

Telangana State Remote sensing Applications centre

Volume III

February-March 2017

CATALYST *for*

TRACR's THRIVE

e-News letter

Thought for the month: Opportunity is missed by most people because it is dressed in overalls and looks like work. -----Thomas Alva Edison.

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Projects initiated

Geo-Spatial Applications of Singareni Collieries

The Singareni coal reserves stretch across 350 Km of the Pranahita – Godavari Valley of Telangana with a proven geological reserves aggregating to whopping 8791 million tonnes. It is currently operating 16 opencast and 30 underground mines in 4 districts of Telangana, Viz. erstwhile Adilabad, Karimnagar, Khammam and Warangal.

However, in the mining sector, monitoring includes early detection of deviations, irregularities and illegal mining is vital to environment and revenue returns. In order to have effective and accountable service, effectively manage boundary compliances as per IBM guidelines and gain clear sense of own jurisdiction and define own boundary clearly from others, mitigate boundary violation issues and avoid potential business risks arising out of such violations and to regulate the extraction of mineral resources it is required to verify the mining lease boundaries by surveying the lease areas, and then comparing the same with the earlier approved lease maps.

According to singareni collieries company limited, the process requires a lot of time and manpower if carried out by conventional verification method. TRAC has proposed to take up the project as it works on High resolution satellite data, which enables precision mapping of various themes such as Land use / Land

cover, Hydro-geomorphology, Geology, Land degradation, wasteland mapping and Wetlands. Which can solve the problem in a cost and time effective manner. It has been realized that the state of the art Web-based GIS technology can play an important part in the development of private participation in the mining sector as it integrates all data components from one interface.

Geo-science division has taken up this project . The study would be carried out in about 50 Mining Lease areas where Coal, is being excavated by the entrepreneurs. boundary along with 10km buffer zone is considered for the study.

work is initiated with delineating precisely Mining Lease / Prospective License Boundary is fixing the pillars of the boundary for geo-referencing with (Carto+LISS IV) image and then integrated with cadastral map with survey numbers for detailed analysis along with thematic data. This information is generated to build a database and then used in integration with Mine Lease Application Processing System (M-LAPS).

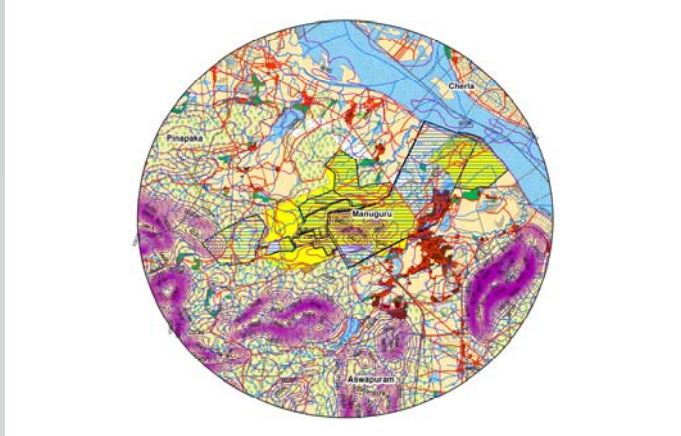
This will work as the base line data in future to have a solution to the administrator, surveyors and most importantly to the lessee during any boundary discrepancies. This will lead to a proper mine plan preparation as each and every point within the lease are referenced. Further this gives the advantage of linking any other geo-referenced information related to mining activity to design individual mineral



Kudos to best performers

Appreciations to All RSO's & TRAC Staff for successful completion of Asset mapping work done at Nawabpet mandal Rangareddy Dist, Huzurabad constituency.

information system as well as a single database system for the mining belt.

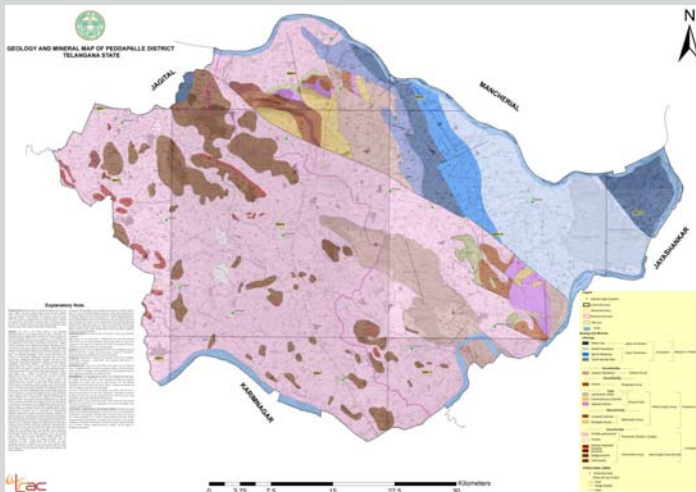


Mining lease boundaries of Manuguru with 10km buffer overlaid with various thematic, base and contour layers.

Geological maps based on new districts based on DRM

Department of mines and geology has requested for preparation of geological maps for all the districts of Telangana based on the newly formed boundaries for better planning and development by the District Administration.

In this regard DRM(district resource map)-Geology and Mineral maps need to be updated on LISS-IV. Scale of DRM is 1:1,25,000 for betterment 1:50,000 scale maps are being prepared by department of Geo-science at TRAC.



Updated Geology map for Peddapalli district at 1:50,000 scale.

NEWS

TRAC a member in drought management in govt of Telangana

Drought Management manual for Telangana state for the year 2016 has been released and release of G.O in this regard is finalised. satellite image based indices, rainfall and crop sown area along with field observations and mandal level **NDVI** based drought assessment maps generated by TRAC adopting an integrated support for drought

assessment plays an important role in support of Drought declaration by Govt. of Telangana from now on.

According to the manual TRAC may update the methodologies for improving drought assessment on a continuous basis by associating with national institutes like NRSC, CRIDA and PJTSAU. Mobile app may be used to collect field data to depict the agricultural conditions.

EVENTS

International Women's day March 8th

On the occasion of International women's day. Sister Kavitha from Brahma Kumari's was invited to take a session for an hour on March 7th on handling stress,How to manage at home and work place especially for women employees. Director Admn Mrs Bharathi Devi, Scientist SC Mrs Kavitha, Women employees from TSDPS and TRAC have participated.

Sister Kavitha spoke how to balance the work at home and work place.How anxiety, stress, anger and other negative energies germinate in our minds. How differences can be minimised by just changing the point of view towards an issue and reminded the hidden inner powers and strengths of a women. A few employees from TRAC shared their experiences about handling stress. The session concluded and refreshments were distributed. March 8th was declared as special casual leave for women employees.

