

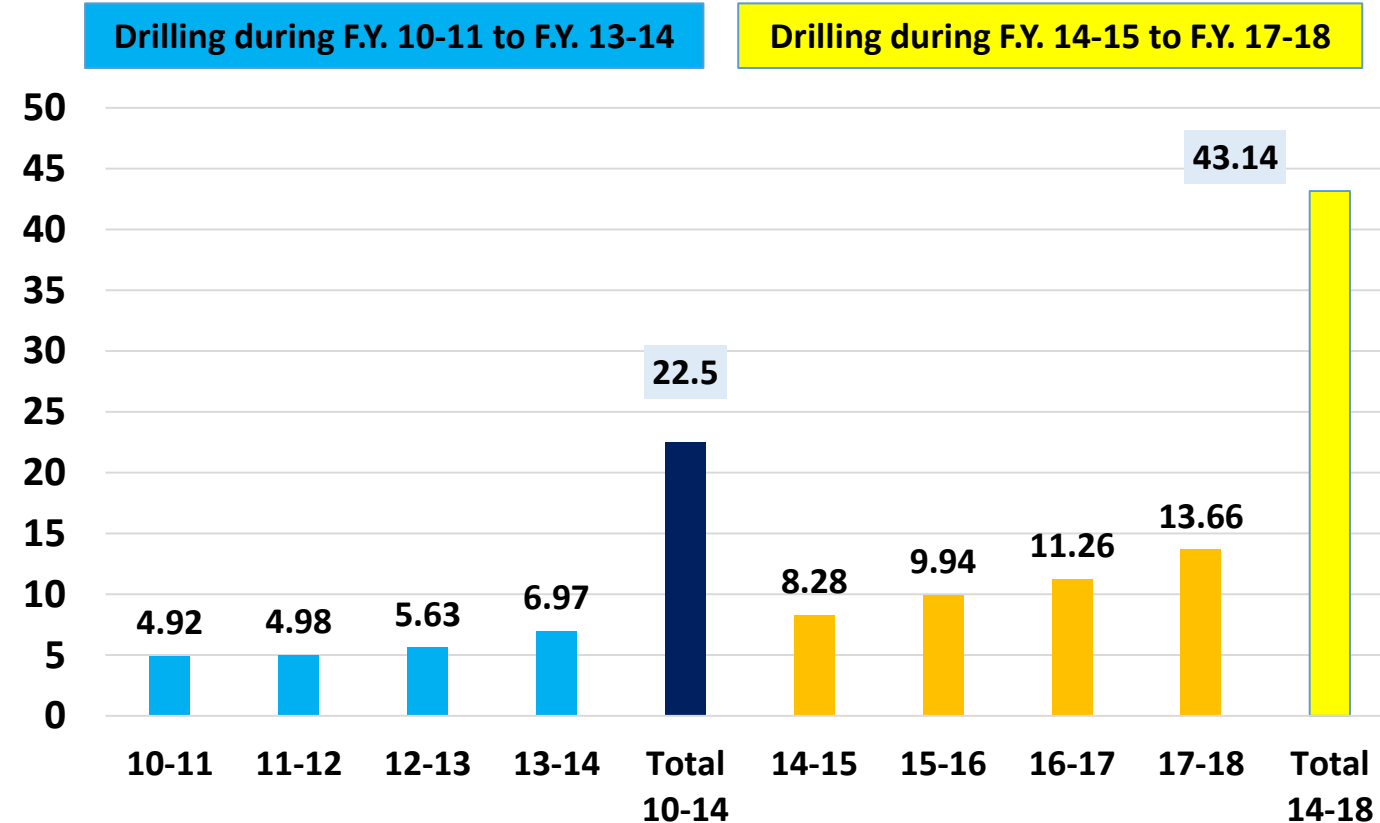
Central Mine Planning & Design Institute Ltd.

Success Story

Success Stories

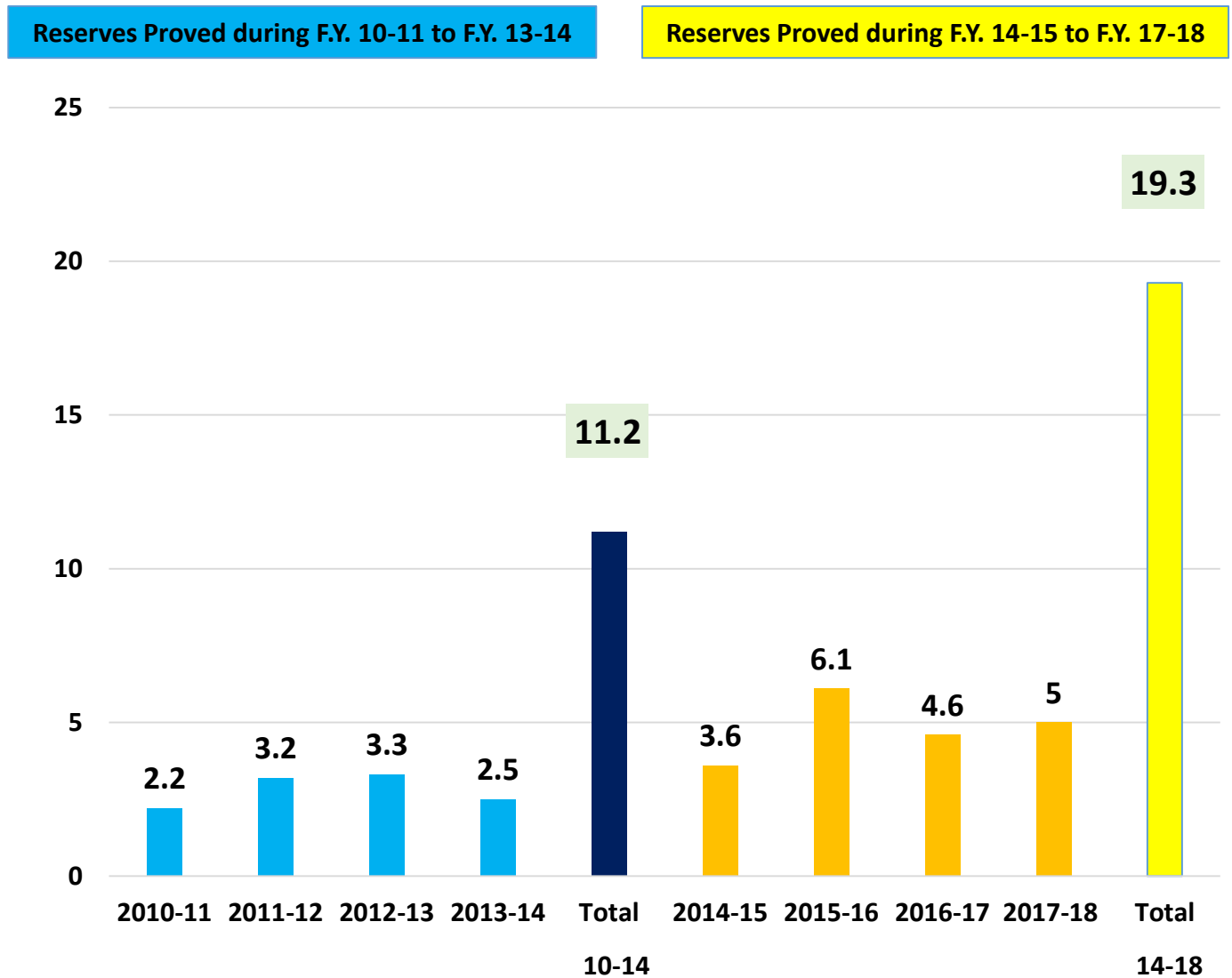
Detailed drilling carried out (lakh meter)

- **Total detailed drilling** has gone up to 43.14 lakh meter during the period 2014-15 to 2017-18 from 22.5 lakh meter achieved during the period 2010-11 to 2013-14. Moreover, the CAGR during 2014-18 is 18.32 % over the achievement of 6.97 lakh meter in 2013-14.



Coal Resources added to Proved category (BT)

- **Proved Coal Resources** has gone up to 19.3 Billion Tonne during the period 2014-15 to 2017-18 from 11.2 Billion Tonne achieved during the period 2010-11 to 2013-14.

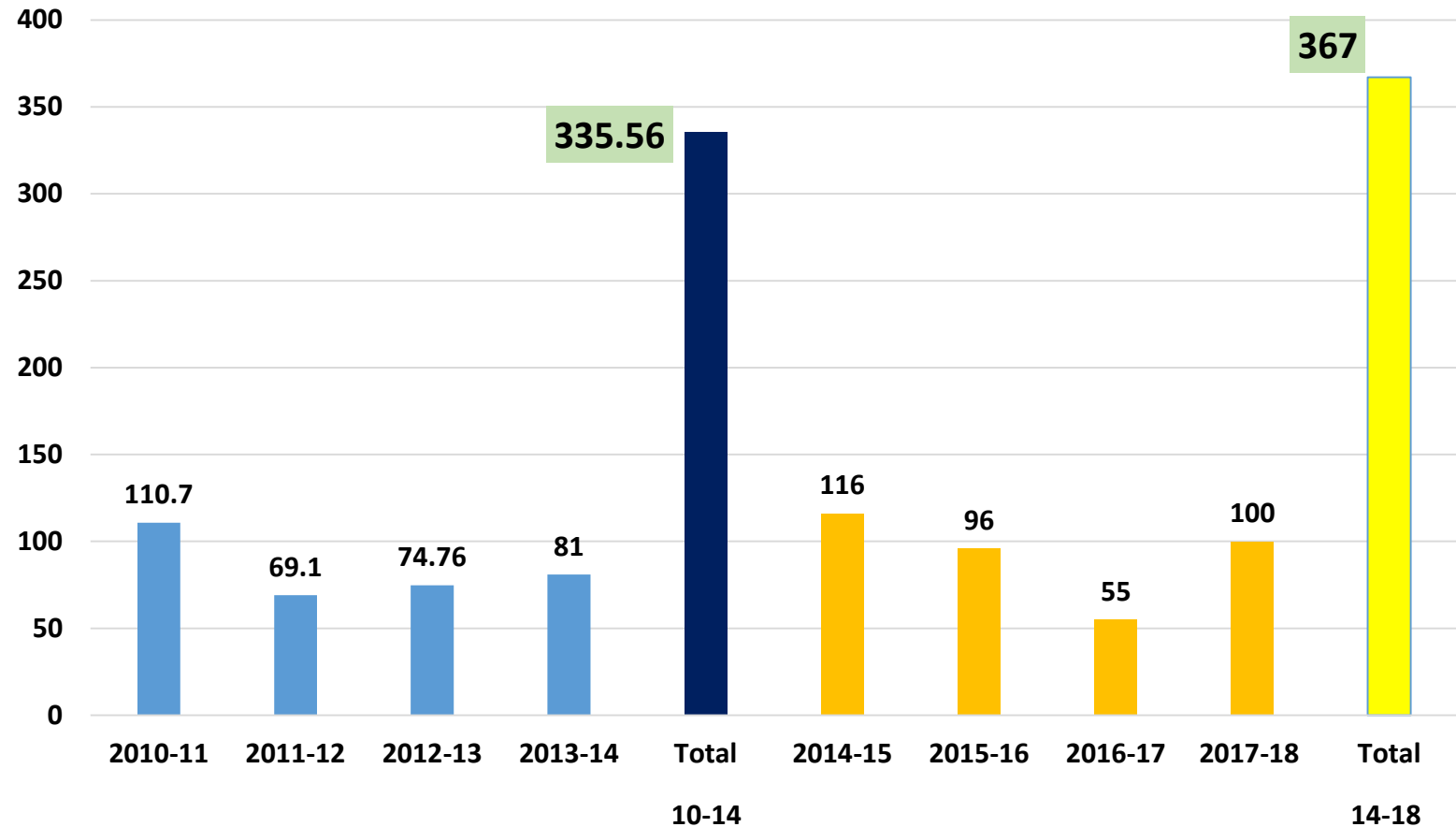


Coal Project Capacity Planned (Mty)

- **Project Capacity planned** for Coal has gone up to 367 Mty during the period 2014-15 to 2017-18 from 335.56 Mty achieved during the period 2010-11 to 2013-14.

Capacity planned during F.Y. 10-11 to F.Y. 13-14

Capacity Planned during F.Y. 14-15 to F.Y. 17-18



In 2018-19 : 52 Mty till Dec.18

Planning of Gevra OC (70 Mty) (Largest capacity OC mine in India)

- Project Report of Gevra OC (70 Mty), the largest opencast mine in India, was planned by CMPDI and approved by CIL Board, in March 2016.
- Presently, Gevra Expn. OC is having Environment Clearance for a peak coal production of 45.0 MTY.
- Technology Proposed
 - ✓ Surface Miner for coal extraction.
 - ✓ 42 cu.m Rope shovel along with 240 te dumper for OB Removal.
 - ✓ Conventional inpit belt conveyors along with shiftable conveyors for inpit coal transport.
 - ✓ 8 nos. of Silos including two nos. of Load out system for surface coal transport
- Performance during 2017-18
 - ✓ Coal Production : 41.433 MT
 - ✓ OB Removal : 58.17 M.Cum.
 - ✓ Composite Excavation : 82.98 M. Cum.
 - ✓ OMS : 55.66 T

❑ ***Development of Coal Mine Surveillance & Management System (CMSMS) and Mobile App “Khanan Prahari”.***

A web based GIS system has been developed with association with BISAG, Gandhinagar, to identify and report illegal coal mining activity.

CMSMS

Coal Mine Surveillance and Management System(CMSMS)

A web based GIS system to identify and report illegal coal mining activity.

Identification process

- Through scanning of satellite images at 3 month interval and
- Through mobile app 'Khanan Prahari'. Available at Google Play Store for Android and Apple Store for IOS.

Action on reports/complaints

By Nodal Officers identified by CIL subsidiaries / State Governments

System Design

CMPDI

Hosting & necessary Web & Mobile development support was provided by BISAG

Weekly Status of Complaint on CMSMS: Week (04.02.2019– 10.02.2019)

I. <u>Complaints generated through Khanan Prahari Mobile app</u>		
1. Total No. of Complaint Generated	74	Remarks
2. CIL Area		
• No. of Complaint generated from CIL Leasehold Area	44	BCCL-9, CCL-4, ECL-27, NCL-3, SECL-1
• Complaint Verified by CIL Nodal Officer	38	BCCL-8, CCL-4, ECL-22, NCL-3, SECL-1
• Complaint Found True	9	BCCL-2, CCL-3, ECL-4
• Complaint Found False/Repeated After Verification	29	BCCL-6, CCL-1, ECL-18, NCL-3, SECL-1
• Complaint Yet to Be Verified	6	BCCL-1, ECL-5
3. Non-CIL Area		
• No. of Complaint Generated From	30	Assam-3, Chattisgarh-6, Madhya Pradesh-6, Odisha-1, W.B.-11, Jharkhand-2, Maharastra-1
Outside CIL Leasehold Areas		
• Complaints Verified	12	Chattisgarh-6, Madhya Pradesh-4, Odisha-1, West Bengal-1,
• Complaint Found False	12	Chattisgarh-6, Madhya Pradesh-4, Odisha-1, West Bengal-1,
• Complaint Found Repeated	8**	Chhattisgarh-5, West Bengal-1, Assam-2
After Verification		
• Complaint Yet to Be Verified	18	Assam-3, West Bengal-10, Jharkhand-2, Maharastra-1, M.P-2
** Complaint ID 272 & 273 are repeated of West Bengal and Complaint ID 274-279 are repeated of Chhattisgarh. Complaint ID 283,284 &285 are repeated of Assam area.		
II. <u>Monitoring of report of scanning of satellite data for the period of 3rd quarter of 2018-19</u>		
No illegal mining detected.		

ASSOCIATED MOBILE APP – KHANAN PRAHARI

TOOL FOR REPORTING ILLEGAL MINING ACTIVITIES



Photographs received through Khanan Prahari Mobile App



Pics are Geotagged with brief of area and nature of mining by complainant.

Event Coverage : *Launching of CMSMS*



- ❖ **ONLINE COAL BLOCK INFORMATION SYSTEM (OCBIS):** The system has been developed by CMPDI which consists information about layers of coal blocks, coalfields & CBM.

ONLINE COAL BLOCK INFORMATION SYSTEM (OCBIS)

- ❖ OCBIS is designed to display Geo-referenced boundaries in WGS84 system of Coalfield, Blocks under different categories e.g. CIL, Additional CIL, Captive, Non-CIL with different colour coding and CBM in different layers.
- ❖ Area, reserves of blocks, status of Exploration and information regarding allocation is displayed.
- ❖ Different layers of coalfield, blocks and CBM, are available to visualize on google earth with both map and satellite images.
- ❖ CBM boundary gives the details such CBM block name, area, awarded to, status of the CBM block such as under development or under production.
- ❖ The system is protected with user authentication. The layers are super imposed on Google maps, since the system has the capability to show on Terrain / Satellite map data provided by the Google maps. It enables to see ground features like infrastructure, vegetation and water bodies.

- ❖ **MINE DATA MANAGEMENT SYSTEM (MDMS):** A web portal has been developed by CMPDI, by which the monitoring agencies are gaining the benefits through retrieval of information from a single source.

MINE DATA MANAGEMENT SYSTEM (MDMS)

- ❖ Mine Data Management System (MDMS) was developed by CMPDI for Coal India Limited, which depicts the salient features of projects being monitored by CIL.
- ❖ The main features of the portal is to monitor the progress of coal projects which encompasses Environmental Clearance (EC), Forest Clearance (FC), Land Acquisition, Rehabilitation & Resettlement (R&R), financial parameters, HEMM procurement, production and other major infrastructure such as Coal Handling Plant (CHP), silo and railway sidings.
- ❖ **By implementing the portal, the monitoring agencies are reaping the benefits through retrieval of information from a single source.**
- ❖ The nominated agencies of Ministry of Coal has already adopted this portal for online monitoring of allotted blocks.