Workshop on Biodiversity Informatics
25 November 2011
Venue: Ashoka Trust for Research in Ecology and the Environment (ATREE),
Royal Enclave, Sriramapura, Jakkur Post, Bangalore 560 064

SCHEDULE

09:00 – 09:20 – Registration of participants
09:20 – 09:30 – Welcome / Introduction
09:30 – 11:15 – Plenary talks - Technology behind biodiversity informatics (3 talks)
11:15 – 11:30 – Tea break
11:30 – 12:30 – Plenary talks - Scientific commons and policy (2 talks)
12:30 – 13:00 – Discussion
13:00 – 14:00 – Lunch break
14:00 – 16:00 – Biodiversity portals in India - Presentations by different teams/panel discussion
16:00 – 16:15 – Tea break
16:15 – 17:00 – Discussions and networking

Spheres of the Workshop:

Plenary I: Technology behind biodiversity informatics - 0930 - 1115 hrs

Development of Information System, Open Data standards, Archive and Geospatial solutions, Visualization in Bhuvan - **Arul Raj**, National Remote Sensing Centre (NRSC), Indian Space Research Organisation (ISRO) - 20 mins + 10 mins discussion

Exploring the semantic web for species pages - **M. Sravanthi**, Western Ghats Portal - 20 mins + 10 mins discussion

Challenges on the emerging discipline of Biodiversity Informatics - **Donald Hobern**, Atlas of Living Australia - 30mins + 10 mins discussion

Focus:
The objective of this session is to understand the global developments in biodiversity informatics in relation with developments in India. The session will focus on:
- the evolution of the discipline of biodiversity informatics and its current status
- the development of standards in Indian context
- the technologies for biodiversity informatics
- the challenges in biodiversity informatics

Plenary II: Scientific commons and policy - 1130 - 1300 hrs

Commons in the context of Biodiversity Information - **Danish Sheikh**, Alternative Law Forum - 20 mins + 10 mins

Open data in the scientific realm - **Sunil Abraham**, Centre for Internet and Society - 20 mins + 10 mins
Discussion on Scientific commons and Policy - 30 mins

Focus:
The objective of the session is to understand the commons principle and its implications for scientific research. The session will focus on:
> - the experience of developing a creative commons policy in Indian scenario and the resulting impacts for scientific collaboration, open data and open access
> - policy and social implications of open data sharing

Plenary III - **Biodiversity portals in India - 1400 - 1700 hrs**

Moderation: R. Prabhakar/ MD Madhusudhan
Panelists: (Introductory note by each of the panelists - 10 minutes each)

Suhel Quader, Season Watch (www.seasonwatch.in), Migrant Watch (www.migrantwatch.in)
Sanjay Molur, Pterocount (www.pterocount.org/)
K.N.Ganeshaiah - Indian Bioresource Information Network (www.ibin.co.in)
Ramesh BR - Western Ghats Portal (www.thewesternghats.in/)
Shwetank Verma, Biodiversity of India, formerly Project Brahma (http://www.biodiversityofindia.org)
Krishnamegh Kunte, ifoundbutterflies (http://ifoundbutterflies.org/)
Vijay Barve, DiversityIndia (http://diversityindia.org/)
Deepak Menon, India Water Portal (http://www.indiawaterportal.org/)
Chitra Ravi, India Biodiversity Portal (http://indiabiodiversity.org/)
Mr D.K Ved, Foundation for Revitalisation of Local Health Traditions (http://envis.frlht.org)

Focus:
The objective of the session is to learn from each other's experience and develop a combined vision for the future of biodiversity informatics in India. The panelists will present a focused summary of the
> - key features available on their portals
> - the experience of building the portal
> - the key lessons learnt
> - future plans

We believe these four aspects will be of common interest to all participants and the presentations are expected to stimulate discussion around these four aspects.

Summary of the Day: R Prabhakar - Call for synergy/collaboration/Thank you!!

CONCEPT NOTE

Rapid advancements in the domains of computer Science and information technologies have allowed integration of biodiversity information and analytical capabilities to collaborate on social networks, leading to the emergence of a new discipline, Biodiversity Informatics. The dynamics in this discipline are defined by integrating multiplicity with the semantic web and enabling of democratic social networks focused on biodiversity. We are bound to see tremendous diversification in the scope of biodiversity informatics globally and in India.

Harnessing technology for aggregating, storing, querying and analyzing biodiversity data has seen major developments over the last decade. There has been a plethora of biodiversity information resources that include mailing lists and discussions groups, occurrence records, geographical databases, biodiversity image libraries, institutional databases, species description pages, specimen records of herbaria and museum databases, and biodiversity focused Internet sites. The challenges on the biodiversity informatics landscape are on two fronts: (1) A semantic web framework to link these biodiversity information islands; and (2) Effective and flexible data exchange standards for seamless information sharing among these sites.

The evolution of social networks and communities around biodiversity information systems has been a unique factor in influencing the ways in which these information systems have developed. The assimilation and aggregation of user-generated biodiversity data and dissemination under the 'commons' principle has gained momentum globally. It has changed the way scientific collaborations are being made, and created possibilities for effective citizen-science initiatives. It is now possible to ask fresh questions, with more data, newer methods, better tools and for citizens to participate and report data from different geographies. With this, local-level data can be integrated with large-scale data leading to a better understanding of biodiversity.

With the increased penetration of the Internet into developing economies, and the widespread adoption of web technologies, biodiversity informatics has spawned an impressive variety of initiatives. These initiatives range from global knowledge bases and networks, national initiatives, eco-region based initiatives, as well as sharply focused initiatives which address a single species or event. There have been tangible advantages for stakeholders from these initiatives which has inspired many other endeavours. Success stories exist at both global and local level, and learning from these experiences can help one understand the multi-faceted nature of this discipline.

The Western Ghats Portal team is organising a one-day workshop to explore the contemporary state of biodiversity informatics as expressed in three spheres: i) technology behind biodiversity informatics, ii) scientific commons and policy and iii) biodiversity portals in India. With these objectives in mind, we welcome your active participation during the workshop. It could provide an opportunity for us to interact and learn from similar endeavors in this discipline.