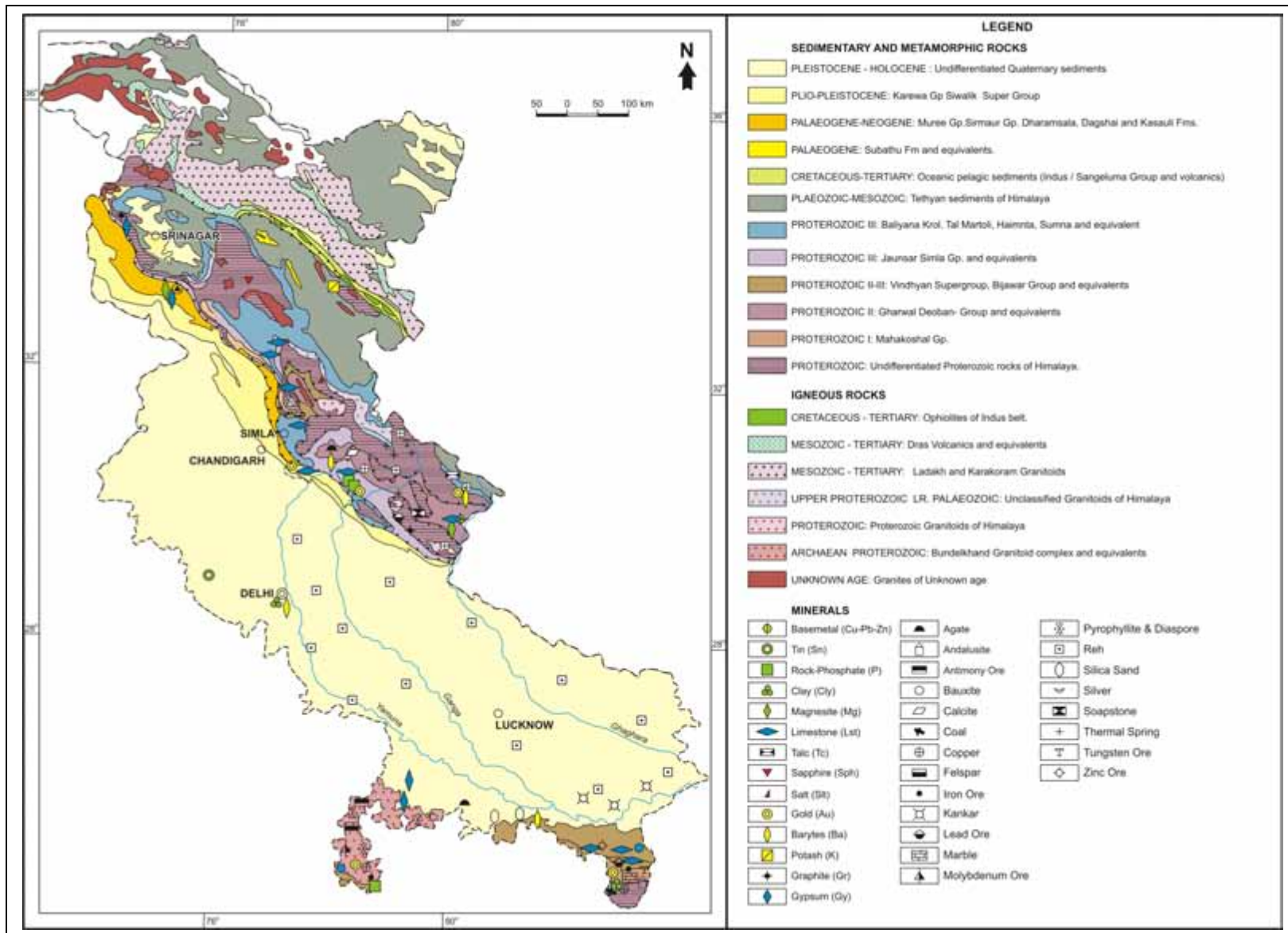
UTTAR PRADESH AND UTTARAKHAND

The Uttar Pradesh covers an area of 2,47,933 Sq km represented by vast alluvial fill of middle Ganga drainage system. The southern part of Uttar Pradesh is characterized by rocky upland. The northern fringe area represented by Tarai and Bhabhar geomorphic units flanking the Siwalik Foothills. Uttarakhand covers an area of 46480 Sq km and represents the Western Himalayan domain divisible into Sub or Outer Himalaya, the Lesser Himalaya, the Higher Himalaya and the Tethys Himalaya from South to North.

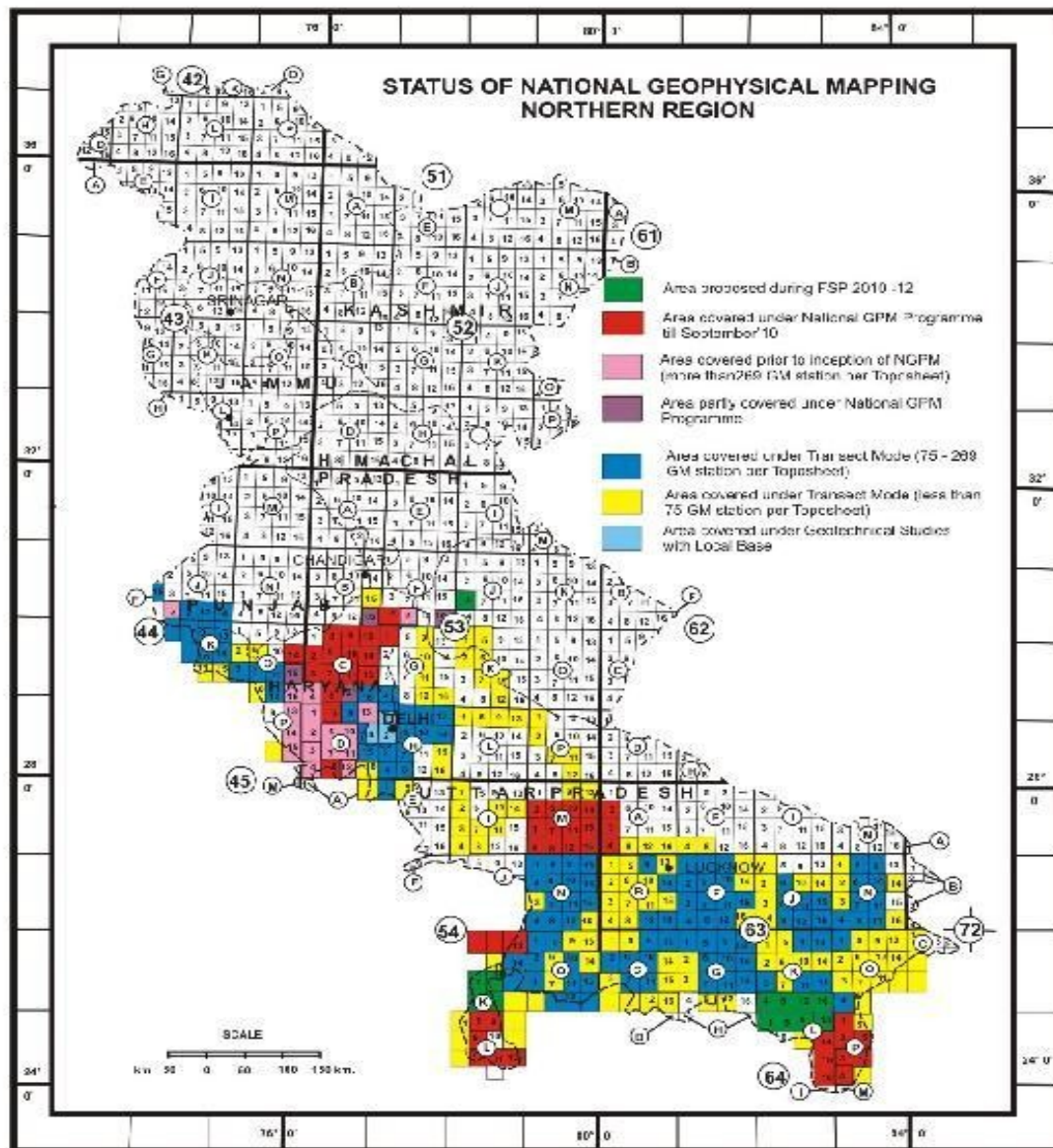
GEOLOGY

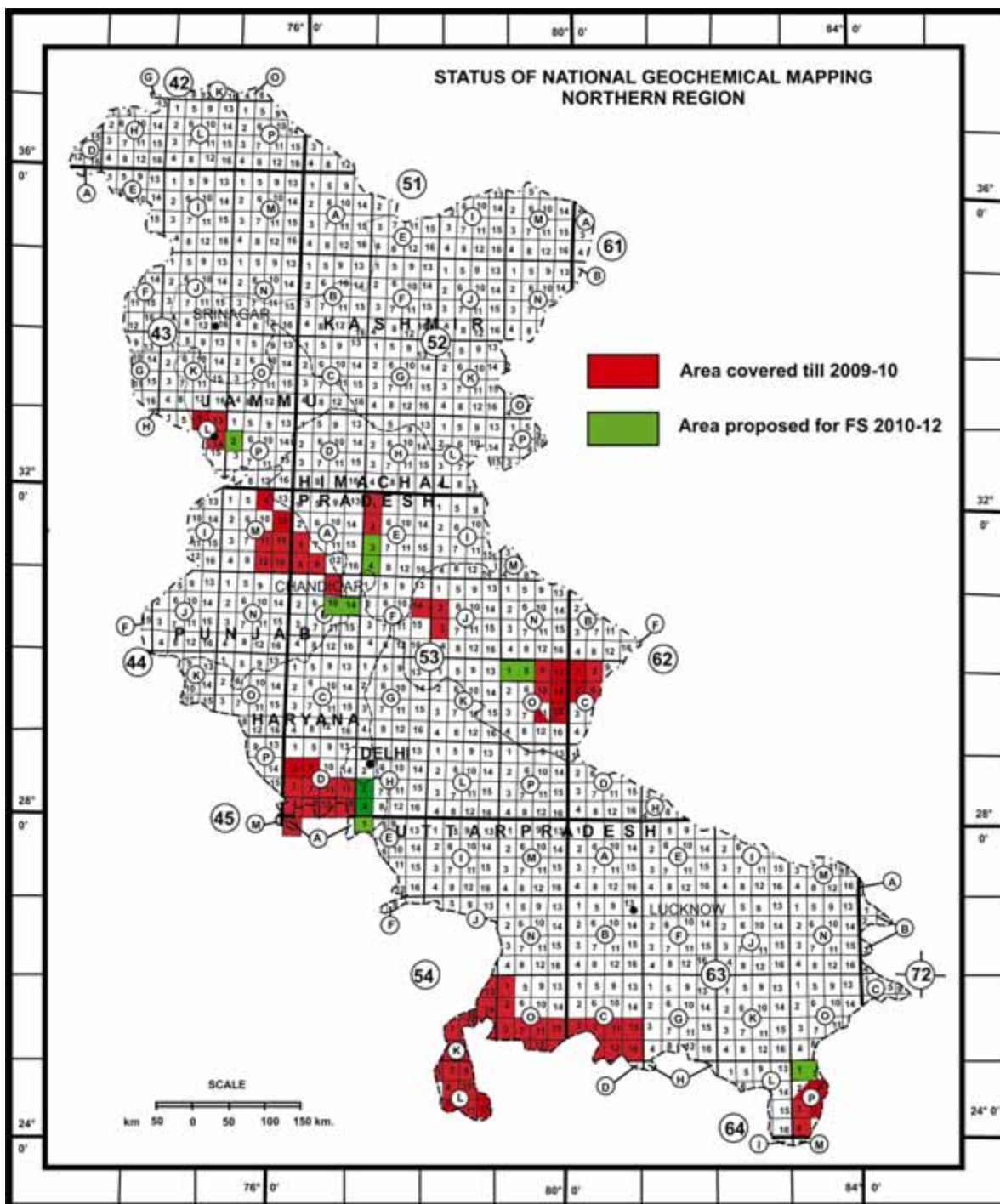
In Uttar Pradesh geologically rocks ranging in age from Archean to Holocene have been found. The oldest crystalline rocks are confined to the southern and southeastern part of the state and are extensions of sequences exposed in the M.P., Bihar and Jharkhand. These are dominantly represented by basement gneisses, older metamorphites with younger granitoids as intrusives; metasedimentaries; sedimentaries and the alluvial. The metamorphites include various types of schist, quartzite, marble and gneiss. In general, the metasedimentaries belong to Palaeo and Palaeo-Mesoproterozoic period. The sedimentaries include rocks of the Vindhyan Supergroup represent Meso to Neoproterozoic period and Gondwana Supergroup, Late Palaeozoic period. Basic volcanic flows of Late Mesozoic - Early Tertiary period are occurring as capping over earlier sequences as detached outcrops. A major part of the state is covered by Ganga Alluvium. Several mineral deposits of economic importance occur in association with the above rock units in the state. Gneisses with metasedimentary enclaves along with intrusive granite and other igneous rocks constitute the dominant lithology and represent the oldest suite of rocks. These are confined to the southern part of the state and exposed in the Bundelkhand and Sonbhadra regions. The natural relationship between different lithounits in these oldest rocks has been obliterated by metamorphism, migmatization, granitization and repeated deformation. In Bundelkhand region, granite-gneiss and granitoids constitute the dominant rock types and the assemblage is known as Bundelkhand Granitoid Complex (BGC). In Sonbhadra region, gneiss is the dominant rock and the assemblage is termed as Dudhi Gneissic Complex (DGC). The Bundelkhand Granitoid Complex (BGC) contains a wide variety of plutonic and hypabyssal rocks dominated by porphyritic granites of several generations, gneisses, migmatites and leucogranites. Among the enclaves, metabasic rocks are widespread. Rafts of schists and metasediments are also present. Migmatites, different types of granite, quartz reefs and younger basic intrusives have been identified and assigned to various types. Quartz reefs trending NE -SW and forming wall like ridges rising upto 175m above the ground are common. Dolerite dykes trending NW-SE are very common. The Dudhi Gneissic Complex consists mainly of granite gneiss, migmatites and non-foliated, massive younger granite with enclaves of metamorphites and veins of pegmatite, aplite and quartz. This is the westward continuation of the Chhotanagpur Granite Gneiss Complex (CGC) of Bihar/Jharkhand. Metasedimentary and meta-igneous enclaves occur with their long axes parallel to the foliation of the enclosing gneiss which is generally ENE -WSW. Dykes of doleritic/gabbroic composition transect the gneissic country. Rocks of Mahakoshal, Bijawar Groups and Vindhyan Supergroup constitute the Proterozoic sequence. The Mahakoshal Group includes metasediments with interlayered metavolcanics and granitic bodies intruding it. Bijawar Group is represented by a sequence of ferruginous quartzite, carbonate, phosphorite, sandstone and tuffaceous rocks. Isolated outcrops of Ajabgarh Group occur around Mathura area. Metabasalts, tuffs, agglomerates and ultramafic (Kimberlite ?) plugs occur within a linear tectonic belt in the Jungel valley of Mirzapur - Sonbhadra area. The Jungel volcanics and sedimentaries are supposed to represent Palaeo to Mesoproterozoic period. The Vindhyan sequence - resting unconformably over the Mahakoshal and Bijawar groups - has been divided into four groups viz. Semri, Kaimur, Rewa and Bhander in the ascending order. The Semri Group includes carbonates, tuffs, shale and minor sandstone, often glauconitic. The Kaimur Group consists of a thick arenite - argillite sequence. The Rewa Group is represented by alternate sequence of argillite and arenite. The Bhander Group is consisting of shale, greenish shale, siltstone, reddish brown to purple pink, spotted sandstone with shale partings and quartz arenite at top. Rocks belonging to the Gondwana Supergroup of Permo-Carb period, are exposed in a small area in Sonbhadra district. It is composed of conglomerate, sandstone, gritty at places, pink and pale green shales. Detached outcrops of basic volcanics (dolerite to basalt), representing the Deccan Trap, are found as capping over Bundelkhand Granitoid Complex, Bijawar Group and Vindhyan Supergroup in Bundelkhand region, southern Uttar Pradesh.

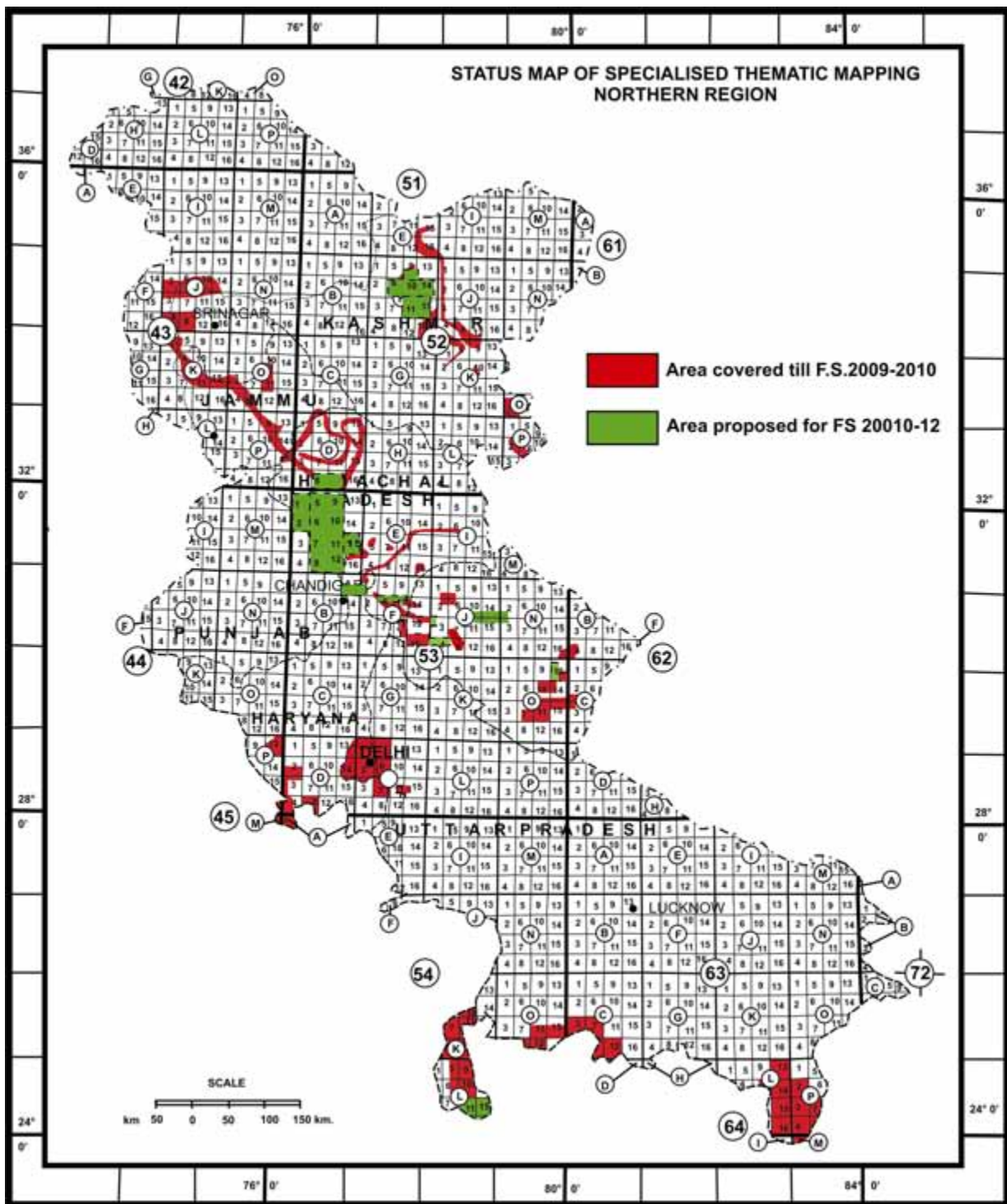
C. STATUS MAP (S)

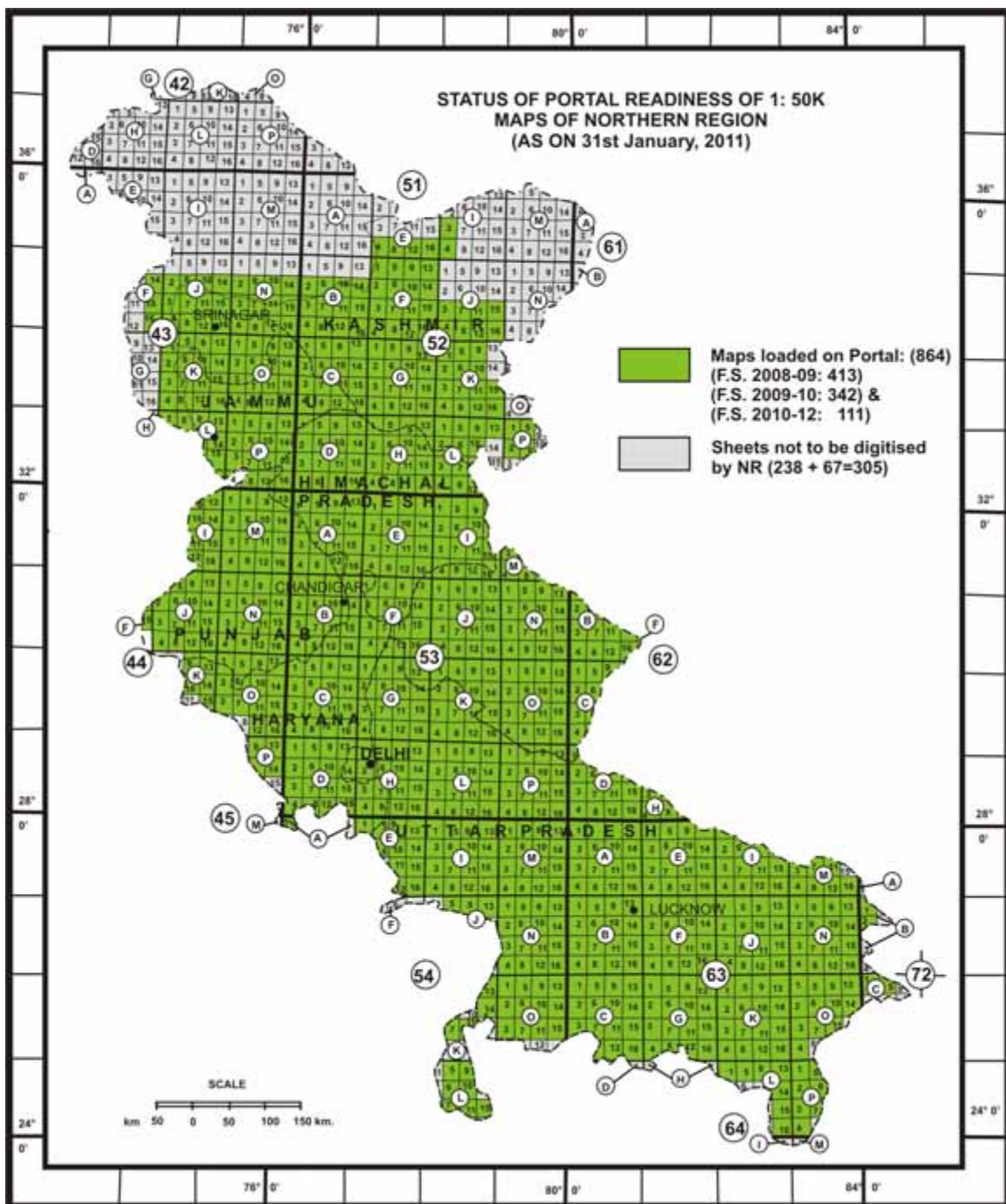


Geological map of Northern Region







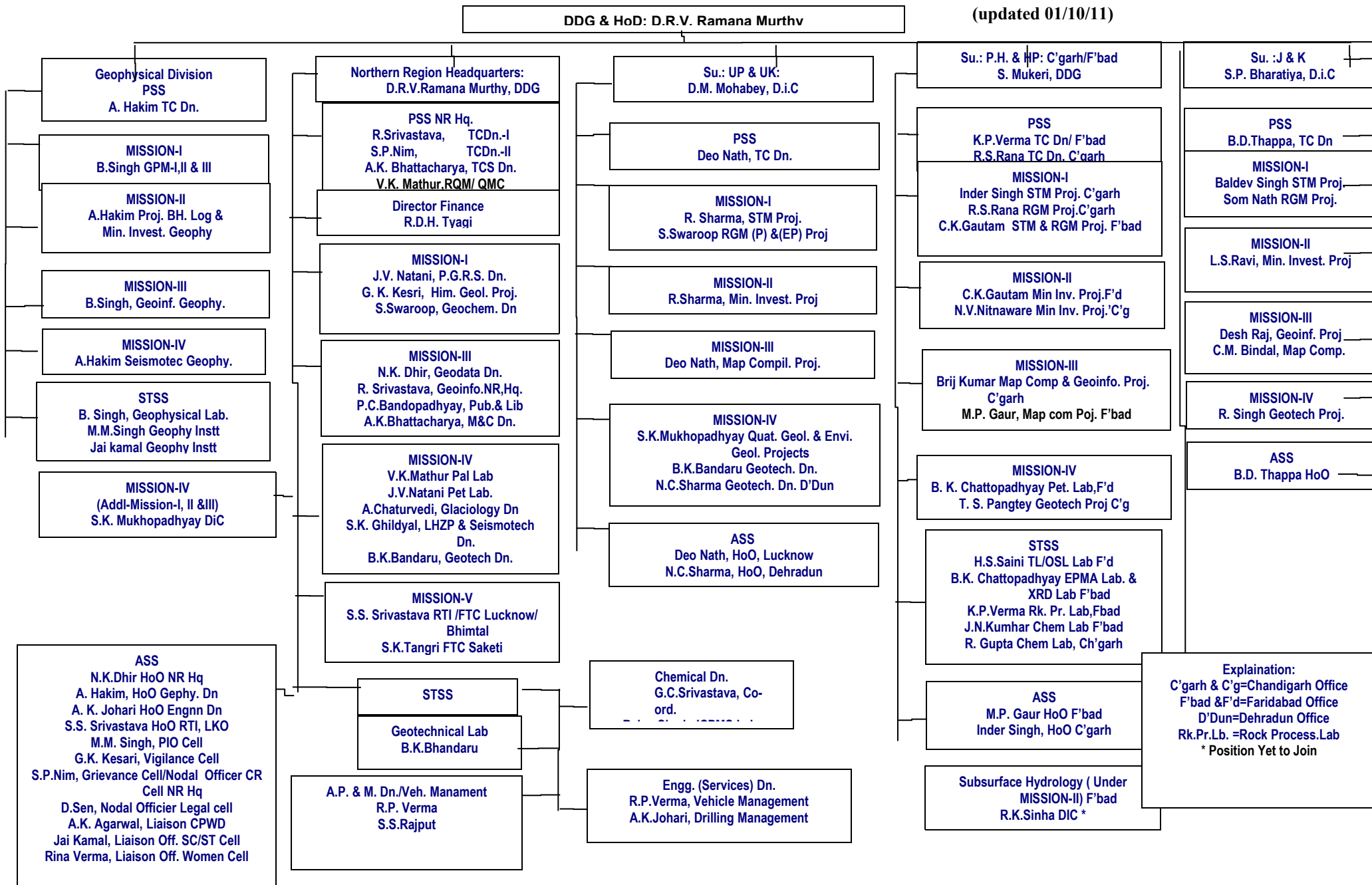


II. ORGANISATIONAL STRUCTURE OF NORTHERN REGION

The Northern Region went through several phases of re-structuring and re-organisation with a view to optimising its scientific output and facing the challenges of ever changing work needs depending upon the priorities and thrust areas as per the policies adopted by the Government of India from time to time. The present organisational set-up of the Region given in Organogram and the present strength of the technical as well as non-technical personnel are shown in Annexure- 12.

ORGANOGRAM OF NORTHERN REGION

(updated 01/10/11)



IV. ACTIVITY DOMAIN

Schemes	Components/Activities
Mission – I Survey & Mapping	Specialised thematic mapping, geochemical mapping, geophysical mapping and systematic geological mapping
Mission – II Mineral Exploration	Exploration for gold, tungsten and base metal and industrial minerals
Mission – III Information / Dissemination	Map compilation and publication on various earth science subjects, information technology and creation of data for GSI Portal
Mission – IV Specialised Investigation and Research & Development	Geotechnical, environmental, landslide, earthquake geology and seismology, and glacial studies. Research work on fundamental geosciences and Arctic
Mission – V Human Resource Development	Training under RTI and FTC
STSS Modernisation, Assets Procurement & Management	Acquisition and replacement of State of the Art instruments / equipments

CENTRAL GEOLOGICAL PROGRAMMING BOARD

CGPB GROUP IX: Geoscientific Investigations (Geotechnical investigation, Natural Hazards, Climate Change, Environmental Geology, Shallow subsurface Geology & Subsurface Hydrology)

Convener: Dy. Director General, GSI, Northern Region (NR), Lucknow

Member Secretary: S.K. Ghildyal, Director, GSI, NR, Lucknow.

Members:

1. Director (Technical), Ministry of Mines
2. Ministry of Environment and Forest (Director Technical)
3. Ministry of Earth Sciences, New Delhi
4. NRSC (ISRO)
5. DGM, Govt. of Jammu & Kashmir
6. DGM, Govt. of Himachal Pradesh
7. DGM, Govt. of Uttarakhand
8. DGM, Govt. of Northeastern States
9. National Environmental Engineering Research Institute, Nagpur
10. Central Ground Water Board (CGWB)
11. Dy. DGs and Directors of GSI associated with the Geoscientific Investigations (Geotechnical investigation, natural hazards, climate change, Environmental Geology, Shallow subsurface Geology & Hydrology), Director (Monitoring) and Director (CGPB), GSI, CHQ.

**TERMS OF REFERENCE FOR COMMITTEE IX (GEOSCIENTIFIC INVESTIGATIONS) OF
THE CGPB**

1. To formulate annual and five year plans on a national scale.
2. To advise the Government from time to time on societal issues arising out of natural hazards and to suggest probable preventive / mitigation measures including rehabilitation.
3. To monitor and collect data systematically (where possible on a spatial basis) on a large number of parameters relating not only to landslides and earthquakes, but also other public-health and public good issues having a geospatial dimension like Arsenic, Fluorine pollution, etc.
4. To review the work done by different organizations including NNRMS, PM Committee on Climate Change, etc. and to assess their proposals for future work and to identify the gap areas for future course of action in the geoscientific domains under the purview of the Committee.
5. Promoting use of the state-of-the-art and research in the geo-environmental and natural hazard domains for effective management of the earth system and its resources.
6. To enable integration of relevant data sets including spatial data in order to help develop a GIS application for planning, management, prevention, etc. in respect of various geoscientific related events including natural hazards.
7. To advise CGPB on any other urgent matter relating to the particular activity domain, as considered necessary by the Committee.
8. To Committee is empowered to convene meetings on smaller groups on specialized subject matter with specific agenda.
9. The Committee may co-opt other institutions as invitees as and when necessary for fruitful deliberation.

V. MISSION-WISE FIELD SEASON 2010-2012 INFORMATION

MISSION - I

Baseline Geoscience Data generation is the fundamental requirement of Mission - I. Specialised Thematic Mapping (STM), Geochemical Mapping (GCM) and Geophysical Mapping (GPM) are the core activities of this mission under the purview of the Region. Overall it includes the following activities:

I. Baseline Geoscience Data Generation

IA.

Ground Surveys:

- **Geological Survey**
- **Geophysical Survey**
- **Geochemical Survey**

Marine & Coastal Surveys:

- **Marine Survey**
- **Coastal Survey**
- **Marine Geotech**

IB.

Remote Sensing and Aerial Surveys:

- **Geomorphological Survey**
- **Hyperspectral Survey, etc.**
- **Airborne Mineral Survey**
- **Photo Geology & Remote Sensing**

A total of 18 regular field items are taken up under the canopy of Mission - I. An area of 17421 sq km will be covered in the states of Uttar Pradesh, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Delhi, Jammu & Kashmir and Union Territory Chandigarh during Field Season 2010-12 under various disciplines of Ground Surveys.

During the compilation of 1:50 K scale geological maps, the number of grey areas have been identified, which posed problems in matching the lithostratigraphy and structure of the areas, the problem is more acute in hard rock areas of the Himalayas. To solve these problems and to bring out accurate geological picture of the area, eight STM items in states of Uttarakhand, Haryana, Himachal Pradesh and Jammu & Kashmir covering 2040 sq km are to be taken up during F.S. 2010-2012.

These items include: Delineation of lithostratigraphic units of Siwalik belt and to develop a reference section to standardise the different units for correlation in Uttarakhand, Himachal Pradesh, Punjab and Haryana; Specialised Thematic Mapping of gap areas in southern part of Toposheet No. 53O/13 in Bageshwar district; STM studies to establish the lithostratigraphy and tectonic setting of Bhilagana Formation vis-à-vis Central Crystallines in part of Degreesheet Nos. 53J & 53N in Tehri district, Uttarakhand; Study of inter-relationship of ultramafic bodies with Bundelkhand Granitoid and Bijawar Group of rocks in Lalitpur district, Uttar Pradesh. STM of Upper Krol Formation for tracing of limestone/dolomite bands in Solan and Sirmour districts, H.P.; STM studies of igneous and metamorphic rocks of Shyok Tectonic Belt between Khalsar - Hundar-Trisha areas, Ladakh district, Jammu & Kashmir.

Under the National Geochemical Mapping Programme six items covering an area of 6606 sq km for geochemical mapping in Uttar Pradesh, Uttarakhand, Himachal Pradesh, Punjab, Haryana, J&K and Chandigarh will be taken up during F.S. 2010-2012. The GCM will continue in Sonbhadra and Mirzapur

districts in Uttar Pradesh and in overlap areas in Rohtas district of Bihar. In Uttarakhand it will be taken up in Nainital, Almora and Chamoli districts. In Haryana, the GCM will continue in parts of Gurgaon, Faridabad and in parts of National Capital Territory of Delhi. In Himachal Pradesh, the GCM will continue in parts of Mandi, Solan and Shimla districts, whereas in Punjab it will be taken up in Hoshiarpur, Patiala and Ropar districts, besides Chandigarh. In J&K, it will be carried out in Mansar-Sambha area, Kathua and Udhampur districts.

Geological Survey of India has been acquiring Gravity data under various projects of National and International importance since independence and revising the maps from time to time. These maps helped in various applications such as geodetic studies, regional tectonic studies and mineral exploration as well and have become most valuable input for any geo-scientific investigation of the earthscience community. An integration of the Special Thematic Mapping, the National Geochemical Mapping and Geophysical Mapping is surely going to help to understand various complicated and interesting geological zig saw especially in covered areas.

Systematic Geophysical Mapping commenced in the year 2003 has been continuing, which will cover 8775 sq km in Uttar Pradesh, Madhya Pradesh and Uttarakhand. The available data are being analysed and interpreted which will help in launching new programmes for mineral investigations.

A three - year programme (in collaboration with ISRO), initiated in the year 2009, will be continued during F.S. 2010-12 to carry out Geomorphological and lineament mapping on 1:50K scale using satellite data.

MISSION - II

NATURAL RESOURCE ASSESSMENT

The demand for natural resources like minerals is growing day by day. Search, location and estimation of mineral resources too are one of the main activities of the GSI.

Mission-II encompasses following core activities:

Mission II- Natural Resources Assessment

- **A. Mineral resource assessment**
- **B. Natural energy resources (except Oil & Gas)**
- **C. Subsurface hydrology, etc.**

Search for minerals is the continuous thrust area of GSI for which a total of 7 items of mineral investigations will be taken up under the aegis of Natural Resource Assessment. Four new investigations will be taken up during Field Season 2010-2012 and three investigations will be continued from last field season.

In order to locate gold mineralisation, the two new items will be taken up in Uttar Pradesh and Uttarakhand i.e. Search for gold and associated mineralisation in the rocks of Mahakoshal Group in Chakoriya-Charka area, Sonbhadra district, U.P., it will be carried out as a linked item by Geophysics Division, NR for IP, SP & Magnetic surveys; Investigation for gold and associated mineralisation in Lameri-Ratura area, Rudraprayag district, Uttarakhand. In Haryana, the investigation of copper mineralisation in Mahendragarh district will be carried out in order to demarcate the host rock. Another new investigation will be taken up to assess the potential of gypsum in inter-dunal areas covered by alluvial/aeolian sediments as well as to locate new gypsum locales in Hissar and Bhiwani districts, Haryana, it will also carried out as a linked item by Geophysics Division, NR.

The three continued items include: Search for glass sand in Rampur Group of rock, Shimla and Kullu districts, HP; Investigation for lead-zinc mineralisation in Bakkal-Sersandu-Khairikot area, Reasi district, J&K; and Detailed investigation for lead-zinc deposit of Buniyar area, Baramulla district, J&K.

MISSION - III

GEOINFORMATICS

Mission-III covers the activities of ‘Geoinformatics’ which include:

- **Data Repository and Management-(a) Geoscientific database (b) Map compilation**
- **Information Delivery-(a) GSI Net Portal (b) Publication**
- **Advanced Spatial Data Systems, etc.**

Development of Management Information Systems covering the entire administrative processes and scientific data management lies under the Portal Project. Major workload in NR, GSI is Portal management, uploading of digitized geological maps on 1:50 K, creation of an archival of regional geochemical/ geophysical data base, creation of theme based data base and sharing of data between different nodes at different State level offices of different Regional Headquarters within the LAN and connecting to WAN for accessing intranet application of GSI portal.

The main objective of the Project is to build an enterprise level spatial database through collation of geological datasets generated through systematic geological mapping on scale 1:50 K carried out by GSI since its inception. The objective can be achieved through uploading the digitized maps in the portal in a national grid. This will lead to consolidation of spatial data archive for visualisation, query and generating value added products for subsequent thematic studies.

Compilation and digitization of 1:50 K scale geological maps of all the amenable 864 sheets falling under Northern Region have been completed. In order to generate seamless maps, the updation of already loaded geological map layers in 1:50 K in GSI Portal will carry out during Field Season 2010-12. It will cover edge matching at degree sheet level, edges matching between inter and intra-regional sheets, correction/modifications of already loaded sheets. This will be helpful in dissemination of the available massive data to user agencies through GSI website.

During F.S. 2010-12, a total of 24 items will be taken up under Mission - III by the Region. It includes 13 nos. of Service Items; 3 items pertaining to theme based database; 3 items related to map compilation and 5 nos. of linked items. Map items i.e. Updation of already loaded geological map layers in 1:50K in GSI Portal will be carried out by Geodata, Northern Region, is linked with Map and Compilation Divisions of the region. A new item pertaining to compilation of District Resource Maps of Northern Region (1:2, 50,000 scale) will be taken up during F.S. 2010-12.

MISSION - IV

FUNDAMENTAL AND MULTIDISPLINARY GEOSCIENCE

Multidisciplinary Geosciences currently encompasses many broad fields like engineering geology (geotechnical investigations), natural hazard studies, climate change and related studies, environmental geology etc.

Mission-IV encompasses following activity areas of GSI:

Fundamental & Multidisciplinary Geosciences and Special studies

- Geotechnical, Landslide & Seismic
- Climate Change impact & Fragile eco- systems
- Biogeochemistry & Medical Geology
- Fundamental Geoscience
- Crustal Evolution
- Stratigraphic Correlation
- Palaeobiology
- Deep Geology
- Isotope Geology and Geochronology
- Meteoritic & Planetary Studies
- Polar Studies, etc.

The societal issues are one of the important concerns for GSI and related programmes are being continuously taken up. Under this mission 21 regular items (excluding 21 service items; 2 linkage item and 5 research items) will be taken up during F.S.2010-12. It include 13 items of geotechnical investigations; 2 items of Landslide Hazard Studies; 1 item each for seismic microzonation and active fault studies; 2 item for geoenvironmental hazard studies(Bio and Chemical Geohazards); 2 items for glacial studies. Four research items under Climate change & Ecosystem and Fundamental Geoscience will also be taken up during F.S. 2010-12.

Geotechnical investigations for hydropower projects and communication routes continue to be an area of importance, where out - agencies required GSI to carryout the investigations. The Northern Region will take up the 8 investigations covering 35 projects. Some of the important projects are –Tapovan-Vishnugarh Hydro electric project, Bansagar Project, Luhri Hydel Project, Sawra-Kuddu Hydel Project, Kol Dam Project, Ranjit Sagar Dam Project, Ujh Multipurpose Project and many other projects under PFR and DPR stages. Besides, five investigations will cover the geotechnical evaluation of communication and transportation project, various civil structure project, flood damage, landslide and stability of slopes on National Highways and Railway alignment, the Katra-Qazigund Rail Line Project is one of them, will be carried out during the ensuring Field Season.

Landslide hazard zonation (on macro- scale), site specific studies of important slides and communication routes are prominent investigations will be taken up during F.S. 2010-12. It include, landslide hazard zonation mapping on macro-scale along Narkanda-Rampur - Khab section of NH-22 in H.P. and Landslide hazard zonation in parts of Bageshwar district, Uttarakhand. Besides emergent investigation of the critical landslides on communication route or damages to the demographic centre in Uttarakhand, Himachal Pradesh, Haryana, Punjab and Jammu & Kashmir.

Seismic microzonation studies of major urban agglomerations have been launched throughout the country. DST, Government of India, has identified 38 cities for carrying out these studies. In Northern Region Seismic microzonation studies of Jalandhar urban agglomeration will continue during Field Season 2010-12. The findings of studies of Delhi, Dehradun and Chandigarh urban agglomerations have already published in the form of Special Publications of GSI. A new item of multi parametric studies to find out seismic status of active fault in Himalayan frontal belt in Kala – Ambala area, H.P. and Haryana will also be taken up.

Study of geoenvironmental scenario and geohazard due to the mining of the river borne construction material from Beas and Pabbar river beds/terraces will continue to suggest the remedial measures to maintain the natural course of the river for sustainable development of the area. A new item pertaining to geoenvironmental appraisal of arsenic prone areas in Ghazipur and Mau districts of Uttar Pradesh will be taken up during F.S. 2010-12. It is initiated to study the role of environmental geochemistry in the incidence of arsenic contamination in ground water as well as to ascertain the contaminated ground water.

A three years programme of multidisciplinary research item taken up under climatic change and response of environmental system in F.S. 2008-09 will continue with the objective to study the

palaeoclimatic changes in selected river basins of northwest Himalayas and to reconstruct past climatic events and responses of environment system during last 60,000 years. During F.S. 2010-12, the field studies and sampling will be undertaken to fill the gaps which were identified based upon studies undertaken so far. It will help in developing a detailed past climatic history of Himalaya and possible future trend. Interbasinal correlation of Quaternary sequences to evolve chronostratigraphy in Kali and Sarju basins will continue to study palaeo-climatic changes and flow regime. A new research item i.e. Palaeoclimatic and magmato-metamorphic history of Wilkes Land, East Antarctica linked up with Antarctica Division will be taken up during F.S. 2010-12.

Glaciological studies in F.S. 2010-12 include: Long - term monitoring of mass balance studies of Hamta glacier in Lahaul and Spiti district, H.P. on the lines of international practice of glacier observations. A new item will cover the monitoring of glaciers of Ghagra basin for evaluating intra - annual recession besides dating of the palaeo-glaciation events to understand the past glacio-geomorphological history.

Significant collections of fossil vertebrates, especially of mammalian group have been made by many of GSI and other workers from northwest Himalaya. The Siwalik belt of Solan and Sirmaur districts, Himachal Pradesh is quite rich in fossil vertebrates. In order to augment fundamental geoscientific knowledge, a programme for significant collections of fossil vertebrates, especially of mammalian groups from Northwestern Himalaya will continue during F.S. 2010-12. A new item pertaining to detailed studies of Neo-Proterozoic and Early Cambrian eggs/emryos from Krol and Tal groups of rocks in H.P. and Uttarakhand will be carried out to understand the evolutionary stages/trends in early metazoan life.

SCIENTIFIC AND TECHNICAL SUPPORT SYSTEM (STSS)

The STSS provides technical support to inter-regional projects and divisions. 9 Nos. of Service Items and one linkage item are taken up during F.S. 2010-12. Out of these 9 items; 5 service items related to chemical analysis of NGCM and Non-NGCM samples, will be carried out by the chemical stream of the region and the remaining 4 service items will be taken up by the Petrology Divisions, Luminescence Dating Laboratory, PGRS Division and Geophysics – Instrumentation.

The linkage item is associated with Drilling Division, to carry out the drilling activities of Mission-II and Mission-IV.

POLICY SUPPORT SYSTEM (PSS)

The Policy Support System (PSS) deals the perspective planning, technical coordination and monitoring of field assignment and report processing besides providing logistic support. 8 service items (including 1 item of Technical Consultancy Services) are taken up during F.S. 2010-12.

ADMINISTRATIVE SUPPORT SYSTEM (ASS)

The Administrative Support System (ASS) deals with the administrative planning and coordination, besides monitoring of Siwalik Fossil Park, Saketi Museum, Core library and maintenance and upgradation of state museums.

MISSION - V

TRAINING AND CAPACITY BUILDING

Training and Capacity Building are the main activity of this Mission. Nineteen courses including workshops are to be taken up under this activity during F.S. 2010-12. The major activity includes 33rd and 34th Orientation Course for Geologist – Bhimtal-Saketi Module.

Annexure-1A

MAJOR MINERALS RESOURCES [UNDER VARIOUS UNFC CATEGORIES] ESTIMATED BY THE REGION, SHOWING STATE-WISE FIVE-YEARLY INCREMENT, FOR THE LAST 10 YEARS (RESOURCES AS ON 30.09.2011)

COMMODITY / MINERAL	STATE	1995	2000	2005	2010
Gold	Uttar Pradesh (Gurhar Pahar, Sonbhadra)	4.5 M.T Grade 0.77 g/t	7.12 M. T. Grade 1.04 g/t	7.29 M. T. Grade 1.03 g/t UNFC – G3	-
	Uttar Pradesh (Sona Pahari, Sonbhadra)	-	0.053 M. T. Grade 3.03 g/t UNFC – G3	-	-
Base Metal	Uttarakhand (Askot, Pithoragarh)	-	0.77 M. T. (8.91% TMC) UNFC – G3	-	-
	Uttarakhand(Chamri, Kwanu, Dehradun)	-	0.39 M. T. (8.13% TMC) UNFC – G3	-	-
	Uttarakhand (Amtiargad, Dehradun)	-	1.41 M. T. (6.57%TMC) UNFC – G3	-	-
	Haryana (Gangutana)	--	--	--	2.318 M. T. Grade 0.34 % Cu UNFC-G3

ANNEXURE – 1B

**STATUS OF UNFC CLASSIFIED REPORTS OF
NORTHERN REGION**

Total No. of Reports to be codified under UNFC Code	Total No. of Reports codified under UNFC Code
1998-99 to 2003-04 Field Season – 31 Nos.	1998-99 to 2003-04 Field Season – 31 Nos.
2004-05 to 2008-09 Field Season – 12 Nos.	2004-05 to 2008-09 Field Season – 12 Nos.

ANNEXURE-2 A

ACTIVITY DOMAIN PERTAINING TO MISSION I, II & IV OF THE REGION AND ACHIEVEMENTS [FSP RELATED ITEMS] DURING THE XI PLAN PERIOD [2007-12] AS ON 30.09.2011

S. No	Major Activity area	Programme Target F.S. 2007-08	Achievement of F.S. 2007-08	Programme Target F.S. 2008-09	Achievement of F.S. 2008-09	Programme Target F.S. 2009-10	Achievement of F.S. 2009-10 September, 2010)	Programme Target F.S. 2010-12	Achievement of F.S. 2010-12 since commencement
I. Survey and Mapping									
a) Ground Survey									
i)	Special Thematic Mapping on 1:25,000 (sq. km)	1500 Sq km	1445 Sq km	1325 Sq km	1299 Sq km	1475 Sq km	1618 Sq km	2040 Sq km	2027 Sq km
ii)	Geochemical mapping on 1:50,000 (sq. km)	4296 Sq km	3909 Sq km	3724 Sq km + 336◆ Sq km	3521 Sq km + 104◆ Sq km	3724 Sq km	3412 Sq km +	7278 Sq km	6026 Sq km
iii)	Geophysical Mapping on 1:50,000 (sq. km)	6100 Sq km	6325 Sq km	6075 Sq km	6115 Sq km	6075 Sq km	6075 Sq km	8775 Sq km	4660.50 Sq km
II. Mineral Exploration / Mission-IV									
i)	Large Scale Mapping on 1:125,000/10,000 (sq. km.)	25 Sq km	25 Sq km	20 Sq km	19 Sq km	15 Sq km 5 Sq km (Mineral) 10 Sq km (Others)	3 Sq km -----	140 Sq km	134.10 Sq. km
ii)	Detailed Mapping on 1:1000/2000/5000 scale (sq. km.) Mission-II 1:1000/2000 Mission-IV 1:5000	1.50 Sq km	0.31 Sq km	0.71 Sq km	0.15 Sq km	2.21 Sq km 1.46 Sq km (Mineral) 0.75 Sq km (Others)	3.01 Sq km 1.21 Sq. km 1.80 Sq km	2.81 Sq km Mission-II 1.81 Sq. km Mission-IV 1.75 Sq km	1.110 Sq km 4.40 Sq km
iii)	Traverse Mapping on 1:25 K scale (in L.km) i) Mission-II ii) Mission-IV							205 L. km 30 L.km 175 L.km	195 L.km 33 L.km 162 L.km
iv)	Mission-II Drilling (metre) Mission-IV Additional Drilling (in metre)	3000 m	1333.80 m +335.35 m *	2750 m	1500.70m	1800 m 300 m (Additional)	910.95 m 96.10 m	1300 m 1100 m	727.05 m 736.3 m

* Spillover of F.S. 2006-07

◆ Target of left over item FS 2007-08 (GCM/NR/PHH/2006/003)

+ Item No.GCM/NR/PHH/2008/003 is not taken up by the concerned officer, in this connection enquiry report has been submitted to DG, GSI;

42 Sq km area lies under Action channel of river Beas could not be sampled under item No.GCM/NR/PHH/2208/004

FSP ROLLING PLAN FOR F.S. 2012-13 TO F.S. 2016-17

Mission – I

F.S.	Short Title	Personnel required
Project Regional Geochemical Mapping (P)		
State : UP UK		
2012-13 & 2013-14	Title: Regional Geochemical Mapping of Toposheet no. 54K/7,8,11,12, 63L/1,5,9,13,14,15,16, 13, 54O/12, 54L/12. 63C/8,12,16	6 G
2014-15 & 2015-16	Title: Regional Geochemical Mapping of Toposheet no. 54K/7,8,11,12, 63L/1,5,9,13,14,15,16, 13, 54O/12, 54L/12. 63C/8,12,16	6 G
2016-17	Title: Regional Geochemical Mapping of Toposheet no. 54K/7,8,11,12, 63L/1,5,9,13,14,15,16, 13, 54O/12, 54L/12. 63C/8,12,16	6 G
Project Regional Geochemical Mapping		
State : J&K		
2012-13 & 2013-14	Title: Regional geochemical mapping of Toposheet 43P/1, 43P/10 in Jammu Province and Toposheet 43N/15 in Dras (half sheet) and 52L/9 (half sheet) being in trans- Himalaya.	2 G
2014-15 & 2015-16	Title: Regional geochemical mapping of Toposheet 43P/9 and 52L/9	2 G
2016-17	Title: Regional geochemical mapping of Toposheet 52L/5(half sheet) and 52L/1 Sheet	2 G
State Project: Specialised Thematic Mapping		
State : J&K		
2012-13 to 2016-17	Title: STM studies of marine sedimentary sequence of Karakoram Group and its relationship with Karakoram Granitoid Complex, Shyok-Agham-Shukpa Kunzang area, Leh District, Ladakh, Jammu & Kashmir – on expedition basis.	2 G
2012-13 & 2013-14	Title: STM studies along Udampur – Banihal rail corridor, Udampur Qazigund Rail Line project.	2 G
F.S.	Short Title	Personnel

		required
Project : Specialised Thematic Mapping		
State : P & HP, Chandigarh		
2012-13 to 2016-17	Title: Delineation of lithostratigraphic units of Siwialik Belt in Bilaspur, Una and Solan distt. H.P. & Ropar distt. Punjab.	2 G
2012-13	Title: Specialized Thematic mapping of Upper Krol Formation for tracing of limestone and dolomite bands in Sirmaur distt. of H.P. for their quality assessment for industrial uses.	2 G
2013-14 to 2016-17	Title: Evaluation of structural, metamorphic and tectonic status of the Vaikrita Thrust sheet and its relationship with the Jutogh and Kulu Thrust sheets in Shimla and Sirmaur, district of H.P.	2 G
Project: Specialised Thematic Mapping		
State : Haryana, Faridabad		
2012-13 & 2013-14	Title: Late Quaternary stratigraphy and geomorphic evolution of piedmont and Alluvial plain along the Ghaghar river basin Toposheet no. 53F/ 2, 53B/4, 8, 10,11, 12, 13, 14, 15, 53C/1, 2, 9, 10, 13, 14	2 G
2012-13 to 2014-15	Title: Quaternary geological and environmental investigations of Yamuna river between mountain exit and Hodal township in parts of Haryana and Delhi with a view to develop rejuvenation strategy. Toposheet No. 53F/8, 11, 12, 13, 53G/1,3, 4, 5, 6, 53H/1, 2, 6, 7, 8 12, 54 E/5 , 9	2 G
2012-13 & 2013-14	Title: Structural mapping along Himalayan Frontal Fault in the foothills of Himalaya between Yamuna and Ghaghar Rivers in parts of Panchkula, Ambala and Yamuna Nagar districts, Haryana . Toposheet No. 53B/11, 12, 13, 14, 15, 16, 53F/1, 2, 3, 4, 7, 8, 11,12	2 G
2014-15 to 2016-17	Title: Segregation of basement and intrusive components of the granitoids of Haryana with reference to evolution of North Delhi fold belt. Toposheet No. 53D/4,54A/1,44P/13	2 G
Regional Geochemical Mapping		
State : P & HP		
2012-13 to 2015-16	Title: Regional geochemical mapping of Toposheet no. 53E/8,9,10,11,12,13,14,15 &16	2 G
2016-17	Title: Regional geochemical mapping of Toposheet no 53I/1,2 &3	2 G
Regional Geochemical Mapping		
State : Punjab		
2012-13 & 2013-14	Title: Regional geochemical mapping of Toposheet no 44J/15,16;44N/3,4,7,8 & 44O/1,&5	4 G

F.S.	Short Title	Personnel required
2014-15 & 2015-16	Title: Regional geochemical mapping of Toposheet no 44N/1,2,11,12,5,6,9&10	4 G
2016-17	Title: Regional geochemical mapping of Toposheet no 44N/13,14,15&16	4 G
Project : Specialised Thematic Mapping State : UP-UK		
2012-13 & 2013-14	Specilised Thematic Mapping of part of toposheet no 62C/2 in Pithoragarh district, Uttarakhand	6 G
2012-13 & 2013-14	Specialised Thematic Mapping of Volcano-sedimentary sequence of Bhimtal Formation around Padampur -Dalkandiya area with a view to find out control of base metal mineralization.	6 G
2014-15 & 2015-16	Specialised Thematic Mapping in parts of Mahakoshal Group and Dudhi Granitoid Complex in parts of Sonbhadra and Mirzapur Districts of Uttar Pradesh.	6 G
2016-17	Specialised Thematic Mapping to resolve the discrepancies of discontinuities of the contiguous areas arising during the course of compilation of geological maps of Uttarakhand Himalaya	6 G
2014-15 & 2015-16	Title: Regional geochemical mapping of Toposheet no 44N/1,2,11,12,5,6,9&10	4 G
2016-17	Title: Regional geochemical mapping of Toposheet no 44N/13,14,15&16	4 G
Project : Specialised Thematic Mapping State : UP-UK		
2012-13 & 2013-14	Specilised Thematic Mapping of part of toposheet no 62C/2 in Pithoragarh district, Uttarakhand	6 G
2012-13 & 2013-14	Specialised Thematic Mapping of Volcano-sedimentary sequence of Bhimtal Formation around Padampur -Dalkandiya area with a view to find out control of base metal mineralization.	6 G
2014-15 & 2015-16	Specialised Thematic Mapping in parts of Mahakoshal Group and Dudhi Granitoid Complex in parts of Sonbhadra and Mirzapur Districts of Uttar Pradesh.	6 G
2016-17	Specialised Thematic Mapping to resolve the discrepancies of discontinuities of the contiguous areas arising during the course of compilation of geological maps of Uttarakhand Himalaya	6 G

Mission-II

F.S.	Short Title	Personnel required
State Unit: UP-UK, Lucknow		
FERROUS MINERALS - IRON		
2012-13	Title: Resource evaluation of potentiality of iron and REE in BIF of Bundelkhand Granitic Complex, Lalitpur district, U.P. Toposheet No. 54L/15	2 G
PRECIOUS METALS - GOLD		
2012-13	Title: Investigation for Gold and associated mineralization in Khurra-Pisnari area, Lalitpur, district, U.P. Toposheet No. 54 L/15	2 G
2013-14 2014-15	Title: Investigation for gold mineralisation in the rocks of Mahakoshal group, Bihawa block, Sonbhadra district, U.P. Toposheet No. 63L /15	2 G
2012-13	Title: Investigation for Gold and Basemetal mineralization in Gangolihat area, Pithoragarh District, Uttarakhand. (G3) Toposheets No:62 C/1	2 G
2012-13	Title: Detailed investigation for Gold and Basemetal mineralisation in Lameri-Tilni area, Rudraprayag District, U.K. (G-3) Toposheets Nos: 53 J/15 & N/3	2 G
2013-14 2014-15	Title: Investigation for gold mineralisation in Galpakot area, Nainital distt, Uttarakhand (P II, E I) Toposheets Nos: 53O/15	2 G
NON FERROUS, STRATEGIC /FERTILIZER MINERALS – TUNGSTEN		
2015-16 2016-17	Title: Investigation for tungsten mineralisation in the rocks of Mahakoshal Group, Mahwariya area, Sonbhadra district, U.P. (P-II) Toposheet Nos. 63L/7, 8 and P/4	2 G
2014-15 to 2016-17	Title: Assessment for Gypsum in Gonti-Maletha area, Jhansi district, U.P. Toposheets No: 54 O/1 & 2.	2 G
2013-14 to 2016-17	Title: Investigation for tungsten mineralisation in Jaurasi-Dharapani area, Almora and Chamoli distt, Uttarakhand (P I, P II, EI) Toposheets: 53 O/13	2 G
State Unit: J&K, Jammu		
2012-13 2013-14 2016-17	Title: Investigation for dimension stones with special reference to granites in Gaik-Kiari area and marble in Lukung area Southeast Ladakh, J&K	2 G
2014-15 2015-16	Title: Investigation to assess limestone deposits in Zaskar area and clay deposits around Leh in Ladakh region, J&K for their suitability for manufacture of cement	2 G
F.S.	Short Title	Personnel required

2014-15 2015-16	Title: Appraisal for Tin and Tungsten mineralization in Saser Brangsa area, Karakoram, Ladakh, Jammu and Kashmir	2 G
2013-14 2016-17	Title: Investigation for assessment of quartzite in Parautochthonous Zone in Banjal- Bhund area, Kathua District, Jammu and Kashmir (P-1)	2 G
2012-13	Title: Investigation for lead - zinc mineralization in Sangar-Saro da bas area, Riasi district	2 G
State Unit: HP, Chandigarh		
2012-13 2013-14	Title: Appraisal of Gypsum deposits of Kinnaur and Lahaul & Spiti districts, Himachal Pradesh (On Expedition Basis)	2 G
2014-15	Title: Search for limestone / dolomitic limestone of Krol Belt in the Sirmaur district, Himachal Pradesh	2 G
State Unit: Haryana, Faridabad		
2012-13 2013-14	Title: To find the extension of copper mineralization in the north of Bakrija, Mahendragarh district Haryana.	2 G
2014-15 2015-16 2016-17	Title: To establish geochemical and geophysical anomalies for basemetal mineralisation in Dantal-Binahari-Thanawas, Begopur and Bathota-Ki-Dhani areas, Mahendragarh district Haryana.	2 G
2012-13 to 2016-17	Title: To locate new gypsum occurrences, find their lateral extension in covered areas as well as find their depth persistence in parts of Hissar and Bhiwani districts, Haryana.	2 G

Mission-III

F.S.	Short Title	Personnel required
Geodata Division, NR, Lucknow		
2012-13 2013-14	Title: Preparation of layouts, updation, Changing of existing geometry-ids as per standardized geometry-id of India supplied by CHQ of geological maps (linkage item with M&C Divisions)	2 G
2012-13 to 2016-17	Title: Digitisation of large scale maps on GIS platform for further studies & modeling	1G+1G from respective division
2012-13 to 2016-17	Title: Generation of regional geological guides, geotour maps & educational guides along important routes/highways alongwith relevant metadata (extracted from national geospatial datasets) Rishikesh- Badrinath Section Kathgodam-Almora Section Joshimath-Tapovan route Kalka-Shimla route Jammu-Qazigund route	1G+1G from M&C
2012-13 to 2016-17	Title:). Creation and archival of Regional Geochemical database from current field season 4(b). Collation, compilation and interpretation of data generated through NGCM projects in RDBMS environment	1 G
2012-13 to 2016-17	Title: a) Looking after and supervising the maintenance of LAN, WAN, PORTAL and computer systems in NR. b) Repository of new information gathered through current projects and research c) Assistance to other Divisions and projects. d) Monitoring of video conferencing & IP telephony	2 G
Geoinformatics Division NR, Lucknow		
2012-13 to 2014-15	Title: Creation of theme based database of the geological maps pertaining to degree sheets 54N, 63L, M, P and 62B on four themes: map 50k, drilling, mining and geochemical exploration in Oracle software	
Geodata Division(H) SU:PH& HP,Faridabad		
2012-13	Title: Creation of theme based database of geological maps pertaining to sheet nos 44K,44O, 44P, 53B,C,D, 53F,G,H, 54E of Haryana.	1G+1G (PT)
2013-14 to 2016-17	Title: Managing and providing IT related services to the operation PH&HP office at Faridabad	1G+1G (PT)
2013-14 to 2016-17	Title: Upgrading of Database and uploading of newer data into the data-base and accompanying map digitization	1G+1GP (PT)

2013-14 to 2016-17	Title: Soft Copy conversion of 1:25,000 scale compiled geological maps pertaining to Haryana	1G
2013-14 to 2016-17	Title: Collection of all the bore hole data of the Haryana, Georeferencing and studying of the borehole data. Stastical treatment of the data for pattern recognition. using GIS Analysis & Modelling techniques	1G (PT)
2013-14 to 2016-17	Title: Study of Delhi- Rohtak depression using GIS analytic techniques Creation of DEM, Study of Stereo satellite data, Digitisation of various thematic maps,	
Geodata Division SU: J&K, Jammu		
2012-13	Title: Creation and Archival of Regional Geochemical Mapping 52L/13, Leh district	1G+1D
2013-14	Title: Creation and Archival of Regional Geochemical Mapping 43L/13, Jammu district	1G+1D
2014-15	Title: Creation and Archival of Regional Geochemical Mapping 43L/14, Jammu district.	1G+1D
2015-16	Title: Creation and Archival of Regional Geochemical Mapping 43P/2, Samba district	1G+1D
2016-17	Title: Creation and Archival of Regional Geochemical Mapping 43P/6, Samba district.	1G+1D
M&C Division NR, Lucknow		
2012-13 to 2016-17	Title: Compilation of District Resource maps (restricted area) of Northern Region on scale 1:2,50,000 (Total target-64 districts, out of which 2 DRM's will be compiled during 2010-12	2G
2012-13	Title: Updation of already loaded geological map layers in 1:50 K in GSI Portal (Linkage Item with Geodata Division)	2G (PT)
2012-13 to 2016-17	Title: Maintenace and issue of maps/toposheets, ferroprinting and drawing work	2G (PT)
M&C Division SU: P&HP, Chandigarh		
2012-13	Title: Compilation of Krol belt of H.P. covering parts of degree sheet no. 53F(53F/5,6,9,10,14)	1G+1D
2013-14	Title: Compilation of Siwalik belt of H.P. covering parts of degree sheet no. 43P and 52D	1G+1D
2014-15	Title: Compilation of Siwalik belt of H.P. covering parts of degree sheet no. 53A	1G+1D
2015-16	Title: Comparison and checking of digitized geological maps on 1:25000 scale of degree sheet no. 53F(53F/5,6,9,10,14)	1G+1D
2016-17	Title: Comparison and checking of digitized geological maps on 1:25000 scale of degree sheet no. 43P, 52D and 53A	1G+1D
M&C Division SU: P&HP, Faridabad		
2012-13 to	Title: Finalisation of geological map layers in 1:50K and uploading in	1G

2016-17	GSI Portal (link item with NR & CHQ).	
2012-13 to 2016-17	1. To prepare portal ready finalized Layout as per the standard format of CHQ. 2. To cater all types of Cartographic work of various Divisions & projects of OP: P,H & H.P., issue of maps/topo sheets, maintenance of aerial photographs and imageries etc. 3. Assistance to other divisions/projects in interpretation of aerial photographs & imageries.	1G
M&C Division SU: J&K, Jammu		
2012-13 to 2016-17	Title: 1.Catering of all types of cartographic/ drawing works, maintenance and issue of maps, toposheets etc. 2. Compilation of district resource maps of J & K (Scale 1:25,00,000	1G

MISSION IV

F.S.	Short Title	Personnel required
Earthquake Geology Division, Lucknow		
2012-13	Title: Seismic-microzonation of cities falling in Zone –IV Phase –II , of Jalandhar City (South)- Continued Item	2 geoscientists
2014-15 2015-16	Title: Seismic-microzonation of cities falling in Zone –IV – Gorakhpur , Eastern U.P.)	2 geoscientists
2014-15 2015-16	Title: Seismic-microzonation of cities falling in Zone –IV – Agra Agglomeration	2 geoscientists
2016-17	Title: Seismic-microzonation of cities falling in Zone –IV – Moradabad City	2 geoscientists
2016-17	Title: Seismic-microzonation of cities falling in Zone –IV – Gurgaon and Panipat	2 geoscientists
Palaeontology Division, NR, Lucknow		
2012-13	Title: Detailed studies of Neoproterozoic and Early Cambrian Eggs/Embryos from Chambaghat Formation Krol Group and basal part of Tal Group in Lesser Himalaya of Himachal and Uttarakhand. (Continued item)	2 G (PT)
2012-13	Title: Search for fossils in Boulder Slate Formation of Lesser Himalaya, Mussoorie syncline Uttarakhand. (In collaboration with BSIP, Lucknow)	2 G (PT)
2013-14	Title: Search for fossils in Sincha Formation of Parautchthonous Belt, J&K. and its regional correlation. (In collaboration with BSIP, Lucknow)	2 G (PT)
2014-15	Title: Search for fossils in Kharikot Formation of Sirban Group, Jammu Lesser Himalaya and its regional correlation. (In collaboration with BSIP, Lucknow)	2 G (PT)
2012-13 2013-14	Title: Delineation of Lithostratigraphic units of Siwalik Belts in Uttarakhand, H.P. & Haryana (Linkage item)	1 G (PT)
2012-13 to 2014-15	Title: Morphological and Ultrastructural studies with micro-chemical analysis of samples / fossils with the help of SEM – EDX.	2 G (PT)
2012-13 to 2016-17	Title: Identification of fossils samples submitted by officers and guidance to field officers, Curatorial work, and maintenance of Palaeontological gallery of NR Museum (in collaboration with Petrology Division, NR) and technical supervision of Siwalik Fossil Park, Saketi, H.P. in collaboration with Op. P, H & H.P.	3 G (PT)
Engineering Geology Division SU: J&K, Jammu		
2012-13 to 2016-17	Title: Geotechnical evaluation of water resource project in J&K.	
2012-13 to 2016-17	Title: Geotechnical evaluation of communication projects in J&K.	
2012-13 to 2016-17	Title: Geotechnical investigation of Katra – Qazigund Rail Line project in J&K	

2012-13 to 2016-17	Title: Geotechnical investigation of miscellaneous Projects in J&K.	
2012-13 to 2016-17	Title: Geotechnical investigation of the landslides in the Jammu and Kashmir State and Updation of Published Inventory of Landslides of North Western Himalayas.	
Engineering Geology Division, NR, Lucknow		
2012-13 to 2016-17	Title: Geotechnical Investigations of water resource projects in Satluj and Pabbar valleys, Himachal Pradesh (Feasibility/DPR stage, Pre-construction stage and Construction stage geotechnical investigations) Luhri HE Project Chirgaon-Majhgaon HE Project Sawra-Kuddu HE Project Rampur HE Project	2 G
Engineering Geology Division, SU: UP-UK, Lucknow		
2012-13	Title: Geotechnical investigations of water resources development project: Kurar Dam Project, Jhansi, UP Maro Tank Project, Chitrakoot, UP Panhai Tank Project, Chitrakoot, UP	
2012-13 to 2016-17	Title: Geotechnical investigations of water resources development project: Paricha Barrage Project, District Jhansi, UP Arjun Sahayak Pariyojana, Mahoba, UP Kanhar Dam Project, Sonbhadra, UP Jakhol –Sankri HE Project, Uttarkashi, Uttarakhand	
2012-13 to 2015-16	Title: Geotechnical investigations of water resources development project: Bhaoni Dam Project, Lalitpur, UP	
2012-13 to 2013-14	Title: Geotechnical investigations of water resources development project: Bhaunrat Dam Project, Lalitpur UP Bansagar Project, Mirzapur UP Lahchura Dam Project, Mahoba, UP	
2012-13 to 2014-15	Title: Geotechnical investigations of water resources development project: Pahari Dam Project, Jhansi UP	
Lanslide Hazard Zonation Project NR, Lucknow		
2012-13 to 2016-17	Title: Preparation of Landslide Hazard Zonation map on macro scale(1:50,000)in parts of NW Himalyas to cover the gap areas	2 G
2012-13 to 2016-17	Title: Collaborative work with DST, Uttarakhand for district landslide hazard zonation mapping on Macro scale in the remaining part of Bageshwar and then in Champavat districts. The monitoring and development of early warning system at selected	2 G

	sites. Communication / pilgrimage routes like Leh-Manali in H.P & J&K and Ghansali- Ghuttu section and Tanakpur-Tawaghat section in Uttarakhand.	
2012-13 to 2016-17	Title: On request basis from different agencies like NDMA, BRO and the state governments geotechnical investigations and first information reports on landslides in Uttarakhand, Himachal Pradesh, Punjab, Haryana and Jammu & Kashmir state will be taken up as and when required during next five years.	2 G
Luminescence Dating Laboratory SU: P&H, Faridabad		
2012-13 to 2014-15	Title: Reconstruction of the Glacial history and monsoon evolution in the Ganga-Yamuna Valley Uttarakhand Himalayas and Development of OSL dating protocol for Himalayan sediments (In collaboration with Risoe National Laboratory, Rosekile, Denmark)	1+1G (PT)
2014-15 to 2016-17	Title: Landscape evolution of the Haryana Plains: Role and timing of geological agencies and palaeoclimatic fluctuations.	2 G
2012-13 to 2016-17	Title: Collaborative items with different divisions/ Missions of GSI towards providing OSL ages to their research and filed items and modernization of laboratory capabilities. (Service item)	1+1 G (PT)
EPMA & XRD Laboratory SU: P&H, Faridabad		
2012-13 to 2014-15	Title: Preparation of monazite and zircon age reference standards for chemical dating using electron probe from samples collected from different known Indian geological domains.	2 G
2013-14 to 2014-15	Title: Comparative study of magma chamber process and felsic-mafic magma interaction in Palaeozoic Mandi and Champawat Granites of Western Himalaya.	2 G
2014-15 to 2016-17	Title: Study of metamorphic evolution of the central crystalline rocks vis a vis the crystalline rocks thrust southwards along the MCT and occurring as Klippe over the Lesser Himalaya.	2 G
2012-13 to 2013-14	Title: Mineralogical evolution of the sediments of Siwalik Group from the parts of Haryana: An implication to the provenance and palaeoclimatological studies.	2 G
Project Environmental Geology SU; UP-UK, Lucknow		
2012-13 to 2016-17	Title: Study of geochemical environment in rain water and its changing pattern both with time and space	
2012-13 to 2016-17	Title: Study of hazardous element concentration in ground water in parts of Uttar Pradesh	
2012-13 to 2016-17	Title: Paleoenvironmental studies of Pliocene and Holocene sediments in parts of UP.	
Project Environmental Geology SU; PH&HP, Chandigarh		
2012-13 to 2016-17	Title: Geoenvironmental appraisal of Groundwater of Mansa, Bhatinda, Amritsar, Faridkot and Ferozpur districts Punjab and Ambala, Fatehabad and Karnal districts, Haryana, on the basis of Heavy Metal Study	

Project Quaternary Geology NR, Lucknow		
2012-13 to 2016-17	Title: Interbasinal correlation of Quaternary deposits of N-S flowing major river system in the southern part of Himalayas, Uttrakhand	1G
Glaciology Division NR, Lucknow		
2012-13 to 2016-17	Title: Monitoring Climate-Change through the Recession of Glaciers: a). Monitoring of glaciers previously surveyed by GSI b). Monitoring of glaciers for generation of baseline data	
2012-13 to 2016-17	Title: Long-term Mass Balance measurements of a Selected Glacier a). Monitoring of Hamtah glacier previously studied by GSI b). Monitoring of Mass Balance of a new glacier	
2012-13 to 2016-17	Title: Glacier Inventory Updating	
2012-13 to 2016-17	Title: Digitisation of archived maps of Glaciology division (collaborative item with Geodata Division, NR	
2012-13 to 2016-17	Title: Collaborative work with other national Institutions	

ANNEXURE-3 A

Financial Outlay and Expenditure during XI Plan, Financial Year 2007-08, 2008-09, 2009-10, 2010-2011 & 2011-12

Scheme-wise financial performance during financial year 2007-08 and 2008-09 of Northern Region is given below whereas the revised estimate for financial year 2009-10 and budget estimate for financial year 2010-11 are presented in Table-II.

(Rs. In lakhs)

S. No.	Name of the Schemes	Financial Year 2007-08		Financial Year 2008-09	
		Approved Outlay (RE)	Actual Expend.	Approved Outlay (BE)	Actual Expend.
1.	Survey & Mapping	29.00	26.48	34.50	20.83
2.	Mineral Exploration	94.00	84.64	105.00	130.29
3.	Specialised Investigation	26.00	18.66	34.00	26.77
4.	Research & Development & other Exploration	86.00	58.37	98.25	93.05
5.	Information Dissemination	70.00	51.89	90.00	34.03
6.	Human Resources Development	2250.00	2432.59	3500.00	3634.74
7.	Modernisation & Replacement	75.00	65.96	90.00	93.77
TOTAL		2930.00	2738.59	3951.00	4033.48

ANNEXURE – 3 A

REVISED ESTIMATAE 2010- 11 AND BUDGET ESTIMATE 2011-12 IN RESPECT OF GSI, NR, LUCKNOW (NON-PLAN)

	Expenditure 2009-10		Budget 2010-11	Grant	Actual upto Sept.'2010	Expenditure	Anticipated Expn.1.10.2010- 31.03.2011		Total RE		Budget Estimate 2011-12		Reasons for ex- cess/saving with full justification in relation to expendit- ure 2009-10	
									Col. (5+7)	Col. (6+8)				
Head/Sub-Head 2853	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Direction & Admn	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P	NP	P
Salary	4698.60	-	3403.79	-	2425.49	-	1774.51	-	4200.00	-	4500.00	-		
Wages	42.00	-	27.75	-	24.41	-	25.59	-	50.00	-	55.00	-		
O.T.A.	5.14	-	3.79	-	2.76	-	2.74	-	5.50	-	6.00	-		
Medical	73.08	-	49.00	-	44.12	-	30.88	-	75.00	-	70.00	-		
D.T.E.	9.02	159.13	-	157.40	-	150.84	-	149.16	-	300.00	-	325.00		
F.T.E.	0.04	-	-	0.09	-	-	-	0.18	-	0.18	-	-		
O.E(C)	-	-	-	-	-	-	-	-	-	-	-	-		
O.E.(V)	100.63	59.07	65.39	39.07	59.36	39.07	90.64	10.93	150.00	50.00	175.00	50.00		
R.R.T.	25.13	10.33	17.22	6.45	16.28	3.12	4.22	3.33	20.50	6.45	30.00	5.00		
O.A.E.	8.06	-	2.50	-	1.06	-	3.94	-	5.00	-	7.50	-		
Prof. Service	1.90	1.97	1.31	1.32	1.04	1.31	0.96	0.64	2.00	2.00	2.50	2.50		
TOTAL=	4963.60	230.50	3570.75	204.33	2574.52	194.34	1933.48	164.24	4508.00	358.63	4846.00	382.50		
Other Expn.														
Supply & Material	-	6.12	-	4.15	-	3.19	-	2.81	-	6.00	-	7.50		
Clothing & Tentage	-	4.83	-	22.00	-	-	-	22.00	-	22.00	-	25.00		
Adv. & Pub.	-	1.16	-	0.50	-	0.11	-	1.39	-	1.50	-	2.00		
Minor works	-	57.49	-	138.03	-	111.97	-	48.03	-	160.00	-	50.00		
Total =	-	69.60	-	164.68	-	115.27	-	74.23	-	189.50	-	84.50		
4853 ACC.Cap.Assets														
Moter Vehicle	-	14.31	-	11.28	-	5.63	-	9.37	-	15.00	-	17.50		
Mach. & Equip.	-	339.74	-	240.00	-	210.84	-	64.16	-	275.00	-	100.00		
TOTAL	-	354.05	-	251.28	-	216.47	-	73.53	-	290.00	-	117.50		

REVISED ESTIMATES 2010-11 AND BUDGET ESTIMATES 2011-12 FOR NORTHERN REGION, LUCKNOW

Sub-Head	Exp. 2009-10		Budget Grant 2010-11		Actual Exp. upto Sep, 10		Anticipated Exp. 01.10.2010 to 31.03.2011		Total R.E Col. Col. (5 + 7) (6 + 8)		B.E. 2011-12		Reasons for Excess/ Savings with full justification	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2853	1	2	3	4	5	6	7	8	9	10	11	12	13	14
M - I	N-Plan	Plan	N-Plan	Plan	N-Plan	Plan	N-Plan	Plan	N-Plan	Plan	N-Plan	Plan		
Surv. & Map.														
Wages	-	8.81	-	14	-	6.86	-	11.14	-	18	-	25		
P. O. L.	-	8.2	-	14	-	4.67	-	13.33	-	18	-	20		
Other Charges	-	9.3	-	148	-	2.06	-	17.94	-	20	-	25	Budget grant is abnormally higher than the demand	
Total		26.31		176		13.59		42.41		56		70		
M - II														
Min. Explrn.														
Wages	-	61.38	-	55	-	28.44	-	31.56	-	60	-	65		
P. O. L.	-	42.41	-	52	-	24.36	-	30.64	-	55	-	60		
Other Charges	-	16.33	-	38	-	15.03	-	22.97	-	38	-	40		
Total		120.12		145		67.83		85.17		153		165		
M - III														
Other. Exp.														
Publication	-	7.08	-	7.5	-	1.66	-	5.84	-	7.5	-	8		
O.A.E.	-	63.84	-	40.5	-	9.23	-	70.77	-	80	-	60		
IT (OAE)	-	40.32	-	66	-	11.17	-	54.83	-	66	-	75		
Total		111.24		114		22.06		131.44		153.5		143		
M - IV (A)														
Res. & Dev.														
Wages	-	1.07	-	1	-	0.07	-	1.93	-	2	-	3		
Supp. & Mat.	-	33.55	-	30	-	20.68	-	24.32	-	45	-	50		
P. O. L.	-	0.31	-	0.5	-	0	-	1	-	1	-	2		
Other Charges	-	26.62	-	25	-	12.87	-	17.13	-	30	-	35		
Total		61.55		56.5		33.62		44.38		78		90		
M - IV (B)														
Investigation														
Wages	-	11.74	-	15	-	11.47	-	3.53	-	15	-	20		
P. O. L.	-	7.52	-	10	-	5.72	-	4.28	-	10	-	15		
Other Charges	-	6.29	-	6.5	-	5.97	-	1.53	-	7.5	-	10		
Total		25.55		31.5		23.16		9.34		32.5		45		
ANT (OC)		6.29		10		3.41		8.59		12		15		
M - V														
Training														
O.A.E.	-	0	-	9	-	2.66	-	12.34	-	15	-	25		

**STATEMENT SHOWING THE MONTHLY AND PROGRESSIVE PLAN EXPENDITURE FIGURES
FOR THE MONTH SEPT 2011 IN RESPECT OF THE NORTHERN REGION**

P L A N

(RUPEES IN LAKHS)

Code No.	Minor head/Sub-head	Allocation of Budget Grant 2011-12			Progressive Exp. upto the	Target for the month	Expenditure incurred during the month	Progressive Exp. upto the end of the Month	Balance
		On 1 st of month	Changes during the month (+/-)	On last day of Month (1+2)	Previous month			(4 + 6)	(3 - 7)
		1	2	3	4	5	6	7	8
2853	-Non-Ferrous Mining and Metallurgical Industries								
	(Major Head)								
01	-Geological Survey of India								
	(Sub-Major Head)								
01.001	-Direction and Administration (allocation directly from CHQ to the Regions)								
01	- Administrative Support								
01.00.01	-Salaries	150	0	150	0	0	147.37	147.37	2.63
01.00.11	-Domestic Travel Expenses	182.04	0	182.04	148.32	20	17.34	165.66	16.38
01.00.12	-Foreign Travel Expenses	0.14	0	0.14	0.14	0	0	0.14	0
01.00.13	-Office Expenses - Voted	79.76	0	79.76	56.79	0	9.79	66.58	13.18
01.00.14	-Rent, Rates, Taxes	5.43	5	10.43	4.92	0	0	4.92	5.51
01.00.28	-Professional Services	1.12	0	1.12	0.23	0	0.86	1.09	0.03
2853.01.001	Total-Direction & Administration	418.49	5	423.49	357.77	357.77	175.36	385.76	37.73

(RUPEES IN LAKHS)

ANNEXURE-3B

**STATEMENT SHOWING THE MONTHLY AND PROGRESSIVE EXPENDITURE FIGURES
FOR THE MONTH OF SEP 2011 IN RESPECT OF THE NORTHERN REGION, Lucknow
NON-PLAN**

(RUPEES IN LAKHS)

Code No.	Minor head/Sub-head	Allocation of Budget Grant 2011-12			Progressive Exp. upto the previ- ous month	Expenditure incurred during the month	Progressive Exp. upto the end of the Month	
		On 1 st of month	Changes during the month (+/-)	On last day of Month				
2853	-Non-Ferrous Mining and							
	Metallurgical Industries							
	(Major Head)							
01	-Geological Survey of India							
	(Sub-Major Head)							
01.001	-Direction and Administration							
	(allocation directly from CHQ to the Regions							
01	- Administrative Support							
01.00.01	-Salaries	2963.51	0	2963.51	2102.84	225.28	2328.12	
01.00.02	-Wages	25.35	0	25.35	23.22	0.74	23.96	

ANNEXURE-3C

**SCHEME-WISE, MONTH-WISE DISTRIBUTION OF APPROVED PLAN
FUNDS AND ACTUAL EXPENDITURE FOR 2011-12**

	SCHEME	FY 2011-12	
		Approved Outlay	Target / Actual Expenditure Upto September, 2011
1.	Survey & Mapping	62	32.90
2.	Mineral Exploration	95	35.26
3.	Specialised Investigation	38	32.55
4.	R&D and Other Explora- tion	56.25	31.48
5.	Information Dissemination	103	82.56
6.	Human Research and De- velopment	15	9.07
7.	Modernisation and Re- placement	0	0
8.	Construction	56.47	49.92
	TOTAL	425.72	273.74

ANNEXURE- 3 D

STATUS OF ECS IMPLEMENATION IN GSI, NR BASED OFFICES (SEPTEMBER 2011)

<i>Sl No.</i>	<i>Name of PAO/HOO Office</i>	<i>No Of Employ- ees covered under ECS</i>	<i>No Of Employ- ees not covered under ECS</i>
1	NRO Hq Lucknow (PAO Lucknow)	408	06
2	SU: UP&UK Lucknow (PAO Lucknow)	88	01
3	Geophysical Dn.(PAO Lucknow)	52	2 - Newly joined officers
4	Engg. Services Dn. Lucknow (PAO Lucknow)	124	22 (Remote drilling Op).
5	SU: J&K Jammu Office, Jammu& Kashmir (PAO Lucknow)	62	---
6	SU: P& HP, Chandigarh (PAO Lucknow)	68	02
7	SU: UP&UK, EG Dehradun (PAO Lucknow)	26	---
8	SU: H Faridabad (PAO Delhi)	94	---

MISSION WISE PRORATA RCA EXPENDITURE IN DIFFERENT PROJECTS VIS-À-VIS TARGET AND ACHIEVEMENTS

Sl.No.	FSP Item No.	Name of Field Officers	Targets	Achievements	Field Days	Total Exp.	Prorata Target
1.	STM/NR/UPUK/2009/001	Pankaj Saini Arindam Roy A.C. Patra S.R. Mishra	STM – 225 Sq km	STM – 250 Sq km	316 days	75,479.00	278.00
2.	STM/NR/UPUK/2010/001	Vijay Bhagat Arun Kumar R. Saraswat	STM – 300 Sq km	STM – 313 Sq km	289 days	1,53,362.00	303.00
3.	STM/NR/UPUK/2010/002	Shailendra Singh Pratibha Singh Nathu Singh Suman Das	STM -400* Sq km *revised	STM -325 Sq km	335 days	1,57,385.00	233.00
	Linkage item (Petrology Division)	G.S. Agarwal	PS- 50 Nos.	PS-45 Nos.	25 days	11,562.00	413.00
4.	STM/NR/HQ/2010/003	Bhriugu Shankar Dinesh Singh Chauhan	STM – 300 Sq km	STM- 285 Sq km	226 days	77,080.00	347.00
5.	STM/NR/PHH/2010/004	Rajinder Kumar Hemant Kumar	STM – 300 Sq km	STM – 320 Sq km	234 days	1,43,790.00	489.00
6.	STM/NR/PHH/2009/001	N.S.Nayyar D.R. Thapa	STM -115 Sq km	STM – 87 Sq km	232 days	1,19,550.00	117.00

7.	STM/NR/PHH/2010/005	S. Kumbhkarni Shyam S. Singh C. Bhagat Aparna Shukla Vipina P.V. Milan K. Sharma	STM – 300 Sq km	STM- 220 Sq	242 days	96,993.00	572.00
8.	GCM/NR/UPUK/2010/007	C.H.Durga Rao V.P.Gaur N. Surdas Abhijit Sarkar	GCM -1050 Sq km	GCM- 705 Sq km	278 days	1,49,060.00	536.19
9.	GCM/NR/UPUK/2010/009* * Additional Item taken up w.e.f June 2011	V.P.Gaur Sulal N.L Archana K.G. A.M. Hikare	GCM – 1440 Sq km	GCM – 210Sq km	143 days	66,439.00	464.61
10.	GCM/NR/UPUK/2010/008	D.K.Soni Rajneesh Mishra M. Rogi Bala Sarita Tirkey N Surdas S.K. Sharma S Bhaumik	GCM – 1350 Sq km	GCM – 1340 Sq km	519 days	1,40,880.00	271.45
11.	GCM/NR/PHH/2009/001	Sanjay Wahi Priyanka Rekha Rani	GCM – 1340 Sq km	GCM- 846 Sq km	295 days	2,22,621.00	754.65
12.	GCM/NR/PHH/2008/003	P.S.Sethi R. Laishram S. Pachpor	GCM- 1144 Sq km	GCM 704 Sq km covered by two parties.	371 days	2,16,324.00	583.08
13.	GCM/NR/PHH/2010/009 (Toposheet Nos.53B/10 & 14)	Ravneet Kaur Ahluwalia Tarsam Kumar S.P. Rout Nivedita Kandpal	GCM- 1050 Sq km	GCM- 1001 Sq km covered by two parties in different toposheets	355 days	2,30,584.00	650.29

14.	GCM/NR/JK/2010/010 (TS No. 43P/2)	Arun Dev Dev Tanu Das	GCM- 1344 Sq km	GCM- 1220 Sq km covered by two parties in different toposheets	547 days	1,53,424.00	280.48
15.	GCM/NR/JK/2010/010 (TS No. 43P/6)	Deshraj Trivedi Gladson Bage					
16.	GPM/NR/HQ/2010/011	A. Zahidi A.K.Singh A Saha	GPM- 2700 Sq km	1702.5 Sq km	175 days	2,05,315.00	1173.23
17.	GPM/NR/HQ/2010/012	M.K.Rai Om Prakash P. Sharma	GPM- 2700 Sq km	1590 Sq km	217 days	2,35,542.00	1085.45
18.	GPM/NR/HQ/2009/001	Mahendra Singh D. Bhattacharya C.S.Verma	GPM- 2700 Sq km	1368 Sq km	191 days	2,27,620.00	1191.73
19.	ME/NR/UPUK/2010/014	M.A.Khan A.K. Murmu Minakshi Sahu A. Niranjana Sangeeta Gupta	LSM -75 Sq km	88 Sq km	418 days	1,70,962.00	409.00
	Linkage item (Project:Geophy)	R.K. Mishra R.P. Singh Praveen Sharma	10 L km	Target achieved	210 days	170,468.00	811.75
20.	ME/NR/UPUK/2010/015	P.S.Mishra S. Balakrishnan Abhishek Anand Arndam Das	LSM- 5 Sq km	6.1 Sq km	449 days	2,90,335.00	646.63
21.	ME/NR/PHH/2010/016	R.S. Rajawat J.Satheesh Kumar B. Mishra	DM- 0.2 Sq km	0.20 Sq km	247 days	2,11,230.00	855.18

22.	ME/NR/PHH/2010/017	R.S. Rajawat J.Satheesh Kumar B.Mishra	DM- 0.3 Sq km LSM-60 Sq km	0.3 Sq km 40 Sq km	108 days	1,63,477.00	1513.68
23.	MIP/NR/PHH/2009/001	Bhupender Singh Girdhari Das Tomoghno Ghosh Mayukhee Ghosh	DM- 0.5 Sq km TM- 20 L km	0.31 Sq km 23 L km	212 days	1,24,851.00	588.92
24.	MIP/NR/JK/2009/001	Sanjay Bharti Nagendra Gautam	DM-0.21 Sq km	0.2 Sq km	258 days	70,804.00	274.43
25.	STM/NR/JK/2010/006	Nirmal Gujjar	STM – 200 Sq km	STM – 227 Sq km	140 days	1,58,700.00	1133.57
26.	MIP/NR/JK/2009/002	Satya Prakash S.K. Gehlot	DM- 0.6 Sq km TM – 10 L km	0.1 Sq km 10 L km	191 days	67,223.00	351.95
27.	SER/NR/HQ/2010/007	S.K. Singh Amar Singh R.P. Singh M. Chauhan	Geophysical logging of BH – As per requirement	-	22 days	89,732.00	4078.73
28.	EG/C/NR/HQ/2010/028	V. S. Yadav Vinod Kumar	-	-	148 days	82,749.00	559.11
29.	EG/C/PHH/2010/029	Pradeep Singh (PT)	-	-	36 days	47,067.00	1307.42
30.	SEI/NR/HQ/2009/001	G.C. Kandpal K.C. Joshi	Reg.l survey -360 Sq km	360 Sq km	140 days	42,328.00	302.34
31.	SEI/NR/HQ/2010/036	D.D.Joshi A. Srivastava	TM- 125 L km	TM- 122 L. km	156 days	57,649.00	369.54
32.	ENV/NR/UPUK/2010/037	Mohd. Fahim M.L. Yadav Surendra Atal	Regional study of distribution of arsenic in	750 Sq km	201 days	37,839.00	188.25

			groundwater 1000 Sq km				
33.	RP/NR/UPUK/2009/001	Manoj Shukla	Study of sections – 5 section TL SMPL – 10 Nos.	5 – section TL SMPL – 10 Nos.	84 days	78,101.00	929.77
34.	RP/NR/HQ/2009/001	R.S.Chandel Shambhu Nath	Sec. Meas.- 3 Fossils Collection – 20 Nos.	Sec. Meas.- 3 Fossils Collection – 60 Nos.	24 days 20 days	38,381.00	468.06
35.	RP/NR/HQ/2010/040	S. Shome Shambhu Nath	Sec. Meas.- 4 SMPL Collection – 30 Nos.	Sec. Meas.- 5 SMPL Collection – 33 Nos.	32 days	17257.00	539..28
36.	SER/NR/HQ/2010/040 (To prepare Geotechnical map of Rae Barely)	R.K. Sanwal Arpita Pankaj Anil Kumar	Collection of data as requirement.	-	34 days	28,815.00	847.50
37.	LHZ/NR/HQ/2009/001	Harish Kumar V.K. Sharma	-	-	36 days	9,559.00	265.53
38.	LHZ/NR/HQ/2010/035	Pankaj Kumar V.K. Sharma	-	-	20 days	25,282.00	1264.10
39.	SER/NR/HQ/2010/021	V.K. Sharma Harish Kumar Pankaj Kumar	-	-	32 days	30,085.00	940.16
40.	NR/PHH/2008/002	S.A.I. Mujitaba Sanjeev Bhattacharya	Sec. meas. – 23 OSL – 57 nos	Sec. meas. – 27 OSL – 43 nos	63 days	36,707.00	582.65
41.	ENV/NR/UPUK/2009/001	Brijesh Kumar	TM – 50 L km	TM –40 L km	85 days	1,02,761.00	1208.95

ANNEXURE-5

PROGRESS & PENDENCY REPORT OF CHEMICAL ANALYSES OF NGCM SAMPLES, GSI,NR, LKO

Sl.No	Item	Particular															
1	Machine Capacity In the Region [nos of samples] per month	Pkg.A		Pkg.B	Pkg.C		Pkg.D		Pkg.E		Pkg.F		Pkg.G		Pkg.H		Pkg.I
		400		200	800		300/150		250		400		600		600		-
2	Capability to analyze in the Region [nos of samples] per month	Pkg.A		Pkg.B	Pkg.C		Pkg.D		Pkg.E		Pkg.F		Pkg.G		Pkg.H		Pkg.I
		400		200	1600		375		1000		400		600		600		-
3	Total Nos. of Samples Collected, and Pendency upto Field Season 2009-10 [since beginning of the NGCM program]	Month	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb	Mar 2010	Apr	May	Jun 2010	Jul	Aug	Sep 2010	Total		
		Collected	@														
		Submitted to lab.	@@ 1388 1+19 =139 00	nil	nil	nil	nil	20	nil	34	nil	25	280	419	14678		

		Analyses Reported [upto the month of:-] [upto Field Season 2009-10]													
		Pkg.A	1186 3#+3 38=1 2201	142	134	100	186	211	125	97	100	46	200	139	13681
		Pkg.B	12903	-	-	-	-	-	-	-	-	-	-	100	13003
		Pkg.C	13153+ 202=13 355	24	-	-	-	-	-	-	122	-	52	120	13673
		Pkg.D	12513+ 180=12 693	140	110	62	10	40	40	40	20	23	52	129	13359
		Pkg.E	8131+3 78=850 9	411	576	458	366	262	252	299	583	433	216	357	12722
		Pkg.F	5020+1 39=515 9	545	194	142	134	124	159	246	76	444	-	-	7223
		Pkg.G	0					262	615	618	348	-	-	722	2565
		Pkg.H	319					130		93	1008	1008	1067	17	3642
		Pkg.I	0												0

		Pendency [upto the end of the month:-] [upto end of Field Season 2009-10]													
		<i>Pkg.A</i>	*1699	1557	1423	1323	1137	946	821	758	658	637	717	997	
		<i>Pkg.B</i>	997	997	997	997	997	1017	1017	1051	1051	1076	1356	1675	
		<i>Pkg.C</i>	545	521	521	521	521	541	541	575	453	478	706	1005	
		<i>Pkg.D</i>	1207	1067	957	895	885	865	825	819	799	801	1029	1319	
		<i>Pkg.E</i>	5391	4980	4404	3946	3580	3338	3086	2821	2238	1830	1894	1956	
		<i>Pkg.F</i>	8741	8196	8002	7860	7726	7622	7463	7251	7175	6756	7036	7455	
		<i>Pkg.G</i>	11450	11450	11450	11450	11450	11208	10593	10009	9661	9686	9966	9663	
		<i>Pkg.H</i>	13581	13581	13581	13581	13581	13471	13471	13412	12404	11421	10634	11036	
		<i>Pkg.I</i>	13675	13675	13675	13675	13675	13695	13695	13729	13729	13754	14034	14453	

4	Total Nos. of Samples collected/analyzed during the current Field Season 2010-12	Month	Oct 2010	Nov	Dec	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	--
		Target													
		Collected													
		Submitted to lab	125	92	2220 for pack-G(returned from CHQ)		225 for pack-I(re-included)	115 for pack-H(re-included)	110	66 +248 for pack-C (re-included)	72	524	nil	nil	
		Analyses Reported ,during the month of-													
		<i>Pkg.A</i>	39	59	139	196	65	211	-	80	190	178	121	112	1390
		<i>Pkg.B</i>	48	146	161	96	-	88	102	384	-	110	200	219	1554
		<i>Pkg.C</i>	106	-	-	-	-	100	100	132	102	98	-	210	848
		<i>Pkg.D</i>	169	64	148	10	-	84	291	310	82	232	-	116	1506
		<i>Pkg.E</i>	345	199	296	220	176	-	42	82	225	145	195	252	2177

		<i>Pkg.F</i>	436	475	351	332	1079	196 2	962	427	338	509	677	264	7832
		<i>Pkg.G</i>	200	694	628	465	-		1006	1009	515	-	-	281	4798
		<i>Pkg.H</i>		1296		1552	1289(Lko)+ 2518(Analys ed at CHQ & JAIPU R)	208 (Lk o) +11 36(Ana lyse d at HY DE RA BA D)	-	994	151	81	38	676+490(analysed by Jaipur)	10429
		<i>Pkg.I</i>	-	-	-	-	-	-	-	-	-	-	-	-	
		Pendency [upto the end of the month:-]													
		<i>Pkg.A</i>	1083	1116	977	781	716	505	615	601	483	829	708	596	
		<i>Pkg.B</i>	1752	1698	1537	1441	1441	135 3	1361	1043	1115	1529	1329	1110	
		<i>Pkg.C</i>	1024	1116	1116	1116	1116	101 6	1026	1208	1178	1604	1604	1394	
		<i>Pkg.D</i>	1275	1303	1155	1145	1145	106 1	880	636	626	918	918	802	

		<i>Pkg.E</i>	1736	1629	1333	1113	937	937	1005	989	836	1215	1020	768	
		<i>Pkg.F</i>	7144	6761	6410	6078	4999	303 7	2185	1824	1558	1573	896	632	
		<i>Pkg.G</i>	9588	8986	10578	10113	10113	101 13	9217	8274	7831*	6875	6875	6594	
		<i>Pkg.H</i>	11161	9957	9957	8405	4598	325 4	3364	2436	2357	2800	2762	1596	
		<i>Pkg.I</i>	14578	14670	14670	14670	14895	148 95	15005	15071	15143	15667	15667	15667	

*1480 samples transferred to CHQ

Analysis of NGCM of other region

month	oct2009	Nov.	Dec.	Jan.2010	Feb.	march	April	May	June	July	August	September	october	November	December	January 2011	february	March 2011	Total
Pack-A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	nil
Pack-B	-	-	-	35-OR	100-OR	101-OR	-	103-OR	116-OR	-	-	-	168-OR	61-OR	-	110-OR	86-OR	19-OR	899
Pack-C		ER-204	ER-251	ER-194	ER-100		ER-82	ER-89		SR-375	SR-358	SR-70	SR-84	SR-124		SR-82		WR-5 PPOD-2	2020
Pack-D	199-OR	ER-20; 191-OR=211	ER-24; 264-OR=288	ER-20; 302-OR=322	ER-88; 156-OR=244	ER-90; 276-OR=366	ER-102; 349-OR=451	ER-73; 404-OR=477	ER-35; 336-OR=371	ER-37; 519-OR=556	ER-31; 465-OR=496	ER-40; 416-OR=456	260-OR	ER-40; 183-OR=223	ER-50; 421-OR=471	ER-46; 494-OR=540	ER-26; 397-OR=423	ER-155 PPOD-2=157	6511
Pack-E		7-OR				SR-100+150=150	SR-100+90=190	SR-90+97=187	SR-87	SR-100	SR-45		SR-40	SR-62	CR-116	CR-137	CR-155		1276
Pack-F	80-OR																		80
Pack-G																			
Pack-H																			

Analysis of other region NGCM samples from April-June 2011

month	April2011	May 2011	June2011	Total
Pack-A	-	-	-	-
Pack-B	106	7	41	154
Pack-C	12	-	-	12
Pack-D	-	-	505	505
Pack-E	12	-	2	14
Pack-F	-	-	-	-
Pack-G	2	-	5	7
Pack-H	-	-	-	-
Package-I	-	-	-	-

Analysis of other region NGCM samples from July -Sept 2011

month	July2011	August 2011	September 2011	Total
Pack-A	5(ER)	35-QM cell	5-QC	45
Pack-B	nil	nil	nil	nil
Pack-C	15-QM cell	nil	nil	15
Pack-D	91(CR)	Nil	35-QM cell;116(CR);20(SR)	262
Pack-E	nil	35-QM cell;5-QC	nil	40
Pack-F	19-QM cell	16-QM cell	nil	35
Pack-G	nil	nil	19-QM cell;2-SRM	21
Pack-H	nil	nil	nil	nil
Package-I	nil	nil	nil	nil

PENDING PROGRESS REPORTS AND DISTRIBUTION OF REPORTS
TABLE SHOWING DATA UNIVERSE ON STATUS OF PENDING PROGRESS REPORTS
AS ON 01.10.2011

REGION	TOTAL PROGRESS REPORTS PENDING AS ON 01.04.2011	REPORTS RELEASED DURING APRIL 2011	REPORTS RELEASED DURING MAY 2011	REPORTS RELEASED DURING JUNE 2011	REPORTS RELEASED DURING JULY 2011	REPORTS RELEASED DURING AUGUST 2011	* REPORTS RELEASED DURING SEPTEMBER 2011	TOTAL REPORTS PENDING AS ON 01.10.2011
NORTHERN REGION	56	02	02	22	00	00	00	30**

* Three interim reports of NGCM items were released during September 2011.

** Reports { Final (30) /Interim(05) /Progress(03) } of NGCM items only.

TABLE SHOWING DATA UNIVERSE ON MISSION WISE STATUS OF
PENDING PROGRESS REPORTS (AS ON 01.10.2011)

* Interim Reports of Twenty-five NGCM items (up to F.S. 207-08) circulated up to September 2011; Interim reports of three-NGCM items

REGION	MISSION-I						MISSION-II		MISSION-III	MISSION-IV		TOTAL NO. OF PENDING PROGRESS REPORTS
	GM	STM	GCM	GPM	AS	MCS	MI	Coal-Lignite	DB-MAP	MULTI-DISP	FUNDAMENTAL (R&D)	
Northern Region	00	00	30*	00	00	00	00	00	00	00	00	30*
	M-I: 30						M-II: 00		M-III: 00	M-IV: 00		

were circulated in the month of September 2011. Total reports of Interim category due up to F.S. 2007-08 were of twenty –six items.

TABLE SHOWING YEAR WISE STATUS OF PENDING PROGRESS REPORTS
(ALL REPORTS AS WELL AS MINERAL INVESTIGATION)
AS ON 01.10.2011

REGION	TOTAL NO. OF PROGRESS REPORTS PENDING AS ON 01.10.2011		2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL
NR	30	ALL REPORTS	02	07	03	07	03	04	01	03	30
		ONLY MI	-	-	-	-	-	-	-	-	00
		ONLY NGCM*	02	07	03	07	03	04	01	03	30*

* Interim Reports of Twenty-five NGCM items (up to F.S. 207-08) circulated up to September 2011; Interim reports of three-NGCM items were circulated in the month of September 2011. Total reports of Interim category due up to F.S. 2007-08 were of twenty –six items.

TABLE SHOWING NGCM REPORT STATUS UPTO SEPTEMBER 2011

Region	Data universe since inception (F.S. 2001-02 to 2009-10)	Progress reports released up to March 2011	Progress reports released during January-March 2011	Progress reports released during April-June 2011	Interim report released up to March 2011	Interim reports released during April-June 2011	Interim reports released during July 2011	Interim reports released during August 2011	Interim reports released during September 2011	Final reports circulated
Northern	30	23	01	00	NIL	21	01	00	03	NIL

* Interim Reports of Twenty-five NGCM items (up to F.S. 207-08) circulated up to September 2011; Interim reports of three-NGCM items were circulated in the month of September 2011. Total reports of Interim category due up to F.S. 2007-08 were of twenty –six items.

Progress Reports of NGCM Items : 24 reports released up to June 2011; 03 reports pending as on 01.10.2011; 02 interim reports(Codes : GCM/NR/PHH/2004/007, and GCM/NR/PHH/2006/004) released without release of their progress reports; 01 interim report of F.S. 2007-08(Code : GCM/NR/JK/2007/002) pending along with its progress report.

TABLE SHOWING GPM REPORT STATUS UPTO SEPTEMBER 2011

REGION	DATA UNIVERSE SINCE INCEPTION (Field Season 2001-02 to 2009-10)	REPORTS RELEASED UPTO DECEMBER 2009	REPORTS RELEASED DURING JANUARY-JUNE 2010 + JULY-DECEMBER 2010	REPORTS RELEASED DURING JANUARY-MARCH 2011	REPORTS RELEASED DURING APRIL-SEPTEMBER 2011	TOTAL REPORTS PENDING
NR	09	05	02+ 00	02*	00	NIL

*In March 2011.

ANNEXURE - 7

Proforma for submission of status for daily report GSI NR 30/09/2011

Sl. No.	Component	Data universe (total volume of data)	Month	Monthly target	Date	Achievement of the day	Cumulative for the month	Total (cumulative achievement)
1	Legacy FSP and Extended abstract	Legacy FSP -22	Sept, 2011	-	30 th Sept, 2011	-	-	22 FSP completed
		Abstract of 21+1 FSP	Sept, 2011	-		-	-	21 FSP+ 30 item of FS 08-09
2	Current FSP data through FSPMIS application(plan for outsourcing may be indicated)	Standard- 58 Service- 61	Sept, 2011	-		-	-	55 standard & 48 service items are under execution
3	Metadata of unpublished reports	5141	Sept, 2011	-		-	-	5155
4	Actual unpublished reports post-2004 (no. to be uploaded as per new dissemination policy dt. 5.6.2009)#	126	Sept, 2011	-		-	-	126
5	Actual unpublished reports pre-2004 (no. to be uploaded as per new dissemination policy dt. 5.6.2009)#	2811	Sept, 2011	-		-	-	2811
6	Marine maps	-	Sept, 2011	-		-	-	-
7	1:50,000 geological maps for map service	864 maps	Sept, 2011	-		-	-	864 maps(all maps uploaded)
8	Pay roll data (no. of records of employees)	973	Sept, 2011	-		-	-	932(previous month)
9	Photographs for photo gallery	Not applicable	Sept, 2011	-		-	-	225
10*	Published paper maps	DRM-55	Sept, 2011	-		-	-	DRM-53
11	Case studies	Not applicable	Sept, 2011	-		-	4	39

*Images and metadata GQM, DRM and Mineral belt maps which have not yet been uploaded may be submitted to Dy. DG, M&P with a copy to Dy.DG, IT for uploading by M&C Division, CHQ

Plan for outsourcing if keying in of actual reports is required, should be mentioned with specific targets.

ANNEXURE - 8

ANNEXURE - 9**DETAILS OF PUBLICATIONS BROUGHT OUT BY THE NORTHERN REGION IN THE LAST FIVE YEARS.****Year 2006**

SI No.	Name of Publication
1.	News Vol. 25 No.1
2.	Bull. Ser. B, No.59, Ranjit Sagar Dam Project
3.	क्षेत्रीय वैज्ञानिक एवं तकनीकी हिन्दी कार्यपाला (सारांश संकलन)
4.	Misc.Pub.30, Pt.XV (Punjab & Chandigarh)
5.	Misc. Pub 30,Pt.XVI(Delhi)
6.	News Vol.25 No.2 & Vol.26 No.1
7.	Spl. Pub. No.87: Seismic Microzonation of Delhi Urban Complex.
8.	Bull. Ser.B, No.62: Tehri Dam Project.

Year 2007

SI No.	Name of Publication
1.	i) Rec. Vol. 139, Pt.8
2.	Bull. Ser.B. No.60: Nathpa Jhakri
3.	Misc. Pub. No.XVI: Delhi (Hindi Version)
4.	News Vol.26(2)
5.	Bull. Ser. B No.63: Salal HE Project (J&K)
6.	Bull Ser.B No.57: Beas Sutluj Link Proj.
7.	News Vol. 27, No.1

Year 2008

SI No.	Name of Publication
1.	Rec. Vol.140, Pt.8
2.	News Vol. 27(2)
3.	Misc. Pub. 30, Pt.XV Punjab & Chandigarh (Hindi Version)

4.	Spl. Pub. No.91(Pan African Event –India and Antarctica)
5.	News Vol. 28(1)

Year 2009

SI No.	Name of Publication
1.	GSI Rec. Vol.141, Pt.8
2.	GSI News Vol.28 (2)
3.	Departmental Telephone Directory, 2009

Year 2010

SI No.	Name of Publication
1.	GSI Rec. Vol. 142 Pt.8
2.	GSI Misc. NO.30 Pt.XIII :Geology and Mineral Resources of states of India, UP & Uttarakhand (Hindi version)
3.	GSI NR News vol. 29, Pt.1&2
4.	GSI Spl. Pub. No.66: Neotectonic and Isoseismal Atlas of North India
5.	GSI Bull. Ser. C, No.8: A compilation on Physio-mechanical properties of soils, rocks and aggregates tested in GT Lab
6.	GSI Record Vol.143, Pt.8
7.	GSI Misc. Pub. No.30 Pt.X: Geology and Mineral Resources of States of India, Jammu & Kashmir (Hindi Version)

Year 2011

SI No.	Name of Publication
1.	Brochure highlighting Activities of NR
2.	Brochure highlighting Geotourism in Ladakh
3.	Telephone Directory, NR Public Utility Services.

ANNEXURE-10

COURSES CONDUCTED AT RTI, NR AND FTC's, ALONG WITH LIST OF FACULTY MEMBERS

(July 2011 to September 2011)

I. RTI, Lucknow (Core faculties: Shri S. S. Srivastava, Director and Shri R. J. Singh, Sr. Geologist)

Sl No.	Training course	Dates	Venue	No. of trainees	Total faculty	Guest Faculty Members
1.	Refresher course in Geotechnical Studies (Item No. NR/RTI/2011/68/2010-12)	04. 07. 2011- 16. 07. 2011	Bhimtal-Srinagar-Mussoorie	10 + 1 outside GSI	10	1. Shri S. Patni, Chief Geologist, NHPC, New Delhi 2. Shri Y. Deva, Ex-Director, GSI, Noida 3. Shri S.S. Garhia, Vice President, Energy Infotech, Gurgaon 4. Shri H. P. Mishra, Ex-Director (Geophy), GSI, Lucknow 5. Shri S. K. gildiyal, Director, GSI, Lko 6. Shri Ashok Kumar, Director, GSI, Kolkata 7. Shri K. C. Joshi, Sr. Geologist, GSI, Lko 8. Dr. Surya Prakash, Ass. Professor, NIDM, N. Delhi 9. Shri Pradeep Singh, Sr. Geologist, GSI, Chandigarh 10. Shri H. Bahuguna, Sr. Geologist, GSI, Dehradun
2.	Course on Systematic approach to mineral exploration for officers of DGMs of Northern Region (Item No. NR/RTI/2011/84/2010-11)	05.09.2011- 09.09.2011	Chandigarh	11	9	1. Sri R. K. Khorana, Ex-Dy.D.G., GSI, Faridabad 2. Dr. O. N. Bhargawa, Ex-Director, GSI, Panchkula 3. H.P. Mishra, Ex-Director, GSI, Lucknow 4. Dr. P.R. Golani, Director, GSITI, Zawar 5. Shri B.B. Sharma, Sr Geologist, GSITI, Zawar 6. Shri N. V. Nitnaware, Director, GSI, Chandigarh 7. Shri N. S. Nayar, Geologist, GSI, Chandigarh 8. Shri S. C. Kaura, Ex-Dy.D.G., GSI, Chandigarh

						9. Dr. J. C. Juyal, Scientist, Shimla
3	Refresher course in map digitization for draughtman (Item No. NR/RTI/2011/74/ 2010-11)	19.09.2011-30.09.2011	Lucknow	18	7	1. Smt. Rina Verma, Sr. Geologist, GSI, Lucknow 2. Shri Vachaspati, Sr. Mineralogist, GSI, Lucknow 3. Shri S.C. Shukla, Asstt. Geologist, GSI, Lucknow 4. Shri S. P. Singh, Asstt. Geologist, GSI, Lucknow 5. Smt. Arpita Punkaj, Geologist, GSI, Lucknow 6. Shri Surabhi Prasad Singh, JTA (DO), GSI, Lucknow 7. Shri Rohit Agrawal, ESRI, Lucknow

Additional, Need based Training Programme:

Sl No.	Training course	Dates	Venue	No. of trainees	Total faculty	Guest Faculty Members
1.	Training on Transactional Applications on GSI Portal for Group 'C' Ministerial Staff of Northern Region	17.082011-19. 08. 2011	Lucknow	14	4	1. Shri Vachaspati, Sr. Mineralogist, GSI, Lucknow 2. Shri S.C. Shukla, Asstt. Geologist, GSI, Lucknow 3. Shri Sandeep Grover, Office Suptdt, GSI, Lucknow 4. Shiv Shaker, STA, GSI, Lucknow
2.	Training on Transactional Applications on GSI Portal for Group 'C' Ministerial Staff of Northern Region	24.082011-2619. 08. 2011	Lucknow	14	4	1. Shri Vachaspati, Sr. Mineralogist, GSI, Lucknow 2. Shri S.C. Shukla, Asstt. Geologist, GSI, Lucknow 3. Shri Sandeep Grover, Office Suptdt, GSI, Lucknow 4. Shiv Shaker, STA, GSI, Lucknow

- II. FTC, Bhimtal : (Core faculties: Shri S. S. Srivastava, Director and Shri J. S. Mehta, Sr. Geologist): NA**
- III. FTC, Saketi: Course on Systematic approach to mineral exploration for officers of DGMs of Northern Region (Item No. NR/RTI/2011/84/ 2010-11); As described above.**

**LIST OF RAC / OAC / STAGE REVIEW / SGPB MEETINGS WITH DATE AND
STATUS OF UPLOADING OF MINUTES
AS ON 30.09.2011**

<i>REGION/STATE</i>	<i>RAC/OAC/SGPB/ STAGE REVIEW</i>	<i>PLACE</i>	<i>DATE OF MEETING</i>	<i>MINUTES STATUS</i>
SU: P,H&HP	OAC	Faridabad & Chandigarh	22.09.2011	Uploaded
XI_NR_18 TH RAC	RAC	Lucknow	28.07.2011	Uploaded
SU:UP&UK	OAC	Lucknow	19.07.2011	Uploaded
SU: J&K	OAC	Jammu	10.07.2011	Uploaded
SU: P,H&HP	SGPB SGPB	Chandigarh Simla	10.08.2011 20.08.2011	--

Highlights of 18th RAC meeting

- The XI_NR_18th RAC meeting of Northern Region was held at V.K.S. Varadan Conference Hall on 28.07.2011 under the Chairmanship of Shri L.S. Jain, Dy. Director General & HOD, GSI, NR, Lucknow
- While reviewing the FSP implementation data in respect of Mission I, II & IV the Chairman observed that the field stay of officer as well as Supervisory Officer is not commensurate with the pro-rata targets. He directed that revised FSP proposal may be submitted through FSPMIS including the names of newly inducted geologists for approval by CHQ.
- The Chairman expressed happiness that good values of gold have been reported from Parsoi area, Sonbhadra district, UP. He directed that systematic sampling should be carried out and directed Chemical Division to analyse the samples on priority basis.
- The Chairman said that the work on skeletonisation of drill cores be speeded up.
- Reviewing the progress made in the establishment/up gradation of Core Library, Director, Petrology, NR highlighted the constraints being faced as regards the manpower and other logistics. After detailed deliberations the Chairman observed that the Core Library is to be set up with the existing infrastructure and if required some young officers can be provided for a period of 2-3 months for streamlining the work of establishment of Core library.

- The Chairman expressed his displeasure over the drilling progress. He further said that the field stay of Supervisory officers is very low. Lack of supervision has resulted in slow progress of drilling. The Chairman directed Director, Drilling to immediately issue letters to the concerned in this regard.
- Dr V.P. Mishra, Dy. DG, DGCO suggested that a compilation highlighting the achievement during the last two decades of Mineral Physics Division may be prepared and submitted for publication. The Chairman welcomed the suggestion and directed for the preparation of the compilation.

**STRENGTH POSITION IN RESPECT OF GROUP A & B OFFICERS
AS ON 30TH SEPTEMBER 2011**

GROUP - A		
1.	Additional Director General	NIL
2.	Dy. Director General (Geology)	02
3.	Director-in-charge	02
4.	Dy. Director General (Chem.)	NIL
5.	Director (Geology)	31
6.	Director (Chem.)	0
7.	Director (Geophy)	03
8.	Director (Mineralogist)	01
9.	Superintending Geologist	06
10.	Superintending Geophysicist	01
11.	Superintending Chemist	04
12.	Superintending Engineering	02
13.	Senior Geologist	71
14.	Geologist	85
15.	Senior Chemist	11
16.	Senior Geophysicist	08
17.	Executive Engineer (NFJAG)	02
18.	Executive Engineer	02
19.	Asstt. Executive Engineer	01
20.	Geophysicist	09
21.	Chemist	16
22.	Sr. Admn. Officer	01
23.	Dy. Controller of Stores	01
24.	Senior Mineralogist	03
25.	Junior Mineralogist	02
26.	Admn. Officer Gr-I	00
GROUP - B		
27.	Admn. Officer Gr-II	05
28.	Officer Surveyor	01
29.	Private Secretary	02
30.	Store Officer	06
31.	Asstt. Geologist	04
32.	Asstt. Chemist	04
33.	Asstt. Geophysicist	02
34.	Cost Accounts Officer	01
35.	Asstt. Engineer Gr-I	01
36.	Librarian	01

VEHICLE POSITION AS ON 30.09.2011 IN NR REGION

A. Field going vehicles / Office Vehicles

S. No.	Particulars/ Type of vehicle	Kilometer run				Total	Sanctioned strength of Drivers	Drivers in position
		Less than 25000 km	25001 – <50000 km	50,001 – <1,50,000 km	>1,50,000			
1	Jeep (diesel)	0	0	70	3	73	1. Spl Grade- 14 2. Grade I –100 3. Grade II- 85 4. Ordinary- 86 Total- 285 Nos	1. Spl Grade- 13 2. Grade I – 74 3. Grade II- 05 4. Ordinary- 02 Total- 94 Nos
2	Pick up	0	0	0	0	00		
3	Amb ISZ	0	0	3	0	03		
4	Indica	0	0	2	0	02		
5	Bolero LX	0	0	2	1	03		
6	Qualis	0	0	7	3	10		
7	LCV	0	0	8		08		
8	HCV	0	0	2	8+1(Spl.Van)	11		
9	Geo logger van	0	0	1	0	01		
10	Jeep (Petrol)			0		00		
11	Amb Mk-4 & Deisel	0	0	2+1	0	03		
12	Gypsy	0	0	6	0	06		
	Total	0	0	104	16	120		

Age wise Status of Vehicles

B. Field vehicles / Office Vehicles

S. No.	Particulars	Vehicles less than 6 years old	Vehicles 6 years & less than 10 years old	Vehicles more than 10 years & less than 15 years old	More than 15 years	Grand Total
1	Jeep (diesel)	0	37	34	2	
2	Pick up	0	0	0	0	
3	Amb ISZ	0	3	0	0	
4	Indica	0	2	0	0	
5	Bolero LX	0	3	0	0	
6	Qualis	0	10	0	0	
7	LCV	0	2	6	0	
8	HCV	0	0	0	11	
9	Geo logger van	0	0	1	0	
10	Jeep (Petrol)	0	0	0	0?	
11	Amb Mk-4 & Deisel	0	0	1	2	
12	Gypsy	0	0	6	0	
	Total	0	57	48	15	120

STATUS OF CASES UNDER ME HEAD AS ON 30.09.2011

Sl No.	Description of Stores	Qty.	Estimated Cost (Rs.)	Remarks
1.	Swell Pressure Apparatus	01	70,000.00	Price bid opened, File submitted to HPTAC for consideration.
2.	Point Load Test Apparatus	01	88,000.00	Price bid opened, File submitted to HPTAC for consideration.
3.	NX-Rock Core Gauge	01	25,000.00	Price bid opened, File submitted to HPTAC for consideration.
4.	Analytical Sieve Shaker	01	55,000.00	Price bid opened, File submitted to HPTAC for consideration.
5.	Permeability Test Apparatus	01	26,000.00	Case is to be retendered.
6.	Jaw Crusher	01	92,000.00	Price bid opened, File submitted to HPTAC for consideration..
7.	Magnetic Barrier Separator	02	35,85,950.00	L/C opened at Faridabad office.
8.	Room Air Conditioner	04	93,010.00	Supply order issued.
9.	Room Air Conditioner	02	37,655.00	Supply order issued
10.	Trinocular Research Polarizing Microscope for Chandigarh office.	01	20,00,000.00	Proposal cleared from CPMC, procurement action to be initiated.
11.	Spare of SEM LEO S440		2,65,400.00	Supply received.
12.	Generator for 200 KVA for Faridabad office.	01	17,00,000.00	File submitted to TEC for consideration.
13.	Drinking Water Cooler	02	45,000.00	Supply Order Placed.
14.	Photocopier M/c	03	2,74,000.00	Proposed to be purchased on DGS&D.
15.	Drill M/C 600 Mtrs.	02	*30,00,000.00	As per CPMC, Procurement is to be made from CHQ, Kolkata.
16.	Hydraulic Sample Extruder	01	1,10,000.00	P.O Issued.
17.	Geophones		6,40,000.00	T/E issued, to open on 13.10.2011
18.	Platinum Crucibles	70	75,00,000.00	Case forwarded to CPMC
19.	Binocular Polarizing Microscope	01	7, 56,000.00	T/E to be issued.
20.	Steel Chester Drawers		1,52,000.00	Under TAC
21.	Radiation Survey Meter	06	1,94,400.00	File submitted to HPTAC.
22.	Petrog Life System	01	5,00,000.00	T/E issued, to open on 17.10.2011.
23.	Steel Sample Rack	05	30,500.00	Supply received.
	Total (Rs.)		1,82,39,915.00	*Excluding item at sl no.15.

(A)Details of Cases under Motor Vehicle Head as on 30.09.2011 (F.Y-2011-12).

Sl No.	Description of Stores	Qty.	Estimated Cost	Remarks
1.	Tyres & Tubes(Assorted Size)	-	4,78,800.00	TAC Stage

(B)Details of Cases under I.T Head as on 30.09.2011 (F.Y-2011-12).

Sl. No.	Description of Stores	Qty.	Estimated Cost	Present Status
1.	Computer Table & Chair	103 Nos.Each	6,00,000.00	Part supply received.
2.	High End Computer	01 No.	1,50,000.00	Supply received.
3.	Ink Cartridge of various Size		22,300.00	Supply received.
4.	Colour Ink Catridge of various Size		48000.00	Supply received.
5.	Toner Cartridge 3005 & 2055	20 Nos	1,20,000.00	P.O issued.
6.	AO Size Scanner	01	7,50,000.00	Case to be considered by HPPAC.
7.	SMF Battery	27 Nos	57,600.00	Supply received.
	Total Rs.		17,47,900.00	

(C) Details of Cases under O.E (V) Head as on 30.09.2011 (F.Y-2011-12).

1.	Carpet & Venation Blinds	-----	34,000.00	Under TAC
2.	Curtain cloth	137 Mtrs	11,508.00	P.O issued.
3.	Table Top Glass	07 Nos	10,500.00	Under TAC.
4.	Stationery		39,522.00	Under TAC
5.	Finit	75 Lt	12,000.00	T/E issued, to open on 17.10.2011
6.	Liveries		1,05,459.00	Under process.
	Total Rs.		2,12,989.00	

(D) Details of Cases under R&D Head as on 30.09.2011 (F.Y-2011-12).

1.	Wide Mouth Bottles	---	1,99,325.00	Under TAC
2.	Vertical Blinds	15	42,000.00	Under TAC
3.	Storage Box	06	7200.00	Supply received
4.	UPS Battery	10 Nos	28,000.00	Supply received.
5.	Milli Q Water purification system	01 No	3,67,200.00	Clarification regarding payment term obtained from Faridabad office, File submitted to TAC.
6.	Wide mouth bottle	5056 Nos	1,62,000.00	Supply received.
	Total Rs.		8,05,725.00	

(E) Details of Cases under Supply & Material Head as on 30.09.2011 (F.Y-2011-12).

1.	Book Shelves	20	1,00,000.00	Supply received.
2.	Plastic Tray	60	18,000.00	Supply received.
3.	Spare parts of AAS PE-400		1,60,000.00	L/C opened at Faridabad..
4.	Refilling of fire extinguisher		65,500.00	TAC Stage.
5.	Photocopier Paper(A-4)	500 Rim	75,000.00	Supply received.
6.	Spare parts of AAS		3,61,508.00	T/E issued, to open on 17.10.11
7.	Camp Equipments		91,250.00	Under TAC
	Total (Rs.)		8,71,258.00	

STATUS OF EXISTING DRILLING EQUIPMENTS UNDER DEPLOYMENT
DETAILS OF DRILLING RIGS AVAILABLE

Sl. No	Unit No.	Target (m)	Achievement (m)	Project	Area/ Item	FSP code
1	468	1100	781.65	Project-6 Coal Investigation Kolkata	Shadol (MP)	MIE/C/CW/CW/2009/014
2	331	1100	988.7	Project-6 Coal Investigation Kolkata	Shadol (MP)	MIE/C/CW/CW/2009/014
3	364	1100	1421.65	Project-5 Coal Investigation Kolkata	Barwan Sidhi (MP)	MIE/C/CW/CW/2008/004
4	475	1100	1628.25	Project-4 Coal Investigation Kolkata	Hat Raigarh (CG)	MIE/C/CW/CW/2008/003
5	417	1100	526.75	Project-9 Lignite Investigation WR	Kolayt (Rajasthan)	MIE/C/CW/CW/2008/008
6	419	650	589.9	Project- Min Inv (Haryana)GSI.,NR	Nagal Choudhary	MIE/NR/PHH/2006/003/2008/2002
7	418	500	89.95	Project- Min Inv Ambota Sirmaur (HP)	Ambota (HP)	MIE/NR/PHH/2007/005
8	467	500	231.1	Project- Min Inv Narag Sirmaur (HP)	Narang (HP)	MIE/NR/PHH/2008/004
9	424	Drilling As required	48.1	Surbee Landslide Mussoorie	Mussoorie (UK)	SPT with Core drilling LSZ/NR/HQ/2008/009
10	442	300	48	Project- Microzonation Studies Jalandhar(Punjab)	Jalandhar (Punjab)	SEI/NR/HQ/2009/003
	Total	7450	6354.05			

DETAILS OF AUGER RIG
(NOT AVAILABLE WITH N. R .)

Sl. No.	Unit No.	Target (m)	Achievement (m)	Project/ Division	Item / FSP Code

DETAILS OF DRILLING RIGS AVAILABLE

Sl. No	Project	Item	Unit No.	Drilling (m) Target/ Achievement (Upto Sep-11)	FSP code
1	Project- Microzonation Studies Jalandhar(Punjab)		442	Target-870 /629.55	SEI/NR/HQ/2009/001
2	Project- Min Inv (Haryana)GSI.,NR		419	Target 1200/ 652.7	ME/NR/PHH/2010/016
3	Arsenic Project Gazipur (UP)		467	Target 200/ 106.75	ENV/NR/UP-UK/2010/037
4	Gypsum Investigation Hissar (Haryana)		418	Target100/ 74.35	ME/NR/PHH/2010/017
				Total Target 2370/	
	TOTAL DRILLING			Total Achie. 1463.35	

DETAILS OF OF AUGER RIG
(NOT AVAILABLE WITH N.R)

Sl. No	Project	Item	Unit No.	Drilling (m) Target/ Achievement	FSP code
	TOTAL DRILLING				

ANNEXURE 15B
STATUS OF EXISTING DRILLING AND OTHER HIGH-END (RS. >1 CORE) EQUIPMENTS TO BE PROCURED DURING FY 2010-11

Type of instrument	Indenting Region	Qty	Cost	Lead Time	PAC/ Sr. PAC	DG's approval & CPMC recommendation	Tendering/ Re-tendering	TEC	TAC	PO Placed	LC opened	Delivery to be or Received	Utility of the Instrument [Mission-wise]
Geophysical [STSS-MI, MII & MIV]	--	--	--										
TOTAL													
Geology [STSS-MI, MII & MIV]	--	--	--										
TOTAL													
FIELD/ SURVEY [STSS – MI, MII & MIV]	--	--	--										
Drilling	1. Drill Machine 600 Mts Capacity	02 Nos	30.00Lacs	1 Year	Done	1.Pending at GSI CHQ Kolkata w.e.f 13/09/11							
	2. Duplex Pump 4 X5	02 Nos	14.00Lacs	1 Year	Done	2.Indent placed to GSI.,NR., MM Division on 20/09/11							
TOTAL	2	4	44.00 Lacs										
GRAND TOTAL													

ANNEXURE 16

MONTHLY STATEMENT OF SHOWING DETAILS OF PENDING COURT CASE

For the month Sept. 20110
Northern Region, GSI (**up dated as on 30.09.2011**)

Sl. No	Applicant's Name and case Number	Designation of the applicant	Name of Court / Bench	Brief Data of the cases	Deptt. Action	Present status / next date	Remarks
1	2	3	4	5	6	7	8
<u>CAT, LUCKNOW BENCH, LUCKNOW:-</u>							
1.	O. A. No. 221/2006 filed by SRI RAMANAND	Geol(Jr)	CAT, Lucknow	Regarding fixation on seniority/promotions	C.A. filed	12.10.2011	
2.	O. A. No. 342/2006 filed by SRI ADITYA RAM,	D/Man	CAT, Lucknow.	Regarding grand of benefits of 2 nd ACP.	C.A. filed	02.11.11	
3.	O.A. No. 295/2006 filed by SRI PREETAM SINGH, Vs UOI & Others	STA(S)	CAT, Lucknow	Regarding Seniority/Promotion to the post of Officer Surveyor	C.A. filed	11.10..11	
4	O.A.No.386/2006 filed by Sri RAM SHANKAR	Durwan	CAT Lucknow	Reg. Appointment to the post of LDC and quashing of impugned order dated 31.10.2005	C.A. filed	DFD	
5.	O.A. No. 294/07 filed by Mukesh Nagar, Geol.(Sr.) Vs UOI	Geol. (Sr.)	CAT Lucknow	Regarding promotion.	C.A. filed	22.12.11	
6.	O.A.No.20/08 filed by Sri A. Hussain Vs UOI & Others	Director(D)	CAT Lucknow	Req. consequential benefits	C.A. filed	30.11.11	
7	O.A.380/2009 filed by Sri J.P.Misra & Others Vs.UOI	Supdt.	CAT Lucknow	Regarding quashing of impugned Order dt.12.03.09 passed by the opposite party No.1 & 2 to directing the opposite party No.4 to withdraw the promotion orders	C.A. filed	08.11.11	
8	O.A.No.145/2009 filed by Sri K.S.Bora & Others Vs.UOI	JTA	CAT Lucknow	Regarding quashing of impugned Order dt.12.03.09 passed by the opposite party No.1 & 2 to directing the opposite partyNo.4 to withdraw the promotion orders	C.A. filed	14.11.11	

9	O.A.No.171/09 filed by Sri S.A.H.Rizvi Vs UOI & Others	Steno II	CAT Lucknow	Set aside the charge sheet dt.15.11.2007 and appellate Order dt.28.07.08 and direct the opposite parties to pay the due salary and other benefits during the period of suspension.	C.A. filed	Dismissed-in-default	
10	O.A.No.193/09 filed by Sri S.A.H.Rizvi Vs UOI & Others	Steno II	CAT Lucknow	Regarding to direct the opposite parties to promote the applicant to the post of stenographer, Gr.II from 14.10.94 and pay his current salary after revision of the pay-scale in old and new pay-scale.	C.A. filed	29.11.11	
11	OA.No.254/09 filed by Sri V.K.Awasthi & Others	D/Asstt.	CAT Lucknow	Regarding stay on operation of the impugned order dt.16.04.09	C.A. filed	17.10.11	
12	O.A.No.393/09 filed by Sri K.R.Verma, Vs.UOI & Others	GWA	CAT Lucknow	Regarding quashing of impugned order dated 8.9.09 passed by the Sr.Dy.director General,NR	C.A. filed	15.11.11	
13	O.A.No.428/09 filed b Sri M.K.Mall	Sr.Scientific Asstt.	CAT Lucknow	Regarding appointment of Minerologist(Sr.) in GSI and quashing the impugned order dated 17.08.07, 5.10.07, 26.06.08, 26.09.08 passed by Opposite party no.2	Application regarding deletion of Secretary &D.G.,GSI from the list of respondent has been moved.	30.11.11	
14	O.A.No.492/09 filed by Smt. Shashi Devi W/O Late Mithai Lal,Ex.JTA(S)	-	CAT Lucknow	Regarding impugned order dt.20.05.09 passed by Dy.D.G.,GSI,NR	C.A.filed	04.11.11	
15	O.A.No.18/10 filed by Sri SAH Rizvi	Steno-Gr.II	CAT Lucknow	Regarding stop the deduction made by the respondent No.3 & 4 from salary of the applicant from GSI Co-operative society,Lucknow.	C.A.filed-	Dismissed-in-default	

16	A.No.63/2010 filed by Sri Satish Kumar	Supdt.	CAT Lucknow	For quashing of impugned order dt.6.2.2009 passed by Dy.D.G.,GSI,NR and also pray to hold review DPC meeting after rectification of mistake in seniority of Supdt.,if need then hold a DPC meeting for promotion to the post of A.O.Gr.II	C.A. filed	11.10.11	
17	O.A.No.189/2010 filed by Dr.Vimal Kumar	Ex.Director	CAT Lucknow	To direct the opposite parties to dispose of the representation dt.12.12.2009 by reasoned and speaking order and make payment of dues and recoveries made against the applicant, subject to the final decision of this O.A..	C.A. filed	Dismissed-in Default	
18	O.A.NO.211/10 filed by Sri Ashok Kumar Agarwal	Director(ME)	CAT Lucknow	For granting non-functional upgradation to PB-4 pay band of Rs.8700/-wef.1.7.2006 and treat appointment on promotion to the post of Director(ME) wef.24.10.08 with all consequential benefits.	C.A. filed	13.10.11	
19	O.A.No.279/2010 filed by Sri Ashok Kumar Agarwal,	Director(ME)	CAT Lucknow	For quashing of impugned order dt.4/8.6.10 passed by respondents No.2 regarding transfer from NR,Lucknow to WR,Jaipur	C.A. filed	04.11.11	
20	O.A.No.485/2010 filed by Sri O.P.Nigam Vs.UOI & others		CAT Lucknow	For quashing of impugned order dt.09.11.2010 passed by the respondents No.3 regarding transfer from GSI, NR, Lucknow to GSI, NR, Opn. J & K, Jammu.	C.A. filed	Order Reserved	
21	O.A.No.486/2010 filed by Sri Bagesh Mishra Vs.UOI & others		CAT Lucknow	For quashing of impugned order dt.09.11.2010 passed by the respondents No.3 regarding transfer from GSI, NR, Lucknow to GSI, NR, Opn.PH & HP, Faridabad.	C.A. filed	Order Reserved	

22	O.A.No.489/2010 filed by Sri S.Roy & others Vs. UOI & others		CAT Lucknow	For quashing of impugned order dt.09.11.2010 passed by the respondents No.3 regarding transfer from GSI, NR, Lucknow to GSI, NR, Chandigarh.	C.A. filed	Order Reserved	
23	R.A.No.13/2010 in O.A.No.322/08 filed by Sri V.D.Agarwal Vs. UOI & others		CAT Lucknow	To review the judgement & order dt.16.12.2009 passed by the Hon'ble CAT,Lucknow	C.A.filed	31/10/11	
24	O.A.No.23/2011 filed by Sri A.K.Johari Vs. UOI & others	Director (Drilling)	CAT Lucknow	Regarding quashing of impugned order dated 22.12.2010 passed by the respondent No.2	C.A. filed	30.09.11	
25	O.A.No. 89/2011 filled by Sri Ramesh Kumar Yadav Vs. UOI & others	-	CAT Lucknow	Regarding quashing of impugned order dated 10.12.2010 and issue directions to the opposite parties to consider appointment of the petitioner under Dying-in-Harness Rules	C.A.filed	DFD	
26	O.A.No.176/2011 filed by Sri S.N.Tandon Vs. UOI & others		CAT Lucknow	For quashing of impugned order dt.09.11.2010 passed by the respondents No.3 regarding transfer from GSI, NR, Lucknow to GSI, Opn.PH&HP, Chandigarh.	C.A. filed	Order Reserved	
27	O.A.No. /2011filed by Sri K.C.Joshi & others Vs. UOI & others.		CAT Lucknow	Regarding claiming the seniority of junior Geologist with effect from their year 1986 and 1987 as per recommendation of the DPC with all consequential benefits.	-	-	
28	O.A.No. /2011 filed by Sri Tarit Ranjan Das Vs. UOI & others	-	CAT Lucknow	To quash the impugned transfer order dated 30.08.11/01.09.11 passed by respondent No.2	-	30.09.11	
29	O.A.No. 353/2011 filed by Smt. Vimla W/O Late Banne,ex.T/Helper	-	CAT Lucknow	Regarding nonpayment of gratuity amount of applicant's husband.	-	14.10.11	

<u>HON'BLE CAT ALLAHABAD,ALLAHABAD:-</u>							
30	O:-No.-----/04 filed by SMT. LEELA WATI RAMA W/O LATE R.S.P. SINGH	Ex. Drilling Asstt.	CAT Allahabad	Investigation the cause of death & delivery of the original death certificate to her		List When Pressed.	
31	O.A.No.1356/2004 filed by SRI N.K. AGARWAL	Geol.(Sr.)	CAT Allahabad	Seniority/Promotion	C.A. filed	29.09.11	Promotion offered and joined. The said fact has been communicated to Counsel for apprising the Tribunal. Accordingly, M.A. with regard to dismissal of OA has been filed before the Hon'ble CAT, Allahabad Bench.
32	O.A.No.1782/2010 filed by sri Babloo alias Chandra Prakash S/O Late Lahuri Prasad,Ex.Durwan Vs. UOI & others		CAT Allahabad	Regarding quashing the impugned order dt.13.05.2010 for appoint,ment on compassionate ground.	C.A.filed	29.11.11	

CAT CHANDIGARH BENCH, CHANDIGARH:-							
33	O.A.No.603/JK/03 filed by SRI RAVI SINGH S/O LATE BHARAT SINGH EX. DRIVER GSI, JAMMU AGAINST UOI & OHTERS	Ex. Driver	CAT, Chandigarh.	Appointment on compassionate ground		List When Pressed	
34	C.S.No.115/2010 filed by Smt.Dhobi Devi Vs. UOI & others		Civil Judge(Jr.Divn .) Baijnath distt.(HP)	For granting family pension	C.A.filed	28.07.11	
LABOUR COURT, UTTARANCHAL UNIT, DEHRADUN:-							
35	CPCO No. 45/2000 now new Case No. 79/2005 filed by SRI MANOJ SHARMA	Skilled (D/man)	Labour court Uttaranchal	Construction Divn., Dak Patthar, Dehradun & GSI Camp Dehradun Dak Pathar has been made a party before the Asstt. Labour Comm., Dehradun since 10.6.88 to 31.3.92	--	02.02.2007	To be listed on turn.
PRINCIPAL BENCH, DELHI:-							
36	O.A.No.3919/2010 filed by Sri Kanhaiya Singh		Principal Bench New Delhi	To direct the respondents to grant non-functional up-gradation to Pay Band, PB-4, G.Pay Rs.8700/- wef.1.7.2006 and G.Pay Rs.10,000/- wef.26.10.2006 to the applicant with all consequential benefits	-	20.07.2011	

<u>HIGH COURT, CHANDIGARH:-</u>							
37	W.P. No. 16419/2005, filed by UOI & Others against SRI MAN BAHADUR KHATI	Contg. Worker	High Court, Chandigarh	Regarding quashing of impugned order dated. 1.2.2005 and Rev. Petition dated. 24.8.2005 reg. non-regularisation/absorption the services of the applicant as Mechanic w.e.f. 10.9.93	Letter alongwith written statement with regard to development taken place in CAT, Chandigarh duly approved by the DDG, GSI, NR has been sent to the Nodal officer, GSI Chandigarh vide letter dt. 21.3.07 requesting to apprise the High Court of Punjab & Haryana, Chandigarh.	3.02.06	To be listed on turn.
<u>HIGH COURT, JAMMU</u>							
38	TA No. 4/JK/05Civil Suit No. /02 filed by SRI M. A. WANI	Driver	High Court, Jammu.	Regarding grant the benefit of ACP.	Objection filed on 20.11.03	29.11.07	To be listed on turn
39	Court case CMP 251/01 filed by the Collector Land at Rawalpura, Srinagar	--	High Court, Jammu.	Revision against order of 3 rd Add. Distt. Judge, Srinagar reg. acquisition of land for construction of GSI, Office-cum-residential complex at Rawalpura.	As desired by the MOM vide their letter dt. 31.8.01 a self contained note has already been forwarded to the Ministry by Jammu office vide their letter dt. 3.11.01.	No date fixed so far	Letter issued to Govt. Counsel for deletion of the name of UOI from the list of Respondent.

40	WP No. 102/02 filed by SHRI INDERJEET RAINA S/O LATE JAGGER NATH RAINA Vs UOI & OTHERS	Tech. Helper	High Court, Jammu.	Regarding Appointment on compassionate ground	C.A. filed on 12.6.2003		As per letter dated. 16.11.07 from Jammu Office, case not listed for hearing till date.
41	SWP No. 261/03 filed by SRI VIRENDER SINGH S/O LATE S. CHATTER SINGH Vs UOI & OTHERS	Foreman	High Court, Jammu.	Regarding appointment on compassionate ground	CA filed on 30.7.2003		Case will be listed on turn. No. date fixed so far.
42	W.P.No. /2010 filed by Shashi Pal S/O Late Bishamber Nath,Ex.Cleaner Vs.UOI & others		High court Jammu	Regarding quashing the judgement dt.119.11.2009 passed in TA10/JK/08(SWP.No.228/2001) and mandamus commanding on respondents to reconsider the case of petitioner for seeking compassionate appointment.	-		To be listed on turn
HIGH COURT BENCH, ALLAHABAD:-							
43	FAFO No.960/87 in CP No.19/80 UOI & others Vs. SMT MAMTA AGRAWAL W/O LATE N.C. AGRAWAL	Geol.	H.C. Allahabad	Award of Comp. of Rs.1,93,076.00	CA filed		Case will be listed on turn. No. date fixed so far.
44	FAFO No. 1076/88 in CP No.25/86 UOI & others Vs. SMT KAVITA PATHAK W/O LATE S.D. PATHAK	--	H.C. Allahabad	Award of Comp. of Rs.2,15,000./-	CA filed		The case has been transferred to Uttaranchal Court at Nainital on 6/2/2001.

45	FAFO No. 1076/88 in CP No. 27/86 UO &Ors Vs SUNIL DUTT GAUR.	--	H.C. Allahabad	Award of Comp. of Rs. 5,000/-	CA filed		The case has been transferred to Uttaranchal Court at Nainital on 6/2/2001.
HIGH COURT BENCH, LUCKNOW:-							
46	W.P.No. 28/98 filed by SRI PARAS RAM	Ex. Contg.	H.C. Lucknow	Quashing of Impugned Judgment & Order reg. re-engagement in Services	CA filed		Case will be listed on turn.
47	WP No.1956/98 in OA No.353/94 UOI Vs. SRI O.P.S. MAURYA	Ex-UDC	H.C. Lucknow	Quashing of order dt. 14.9.98 for payment of pension	RA on CA filed		Case will be listed on turn.
48	WP No.208/SS/2000 SMT MONORAMA MISRA W/O LATE O.P. MISRA VS. UOI & OTHERS	Ex-Driver	H.C. Lucknow	Appointment on Compassionate Ground	CA filed		Case will be listed on turn.
49	WP No.1823(SB)/01 UOI Vs. SRI O. N. KATIYAR	--	H.C. Bench, Lucknow	Appeal against the judgement dt. 16.8.01 OA No. 415/98 reg. quashing of censure order & compulsory retirement.	C.A. filed		Partly heard by the Hon'ble High court, Lucknow on 14.3.2005,. Next part of the case will be listed for hearing on turn.
50	WP No.1824(SB)/01 UOI Vs. SRI O. N. KATIYAR.	--	H.C. Bench, Lucknow	Appeal against the Judgement dt. 16.8.01 in OA No. 37/99 reg. quashing of recovery & payment of 93etrial benefits as Supdt.	C.A. filed		Partly heard by the Hon'ble High court, Lucknow on 14.3.2005,. Next part of the case will be listed for hearing on turn.
51	WP No.1857/SB/01 SRI V.P. AGRAWAL VS. SR. P.A.	--	H.C. Bench, Lucknow	Appeal against order dt. 16.11.01 of Hon'ble CA T in 255/95 reg. payment of salary to the post of Security Officer, since 13.11.90.	Short CA filed	--	Case will be listed on turn. No date fixed so far.

52	WP No.833/02 UOI & others Vs. SRI G.L. BINDROO	STA(D.O.)	H.C. Bench, Lucknow	Appeal against order dt. 6.6.01 of Hon'ble CAT 116/95, reg. promotion on the post of Draftsman & pay fixation to the post of D/Man.	Rejoinder has been filed	05.10.08	To be listed on turn
53	WP No. 1517/SB/02 filed by SRI A.B. SRIVASTAVA	Geol.(Jr.)	H.C. Bench, Lucknow	Quashing transfer order dt. 11.12.2002 & dt. 04.09.2002 from Lucknow to Shillong & allow him to continue in service at Lucknow.	Affidavit in support of application for dismissal of WP filed before the Hon'ble High Court on 25.08.2006.	09.02.07	To be listed on turn
54	W.P. No. 531/2003 (SB) filed by SRI RAJ KUMAR MISRA, S/O LATE GUR SAHAI	Ex. Cleaner	H. C. Lucknow.	Quashing of impugned order dated 07.12.98. reg. appointment on Compassionate Ground.	CA filed on 12.05.03	--	Case will be listed on turn. No date fixed so far.
55	W.P.No.1154/SB/03 filed by SRI S.A.H. RIZVI	Steno Gr.II	H. C. Lucknow.	Quashing of the Hon'ble CAT order dated. 29.10.2002 & adverse entries in CAT. Reg. promotion to the post of Steno Gr-II.	C.A. filed		Case will be listed on turn. No date fixed so far.
56	W.P.No.165/04 filed by MOHD ISHAQ	-do-	H. C. Lucknow.	Appeal against CAT order dt. 11.09.03 in O.A. No. 163/98, reg. fixation of pay scale.	CA filed	04/02/11	Case will be listed on turn. No date fixed so far.

57	W.P.No.194/SB/04 filed by SRI SANTOSH K. YADAV S/O LATE KRISHANA YADAV	Ex. Asstt.	H. C. Lucknow.	Appeal against CAT order dt. 12.12.03 of compassionate Appointment	CA filed	20.12.06	To be listed on turn
58	W.P.No 381/SB/04 in 503/00 filed by UOI & Others against the CAT order of SRI S.S.MISRA	Ex. LDC	H. C. Lucknow.	Appeal against the CAT order dt. 03.09.03 in O.A. No. 503 /00 against Sri S. S. Misra, reg. quashing of punishment order dated. 23.8.04 & ^ reinstate in service & pay him the entire arrears & Other consequential benefits.	CA filed	22.12.08	Case will be listed on turn.61
59	W.P.N0.1284 /SB/ 2004 filed by DR. V. D. AGARWAL, Geophy. (Sr.) Vs UOI & Others	Geophy(Sr.)	H. C. Lucknow.	Quashing of impugned order dated. 29.06.04 & promotion to the post of Director (Geophy) from the date of is junior were promoted with all consequential benefits.	CA filed	26.08.04	Case will be listed on turn. No date fixed so far. Letter issued to the Govt. Counsel for intimating the present status/ development.
60	W.P.No. 1633/SB/2004 in O.A.No. 92/96 filed by SRI Babu Lal	Ex. Durwan	H. C. Lucknow.	Appeal against the CAT order dated. 24.10.03, reg. quashing of termination order dated. 22.9.95.	CA is filed	06.12.2006	To be listed on turn
61	WP. No. 1365/SB/2005, filed by SRI V. K. SHARMA, VS UOI & OTHERS	Geol(Jr)	H. C. Lucknow.	Quashing of CAT order dated. 17.4.2005 and 6.7.2005, reg. quashing of Memorandum charges dated. 23.3.01 pertaining to false & forged Mark Sheet of MSc final Exam 1996-97.	C.A. filed		CA filed on 18.9.06. Case will be listed on turn.

62	WP. No. 137/2006, filed by UOI & OTHERS against SRI S.C.SHARMA.	Ex. DDG	H. C. Lucknow.	Quashing of CAT order dated. 13.9.2005, reg. payment of arrear of salary on the post of DDG from the date of promotion of his junior alongwith interest thereof.	RA on CA is under preparation with Govt. Counsel	24.8.2006	To be listed on turn
63	W.P. No.1326/07 filed by UOI & others Vs Kandhai Lal Dhanuk, S/O Late Ram Asrey	Ex. Safaiwala	H. C. Lucknow	Quashing of impunged order dated. 30.04.2007 passed by CAT, reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	Stay on operation of CAT order dt. 3.4.07 passed in OA NO.299/06 granted by the Hon'ble High Court, Lucknow Benchvide its order dt.30.10.07. To be listed on turn
64	W.P. No.1327/07 filed by UOI & others Vs Sri Karan Bahadur, S/O Late Hari Bahadur & others	Ex. Durwan	H. C. Lucknow	Quashing of impunged order dated. 30.04.2007 passed by CAT, reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	Stay on operation of CAT order dt. 3.4.07 passed in OA NO.303/06 granted by the Hon'ble High Court, Lucknow Bench vide its order dt.30.10.07. To be listed on turn
65	W.P. No.363/SB/08 filed by UOI & others Vs Smt Meera Devi, W/O Late Tek Bahadur	Ex. Durwan	H.C. Lucknow	Quashing the Hon'ble CAT order dt31.5.07 reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	To be listed in next cause list.

66	W.P. No.387/SB/08 filed by UOI & others Vs Sri Manoj Kumar, S/O Late Ram RajRam	Ex. Driver	H.C. Lucknow	Quashing the Hon'ble CAT order dt 30.5.07 reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	To be listed in next cause list.
67	W.P. No.388/SB/08 filed by UOI & others Vs Sri Mata Pher Singh, S/O late R.P. Singh	Ex. Driver	H.C. Lucknow	Quashing the Hon'ble CAT order dt..... reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	To be listed in next cause list.
68	W.P. No.389/SB/08 filed by UOI & others Vs Kalpana Sharma, D/O Late R.C.Sharma	Ex. Assistant	H.C. Lucknow	Quashing the Hon'ble CAT order dt. 7.8.07 reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	To be listed in next cause list.
69	W.P. No.386/SB/08 filed by UOI & others Vs Smt Middo Devi, W/O Late Mohd. Rafiq	Ex. Tech. Helper	H.C. Lucknow	Quashing the Hon'ble CAT order dt. 30.5.07 reg. appointment on compassionate ground.	-	Listed in weekly cause list wef. 23/08/10 to 27/08/10	To be listed in next cause list.
70	W.P. No.1970/SB/08 filed by UOI & Others Vs. B.B. Tamang, & Others	Cleaner	H.C. Lucknow	Regarding quashing of impugned order dated 3.9.08 passed by the Hon'ble CAT, Lucknow Bench in O.A. No.546/2006.	-	07.01.09	To be listed on turn.

71	WP.NO. /MB/2009 filed by Sri S.A.H.Rizvi Vs. UOI & Others	Steno Gr.II	H.C. Lucknow	Regarding to direct the opposite parties No.1 & 2 to get an enquiry conducted by C.B.I. or any other independent agency into the alleged frauds and manipulations committed in the office of opposite party No.3 and also praying to direct the concerned respondents to take appropriate action against the conduction of the enquiry	C.A.filed		To be listed in next cause list.
72	WP.No.2564/(S/S)/2009 filed by Km. Radhika Devi Vs. UOI & Others	-	High Court Lucknow Bench	Regarding appointment on compassionate ground	C.A.filed		To be listed on turn
73	W.P.No. 1242/SB/09 filed by Sri Amir Ahmed Vs. UOI & others	Ex.Director	High Court Lucknow Bench	Regarding quashing of impugned order dated 19.05.09 and 22.07.08 passed by the Hon'ble Tribunal in R.A.No.24/08 and T.A.No.1/99 in O.A.No.119/93	C.A. filed		
74	W.P.No. /SB/09 filed by Sri Ashok Kumar S/O Late Ram Bharosey Dixit		High Court Lucknow	Regarding quashing of impugned order dated 5.6.2009 passed by the Hon'ble Tribunal, Lucknow , in O.A.No.212/2008	C.A. to be filed	-	To be listed on turn
75	W.P.No. /(S/B)/10 filed by Sri P.N.Dixit S/O Late D.N.Dixit,		High Court Lucknow	Regarding quashing of impugned order dt.4.12.2009 passed by Hon'ble CAT,Lucknow	C.A. to be filed	-	To be listed on turn
76	W.P.No. /(M/B)/2009 filed by Sri Sudhir Kumar S/O Late Sri Pal,		High Court Lucknow	Regarding quashing of impugned order dt.30.10.2009 passed by Hon'ble CAT,Lucknow	-	-	To be listed on turn
77	W.P.No.3101/(M/B)/2010 filed by Sripal Vs. state of UP & others		High Court Lucknow	Regarding to direct opp. Parties to restrained the mining operation.	-	16.7.10	

78	W.P.No.914/(SB)/2010 filed by Sri Vijender Singh S/O Late Indrer Singh, Ex.Driver Vs. UOI & others		High Court Lucknow	Regarding quashing the impugned judgment & order dt. 04.12.2009 Passed by the Hon'ble CAT, Lucknow In O.A.No.93/09	-	-	To be listed on turn
79	W.P.No.5661/(M/B)/2010 filed by Sri Shesh Nath Vs. State of UP & others		High Court Lucknow	Regarding illegal mining in state of UP including district Banda	-	-	To be listed on turn
80	W.P.No. /SB/2010 filed by UOI & others Vs. Sri Awadesh Kumar,DE(Jr.)		High Court Lucknow	Against the order dt.20.10.09 passed by the Hon'ble CAT,Lucknow Bench,Lucknow in O.A. No.459/2007	-	12/04/10	To be listed on turn
81	W.P.No.149/2011(SB) filed by Sri Ganpat Narain Sachan, Vs.UOI & others	Ex.Astt.Chemist	High Court Lucknow	Reg. Pay the Arrears pension of petitioner since 15.09.1978	C.A.filed	-	To be listed on turn
82	W.P.No. /M/S)/2011 filed by UOI Vs. Sri Mobin Ahmad Khan and others		High Court Lucknow	Stay operation of the order dated 07.01.2010 and 30.04.2010 passed by opposite party no.3	-	-	
	<u>Motor Accident Claim</u>		<u>MACT Lucknow</u>				
83	C.P.No.159/2008 filed by Sri Raju S/O Sri Raees Ahmad Vs. Director(E&T)Divn.		MACT Lucknow	For compensation of 12,00,000/-		11.10.11	

84	<u>Motor Accident Claim</u> MACT No.17/2011 filed by Smt.Reshmo Devi Vs.UOI & others		D.J. Dehradun D.J. Dehradun	Claim of Rs.60,00,000/- alongwith interest @ 12% wef. date of claiming	C.A.filed	21.09.11	
	<u>Civil Court, Lucknow.</u>		<u>C.J. (Jr.Divn.) Lucknow</u>				
85	Court case No.146/2011 filed by Nov Chetna Association Vs.Sri L.S.Jain & others		C.J. (Jr.Divn.) Lucknow		-	07.10.11	
	<u>Supereme Court of India</u>		Supereme Court of India				
86	SLP filed by UOI & Ors Vs Man Bahadur Khati <u>Diary No.25733 of 2011</u> <u>dt.17.08.2011</u>		Supereme Court of India	During the pendency of the present petition the operation and implementation of the impugned order dated 12.11.2010 passed in O.A.No.707/CH/2009 be stayed.	-	-	

Contempt Cases

Sl. No.	Case No., Name of applicant, designation & Name of court	Short Details of the cases	Date of Judgement	Present Date	Action(s) taken for comppliance of court order	Remarks, if any
87	C.P. No.7/2009 filed by Shri B.B. Tamang, Cleaner, & Others Vs. Shri P.M. Tejale, D.G. GSI, and Shri R.K. Singh, Dy.D.G. NR., CAT, Lucknow	Regarding non-compliance of Hon'ble CAT order dated 03.09.2008 passed in O.A. No.546/2006.	03/09/08	13.10.11	Compliance Report filed	The order dated 03.09.2008, passed by the Hon'ble CAT, Lucknow was fully complied with and communicated vide letter dated 02.08.10 & 3.8.10 and compliance report has been handed over to Govt. Counsel with the request to apprise the Hon'ble Tribunal, Lucknow Bench, Lucknow.
88	C.P. No. 49/2011 in O.A. No. 707/CH/09 filed by SRI Man Bhadur Khati VS Shri Laxman Singh Jain Dy. DG, GSI, NR and Others.	Non-compliance of Hon'ble CAT order dt. 12.11.2010	12/11/10	Sine die	-	

89	C.P.No. 68/10 in O.A. No. 322/2008 filed by Sri V.D. Agrawal (Sr.) VS Shri S. Vijai Kumar, I.A.S. and Others.	Non-compliance of the Hon'ble CAT order dt. 16.12.2009	16.12.2009	10.10.11	-	The matter has been taken up with the DOP&T and Deptt. Of P&PW, who has advised to take up the matter again with the Ministry of Law & Justice , DOP&T and their policy Desk to study the implication of the matter and decide on the propriety feasibility of taking fresh action in consultation with the UPSC etc under rule 9 of CCS(Pension)Rules, which may take some time. And the matter is being referred to UPSC for their advice/opinion in the matter. Govt.Counsel's opinion has also been forwarded to MOM,New Delhi in the mean time Sri Agarwal has filed a C.P.No.68/2010 before the Hon'ble Tribunal .
90	C.P.No.1626/08 filed by Sri V.D. Agarwal Ex. Geophysics(Jr.),High Court,Lucknow	Non-compliance of Hon'ble High Court order dt. 20.9.07	20.09.2007	06.07.2011	C.A. filed	An affidavit has been filed before the Hon'ble High Court that the opposite parties in the contempt petition have been retired/transferred as such the deponent considers his duty to

						<p>apprise the Hon'ble Court the factual position of the case and payment of provisional pension till the conclusion of disciplinary proceedings is concerned it is submitted that the NR,GSI had taken up the necessary steps by writing to pay and accounts office vide letter dated 18.03.2005 to pay the provisional pension , but the pay and accounts office expressed their inability to pay the same due to the pending decision in r/o of period of unauthorized absence of the petitioner for more than 10 years.</p>
91	<p>C.P. No.26/2009 filed by Shri R.D.H.Tyagi,DE(Sr.) Vs. Shri Santanu Counsul ,Secretary (Mines) P.M. Tejale, D.G. GSI, and Shri R.K. Singh, Dy.D.G. NR, CAT,Lucknow</p>	<p>Regarding non-compliance of Hon'ble CAT Order in dt.16.09.2008 O.A.No.500/1998</p>	7.07.2008	17.10.11	<p>Application for dismissal of C.P. has already been filed before the Hon'ble Tribunal</p>	

92	C.P No 71/2004 in O.A. No. 503/00 filed by SRI S.S. MISRA,Ex.LDC VS DR. K.N. MATHUR, DG, GSI,CAT,LUCKNOW	To reinstate the applicant in service with all consequential benefits from the date of compulsory retirement CP filed by the petitioner reg. non-compliance of CAT order dated. 3.9.2003	03/09/03	Sin-e-die on 2.6.2008	C.A. filed	CP stayed by the Hon'ble High Court, vide order dated. 7.12.2006.
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POSITION OF PEDNING LEGAL COURT CASES UPTO JULY TO SEPT. 2011 IN RESPECT OF GSI, NR

<u>QUARTER ENDING</u>	<u>TOTAL PENDING LEGAL CASES</u>	<u>REMARKS</u>	
		<u>DURING THE QUARTER ENDING DECEMBER'2008.</u>	
30.09.2001	068	Cases decided 05	07
31.12.2001	072	Cases filed 06	06
31.03.2002	074		
30.06.2002	075		
30.09.2002	074		
31.12.2002	078		
31.03.2003	084		
30.06.2003	084		
30.09.2003	084		
31.12.2003	074		
31.03.2004	071		
30.06.2004	075		
30.09.2004	073		
31.12.2004	075		
31.03.2005	076		
30.06.2005	081		
30.09.2005	075	<u>BREAK UP QUARTER ENDING 31.12.2008.</u>	
31.12.2005	075		
31.03.2006	072		
30.06.2006	075	1. Lucknow 76	65
30.09.2006	084	2. Allahabad 06	05
31.12.2006	093	3. Chandigarh 03	04
31.03.2007	092	4. Jammu 05	04
30.06.2007	090	5. Uttaranchal 02	01
30.09.2007	081	6. Civil Judge Faridabad 00	01
31.12.2007	086	7. Principal Bench, Delhi 02	01
31.03.2008	085		
30.06.2008	086		
30.09.2008	082		
31.12.2008	081	Toatal:- 92	81

31.03.2009	083		
30.06.2009	083		
30.09.2009	082		
31.12.2009	079		
31.03.2010	080		
30.06.2010	86		
30.09.2010	88		
31.12.2010	92		
31.03.2011	94		
30.06.2011	91		
30.09.2011	92		

LIST OF FRESH CASES FOR THE QUARTER ENDING JULY TO SEPT. 2011

1. Court case No.146/2011 filed by Nov Chetna Association.
1. SLP Diary No.25733 of 2011 dt.17.08.2011 filed by UOI & others
2. W.P.No.5195/2011 filed by GSI through Dy.D.G., NR.
3. O.A.No.353/2011 filed by Smt.Vimla W/O Late Banne,Ex.T/Helper
4. O.A.No. /2011 filed by Sri K.C.Joshi& others
5. O.A.No. /2011 filed by Sri Tarit Ranjan Das

DECIDED CASES DURING THE QUARTER ENDING JULY TO SEPT. 2011

O.A.No.89/2007 filed by M.K.srivastava
O.A.No.473/2010 filed by Sri R.P.Verma
O.A.No.1414/2010 filed by S.R.Bhati
Court Case No.43/06/2011 arising out of MACT No.334/2006 filed by Sri Pushkar Singh Thapa
O.A.No. /2011 filed by Sri Kalpoo Ram

ANNEXURE-17

FSP ITEMS APPROVED IN FSPMIS MODE FOR F.S. 2010-2012 – NORTHERN REGION

		MISSION - I		
1.	Parent Unit	SPECIALISED THEMATIC MAPPING - (UP & UK)	Project ID	2010585 – Approved
	TITLE	SPECIALISED THEMATIC MAPPING OF GAP AREAS IN THE SOUTHERN PART OF TOPOSHEET NO. 53 O/13 IN BAGESHWAR DISTRICT, UTTARAKHAND.		
	OBJECTIVE	To build up detailed lithostratigraphy and to work out the major tectonic elements of rocks of the Garhwal Group.		
2.	Parent Unit	SPECIALISED THEMATIC MAPPING - (UP & UK)	Project ID	2010407 – Approved
	TITLE	SPECIALISED THEMATIC MAPPING TO BRING OUT THE INTER-RELATIONSHIP OF ULTRAMAFIC BODIES WITH BUNDELKHAND GRANITOIDS AND BIJAWAR GROUP OF ROCKS IN LALITPUR DISTRICT, U.P.		
	OBJECTIVE	To bring out the inter-relationship of ultramafic bodies and Bundelkhand Granitoids and to establish the nature of contact of ultramafic bodies with Granitoids as well as Bijawar sediments.		
3.	Parent Unit	SPECIALISED THEMATIC MAPPING - (UP & UK)	Project ID	2010396 – Approved
	TITLE	SPECIALISED THEMATIC MAPPING OF SIWALIK BELT IN SAHARANPUR DISTRICT OF UTTAR PRADESH AND DEHRADUN DISTRICT OF UTTARAKHAND.		
	OBJECTIVE	To establish i) the lithostratigraphy of Siwalik Belt in parts of Uttarakhand and ii) the type section of Siwalik as per the code of stratigraphic nomenclature.		
4.	Parent Unit	PROJECT: HIMALAYAN GEOLOGY	Project ID	2010724 – Approved
	TITLE	SPECIALISED THEMATIC MAPPING TO ESTABLISH LITHOSTRATIGRAPHY AND TECTONIC SETTING OF BHILANGANA FORMATION VIS A VIS CENTRAL CRYSTALLINES.		
	OBJECTIVE	To build up detailed tectonostratigraphy and to work out the major tectonic elements of rocks of the Bhilangana Formation.		
5.	Parent Unit	PROJECT: SPECIALISED THEMATIC MAPPING (H)	Project ID	2010148 – Approved
	TITLE	DELINEATION OF LITHOSTRATIGRAPHIC UNITS OF SIWALIK BELT IN NORTH-WESTERN HARYANA AND ADJOINING PARTS OF PUNJAB AND HIMACHAL PRADESH (TOPOSHEET NOS. 53B/13 AND 53F/1)		
	OBJECTIVE	To establish the lithostratigraphy of Siwaliks Belt in Haryana and its correlation with the Siwaliks of Punjab, Himachal Pradesh and Uttarakhand.		
6.	Parent Unit	PROJECT: SPECIALISED THEMATIC MAPPING (HP)	Project ID	2010630 – Approved
	TITLE	SPECIALIZED THEMATIC MAPPING OF UPPER KROL FORMATION FOR TRACING OF LIMESTONE/DOLOMITE BANDS.		
	OBJECTIVE	To differentiate and assess the quality of limestone/dolomite bands for use in cement/glass industry respectively.		
7.	Parent Unit	PROJECT: SPECIALISED THEMATIC MAPPING (HP)	Project ID	2010621 – Approved
	TITLE	DELINEATION OF LITHOSTRATIGRAPHIC UNITS OF SIWALIK BELT IN KANGRA, HAMIRPUR, MANDI, BILASPUR AND UNA DISTRICTS, HIMACHAL PRADESH AND ROPAR DISTRICT, PUNJAB.		

	OBJECTIVE	To establish the lithostratigraphy of Siwalik Belt in Punjab and Himachal Pradesh and to work out its palaeo-environment and tectonic setting		
8.	Parent Unit	PROJECT: SPECIALISED THEMATIC MAPPING (J&K)	Project ID	2010695 – Approved
	TITLE	SPECIALISED THEMATIC MAPPING OF THE ROCKS OF SHYOK TECTONIC BELT OF KHALSAR – HUNDAR – TRISHA AREA, LADAKH, JAMMU AND KASHMIR – ON EXPEDITION BASIS.		
	OBJECTIVE	To work out the interrelationship among the different litho-units occurring within the Shyok Tectonic Belt, to build up stratigraphy of this belt, and its relationship with juxtaposed Karakoram Batholith to the north and Ladakh Granitoid Complex to the south.		
9.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (PENINSULA) – UP&UK	Project ID	2010400 – Approved
	TITLE	REGIONAL GEOCHEMICAL MAPPING OF THE TOPOSHEET NOS. 63P/1 & 5 FALLING IN PARTS OF SONBHADRA AND MIRZAPUR DISTRICTS OF UTTAR PRADESH AND ROHTAS DISTRICT OF BIHAR.		
	OBJECTIVE	To establish baseline database and prepare geochemical maps to study the behaviour, concentration and dispersion pattern of various elements in the area for its application in mineral exploration, soil fertility and environment.		
10.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (PENINSULA) – UP&UK	Project ID	2010546 – Approved
	TITLE	COMPILATION, SYNTHESIS AND INTERPRETATION OF CHEMICAL DATA, MAINTENANCE OF NATIONAL GEOCHEMICAL SAMPLE REPOSITORY AND PREPARATION AND UP GRADATION OF THE PROGRESS REPORTS.		
	OBJECTIVE	Service		
11.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (EP) – UP&UK	Project ID	2010197 – Approved
	TITLE	REGIONAL GEOCHEMICAL MAPPING OF TOPOSHEET NOS 53O/5, 6 AND 7 IN NAINITAL, ALMORA AND CHAMOLI DISTRICTS OF UTTARAKHAND.		
	OBJECTIVE	To prepare a geochemical database map and study the behaviour, concentration and dispersion pattern of various elements in the area for its applications in mineral exploration, agriculture, forestry, human/ animal health environments.		
12.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (EP) – UP&UK	Project ID	2010450 – Approved
	TITLE	COMPILATION, SYNTHESIS AND INTERPRETATION OF GEOCHEMICAL ANALYTICAL DATA AND MAINTENANCE OF NATIONAL GEOCHEMICAL REPOSITORY COMMODITIES AND UPGRADATION OF PROGRESS REPORTS.		
	OBJECTIVE	1. Compilation, synthesis and interpretation of chemical data 2. Maintenance of National Geochemical Sample Repository. 3. Preparation and circulation of the interim/final reports upto F.S. 2006-07 by March'2011 and later reports by March'2012 depending on the availability of 40 and or 68 elements respectively.		
13.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (HARYANA)	Project ID	2010216 – Approved
	TITLE	REGIONAL GEOCHEMICAL MAPPING IN TOPOSHEET NOS. 53H/4 AND 54E/1 IN PARTS OF GURGAON, AND FARIDABAD DISTRICTS OF HARYANA AND PARTS OF NATIONAL CAPITAL TERRITORY DELHI.		

	OBJECTIVE	To prepare a regional geochemical map and database to study the behaviour, concentration and dispersion pattern of various elements in the area for its applications in mineral exploration, agriculture, forestry, human/animal health and environments.		
14.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (HARYANA)	Project ID	2010778 – Approved
	TITLE	1) SUPERVISION AND MAINTENANCE OF SAMPLES AT NATIONAL GEOCHEMICAL SAMPLE REPOSITORY, FARIDABAD 2) PROCESSING AND INTERPRETATION OF GEOCHEMICAL ANALYTICAL RESULTS OF NGCM SAMPLES. 3) UPDATING OF NGCM REPORTS OF PREVIOUS FIELD SEASONS.		
	OBJECTIVE	Service		
15.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (H.P.)	Project ID	2010685– Approved
	TITLE	REAPPRAISAL OF REGIONAL GEOCHEMICAL MAPPING IN TOPOSHEETS NOS. 53E/3 & E/4 IN PARTS OF MANDI, SOLAN AND SHIMLA DISTRICTS, HIMACHAL PRADESH.		
	OBJECTIVE	To prepare a geochemical database map and study the behavior, concentration and dispersion pattern of various elements in the area for its applications in mineral exploration, agriculture, forestry, human/animal health environments.		
16.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (PUNJAB)	Project ID	2010603 – Approved
	TITLE	REGIONAL GEOCHEMICAL MAPPING IN TOPOSHEET NOS. 53B/10 & 14, CHANDIGARH (UNION TERRITORY), HOSHIARPUR, PATIALA & ROPAR DISTRICTS, PUNJAB.		
	OBJECTIVE	To prepare a Regional geochemical map, and for the geochemical assessment of the area with regard to mineral potential, soil fertility, agriculture etc. and also to establish valid environmental base line for understanding the geochemical aspects of the environment.		
17.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (PUNJAB & HP)	Project ID	2010599 – Approved
	TITLE	(i) PROCESSING, INTERPRETATION OF GEOCHEMICAL ANALYTICAL RESULTS OF NGCM SAMPLES AND FINALIZATION OF REPORTS. (ii) ESTABLISHMENT OF REPOSITORY OF NGCM SAMPLES COLLECTED UNDER PROJECT: REGIONAL GEOCHEMICAL MAPPING (PUNJAB & HIMACHAL PRADESH).		
	OBJECTIVE	SERVICE ITEM		
18.	Parent Unit	PROJECT: REGIONAL GEOCHEMICAL MAPPING (J&K)	Project ID	----- – Approved
	TITLE	REGIONAL GEOCHEMICAL MAPPING IN MANSAR-SAMBA AREA, SAMBA, KATHUA AND UDHAMPUR DISTRICTS, J&K.		
	OBJECTIVE	To prepare a regional geochemical map of Mansar-Samba area, Samba, Kathua and Udhampur districts, J&K on systematic grid pattern to work out the tentative geochemical abundance of elements, their regional trends and anomalous pattern.		
19.	Parent Unit	M I A – GEOPHYSICAL MAPPING PROJECT: GEOPHYSICS (UTTAR PRADESH-I)	Project ID	2010075 – Approved
	TITLE	GROUND GEOPHYSICAL MAPPING IN PARTS OF DEGREE SHEET NO. 54K (TOPOSHEET NO.54K/7, 8, 11& 12) IN UTTAR PRADESH AND MADHYA PRADESH.		
	OBJECTIVE	To configure subsurface geological structures.		
	Parent Unit	PROJECT: GEOPHYSICS (UTTAR PRADESH-II)	Project ID	2010133 – Approved

20.	TITLE	GROUND GEOPHYSICAL MAPPING IN PARTS OF DEGREE SHEET NO. 63 K (TOPOSHEET NO.63 K/4, 8,12 & 16) IN UTTAR PRADESH.		
	OBJECTIVE	To configure subsurface geological structures.		
21.	Parent Unit	PROJECT: GEOPHYSICS (UTTAR PRADESH-III)	Project ID	2010143 – Approved
	TITLE	GROUND GEOPHYSICAL MAPPING IN PARTS OF DEGREE SHEET NO. 63 L (TOPOSHEET NO. 63 L/1, 5, 9 AND 13) IN UTTAR PRADESH AND MADHYA PRADESH.		
22.	OBJECTIVE	To configure subsurface geological structures of the area.		
	Parent Unit	PROJECT: GEOPHYSICS (UTTARAKHAND)	Project ID	2010387 – Approved
23.	TITLE	GROUND GEOPHYSICAL MAPPING IN PARTS OF DEGREE SHEET NO. 53J (TOPOSHEET NO.53J/3), DEHRADUN DISTRICT, UTTARAKHAND.		
	OBJECTIVE	To configure subsurface geological structures.		
		M-I B REMOTE SENSING AND AERIAL SURVEYS		
24.	Parent Unit	DIVISION: PHOTO GEOLOGY AND REMOTE SENSING	Project ID	2010421 – Approved
	TITLE	NATIONAL MISSION ON GEOMORPHOLOGICAL AND LINEAMENT MAPPING ON 1:50,000 SCALE USING SATELLITE DATA.		
25.	OBJECTIVE	Mapping of landforms of the entire country on 1:50,000 scale and identification of various types of lineaments of tectonic and structural significance on 1:50,000 scale using National classification scheme for Geomorphological and Lineament mapping.		
	Parent Unit	DIVISION: PHOTO GEOLOGY AND REMOTE SENSING	Project ID	2010009 – Approved
26.	TITLE	PHOTO GEOLOGICAL STUDIES OF VARIOUS AREAS TO BE TAKEN UP (ON LINKAGE ITEM BASIS) ON THE REQUEST FROM DIFFERENT OPERATIONS/DIVISIONS/PROJECTS (SUBJECT TO PRIORITY AND AVAILABILITY OF PERSONNEL) AND SPONSORED ITEM FROM OTHER AGENCIES, (IF ANY).		
	OBJECTIVE	To provide interpretation of remotely sensed data (if linked in consultation with PGRS Division) for different Operations/ Divisions/Projects and to render help and guidance to the officers in photo/image interpretation. To provide interpretation of remotely sensed data for the sponsored item on commercial basis (if any).		
27.	Parent Unit	PROJECT: GEOPHYSICS (UTTAR PRADESH-II)	Project ID	2010012 – Approved
	TITLE	(i) DIGITAL IMAGE PROCESSING AND RELATED SERVICES - DATA PREPARATION - GEOCODING (GEOREFERENCING AND IMAGE RECTIFICATION) OF DIGITAL/ RASTER DATA; DIGITAL IMAGE PROCESSING (ENHANCEMENT); REPRODUCTION OF LARGE SCALE TOPOSHEETS ON 1:25,000/10,000 FROM EXISTING TOPOSHEETS OF 1: 50,000 SCALE; TECHNICAL GUIDANCE IN INTERPRETATION OF FCC TO THE OFFICERS OF OPERATIONS/DIVISIONS.		
28.	OBJECTIVE	(II) STABILITY OF THE SLOPES ABOVE THE RESERVOIR RIM OF TEHRI DAM		
	OBJECTIVE	Generation of high quality, digitally enhanced FCC's from digital satellite data procured from NRSC or different user Divisions; Reproduction of SOI toposheets on large scale (from pre-existing toposheets) for those user Divisions for which digital satellite data has to be procured.		
		MISSION – II M-II Mineral Resource Assessment Precious Metals & Minerals (Gold PGE, Diamond & Precious Stones Placers)		
	Parent Unit	PROJECT: MINERAL INVESTIGATION - (UP &	Project ID	20101101 – Approved

26.		UK)		
	TITLE	SEARCH FOR GOLD AND ASSOCIATED MINERALISATION IN THE ROCKS OF MAHAKOSHAL GROUP IN CHAKORIYA – CHARKA AREA, SONBHADRA DISTRICT, UTTAR PRADESH (G-4)		
	OBJECTIVE	To delineate and assess auriferous mineralized zones in the area.		
27.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (UP & UK)	Project ID	20101102 – Approved
	TITLE	INVESTIGATION FOR GOLD AND ASSOCIATED MINERALISATION IN LAMERI - RATURA AREA, RUDRAPRAYAG DISTRICT, UTTARAKHAND (G- 4)		
	OBJECTIVE	To delineate and assess auriferous mineralized zones in the area.		
28.	Parent Unit	PROJECT: GEOPHYSICS (Linkage Item)	Project ID	2010377 – Approved
	TITLE	GEOPHYSICAL INVESTIGATION FOR GOLD AND ASSOCIATED MINERALISATION IN THE ROCKS OF MAHAKOSHAL GROUP (LINKAGE WITH ITEM NO.ME/NR/UPUK/2010/014)		
	OBJECTIVE			
29.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (HARYANA)	Project ID	2010315– Approved
	TITLE	INVESTIGATION IN THE UNEXPLORED PARTS, WEST OF BAKRIJA WITH EMPHASIS ON DEMARCATION OF THE HOST ROCK OF COPPER MINERALISATION, MAHENDRAGARH DISTRICT, HARYANA (G-3 STAGE).		
	OBJECTIVE	To assess the potential of copper mineralization to the west of Bakrija.		
30.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (HARYANA)	Project ID	2010135– Approved
	TITLE	PRELIMINARY ASSESSMENT OF GYPSUM IN PARTS OF HISSAR AND BHIWANI DISTRICTS, HARYANA. (G-4)		
	OBJECTIVE	To assess the potential of gypsum in inter-dunal areas covered by alluvial / aeolian sediments in the western part of Haryana.		
31.	Parent Unit	PROJECT: GEOPHYSICS (MINERAL INVESTIGATION-II)	Project ID – Approved
	TITLE	GEOPHYSICAL INVESTIGATION FOR PRELIMINARY ASSESSMENT OF GYPSUM IN PARTS OF HISSAR AND BHIWANI DISTRICTS, HARYANA (LINKAGE WITH ITEM NO. ME/NR/PHH/2010/017)		
	OBJECTIVE	To assess the potential of gypsum in inter-dunal areas covered by alluvial / aeolian sediments in the western part of Haryana.		
32.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (H.P.)	Project ID	2010127 – Approved
	TITLE	SEARCH FOR GLASS SAND IN RAMPUR GROUP OF ROCKS, DISTRICTS SHIMLA AND KULLU, HIMACHAL PRADESH. (G-4)		
	OBJECTIVE	Search for quartzite of Rampur Group to assess its suitability for the glass industry and other purposes.		
33.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (J & K)	Project ID	2010524 – Approved
	TITLE	INVESTIGATION FOR LEAD-ZINC MINERALISATION IN BAKKAL-SERSANDHU-KHAIRIKOT AREA, REASI DISTRICT, J&K (G-4)		
	OBJECTIVE	To reassess the potentiality of Pb-Zn mineralisation and other associated metals in Bakkal-Sersandhu-Khairikot area.		
34.	Parent Unit	PROJECT: MINERAL INVESTIGATION - (J & K)	Project ID	2010659 – Approved
	TITLE	DETAILED INVESTIGATION FOR LEAD-ZINC DEPOSIT OF BUNIYAR AREA, BARAMULLA DISTRICT, J&K.		
	OBJECTIVE	To reassess the nature and extent of Pb-Zn mineralisation and other associated.		
	Parent Unit	PROJECT: GEOPHYSICS (BOREHOLE LOGGING)	Project ID	2010180 – Approved

35.	TITLE	a) GEOPHYSICAL LOGGING OF BOREHOLES AND MISE-A-LA-MASSE SURVEY IN NORTHERN REGION, AS AND WHEN REQUIRED. (LINKAGE ITEM) B) GEOPHYSICAL LOGGING OF BOREHOLES DRILLED FOR NATURAL ENERGY RESOURCES, AS AND WHEN REQUIRED. (LINKAGE ITEM)		
	OBJECTIVE			
		MISSION – III DATA REPOSITORY & MANAGEMENT- GEOSCIENTIFIC DATABASE		
36.	Parent Unit	DIVISION: GEODATA	Project ID	2010020 – Approved
	TITLE	UPDATION OF ALREADY LOADED GEOLOGICAL MAP LAYERS IN 1:50K IN GSI PORTAL.		
	OBJECTIVE	The main objective of the project is to build an enterprise level spatial database through collation of geological datasets generated through systematic geological mapping on scale 1:50,000 carried out by GSI since its inception. The objective can be achieved through uploading the digitised maps in the portal in a national grid. This will lead to consolidation of spatial data archive for visualization, query and generating value added products for subsequent thematic studies.		
37.	Parent Unit	DIVISION: GEODATA	Project ID	2010021 – Approved
	TITLE	(A) ASSISTANCE TO OTHER DIVISIONS, IMPLEMENTATION OF LAN, WAN, PORTAL, SUPPLY OF DATA FOR PORTAL AND MAINTENANCE OF GDC. (B) DATA ENTRY FOR LEGACY FSP AND EXTENDED ABSTRACTS IN DAILY REPORT.		
	OBJECTIVE	1. Looking after and supervising the maintenance of LAN, WAN and PORTAL. 2. Preparation of backups for archival and export of data. 3. Maintenance of Computers systems of NR. 4. Supervision of Video Conferencing facility at NR. 5. Preparation of backups for archival and transfer of data to CHQ. 6. Maintenance of LAN in Operations/unit of Northern Region. 7. Assistance to other Divisions and projects.		
38.	Parent Unit	DIVISION: GEODATA	Project ID	2010025 – Approved
	TITLE	CREATION AND ARCHIVAL OF REGIONAL GEOCHEMICAL AND GEOPHYSICAL DATABASE.		
	OBJECTIVE			
39.	Parent Unit	PROJECT: GEOPHYSICS	Project ID	2010183 – Approved
	TITLE	CREATION AND ARCHIVAL OF REGIONAL GEOPHYSICAL DATABASE.		
	OBJECTIVE			
40.	Parent Unit	PROJECT: GEOINFORMATICS (NR-HQ)	Project ID	2010350 – Approved
	TITLE	CREATION OF THEME BASED DATABASE OF THE SHEET NOS. 63L/9, 13; 63M/7, 8, 11, 12; 63P/1, 2, 3, 4.		
	OBJECTIVE	Creation of toposheet wise theme based database and its integration with existing geoscientific database.		
41.	Parent Unit	PROJECT: GEOINFORMATICS (GEOPHYSICS)	Project ID	2010183 – Approved
	TITLE	CREATION OF THEME BASED DATABASE OF VARIOUS TOPOSHEETS PERTAINING TO UP AND HARYANA – (LINKAGE WITH ITEM NO.DB/NR/HQ/2009/001)		
	OBJECTIVE			
	Parent Unit	PROJECT: GEOINFORMATICS (P & HP)	Project ID	2010367 – Approved

42.	TITLE	CREATION OF THEME BASED DATABASE OF THE GEOLOGICAL MAPS PERTAINING TO DEGREE SHEET NOS 44M, 44N, 44I, 44J, 43P OF PUNJAB AND H.P.		
	OBJECTIVE	Creation of theme based relational database at oracle platform to be integrated with existing geoscientific database and its updation.		
43.	Parent Unit	PROJECT: GEOINFORMATICS (P & HP)	Project ID	2010361 – Approved
	TITLE	DIGITIZATION, UPGRADATION AND UPDATION OF GEOLOGICAL MAPS UPLOADED IN GSI PORTAL.		
	OBJECTIVE	To upgrade and update the geological maps uploaded in GSI portal.		
44.	Parent Unit	PROJECT: GEOINFORMATICS (P & HP)	Project ID – Approved
	TITLE	EXECUTION AND MAINTENANCE OF LAN AT GEOINFORMATICS LAB. AND WAN (PORTAL) IN G.S.I. OFFICE CHANDIGARH AND MONITORING / EXTENSION OF NETWORK RELATED COMPUTER FACILITIES TO VARIOUS OFFICERS.		
	OBJECTIVE			
45.	Parent Unit	DIVISION: GEODATA (H)	Project ID	2010030 – Approved
	TITLE	CREATION OF THEME BASED DATABASE OF GEOLOGICAL MAPS PERTAINING TO SHEET NOS 44K, 44O, 44P, 53B,C,D, 53F,G,H, 54E OF HARYANA.		
	OBJECTIVE	Creation of theme based relational database pertaining to Haryana. The thematic database is to be integrated with the existing geoscientific database.		
46.	Parent Unit	PROJECT: GEOINFORMATICS (H)	Project ID	2010001 – Approved
	TITLE	MANAGING AND PROVIDING IT RELATED SERVICES TO THE OPERATION PH&HP OFFICE AT FARIDABAD.		
	OBJECTIVE	<ol style="list-style-type: none"> 1. Updating the knowledge and acquiring of IT solutions related to geoscience and implementation of these solutions in the department. 2. Provide Assistance to the users in utilization of various IT solutions and analysis of geoscientific data. 3. Management of Transactional applications of Portal data and provide assistance in its effective utilization by the officers/staff. 4. Management and maintenance of IT facilities both hardware and soft ware of the office which include both WAN and LAN. 		
47.	Parent Unit	DIVISION: GEODATA (JK)	Project ID	2010542 – Approved
	TITLE	EXECUTION AND MAINTENANCE OF LAN IN GSI OFFICE, JAMMU AND MONITORING/ EXTENSION OF COMPUTER RELATED FACILITIES TO VARIOUS OFFICERS.		
	OBJECTIVE			
		M – III MAP COMPILATION		
48.	Parent Unit	DIVISION: MAP AND CARTOGRAPHY	Project ID	2010692 – Approved
	TITLE	COMPILATION OF DISTRICT RESOURCE MAPS OF NORTHERN REGION (SCALE 1:2,50,000)		
	OBJECTIVE	Compilation of District Resource Maps		
49.	Parent Unit	DIVISION: MAP AND CARTOGRAPHY	Project ID	2010697 – Approved
	TITLE	MAINTENANCE AND ISSUE OF MAPS / TOPOSHEETS, FERROPRINTING AND DRAWING WORK. UPDATION OF ALREADY LOADED GEOLOGICAL MAP LAYERS IN 1:50K IN GSI PORTAL – (LINKAGE WITH ITEM NO.MAP/NR/HQ/2010/018)		

	OBJECTIVE			
50.	Parent Unit	DIVISION: MAP COMPILATION – (UP & UK)	Project ID	2010503 – Approved
	TITLE	TO CATER ALL TYPE OF CARTOGRAPHIC WORK OF VARIOUS DIVISIONS AND PROJECTS OF OPERATION UTTAR PRADESH AND UTTARAKHAND. UPDATION OF ALREADY LOADED GEOLOGICAL MAP LAYERS IN 1:50K IN GSI PORTAL – (LINKAGE WITH ITEM NO.MAP/NR/HQ/2010/018)		
	OBJECTIVE			
51.	Parent Unit	DIVISION: MAP COMPILATION – (FARIDABAD)	Project ID	2010002 – Approved
	TITLE	1. TO PREPARE PORTAL READY FINALISED LAYOUT AS PER THE STANDARD FORMAT OF CHQ. 2. TO CATER TO ALL TYPES OF CARTOGRAPHIC WORK OF VARIOUS DIVISIONS & PROJECTS OF OP: P,H & H.P., ISSUE OF MAPS/TOPO SHEETS, MAINTENANCE OF AERIAL PHOTOGRAPHS AND IMAGERIES ETC. 3. ASSISTANCE TO OTHER DIVISIONS/PROJECTS IN INTERPRETATION OF AERIAL PHOTOGRAPHS & IMAGERIES. UPDATION OF ALREADY LOADED GEOLOGICAL MAP LAYERS IN 1:50K IN GSI PORTAL – (LINKAGE WITH ITEM NO.MAP/NR/HQ/2010/018)		
	OBJECTIVE	To prepare Lay outs of standadised 50K series maps Manage and maintain cartographic services and aerial photographs and imageries.		
52.	Parent Unit	DIVISION: MAP COMPILATION – (P & HP)	Project ID	2010470 – Approved
	TITLE	GENERATION OF 1:50K SCALE GEOLOGICAL MAP OF THE REGION (LINKAGE WITH M&C AND GEODATA, NR). UPDATION OF ALREADY LOADED GEOLOGICAL MAP LAYERS IN 1:50K IN GSI PORTAL – (LINKAGE WITH ITEM NO.MAP/NR/HQ/2010/018)		
	OBJECTIVE	To generate 1:50,000 scale geological map for preparation of seamless portal ready map of the entire region.		
53.	Parent Unit	DIVISION: MAP & CARTOGRAPHY (JK)	Project ID	2010708 – Approved
	TITLE	TO CATER ALL TYPES OF CARTOGRAPHIC WORK OF VARIOUS DIVISIONS AND PROJECTS OF OPERATION: J&K, ISSUE OF MAPS/TOPOSHEETS, MAINTENANCE OF AERIAL PHOTOGRAPHS AND IMAGERY ETC.		
	OBJECTIVE			
		M – III INFORMATION DELIVERY		
54.	Parent Unit	DIVISION: PUBLICATION	Project ID	2010725 – Approved
	TITLE	PROCESSING OF MANUSCRIPTS FOR PUBLICATION OF GSI RECORDS, SPECIAL PUBLICATIONS, NEWS, MISCELLANEOUS PUBLICATIONS, BULL. SERIES AND LINKING OF FSP ITEMS WITH EXTENDED ABSTRACTS AND CONVERSION OF DATA IN MIS MODE FOR UPLOADING OF UNPUBLISHED REPORTS IN GSI PORTAL.		
	OBJECTIVE			
54.	Parent Unit	DIVISION: PUBLICATION	Project ID	2010726 – Approved
	TITLE	MAINTENANCE AND UP-GRADATION OF NR LIBRARY SYSTEMS, PROCUREMENT OF BOOKS AND JOURNALS, PREPARATION OF BIBLIOGRAPHIC DATABASE FOR BOOKS/JOURNALS, REPORTS ETC. PROCESSING AND SCRUTINY OF PAPERS FOR PUBLICATION WITHIN AND OUTSIDE THE DEPARTMENT IN NATIONAL/INTERNATIONAL JOURNALS / AND FOR SEMINARS/SYMPOSIUM ETC. AND SALE/DISTRIBUTION OF DEPARTMENTAL PUBLICATIONS.		
	OBJECTIVE			

		MISSION – IV GEOTECHNICAL		
55.	Parent Unit	ENGINEERING GEOLOGY DIVISION (UP)	Project ID	2010155 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCE DEVELOPMENT PROJECTS IN UP AND UTTARAKHAND.		
	OBJECTIVE	To carry out preliminary, pre-construction, construction and post construction stage geotechnical investigations of river valley projects.		
56.	Parent Unit	DIVISION: UTTARAKHAND UNIT ENGINEERING GEOLOGY PROJECT – (I), DEHRADUN	Project ID	2010623 – Approved 2010769 – Approved 2010770– Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCES DEVELOPMENT PROJECT IN UTTARAKHAND.		
	OBJECTIVE	To carry out pre feasibility, feasibility, detailed investigation stage and construction stage geotechnical investigation of multipurpose river valley project in Garhwal Himalayas.		
57.	Parent Unit	ENGINEERING GEOLOGY PROJECT – (I), DEHRADUN	Project ID	2010771– Approved 2010772– Approved
	TITLE	GEOTECHNICAL EVALUATION OF COMMUNICATION AND TRANSPORTATION PROJECTS AND STABILITY OF SLOPES, KUMAON & GARHWAL REGION, UTTARAKHAND.		
	OBJECTIVE	To carry out geotechnical evaluation of the proposed bridge sites, road alignment high tension power lines, ropeways, disaster management and road widening (National highways) and to provide necessary geological information and suggest remedial measures on the problems of landslides and hill slope stability of the area.		
58.	Parent Unit	ENGINEERING GEOLOGY PROJECT – (II), DEHRADUN	Project ID	2010775 – Approved 2010776 – Approved 2010777 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCES DEVELOPMENT PROJECTS AND ARTIFICIAL LAKES IN UTTARAKHAND.		
	OBJECTIVE	To carry out geotechnical investigations of Dam/barrage and artificial lakes in Uttarakhand Himalaya Project in Kumaun Himalaya.		
59.	Parent Unit	DIVISION: ENGINEERING GEOLOGY - II (CHANDIGARH)	Project ID	2010699 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCE DEVELOPMENT PROJECTS IN HIMACHAL PRADESH.		
	OBJECTIVE	To carry out pre-feasibility, detailed investigation, construction and post-construction stage geotechnical investigations of multipurpose river valley projects.		
60.	Parent Unit	PROJECT: ENGINEERING GEOLOGY - I (HP)	Project ID	2010714 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF COMMUNICATION AND TRANSPORTATION PROJECTS, FLOOD DAMAGE, LANDSLIDES AND STABILITY OF SLOPES ON NATIONAL HIGHWAYS AND ROADS UNDER BRO AND PWD, RAILWAY ALIGNMENT, TUNNELS AND BRIDGES UNDER NORTHERN RAILWAY IN HIMACHAL PRADESH.		
	OBJECTIVE	To carry out geotechnical investigations for bridge sites, tunnels, rail alignment, road alignments, flood damages, landslides and instability of hill slopes and formulate remedial measures for ensuring safety and economy.		
61.	Parent Unit	PROJECT: ENGINEERING GEOLOGY - I (HP)	Project ID	2010717 – Approved
	TITLE	UPDATION OF PUBLISHED LANDSLIDE INVENTORY.		
	OBJECTIVE			

62.	Parent Unit	DIVISION: ENGINEERING GEOLOGY – NR, LUCKNOW	Project ID	2010366 – Approved
	TITLE	GEOTECHNICAL INVESTIGATIONS OF WATER RESOURCE PROJECTS IN SATLUJ AND PABBAR VALLEYS, HIMACHAL PRADESH.		
	OBJECTIVE	To carry out detailed construction stage geotechnical investigation of Hydroelectric Projects in Satluj and Pabbar valleys in HP.		
63.	Parent Unit	DIVISION ENGINEERING GEOLOGY – II (PUNJAB & HARYANA)	Project ID	2010660 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCES DEVELOPMENT PROJECTS IN PUNJAB.		
	OBJECTIVE	To carry out detailed investigations, construction and post-construction stage geotechnical investigations of multipurpose river valley projects and irrigation-cum-flood-control schemes.		
64.	Parent Unit	DIVISION ENGINEERING GEOLOGY – II (PUNJAB & HARYANA)	Project ID	2010629– Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCES DEVELOPMENT PROJECTS IN HARYANA.		
	OBJECTIVE	To carry out construction stage geotechnical investigations of irrigation-cum-flood control schemes.		
65.	Parent Unit	DIVISION: ENGINEERING GEOLOGY (JK)	Project ID	2010536 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF WATER RESOURCE PROJECT IN J&K.		
	OBJECTIVE	To carry out preliminary / post construction stage investigation.		
66.	Parent Unit	DIVISION: ENGINEERING GEOLOGY (JK)	Project ID	2010657 – Approved
	TITLE	GEOTECHNICAL EVALUATION OF COMMUNICATION PROJECTS IN J&K.		
	OBJECTIVE	To carry out geotechnical evaluation of landslide, road alignment, bridge sites, roads and tunnels in J&K		
67.	Parent Unit	DIVISION: ENGINEERING GEOLOGY (JK)	Project ID	2010567 – Approved
	TITLE	GEOTECHNICAL INVESTIGATION OF KATRA – QAZIGUND RAIL LINE PROJECT IN J&K.		
	OBJECTIVE	To carry out geotechnical evaluation of rail alignment, bridge sites, tunnels and landslide along the proposed rail line in J&K.		
68.	Parent Unit	DIVISION: ENGINEERING GEOLOGY (JK)	Project ID	2010672 – Approved
	TITLE	GEOTECHNICAL INVESTIGATION OF VARIOUS CIVIL STRUCTURAL PROJECTS IN J&K.		
	OBJECTIVE	To carry out geotechnical investigation miscellaneous projects in J&K.		
69.	Parent Unit	DIVISION: ENGINEERING GEOLOGY (JK)	Project ID	2010571 – Approved
	TITLE	GEOTECHNICAL INVESTIGATION OF THE LANDSLIDES IN THE JAMMU AND KASHMIR STATE AND UPDATION OF PUBLISHED INVENTORY OF LANDSLIDE OF NORTH WESTERN HIMALAYAS.		
	OBJECTIVE			
		M IV - LANDSLIDE		
70.	Parent Unit	PROJECT: LANDSLIDE HAZARD STUDIES	Project ID	2010375 – Approved
	TITLE	LANDSLIDE HAZARD ZONATION MAPPING ON MACROSCALE OF BAGESHWAR DISTRICT, UTTARAKHAND.		

	OBJECTIVE	To prepare Landslide Hazard Zonation Map (1:50,000) of Bageshwar District in Uttarakhand using BIS / GSI code.		
71.	Parent Unit	PROJECT: LANDSLIDE HAZARD STUDIES	Project ID	2010364 – Approved
	TITLE	LANDSLIDE HAZARD ZONATION MAPPING ON MACRO-SCALE ALONG NARKANDA -RAMPUR-KHAB SECTION OF NH-22, HIMACHAL PRADESH.		
	OBJECTIVE	Preparation of Landslide Hazard Zonation map on macro-scale along parts of NH-22 in Himachal Pradesh and documentation of landslide incidences.		
72.	Parent Unit	PROJECT: LANDSLIDE HAZARD STUDIES	Project ID	2010368 – Approved
	TITLE	EMERGENT INVESTIGATION OF THE CRITICAL LANDSLIDES ON COMMUNICATION ROUTE OR DAMAGES TO THE DEMOGRAPHIC CENTRE IN UTTARAKHAND, HIMACHAL PRADESH, HARYANA, PUNJAB AND JAMMU & KASHMIR.		
	OBJECTIVE			
		M – IV SEISMIC STUDIES / EARTHQUAKE		
73.	Parent Unit	DIVISION: EARTHQUAKE GEOLOGY	Project ID – Approved
	TITLE	SEISMIC MICROZONATION STUDIES OF JALANDHAR URBAN AGGLOMERATION.		
	OBJECTIVE	To prepare the seismic zonation maps of Jalandhar Urban Agglomeration.		
74.	Parent Unit	DIVISION: EARTHQUAKE GEOLOGY	Project ID	2010171 – Approved
	TITLE	ACTIVE FAULT STUDIES IN HIMALAYAN FRONTAL BELT IN KALA AMB AREA, HP & HARYANA.		
	OBJECTIVE	To study active tectonics around Kala Amb area.		
75.	Parent Unit	DIVISION: EARTHQUAKE GEOLOGY	Project ID	2010230 – Approved
	TITLE	MACROSEISMIC SURVEY OF DAMAGING EARTHQUAKE(S) OCCURRING IN THE NORTHERN REGION.		
	OBJECTIVE	Preparation of Landslide Hazard Zonation map on macro-scale along parts of NH-22 in Himachal Pradesh and documentation of landslide incidences.		
76.	Parent Unit	PROJECT: GEOPHYSICS (SEISMOTECTONIC)	Project ID	2010160 – Approved
	TITLE	Seismic Microzonation Studies of Jalandhar Urban Agglomeration.		
	OBJECTIVE			
		M IV – BIO & CHEMICAL GEOHAZARDS		
77.	Parent Unit	PROJECT: ENVIRONMENTAL GEOLOGY (UP&UK)	Project ID	2010686 – Approved
	TITLE	Geoenvironmental impact assessment of mining in the Beas and Pabbar riverbeds / terraces for sustainable exploration of minor minerals in Kullu and Shimla district H.P.		
	OBJECTIVE	1) Study of Geoenvironmental scenario and geo hazards occurring due to the mining of the river borne construction material from Beas and Pabbar river beds/terraces. 2) To suggest the remedial measures to maintain the natural course of the river for sustainable development of the area.		
78.	Parent Unit	PROJECT: ENVIRONMENTAL GEOLOGY (UP&UK)	Project ID	2010675 – Approved
	TITLE	Geoenvironmental appraisal of Aresenic Prone areas in Ghazipur and Mau districts, UP.		

	OBJECTIVE	To study (a) the magnitude of the problem, (b) geogenic source of arsenic minerals occurring in sand particles and their association and (c) the chemical process through which arsenic is released in ground water.		
		M IV – CLIMATE CHANGE & ECOSYSTEM		
79.	Parent Unit	DIVISION: PETROLOGY (LUMINESCENCE DATING LABORATORY)	Project ID	2010520 – Approved
	TITLE	Study of Palaeoclimatic changes in selected river basins of Northwest Himalayas.		
	OBJECTIVE	To constrain and correlate the palaeo-climatic events in some major river basins in NW Himalayas.		
80.	Parent Unit	DIVISION: GLACIOLOGY	Project ID	2010003 – Approved
	TITLE	Intra annual documentation of recessional pattern of glaciers of Ghaghra basin, Uttarakhand Himalaya - On expedition basis.		
	OBJECTIVE	Monitoring of glaciers of Ghaghra basin for evaluating intra annual recession, besides dating the palaeo-glaciation events and understanding the past glacio-geomorphological history in parts of Ghaghra valley.		
81.	Parent Unit	DIVISION: GLACIOLOGY	Project ID	2010015 – Approved
	TITLE	Long term monitoring of mass balance of the Hamtah glacier, Lahaul and Spiti District, Himachal Pradesh- On expedition basis.		
	OBJECTIVE	To carry out the long term monitoring the mass balance of Hamtah glacier.		
82.	Parent Unit	DIVISION: GLACIOLOGY	Project ID	2010005 – Approved
	TITLE	Compilation of final report on detailed glaciological studies on Hamtah glacier, Lahaul and Spiti District, Himachal Pradesh.		
	OBJECTIVE			
83.	Parent Unit	DIVISION: GLACIOLOGY	Project ID	2010006 – Approved
	TITLE	Identification of signatures of palaeoglaciation, change in climate, availability of water resources and future scenario in Ganga basin, India.		
	OBJECTIVE			
84.	Parent Unit	PROJECT: QUATERNARY GEOLOGY – (UP&UK)	Project ID	2010882 – Approved
	TITLE	Interbasinal Correlation of Quaternary sequences to evolve chronostratigraphy in Kali and Sarju Basins with the help of available T.L. and C ₁₄ dating.		
	OBJECTIVE	Inter basinal Correlation of Quaternary sequence to evolve chronostratigraphy.		
		M – IV FUNDAMENTAL GEOSCIENCE		
85.	Parent Unit	DIVISION: PALAEONTOLOGY	Project ID	2010209 – Approved
	TITLE	Search for Vertebrate fossils from the Siwalik Group in parts of Sirmaur and Solan districts, Himachal Pradesh for Saketi museum.		
	OBJECTIVE	Search for vertebrate fossils in the Siwalik Group of Solan and Sirmaur distt. and their detailed studies. This will be helpful in enrichment of fossil collection in the Saketi Museum.		
86.	Parent Unit	DIVISION: PALAEONTOLOGY	Project ID	2010166 – Approved
	TITLE	Detailed studies of Neo- Proterozoic and Early Cambrian Eggs/Embryos from Chambaghat Formation of Krol Group and basal part of Tal Group in Lesser Himalaya of Himachal and Uttarakhand.		

	OBJECTIVE	Detailed studies of Neoproterozoic and Early Cambrian Eggs/Embryos from Chambaghat Formation Krol Group and basal part of Tal Group in Lesser Himalaya of Himachal and Uttarakhand will help to understand the evolutionary stages/trends in early metazoan life.		
87.	Parent Unit	DIVISION: PALAEONTOLOGY	Project ID	2010229 – Approved
	TITLE	Morphological & Ultrastructural studies with micro -chemical analysis of samples/ fossils with the help of SEM-EDX.		
	OBJECTIVE			
88.	Parent Unit	DIVISION: PALAEONTOLOGY	Project ID	2010233 – Approved
	TITLE	Identification of fossil samples submitted by officers and guidance to field Officers, Curatorial work, and maintenance of palaeontological gallery of N.R. Museum (in collaboration with Petrology Division, NR) and technical supervision of Siwalik fossil Park, Saketi, H.P. (In collaboration with Op. P., H. & H.P.)		
	OBJECTIVE			
89.	Parent Unit	DIVISION: PETROLOGY - NR	Project ID	2010186 – Approved
	TITLE	(i) Support to Divisions/Projects of Northern Region. Preparation of thin sections, identification of rocks and mineral samples. (ii) Maintenance and operation of Fluid Inclusion Laboratory and to carry out fluid inclusion studies of samples received from the various divisions/projects. (iii) Specialised thematic mapping of Siwalik Belt in Saharanpur district of Uttar Pradesh and Dehradun district of Uttarakhand (Linked with item No.STM/NR/UPUK/2010/002)		
	OBJECTIVE			
90.	Parent Unit	DIVISION: PETROLOGY (PHH)	Project ID	2010004 – Approved
	TITLE	To oversee preparation of thin sections and polished sections, provide support in identification of rocks/ minerals to other divisions/ projects. To undertake petrological studies of geological samples received from outside agencies on commercial basis.		
	OBJECTIVE			
91.	Parent Unit	DIVISION: PETROLOGY – PHH (LUMINESCENCE DATING LABORATORY)	Project ID	2010649 – Approved
	TITLE	To carry out luminescence dating of the samples generated through different field and research projects in different regions of GSI.		
	OBJECTIVE			
92.	Parent Unit	DIVISION: PETROLOGY (PHH) – XRD LAB	Project ID	2010365 – Approved
	TITLE	Palaeoclimatic and magmato-metamorphic history of Wilkes Land, East Antarctica: Constraints from accessory minerals, clay mineralogy and micropalaeontology in oceanic sediments. – (Linked up with Antarctica Division)		
	OBJECTIVE	To determine palaeoclimatic history and tectonothermal evolution of Wilkes Land, East Antarctica.		
93.	Parent Unit	DIVISION: XRD LABORATORY (PHH)	Project ID	2010365 – Approved
	TITLE	Palaeoclimatic and magmato-metamorphic history of Wilkes Land, East Antarctica: Constraints from accessory minerals, clay mineralogy and micropaleontology in oceanic sediments. – (Linked up with Antarctica Division)		
	OBJECTIVE			
94.	Parent Unit	DIVISION: XRD LABORATORY (PHH)	Project ID	2010132 – Approved
	TITLE	X-ray diffraction studies of the samples submitted by various divisions and projects of GSI and outside agencies.		
	OBJECTIVE			
	Parent Unit	DIVISION: XRD LABORATORY (PHH)	Project ID	2010207 – Approved

95.	TITLE	X-ray diffraction studies of the samples submitted by various divisions and projects of GSI and outside agencies. Study of Palaeoclimatic changes in selected in selected river basins of North- West Himalayas. (Linked up with TL- OSL laboratory)		
	OBJECTIVE			
96.	Parent Unit	EPMA LABORATORY (PHH)	Project ID	2010403 – Approved
	TITLE	Analysis by EPMA		
	OBJECTIVE	To carry out electron microprobe analysis of samples generated through different mineral investigations, STM and research projects of different offices of GSI and similar work for other agencies on commercial basis.		
97.	Parent Unit	DIVISION: MINERAL PHYSICS	Project ID	2010713 – Approved
	TITLE	Mineralogical Studies of Geological samples by X-ray diffraction and other studies.		
	OBJECTIVE			
98.	Parent Unit	DIVISION: MINERAL PHYSICS	Project ID	2010715 – Approved
	TITLE	Separation of Heavy Minerals and clays by different methods. Systematic Studies of separated fractions by re-characterisation, thermal and other studies.		
	OBJECTIVE			
99.	Parent Unit	DIVISION: GEOPHYSICS	Project ID	2010371 – Approved
	TITLE	i) Data acquisition with Absolute Gravimeter installed in GSI Complex. ii) Continuous data acquisition with Broad Band seismic equipment temporarily installed in GSI complex.		
	OBJECTIVE			
100.	Parent Unit	DIVISION: GEOPHYSICS (PHYSICAL PROPERTY MEASUREMENT)	Project ID	2010218 – Approved
	TITLE	Determination of physical properties of rock samples.		
	OBJECTIVE			
101.	Parent Unit	DIVISION: GEOTECHNICAL LABORATORY	Project ID	2010300 – Approved
	TITLE	Geotechnical map of Rae Bareli district of U.P.		
	OBJECTIVE	To prepare geotechnical map of Rae Bareli district, U.P. by determining physico-mechanical properties of surface /sub-surface soil samples to be used in designing foundation of civil engineering structures.		
102.	Parent Unit	DIVISION: GEOTECHNICAL LABORATORY	Project ID	2010291 – Approved
	TITLE	i) Preparation of Consolidated geotechnical database. ii) Determination of physical and mechanical properties of soils, rocks and aggregates received from other Projects / Divisions, N.R., G.S.I. as well as samples received from outside agencies (on commercial basis). iii) Analysis and interpretation of data on various geotechnical problems, using Software at the request of different Divisions/Projects of N.R. Seismic Microzonation Studies of Jalandhar Urban Agglomeration, Punjab State (Linkage with Item No.SEI/NR/HQ/2009/001)		
	OBJECTIVE			
103.	Parent Unit	MISSION – V	Project ID– Approved
	TITLE			
	OBJECTIVE			
		STSS- CHEMIAL STREAMS & LAB		

		NETWORK		
104.	Parent Unit	DIVISION: CHEMICAL - NR	Project ID	2010187 – Approved
	TITLE	Chemical Analysis		
	OBJECTIVE			
105.	Parent Unit	DIVISION: CHEMICAL (H) - FARIDABAD	Project ID	2010378 – Approved
	TITLE	Instrumental Analysis and conventional analysis.		
	OBJECTIVE			
106.	Parent Unit	DIVISION: CHEMICAL (CHANDIGARH)	Project ID	2010620 – Approved
	TITLE	Instrumental Analysis <ul style="list-style-type: none"> ▪ Atomic Absorption Spectrometer (AAS) ▪ ISE Analyzer (for F⁻) 		
	OBJECTIVE			
107.	Parent Unit	DIVISION: CHEMICAL (FARIDABAD)	Project ID – Approved
	TITLE	Preparation of Standard reference material (SRM) for NGCM project.		
	OBJECTIVE			
108.	Parent Unit	DIVISION: CHEMICAL (JK)	Project ID	2010701 – Approved
	TITLE	Analysis of NGCM samples for packages E, routine analysis of rock, mineral and water samples conventional, instrument and wet chemical <u>Analycal</u> methods with emphasis on whole rock analysis. (Linkage item with other Operations for sample supply).		
	OBJECTIVE			
		STSS – GEOLOGICAL & GEOPHYSICAL LABORATORY NETWORK		
109.	Parent Unit	DIVISION: PETROLOGY - NR	Project ID	2010219 – Approved
	TITLE	Procurement, issue and maintenance of petrological/survey instruments and operation of sedimentological laboratories.		
	OBJECTIVE			
110.	Parent Unit	DIVISION: PETROLOGY (LUMINESCENCE DATING LABORATORY)	Project ID	2010650 – Approved
	TITLE	To install and standardize two new TL/OSL Readers in the laboratory.		
	OBJECTIVE			
111.	Parent Unit	DIVISION: PHOTOGEOLOGY AND REMOTE SENSING - NR	Project ID	2010010 – Approved
	TITLE	Procurement and maintenance of satellite data/ aerial photographs and assistance.		
	OBJECTIVE	Procurement of digital satellite data from NRSC for different Operations/ Divisions/ Projects requiring PGRS input for their respective field assignments as projected in their FSP 2010-12		
	Parent Unit	DIVISION: GEOPHYSICAL (INSTRUMENTATION)	Project ID	2010227 – Approved

112.	TITLE	i) Repairs, preventive maintenance, servicing and calibration of sophisticated various categories geophysical instruments along with their accessories and laboratory test & measuring instruments. ii) Field support to Geophysical investigations for repair/maintenance of geophysical instruments in field and to assist the field work. iii) Minor repairs & operation of EPABX system installed in the office of GSI, NR.		
	OBJECTIVE			
113.	Parent Unit	STSS - DRILLING	Project ID – Approved
	TITLE	1. Investigation in the unexplored parts, west of Bakrija with emphasis on demarcation of the host rock units of copper mineralization, Mahendragarh district, Haryana (E-I stage) (Linkage with Item No. ME/NR/PHH/2010/016) – Mission-II 2. Preliminary assessment of gypsum in parts of Hissar and Bhiwani districts, Haryana (Linkage with Item No. ME/NR/PHH/2010/017) – Mission-II 3. Seismic Microzonation Studies of Jalandhar Urban Agglomeration, Punjab State (Linkage with Item No. SEI/NR/HQ/2009/001) – Mission-IV 4. Geoenviromental appraisal of Aresenic Prone areas in Ghazipur and Mau districts, UP. (Linkage with Item No. ENV/NR/UPUK/2010/037) – Mission-IV		
	OBJECTIVE			
		POLICY SUPPORT SYSTEM		
114.	Parent Unit	DIVISION: TECHNICAL COORDINATION – I (HQ)	Project ID	2010326 – Approved
	TITLE	Perspective planning, technical coordination and monitoring, man power placement, seminar, symposia, trainings, report processing, monitoring of mineral investigation items for data generation.		
	OBJECTIVE			
115.	Parent Unit	DIVISION: TECHNICAL COORDINATION – (UP & UTTARAKHAND)	Project ID – Approved
	TITLE	Perspective planning, programming & technical co-ordination of activities of different Divisions/Projects. Monitoring of project proposals of Operation Uttar Pradesh and Uttaranchal & human resource management for effective implementation. Report processing and generation of computerized database and formulation of annual programme, preparation of database of FSP in MIS mode, quarterly/annual reviews, upkeep of report library etc. Monitoring of targets vis-à-vis achievement and updating of project documents.		
	OBJECTIVE			
116.	Parent Unit	DIVISION: GEOPHYSICS (CO-ORDINATION)	Project ID	2010170 – Approved
	TITLE	Annual Programme formulation; monitoring of projects. Preparation of material for various Advisory Committee meetings, training, periodical returns, generation, distribution and up keeping of geophysical reports & maintenance of raw field data / records / maps.		
	OBJECTIVE			
	Parent Unit	DIVISION: TECHNICAL COORDINATION – (PHH)	Project ID – Approved

117.	TITLE	Technical Coordination and monitoring, report processing, Formulation of periodic returns, review material, monitoring of submission of progress reports, their scrutiny and processing for final distribution, compilation of project wise expenditure including operational, overhead and other charges, monitoring of targets vis-à-vis achievement and cost vis-à-vis achievement and submission of periodic returns, F.S.P.M.I.S.		
	OBJECTIVE			
118.	Parent Unit	DIVISION: TECHNICAL COORDINATION – II (HQ)	Project ID	2010160 – Approved
	TITLE	Quarterly reviews, CGPB, SGPB, IGCP projects, Stage review, FSP formulation, Preparation of database of FSP in MIS mode, monitoring of implementation of project proposals, updating of project document. Compilation of project wise expenditure including operation, overhead and other charges, monitoring of target vis-à-vis achievement and cost vs. achievement.		
	OBJECTIVE			
119.	Parent Unit	DIVISION: TECHNICAL COORDINATION – II (P&HP)	Project ID	2010023 – Approved
	TITLE	Formulation, implementation and monitoring of annual programme; coordination of technical activities of Divisions/Projects; compilation and submission of periodic returns, review materials; monitoring of submission of progress reports, their scrutiny and processing for final distribution; compilation of project-wise expenditure including operational, overhead and other charges; monitoring of targets vis-à-vis achievement and cost vs. achievement.		
	OBJECTIVE			
120.	Parent Unit	DIVISION: TECHNICAL COORDINATION – (JK)	Project ID	2010438 – Approved
	TITLE	Formulation, budgeting and monitoring of Annual Programme, technical co-ordination of activities of different Division/Projects. Scrutiny and processing of reports. Quarterly review, RAC, MTR, Periodical returns. Preparation of database of FSP in MIS mode and uploading on GSI web site/Portal. Monitoring of targets vis-à-vis achievements and costs vs. achievements, besides supervision of library and Survey Section of the Operation.		
	OBJECTIVE			
		PSS – COMMERCIAL OPERATIONS		
121.	Parent Unit	DIVISION: TECHNICAL CONSULTANCY SERVICES	Project ID	2010130 – Approved
	TITLE	Evaluation/costing of geological/geotechnical services rendered to sponsored projects and other contractual jobs, pricing of unpublished geological reports and liaisoning and realisation of outstanding payments with sponsoring agencies.		
	OBJECTIVE			
		ADMINISTRATIVE SUPPORT SYSTEM		
122.	Parent Unit	DIVISION: PETROLOGY (CORE LIBRARY)	Project ID	2010231 – Approved
	TITLE	Creation of Core Library		
	OBJECTIVE			
123.	Parent Unit	DIVISION: PETROLOGY – NR	Project ID	2010196 – Approved
	TITLE	Curatorial work (a) Maintenance and up-gradation of Museum and (b) Organizing exhibitions etc.		
	OBJECTIVE			

124.	Parent Unit	DIVISION: TECHNICAL COORDINATION – I (PHH)	Project ID – Approved
	TITLE	Maintenance of Siwalik Fossil Park and Museum at Saketi.		
	OBJECTIVE			