

Highlights of achievement of CMPDI (2015-16)

Financial year 2015-16 had been a spectacular year for CMPDI. CMPDI recorded excellent all-round performance during the year.

CMPDI, a Mini-Ratna Company, received the 'Corporate Award for Excellent MoU for 2014-15' on the occasion of CIL Foundation Day 2015 celebrated on 1st November, 2015 at Kolkata. Also, CMPDI got the third best MoU rating (provided by DPE) of 1.002 for 2014-15 amongst 215 PSUs and Best MoU Rating in the "Energy, Power Generation & Transmission" Syndicate.

Highlights:

- CMPDI achieved a new record in the field of exploration during 2015-16. CMPDI has achieved an **all-time high drilling of 9.94 lakh meter during 2015-16** as compared to 8.28 lakh metre achieved in previous year, through departmental resources and outsourcing, registering a **growth of 20%** over previous year. Through departmental drills, it carried out about **4.08 lakh metre of drilling which is the highest in a year till date registering a growth of 14% over last year** by adopting latest mud technology, induction of new higher capacity drills and high performance bits.
- Exploratory Detailed drilling has been taken up in 113 blocks/mines spread over 22 coalfields in 7 States and that in respect of Promotional (Regional) drilling in 16 blocks spread over 8 Coalfields in 6 States.
- **17 Geological Reports** have been prepared by CMPDI and its agencies establishing about **6.1 Billion Tonnes** of coal resources to the '**Proved category**'. **3 Geological Reports** have also been prepared under Promotional (regional) Exploration establishing about **1.03 Billion Tonnes** of additional coal resources to the '**Indicated & Inferred category**'.
- **15 blocks were awarded to Outsourced agencies** for detailed exploration through E-tendering.
- DGPS Survey/WGS-84 conversion exercise for major coalfields to address block boundary issues on new toposheets received from Survey of India was completed, barring few coalfields due to forest/law & order issues. Exercise to include geological features on WGS converted blocks of different coalfields has also been taken up.

- In-house software CEMPGEODOC was modified to address quality issues as per GCV. SASLINT software for quality and lithology interpretation through geophysical logs are being routinized at RI level.
- HRSS (2-D Seismic) survey has been carried out in Pundi East block, West Bokaro Coalfield, Dabor Central Salanpur A, Central Salanpur Phase-II, Sangramgarh East, Sadhna East, Sadhna South East, Mohanpur East and Mohanpur South East blocks of Raniganj Coalfield collectively to decipher the structure and to help the geological interpretation of the block. Nearly 80 Line KM of seismic data has been collected in the above 9 blocks.
- For 3-D seismic survey, CMPDI has tied up with NGRI for taking up Belpahar block in IB Valley Coalfield under Promotional scheme. NGRI, in association with CMPDI, has already completed data acquisition of 3D seismic survey and about 10 sq.km. area has been covered. Further, data processing and interpretation will be done at NGRI, Hyderabad.
- **26 Project Reports** have also been prepared with **capacity addition of about 96 Mt per year**. Project Report for Gevra OC Expansion (70.0 Mty), the highest capacity mine of the country, was planned.
- **50 Environment Management Plans** (including 16 Form-I) have been prepared.
- **6 nos. of R&D and S&T projects** have been completed. Fund disbursed was ₹22.46 crores.
- **Land reclamation monitoring of total 50 nos. of opencast projects having more than 5 million cu.m. production capacity (coal+OB) and 37 opencast projects having less than 5 million cu.m. production capacity (coal+OB)** of CIL based on high resolution satellite data has been completed.
- **Vegetation cover mapping of six (6) Coalfields** viz. Karanpura, East Bokaro, West Bokaro, Singrauli, Korba and Bander was carried out.
- **Identification of built-up structure** present before notification of land acquisition in Jayant, Dudhichua, Bina-Kakri and Block-B projects of Singrauli Coalfields was carried out based on High Resolution Satellite Data.

- **DGPS survey for 'Geo-referencing of mine lease boundary (under MCR & MMRD) and overlaying on cadastral HRS data'** for twelve (12) leases of SECL was completed.
- Report on '**Satellite based Integrated Water Resource Management (WARM)** for Kamptee Coalfield, WCL' was prepared.
- CMPDI obtained **ISO 27001 certification** in Jan.'16 for **successfully implementing an Information Security Management System at three of its Regional Institutes (RIs) viz. RI-I, RI-II and RI-III.**
- Audit for OHSAS 18001 Management System for Environmental Labs at RI-IV and RI-V was carried out by the Certification body and provisional certificated were issued.
- Integrated Manuals for companywide certification at BCCL, CCL and ECL was completed by CMPDI and released by the CMDs of respective subsidiary companies.
- Controlled blasting studies were carried out in 23 different mines of CIL to protect the surrounding habitats/important structures and extraction of locked-up coal safely.
- **Development of coal based non-conventional energy source:**
CMPDI continued its efforts for facilitating commercial development of coal based non-conventional energy resources and is pursuing commercial and R&D projects with national/international organizations. Land mark achievements of CMPDI are as under:
 - ✓ CMPDI is pursuing envisaged activities on behalf of CIL for CBM development in two blocks namely Jharia and Raniganj North allotted to the consortium of ONGC-CIL and extending support to CIL in taking up administrative and other issues viz. Contractual, Operational, etc.
 - ✓ To expedite commercial development of CMM within CIL areas, MoP&NG has granted right to exploration and exploitation of CBM to CIL and its subsidiaries on nomination basis from coal bearing areas for which they possess mining lease for coal. **To expand the scope of development of CMM in CIL areas, further studies for "Assessment of CMM Potentiality in CIL Command Area" has been undertaken.**
 - ✓ Inter-Ministerial Committee (IMC) has been constituted by MoC for identification of areas for UCG on the lines broadly similar to the existing policy of CBM development. The second IMC meeting was held on 21st March, 2016 where potential blocks in coal and

lignite were identified for the commercial development of UCG by PSUs.

- ✓ CMPDI is carrying out studies related to "Assessment of Coalbed Methane Gas-in-Place Resource of Indian Coalfields/Lignite fields" through boreholes being drilled under promotional exploration. Assessment reports on CBM Gas-in-Place for three (3) blocks (Subhadra West block, Dolesra block, & Brahmanbill block) have been submitted.
- ✓ A project for mitigation and utilisation of VAM with CSIRO, Australia to be taken up under NCEF and CIL R&D funding is under finalisation. The project will be taken upon competent approval of the Government.
- **Information and Communication Technology Services were provided to CIL and its subsidiaries:**
 - ✓ Development of following online modules under Human Resources Information System for CIL:
 - Transfer request module for Executives
 - Mentor-mentee module
 - K-mining (Knowledge mining) module
 - Employee suggestion module
 - ✓ Development of Online bank card rate system for CIL. This online system facilitates banks to upload their quoted interest rate for deposits for the scrutiny of CIL.
 - ✓ Development of Vigilance clearance/monitoring system for CIL.
 - ✓ Annual Property Return system extended to non-executives also under Lokpal and Lokayukta Act.
- **Consultancy Services outside CIL:**
 - ✓ CMPDI has obtained **jobs worth ₹39.37 crores from 28 organisations, which is the highest ever received in a year till date, registering a growth of 239%** over last year. This includes consultancy jobs from Ministry of Coal also for providing comments on Mining plan & Mine closure Plans of coal / lignite blocks forwarded by MoC.
 - ✓ Jobs worth ₹9.8 crores have been successfully completed and submitted to clients' viz. NMDC, PSPCL, WAPCOS Limited, MoC, MOIL, MAHAGENCO, Hindalco Industries Ltd., Tata Steel, West Bokaro Collieries, Bharat Aluminium Co Ltd., Jaiprakash Power Ventures Ltd., TVNL, Adani Power Ltd., etc.

- ✓ Some of the major jobs obtained are Detailed exploration & preparation of geological report of all the seams within the lease hold area of DVC Bermo Mines, Preparation of Mining Plan & Project Report (PR) for Gare Palma Sector-I Coal Block of M/s GSECL, Preparation of Mining Plan & Project Report (PR) for Gond-bahera Ujheni Coal Block of M/s M. P. Power Generating Company Limited (MPPGCL) and OGL (Datum) Survey and excavation measurement survey in Pakri Barwadih Coal Mining Project of M/s NTPC.
- Surveillance assessment of Environment Laboratory of CMPDI HQ by National Accreditation Board for Testing & Calibration of Laboratories (NABL) was done. Further, re-accreditation of CMPDI as Environmental Impact Assessment/ Environmental Management Plan (EIA/EMP) consulting organization by Quality Council of India (QCI), New Delhi was done during the year.
- Technical assistance was provided to the subsidiary companies of CIL in setting up of 15 nos. of new coal washeries. E-tendering mode was opted to expedite the tendering process and identification of L1 bidder in record time. Out of these 15 nos. washeries, tender document on e-tender mode has been successfully floated for 6 nos. washeries.
- A study has been carried out to ascertain optimum grade mix of raw coal feed stock as per the washery design to various washeries of BCCL.
- A book titled 'A Handbook on Dragline Dump Profile in India' has been published and another book titled 'Handbook of Coal Petrology' is in process of printing.
- **E-Office implemented at CMPDI:**

File tracking and dispatch through digital platform 'e-Office' developed by NIC has become functional at CMPDI, on pilot basis for bringing in transparency, from 6th November'15 which was inaugurated by Shri Anil



Razdan, former Secretary (Power), Govt. of India.

Workshops:

- A two days' workshop on "Accreditation Scheme for EIA Consultant Organisations: Rev 03" for the executives of CIL was jointly organised by National Accreditation Board for Education & Training (NABET) of Quality Council of India, New Delhi and CMPDI at Ranchi from 17th Aug.'15 to 18th Aug.'15. For re-accreditation of CMPDI, personal evaluation of over 100 experts was undertaken by NABET-QCI from 19th Aug.'15 to 22nd Aug.'15.
- Two workshops on the issues 'Enhancing underground production of CIL - Target 100 Mty' and 'Expeditious execution of coal washeries' were held on 19th Sep.'15 and 26th Sep.'15 respectively at CMPDI (HQ), Ranchi. The workshops were attended by the representatives of subsidiary companies of CIL, SCCL, Academic/Research Institutions like ISM & CIMFR, Dhanbad, Manufacturers and operators.
- SAARC Training Workshop on "Experience sharing on CBM, UCG and Coal Extraction Methodology" was organized at New Delhi on 26th - 27th November in collaboration with SAARC Energy Centre, Islamabad and CMPDI where representatives from six member countries of SAARC participated in the program.

Foreign Dignitaries visit CMPDI:

- US Environmental Protection Agency (USEPA) representative Ms Felicia A Ruiz, Climate Change Division, US Environmental Protection Agency, Washington DC along with Mr Jonathan Kelafant visited CMPDI (HQ) on 9th - 11th February, 2016. During the visit activities of India CMM/CBM Clearinghouse was also reviewed and appreciated by USEPA.
- A team from US Consulate, Kolkata led by Consul General Mr. Craig L. Hall visited CMPDI on 26th Feb.'16 which reviewed the projects under Indo-US Coal Working Group and assured necessary help on the matter.

CSR:

Govt. is putting emphasis on carrying out more **CSR (Corporate Social Responsibility) activities** by the Public Sector Undertakings and this has become mandatory under the Companies Act for all PSUs. Following major activities were carried out during the year 2015-16:

- 1) Financial assistance to K.C. Roy Memorial Charitable Hospital for medical equipment.
- 2) Financial assistance to Brij Kishore Netraheen Balika Vidhayala for blind students.
- 3) Financial Assistance to different schools for celebration of occasions like Independence day, Republic day, Annual day & Sports day, etc.
- 4) Construction of Kalyan Mandap at Kosala village, Odisha.
- 5) Distribution Desks, Benches & Sports Items in different govt. schools of Jharkhand.
- 6) Construction of 4 nos. of Toilets at 1) Govt. Secondary School, Khamtra, 2) Govt. Secondary School, Nagpura, 3) Govt. Girls Hr. Sec. School, Chakarbhata and 4) Govt. Boys Hr. Sec. school, Chakarbhata, Bilaspur, Chhattisgarh.

Sports:

- ✓ A three day 'Coal India Inter-Company Chess Tournament' and 'CMPDI Inter-RI Athletic Meet' was organized at CMPDI in the month of December'15.
