

Training on

Customised Hands-on Bhuvan Training, ISRO

(Date: 15th – 16th October, 2015, Time: - 09:30, Venue:
NRSC JODHPUR)

A workshop on Bhuvan - Customised Hands-on Bhuvan Training, ISRO, was organized by Dr. Arun Raj (NRSC - Hyderabad) on the 15th and 16th of October, 2015 at National Remote Sensing Centre (NRSC), Jodhpur. From Gujarat Cleaner Production Centre (GCPC), Mr. Zankhesh Jain (External Expert, ENVIS), had attended the workshop.

15th October, 2015

The workshop began with an inaugural session by Dr. Arun Raj who gave an overview of BHUVAN – A Geo spatial portal, ISRO. Before, beginning with the workshop, Dr. Raj had also asked the participants to introduce themselves. The participants were from CERC – Ahmedabad, GCPC – ENVIS, CMS – New Delhi, FRI – Dehradun, GEC – Gandhinagar, TERI – New Delhi etc.

Dr. Raj began the workshop by giving an *Overview of Bhuvan, Free data/Products, Thematic services*. He explained how this workshop will be a platform for academicians, researchers and students to provide opportunities to learn and interact Bhuvan software. Bhuvan also provides 1m resolution data of 269 cities and 2.5 m resolution of the entire country. 3D models of building can also be created and uploaded. Mr. Raj elucidated the Bhuvan tools and its Uses and applications. He also introduced different state portals of Assam, Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh etc. and its 2D and 3D portals. He showed how Bhuvan gives a host of services covering visualization, free data download thematic map display and analysis, timely information on disaster, crowd sourcing and project specific GIS applications since August 2009 and which is available in

English, Hindi, Tamil and Telugu. Dr. Raj shown how to use data visualization and creation, add content to web, mobile, mapper. He also gave introduction of OGC Web Services and Maps. Thereafter everyone took a break for lunch.

The second session was hands on session which was conducted in the computer lab, where all participants tried for data visualization creation and add content with the help of IT people of NRSC. In that hands on session all tried to create a dynamic map with their live data. Dr. Raj had also personally helped each participant.

In the plenary discussion, students from Agricultural University were asked how Bhuvan can facilitate the problems of farmer. Dr. Bothale gave the user friendly of the Bhuvan Application on the mobile through which one can also check the NPK soil data and can get variety of data such as Irrigation Projects/canal, surface soil moisture etc.

16th October, 2015

On Second day of Training, Mr. Raj started with QGIS overview and Add-ons. QGIS is a Free and Open Source Geographic Information System. QGIS allow to create maps with layers with different map projection. Maps can be assembled in different formats and for different use. Dr. Raj shown us how to use QGIS maps with raster and vector layers.

After tea break, Dr. Raj continued the session with Open Layers overview and Bhuvan Framework. Dr. Raj also informed about how to use Bhuvan Framework with coding technique in HTML and PHP.

After lunch, all participants were attended hands on practical training at computer lab. In which, they had opened QGIS, created shape file, added layers, WMTS layer and satellite image URL etc. Also, the participants created maps using their live data. Dr. Raj also informed about the Bhuvan Discussion Forum, in which, all were free to ask any question regarding Bhuvan Framework and QGIS. Training data was also available in this forum.

After the conclusion of the lively interactive session, Dr. Suresh Kumar, Principal Scientist and ENVIS Coordinator CAZRI Jodhpur expressed his gratitude towards the participants, towards the NRSC and ISRO experts who had come all the way long from Hyderabad. A representative from TERI – New Delhi requested the Bhuvan experts to upload a tutorial of Bhuvan portal on YouTube or any social networking site for its better dissemination. Dr. Suresh Kumar paid their gratitude towards Dr. Raj for arranging the workshop and thanked everyone for their participation. Before ending, everyone gathered for a group photograph.