1. Starting in 1958 with a production capacity of 2 million tonnes per annum, NMDC Limited, a mining Company, has achieved a production capacity of 32 million tonnes per annum (MTPA) as of 2011-12. The Company has been making profit over the last 21 years and earned a profit before tax of \gtrless 10,760 crore on an income of \gtrless 13,278 crore in 2011-12. The Company undertakes iron ore mining operations mainly through its four open cast mines at Kirandul and Bacheli (two mines each) in the State of Chhattisgarh and one at Donimalai in the State of Karnataka.

2. We conducted performance audit of Company's activities relating to production, evacuation and sale of iron ore covering the period from 2005-06 to 2009-10. This was updated with statistics for 2010-12. During audit, we reviewed the activities of all the mines, i.e., five operational mines and two new mines (Kumaraswamy Deposit at Donimalai, Karnataka and Deposit 11B at Bailadila, Chhattisgarh) under development. We also reviewed sales made to selected customers, which represented 94 *per cent* of the total sales of the Company. Apart from this, we also reviewed price fixation mechanism and minutes of 63 Board meetings held between April 2005 and March 2012. Significant audit findings are stated below.

Production of iron ore

3. The Company's Corporate Plan last formulated in May 2001 covered nine years from 2001-02 to 2009-10. The plan envisaged to increase production capability to 25 MT by 2006-07 and around 30 to 35 MT by 2011-12 and secure the Company's share in iron ore production at 20 *per cent* of the Country's production. Audit noticed that:

- The production capacity stood at 32 MTPA in 2010-11 which was in line with the Corporate Plan target.
- The Company's share in iron ore production of the Country, however slipped from 14 per cent in 2005-06 to 11 per cent in 2009-10 but increased to 16 per cent in 2011-12 owing to ban on private mining in Karnataka. The decrease in market share was due to increase in production of low grade iron ore by other producers.
- The Company attained capacity utilization ranging from 74 per cent to 105 per cent but did not meet the annual production targets in four of the seven years except 2007-08, 2010-11 and 2011-12. The shortfall in the Company's production was mainly on account of evacuation constraints.

4. There were total iron ore reserves of 1,565 million tonnes (MT) with the Company out of total proven reserves of 28,526 MT in the Country. The Company needs to formulate a strategy for acquisition of new mines so as to maintain operations on a longer horizon.

Capacity expansion

5. The available installed capacity increased from 24.22 MTPA in 2005-06 to 32 MTPA in 2007-08 due to introduction of third shift in Bailadila and Donimalai sectors and addition of fourth line in screening plant at Donimalai sector.

6. NMDC decided to develop Kumaraswamy Deposit and 11B Deposit in 1997 and 2003 respectively. These two projects, expected to add capacity of 14 MTPA, were still under implementation in 2012.

- Though conceived in 1997, the work in Kumaraswamy Project in Bellary district of Karnataka could effectively start only after February 2009 due to delays in getting statutory clearances.
- The Kumaraswamy Project is still in progress due to delays in awarding contracts for development.
- Delays in award of contracts and implementation were noticed in 11B Deposit Project in Dantewada district of Chhattisgarh. Other constraints such as difficulties in mobilization of resources and manpower due to Maoist activities were noted in Audit.
- As a result of delays and also change in scope of the work, the initial project cost of ₹ 592 crore for both the projects has gone up to ₹ 1,506 crore..
- Some of the delays were controllable and point towards the deficiencies in the project management by the Company. There were also delays due to external constraints. The projects are expected to be completed by January 2013 (Kumaraswamy mine) and November 2012 (Deposit 11B).

Evacuation Facilities

7. Evacuation refers to transporting of iron ore from mines to buyers' sites/ ports. NMDC had an evacuation capacity of 30 MTPA as against the production capacity of 32 MTPA. The shortfall was at Bailadila sector in Chhattisgarh.

- Though the evacuation capacity turned inadequate in 2007-08, the options available to enhance the capacity were not pursued vigorously by NMDC.
- The Board approved laying of a slurry pipeline (capacity of 8 MTPA) from Kirandul to Visakhapatnam in July 2008 but only 'due diligence' could be completed by March 2012.
- Another option of doubling of Kirandul Jagadalpur railway line to enhance the capacity by 3 MTPA was taken up in JCM with Railways only in February 2010 and not pursued vigorously thereafter.

8. In essence, inadequate evacuation facilities at Bailadila sector proved to be significant limiting factor in enhancing production.

Sale of Iron ore

9. The Company enters into Long Term Agreements (LTAs) for a period of five years with customers for sale of iron ore in the domestic as well as export market. Such LTAs provide for minimum and maximum quantities to be supplied by the Company. During 2011-12, it contributed 16 *per cent* of Country's iron ore production and met 23 *per cent* of the domestic demand. 84 *per cent* of Company's domestic sales were through LTAs. Only 3 *per cent* were through domestic spot sales.

10. Till 2010-11, the export prices of the Company formed the basis for fixing domestic prices. The Company entered into long term agreements with Japanese Steel Mills (JSMs) for supply of iron ore. The prices negotiated by the Company were in line with those paid by JSMs to Australian and Brazilian suppliers. However, due to infirmities in the domestic contracts and inadequate action by the Company to revise the prices in view of market trends, the Company suffered a loss of ₹ 745.94 crore during 2007-10 on domestic sales.

11. By extending unwarranted reduction in price, the Company passed on benefit of \mathbf{E} 600.83 crore to the customers during 2010-11. Further, by not increasing the prices by full percentage in line with increase in export prices, it suffered a loss of \mathbf{E} 227.34 crore during the same period.

12. During 2011-12, the Company followed 'Net Back' method and 'Domestic Price Parity' method to fix the domestic prices of iron ore. The net back price is fixed after deducting expenses such as export railway freight, port charges, royalty and export duty from the export price. The net back method suppresses the domestic price due to higher export related expenses. The domestic price parity method which is based on OMC prices is an imperfect method of fixing prices as the individual ex-mine prices vary based on the quality of ore and transport distance.

13. Considering that the end-product (steel) prices are market driven, it is desirable that a mechanism may be established which would address (i) optimum price realization for NMDC's ore, (ii) assured supply to domestic steel producers, and (iii) predictability of price.

Governance Issues

14. The Board of Directors is expected to monitor the key areas of operations and direct appropriate remedial action wherever required. As brought out in the Report, delays in completion of capacity expansion projects, inadequacy of evacuation facilities and infirmities in fixation of prices were three high risk concerns.

15. Though the Board held 63 meetings between April 2005 and March 2012, the progress of implementation of capacity expansion projects was not discussed until January 2010. The issue of inadequate evacuation capacity was discussed by the Board only in July 2008 but was not followed up later. It is only in March 2010, the Board constituted a sub-committee of Directors to monitor the progress of expansion schemes.

16. In respect of price revision in case of domestic LTAs, the Board did not provide any guidance regarding clarity in terms relating to revision of prices, i.e, when exactly to effect the revision in prices and by how much.

17. Thus, the performance of the Board fell short of the expected standards of governance. The oversight of the Ministry was deficient as it did not set appropriate targets in the Results Framework Document for the projects under implementation.

Conclusion

18. The Corporate Plan aimed at securing the market leadership for the Company in its mining operations. Though the Company catered to about 23 *per cent* of domestic demand of ore in 2011-12, its new capacity expansion projects did not progress as planned, due to deficiencies in the project management by the Company and external constraints. Similarly, the mismatch of its evacuation facilities vis-à-vis production capacity in Bailadila sector proved to be a bottleneck in realization of its optimum production capacity.

19. Due to infirmities in price fixation, the Company suffered a loss of \gtrless 1574.11 crore during 2007-11.

20. The 'net back method' followed for price fixation in the domestic market results in the domestic buyers being charged lower rates than the overseas buyers. Considering that the end-product (steel) prices are market driven, we are of the opinion that NMDC should establish a new pricing mechanism whereby the price reflects the market scenario.

Recommendations

21. Audit recommends the following measures to help the Company to strengthen its operations:

- The Company needs to formulate a strategy spelling out its plans for acquisition of new mines/ reserves;
- The Company needs to enhance its project management capability by focusing on project planning, implementation and monitoring. In this regard, the Company needs to specify the timeframes and milestones for all project activities and ensure their strict adherence through continuous monitoring and requisite remedial action;
- The Board should regularly monitor the progress of laying of slurry pipeline;
- The issues relating to doubling of K-K line should be taken up at the Railway Ministry level and pursued so as to expedite its completion;
- The domestic price fixation mechanism for iron ore may be established which would address these issues: (i) optimum price realization for NMDC's ore, (ii) assured supply to domestic steel producers, and (iii) predictability of price.
- The Board of Directors of the Company need to review the progress of ongoing projects periodically and suggest remedial action wherever warranted so that the projects are completed as envisaged.