

**Report of the IGU Thematic International Conference on Urbanization,
Health and Wellbeing and Sustainable Development Goals, Hyderabad
March 17-19, 2017**

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1. Major Highlights

This conference was organised in collaboration with IGU Commissions on Urban Geography, Biogeography and Biodiversity, Local and Regional development, Land Use/Land cover Change. This 10th IGU India Conference is the Theme based conference organized by International Geographical Union (IGU). It was hosted by the Department of Geography and Geoinformatics, Osmania University, Hyderabad from 17-19 March, 2017. A total number of 306 papers were presented in 25 technical sessions and in plenary session. Over 400 participants took part in the deliberations of the conference. Of this number, 345 participants represent 25 states of India and about 60 were from Hyderabad. Indian participants from universities, institutes, government departments, industry etc. were present. Around 28 International participants from 15 countries (Japan, China, Russia, Switzerland, South Africa, Poland, Italy and Sri Lanka) also attended the conference. The participants include IGU President Professor Y. Himiyama; IGU Urban Commission Chair Prof. Rozenblat Céline, IGU Commission on Biogeography and Biodiversity Chair Dr. Suraj Mal; Chair of Local and Regional Development Commission Prof. Jerzy Banski; LUCC Commission representative Prof. K. Kimoto; Ex IGU Vice President Prof. G. Bellezza; Chair of IGU National Committee-South Africa-Prof. Brij Maharaj; ICSU Scientific committee Members on Urban Health and Wellbeing Prof. R.B.Singh and Prof. Saroj Jayasinghe from Sri Lanka.

2. Plenary Session on ICSU Urban Health and Wellbeing Programme

Urban Health and Wellbeing programme is a joint programme of ICSU/IAMP/UNU. 3 ICSU Scientific Committee Members Prof. Rozenblat Céline, Prof. R. B. Singh and Prof. Saroj Jayasinghe together with Indian policy makers and academics were present in the session. A research project dealing with Air-Water Quality Induced Challenges for Urban Health and Wellbeing: Application of Systems Approach in South Asian Cities has been planned together with scientists from India, Sri Lanka, Bangladesh and Nepal.

Proposed Research Team Members

General Coordination

1. Prof. R.B. Singh (India)
2. Prof. Saroj Jayasinghe (Sri Lanka)
3. Prof. Rozenblat Céline (Switzerland)

Conference Secretariat

4. Prof. C.V. Rao
5. Dr. B. Srinagesh

City-India with Experts

1. Delhi- Prof. R.B. Singh, Dr. Shouraseni Sen Roy, Dr. Subhash Anand, Dr. P.K.Pathak, Dr. Netrananda Sahu, Akriti Grover
2. Aligarh- Prof. Sahab Fazal
3. Bangalore- Dr. Priyanarayanan
4. Hyderabad- Dr. B. Srinagesh, Prof. Kalpana Markandey
5. Dharward- Prof. A.A. Mulimani
6. Chennai- T. Vasantha Kumanan, Prof. Madhav Suresh
7. Mumbai- Prof. R.B.Singh, Akriti Grover
8. Kolkata- Prof. Lakshmi Sivaramakrishnan, Prof.R.B.Singh, Senaul Haque
9. Agra-Dr.V.R.Sharma
10. Lucknow- Prof. R.B.Singh
11. Varanasi- Prof. R.B.Singh and Mr. Sant Prasad

Sri Lanka Experts

1. Colombo-Prof. Saroj Jayasinghe, Dr Indrika Rajapaksha (Dept of Architecture, University of Moratuwa), Dr Shreenika Weliange (Department of Community Medicine, University of Colombo) and Dr Sanjeewa Perera (Dept of Mathematics, University of Colombo)

Bangladesh Experts

1. **Dhaka**-Prof. Rejuan Hossain Bhuiyan (TBC), Dr. Mahmuda Binte Latif

Nepal Experts

1. **Kathmandu**-Professor Pushkar Pradhan and Dr Bandana Pradhan, Professor at the Department of Community Medicine and Public Health, Institute of Medicine, Tribhuvan University,



Inaugural Session at IGU, Hyderabad



Plenary Session at IGU, Hyderabad

3. Comprehensive Session Programme for Presentation of Scientific Papers

The conference has discussed a variety of viewpoints to the topics, milieus and methods of study covered in the conference. The main themes were focused on Biodiversity and Climate Change, Natural Hazards and Disaster Management, Urban Planning and Infrastructure, Urban Morphology and Hierarchical System, Urban Transportation and Waste Management, Natural Resources and Environment, Sustainable Development Goals, Urban Health and Well being. Youth, Gender and Society beside Urban Safety and Governance.

4. IGU-YECG Late Dr. Manju Singh Memorial Young Scientist Poster Award

The IGU Young and Early Career Geographers Taskforce (IGU-YECG) and the Organizing Committee of Xth IGU International Thematic Conference had organised a poster competition for IGU-YECG LATE DR. MANJU SINGH MEMORIAL YOUNG SCIENTIST (POSTER) AWARD on 17th March 2017 at Hyderabad, Telangana, India. Mr. Gaurav Sikka (India) from the steering committee of IGU-YECG coordinated the event.

The IGU's Young and Early Career Geographers Taskforce (IGU-YECG) was launched in 2016 at the 33rd International Geographical Congress in Beijing, China. The Taskforce Steering Committee comprises ten members globally and its primary aim is to stimulate young geographers to participate in IGU activities.

IGU-YECG aimed to present a special poster award, to foster the excitement of younger colleagues in presenting their work in the form of a poster. Therefore, posters were invited from young scholars on the theme and sub themes of this conference. The award is instituted in the memory of Late Dr. Manju Singh, daughter of Prof. R. B. Singh (Vice President, International Geographical Union). Dr. Manju Singh, a young and dynamic academic did her M.Sc. from USA and PhD in nanotechnology from Italy. She left for her heavenly abode after a prolong illness on 9th December 2014. Prof. R. B. Singh has been generous enough to provide financial support for this award.

Eleven poster presentations from India and abroad were made in this competition. The jury for the award competition comprised of Prof. Yukio Himiyama (President, IGU), Prof. Celine Rozenblat (Chair, IGU Urban Commission) and Prof. Aravind Mulimani (Karnatak University, Dharwad). Awardees were selected on the site by jury and award recipients were announced during the valedictory session of the conference. The award included a certificate of merit and monetary award of Rs 5100/-. Two consolation certificates were also given. The award is bagged by S. Abdul Rahaman from Department of Geography, Bharathidasan University, Tiruchirappalli, Tamil Nadu for his poster on "*Assessment Of Human-Induced Land Degradation and Its Impact Through Geospatial Based MCE Approach In Kallar Watershed Of Tamil Nadu*". The consolation certificates 2nd & 3rd position was won by Gaurav Kant Nigam from Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh and Tejpal Sharma from Kurukshetra University, Haryana respectively. The event was hailed by entire geographers' community and appreciated by the young scholars. The task force aims to

make this competition a regular affair with organizing the poster award in XI IGU Commission Seminar 2018 scheduled in Assam, India.



Participants of IGU-YECG Poster Award with jury and IGU-YECG representative

5. Collaboration with ICSU CODATA for Organising International Training Workshop on Big Data for science and sustainability in Developing Countries

The CODATA PASTD – IGU joint action of the International Training workshop on Big Data for Science and Sustainability in Developing Countries was successfully held from 17th -19th March, 2017 in Hyderabad, India. Training workshop was the academic event of The Xth IGU International Conference on "Urbanization, Health & Well Being and Sustainable Development Goals ". The Indian training workshop is one of three actions of CODATA PASTD on capacity building in 2017 supported by International Geographical Union (IGU) and Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR, CAS). Other training activities will be held in Madagascar in September and in China in November. The training course aims to cultivate big open data publication and sharing idea and policy, and analysis and application abilities of young data scientist.

Three days training workshop included lectures and hands-on practice, which aims to promote capacity building for preservation of and open access to research data in developing countries.

Prof. R.B.Singh, Vice President of the International Geographical Union (IGU) and Co-Chair of Strategy and Policy Sub-group of CODATA PASTD, and Prof. Yukio Himiyama, President of the International Geographical Union attended the opening and closing ceremonies respectively. 56 trainees from 13 universities in India attended the training courses. CODATA PASTD member, Dr. Yunqiang Zhu, Co-chair of Capacity Building Sub-group of CODATA PASTD and professor from IGSNRR, CAS, and Dr. B. Srinagesh from Osmania University organized the training as co-chairs. Chinese scientists worked along with Indian colleagues to deliver courses on Open Big Data Discovery; data publication & sharing, India earth observation system, geospatial data interoperability; geospatial data infrastructure and data sharing principles. The training workshop has achieved favorable effects with active participation. Professor R. R. Singh and Dr. V. Raghavaswamy, Deputy Director of the National Remote Sensing Centre, India hope that the PASTD training course will continue in future and cultivate new generation of young data scientists with growing awareness of international cooperation.



Prof. R..B.Singh, Vice President, IGU delivered the opening speech



Prof. Yukio Himiyama, President, International Geographical Union (IGU), awarded certificates.

6. Special technical session on “SWAT application based watershed study”

A special technical session on Soil and Water Assessment Tool (SWAT) was organised at Xth IGU International Thematic Conference Hyderabad (India) on 19 March, 2017. The coordinator of the session was Dr. Pankaj Kumar. This session was chaired by Prof. Brij Maharaj (Department of Environmental Sciences, University of Kwazulu Natal, South Africa) and Prof. Vasantha Kumaran. The session witnessed 17 paper presentations by scholars and academicians. The Technical session started on the scheduled time with a brief key note address by Dr. QIU Dun-Lian, Senior Research Fellow, Executive Editor-in-chief of the Journal of Mountain Science, Director of the Center of Sci-Tech Information and Dissemination, Institute of Mountain Hazards and Environmental Sciences. The Chairperson, Prof. Brij Maharaj vividly described the rules and regulations of the session with explaining the pre-requisites i.e., the time allotment and the nature of the presentations that were to be presented. This was followed by scholars giving an outline of SWAT as a research tool that can be utilized to explain the impact of land use change on water balance in urban areas, identifying the suitable sites for water harvesting and estimating the direct run off from the river basin. Scholars in their presentations also dwelled upon the delineation of watershed for a sustainable development of land and water resources, calculation of stream flow and precipitation using SWAT, adaptation techniques, assessment of ecosystem services in a watershed and water efficiency for agriculture, SWAT analysis for hydro projects and impacts of urban and industrial growth on the transformations in spatial distribution of water bodies. Arc-SWAT tool used to delineate the boundary of watershed and Web Based Hydrography Analysis Tool was also discussed through presentations by the academicians. The session also witnessed a vibrant discussion session with many senior and young scholars putting queries to the presenters and receiving answers for the same. In a nutshell, the session

remained a successful endeavour and paved a road map for further research in academia using the SWAT Model as a tool. Towards the end, the session concluded with certificate distribution to the participants.



SWAT special session at IGU India Thematic Conference, Hyderabad.

Valedictory Ceremony

Valedictory session was graced with the presence of Prof. Yukio Himiyama, President, International Geographical Union (IGU) and Chair- IGU Commission on Urban Geography, Dr. QIU Dun-Lian, Executive Editor-in-chief of the Journal of Mountain Science, Director of the Center of Sci-Tech Information and Dissemination, Institute of Mountain Hazards and Environmental Sciences, Chinese Academy of Sciences, Chendu, China. Conference report and recommendations were presented.



Closing Ceremony

Publication Plan

Two volumes are being planned under Springer Series: Advances in Geographical and Environmental Sciences : <http://www.springer.com/series/13113>