

## Consultancy projects of major significance undertaken by the EM Division, ICFRE:

### 1- Monitoring & Evaluation of forestry sector schemes of NAEB, MoEF&CC, GoI

The Indian Council of Forestry Research and Education (ICFRE) in collaboration with NAEB undertook a comprehensive evaluation study spanning over 27 states of the country. ICFRE officials visited 182 FDAs and over 600 JFMCs as part of field investigations and developed valuable insights to inform the policy process for Ministry of Environment and Forests.



### 2- Monitoring & Evaluation of forestry sector schemes of medicinal plant projects of NMPB, MoH&FW, GoI

Monitoring and evaluation of National Medicinal Plant Board, AYUSH, GoI sanctioned schemes was carried out in the States and Union Territories of Uttaranchal, Uttar Pradesh, Haryana, Chandigarh, Punjab, Delhi, Himachal Pradesh, Jammu and Kashmir, Tamil Nadu, Andaman & Nicobar, Kerala, Andhra Pradesh, Karnataka, Goa, Assam, Meghalaya, Mizoram, Nagaland, Manipur, and Arunachal Pradesh from the 32 States /Union Territories where the schemes were sanctioned by NMPBAs in order to assess the multiplicity of formal and informal relationships with a diverse group of stakeholders, and to provide flow of information on programmes status, performance and impact of the NMPB sanctioned schemes. The key problems in promotional and commercial schemes, organizational structure and link of effective functioning and policy issues were identified and best options were recommended.



### 3- Macro –level EIA study of Bellary District, Karnataka as per directions of Honable Supreme Court of India for MoEF&CC, GoI

The Hon'ble Supreme Court of India while hearing Special Leave to Appeal petition Nos. 7366-7367/2010, citing rampant and unscientific iron ore mining leading to environmental degradation in Bellary district, Karnataka, ordered the ICFRE on 5th August 2011 to carry out a Macro level EIA study of Bellary district in collaboration with the Forest Survey of India (FSI) and Wildlife Institute of India (WII) and incorporating other domain specialists as needed in consultation with the Ministry of Environment, Forests & Climate Change (MoEF&CC), GoI. The study was accordingly completed and report submitted to the Hon'able Supreme Court of India.



#### 4- Preparation of Reclamation and Rehabilitation (RR) Plans for 166 mines of category A, B and C of Karnataka for Govt. of Karnataka

The Hon'ble Supreme Court of India, considering the severe and significant damages caused due to unscientific and unregulated mining in Bellary, Chitradurga and Tumkur Districts of Karnataka and based on the Macro Environmental Impact Assessment (EIA) report submitted by ICFRE, directed the Government of Karnataka to submit a Reclamation and Rehabilitation (R&R) plan for the mine affected districts. The Government of Karnataka, keeping in view the National Environmental Standards and the commitment for sustainable management of environment has awarded ICFRE, Dehra Dun the study to formulate R&R plan vide letter No. DMG/MLS/R&R/2011-12 dated 27.12.2011. As on date, ICFRE has submitted 119 R&R Plans, out of which 115 have been approved by the Hon'ble Supreme Court of India (through CEC).



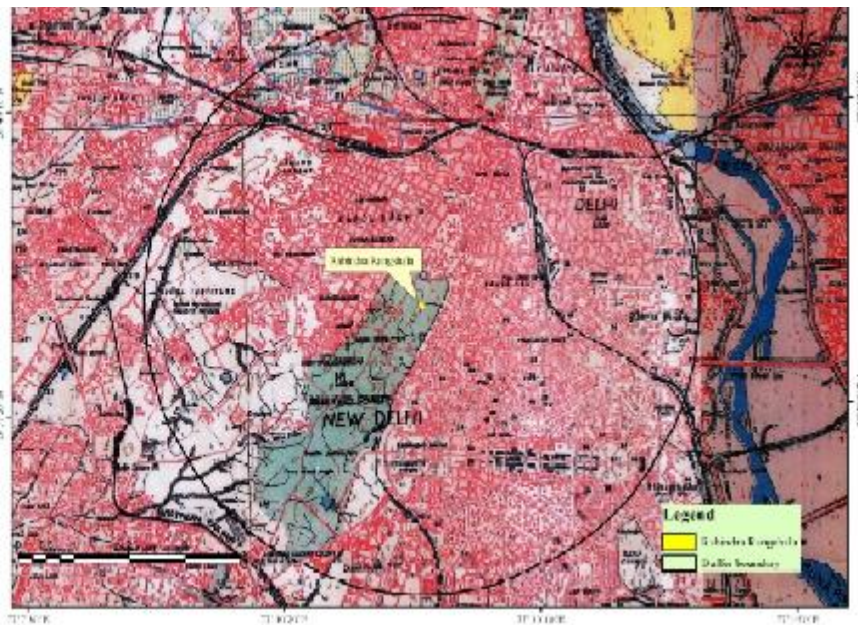
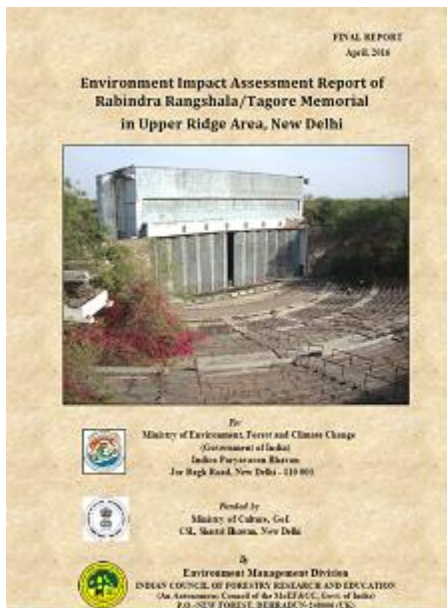
#### 5- Carrying Capacity Study of Saranda Region to Suggest Annual Cap (For Ore Production) West Singhbhum District, Jharkhand

Indian Council of Forestry Research and Education (ICFRE), Dehradun, in association with Wildlife Institute of India (WII) of Dehradun & Central Institute of Mining and Fuel Research (CIMFR), Dhanbad and Xavier Institute of Social Service (XISS), Ranchi conducted the "Carrying capacity study in Saranda Forest Division in the West Singhbhum District, Jharkhand to suggest annual capacity for iron ore production' and submitted the report within 14 months to Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India with the recommendations for sustainable mining in biodiversity rich Saranda forest areas in Jharkhand.



6- Environment Impact Assessment Study (EIA) in respect of Rabindra Rangshala/Tagore Memorial (RRTM), Upper Ridge Area, New Delhi

The ICFRE on the directions of MoEF&CC GoI conducted Environmental Impact Assessment study in respect of Rabindra Rangshala /Tagore Memorial funded by Ministry of Culture, GoI and submitted the report within six weeks time to MoEF&CC, GoI.



7- Cumulative Environmental Impact Assessment studies of hydroelectric projects in river basins

Cumulative Environmental Impact Assessment (CEIA) of hydro power projects in Sutlej River basin in Himachal Pradesh and Yamuna and Tons river basin in Uttarakhand have been undertaken as agreed Terms of Reference (ToR) in association with the three national subject expert institutions viz. Alternate Hydro Energy Centre (AHEC), Indian Institute of Technology (IIT), Roorkee; Directorate of Coldwater Fisheries Research (DCFR), Bhimtal; and Salim Ali Centre for Ornithology & Natural History (SACON), Coimbatore. The final draft reports of studies in Yamuna and Tons river basin and Sutlej river basin have been submitted to Uttarakhand Jal Vidhyut Nigam Limited, Govt. of Uttarakhand and MoEF&CC, GoI respectively. The additional study for less than 10 MW capacity hydroelectric projects in Sutlej basin as suggested by MoEF&CC, GoI is in progress.

8- Environmental audit of Coal Mines operated by Coal India Limited (CIL) and Subsidiary Coal Companies funded by Coal India Limited (CIL).

Coal India Limited (CIL), a “Maharatna” Public Sector Undertaking under the Ministry of Coal (MoC), Government of India, the single largest coal producing company in the world operates through 81 mining areas spread over eight states of India viz. Assam, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Uttar Pradesh and West Bengal and has 429 mines (237 are underground, 166 opencast and 26 mixed mines). It further operates 17 coal washeries (12 coking coal and 5 non-coking coal). The Indian Council of Forestry Research & Education (ICFRE), Dehradun has taken up works on Environmental Audit of compliance of the Environmental Clearance (EC) conditions and the status of reclamation & rehabilitation of mining areas as per the approved mine closure plans for 20 Open Cast Mines. So far Environment Audit report for 12 mines (5 subsidiaries) has been sent to CIL, HQ. The audit has been conducted in association with domain experts across India and involving experts from its sister institutions of ICFRE such as Institute of Forest productivity, Ranchi; Institute of Forest Genetics and Tree Breeding, Coimbatore; Institute of Forest Biodiversity, Hyderabad and Tropical Forest Research Institute, Jabalpur.

#### 9- Establishment of liaison with Govt. expert Institutions

Moreover, with passage of time this division has developed liaison with Govt. expert institutions like AHEC, IIT Roorkee, DCFR, Bhimtal; SACON, Coimbatore; WII, Dehradun, NEERI, Nagpur; NRSC, Hyderabad; CIMFR, Ranchi, Xavier Institute of Social Sciences, Ranchi for execution of consultancy services in Consortium mode. A pool of multidisciplinary domain experts have also been identified, whom services are utilized on case to case basis as per the requirement.

Environmental Policy analysis with respect to green aspect of environment have been carried out for more than 100 iron ore mining projects in Karnataka and a numbers of coal mines of Coal India Ltd. and suitable remedial measures have been suggested.

#### 10- Capacity Building

This division has also arranged for capacity building of more than 40 officials from ICFRE and its institutes in the field of Environment Management. Recently, regional environmental management units have been established in 04 institutes of ICFRE namely FRI, Dehradun, RFRI, Jorhat, IWST, Bangalore and AFRI, Jodhpur. Strengthening of these regional environment management units are in progress.

#### 11- New Initiatives of the EM Division

1- A Memorandum of Understanding (MoU) has been signed between the Indian Council of Forestry Research and Education (ICFRE) and Coal India Limited (CIL) for third party monitoring works of CIL on long term basis. The area of consultancy works will include the following:

i- Environmental audit of Coal Mines operated by Coal India Limited (CIL) and Subsidiary Coal Companies funded by Coal India Limited (CIL).

ii- Effect of pre and post exploratory drilling on terrestrial Flora, Fauna and Aquatic lives under Makri Barka East Block (1000 ha) of Singrauli Coalfield Area falling under Mahan Reserve Forest, district Singrauli, Madhya Pradesh funded by Central Mine Planning and Design Institute (CMPDI), Ranchi.

iii- Effect of pre and post exploratory drilling on terrestrial Flora, Fauna and Aquatic lives under Makri Barka West Block (800 ha) of Singrauli Coalfield Area falling under Mahan Reserve Forest, district Singrauli, Madhya Pradesh funded by Central Mine Planning and Design Institute (CMPDI), Ranchi.

2- A Memorandum of Understanding (MoU) has been signed between Indian Council of Forestry Research and Education (ICFRE) and National Thermal Power Corporation (NTPC), Noida for Monitoring of its Accelerated Afforestation programme of Plantation of 10 Million Trees – in Seven Different States.

i- Monitoring of green conditions of NTPC plantations in seven states of the country i.e. Madhya Pradesh, Maharashtra, Assam, Karnataka, Andhra Pradesh, Telangana and Bihar, where altogether plantation of native tree species have been carried out in more than 5000 hectares by respective forest departments with financial assistance from NTPC.