



INDIA GEOSPATIAL FORUM

22-24 January 2013

Hyderabad International Convention Centre, Hyderabad, India

REPORT



www.indiagespatialforum.org



*M*oving towards building a sustainable industrialised and technologically driven economic scenario, India is one of the emerging economies in the world. With such a level of economic developmental plan, the nation demands a new thought-process that is powered and influenced by geospatial intelligence. Having acknowledged the vital potential of geospatial technologies in overall socio-economic development, India is poised to invest in the sectors that are directly contributing to the nation's economy such as infrastructure, construction, power, water, land, banking, insurance and many more. In order to address the same, the **15th edition of geospatial industry's premier event -India Geospatial Forum** was organised with the theme "Towards Geospatially-enabled Economy". The forum endeavoured its best to demonstrate and project the aforesaid to larger stakeholders and contributors to the economy. It very deeply highlighted the emerging cultural and governance revolution offered by geospatial technologies and spatially equipped organisations by centre staging the national programs/projects that are being initiated by Indian government with tremendous emphasis on geospatial components.

OVERVIEW:

The 15th edition of geospatial industry's premier event -India Geospatial Forum, made a grand start in Hyderabad. The conference was very well received with **1538 delegates** joining from the length and breadth of the nation as well globally. With a well rounded structure, spanning over three full days of activities, the conference covered 2 plenary sessions, 5 full day symposiums, 4 significant seminars, 7 informative technical sessions and a well laid-out exhibition with 52 exhibitors showcasing the latest Geospatial Technologies running on three days.

OBJECTIVES & ACHIEVEMENTS

- **To create geospatial awareness and knowledge for sustainable economic development**

This objective was achieved with the presence of various geospatial stalwarts and major stakeholders of the India economy at the forum. They gave their experienced rich perspective to capitalise and harness the strength of geospatial technologies in uplifting the economy. Interactive discussions at the forum offered ample opportunities to learn and implement which shall lead to sustainable growth.

- **To explore geospatial business opportunities across India**

The forum served as a unique platform to bring geospatial stakeholders from different geographies under one roof. The forum saw the presence of 350 organisations, which indeed offered the best opportunity to explore new avenues and build new relationships.

- **To provide an explicit platform for networking opportunities**

The conference indeed offered an explicit platform for networking. With 1500+ delegates representing various states, nations and domains, made the good use of the occasion to share and receive the knowhow of the market and various geospatial technologies.

- **To strengthen and connect geospatial communities in India**

With the presence of delegates, guest from varied domains, certainly strengthened the connect within the Indian geospatial nations and cropped new opportunities to lead the continent to newer heights in collaboration with each other.

Key Outcomes

- Geospatial technology is a powerful tool to empower sustainable economic growth
- There is a need to build capacity for enhanced integration of geospatial technologies into the mainstream education by means of partnerships between the industry, government and academia
- Policy makers need to be empowered with more geospatial knowledge as to play a leading role in decision making
- Cross pollination of datasets and information between departments and organisations is important
- Dissemination of geospatial awareness through social media is required
- In order to work more efficiently and in a unified manner, there is an increased need to have more integrated and active SDIs and standardization of data to facilitate interoperability
- There is a need for greater collaboration and association between industry and government to develop a global platform for sharing geospatial knowledge
- Geospatial technologies are playing a crucial role in managing the nation's resources and enabling better decision making
- Latest and innovative technologies are revolutionizing the way we live and work
- Industry leaders from various vertical domains still need to realise the full potential and better use geospatial technologies



Inaugural Ceremony

“Need of the hour is making geospatial technology useful for common man and its applications in segments that are of most relevance to common man- **Danam Nagender, Hon'ble Minister of Labour, Employment, Training & Factories, Industrial Training Institutes, Government of Andhra Pradesh**”

“The national geospatial information organisations need to understand the changing dynamics and adapt their policies- **Drs. Th A J Burmanje (Dorine), Chair Executive Board, Cadaster, Land Registry and Mapping Agency, The Netherlands**”

“‘geography-as-a-service’ can guide India towards becoming a geo-enabled economy - **Arvind Thakur, CEO, NIIT Technologies, India**”

An elegant opening session of the 15th edition of India Geospatial Forum, witnessed the gracious presence of dignitaries deliberating on various issues that plague the region and how geospatial technology can be an effective solution to tackle those challenges.

Dignitaries present at the forum:

- Danam Nagender, Hon'ble Minister of Labour, Employment, Training & Factories, Industrial Training Institutes, Government of Andhra Pradesh,
- Dr. Shailesh Nayak, Secretary, Department of Earth Sciences, Government of India
- Drs. Th A J Burmanje (Dorine), Chair Executive Board, Cadaster, Land Registry and Mapping Agency, The Netherlands
- Dr. Swarna Subba Rao, Surveyor General, Survey of India
- KK Singh, Chairman & Managing Director, Rolta



Danam Nagender, Hon'ble Minister of Labour, Employment, Training & Factories, Industrial Training Institutes, Government of Andhra Pradesh, stressed that it is important to make and create awareness amongst common people about the application and potential of geospatial technologies. He further stressed about its applications in segments that are of most relevance to common man, like civic amenities and public safety.

In his keynote address, **Dr. Shailesh Nayak, Secretary, Department of Earth Sciences, Government of India**, mentioned that right knowledge is a key tool in maintaining this balance and geospatial information and geo-enabled services play a role in this. He also mentioned that even as economic growth is based on use of natural resources, the growth and environment management do not have to be conflicting.

Drs. Th A J Burmanje (Dorine), Chair Executive Board, Cadaster, Land Registry and Mapping Agency, The Netherlands, discussed the evolving role of geospatial information with the evolution of technology where geospatial information is beyond data collection. She highlighted the initiatives of Kadastre to address some of the changing dynamics of geospatial information and unlocking more datasets.

Dr. Swarna Subba Rao, Surveyor General, Survey of India, mentioned how utilisation of geospatial data has grown manifold and the contribution of Survey of India in terms of providing geospatial data. Technology advancements like tablet are changing the dynamics of geospatial information, so are offerings like Google Earth which are contributing to making geospatial information.

K.K. Singh, Chairman & Managing Director, Rolta and President, Association of Geospatial Industries, observed that geospatial information is radically changing business and how we do business.

Dr. V.K. Dhadwal, Director, National Remote Sensing Centre, stressed that the need of the hour is convergence, utility and pervasiveness of data. He urged for greater interactivity between different stakeholders of the geospatial community to facilitate this.

India Geospatial Forum opened to rich and thought provoking deliberations from geospatial experts of the country during the plenary sessions.

PLENARY 1

“ Indian Roads Congress will soon have some pilot projects to assess the potential usages and benefits of geospatial technologies- **C. Kandasamy, Director General (RD) & SS, Ministry of Road Transport & Highways, Government of India** ”



Key outcomes

- Geospatial-powered intelligence machine will be a reality
- PPP model for location-based solutions can build the communication gap between users and service providers which is proving hindrance for businesses
- Geospatial-powered intelligence machine will be a reality
- With digital workflow, GIS makes us understand the challenges like political and social conflicts, climate change, water scarcity
- Integrating of national land record programme with urban planning leads to better planning for urban areas

“ GIS has embraced evolution of IT and the new buzzword 'cloud'- **Arvind Thakur, CEO, NIIT Technologies** ”

“ Geospatial industry is one amongst 14 sectors which promises most of the jobs during the time of recession- **John Graham, President, Intergraph SG&I, United States** ”

Eminent speakers:

- **C. Kandasamy**, Director General (RD) & SS, Ministry of Road Transport & Highways, Government of India
- **Arvind Thakur**, CEO, NIIT Technologies Ltd., India
- **John Graham**, President, Intergraph SG & I, USA

PLENARY II

“ Data availability is not an issue in today’s world- **Prof. Y S Rajan, Honorary Distinguished, Professor, Indian Space Research Organisation (ISRO), India** ”

“ To achieve the targets under the XII Plan, the mining giant is planning extensive use of geospatial technology- **S Narsing Rao, IAS, Chairman, Coal India** ”

“ The XII Plan has allocated USD 1 trillion for infrastructure in areas like roads, highways, energy, in all of which geospatial technology will play a key role since it is an integral part of building and construction- **Rajan Aiyer, Managing Director, Trimble, India** ”



Key outcomes

- New technologies like satellite based navigation is an integral part of geospatial technologies
- The bigger challenge for the industry is to convert the data into knowledge products, assimilating into model societal applications with relevance and delivering in Web format in near real-time basis
- Geospatial technology can bring dramatic changes to the agriculture sector in a monsoon-dependent country like India
- GIS is of significant use for monitoring emissions and dumps from environment and safety points of view along with mine reclamation
- PSU is using GPS-based truck monitoring system to prevent theft
- Geospatial data had grown exponentially from 2D maps on paper to 3D apps, and would continue to grow tremendously in near future
- It is important to align technology, economic incentives and policy Geospatial applications and solutions also have to be easy to use so that it becomes part of our work culture- Rakesh Verma, Managing Director, MapmyIndia

Eminent Speakers:

- **Dr. Y.S. Rajan**, Honorary Distinguished, Professor, Indian Space Research Organisation (ISRO), India
- **S. Narsing Rao**, IAS, Chairman, Coal India
- **Rajan Aiyer**, Managing Director, Trimble, India
- **Rakesh Verma**, Managing Director, MapmyIndia

GEOSPATIAL STATE PANEL

Recommendations emerged from the panel discussion:

- The world today is facing many different challenges, and each geography poses a different set of challenges, requiring effective mechanism of governance
- Technology enables measuring, organising and analysing data which is available with us. Today, we have effective tools and they are proving valuable in decision making
- A seamless, standard based, citizen friendly state GIS is required now
- A lot has changed and there is an imminent need to have some standardised infrastructure through which application services can be delivered
- There is a need to have a good handshake between the state governments as well as the Union government
- Need to resolve issues of interoperability of datasets, availability of capacity, funding are impeding the speed of the projects

- Need to bridge the gap between vision and expectations of decision makers and the capabilities and ownership of the implementing agencies
- Need to integrate IT and IT-enabled services so that each can take benefit from the other
- Important for geospatial technologies to lap up at that scale
- Administrative structures need to be created for the smooth flow of any project

Panelists

- Bipul Pathak, IAS, Secretary-IT, Jammu & Kashmir
- Sanjay Jaju, IAS, Secretary-IT, Andhra Pradesh
- S Sridhar, President & COO, Esri India
- Kaushik Chakraborty, Vice President, Hexagon India
- Prof Arup Dasgupta, Managing Editor, Geospatial World
- Dr CR Bannur, Senior Divisional Director, Enterprise GIS& Defence Solutions, Rolta India.

BUILDING NATIONAL DATA REPOSITORY

“GIS is becoming a critical national infrastructure, demanding effective management- **Maj. Gen. R. C. Padhi, Additional Surveyor General, Survey of India**”

Key Outcomes

- GIS is becoming a critical national infrastructure, demanding effective management
- Geospatial data has potential for major economic contribution to national development
- Geospatial technologies lead potential economic benefits in terms of cost, energy and resource saving
- Governance is one of the key applications of geospatial data
- Spatial information can be used efficiently to build sustainable water resources
- NMOs must evolve their vision to get data GIS-ready, moving from “mapping” to providing spatial datasets
- One of the key requirements is an integrated geographic platform that leverages the new medium of intelligent Web services
- Information has meaning and gives power only when shared and distributed
- National repository needs to become a key component in a ‘dynamic ecosystem’ providing a marketplace to find, use and publish services
- Content updates need to be more frequent and stability and availability of services needs to improve
- There should be seamless data as well as integration with third party solutions
- Key criteria in a national repository are the format and standards
- Need for a mandate for quality checks before data is loaded in the servers

Deliberations by:

- **Dr. R. Siva Kumar**, Chief Executive Officer, National Spatial Data Infrastructure
- **Rajesh Mathur**, Chairman, NIIT GIS
- **Mladen Stojic**, Vice President – Geospatial, Intergraph
- **Dr. R. Nagaraja**, Group Director, NRSC
- **Maj. Gen. R. C. Padhi**, Additional Surveyor General, Survey of India
- **Dr. Aniruddha Roy**, Vice President, Navayuga
- **Dr. P. K. Srivastava**, Managing Director, Geospatial Delhi Limited
- **Shivalik Prasad**, Executive Director, MapmyIndia

**National development Programme**

“ We need ground-level applications. Private players should come up with low-cost apps for the poorest of the poor- **Dr. M. V. Rao**,
Director General, NIRD ”

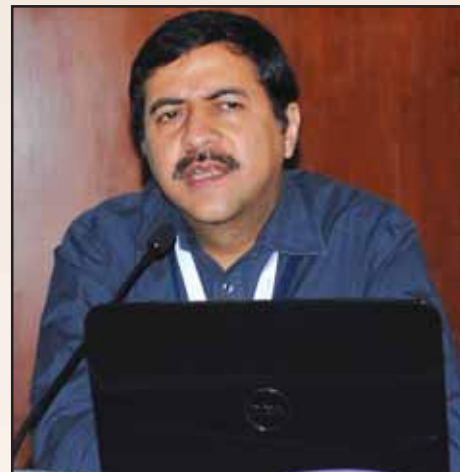
**Key Outcomes**

- Geospatial technologies are of significant use to give location of UAIDAI centres and GPS devices in enrolment kits
- There is a need to guide various govt. authorities about the areas where this technology can be applied
- The National Institute of Rural Development (NIRD) is using this technology extensively to identify and plug the leakages in rural development programmes
- Satellite imageries plays vital role to authenticate or monitor whether a particular piece of work for which the funds were sanctioned has been done, or, not
- NIRD has acknowledged the potential of GIS and established village GIS and is also opening geoinformatics centre in 11 villages
- GIS, GPS and remote sensing technologies play important role in timely and effective monitoring of construction and maintenance of quality and efficacy of the highways
- Information and computer technology with cutting edge space and geospatial technology in association with latest gadgets like GPS-enabled camera can be a big help in various national development projects
- GIS maps are useful in land acquisition along the highways for construction of road widening, bypass purposes and relocation and rehabilitation of affected people
- Geospatial technologies help in automation of the entire power distribution system in the state

Deliberations by:

- **Dr. R S Sharma**, Director General, Unique Identification Authority of India (UIDAI)
- **Prof. P. K. Verma**, Director General, M. P. Council of Science & Technology
- **Dr. M.V. Rao**, Director General, National Institute of Rural Development
- **Charanjit Singh**, Director, Department of Land Resources, Ministry of Rural Development, Government of India
- **Atul Kumar**, Chief General Manager, NHAI

- **B. Purushothama Reddy**, Director - Town & Planning, Government of Andhra Pradesh
- **K. Vidyadhar** (Deputy Director) MEPMA, Mission for Elimination of Poverty in Municipal Areas (MEPMA), Government of Andhra Pradesh
- **Dr. Sandeep Goyal**, Senior Scientist and Head of Madhya Pradesh Council of Science and Technology
- **Anita Ramachandran**, Mission Director, Mission for Elimination of Poverty in Municipal Areas (MEPMA), Government of Andhra Pradesh
- **S. K. Sinha**, Director, Survey of India
- **G. Chandrasekhar**, Infosys



STATE SDIs

Key Outcomes

- Having a policy mandate on utilization of data contained in state SDIs is critical to its success
- SDI needs to move beyond being a centralised data repository
- An SDI is only as good as its use at the grassroots level
- Need to understand stakeholders' constraints in maintaining data, data quality reporting before putting data on the portal
- Need to establish GIS committee with one key GIS experienced resource from each stakeholder from various GIS domains
- Need to focus on developing problem solving tools and services
- Urgent need of high bandwidth and performing software for smooth functioning of the processes

Deliberations by:

- **Anoop Singh**, IFS, Special Secretary, Department of Information Technology, Government of Andhra Pradesh, India
- **H. Hemanth Kumar**, Fellow & Principal Investigator-NRDMS, Karnataka State Council for Science & Technology, India
- **Sirish Chandra**, Assistant General Manager - Business Development (Geospatial Services), Avineon India
- **Dr. Jaisankar Prasad**, Kerala IT Mission
- **Dr. T.S.Sharma**, Project Director, State Remote Sensing Application Centre, Rajasthan
- **Dr. A.K. Mohapatra**, Chief Executive, Orissa Remote Sensing Application Centre, India
- **Sangita P. Rajankar**, Associate Scientist, Maharashtra Remote Sensing Applications Centre, India
- **Atanu Sinha**, General Manager, Intergraph, India
- **Pranav Kumar**, Lead-Systems and Software, Geospatial Delhi Ltd., India

GEOSPATIAL FOR BUSINESS ENTERPRISES



Key Outcomes

- Geospatial tools are of significant importance in construction by planning inspection and work routes
- Geospatial tools play role in work programme management, it helps in coordinating activities that may occur on the same asset over time
- GIS technology helps in ensuring that asset maintenance and investment strategies support the future service demands
- GIS BASED SEA PORT SECURITY leads to optimization of the movement of cargo
- Geospatial system provided 50-60% increase in labor efficiency & savings
- Geospatial leads to reliable and efficient electricity distribution
- Effective implementation of GIS technologies provide a correct representation of the entire distribution and transmission network with continuous monitoring of network and avoids redundancy of data in systems
- A utility GIS that allows integrated job and workflow management and can leverage existing GIS or integrated GIS
- Integrating GIS to title search platform can facilitate geographic indexing that can narrow down search and save time, typically from 3 hours to 10 minutes
- GIS tool in insurance sector allows to compare valuation and sale prices of adjacent plots to facilitate proper valuation of property to be insured
- GIS tools help evaluate any encroachment of property

Deliberations by:

- **Alok Upadhya**, HEAD GIS & International Business Development, Navayuga Group
- **P. K. Choudhary**, General Manager, RiTES
- **Dr. Y. Pari**, Engineering Manager-GIS, Larsen and Toubro
- **S.S. Mathur**, General Manager - Corporate Planning, Centre for Railway Information Systems
- **G. Kumar**, Chief Officer (Information Technology), Tamil Nadu Highways Department
- **Manideep Shah**, Intergraph, India
- **Advait Aundhkar**, Associate Director, Rolta India Limited
- **Akash M.**, Founder-Director, Sky Group
- **Vivek S. Kale**, Kalyani Global Engineering Private Limited
- **Anand Kumar**, Deputy General Manager, Reliance Energy, India
- **Francois Valois**, Director of Product Management, Geospatial, Bentley Systems, United States
- **Vasanth K.C.**, Senior GIS Consultant, NeST Information Technologies Private Limited



SME forum had brief presentations by 7 SMEs in India who are offering geospatial services, solutions and are resellers/distributors of software/hardware products and data products.

The presentations were followed by a panel discussions which included the SMEs, high level participation from technology companies – Rajan Aiyar, MD Trimble India, Mladen Stojic, VP of Intergraph; government participation – Maj Gen RC Padhi, Additional Surveyor General and User community – PK Chaudhary, Rites

The panel discussed a wide range of topics. The highlights of the panel discussion include -

- Value proposition a MNC technology company sees in working with a local SME
- Need for a progressive data policy
- Challenges faced by SMEs in bagging the projects
- Insufficient domain knowledge of SMEs
- Impact of macroeconomic fluctuations on SME businesses
- Need for training to students so that they are industry-ready



“ DLR needs to build up an inventory of competent HR personnel, technology service providers and other infrastructure and put it in the public domain to enable states to access such agencies for their work to get rid of the current vendor-driven practice - **Bipin Bihari Srivastava, Secretary, Department of Land Resources** ”

“ A total of 5,470 tehsils have been computerised and cadastral maps of 5 lakh villages have been completed- DLR **Charanjit Singh, Director, Department of Land Resources, Ministry of Rural Development, Government of India** ”

Key Outcomes

- There is a need for formulating guidelines on how land administration can be executed at national level down to the state level and then village level, so that in the four years the land records were digitised and integrated
- There is a need to revisit the entire land records and management system in view of the advancement in technology like geospatial
- There is an urgent need to build up an inventory of competent HR personnel, technology service providers and other relevant infrastructure
- It is important to convince people with the benefits of proper land records management, which further helps reduces disputes and encourages business
- Need to adopt high-end technology for survey and resurvey land
- Urgent need for capacity building among the officials
- Need to pay attention to inadequate bandwidth for connectivity so that data could be accessed from a central server and interconnectivity among various departments like revenue, registration and urban bodies
- Need to ideate a uniform system and command for all land records management, technology-mediated functional integration and nationwide interconnectivity
- It is necessary that land records had to be integrated with the SOI's ground control points nationally
- Advanced technologies like LiDAR and data of high resolution satellite imagery for land parcel mapping have shown significant results in improved land administration

Deliberations by:

- **Charanjit Singh**, IFS, Director LR, Department of Land Resources, Govt. of India
- **B B Srivastava**, IAS, Secretary, Department of Land Resources, Government of India.
- **Dr. Prithvish Nag**, Vice Chancellor, Mahatma Gandhi Kashi Vidyapith.
- **Sanjay Kumar**, CEO, Geospatial Media and Communications Private Limited.
- **M. B. Dyaberi**, IAS, CEO & EM, Karnataka Industrial Areas Development Board (KIADB), Karnataka
- **Dr. B. M. Mishra**, IAS, Special IGR, Delhi
- **Vishnu Borla**, Industry Manager, Land Information system, Intergraph
- **Akbar Shah**, Geospatial Advisor, Geospatial Delhi Ltd.
- **Sanjeev Trehan**, Regional Manager - SAARC Region, Trimble India
- **Inder Claire**, Sales Director, SAARC , GeoEye
- **Dr. Wang Kang Hong**, Vice President, Supermaps
- **Dr. Sultan Singh**, Senior Scientist, HARSAC
- **Kiran Hundi**, Head - Business Solutions, Navayuga Spatial Technologies Pvt. Ltd.
- **Christopher H Barlow**, Director, Strategic Accounts & Marketing, Thomson Reuters

MINING AND EXPLORATION

Key Outcomes

GIS analytics allows many users to interactively and visually analyse attribute data, leading to rapid information uptake and faster actionable insight

- Geospatial is a powerful tool to track material movements from load location to dump location
- In-situ measurements provide rapid, timely information, which makes multi-aspect measurements possible to obtain vector deformation data
- New technology like ground-based radar interferometry provides high spatial resolution, high deformation
- Satellite data helps in the status assessment of mine land reclamation and helps in taking remedial measures
- Need to replace old data with newer and better ones
- Ground Based LiDAR for Monitoring & Stability Analysis of Dump Slope in
- Opencast Coal Mine

Deliberations by:

- **Vijay Saradhi**, Consultant, Andhra Pradesh Mineral Development Corporation Ltd., India
- **N. P. Singh**, General Manager – Geomatics, Central Mine Planning and Design Institute (CMPDI), India
- **Dr. Charles L. Werner**, Vice-President – Vice President of Executive Board and Senior Project Scientist, Amigo Optima
- **Ratan Awasthi**, Senior General Manager, Elcome Technologies, India
- **Adam Christopher Wojciechowski**, Manager, Geomatics, GIS & Analytics, GEOSEIS, Canada
- **Mohit Rastogi**, Senior Manager, Central Mine Planning and Design Institute (CMPDI) , India
- **Dr. Dheeraj Kumar**, Associate Professor, Indian School of Mines, India
- **Kurt Maynard**, Senior Business Development Manager, Trimble, United States
- **Kian Hong**, Manager Pre-Sales, Information Services, GeoEye, Singapore
- **Mrinmoy Chakraborty**, Geologist, Hatch Associates India

NRDMS

Points Discussed:

- Environmental monitoring and assessment using geospatial technologies
- Participatory GIS Mapping of Land use Pattern
- Deforestation control using geospatial technologies
- Geo-Information Strategy for Rural Development
- Geospatial for Disaster Management
- Remote Sensing and GIS based Village Level Predictive disaster Modelling

EMERGING TRENDS AND TECHNOLOGIES

Points discussed:

- Intelligent Infrastructure
- Cloud Computing
- RADAR & LiDAR
- Photogrammetry
- 3d Urban Information System

URBAN PLANNING AND MANAGEMENT

- GIS & Public Participation for Town Planning
- Economic Corridor Planning using GIS:
- Spatio - Temporal Analysis of Urban
- Assessing the Impact of Urbanization and Industrialization
- Remote Sensing for Land use Land Cover Change Management

B2B MATCH MAKING

Canada - India Geomatics Matchmaking Session was organised by Canadian partners, ISTP Canada, the Government of Alberta, and TECTERRA



- The session provided an opportunity for Indian and Canadian geomatics companies to meet one-on-one to explore opportunities for business collaboration
- 9 Geomatics companies from Canada and approx. 15 Indian companies participated in one to one discussions and meetings
- The programme was highly productive and successful, focusing on the business interest and partnership requirement of each company

TECHNICAL SESSIONS

India Geospatial Forum 2013 hosted Technical Sessions on varied themes. These sessions were aimed to give members of the geospatial community an opportunity to showcase their work presentations. The proposed focus areas for technical sessions were:

- Web Applications and Open Source
- Remote Sensing and Image Processing
- Local Governance
- Geospatial Enterprise Solutions
- Agriculture
- Mobile Mapping



INDIA GEOSPATIAL EXCELLENCE AWARDS:

In order to recognise and encourage sincere efforts in the field of innovations and excellence brought forward by geospatial technology developers, professionals, users and policy makers, Geospatial Media & Communications conferred awards and recognitions to the exemplary contributors, at India Geospatial Forum 2013.

The winners for the Leadership Award are:

Most progressive geospatial state: State of Kerala

Geospatial Leader of the Year: Sajid Malik, Chairman & MD, Genesys International Co

Most Popular Geospatial Data Portal in India: Bhuvan, National Remote Sensing Centre

Excellence in Capacity Building: Indian Institute of Technology, Rourkee

Young Entrepreneur of the Year: Rohan Verma, MapMyIndia

System Integrator of the Year: Tata Consultancy Services

Lifetime Achievement Award: Prof. YS Rajan, Honorary Distinguished Professor, Indian Space Research Organisation

The Kamakshi Award for the Young Geospatial Scientist was awarded to Farjana Sikandar Birajdar, Research Scholar, IIT Bombay.

The winners of the Excellence Award are:

Land Administration: Revenue Department, Government of Gujarat

Disaster Management: National Disaster Management Authority

Infrastructure: Tamil Nadu State Highway Department

Insurance: ICICI Lombard

Best GIS Utility portal: Orissa Space Application Centre (for Odisha Samada)

Health: Thane Municipal Corporation



Forest Management: Madhya Pradesh Forest Department

Geospatial Application in an enterprise: Coal India limited



Rural development: Rural Development & Panchayati Raj Department Govt of Karnataka

STUDENT FORUM

Innovative presentations by students judged by Dr. Akhilesh Gupta, Secretary, University Grants Commission. Best paper presentation awards were given to Venugopal T.V, Mtech student, KRSAC and Sindhu Swarna, M Tech Student, NIIT Technologies.

Recommendations

- There is still too much focus on 'buttonology' (software training), as opposed to fundamental concepts
- Capacity building has to start from general education in schools
- Capacity building is a societal, not only professional task
- GI knowledge need to build on domain orientation
- There are several 'digital divides', we need to deal with all of them



Panelists

- Dr. Prithvish Nag, Vice Chancellor, Kashi Vidyapeeth - M. Dharam Raj, Addl. Surveyor General, Survey of India- Dr. Shahnawaz, Director - S & SE Asia, UNIGIS International, Austria- Dr. P. S. Roy, Former- Director, Indian Institute of Remote Sensing

Adcc Infocad | Alberta Canada | Amigo Optima | AMTRON | Andhra Pradesh Forest Department | ASB Systems | ASB Systems | Association of Geospatial Industries (AGI) | Astrium | Avineon India | BAE Systems | Bentley | CHC designs | Coal India Limited (CIL) | Department of Information Technology (DIT), Ministry of Communications & Information Technology, Government of India | Department of Science & Technology (DST), Government of India | DigitalGlobe | elets | FARO | GeoEye | GeoMax | Geospatial Delhi Ltd. (GSDL) | Geospatial Media & Communications | Hexagon | IIC Technologies | Imapmaps Pte Ltd | Infotech Enterprises | Janak Positioning & Surveying Systems P. Ltd | Karnataka State Council for Science and Technology (KSCST) | Kerala State Information Technology Mission (KSITM) | Kurabo Industries Ltd. (Kurabo) | MapmyIndia | National Institute of Rural Development (NIRD), Government of India | National Remote Sensing Centre (NRSC), Government of India | NATMO | Navayuga | Spatial Technologies Pvt. Ltd. (NST) | NIIT Technologies (ESRI) | Odisha Space Applications Centre | Pitney Bowes | RapidEye | REPROGRAPHICS INDIA | ROLTA | RSI Softech | SuperGeo | State Remote Sensing Application centre – Rajasthan | Survey of India | Madhya Pradesh Council of Science and Technology | Terrasolid Ltd. | Geological Survey of India (GSI) | Ministry of Earth Sciences (MoES) | Technology Development Board (TDB) | TriCAD | Trimble | ULT Solutions







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