



## **LAKE 2014: Conference on Conservation and Sustainable Management of Wetland Ecosystems in Western Ghats**

**Dates:** 13<sup>th</sup> -15<sup>th</sup> November 2014

**Venue:** Parisara Auditorium, Sirsi

**Symposium Web:** <http://ces.iisc.ernet.in/energy>

**E Mail:** lake2014@ces.iisc.ernet.in; lake2014symposium@gmail.com;

cestvr@ces.iisc.ernet.in; energy@ces.iisc.ernet.in

| <i>Organised by</i>  |   |
|--|---|
| Energy and Wetlands Research Group [ <a href="http://ces.iisc.ernet.in/energy">http://ces.iisc.ernet.in/energy</a> ],<br>Centre for Ecological Sciences, Indian Institute of Science, Bangalore 560012 |   |
| Gramabhyudaya unit,<br>Sri Swarnavalli Mahasamsthana, Sonda, Sirsi   | <i>Vriksh Laksha Andolana, Karnataka</i>                      |
| School of Life Sciences, Assam University,<br>Silchar  | School of Environmental Sciences, M G<br>University, Kottayam |
| Karnataka State Council for Science and<br>Technology, Bangalore.  | K.K. High School, Varthur, Bangalore                          |
| Vidyaniketan Public School, Ullal, Bangalore   | Vagdevi Vilas Institution, Bangalore                          |

| <i>Supported by</i>                                   |  |
|---|--|
| Karnataka State Pollution Control Board,<br>Bangalore | <i>Sharadamba Education and Rural<br/>Development Society (R), Bhairumbe</i> |
| Village Forest Committee, Shigehalli, Sirsi           | Snehakunja, Honnavar   |
| Karnataka Environment Research Foundation             | Lions English High School, Sirsi   |

**Introduction:** Symposium focusing on lakes popularly known as “**Lake Symposium**” was initiated by the Energy & Wetlands Research Group at Centre for Ecological Sciences, Indian Institute of Science, Bangalore in the year 1998. The theme was broadened in 2000 (Lake 2000) with a wider participation of education institutions, Governmental and non-governmental organisations, etc. The basic idea of the symposium was to bring out the trends in ecosystem conservation, restoration and management including the hydrological, bio-physical, people’s participation and the role of non-governmental, educational and the governmental organizations and the future research needs. **Lake 2014** will be the 9<sup>th</sup> Biennial Lake Conference focussing on “**Conference on Conservation and Sustainable Management of Wetland Ecosystems in Western Ghats**”. The theme of world wetlands day 2014 is “*Wetlands and Agriculture*”:

Placing a focus on the need for the wetland and agricultural sectors (and the water sector too of course) to work together for the best shared outcomes” and this conference provides a unique opportunity to increase understanding of the role of wetlands in sustaining the food production and challenges faced by these fragile ecosystems.

Wetland ecosystems are cradles of biological diversity, providing water and primary productivity upon which countless species of plants and animals depend for survival. The degradation of these vital ecosystems is linked to continuing problems of land cover changes, deforestation, habitat fragmentation, pollution, indiscriminate disposal of liquid and solid wastes, and issues related to economic productivity and ecological security. The structural changes in the ecosystem due to land cover changes, will influence the functional aspects namely hydrology, bio-geo chemical and nutrient cycle, which are evident in many regions in the form of conversion of perennial streams to seasonal and disappearance of water bodies leading to a serious water crisis. There is growing evidence that biological diversity will be severely threatened by rapid climate change. Also, hydrological changes could be the dominant effect of climate change, as snowmelt increases, as evaporation rates increase and as droughts, storms and floods intensify. Much of the hydrological changes will be reflected in changes in freshwater ecosystems including most of the wetland areas. The biological impacts include dwindling of the biodiversity, habitat damage and loss of spawning grounds of aquatic organisms, reduction in inland fisheries resources and loss of vegetation. Conservation of natural resources through sustainable ecosystem management and development is the key to our secured future. Formulation and implementation of action plans that best conserve wetland resources require an understanding of issues, concerns and threats to water resources. Approaches towards this direction include:

- Fostering participation of all stakeholders to ensure that individuals and organizations are provided an opportunity to participate in the development of aquatic resources conservation activities;
- Encouraging intergovernmental initiatives through partnerships between communities and non-profit organizations;
- Identifying significant natural, recreational, economic, cultural, scenic resources and aquatic ecosystem values;
- Identifying potential threats to aquatic resources and values;
- Recommending policies and actions that can be undertaken to restore, maintain or enhance aquatic and terrestrial resources.

## **Scope:**

**Lake 2014** - “*Wetlands and Agriculture*: Placing a focus on the need for the wetland and agricultural sectors (and the water sector) to work together for the best shared outcomes”. Lake 2014 would focus not only on updating of the current knowledge of the scientific community and also would bring in awareness among students, teachers and public. This would provide a platform for interaction among researchers, policy makers, academics and NGOs and address the issues related to wetlands and biodiversity in an era of climate change. This would help in developing a stronger network among experts and institutions in order to develop efficient strategies for the conservation and management of fragile ecosystems. As a part of the conference it has been decided to have theme based lead lectures by the eminent scholars, paper and poster presentations by researchers, school and college students.

## **Lake 2014 – Objectives:**

Focus of Lake 2014 would be (i) assessment of the present status and conservation aspects of wetlands, lakes, tanks, ponds, swamps, streams and rivers in the Western Ghats, (ii) presentation by researchers, practitioners, students of case studies focusing on biodiversity, ecology, present status, threats, conservation measures required, (iii) discussion of current programmes on restoration, conservation and management of wetlands, (iv) role of education institutions, non-governmental organisations, religious organisations, (v) discussion of people's livelihood and fundamental right towards equitable resource allocation through scientific assessment of ecosystem goods and services, (vi) presentation by students (schools and colleges) based on documentation focussing on wetlands – biodiversity, present status, ecology, conservation and protection needs, (vii) allocation of financial and human resources to conserve and protect ecologically fragile ecosystems, (viii) proposals by students and non-governmental organisations for conservation, protection, restoration and sustainable management of aquatic ecosystems, (ix) discussion on research gaps and activities to be initiated by researchers to evolve appropriate strategies towards conservation of ecosystems in Western Ghats.

## **Themes:**

Papers are invited on the following themes from researchers, planners, development managers, economists and social scientists, school (VIII – XII students) and college students, school and college teachers.

Topics for Paper Presentation/ Poster in Lake 2014:

1. Biodiversity: Western Ghats, Rivers and Wetlands;
2. Wetlands and swamps: Restoration, Conservation and Management;
3. Land use, Land cover dynamics in Western Ghats
4. Climate Change and Western Ghats;
5. Carrying Capacity of Western Ghats;
6. Carrying capacity of river basins in Western Ghats;
7. Valuation of Ecosystem Goods and services;
8. Sacred Groves (kans, devara kadu) and Myristica Swamps;
9. Eco-Tourism in Western Ghats and Carbon sequestration;
10. Need for conservation - Food and water security of India;
11. Application of Geoinformatics in Wetland Management;
12. Natural and Anthropogenic disasters;
13. Limnology, aquatic ecology, biodiversity and prospects of biomonitoring;
14. Pollution –terrestrial and aquatic - Monitoring and Management, bioremediation;
15. Sustainable Agriculture and organic farming;
16. Coastal ecosystems – Biodiversity, Ecology, Productivity and livelihood aspects;
17. Wetland Resources and Livelihood;
18. Prospects of Renewable Energy (solar, biofuel, bioenergy) and Energy Conservation;
19. Environmental Education and Sustainable Development;
20. Environment Ethics and Green Technology.

There are **three awards in students and teachers category**— High School (VIII, IX, X); College (XI, XII and UG) and Teachers (school and college). Awards for the best paper presentation would include a Certificate and a Memento. The best posters would be similarly, awarded.

**Venue:** Parisara Auditorium (Swarnavalli Mutt Sabhagana, Sonda & Parallel Sessions at Lions English High School, Yellapur Road, Sirsi), Sirsi, Uttara Kannada, Karnataka

- Sirsi is located at an altitude of around five hundred and ninety meters (590m) and is located close to the Arabian Sea. Details are available at <http://www.sirsicity.gov.in/>
- **Location and Connectivity:** Sirsi town is in the central Western Ghats (Uttara Kannada district, Karnataka) is well connected with other parts of the country by road, rail and air. Nearest airports are Hubli, Goa and Bangalore which are 105, 210 and 440 km away from Sirsi.
- **Climate:** Sirsi has a moderate climate that is basically tropical. Weather during November month is very pleasant and are hospitable. The maximum temperature during these winter months is thirty two degrees (32°C) and the minimum temperature is nineteen degrees (19°C).

## **Registration Fee**

Delegates: INR 2500/- and Accompanying person: INR 1500/-

Research scholars and University faculty: INR 2000/- (mandatory to attend all three days)

Masters students: INR 1000/- (mandatory to attend all three days)

UG students: INR 500/- (mandatory to attend all three days)

No spot registration

School and College (PU) teachers and students: Free (paper accepted for presentation in the technical session)

**The organising committee has decided to waive registration fee to students and teachers (school/ PU) whose papers/posters are accepted for presentation in the technical session.** The registration fee for individuals from industry, government and those who wish to participate in the symposium are required to pay INR 2500 (and for accompanying person: INR 1500) and Research scholars and University faculty: INR 2000/- (Research Scholars and university faculty need to attend all three days). Registration fee to be paid by demand draft, drawn in favor of **“Lake 2014, Indian Institute of Science”** payable at Bangalore. The registration fee would include registration kit, working lunch and tea during the symposium. Accompanying person will have access to all technical sessions and hospitality as per delegates except registration kit.

**Exhibition:** An exhibition of software and hardware related to Restoration and Monitoring technologies, Water quality analysis, Geographic Information System (GIS), Global Positioning System (GPS), Remote sensing, Image processing and Cartography, as well as products and services of other organizations and agencies working in the area related to the theme of the conference, will be organised. Organisations / Agencies can participate in the exhibition on payment of fee of INR 20,000. Registered agencies would be allowed to make 10 minutes presentation. Interested agencies may contact **Dr. T.V. Ramachandra** (cestvr@ces.iisc.ernet.in) and remit the fee through DD drawn in favor of "**Lake 2014, Indian Institute of Science**" payable at Bangalore.

### Programme Details:

| Date                           | Morning Session<br>(9 am to 1 noon)   | Afternoon Session<br>(2 pm to 6 pm)   |
|--------------------------------|---|---|
| 13 <sup>th</sup> November 2014 | Inaugural Session, Presidential Address, Keynote Talk, Felicitation of Senior Researchers   | Session on "Integrated Ecological Carrying Capacity of Uttara Kannada" – 35 themes  |
| 14 <sup>th</sup> November 2014 | <i>Technical Sessions:</i> Biodiversity, land use dynamics, Aquatic Ecology, Forest Ecology, Sacred Groves, water, Wetlands and agriculture, pollution, green technology, environment ethics, limnology, Presentations by school and college students (parallel sessions) | <i>Technical sessions:</i> Myristica Swamps, wetlands, climate change, global warming, valuation of ecosystems, carbon sequestration, environmental education, ecotourism, sustainable livelihood. Presentations by school and college students (parallel sessions) |
| 15 <sup>th</sup> November 2014 | Key note talk, presentation by school and college students (finalists)  | Panel Discussion, Cultural programme, valedictory programme, distribution of prizes, certificates (prize and participation)   |
| 16 <sup>th</sup> November 2014 | <i>Field Visit</i>  |   |

### Dates to Remember:

|  |                                       |
|--|---------------------------------------|
| Early Bird Registration (for participation), registration form is in page 9.   | <b>18<sup>th</sup> May 2014</b>       |
| Submission of scientific papers (full length / extended abstract), posters with the Registration Form (with the registration fee, depending on the category) – <b>delegates presenting papers/posters.</b> | <b>18<sup>th</sup> June 2014</b>      |
| Review of Papers and posters by the committee  | <b>June and July 2014</b>             |
| Final submission of the revised manuscript (based on review comments)  | <b>25<sup>th</sup> August 2014</b>    |
| Notification of Acceptance of Papers (on web)  | <b>30<sup>th</sup> September 2014</b> |
| Lake 2014 Conference   | 13-15 November 2014                   |
| Field work   | 16 November 2014                      |

## Call for papers:

**Call for Scientific Papers:** Delegates interested in presenting papers as oral or poster need to submit the scientific paper as per the guidelines given below.

**Guidelines for Paper Preparation:** The full text paper (e-version preferably in a CD and one hard copy) formatted to A4 (210 mm x 297 mm) size, after having been scrutinized and accepted, will be printed as received, by offset process. Therefore, the text of the paper in English must confirm strictly to the following requirements and be free from errors.

|   |   |
|---|---|
| Top/bottom margin                                 | 25mm (on first page 35mm)   |
| Left/right margin                                 | 25mm (all pages)  |
| Typing area                                       | 160 mm x 247 mm (including folio), single space single column               |
| Total pages                                       | 8-10 pages including figures, tables, photographs, references etc., if any. |
| Font type   | Times New Roman/Arial   |
| Title   | 14 point BOLD CAPITALS  |
| Author's Name                                     | <b>12 point Bold</b> Upper-Lower (Do not prefix name with/Ms./Dr./Prof.)    |
| Affiliation (designation, organisation and place) | <i>11 point italics</i>   |
| E Mail ID, Telephone number and Mobile            | 11 point  |
| Organisation web URL                              | 11 point  |
| Main headings                                     | 10 point <b>BOLD CAPITALS</b>   |
| Subheadings                                       | 10 point <b>Bold Upper-Lower</b>  |
| Text  | 10 point normal   |
| Print   | Laser Print or letter quality   |

The paper title, name(s) of author(s), affiliation and address, center justified, should be typed in a space of 50 mm from the top margin on the first page. The paper should begin with a synopsis of not more than 200 words describing the aim(s) of the work, methods, results obtained and conclusions. Type the headings, subheadings and paragraphs aligned with the left-hand margin (Align Left). Text justified on both sides is preferred. Use double space between paragraphs, and between section headings/subheadings and paragraphs. Do not number paragraphs, but number section and sub-sectional headings except synopsis, in conformity with established convention. The manuscript should be prepared by using MS Word (suitable for Windows). Figures should be drawn in black Indian Ink on translucent paper or acetate material (Gateway Tissue) with lettering of appropriate size using stencils. The figures should be placed nearest to the first reference

in the text. Photographs on glossy paper may be included, if absolutely necessary. The authors must send brief bio-data (100 words) and the recommendations that they would like to be considered as a part of the conference based on their presentations.

**Accommodation:** Key speakers and invited delegates would be accommodated at Guest houses, Sonda. Delegates whose paper is accepted for technical session will be accommodated at hotel on first come first serve basis. Delegates requiring accommodation need to mention the requirement in the registration form. Room rent is required to be paid by the delegates as per the tariff in the respective hotel. All delegates will have to make their own travel arrangements.

Accommodation will be arranged on payment basis upon the request from the delegates.

| Hotel                                   | Room type (Bed room)         | Tariff per day (INR) | Available Rooms (Nos.) | Other              |
|---|------------------------------|----------------------|------------------------|--------------------|
| Saamrat                                 | Single (Non AC)              | 260                  | 25                     | Extra bed- INR 100 |
|   | Double (Non AC)              | 450                  | 20                     |                    |
|   | Double (AC)                  | 700                  | 10                     |                    |
|   | Suit (Family)                | 940                  | 5                      |                    |
|   | Double Suite                 | 450                  | 2                      |                    |
| Madhuvan                                | Double (Non AC)              | 624                  | 21                     |                    |
|   | Double (AC)                  | 1296                 | 8                      |                    |
|   | Suit (Family)                | 2500                 | 1                      |                    |
|   | Three Bedroom (Non AC)       | 830                  | 1                      |                    |
|   | Three Bedroom (AC)           | 1620                 | 1                      |                    |
| Panchavati                              | Double                       | 450                  | 9                      |                    |
|   | Double (With TV)             | 572                  | 11                     |                    |
|   | Delux                        | 676                  | 3                      |                    |
|   | Delux (AC)                   | 1030                 | 4                      |                    |
|   | Three Bedroom (Non AC)       | 624                  | 1                      |                    |
|   | Suit (Couple)                | 1620                 | 2                      |                    |
| Yatri Nivas Homestay (BAKULA)           | AC room                      | 1500                 | 4                      | Extra bed- INR 200 |
|   | Non AC room                  | 1200                 | 2                      |                    |
| Yatri Nivas (Swarnavalli)               | Single (Non AC)              | 250                  | 1                      |                    |
|   | Double (Non AC)              | 250                  | 5                      |                    |
| Netravati Hotel (Opp. Marikamba Temple) | About 20 rooms are available |                      |                        |                    |

## **Symposium Organising committee:**

**Honorary President:** Shri Shri Gangadharendra Saraswati Samiji,  
Shri Sonda Swarnavalli Mahasamsthanam, Sonda, Sirsi  
<http://www.swarnavallimatha.org/>

**Chairman:** Dr. T.V. Ramachandra, EWRG, CES, IISc 560012

**Working President:** Sri Ananth Hegde Ashisar, Convener, *Vriksh Laksha Andolana*,

| <b>Conveners</b>                             | <b>Co-Conveners</b>                     |
|--|---|
| Dr. M.D. Subash Chandran, CES, IISc          | Shri. Narayana Gadikai                  |
| Dr. Keshav Hegde Korse, Ujire                | Shri. Prabhakar Bhat, CES, IISc, Sirsi  |
| Dr. B.M. Kumaraswamy, Shimoga                | Shri. B.H. Raghavendra, Sagar           |
| Dr. R. Vasudeva, Forestry College, Sirsi     | Shri. Ganapathi B. Bislakoppa           |
| Shri. Shantharama Siddi, Yellapur            | President, Lions Club, Sirsi            |
| Shri. Harish R. Bhat, CES, IISc              | President, Parisara Vardhini, Yadahalli |
| Dr. Prakash Mesta, CES, IISc, Kumta          | Shri. G. R. Rao, CES, IISc, Kumta       |
| Shri. M.A. Khan, K.K. High School, Bangalore | Shri. Gajendra Gorasakodige, Balehonnur |

| <b>National Scientific Committee</b>         | <b>Local Organising Committee</b>    |
|--|--------------------------------------|
| T.V. Ramachandra, CES, IISc, Bangalore       | Prahallad Rao                        |
| N.V. Joshi, CES, IISc, Bangalore             | Harish Krishnamurthy, Vagdevi Group  |
| M.D. Subhash Chandran, CES, IISc, Kumta      | Vishwas R.S., Globe Trotter CEO      |
| E.V. Ramasamy, M G University, Kottayam      | Vallish Nagar, Bosh India            |
| M. Prithviraj, KSCST, Bangalore              | Meera Rajesh, TCS                    |
| Devashish Kar, Assam University, Silchar     | Rajesh, Volvo                        |
| S.N. Prasad, IIIT, Hyderabad                 | Padma Ashok                          |
| Durga Madhab Mahapatra, CES, IISc, Bangalore | Snehalatha V.K.                      |
| Rajasri Ray, CES, IISc, Bangalore            | Sreevidya                            |
| Shwetmala, CES, IISc, Bangalore              | Dr. Ramesh B., Chandan School        |
| Bharath H. Aithal, CES, IISc, Bangalore      | Vinayak Bhat, Lions School, Sirsi    |
| Bharath Settur, CES, IISc, Bangalore         | M.M. Bhat, Lions School, Sirsi       |
| Vinay S, CES, IISc, Bangalore                | Boominathan M., CES, IISc, Bangalore |
| Ganesh Hegde, CES, IISc, Bangalore           | Gouri Kulkarni, CES, IISc, Bangalore |
| Sumesh Dudani, CES, IISc, Bangalore          | Vishnu Mukri, Sreekanth Naik, CES    |
| Sudarshan Bhat, CES, IISc, Bangalore         | Mahima Bhat, CES, IISc, Bangalore    |
| Balachandran C, CES, IISc, Bangalore         | Gayatri Naik, CES, IISc, Bangalore   |

### **Address for communication**

Dr. T.V. Ramachandra, Chairman & Organising Secretary, Lake 2014  
Energy and Wetlands Research Group, CES TE 15  
Centre for Ecological Sciences  
Third Floor, E wing, New Bioscience Building  
[Near D Gate], Indian Institute of Science, Bangalore 560012  
Phone: 91-080-22933099/2293 3503 (extn. 101/107)  
E mail: [cestvr@ces.iisc.ernet.in](mailto:cestvr@ces.iisc.ernet.in), [lake2014@ces.iisc.ernet.in](mailto:lake2014@ces.iisc.ernet.in)  
[Lake2014symposium@gmail.com](mailto:Lake2014symposium@gmail.com)  
Conference Web: <http://ces.iisc.ernet.in/energy>



**LAKE 2014: Conference on Conservation and Sustainable Management of Wetland  
Ecosystems in Western Ghats**

**Dates: 13<sup>th</sup> -15<sup>th</sup> November 2014, Venue: Parisara Auditorium, Sirsi**

**REGISTRATION FORM**

|    |   |  |
|----|---|--|
| 1  | Name  |  |
| 2  | Designation   |  |
| 3  | Official address  |  |
| 4  | Communication Address   |  |
| 5  | E Mail  |  |
| 6  | Telephone Number with Code  |  |
| 7  | Mobile  |  |
| 8  | Presenting Paper / Poster   | Paper / Poster   |
| 9  | If Yes, Title of the paper /Poster  |  |
| 10 | Enclosed: Abstract / Paper (e – version and hard copy):<br>(Please ensure CD is virus free) |  |
|    | e-version of the Abstract and paper may also be sent to                                     | lake2014@ces.iisc.ernet.in;<br>lake2014symposium@gmail.com |
| 11 | Accommodation Required:   | Yes / No:  |
| 12 | If yes: Hotel Name  |  |
| 13 | Arrival at Sirsi  | Date _____ and Time _____                                  |
| 14 | Details of Registration Fee*  | Amount: _____ DD No: _____<br>Bank: _____ Date: _____      |
| 15 | Accommodation required  | From: _____ To: _____                                      |
| 16 | Details of accommodation charges*   | Amount: _____ DD No: _____<br>Bank: _____ Date: _____      |
| 17 | Travel details  | Arrival Train / Flight/Bus:<br>Place and Date:             |
| 18 | Travel details  | Departure Train / Flight/Bus:<br>Place and Date:           |
|    |   |  |

(All fields must be filled) \*DD in favour of Lake 2014, Indian Institute of Science, Bangalore

Place:

Date:

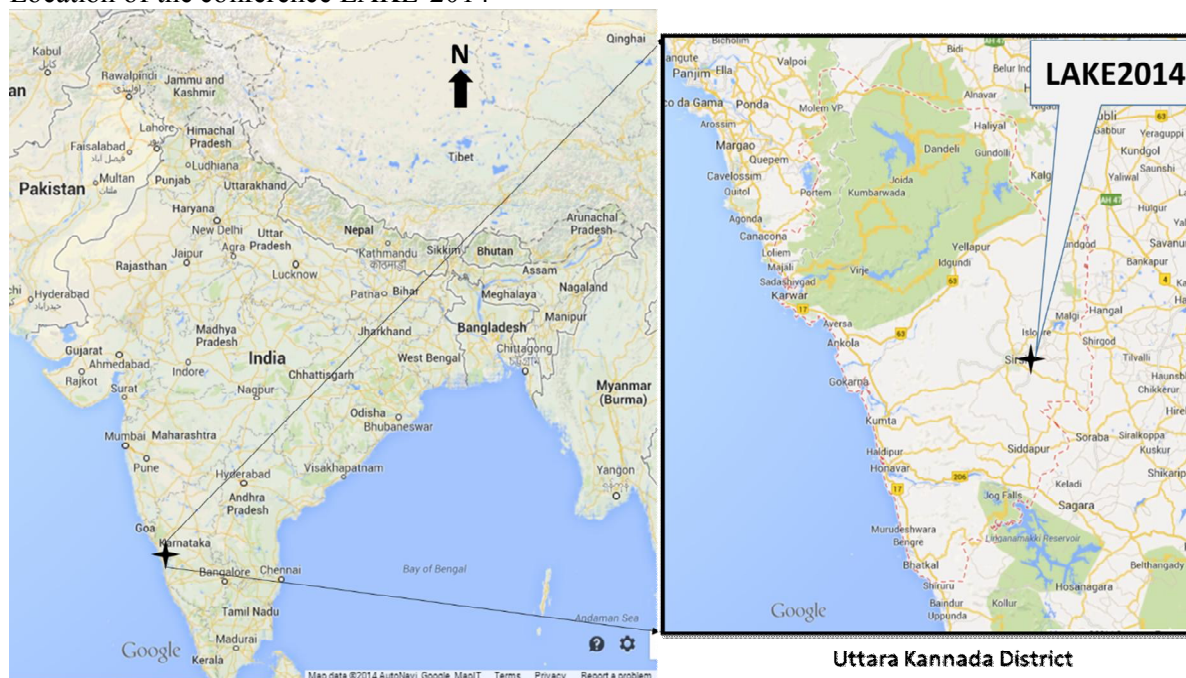
Signature

### How to reach Sirsi, Uttara Kannada (Karwar) district, Karnataka:

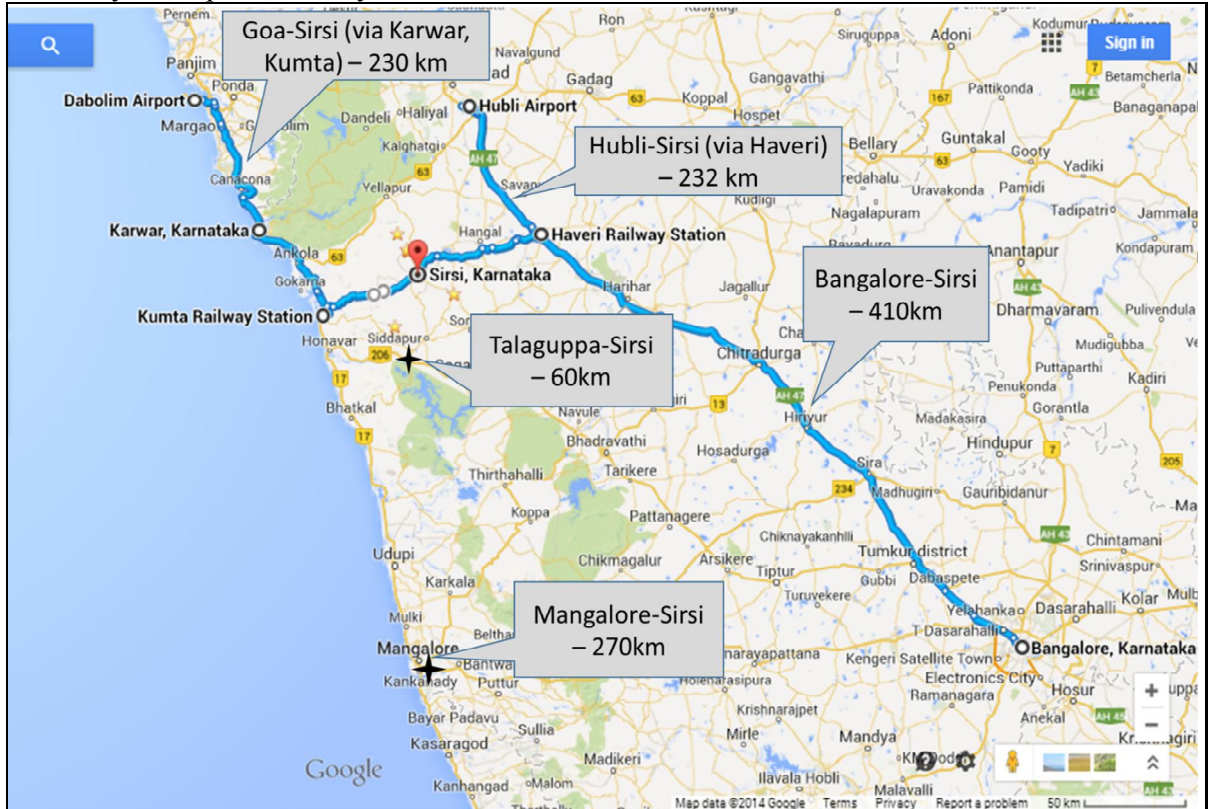
| From   | Distance (km) | Mode  | Best option   |
|--|---------------|---|---------------|
| <b>Bangalore</b> (International Airport, Railway station, Bus stand)       | ~ 450         | Bus transport (Private and KSRTC) – Volvo, sleeper, semi sleeper<br>Flight – Either Hubli or to Goa, then by road<br>Railway – Haveri, Kumta or Talaguppa | Bus transport |
| <b>Hubli</b> (Airport, Railway station, Bus stand)                         | ~110          | Road transport (KSRTC buses and Taxi are available)   |               |
| <b>Haveri</b> (Railway station, Bus stand)                                 | ~ 80          | Road transport (KSRTC buses and Taxi are available)   |               |
| <b>Goa</b> (Airport, Railway station, Bus stand)                           | ~205          | Road transport – Reach Ankola or Kumta by KSRTC/Kadamba (Goa transport). From there KSRTC buses and Taxi are available                                    |               |
| <b>Talaguppa</b> (Railway station, Bus stand)                              | ~ 60          | Reach Siddapur (town) by KSRTC/Private buses. KSRTC buses/Taxi are available from Siddapur to Sirsi   |               |
| <b>Kumta</b> (Railway station (Konkan Railway), Bus stand)                 | ~ 65          | Road- KSRTC Buses/ Taxi   |               |
| <b>Karwar</b> (Railway station, Bus stand)                                 | ~ 120         | Road – Direct KSRTC buses are available (less frequent), Reach Ankola/Kumta for more frequent buses   |               |
| <b>Mangalore</b> (Bajpe International Airport, Railway station, Bus stand) | ~ 270         | Road – Reach Kumta by KSRTC bus/Taxi and then Kumta to Sirsi via road<br>Railway – Mangalore to Kumta, and then Kumta to Sirsi via road (KSRTC)           |               |

### Route Maps:

Location of the conference LAKE-2014



## Proximity of Airports, railway stations and Bus stands



## Useful Landmarks and road network in Sirsi

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