

भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

(विज्ञान एवं प्रौद्योगिकी विभाग) (DEPARTMENT OF SCIENCE & TECHNOLOGY)

वार्षिक रिपोर्ट ANNUAL REPORT

2012 - 2013

भारत के महासर्वेक्षक के आदेश से प्रकाशित
PUBLISHED BY THE ORDER OF THE SURVEYOR GENERAL OF INDIA

CONTENTS

	Page
Highlights	2
• The Organization & Locations of Zones, Geo-Spatial Data Centres,	
Specialized Directorates & Printing Groups	4
• The Charter of duties	5
• Personnel	6
• The Budget	7
• The Activities	8
Geodetic & Geophysical	8
Special Surveys	9
Aerial Photography	10
Digital Cartography	10
Progress of Important Projects	11
Topographical Surveys & Mapping	15
International Boundaries	15
Scientific Activities	16
Collaborative Scientific Activities	17
Research & Development	17
 Participation in Indian Scientific Expedition to Antarctica 	17
• Printing	18
Map Sales	18
• Training	18
• Publications	18
Conferences/ seminars/ meetings	18
Technical Papers	20
Foreign Visits/ Study Tours/ Deputation	20
Visit to Survey of India Offices	21
Cultural and Educational Activities	22
Development Surveys	23
Courses conducted by IIS&M	24
Use of Hindi in official work	28
 SCs, STc, OBCs & Person with disabilities 	30

HIGHLIGHTS

Survey of India, under the Department of Science & Technology, Govt. of India, has been engaged in production and maintenance of various types of Topographical, Geographical and many other public series maps on various scales covering India, for the defence and development of the nation. Besides, being grouped under 'Scientific Surveys' the Govt. of India business rule, it has also been called upon extensively to deploy its expertise in the field of geodetic and geophysical surveys, study of seismocity and seismotectonics, environmental and disaster management, participation in Indian scientific expeditions to Antarctica, glaciology programmes and other projects related to digital cartography and digital photogrammetry etc. to provide basic data for Science & Technology requirements. Highlights of activities during the year are as under:-

TOPOGRAPHICAL MAPPING STATUS

Maps on the 1:250,000 and 1:50,000 scales covering the entire country have been published. Revision surveys for updating these maps are done at regular interval in phased manner.

Surveys on the scale of 1:25,000 is in progress on need basis. 10484 maps have been printed off till 31st March, 2013.

Survey of India has also taken up the tasks of producing new series of maps (Open Series Maps & Defence Series Maps) based on WGS-84 datum.

AERIAL PHOTOGRAPHY

Whole of the country is covered with aerial photography. Special emulsion photography on various scales were undertaken as and when required.

DISTRICT PLANNING MAPS

The status of District Planning Maps being published by Survey of India is as under:

Total Maps under the jurisdiction of Survey of India ... 256

Maps printed ... 255
Maps under printing/ processing ... 01
Maps yet to be taken up ... Nil

POLITICAL MAP OF INDIA IN REGIONAL LANGUAGES

Publication of the POLITICAL MAP OF INDIA in regional Indian languages is continued. Maps in Bengali, Gujarati, Kannad, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Tamil, Telugu and Sanskrit have been published.

DIGITAL CARTOGRAPHY

The digital techniques in cartography and use of Digital Cartographic Data Base (DCDB) for bringing out updated maps were initiated in SOI in early eighties. Maps on 1:250,000 scales covering the entire country have been digitized and updation of these maps is in progress. Digitization of 1:50,000 and 1:25,000 scale maps are in progress. 5060 sheets on 1:50,000 scale and 7870 sheets on 1:25,000 scale have been digitized till date.

INTERNATIONAL BOUNDARIES

Strip surveys, demarcation and construction of boundary pillars on international boundary between India-Pakistan, India-Bangladesh, India-Bhutan, India -Nepal and India-Myanmar are continued.

GEODETIC AND GEOPHYSICAL SURVEYS

Geodetic and allied geophysical surveys viz; upgradation and densification of geodetic plan and height control; densification and revision of gravity, geomagnetic, astronomical surveys; tidal measurements and prediction of tides for navigational activities; precise surveys for tunnel alignments, crustal movement and dam deformation studies, repetitive geodetic measurements and analysis of result for the study of seismocity and seismotectonic in earthquake prone areas were carried out in various parts of the country.

SURVEYS FOR DEVELOPMENTAL PROJECTS

Large scale surveys and mapping on various scales for National Developmental Projects are continued/ undertaken.

TRAINING

287 officers including 7 foreign nationals from Bhutan & Bangladesh attended various courses while special courses are also conducted for 198 officers from various states and private personnel, at the Indian Institute of Surveying & Mapping, Hyderabad.

PRINTING

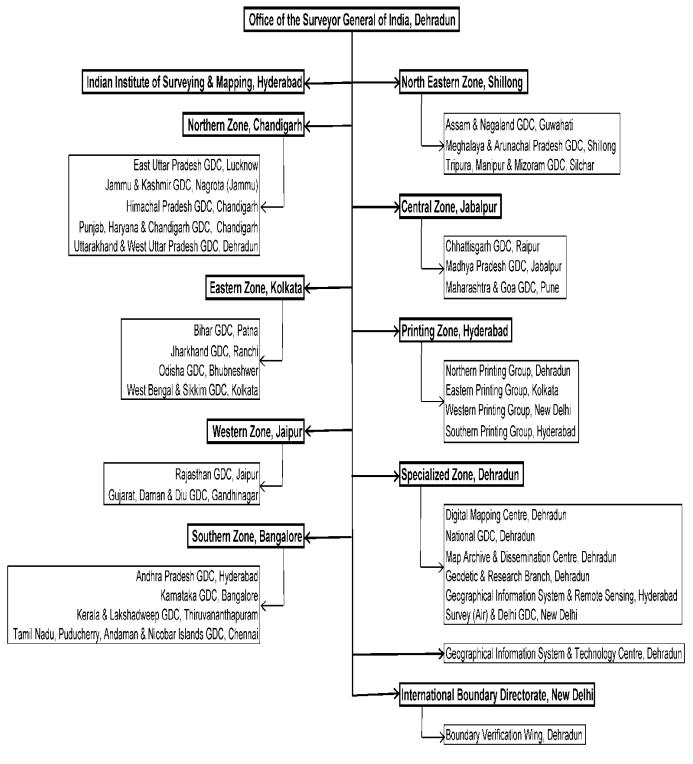
Printing of Topographical Maps, Geographical Maps, Special Purpose Maps, Project Maps, Tourist / Guide Maps and IAF Maps & Charts etc. is continued. 177 maps were printed during the year.

THE ORGANIZATION

Survey of India has been reorganized w.e.f. 15-05-2009* to meet the Spatial Data demands of Users in different states. Now Survey of India has its offices in almost all of the State Capitals of India named as Geo-spatial Data Centres. The Headquarter of Survey of India remains at Dehra Dun. The following chart depicts the entire structure of Survey of India.

Locations of various Surveys of India's Zones, Geo-spatial Data Centres, Special Directorates, and Printing Groups are as under:-

Organization Chart of Survey of India



GDC - Geo-spatial Data Centre

^{*} SGO's No. W-340 / 709-GDC (Coll 7) dated 15-05-2009

THE CHARTER OF DUTIES

The charter of duties and responsibilities of the Survey of India (SOI) are enumerated below:-

- (a) Provision and maintenance of geodetic plan and height control network and provision and maintenance of gravimetric and geomagnetic control network.
- (b) Provision of topographical cover in surveying and mapping for the entire country to meet the national requirements, including those of defence forces.
- (c) Collection of tidal data along the coast line and islands and Tidal predictions for 44 ports in the Indian Ocean, Arabian Sea and the Bay of Bengal including ports in Myanmar, Iran, Sri Lanka and Sultanate of Oman in the interest of good Neighborly relations.
- (d) Compilation/ mapping and production of geographical maps e.g. Railway Map, Road Map, Political Map, Physical Map etc.
- (e) Preparation of the International Map of the World (IMW) series and the World Aeronautical Charts (WAC) series as a commitment to the International Civil Aviation Organization (ICAO).
- (f) Surveys for development projects, e.g., power and irrigation, mineral exploration, urban and rural development etc.
- (g) Surveying and mapping of forest areas, large cities and preparation of guide maps of cities/ towns/ places of interest.
- (h) Surveying and mapping of Cantonments, surveying and mapping for aeronautical maps/ charts for the IAF.
- (i) Standardization of geographical names based on phonetics and participation in the international body set-up by the United Nations for this purpose.
- (j) Demarcation of the external boundary of India, its correct depiction on maps published within the country. Also advising the Government of India on the demarcation of inter-state boundaries.
- (k) Training of officers and staff of the department, trainees from other central and state government departments and trainees from foreign countries.
- (I) Promotion of Research & Developmental activities in the field of geodesy, photogrammetry, cartography and printing techniques etc.
- (m) Introduction of modern technology in the related fields and indigenization of equipment as an aid to import substitution. This includes development of instruments/ materials indigenously to increase self-reliance and reduce the drain on the foreign exchange reserves.

- (n) Co-ordination and control in providing aerial photographic cover for the whole country.
- (o) Collaboration with training organizations, educational institutions and scientific bodies on specific projects to promote research and developmental activities.
- (p) Representation at various international and national conferences to promote the growth of surveying and cartography and to introduce the state-of-the-art technology for optimum results.
- (q) Support to Third World countries e.g., Nigeria, Afghanistan, Kenya, Iraq, Nepal, Sri Lanka, Zimbabwe, Indonesia, Bhutan, Myanmar and Mauritius etc. by providing technical know-how and expertise in various disciplines of surveying and survey education.

Besides above activities, the Surveyor General of India is associated with the under mentioned Expert Groups/ Committees.

- i) Member of Executive Board of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) under the auspice of the United Nations Regional Cartographic Congress (UNRCC).
- ii) Chairman of Standing Committee on Cartography and Mapping under NNRMS Programme, constituted by the Planning Commission.
- iii) Member of Management of Geological Survey of India.
- iv) Member of Governing Body of Wadia Institute of Himalayan Geology.

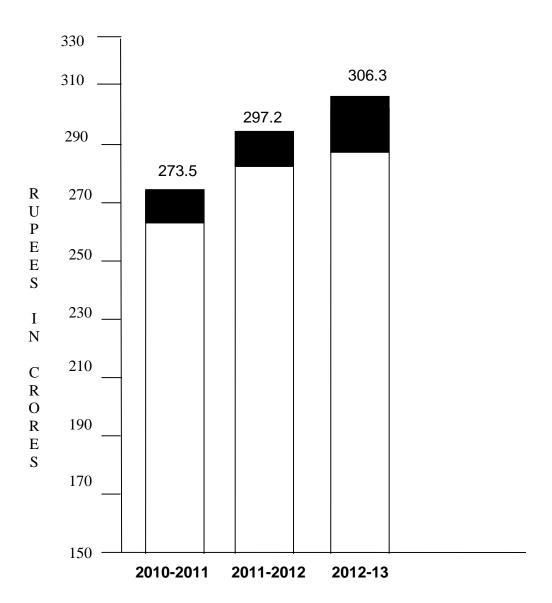
The Surveyor General of India acts as an adviser to various ministries of the Government of India on all surveying and cartographic matters. Survey of India also renders advice on the specifications of surveys and furnishes necessary data / maps to various central and state government departments for development, planning and defence applications.

PERSONNEL

As on 31.03.2013

Groups	Total
Group `A'	149
Group `B'	504
Group `C' Div.I	1,361
Group `C' Div.II	1,060
Ministerial Estt.	757
Group `D' Estt.	2,337

THE BUDGET



PLAN	
NON-PLAN	

THE ACTIVITIES

The main activities of the department have been as under :-

GEODETIC AND GEOPHYSICAL Geodetic Control

The following tasks were carried out against the projected targets for densification of the geodetic & vertical control, adjustment of second level-net and providing precise planimetric & vertical control for various developmental projects:

i)	GPS Observation for GCP Library	279 Stations for Phase II
ii)	High Precision Levelling for Redefinition	33 Lin km
	of Indian Vertical datum	
iii)	Precision Levelling for Project Surveys	406 Lin km
iv)	EDM Traverse	204 Metres
v)	Angular observation for projects	10 Stations
vi)	No. of bases for project surveys	8 bases
vii)	GPS observation for projects	65 Stations
viii)	Gravity observation	466 Stations
ix)	Geomagnetic repeat observations	11 Stations

Geophysical

Continuous Geomagnetic observations of Horizontal Force (H.F.), Vertical Force (V.F.), Declination (D) and their absolute Measurement in order to control the baseline values, throughout the year by Digital Magnetic Instrument installed in Digital Magnetic Observatory Sabhawala, Dehra Dun.

Geomagnetic

Geomagnetic observations were carried out at 11 repeat stations to analyse Horizontal Force (HF), Vertical Force (VF) and declination (D) in the states of Punjab, Rajasthan, Himachal Pradesh and Jammu & Kashmir.

Geomagnetic observations on 25 stations to provide Horizontal Force(HF), Vertical Force (VF) and declination (D) is under progress in North East Region.

Tidal Works

Survey of India maintains a series of tidal observatories located all along Indian Coast and Islands. Tidal observations are carried out on regular basis for tidal predictions. Tidal data generated through tide gauges installed in tidal observatories is quality controlled and then used for up gradation of Harmonic constituents. These in tune are used for tidal predictions which are brought out in the form of Indian Tide Tables. Indian Tide Table and Hugli River Tide tables for the year 2013 published in October, 2012.

Aftermath Tsunami of 26th December 2004, Survey of India has contributed immensely in establishing Tsunami Early Warning System. Under the project "Modernization and Expansion of Indian Tide - Gauge Network". It was decided to equip all its tidal observatories along East and West coast of India with State of the Art digital tide gauges and Dual frequency GPS receivers co-located with Real Time Data transmission facilities through dedicated V-SAT network.

SPECIAL SURVEYS

Planimetric and height control for tunnel alignments, crustal movement studies for the following developmental projects as listed below:

Out of India	Name of Special Survey	
Bhutan	Mangdechhu Project	
<u>State</u>	Name of Special Survey	

Andhra Pradesh Kolleru Lake Project

ICZM Project

Chhattisgarh CMPDI Project

Gujarat ICZM Project

Himachal Pradesh Kashang HE Project

Bhakra Dam Project Nakthan HE Project Kauli HE Project

Jharkhand CMPDI Project

Karnataka ICZM Project

Kerala ICZM Project

Maharashtra CMPDI Project

ICZM Project

Tarapur (NPCIL) Project

Meghalaya CMPDI Project

Manipur Loktak Down Stream HE Project

Orissa CMPDI Project

ICZM Project

Punjab Shahpur Kandi Dam Project

Tamilnadu ICZM Project

Uttar Pradesh Gobind Ballabh Pant Reservoir (Rihand Dam) Project

Indrapuri Reservoir HE Project

Kadwan Project Maudha Dam Project

Uttarakhand Devsari HE Project

Lakhwar Vyasi HE Project

West Bengal ICZM Project

CMPDI Project

AERIAL PHOTOGRAPHY

Aerial photography completed during the year in the various parts of the country has been as under:

Scale	Area covered
1:8,000	235 Sq Km
1:10,000	13805 Sq Km
1:15,000	5887 Sq Km
1:20,000	8485 Sq Km
Total	28,412 Sq Km

DIGITAL CARTOGRAPHY

The activities of National Geo-spatial Data Centre, Dehra Dun, GIS & Remote Sensing Directorate, Hyderabad, GIS Technology Centre, Surveyor General's Office (SGO), Dehra Dun and Digitization Cells under various Geo-Spatial Data Centre during the year are enumerated below:

Digitization and Creation of Digital Cartographic Data Base (DCDB)

Departmental

Digitization and creation of Cartographic Data Base on 1:250,000 scale have been completed and updation of these sheets is in progress.

Digitization and creation of Cartographic Data Base of OSM/DSM sheets on 1:50,000 scales have been completed as under:-

Progress of OSM Sheets

		Submi of		International Bdy. Coastal			atterning POP pre			Printing			
	0	digital for scrutin		line verificat	ion				Englis versio		Hindi versio	on	
Total Sheets	DTDB updated	NGDC	GIS & RS	Submitted	Cleared	By GDC itself	By M/S Rolta	Total	Submitted	Printed off	Submitted	Printed off	Remarks
5060	4791	2237	2545	623	399	1828	2703	4531	4320	1561	281	14	

Progress of DSM Sheets

	ion		Int. Coastal Ver. Bo Bdy.Ver.			line dy by ADGMS(GSGS) archival in NGDC/ Printing			ng
Total Sheets	Transformation	Patterning	Submitted	Cleared	Sheet Submitted	Blue indent issued		Submitted	Printed off
5060	4644	4444	496	338	4218	3889	3994	2685	263

Digitization and creation of Cartographic Data Base of 7,870 sheets on 1:25,000 scales has been completed.

PROGRESS OF IMPORTANT PROJECTS

NUIS Project:

Survey of India has undertaken the task of mapping of 152 towns on 1:2000 scales for core area and 1:10,000 scale for the peripheral areas under National Urban Information Scheme (NUIS), of Ministry of Urban Development.

1:10,000 Scale Survey

Geo referenced Satellite Imagery of 152 towns has been sent to NRSC. Thematic mapping of 147 towns have been completed and final product of 142 towns has been sent to State Nodal Agency after obtaining security clearance from GSGS.

1:2,000 Scale Surveys

Aerial Photography of 133 towns received and scanned. Control points of 150 towns have been completed. 2D feature extraction of 135 towns has been completed so far. Ground survey of 4 towns, using total station has been completed. Data pertaining to 128 towns has been sent to State Nodal Agency.

Mapping and Delineation of Hazard Line

The objective of the project is to delineate, map and benchmark the coastal hazard line all along the mainland coast of India under World Bank Assisted "Integrated Coastal Zone Management (ICZM) project, where SOI has to generate a 0.5 metre elevation contour map on 1:10,000 scale as base map to delineate the Hazard Line for the entire mainland coast of India upto the maximum width of 7 Km from shore line on the landward side.

Tidal data pertaining to 40 years (as available with G&RB) for extraction of maximum annual elevation and extra-pullation for 100 years pertaining to 20 ports (converted to M.S.L. heights as compiled by G&RB) has been submitted to MoEF.

Primary & Secondary control consisting of GPS and leveling work of the entire coastal area is completed.

Aerial photography of the project area almost completed, QA/QC are under process.

Provision of primary GPS control points (GCPs)

Construction of pillars 182 and GPS observation at 50 km & 10 km apart 335 & 1217 stations respectably completed.

DT Levelling lines :- 17253 lin km ST Levelling lines :- 3895 lin km

Redefinition of Indian Vertical Datum:-

A project of National importance on 'Redefinition of Indian Vertical Datum' Ist Phase has been completed and the work of 2nd Phase i.e. densification is to be taken up. 33 Lin km High Precision levelling has been completed in the state of Uttrakhand as a part of densification.

Computation of Standard Error, Probable errors etc. for each levelling line its adjustment and computation of Geopotential Numbers for the entire level net observed under the project on 'Redefinition of Indian Vertical Datum'.

Modernisation and Expansion of Indian Tide Gauge Network Ocean and Island for Disaster Management

"Modernisation and Expansion of Tide Gauge Network along Indian coast & Island" for Tsunami Warning System and Disaster management is continued. Modernisation of 30 Ports is completed out of 36 proposed under star Network. Maintenance of Tide Gauge Cabin at Port Blair, Aerial Bay, Campbell Bay & Noncowry has been completed.

Receiving & Archiving of Real Time GPS Data from Tidal observatories

Retrieval and Archival of Real Time GPS data at 1" epoch interval received from 14 sites located along Indian Coast & Island at Port Blair, Nancowry, Chennai, Minicoy, Kawarati, Cochin, Marmagao, Machilipatanam, Visakhapatanam, Haldia, Kandla, Paradeep, Tuticorin, Ennore. Merger of Rinex data at 30" epoch interval for all the 14 stations for their processing to determine the precise positions required for carrying out seismotectonic / plate movement studies.

GCP Library

The project envisages setting of precise & consistent GCP Library in a Geocentric Coordinate system for the entire country. The Project will be completed in three phases, In the 1st phase, 300 1st order control points at spacing of 250 to 300 km. apart, covering the entire country has already been completed.

In phase- II Densification of first order network at a spacing of 30 to 40 km apart is under progress. Recee / Site selection of 2271 points, construction of 2258 pillars and GPS observation at 2043 stations has been completed so far. Processing of GPS data collected as a part of GCP Library phase-II is in progress.

Progress of GCP Library phase - II

Total no. of GCP Pillars - 2267 Recce - 2271 Constructions of Pillars - 2258 GPS observations - 2043

Coal Mine Project

Preparation of updated Topographical maps of major Indian Coal fields based on remote sensing technique.

The Primary control consisting of GPS and leveling work of Phase–I comprising 10 coal fields have been completed. Aerial photography of 10 Coal fields (priority-I area) (Bisrampur, Lakhanpur Korba, Chirimiri, Sonhat, Sohagpur, Talcher, Hasda, Arand, I.B. Valley & Mand – Raigarh) has been completed, and Aerial Triangulation of 4 blocks completed.

2D feature extraction of 129 sheets and photo / field verification of 778 sq km area is completed

Progress of Field Verification

Scale	Total No. of Sheets	Sheets alre	ady verified	Total Sheets verified up to	Remarks
		Up to31 st March 12	During 2012-13	Date	
1:50,000	5060	4907	2	4909	
1:25,000	19,393	747	34	781	

Scrutiny & Verification of Private Publishers / State Govt. / Central Govt. by Boundary Verification Wing:

	Scrutiny						2462	maps	
	Certification						2068	maps	
	F	Releas	ed		=		713	maps	
	Boundary Des	criptio	n/ Ve	rification	=		99	maps	
	l.	AF Ma	aps		=		Nil	maps	
				Total	=		5342	maps	
(a)	Amount received	from	Fore	st Department		=	Nil		
(b)	Amount received	from	State	e Government		=	₹	81,80	00
(c)	Amount received	from	Cent	ral Governmer	nt	=	₹	1,87,20	00
(d)	Amount received	from	Priva	ate Publishers		=	₹	16,13,73	30
				Total		=	₹	18,82,73	30

SALES OF MAPS & VALUE BY MRIO

SI No.	Description	No. of copies	Price ₹
1	Defence	Nil	Nil
2	Central Govt.	4996	5,38,597
3	State Govt.	916	89,350
4	Misc.	15318	14,63,077
	Total	21230	2091024
	Digital Data Supplied		10,57,74,523

TOPOGRAPHICAL SURVEYS AND MAPPING

The details of topographical surveys and mapping on various scale have been as under:-

SI No.	Activity	Area (sq km) Distance (lin km)
1	Control Surveys	
	Topo Triangulation	Nil
	Traverse	107 lin km
	Levelling	8646 lin km
	Aerial Triangulation	1124 sq km
2	Detailed Surveys	
	Digital Photogrammetric Surveys	Nil
	Ground Survey	1851 sq km
	Verification Topo Sheet	88 sheets
3	<u>Digitization</u>	
	Digital Mapping (DCDB for OSM) on 1:50,000	4,531 maps
	Digital Mapping (DCDB for DSM)	4,444 maps
4	<u>Printing</u>	
	Topographical & others	177 maps

INTERNATIONAL BOUNDARIES - CONFERENCES / MEETINGS

<u>India – Myanmar Boundary</u>

The 18th National level meeting between India & Myanmar attended by Sh. U.S. Prasad, Superintending Surveyor, IBD, (SGO) in New Delhi from 28.12.2012 to 29.12.2012.

The 8thmeeting between heads of Survey departments of India and Myanmar on Indo – Myanmar boundary task attended by Maj Gen Umesh Chander, Addl SG and Sh.U.S. Prasad, Superintending Surveyor, IBD, (SGO) in New Delhi from 15.01.2013 to 17.01.2013.

India – Bangladesh Boundary

The 81st Joint boundary conference between the Director General, Department of Land Records and Surveys, Bangladesh and the Director, Settlement and Land Records (Ex officio), Tripura, India was held in Dhaka from 13.07.2012 to 15.07.2012.

The joint boundry conference between Director, Land Revenue & Settlement (Ex officio) Mizoram (India) and Surveyor General of Bangladesh, held in Dhaka Bangladesh from 16.07.2012 to 18.07.2012.

<u>India – Pakistan Boundary</u>

Surveyors/ Engineers meeting to review the India-Pak boundary demarcation work was held at JCP Wagha Amritsar (Pakistan side) on 18.04.2012. Shri Pankaj Mishra, Superintending Surveyor, Punjab, Haryana & Chandigarh GDC attended the meeting.

Joint Director's inspection of India – Pakistan boundary demarcation work was held from 18.03.2013 to 20.03.2013 at Ramtirath (Headquarter 67 BN BSF), Sherpur, Aajnala (India side).Maj Gen R.P. Sian, Addl. Surveyor General and Sh. Pankaj Mishra, Superintending Surveyor, Punjab, Haryana & Chandigarh GDC have attended the inspection work.

<u>India – Bhutan Boundary</u>

The 8th meeting of India – Bhutan on Border Management & Security in the Ministry of Home Affairs, New Delhi attended by Maj Gen Umesh Chander, Addl SG, IBD, (SGO) on 09.01.2013.

Dr. Swarna Subba Rao, Surveyor General of India attended Inter- Ministerial meeting on Indo – Bhutan boundary talks in MEA, New Delhi on 18.03.2013.

SCIENTIFIC ACTIVITIES

Geodetic activities undertaken in Geodetic & Research Branch, Survey of India during the period under report includes the following major disciplines:-

Establishment of primary planimetric and height control for National Control Framework, its densification for mapping.

Geophysical surveys i.e. Gravimetric, Geomagnetic & Astronomical Surveys.

Retrieval and storage of GPS data being received from Indian Permanent GPS Stations maintained by Survey of India and other organization and its analysis.

Sea level observations to establish the mean sea level. These observations are required to establish the datum for height control and tide predictions used by port authorities for Navigational purposes.

Modernisation of Tide Gauge Network of India.

Provision of Geodetic & Geophysical control for developmental projects within the country and also in adjacent countries.

Geodetic studies for monitoring the crustal movement, dam deformation, checking of verticality of archaeological structures, earthquake studies etc.

National/International collaborative activities in the field of Geodesy and Geophysics.

Mapping of Antarctica (Maitri & Environs) region.

Research & Development Programme in Sea level studies, Glaciology, Earthquake prediction etc.

COLLABORATIVE SCIENTIFIC ACTIVITIES

Following collaborative scientific activities in the field of Geodesy and Geophysics were continued:

Magnetic data has been supplied regularly to IIG, Mumbai and also supplied to World Data Centre whenever it required.

Supply of Mean Sea Level data of 18 Indian ports to International Permanent Service for Mean Sea Level (IPSMSL), U.K. for various scientific studies by the International Geodetic Community.

RESEARCH AND DEVELOPMENT

The main thrust of the research and developmental activities of the Geodetic & Research Branch during the period under report has been focused towards:

Processing / analysis of pre & post Tsunami GPS data of Antarctica for crustal deformation & seismotectonic movement studies.

Backup and archival of data received from permanent GPS stations.

Downloading of precise ephemeris of IGS stations from web sites through internet.

Adjustment of Second Level Net in India (data compilation).

Data processing / analysis and tidal predictions for year 2012 and 2013.

As a seguel to above programs, the following activities were initiated / completed.

Data acquisition with Global Positioning System in static relative mode to obtain transformation parameters between the Everest Spheroid and WGS-84.

Gravity data acquired for equal crustal movement studies across faults / thrust zones as well as for Geodetic and Geophysical studies for International Geodynamics projects is being restructured and formatted, so as to meet the requirements (of redesigned mathematical model).

PARTICIPATION IN INDIAN SCIENTIFIC EXPEDITION TO ANTARCTICA

Survey of India Team under the XXXIIth Indian Scientific Expedition to Antarctica carried out the following task:-

Original Survey of 7.01 sq km on scale 1:10,000 with C.I. 5 metre in Schirmacher Oasis and new station at Maitri on the scale 1:1,000 with C.I. 1 metre was carried out by SOI team.

Total number of 342 stations with offsets were also observed during this period.

PRINTING

The following maps were printed during the year:

Maps	Nos.
1:25,000 (Reprint)	 04
1:50,000 (Final &Reprint)	 140
1:250,000	 Nil
IAF(PGM,OGM,OLM,LAC etc.)	 27
Geographical, Railways, Tourists & State Maps etc.	 06

SPECIAL PURPOSE MAPS

The following special purpose maps were also printed during the year :-

Maps	Nos.
District Planning Maps	 Nil
Project Maps	 Nil
Miscellaneous Maps/ Indices / Charts etc.	 231

MAP SALES

Maps, Digital data supplied/ sold to the Ministry of Defence, Central and State Governments and other users' agencies.

TRAINING

287 trainees including 96 extra-departmental, 10 private and 07 foreign candidates are undergoing training in various courses run by Indian Institute of Surveying & Mapping, Hyderabad as per details given in Appendix 'A'.

PUBLICATIONS

The following publications were brought out during the period under report :-

Indian Tide Table 2013

Hugli River Tide Tables 2013

Magnetic Bulletin 2009 & 2010 of Sabhawala Observatory have been supplied to IIG Mumbai for publication.

Magnetic Bulletin 2011 is in progress.

Magnetic Declination Chart epoch 2015.0 is under progress.

CONFERENCES / SEMINARS / MEETINGS

Dr. Swarna Subba Rao, Surveyor General of India attended NNRMS meeting at NRSC, Hyderabad.

Dr. Swarna Subba Rao, Surveyor General of India attended meeting in ASCI about IIT, Hyderabad and Training Programme for IAS officers of HRDI of AP at Hyderabad.

- Dr. Swarna Subba Rao, Surveyor General of India attended 'Geo-Spatial Artha Summit' at New Delhi.
- Dr. Swarna Subba Rao, Surveyor General of India attended Expert Committee Meeting of PAMC of DST Project "Geospatial Technologies Restoration of Kolleru Lake Ecosystem" in Andhra University, Vishakhapatanam.
- Maj Gen R. C. Padhi, Addl. Surveyor General, SGO attended meeting in MoD, New Delhi on Security Clearance of Maps.
- Maj Gen R. C. Padhi, Addl. Surveyor General, SGO delivered a guest lecture at DRDO, SASE, Chandigarh on mapping of Himalaya.
- Maj Gen R. C. Padhi, Addl. Surveyor General, SGO attended scoping meeting of DST for "Integrated Programme on Gangotri Glacier Implementation Plan" at SASE, Chandigarh.
- Maj Gen R. C. Padhi, Addl. Surveyor General, SGO alongwith senior officers from Survey of India participated in "INDIA GEO-SPATIAL FORM 2013" at Hyderabad International Convention Centre, Hyderabad.
- Maj Gen R. P. Sian, Addl. Surveyor General and Sh. Pankaj Mishra, Deputy Director attended joint Director's inspection of Indo Pak demarcation work at Ramtirath (Headquarter 67 BN BSF), Sherpur, Ajnala (India side).
- Sh. R. M. Tripathi, Additional Surveyor General, Northern Zone, Chandigarh attended one day workshop on "Disposal of Appeal under RTI" conducted by Institute of Secretariat Training & Management, New Delhi.
- Sh. R. M. Tripathi, Additional Surveyor General, Northern Zone, Chandigarh attended conference on Information Management Challenges and the latest trend in Information Infrastructure Technology at EMC Executive Briefing Centre, Bagmane World Technology Centre, K.R.Puram, Banglore.
- Sh.U.N. Mishra, Director, G&RB and Sh. Varuna Kumar, Superintending Surveyor, Indian Institute of Surveying & Mapping attended the committee meeting in connection with setting up of permanent tide gauges in Sunderbans as a part of Integrated Coastal Zone Management Programme in Kolkata.
- Sh. U.N. Mishra, Director, G&RB attended "Project Management Council of Ocean Observation System, SIBER and GEOTRACE" in the Ministry of Earth Sciences, New Delhi.
- Shri N.R. Biswal, Director, West Bengal & Sikkim GDC was nominated as a Nodal officer for the "Pride of India" ISC Expo 2013, Kolkata in which West Bengal & Sikkim GDC also participated by showcasing the main activities of Survey of India.

Sh. M.I. Malik, DSG, S(Air) & DGDC attended two days Delhi round table conclave at seminar hall, New Delhi regarding Vulnerable Indian Ocean acidification, Sea level rise and extreme events.

Shri R.N. Nanda, Superintending Surveyor, Indian Institute of Surveying & Mapping participated in a two days symposium on "Indian Remote Sensing Satellite(IRS) Series. A saga of 25 years" at J.N.Tata Auditorium, National Science Seminar Complex, Banglore.

Mrs. Bindu Manghat, Superintending Surveyor, S(Air) & DGDC attended 27th Annual General meeting of National Water Development Agency Society at committee room, Ministry of Labour, Shram Shakti Bhawan, New Delhi.

Sh. Pradeep Singh, Deputy Superintending Surveyor, Punjab Haryana & Chandigarh GDC attended 56th of governing body and 26th of the general body meeting of Punjab Remote Sensing Centre at Chandigarh under chairmanship of Sh. G.S.Sandhu, I.A.S. financial commissioner, Punjab Remote Sensing Centre.

Geo-intelligence Asia 2012 conference cum Exhibition was being organized by Geospatial Media and Communication Pvt. Ltd. at hotel The Ashok, New Delhi. The Theme of Conference was 'Building a Credible Geointelligence Infrastructure for Defence and Internal Security'.

XXXIIth INCA congress was organized at ONGC Auditorium, Dehradun. The congress was inaugurated by His Excellency Dr. Aziz Qureshi, the Governor of Uttarakhand. Dr. Swarna Subba Rao, Surveyor General of India alongwith senior officers from Survey of India participated in the congress. The congress was being organized with the Theme of 'Cartography for Sustainable Earth Resource Management'.

TECHNICAL PAPERS

Sh. U.N. Mishra, Director, G&RB, presented technical paper in XXXIIth INCA International Congress 2012 organised by NHO Dehra Dun on "GPS Permanent Station Data Archival & Analysis"

Sh. Rajiv Kumar Srivastava, Superintending Surveyor, G&RB presented Technical paper in XXXIIth INCA International Congress, 2012 organized by NHO, Dehra Dun on "Geomagnetic Reversal: A Myth or Truth"

Dr. M. Stalin, Director, Bihar GDC presented a Technical paper on "Study of Urban in Hyderabad City Using Spatial Modelling, Remote Sensing and GIS" in the "INDIA GEO-SPATIAL FORM 2013 CONFERENCE" at Hyderabad.

FOREIGN VISITS / STUDY TOURS / DEPUTATION

Dr. Swarna Subba Rao, Surveyor General of India visited Islamabad (Pakistan) to attend 13th Round of Defence Secretary Level talks on Siachin.

Dr. Swarna Subba Rao, Surveyor General of India alongwith Maj Gen Umesh Chander, Addl SG and Sh. U.S. Prasad, Superintending Surveyor, IBD, (SGO), New Delhi attended Indo – Bhutan (Govt. level) meeting at Thimpu (Bhutan).

Sh. Chandra Pal, Deputy Surveyor General, SGO participated in the 18th meeting of PCGIAP and 19th UNRCC-AP conference held in Bangkok, Thailand.

VISIT TO SOI OFFICES

Northern Printing Group, Dehra Dun

The Director/IG office of the Director, SSB Academy, Shrinagar Garhwal, 12 officers & 1 Instructor.

The Dean, IIRS, Dehra Dun 80 apprentice and 3 staff members.

17 students and 1 staff member from the faculty of Architecture CEPT University, Ahmedabad.

44 officers and trainees from IFS, Cent. Academy for SFS, New Forest, Dehra Dun.

130 students and 5 staff members of Department of Geography, BHU, Varanasi.

60 students and 3 staff members of Mehar Chand Polytechnic College, Daya Nand Nagar, G.T. Road, Jallandar, Punjab.

30 students and 2 staff members of the Department of A Study and Research in Applied Geology KUVEMPU University, Karnataka.

54 students and 4 staff members of Sh. Baldev Singh, P.G. College, Bara Gaun, Varanasi.

The Group Commandant and 9 Officers from 501 Fd. Svy. Engineering Group C/o 56 APO.

36 students and 4 teachers from Unison World School, Krishali Greens, Mussoorie Diversion, Dehra Dun.

National Geo-spatial Data Centre, Dehra Dun

A group of twenty two members of IIRS Dehradun visited the centre.

Fifty four students with four staff members of Shri Baldev P.G. college, Baragaon Varansi, UP.

A group of 42 students with 3 staff members of Jawaharlal Nehru College, Etah, UP.

Teachers with thirty cadets from RIMC Dehradun Cantt.

One hundred thirty students, four staff members and one attendant from Department of Geography, Banaras Hindu University, Varansi (UP).

Nine officers of 501 Field. Survey Engineer Group.

One hundred thirty students with two staff members of Graphic Era University Dehra Dun.

CULTURAL AND EDUCATIONAL ACTIVITIES

Hindi Pakhwada was celebrated in various offices in Survey of India located at different cities from 14.09.2012 to 30.09.2012 to encourage the officers and staff to work in "Rajbhasha Hindi". Hindi essay writing, noting – drafting and quiz competition was also organized during this period.

NATIONAL SCIENCE DAY

National Science Day was celebrated on 28-02-2013 at various offices of Survey of India located in different places of the country. Displaying the exhibits and demonstration of various modern instruments on Surveying & Mapping were made to the students and technocrats. On this occasion an exhibition was inaugurated at Indian Institute of Surveying & Mapping, Hyderabad by Sh. Dharma Raj, Addl. Surveyor General, Indian Institute of Surveying & Mapping as the Chief Guest. More than 1000 students from different schools / colleges visited the exhibition.

DEVELOPMENT SURVEYS

The following project surveys were continued / carried out during the year 2012 – 2013 :-

State	Name of Project
Andhra Pradesh	Kolleru Lake Project ICZM Project NUIS Project
Assam	NUIS Project
Bhutan	Mangdechhu Project
Chhattisgarh	CMPDI Project NUIS Project
Delhi	Sindhu Durg Aerodrome Qutb Minar
Jharkhand	CMPDI Project
Gujarat	ICZM Project
Himachal Pradesh	Kashang HE Project Nakthan HE Project Khauli HE Project Bhakra Dam Project NUIS Project
Karnataka	Nirmala Nagar Project KMRP Project ICZM Project
Kerala	NUIS Project ICZM Project
Madhya Pradesh	CMPDI Project
Maharastra	CMPDI Project ICZM Project Tarapur (NPCIL) Project NUIS Project

Meghalaya CMPDI Project

Manipur Loktak Down Stream HE Project

NUIS Project

Orissa CMPDI Project

ICZM Project NUIS Project

Punjab NUIS Project

Dappar Ammunition Depot Survey

Shahpur Kandi Dam Project

Tamilnadu ICZM Project

Uttar Pradesh Gobind Ballabh Pant Reservoir (Rihand Dam)

Project

Kadwan Project Maudha Dam Project

Uttarakhand Mussoorie Forest Survey & Demarcation

Topographical Survey of CBRI Campus, Roorkee

Devsari HE Project

Lakhwar Vyasi HE project

West Bengal ICZM Project

NUIS Project

Turga (Puruliya) Pumped Storage Project

APPENDIX - "A"

COURSES CONDUCTED & OFFICERS TRAINED BY IIS&M REGULAR/ SCHEDULED COURSES

SL NO.	COURSE NO.	NOMENCLATURE	DEPTL.	EXTRA DEPTL.	FOREIGN	OTHERS	TOTAL
1	115.20	Office Management	11				11
2	315.13	Cadastral Survey and Land Information System		04	-		04
3	320.03	Dual Trade Course on Digitization of Cartographic Documents	06	08	-		14
4	340.44	Digitization of Cartographic Documents	01	04			05
5	340.45	Digitization of Cartographic Documents	05	04			09
6	400.90(A)#	Surveying Supervisor	01				01
7	400.90(B)#	Surveying Supervisor	01				01
8	400.91	Surveying Supervisor			07		07
9	400.92(A)#	Surveying Supervisor	01				01

10	14 02 13 10 08
Survey	13
Applications	10
Applications	
14 440.21 Digital Cartography & GIS Applications 07 01	08
15	
16 480.33 Digital Photogrammetry & Remote Sensing 10 04 17 480.34 Digital Photogrammetry & Remote Sensing 10 05 02 18 480.35 Digital Photogrammetry & Remote Sensing 02 04 19 480.36 Digital Photogrammetry & Remote Sensing 05 02 01 20 480.37 Digital Photogrammetry & Remote Sensing 05 02 01 21 485.03 Digital Photogrammetry & Remote Sensing 06 05 21 485.03 Digital Photogrammetry & Digital Photogrammetry & Remote Sensing 07 22 495.20 Fundamental of Survey 07	05
17 480.34 Digital Photogrammetry & Remote Sensing 10 05 02 18 480.35 Digital Photogrammetry & Remote Sensing 02 04 19 480.36 Digital Photogrammetry & Remote Sensing 10 01 20 480.37 Digital Photogrammetry & 05 02 01 & Remote Sensing 06 05 01 21 485.03 Digital Photogrammetry & 06 05 01 22 495.20 Fundamental of Survey 07 23 496.03 Refresher Course 06 01	14
18 480.35 Digital Photogrammetry & Remote Sensing 02 04 19 480.36 Digital Photogrammetry & Remote Sensing 10 01 20 480.37 Digital Photogrammetry & Remote Sensing 05 02 01 21 485.03 Digital Photogrammetry & Remote Sensing 06 05 22 495.20 Fundamental of Survey 07 23 496.03 Refresher Course 06 01 24 500.72 Surveying Engineer 01 25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS 02	17
19 480.36 Digital Photogrammetry & Remote Sensing 10 01 01 01 01 01 01 01 01	06
20 480.37 Digital Photogrammetry & Remote Sensing 05 02 01 21 485.03 Digital Photogrammetry & Remote Sensing 06 05 22 495.20 Fundamental of Survey Engineering 07 23 496.03 Refresher Course 06 01 24 500.72 Surveying Engineer 01 25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 01 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS 01 14 01 29 690.25 Control & Detail Survey by GPS 02 04 02 30 690.26 Control & Detail Survey by GPS 05 07 01 31 695.01 Mid care	11
21 485.03 Digital Photogrammetry & Remote Sensing 06 05 22 495.20 Fundamental of Survey Engineering 07 23 496.03 Refresher Course 06 01 24 500.72 Surveying Engineer 01 25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 01 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS 01 14 01 29 690.25 Control & Detail Survey by GPS 02 04 02 8 Total Station 01 01 30 690.26 Control & Detail Survey by GPS 05 07 31 695.01 Mid career Advance Course <t< td=""><td>80</td></t<>	80
22 495.20 Fundamental of Survey Engineering 07	11
23 496.03 Refresher Course 06 01 24 500.72 Surveying Engineer 01 25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS 01 14 01 29 690.25 Control & Detail Survey by GPS 02 04 02 30 690.26 Control & Detail Survey by GPS 05 07 01 31 695.01 Mid career Advance Course 02 03	07
25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS Mapping System. 01 14 01 29 690.25 Control & Detail Survey by GPS Mapping System. 02 04 02 30 690.26 Control & Detail Survey by GPS Mapping System. 05 07 01 31 695.01 Mid career Advance Course 02 03	07
25 500.73# Surveying Engineer 07 01 26 500.74# Surveying Engineer 10 27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS Mapping System. 01 14 01 29 690.25 Control & Detail Survey by GPS Mapping System. 02 04 02 30 690.26 Control & Detail Survey by GPS Mapping System. 05 07 01 31 695.01 Mid career Advance Course 02 03	01
27 585.07 Map Updation using Mobile Mapping System. 03 28 690.24 Control & Detail Survey by GPS A Total Station 01 14 01 29 690.25 Control & Detail Survey by GPS A Total Station 02 04 02 30 690.26 Control & Detail Survey by GPS A Total Station 05 07 01 31 695.01 Mid career Advance Course 02 03	08
Mapping System. 28 690.24 Control & Detail Survey by GPS 01 14 01 29 690.25 Control & Detail Survey by GPS 02 04 02 & Total Station 30 690.26 Control & Detail Survey by GPS 05 07 01 & Total Station 31 695.01 Mid career Advance Course 02 03	10
28 690.24 Control & Detail Survey by GPS 01 14 01 29 690.25 Control & Detail Survey by GPS 02 04 02 & Total Station 05 07 01 30 690.26 Control & Detail Survey by GPS 05 07 01 & Total Station 31 695.01 Mid career Advance Course 02 03	03
29 690.25 Control & Detail Survey by GPS 02 04 02 30 690.26 Control & Detail Survey by GPS 05 07 01 & Total Station 31 695.01 Mid career Advance Course 02 03	16
30 690.26 Control & Detail Survey by GPS 05 07 01 & Total Station 31 695.01 Mid career Advance Course 02 03	80
	13
32 700.22 Advance Geodesy 03	05
	03
33 700.23# Advance Geodesy 04	04
34 710.29 Advance Photogrammetry & 06 Remote Sensing	06
35 710.30# Advance Photogrammetry & 05 Remote Sensing	05
36 740.08 Advance Course on Digital 06 Cartography & GIS	06
37 740.09# Advance Course on Digital 04 Cartography & GIS	04
38 780.02 Refresher Course on GPS, Total 01 02 Station, Mobile Mapping, GIS and Digital Photogrammetry	03
39 820.02 Refresher Course for Addl.S.Gs/ 06 Directors on GPS, Total Station, Mobile Mapping, GIS and Digital Photogrammetry	06
Total 174 96 07 10	287

Courses continuing from previous year.

APPENDIX - "B"

SPECIAL COURSES CONDUCTED BY IIS&M FOR SPECIFIC USERS

SL NO.	COURSE NO.	NOMENCLATURE	DEPTL.	EXTRA DEPTL.	FOREIGN	OTHERS	TOTAL
1	Spl.	Training on vetting of 1:2,000 scale database under NUIS scheme		20			20
2	Spl.	Training on vetting of 1:2,000 scale database under NUIS scheme		14			14
3	Spl.	Training on vetting of 1:2,000 scale database under NUIS scheme		11			11
4	Spl.	Course on Photogrammetry, GPS & GIS for officials of AP Survey Training Academy		03		-	03
5	Spl.	Course on Modern Survey Techniques for AP Survey Training Academy officials		02			02
6	Spl.	Training in Modern Surveying Technology for National Institute of Defense Estate Management officers (NIDEM)		35			35
7	Spl.	Special course on Digital Cartography for Bangladesh officer			01		01
8	Spl.	Special course on "Modern Surveying Techniques for Engineering students"				35	35
9	Spl.	Special course on "Modern Surveying Techniques for Engineering students"				38	38
10	Spl.	Training in Modern Survey Equipments and Techniques for Oil India Ltd.officials		10			10
11	Spl.	Training in Modern Survey Techniques for Power Grid officials		29			29
		Total		124	01	73	198

APPENDIX -"C"

SHORT TERM AWARENESS COURSES CONDUCTED BY IIS&M

SL NO.	COURSE NO.	NOMENCLATURE	DEPTL.	EXTRA DEPTL.	FOREIGN	OTHERS	TOTAL
1	-	Seminar on GIS and other modern trends in mapping		21			21
2	-	Short Course on GPS & Total station concepts & applications		65			65
3	-	Short Course on Datum Coordinats & Map Projection – concept for advance map user		26		02	28
4	-	Short course on Digital Photogrammetry and Remote Sensing		28			28
5	-	Short course on Modern Surveying Instruments and Techniques		40			40
		Total		180		02	182

APPENDIX - "D"

ACADEMIC COURSES CONDUCTED BY IIS&M

SL NO.	COURSE NO.	NOMENCLATURE	DEPTL.	EXTRA DEPTL.	FOREIGN	OTHERS	TOTAL
1	Academic	M.Tech (Geomatics)- 2010-12 #		16	1	01	17
2	Academic	M.Tech (Geomatics)- 2011-13 #		13	-	03	16
3	Academic	M.Tech (Geomatics)- 2012-14 #				16	16
4	Academic	M.Sc (Geo-Spatial Science & Technology) – 2012-14 #	07			01	08
		Total	07	29		21	57

[#] Courses continuing from previous year.

USE OF HINDI IN OFFICIAL WORK

In accordance with the Official Languages Rules, 1976, 15 Geo-Spatial Data Centres / Directorates / Printing groups including headquarter of Survey of India are located in Region 'A' while 6 Geo-Spatial Data Centres in Region 'B' and 21 Geo-Spatial Data Centres / Training Institute / Printing groups / Zonal Offices are in Region 'C'. The position regarding the use of Hindi in the department for the year 2012-2013 remained as under:-

Correspondence

During the year 2012-2013 intensive measures were taken for transacting the official work of the union in Hindi by the various offices of the department. 5,805 documents were issued bilingually under section 3(3) of the Official Languages Act, 1963. Letters received in Hindi were replied in Hindi. Region wise position regarding correspondence in Hindi remained as under:-

1) Correspondence in Hindi by the offices located in Region 'A'

With 'A' and 'B' Region - 78.1% With 'C' Region - 56.3%

2) Correspondence in Hindi by the offices located in Region 'B'

With 'A' and 'B' Region – 87.6% With 'C' Region – 79.8%

3) Correspondence in Hindi by the offices located in Region 'C'

With 'A', 'B' and 'C' Region - 38.7 %

Training

During the period under report 12 officers / employees passed Hindi Prabodh, Praveen and Pragya examination and 10 LDCs' passed Hindi Typing examination, under Hindi Teaching Scheme.

Hindi workshop / Seminar

With a view to acquaint with the Official Language orders/rules and the target laid down in the Annual Programme Hindi workshops were organized in Surveyor General's office, Dehra Dun; Assam & Nagaland GDC, Guwahati. 37 officers / employees received training in these workshops.

Incentive Scheme

During the year 2012-2013 incentive schemes for noting and drafting for doing official work in Hindi, Hindi typing and Hindi stenography remained continued. Till now 25 employees of the Department have been awarded under the incentive scheme for noting and drafting in Hindi.

Hindi Day / Fortnight / Function

During the year Hindi day / Hindi fortnight / Hindi functions were organized in the month of September in various offices of the Department. To encourage the use of Hindi various competitions pertaining to Hindi were organized on this occasion and the winners were awarded.

Chal Vaijayanti Running Shield was given to the LAP section for doing maximum work in Hindi in Surveyor General's Office, Dehra Dun. On this occasion prize distribution ceremony, Hindi Quiz Competition was also organized besides recitation of poems in Hindi.

Publication of in-house Magazine in Hindi

The following offices published in-house magazines in Hindi during the period under report :-

1. Surveyor General's office, Dehra Dun	Sarvekshan Darpan
2. Uttarakhand & West Uttar Pradesh GDC. Dehra Dun	Pravas

2. Ottaraknand & West Ottar Pradesh GDC, Denra Dun	Prayas
3. Northern Zone, Chandigarh	Jagriti
4 Indian Institute of Cumpaying 9 Manning I hydroled	Drotibiosk

4. Indian Institute of Surveying & Mapping ,Hyderabad --- Pratibimb 5. Andhra Pradesh GDC, Hyderabad --- Kalakal

6. Kerala & Lakshadweep GDC, Thiruvananthapuram --- Sampreshan 7. Maharashtra & Goa GDC, Pune --- Sahyadree 8. Assam & Nagaland GDC, Guwahati --- Samvedna

9. Jammu & Kashmir GDC, Jammu --- Himkoti
10. Orissa GDC, Bhubneshwar --- Utthan
11. Southern Printing Group, Hyderabad --- Prerna
12. GIS&RS, Hyderabad --- Pushpanjali

Meetings

During the year 2012-13 quarterly meetings of the officials Language Implementation Committee were held in almost all the GDCs and Directorates etc. of the Department located in Region 'A', 'B' and 'C'. In these meetings discussions were held to achieve the targets given in the Annual Programmes issued by the Govt. for transacting the official work of the union in Hindi.

ANNUAL STATEMENT SHOWING THE REPRESENTATION OF SC's, ST's AND OBC'S AS ON 01-01-2013 AND NUMBER OF APPOINTMENTS MADE DURING THE PRECEDING CALENDAR YEAR- 2012

MINISTRY / DEPARTMENT / ATTACHED / SUBORDINATE OFFICE :- SURVEY OF INDIA

	Repres	sentati	on of		Numb	oer of	appoi	ntments	made	made during the calendar year 2011					
Groups	SCs/STs/OBCs (As on 01-01-2013)					Direct F	Recruit	ment	Ву Б	Promot	ion	Deputat	By ion/Abso	orption	
	Total Number of Employees	SCs	STs	OBCs	Total	SCs	STs	OBCs	Total	SCs	STs	Total	SCs	STs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Group A	169	9	7	4	-	-	-	-	-	-	-	-	-	-	
Group B	488	73	56	23	-	-	-	-	9	5	-	-	-	-	
Group C	3,180	534	218	181	36	5	6	14	121	14	5	-	-	-	
Group D (Excluding Sweepers)	2,229	647	105	75	-	-	-	,	-	-	-	-	-	-	
Group D (Sweepers)	92	87	03	2	-	-	-	ı	-	-	-	-	-	-	
Total	6158	1350	389	285	36	5	6	14	130	19	5	0	0	0	

^{*} No Other SC/ST candidates are available even in the extended zone of consideration.

SC/ST/OBC REPORT - II

ANNUAL STATEMENT SHOWING THE REPRESENTATION OF SC's, ST's AND OBC'S IN VARIOUS GROUP `A' SERVICES AS ON FIRST JANUARY, 2013 AND NUMBER OF APPOINTMENTS MADE IN THE SERVICE IN VARIOUS GRADE IN THE PRECEDING CALENDAR YEAR – 2012

MINISTRY / DEPARTMENT / ATTACHED / SUBORDINATE OFFICE :- SURVEY OF INDIA SERVICE :-

Pay Band		resent	tation	of	Nu	mber of appointments made during the calendar year 2012								
& Grade	SCs/STs/OBCs (As on 01- 01- 2013)				D	irect Re	By ecruitm	ent	By By Promotion Other Method				od	
Pay	Total Number of Employ ees	SCs	STs	OBCs	Total	SCs	STs	OBCs	Total	SCs	STs	Total	SCs	STs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PB-3 ₹ 5400	24	2	3	1	-	-	-	-	-	-	-	-	-	-
PB-3 ₹ 6600	74	3	1	2	-	-	-	-	-	-	-	-	-	-
PB-3 ₹ 7600	3	-	1	-	-	-	-	-	-	-	-	-	-	-
PB-4 ₹ 8700	27	4	3	1	-	-	-	-	-	-	-	-	-	-
PB-4 ₹ 8900	1	-	-	-	-	-	-	-	-	-	-	-	-	-
PB-4 ₹ 10000	27	-	-	-	-	-	-	-	-	-	-	-	-	-
HAG & above	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	157	9	8	4	0	0	0	0	0	0	0	0	0	0

ANNUAL STATEMENT SHOWING THE REPRESENTATION OF THE PERSONS WITH DISABILITY IN SERVICES (As on 01-01-2013)

MINISTRY / DEPARTMENT :- Ministry of Science & Technology ATTACHED / SUBORDINATE OFFICE :- Survey of India

GROUP	Number of Employees									
	Total	In Identified Posts	VH	НН	ОН					
1	2	3	4	5	6					
Group A	169	-	-	-	-					
Group B	488	3	-	-	3					
Group C	3180	39	-	-	39					
Group D	2321	-	-	-	-					
Total	6158	42	0	0	42					

Note: (I) VH Stands for Visually Handicapped (persons suffering from blindness or low vision)

- (II) HH Stands for Hearing Handicapped (persons suffering from hearing impairment)
- (III) OH stands for Orthopaedically Handicapped (persons suffering from locomotor disability or cerebral palsy)

PWD REPORT - II

STATEMENT SHOWING THE NUMBER OF PERSONS WITH DISABILITIES APPOINTED DURING THE YEAR (FOR THE YEAR-2012)

MINISTRY / DEPARTMENT :- Ministry of Science & Technology ATTACHED / SUBORDINATE OFFICE :- Survey of India

GROUP	DIRECT RECRUITMENT						PROMOTION							
	No. of					No. of								
	vacancies		No. of Appointments			vacancies		No. of Appointments						
	reserved		Made			reserved		Made						
	VH	нн	ОН	Total	VH	нн	ОН	VH	нн	ОН	Total	VH	нн	ОН
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
GROUP A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROUP B	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROUP C	-	-	-	-	-	-	-	-	-	4	2	2	-	2
GROUP D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	4	2	2	-	2

Note: (I) VH Stands for Visually Handicapped (persons suffering from blindness or low vision)

- (II) HH Stands for Hearing Handicapped (persons suffering from hearing impairment)
- (III) OH stands for Orthopaedically Handicapped (persons suffering from locomotor disability or cerebral palsy).