



# MIRSAC Newsletter

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

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**Pi L. Toichong,**  
Chairman, MIRSAC Governing Body

## Governing Body of MIRSAC

- Chairman : Chief Secretary  
Govt. of Mizoram
- Vice Chairman : Secretary  
Planning & Prog.  
Implementation Dept.  
Govt. of Mizoram
- Member Secretary : Project Director,  
MIRSAC
- Members : 16 members from various  
Depts. of the State, viz.,  
Science & Technology,  
State Planning Board,  
Finance Department,  
Environment & Forest,  
PWD, PHE, P&E,  
Minor Irrigation,  
Agriculture (Crop Husbandry),  
Horticulture,  
Soil & Water Conservation,  
Rural Development,  
Land Revenue & Settlement,  
DM&R, UD&PA, & Sericulture

## MIRSAC Editors

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## Hon'ble Minister visit's MIRSAC and handover Geo-referenced Base map of Lunglei town to UD&PA Dept.

Pu Lalsawta, the Hon'ble Minister for Planning, Finance, etc, Govt. of Mizoram visited the Centre on 26th June 2014. At a short function organised on his behalf at the conference room of the Centre, a brief presentation on the Centre's profile, nature of work and projects executed so far was highlighted by the Project Director, MIRSAC. The Scientists and staff of the Centre were also briefly introduced to the Minister.



Taking the opportunity of his visit, the Geo-referenced base maps for Lunglei town prepared under RAY project was handed over by the Hon'ble Minister to Pu R.Lalhmuliana, Jt. Director, Urban Development & Poverty Alleviation Dept. The Jt. Director, UD&PA Dept. was also accompanied by other officials from the Dept. attached with the project. Pu R.Lalhmuliana expressed his appreciation towards the hardwork given by Centre for preparation of the base maps for Lunglei town and also the previous work done for Aizawl city.

In his brief speech, the Hon'ble Minister expressed his interests in the works being done by the Centre and acknowledged the valuable inputs given by the Centre to important projects taken up for the state. After the short function, the Hon'ble Minister also visited the Remote Sensing and GIS Labs, where he could further interact with the Scientists and have a practical preview of facilities present at the Centre.



## Appraisal Meeting of NESAC activities & Launching of SBIK-Mizoram



An Appraisal Meeting of NESAC activities was held at the Chief Secretary's Conference room on 17th June 2014. The meeting was chaired by Pi L.Toichong, Chief Secretary, Govt. of Mizoram. The meeting was attended by Secretaries from

State line Departments, Director, NESAC and his team of Scientists, Chief Scientific Officer, Dte. Science & Technology, Project Director, Officers & Scientists of MIRSAC.

*From Editor's desk*

*Emerging technologies in space science can prove a boon to service providers and even to end users. However, every new concept and technology has to be studied thoroughly so that it meets the requirements and has positive implications to address today's problematic issues. In this context, a standalone process of taking up challenges might not prove fruitful as there could be a number of hidden and unknown factors to deal with. This is where a collaborative mechanism of work culture plays a role in bringing out the best solutions, smarter choices and effective implementation of the scientific knowledge.*

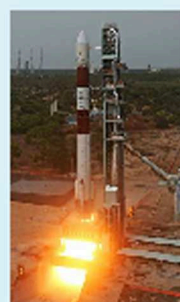
*Space technology has penetrated almost every aspect of developmental activities and will continue to do so in the future. It is important that we make use of these technologies through collaborative steps taken at the regional and grassroot levels. Knowledge is power, but only when it is used for a cause. Sharing of technologies and knowledge at all stages of work execution is crucial in reaching our goal for a better solution-driven result.*

**Congratulations to ISRO**

The Project Director, Scientists and Staff of MIRSAC congratulates ISRO on the successful launch of PSLV C-23 on 30th June 2014 from Satish Dhawan Space Centre, Sriharikota.

The PSLV C-23 carried five foreign satellites - two from Canada and one each from France, Germany and Singapore. Among the noteworthy satellites injected into the desired orbits is the French earth observation satellite - SPOT-7.

The success of PSLV C-23 has marked the 26th consecutive successful launch of PSLVs by ISRO.



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Chief Secretary, Govt. of Mizoram launches SBIK-Mizoram

In conjunction with the meeting, the Space Based Information Kiosk (SBIK) - Mizoram was launched by the Chief Secretary. A short presentation and demonstration of SBIK was delivered by Director, NESAC along with activities and projects taken up by NESAC for Northeastern states. The Space Based Information Kiosk on Mizoram (SBIK-Mizoram) is an outcome of the SBIK-NER which was conceptualised by NESAC in collaboration with MIRSAC to showcase the strength of existing geospatial inputs of the state for natural resources management and for various other development and planning activities in the state. The system containing this SBIK-Mizoram has been placed at the Chief Secretary's office for its effective use during natural resource based planning activities in the state.

**MIRSAC Governing Body Meeting**

The Governing Body of MIRSAC had its meeting at the Chief Secretary's Conference room, New Secretariat Complex, Aizawl on 5th May 2014. The meeting was presided over by Pi L. Toichong, Chief Secretary, Govt. of Mizoram & Chairman, MIRSAC. A total of 16 members representing State line Departments attended the meeting. The Project Director & Member Secretary, MIRSAC gave a brief report on the activities of the Centre during 2013 - 2014. According to his report, the Centre had completed 5 projects during the reporting year and 6 projects were being executed currently which constitute both National and State level projects. The report also stated that data generated at the Centre were provided to various user Departments/institutions at nominal charges. The Audit report of the Centre for the year 2013 - 2014 was duly presented at the meeting and consequently approved. The draft Annual plan for the forthcoming year 2014 - 2015 with a financial target of ₹.400 lakh was also approved at the meeting. This included sections of administration, collaborative projects, sponsored projects, data and service charges.



The concluding part of the meeting had a discussion pertaining to data requirements and project reviews from members. As the Centre had been providing data to the line departments for their projects, the contributions from the Centre was appreciated by members representing their line departments and suggestions were made for additional requirements of data for their future projects. Further, a LIDAR survey for large scale DEM and contour mapping was proposed which would amount to approximately ₹. 25 crores. The meeting proposed to seek for funding for this survey.



## PROJECTS COMPLETED

*The following projects were completed during January to June 2014*

### **1. Groundwater Prospect mapping under RGNDWM**

Groundwater prospect mapping under RGNDWM for entire Mizoram has been completed. This nationwide project is sponsored by Ministry of Drinking Water & Sanitation and co-ordinated by NRSC, Hyderabad. The maps have been generated on 1:50,000 scale and highlights groundwater prospects in the state. The data and maps in hard and soft copies were handed over to the PHE Dept., Government of Mizoram on 29th April 2014 at a short function organised at the Centre. The project work carried out was well appreciated by the PHED officials and acknowledged its impending usefulness for upcoming projects taken up by the department.

### **2. Geo-referenced Base Map preparation for Lunglei town under Rajiv Awas Yojana (RAY) project**

This project is funded by Urban Development & Poverty Alleviation Dept., Govt. of Mizoram to cover two important townships of the State - Aizawl city and Lunglei town. Georeferenced base maps have been prepared at 1:2000 scale where the main focus has been on mapping urban land use / land cover, roads and important landmarks within the city/town. Mapping for Aizawl city was first completed during 2013 and data was handed over to the funding Dept. Consequently in the next phase of mapping for Lunglei town, the data and maps in hard and soft copies has also been handed over to the concerned Department by Pu Lalsawta, Hon'ble Minister of Planning, Finance, etc, Govt. of Mizoram at a short function held on 26th June 2014 at the conference room of the Centre.

## PROGRESS OF ON-GOING PROJECTS

### **1. Space Based Information Support for Decentralized Planning (SIS-DP)**

Land Use / Land Cover mapping for the 6 northern districts of the state was completed and mapping for the remaining 2 districts to the south (Lawngtlai & Saiha) is being carried out at present. External Quality Check (EQC) for the previously completed 5 districts was conducted at NESAC, Umiang during April and consequent corrections have been made to the final data. For the remaining 2 districts, Internal quality check (IQC) has been done and pre-field corrections made wherever necessary. Ground data collection for Lawngtlai and Saiha districts are yet to be done as well as integration of legacy data.

### **2. Desertification Status Mapping (Second cycle)**

Desertification status mapping for two districts each of Mizoram and Tripura states at 1:50,000 scale using AWIFS data has been completed recently at SAC, Ahmedabad. For this mapping, Aizawl and Lunglei districts have been selected for Mizoram state, and Tripura west & Tripura south districts for Tripura state. The next stage of the project will involve the analytic part of Desertification Vulnerability model which has to be used on one selected district of each states. Ground truthing and data collection is currently being done for this stage of the project.

### **3. Mizoram Infrastructure Information & Monitoring System (MIIMS)**

This is an in-house project funded by NEC, Shillong and taken up by the Centre for mapping existing infrastructures within the state which will be compiled in a GIS system for easy access, query and further value addition. At present, the necessary ARC server softwares, satellite imagery (Quickbird & Worldview) have been procured and the database structure designing is in process.

### **4. Groundwater Quality Mapping under RGNDWM**

With the completion of prospect mapping, the groundwater quality mapping is being initiated with collection of data on wells and other surface water features which will be composed in map forms.

## Employees Space

\* The Centre has recruited and filled up the post of two LDCs through written test and personal interview conducted during the last financial year. Ms. Chawngthansiami and Mr. Lalrempuia are the two new LDCs that have joined the Administrative section of the Centre.

\* Three Field Assistants - Pu Lalfakawma Royte, Pu David Vanlalafela Pachuau & Pu Lalzawngliana who were working as contract employees have been regularised at their same posts under the Centre from the month of June 2014.

\* Pu F.Lalbiakmawia, Scientist resigned from his post at MIRSAC to join PHE Department as a Hydrogeologist. He has been working at MIRSAC since 2007 and will be remembered for his sincerity, hardwork and spontaneous sense of humor. His colleagues at MIRSAC wishes him all the best in his career and professional endeavor.



## NEWS & ACTIVITIES

*\* Pu Z.D. Laltanpuia & Pu R. Lalfamkima, Scientists were detailed for ground data collection at Lunglei under RAY project from 7th January 2014.*

*\* Project Director attended the 3rd State Remote Sensing Application Centre meeting at NRSC, Hyderabad on 21st January 2014.*

*\* Pu F.Lalbiakmawia, Scientist was detailed to attend the meeting on Groundwater Quality Mapping under RGNDWM at NRSC, Hyderabad on 30th January 2014.*

*\* Pi Hmingthanpuii, Sr. Scientist, & Pu R.Lalfamkima, Scientist attended a One week training programme on 'RISAT-I Data utilization with special emphasis on application in North East region' at NESAC, Umiam from 10th - 15th February, 2014.*



*Training on RISAT-I Applications at NESAC, Umiam.*

*\* Pu Edward Lalzuithanga, Sr. Scientist and his team of Field assistants were detailed for ground truthing and data collection in and around Lunglei town under RAY project during the month of February..*

*\* Pi Hmingthanpuii, Sr. Scientist was detailed to attend the EQC programme under the on-going SIS-DP Project at NESAC, Umiam from 22nd - 25th April 2014.*



*Handover programme of Groundwater prospect mapping in Mizoram*

*\* A handover programme of Groundwater Prospect maps prepared under RGNDWM project was organised at MIRSAC Conference room on 29th April 2014. The maps along with soft copies of the same were handed over to the PHED officers present at the function.*

*\* Pu C.Vanlalengkima & Pi Rosy Vanlalarzovi, Scientists attended a one month training course on 'Introduction to GIS' at NRSC, Hyderabad during the month of May.*

*\* Pu H.Lalhmachhuana, Scientist was detailed for a two weeks project work under Desertification Status Mapping project at SAC, Ahmedabad during 12th - 23rd May 2014.*



*Ground truthing and data collection for RAY project*

*\* Dr. Lalnunsiam Colney, Sr.Scientific Officer attended a meeting n "North Eastern Region Rice Crop Acreage Estimation" on 3rd June 2014 at NESAC, Umiam.*

*\* The Appraisal meeting on NESAC activities and launching of Space Based Information Kiosk (SBIK) - Mizoram was held on 17th June 2014 at Chief Secretary's Conference room, New Secretariat Complex, Aizawl.*

*\* Pu H.Lalhmachhuana, Scientist was detailed for ground truthing and data collection under Desertification Status Mapping project at Agartala, Tripura during the month of June.*

*\* Pu Lalsawta, Hon'ble Minister - Planning, Finance, etc visited the Centre on 26th June 2014. A short function on this occasion was organised at the Centre's Conference room where he also handed over the Georeference base maps prepared for Lunglei town under RAY project to the officials of UD & PA Dept. present at the function.*



*Pu Lalsawta, Hon'ble Minister visits MIRSAC, RS & GIS Labs.*

*\* Dr. Lalnunsiam Colney, Sr.Scientific Officer presented a paper entitled 'Geospatial Approach on Integrated Land and Water Resource Management : A Case study of N.Vanlaiphai Village Council area, Serchhip District' on 26th June 2014 at the Regional Conference on Land & Water Resource Management at NLUP Conference Hall, Aizawl.*