

International Working Group on Digital Governance and Hotspot Geoinformatics for Monitoring, Etiology, Early Warning, and Sustainable Management : Third Meeting at JalaSRI, Jalgaon, India : December 17-29, 2008 : A Summary Report

The third meeting of the working group under the umbrella of CTG's international digital government initiative was held at JalaSRI, Jalgaon, India at the Unique District Level Watershed Surveillance and Research Institute during December 17-29, 2008.

Co-chair Ganapati Patil, Penn State Center for Statistical Ecology and Environmental Statistics, organized the meeting of an extremely excited group of some 50 members and invited participants, representing a wide variety of disciplines and institutions as also a wide range of expertise and experience, with a focused common interest in the Group theme of digital governance and hot spot geoinformatics for monitoring, etiology, early warning, and sustainable management. The 12-day program was full with insightful and colorful presentations, tutorials, and deliberations followed by intimate brainstorming events, enlightening evenings, and visual field trips.

The district level watershed surveillance and research case study of the Group has evolved into a research, training, and outreach institute with 15 full-time researchers, 2 model watersheds as field laboratories and societal initiatives over one thousand and fifty thousand hectares areas , a stimulating anthem, and two exciting dance dramas of 90-minute duration for urban and rural audiences showing digital governance, hotspot geoinformatics, river and stream networks, sensor networks, youth brigades, and watersheds development bringing together present day science and technology with local wisdom.

The Italian Map of Nature Case Study of the Group has joined hands with the Indian District Level Watershed Surveillance and Research Case Study of the Group and the two together recently won the Milan City Millennium Development Goals Grant for purposes of appropriate development and application of hotspot methodology and software in the watershed field.

A consortium is now in planning stages between Penn State; TERI University, Delhi; JalaSRI, Jalgaon; and the International Crop Research Institute for Semi-Arid Tropics, Hyderabad for Geoinformatics, Environmetrics, Ecometrics, and Aquatics for Water, Energy, and Natural Resources Development. TERI has been the Home Base of IPCC that has shared Nobel for Climate Change with Al Gore. The next group meeting is scheduled for June 1-7, 2009 in Delhi and Jalgaon.

The group has representation at present from USA, Germany, Italy, India, Indonesia, China, and Japan. A declared purpose of digital governance is to empower public with information access to enable transparency, accuracy, and efficiency for societal good. Spotting what is hot, and prioritizing it, become natural undertakings as a result of space time information access. Naturally, hotspot geoinformatics has become a critical need for the 21st Century.

“With the momentum provided by their effort, long term prospect for continuing this collaboration is pretty good” said Dr. Patil. “The chances are that we will have prepared

ourselves into launching an international forum for digital governance and hotspot geoinformatics. And since the programs of several working group members are in the process of being institutionalized in one form or the other, it will help strengthen and sustain continuity. Further more, sophisticated scientific issues and their implications on the models, methods, and tools will continue to keep the hotspot geoinformatics areas in the forefront. And this would help strengthen and sustain continued scientific challenge, methodological opportunity, software sophistication, and novel information technology for digital governance.”

Other members of the working group include Raj Acharya, Noshir Contractor, Amy Glasmeier, Anil Kulkarni, Andrew Lawson, Wayne Myers, Shashi Phoha of USA; Rainer Bruggemann (Germany), Orazio Rossi (Italy), Gauri Rane (India), Asep Saefuddin (Indonesia), Tomasz Jankowski (China), Koji Kurihara and Harry Cullings (Japan). Tomasz Jankowski of the United Nations University Institute of Software Engineering is the second co-chair of the Group.

The couple accompanying pictures may be able to convey the workshop spirit. The following links also may be informative and interesting.

- (1) Picturesque Colorful Pamphlet : TR 2008-1204 :
http://www.stat.psu.edu/~gpp/Picturesque_Pamphlet.pdf
- (2) A Couple Representative Papers :
 - (2a) TR 2008-1105 : <http://www.stat.psu.edu/~gpp/TR2008-1105.pdf>
 - (2b) TR 2008-1121 : <http://www.stat.psu.edu/%7Egpp/pdfs/TR2008-1121.pdf>
 - (2c) TR 2007-0226 : <http://www.stat.psu.edu/~gpp/pdfs/TR2007-0226.pdf>
 - (2d) TR 2007-0221 : <http://www.stat.psu.edu/~gpp/pdfs/TR2007-0221.pdf>

Digital Governance & Hotspot Geoinformatics for Monitoring, Etiology, Early Warning & Sustainable Management

December 17-29, 2008

Working Group and Workshop Schedule

Day	SESSIONS			
	I	II	III	IV
SUNDAY 21.12.08	Inaugural session of the workshop and Discussion on JalaSRI Pamphlet (Dr. G. P. Patil)	Geospatial and Spatiotemporal Hotspot Detection and Prioritization (Dr. Sharad Joshi)	Overview of Sensor Activities (Mr. Rajan Zambre)	Data Warehousing for JalaSRI to Help Transition to Better Governance and Data Empowerment (Mr. Sanjay Pawde, et al.)
MONDAY 22.12.08	1. Identification and Prioritization of Critical Sub-watersheds for Soil Conservation Management using the SWAT Model – A case study of Jalgaon district, Maharashtra, Western India. (Mr. Bidhan Sardar et al.) 2. Modeling of subsurface contamination of mercury within the white oak creek watershed (Mr. Mandar Zope)	Vegetation Cover Change Detection & Hotspot Area Analysis using Multi-Temporal Remote Sensing Data (Mr. Rahul K. Pandey, et al.)	Sustainable Development and Management of Water Resources (Dr. A. K. Gosain)	SWAT Hydrological Modeling of Jalgaon District of Tapi Basin (Dr. A. K. Gosain)
TUESDAY 23.12.08	1. Biogeographical and Bio-cultural Context for Collaborative Conservation and Resource Sustainability in Jalgaon District of Maharashtra, India (Dr. Gauri Rane et al.) 2. Sensor Deployment in Varangaon-Talwel Irrigation Command Area, Jalgaon (Ms. Pranita Behera et al.)	Virtual Globes and its Applications (Mr. Rahul Rakshit)	1. Identification of Potential Sites for Establishing Farm Ponds in Jalgaon District, Maharashtra- A Remote Sensing and GIS Approach (Mr. Vikrant Mahendran et al.) 2. Geoinformatics IPB Research Activity (Ms Dian Kusuamaningrum)	Landscape Pattern Analysis with reference to Forest Ecosystem in Jalgaon District, Maharashtra, India (Mr. Rahul K. Pandey et al.)
WEDNESDAY 24.12.08	Discussion on personal work plan & activity report of JalaSRI members. (Dr. G.P. Patil)	Alternative Energy (Dr. Anil K. Kulkarni)	Community Watershed as a Growth Engine for Sustainable Development of Dryland Areas: Model Watersheds (Dr. Suhas P Wani)	Introduction & Discussion of JalaSRI team members on river linking project (Mr. Vijay Singhal, Former District Collector, Jalgaon)
THURSDAY 25.12.08	1. Challenges in developing indicators and composite indices for hot spot detections and surveillance (Dr. Ashbindu Singh) 2. Earth Observations and GIS for Hot spots detection and surveillance (Dr. Ashbindu Singh)	Overview of Sensor Activities with Demonstration (Mr. Rajan Zambre)	Discussions on Amravati JalaSRI with Dr. Kamal Singh , Vice- Chancellor of Amravati University	National workshop on biodiversity conservation - a case study in Eastern Ghats (Mr. K. Thulsi Rao)

<p align="center">FRIDAY 26.12.08</p>	<p>G-readiness of India with reference to educational infrastructure (Dr. P. K. Joshi)</p>	<p>1. Sustainable Management of water resources of Shahnur, River basin, Akot region, Akola Dist., Maharashtra with reference to sensor networking & hotspot geoinformatics (Dr.S.F.R.Khadri) 2. Ground water appraisal of the Uma river basin (Dr.S.F.R.Khadri) 3. Hydrological investigation of Chandrabhaga river basin, chikhaldara region, Amravati Dist. (Dr.S.F.R.Khadri) 4. 50-ha permanent vegetation plot, Database Management, Case Study species using Torus Randomization (Mr. Surendra D. Champanerkar)</p>	<p>1. Field visit to Jain Hills to understand Jain Watershed Management Practices. 2. Visit to Model Watershed villages – Pathari and Samner of Jalgaon district. The team has visited to various existing and proposed water harvesting structures in these villages. 3. A delicious dinner followed by Dance Drama based on different ongoing projects at JalaSRI, Jalgaon in local language at Samner village.</p>
<p align="center">SATURDAY 27.12.08</p>	<p>1. Field visits to various sites included Hatnur dam pump station, Pipe factory, Ozarkheda reservoir and finally at Waghur dam, was arranged by Mr. V.D. Patil, Exe. Engineer, Minor Irrigation Department, Jalgaon. 2. In the evening session Dance Drama Programme of "JalaSRI on Stage" was performed by Jhelum Paranjpe and group, Mumbai & 'Swarada', Music Department, M. J. College, Jalgaon. Felicitations of Padmashree Dr. Bhavarlal Jain, President, Jain Group of Industries, Jalgaon for his significant contributions to the field of water conservation & management. Felicitations of Mrs. Jhelum Paranjpe, Odyssey dancer, smtalay, Mumbai, for her significant contributions to the field of dance. Recently Government of Maharashtra has conferred upon her the Sanskritik Puskar for the year 2008-2009.</p>		
<p align="center">SUNDAY 28.12.08</p>	<p>Classification, calibration and Identification of water quality using high frequency growth data from E-Tongue Tasting (Dr. Ashis SenGupta)</p>	<p>1. Scenario of Sex Ratios in Bihar (Dr. Arun K Sinha) 2. Investigation of Tuberculosis Clusters in Dehradun city using GIS and Spatial Scan Statistic (Dr. Neeraj Tiwari) 3. Discussion on the Dance & Drama of JalaSRI on the Stage with Jhelum Paranjpe and her group.</p>	<p>1. Spatial and Space time Scan Statistics to Detect Low Rate of Female Sex Ratio in Jalgaon District (Mrs. Yogita Jadhav) 2. Malaria Case in Indonesia – Future Research Planning (Ms. Yekti Widyaningsih)</p> <p align="right">Look Forward Session</p>

Time Schedule

Event	Time	Event	Time
Session I	9.00 - 10.30 a.m.	Coffee Break	10.30 - 11.00 a.m.
Session II	11.00 - 12.30 a.m.	Lunch	12.30 - 2.00 p.m.
Session III	2.00- 3.30 p.m.	Coffee Break	3.30 - 4.00 p.m.
Session IV	4.00 - 5.30 p.m.	Dinner Meetings (if any)	7.30 - 9.00 p.m.

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