MIRSAC Newsletter

Mizoram Remote Sensing Application Centre (An Autonomous Govt. Institution under Science & Technology, Planning Department, Govt. of Mizoram)

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Dr. C. Vanlalramsanga Vice Chairman MIRSAC Gov. Body

Governing Body of MIRSAC

Chairman : Chief Secretary

Govt. of Mizoram

Vice Chairman : Secretary

> Planning & Prog. Implementation Dept. Govt. of Mizoram

Member Secretary: Chief Scientific Officer

Dte. Science & Technology

Members : 16 members from various

> Depts, of the State, viz., Planning & Prog.

Implementation, Finance, Environment Forest & Climate Change, PWD.

PHED, P&E, DM&R, Irrigation & Water Resources, UD&PA, Agriculture (Crop Husbandry), Horticulture, Rural Dev., Land Resources, Soil &

Water Conservation, Land Revenue & Settlement. Geology & Mineral

Resources, & Sericulture.

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HRVA & 3D-DTM WORKSHOPS AT KOLASIB & **CHAMPHAI**

The two major projects of the Centre - 'Hazard Risk & Vulnerability Analysis (HRVA) project' and '3D Digital Terrain Mapping & Modelling (3D-DTM) project' funded by NEC, Shillong, is an extensive initiative towards disaster management, mitigation, terrain-based development planning and implementation activities for the state. However, the effective utilization of data generated in the projects lies in its practical implementation by the users at ground-level.

For this purpose, awareness programmes and workshops about these projects have been conducted towards the final phases of the projects in various districts. In continuation of the workshops and awareness programmes conducted in the southern districts of Mizoram (Lunglei, Lawngtlai & Siaha), the HRVA & 3D-DTM workshops were organized for officials at Champhai and Kolasib district during July, 2019.



HRVA & 3D-DTM Workshop at Kolasib

The workshop and awareness programme for Champhai district was organized at DC Conference Hall, Champhai on 2nd July, 2019. The programme was chaired by Shri. S.L. Naveen, IAS, Deputy Commissioner, Champhai District and presentations about the projects were given by Pu R.Lalfamkima & Pu Lalramdina, Scientists, MIRSAC. The programme for Kolasib district was organized at I&PR Conference Hall, Kolasib on 4th July, 2019. The function was chaired by Pu Zoengsanga, Deputy Commissioner, Kolasib district. Pi Hmingthanpuii, Principal Scientist, MIRSAC addressed the workshop and presentations about the projects were given by Pu C. Vanlalengkima & Pu Malsawmdawngliana, Scientists, MIRSAC. The programme/workshop was attended by representatives from various line departments, NGOs and media agencies of the districts.



HRVA & 3D-DTM Workshop at Champhai

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From Editor's desk



Taking a step forward into the realms of awareness and exposures, the Centre has seen its participation in mainstream science activities. The inclusiveness of Geospatial technology in the science streams trending today, indicates the

multi-facet and robust nature of this technology. Science being its basic foundation; what is built upon it by our esteemed scientists and innovators is worthwhile bringing into practice. Exposure in terms of workshops and symposiums are also the interminent need for creating mass awareness not just to the user communities but also to the general public as well.

The focus towards these aspects of publicity can have far-fetched momentum for inclusive development of the government and the society at large. At the same time, policies that are of concern to the state and implemented per-se has to be considered while initiating such strides for development in geospatial technology. As such, the data policies that governs its usage and restrictions also has to be made a bit flexible to enable pragmatic utilization in development schemes for public benefit and better functioning of e-governance.

Training for FOCUS Project staff



In conjunction with the on-going FOCUS project, a one day training programme was organized for FOCUS Project officers and staff (PMU & DMU) of Kolasib at the Dte. of Science & Technology Conference room on 25th October, 2019. The main focus of the training was to familiarize the project staff on the use of GIS software (Q-GIS) for effective use of geospatial data generated for the project at the field level. The programme was charied by Pi Hmingthanpuii, Principal Scientist. Training was imparted by Pu R.Lalfamkima, Scientist on the use of Q-GIS software, and Pi Vanlalmuansangi, Scientist - on the methodologies of suitability analysis and land use mapping.

PARTICIPATION AT 5TH INDIA INTERNATIONAL SCIENCE FESTIVAL, KOLKATA

The India International Science Festival (IISF) is an event for the celebration & promotion of Science & Technology in India, and also to facilitate a platform for demonstrating how science can lead India towards a developed nation within a short span of time. The event also aims to engage public with science and celebrate the joy of science - showing the ways how Science, Technology, Engineering and Mathematics (STEM) provide us with the solutions to improve our lives. The IIFS 2019 was organized jointly by Ministry of Science & Technology, Ministry of Earth Sciences and Ministry of Health & Family Welfare in association with Vijnana Bharati (VIBHA). The entire event was co-ordinated by Department of Science & Technology (DST), Govt. of India and Vigyan Prasar as the nodal agency. Being the premiere science outreach marathan and 5th time in a row, the IISF 2019 was organized as a 4 day eye & mind catching event at two locations - the Asian renowned- Biswa Bangla Convention Centre & Science City, Kolkata. A total of 28 sub-events were conducted during the IIFS which included Scientific conferences, Meets, Conclaves, Shows, Expos, Competions and Cultural programmes. Ministers, Government officials, Students, Academicians, Industry professionals, Social activists, Scientists, and a number of science enthusiasts participated in the event, not to mention the event being opened to the general public especially in the Shows and Expos section.

Two Scientists from the Centre, Pu Robert Lalchhanhima Sailo, Senior Scientist & Pi Vanlalmuansangi, Scientist were also invited to participate in the 'Young Scientist Conference' and 'Women Scientist & Entrepreneurs' Conclave' of the event. Both the scientists participated in Poster presentations related to Geospatial applications in Agriculture, Horticulture & Sericulture at Biswa Bangla Convention Centre. The presentations received enthusiastic responses from conference attendees & students from national & International scientific institutions.





MIRSAC Scientists with their Poster Presentations

Few Glimpses of the IISF 2019, Kolkata



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PARTICIPATION AT NATIONAL SYMPOSIUM ON INNOVATIONS IN GEOSPATIAL TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT - NESAC, SHILLONG





MIRSAC team attending the Symposium

MIRSAC Exhibit stall at NESAC

Pi Hmingthanpuii, Principal Scientist and a team of Scientists - Pu Z.D.Laltanpuia, Sr.Scientist; Pu R.Lalfamkima, Pu H.Lalhmachhuana & Pu VanlaInghaka, Scientists participated at the National Symposium on "Innovations in Geospatial Technology for Sustainable Development with special emphasis on NER" which was jointly organised by Indian Society of Geomatics & Indian Society of Remote Sensing during 20-22 November, 2019 in Shillong. The event was hosted by Indian Society of Geomatics-Shillong chapter, Indian Society of Remote Sensing - Shillong chapter, NESAC, Umiam & NEHU, Shillong. The symposium focused on recent advancements made in satellite payloads, data processing techniques, Web GIS, Mobile Apps., Geospatial technology and applications in various key areas of the Govt. of India programmes. The event was attended by researchers, professionals, academicians, students, scientists and industry personels from different parts of the country. Two scientists from the Centre- Pu Z.D.Laltanpuia & Pu H.Lalhmachhuana also presented papers at the technical programmes of the symposium. An exhibition stall was also set up by the Centre where various posters and GIS systems related to Remote sensing and GIS application projects executed by MIRSAC was displayed.

ON-GOING PROJECTS

1. Monitoring of IWMP activities using Geospatial tools

The project involves mapping and monitoring of land changes due to implementation of IWMP activities. Compilation of Report for Champhai and Kolasib district is prepared for finalization and submission to sponsoring agency. Remaining land use change mapping and report compilation for Mamit and Serchhip district will commence upon receiving imagery.

2. CHAMAN Project - Site Suitability study for Dragon fruit in Aizawl & Serchhip District

Dragon fruit ground data collection and sample site validation within Aizawl district was done to ascertain accuracy of site-suitability analysis, mapping and procedures. Project report is being prepared and will be submitted to MNCFC after external quality check of vector data is performed at NESAC.

3. North East Spatial Data Repository (NeSDR)

Data incorporation into portal including census data has been completed and necessary ammendments required for state node portal is executed. Prior to the official launch of state portal, training will be imparted to identified scientists from the centre for which the date is awaited.

4. Fostering Climate resilient Upland farming System (FOCUS) project

Land use/land cover mapping for remaining two districts - Mamit & Champhai is completed as well as Suitability area mapping for selected crops. Atlas compilation is being carried out for the two districts, along with statistical report. Procurement of hardware for field applications and training to field level staff of FOCUS will be taken up at the last phase of the project.

5. National Wetland Inventory Assessment (NWIA) project - Mizoram

The project is taken up in collaboration with SAC, Ahmedabad and NESAC, Umiam to assess and map the wetland areas in the state. Preliminary interpretation and mapping of wetlands using LISS IIII imagery is done for the state. Ground truthing for the wetlands is being carried out for post field corrections of the interpreted data.

6. Use of Geo-Informatics in Rural Road Projects under PMGSY Project : A collaborative project with NRSC & NESAC, Dept. of Space to map and monitor the existing and on-going road infrastructure within the state using location based geospatial technology. The project has started with preliminary interpretation of existing roads in Champhai district.

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NEWS & ACTIVITIES

- * The MIRSAC Governing Body Meeting was held on 2nd July, 2019 at Chief Secretary's Conference room under the chairmanship of Dr.C. Vanlalramsanga, Secretary, Planning, & Vice Chairman, MIRSAC Governing Body.
- * A One day Workshop & Awareness programme on HRVA & 3D-DTM was organized at DC Conference hall, Champhai on 2nd July, 2019. The workshop was chaired by Shri. S.L.Naveen, IAS, DC, Champhai District.
- * A Workshop & Awareness programme on HRVA & 3DTM was organized at I&PR Conference hall, Kolasib on 4th July, 2019. The workshop was chaired by Pu Zoengsanga, DC, Kolasib.
- * A meeting with officials from Asian Development Bank (ADB), New Delhi was held at the office chamber of Chief Scientific Officer, DST on 31st July, 2019. The meeting discussed possible involvement of MIRSAC in the on-going projects taken up by ADB.
- * Pi Vanlalmuansangi, Scientist attended the 'National Workshop on Application of Remote Sensing & GIS in Sericulture Development' at NESAC, Umiam from 5th 6th August, 2019. Atlas prepared under the Sericulture Development Project- Phase II and SILKS portal was released at the workshop.
- * Pu Vanlalnghaka, Scientist attended a One day Hands-on training on 'Use of Geo-Informatics for monitoring of rural roads under PMGSY' at NESAC, Umiam on 8th August, 2019.
- * Pi Ngurliantluangi, Cartographer & Pu Lalfakawma Royte, Field Assistant were detailed for Land use ground data collection within Serchhip, Mamit and Champhai districts during October & November, 2019 under the FOCUS project.
- * Pu Robert Lalchhanhima Sailo, Sr. Scientist and Pi Vanlalmuansangi, Scientist participated at the 5th India International Science Festival 2019 at Kolkata from 4th - 8th November, 2019. The scientists were invited for Poster presentations at this event.
- * Pi Hmingthanpuii, Principal Scientist and her team of Scientists attended the 'National Symposium on Innovations in Geospatial technology for Sustainable Development with special emphasis on North Eastern Region' at NESAC, Umiam from 20th 22nd November, 2019.
- * Pu Robert Lalchhanhima Sailo, Sr.Scientist was detailed for ground data collection within Aizawl District under CHAMAN Phase II project from 2nd 5th December, 2019.
- * Pu Lalramdina, Scientist attended a training programme on 'Usage of Groundwater Prospects and Quality (HGM) maps under Jaal Jeevan Mission for state officials of PHED/RWSS at NRSC, Balanagar from 4th 6th December, 2019.
- * Pu H.Lalhmachhuana, Scientist was detailed for ground data collection within Kolasib, Mamit, Champhai, Aizawl & Serchhip Districts under the National Wetland Inventory Assessment Project from 16th 20th December, 2019.



Officials from Asian Development Bank (ADB) visits MIRSAC



Training for monitoring of rural roads under PMGSY at NESAC



Training for use of HGM maps at NRSC, Balanagar



IFAD Consultant visits MIRSAC