



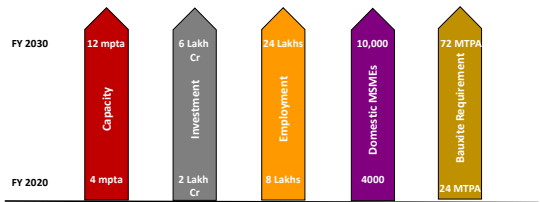
Leveraging Indian Bauxite & Aluminium Industry for Atmanirbhar Bharat

Key Mining Reforms for Bauxite Mining



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Vision for Aluminium Industry – Atmanirbhar Bharat



Category	FY 2020	FY 2030
Capacity	4 mpta	12 mpta
Investment	2 Lakh Cr	6 Lakh Cr
Employment	8 Lakhs	24 Lakhs
Domestic MSMEs	4000	10,000
Bauxite Requirement	24 MTPA	72 MTPA

Aluminium Capacity to expand from 4 MTPA to 12 MTPA by 2030
New Investment of 4 Lakh Crs.: Creating 10,000 SME's & 24 Lakh jobs
Bauxite Requirement to grow three-fold from current 24 MTPA to 72 MTPA

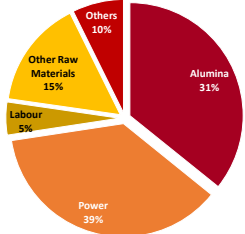
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Availability of Natural resources- bauxite and coal

India has the fifth largest coal & bauxite reserves in the world
 Among the best quality bauxite globally

Coal and Bauxite resources (Bn Tons)			
	Proven Reserves	Resource	Total
Coal	149	170	319
Bauxite	0.7	3.2	3.9

Aumina (Bauxite) & Power (Coal) are main Cost Component – 70%



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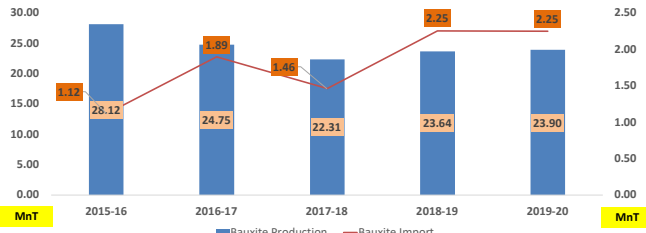
Wealth Creation by Optimal value add to Natural Resources

- Monetisation of natural resource is important for economic growth and wealth creation of the country.
 - Australia, Chile, Peru, Brazil, South Africa, Indonesia to name a few.
- Value addition from Bauxite to Finished Aluminium Goods
- Forward and backward linkage of Employment Creation > 1
- Wealth creation across people, community and government

Bauxite Mining	Alumina	Coal Mining	Power	Aluminium
Mining Contractors	Refinery Operations	Mining Contractors	Power Plant Opr	Smelter Opr
Maintenance Supplies	Causitic Soda	Maintenance Supplies	Maintenance Supplies	C.P Coke
Ore Transportation	Lime	Coal Transportation	Electricity Duty	Aluminium Fluoride
Explosives	Other Chemicals	Explosives		Maintenance Supplies
Royalty, District Mineral Fund	Power & Steam	Royalty, District Mineral Fund		Transport
CSR	Alumina Transportation	CSR		Just in time for consumer
	Other Chemicals	Coal Cess		
	Maintenance Supplies			

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Bauxite Production & Import Scenario



Year	Bauxite Production (MnT)	Bauxite Import (MnT)
2015-16	28.12	1.12
2016-17	24.75	1.89
2017-18	22.31	1.46
2018-19	23.64	2.25
2019-20	23.90	2.25

No Metallurgical Grade Bauxite Mine has been Auctioned Since Inception of MMDR Act 2015
Domestic Production has decreased whereas Import have Increased

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Challenges

- No Auction of Metallurgical Grade Bauxite in last 5 Years -
 - Only Bulk Mineral where Average Sale Price (ASP) is calculated from selling price of end product.
 - ASP of Bauxite is artificially increased to a price of INR 1,800-2,500 per ton, which is 3-4 times in comparison to the data of Indian Bureau of Mines (IBM) or sales done by state government companies like by Odisha Mining Corporation Limited (OMC) or Gujarat Mineral Development Corporation Limited (GMDC).

ASP as per Indian Bureau of Mines (IBM) Data (Rs./Ton)	*ASP as per OMC (Odisha)/ GMDC (Gujarat) Merchant Sales (Rs./Ton)	ASP as determined from selling price of end product (Rs./Ton)
Rs. 550-Rs. 650 per Ton	Rs. 550-Rs.700 per Ton	Rs. 1,800-Rs.2,500 per Ton

- States like Jharkhand, Chhattisgarh & Odisha are unable to auction the bauxite mineral blocks.
- High bauxite price to make Production of Alumina & Aluminium economically unviable. Import will be cheaper than producing Alumina in the country.

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Challenges

- No Incentive for Exploration-**
 - Bauxite Resources mainly located in difficult remote terrains.
 - No Seamless right to move from Exploration to Mining.
 - No Investment & Private Participation in the Exploration of new reserves.
- High Logistics Cost of Bauxite Transportation-**
 - Bauxite located in High Tariff structure of Class 160 by Indian Railways.
 - Logistics and Transportation of Bauxite from any new mine to the plant - Rs. 1,500/T
- Long Lead time for Mining Clearances-**
 - Long waiting time for Mining Approval of EC & FC
 - Projects stuck awaiting clarity on Conduct of Public Hearing during Covid

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Way Forward

Issues	Recommendations
Priority Status Aluminium - a strategic metal Sector has similar challenges and opportunities as the steel	<ul style="list-style-type: none"> Include aluminium as the 9th core industry Announce a National Aluminium Policy - vision, roadmap and policy framework to attract investments, on the lines of National Steel Policy Preference to domestically manufactured aluminum and aluminum products under all public procurements.
ASP of Metallurgical Grade Bauxite inline with the Market Prices: No successful auction of large bauxite mine in past 5 years Present formula artificially increases the price 3-4 times of the actual market value.	<ul style="list-style-type: none"> Address high Average Selling Price (ASP), basis which the reserve price is determined ASP determination for bauxite in line with the methodology used for other Bulk Minerals/ore such as Iron Ore, Limestone, Manganese etc. as per monthly data is filed Miners to Indian Bureau of Mines (IBM) Formation of National Mineral Index for Metallurgical Grade Bauxite as done for Coal to reflect to Market picture.

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Way Forward

Issues	Recommendations
No Incentive for Exploration- Bauxite Resources mainly located in difficult remote terrains. No Seamless right to move from Exploration to Mining	<ul style="list-style-type: none"> Expedite seamless composite exploration -cum-mining-cum production regime even for Bulk Minerals Exploration permits to Private Explorers with First Right of Refusal at the time of Auctions. Allowing investors freedom to choose any available area for exploration and mining on profit sharing basis with the government. (As done in Oil and Gas- In OALP model)
Long Lead time for Mining Clearances- Long waiting time for Mining Approval of EC & FC- 3 to 5 years Projects stuck awaiting clarity on Conduct of Public Hearing during Covid	<ul style="list-style-type: none"> Single Unified Statute for all Forest & Environment Clearances Joint site inspection instead of multiple visits by State officials for Forest Clearance. GIS based network for macro EIAs Conduct of PH through digital platforms like Zoom/Webex to avoid public gatherings.

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Thank You

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