

**GOVERNMENT OF INDIA
COAL
LOK SABHA**

STARRED QUESTION NO:254
ANSWERED ON:06.08.2015
Production of Coal from Underground Mines
Ramachandran Shri Krishnan Narayanasamy

Will the Minister of COAL be pleased to state:

- (a) the number of underground coal mines operating under the Coal India Limited (CIL) and its subsidiaries along with the annual production of coal during each of the last three years and the current year, company-wise;
- (b) whether the targets fixed for production of coal from underground mines have not been achieved by CIL;
- (c) if so, the details thereof indicating the targets fixed and achievements made by CIL in producing coal from the underground mines during the said period, mine-wise along with the reasons therefor; and
- (d) the steps taken/proposed to be taken by the Government for extraction of coal as per pre-determined targets from these mines including the funds likely to be invested for the purpose?

Answer

MINISTER OF STATE (I/C) IN THE MINISTRY OF COAL, POWER AND
NEW & RENEWABLE ENERGY
(SHRI PIYUSH GOYAL)

(a) to (d): A statement is laid on the Table of the House.

Statement referred to in reply to LS Starred Question no. 254 for 06.08.2015.

(a) Subsidiary-wise number of working underground & mixed mines under Coal India Limited (CIL) as on 1.4.15 (provisional) is given below:

COMPANY UG MIXED
Eastern Coalfields Limited (ECL) 75 9
Bharat Coking Coal Limited (BCCL) 15 17
Central Coalfields Limited (CCL) 22 1
Northern Coalfields Limited (NCL) 0 0
Western Coalfields Limited (WCL) 41 0
South Eastern Coalfields Limited (SECL) 63 1
Mahanadi Coalfields Limited (MCL) 10 0
North East Coalfields (NEC) 1 0
Coal India Limited (CIL) 227
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Subsidiary-wise raw coal production of Coal India Limited from underground mines during 2011-12, 2012-13, 2013-14 and 2014-15 is given below:

(Figures in MT)

Company	2011-12	2012-13	2013-14	2014-15
ECL	6.833	6.849	6.871	7.292
BCCL	3.482	3.153	2.704	2.029
CCL	1.090	1.024	0.956	0.841
NCL	0	0	0	0
WCL	8.390	8.200	7.730	7.565
SECL	16.408	16.869	16.416	16.036
MCL	2.186	1.678	1.433	1.276
NEC	0.004	0.003	0.003	0.003
CIL	38.393			

37.776
36.113
35.042

(b) Targets fixed and achievements made by Coal India Limited in producing raw coal from the underground mines during 2011-12, 2012-13, 2013-14 and 2014-15 is given below:

(Figures in MT)

Year	Target	Production
2014-15	37.600	35.042
2013-14	38.92	36.113
2012-13	43.900	37.776
2011-12	45.000	38.393

(c) Mine-wise targets fixed and achievements made by Coal India Limited in producing raw coal from the underground mines during 2011-12, 2012-13, 2013-14 and 2014-15 is enclosed as Annexure.

Reasons for less achievement from UG mines:-

There was need to augment production matching the growing energy requirements by undertaking large number of high capacity mechanized opencast mines with lesser gestation periods. The scope for augmenting production from the underground mines was limited on account of difficult geo-mining conditions, non-availability of large size deposits for adopting mass production technologies, inadequate experience in mechanisation of underground mines, total dependence on imported equipments for mass production technologies and long gestation periods involved. In addition to the above the other major constraints in augmenting coal production from underground mines are as follows:-

- i. Lack of appropriate technologies to mine coal from thick and steeply inclined and multiple seams
- ii. Non-availability of indigenous manufacturing facilities for equipment and spares for longwall technology and continuous miner technology
- iii. Long gestation periods mainly due to absence of mechanization for incline drivage and shaft sinking
- iv. Gassiness of seams requiring special attention in certain cases.
- v. Heavy pumping out of water
- vi. Adverse roof conditions
- vii. High cost of production because of uneconomical scale.
- viii. Large requirement of skilled manpower. Skilled manpower is progressively reducing.
- ix. Problem associated with contiguous / multiple seam working- Multiple seam workings have problems of goaved out waterlogged areas and fire in overlying seams restricting depillaring with caving. Contiguous seams pose problems of parting failure and roof control.
- x. Many underground mines developed during pre-nationalisation period in un-scientific manner, had to be discontinued due to safety reasons. In some cases, these mines were converted into opencast mines to crate safe condition for extraction of lower seams.

(d) Underground mining is presently contributing around 7% to the total production of Coal India Limited. At present, underground mining is practiced up to a depth of 300 m. Almost all underground mines are less productive and are running in losses. To meet the demand of country, some of the unsafe legacy mines are being converted into opencast mines. However, for extraction of deep seated coal deposit, CIL has planned to introduce mass production technology with high productivity and safety.

Following actions/steps are being taken up in respect of underground coal mining by Coal India Limited:

- i. Continuous Miner technology has been established as a successful underground mass production technology with high productivity and safety. At present, 8 Continuous Miners are deployed in 7 underground mines of CIL. Introduction of this technology in 19 more underground mines has been planned.
- ii. Longwall technology has been introduced in two mines, one each in BCCL and ECL. Production has already started in BCCL whereas it is expected to start in ECL within six months.
- iii. Further, works have been awarded to Mine Developer and Operator to operate Kapuria, Moonidih (both XV & XVI seam) and Muraidih in BCCL by longwall technology.
- iv. One mine with High Wall mining technology is working in SECL and few more are being identified.

In addition to the above, following steps are also being taken by CIL:-

- i. Efforts are being taken by all the subsidiaries for obtaining EC/FC within the schedule time frame so that projects could be able to start production in time.
- ii. Efforts are also being taken by the subsidiaries with state Government agencies to acquire land for identified & expansion projects

Funds likely to be invested in underground mines for the year 2015-16, would be to the tune of 762 Crs, which is 12% of total CAPEX for 2015-16.
