# *EMPLOYMENT IN MINING: A case of missed opportunities – prospects for future*

*August, 2019*

**FEDERATION OF INDIAN MINERAL INDUSTRIES**
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# Economic Growth and Employment

A fine balance vital for India's sustainable development

## Mining in India is employment-intensive

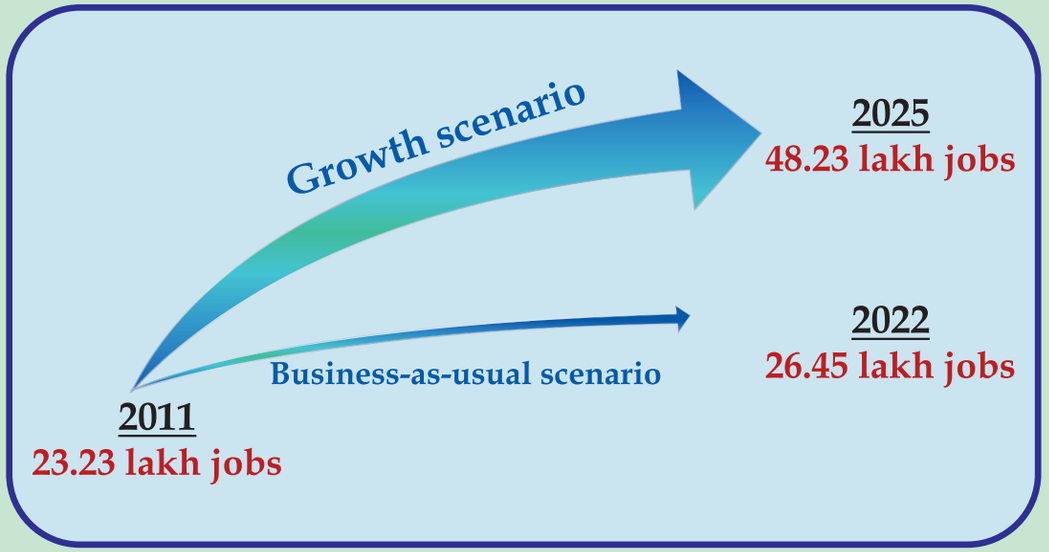
**For 1% increase in sector GDP**

**Mining creates**

- **13x** more jobs than **Agriculture**
- **6x** more jobs than **Manufacturing**

### Mining jobs


## Employment Potential (direct) in Mining




# FOREWORD

Mining involves identifying and extracting mineral resources hidden in the earth, which are of no value unless extracted. Thus, mining creates primary value out of nothing and further leads to value-addition through mineral beneficiation. In the process, huge employment is generated, which leads to improvement in the socio-economic status of the communities and inclusive growth in the economy.

The mining sector is widely considered as the transformational sector for agricultural labourers moving from low skilled to more value added jobs. This is because, historically, economic development has followed a pattern of pulling people out of agriculture, moving them into non-farm activities such as mining, manufacturing and services. FIMI has brought out this publication titled **"EMPLOYMENT IN MINING: A case of missed opportunities – prospects for future"** illustrates the linkage and job multiplier effect and provides a conceptual framework for linkages of mining with transportation, construction, equipment manufacturing, environmental management, geological services and the education sector.

It is a matter of concern that the unemployment rate in India has risen dramatically from 2.2% in 2011-12 to 6.1% in 2017-18 as per NSSO survey. The workforce has shrunk by 47 million during the period and labour force participation rate (LFPR) has come down from 55.9% to 49.5%, which prompts us that there is an urgent need to review India's employment policy and improve regulatory mechanism, without which there can be no possibility of creating employment as well as overall economic growth in India.

This publication depicts the potential of mining and its cascading effect on generation of employment to provide socio-economic development particularly in the rural and backward areas as mining creates a self-sustaining dominoes effect in the whole economy.

I believe that this publication will be useful to the planners and policy makers at the State/Centre level, for the formulation of appropriate policies for the cause of socio-economic development of the mining areas and inclusive growth.

**(SUNIL DUGGAL)**
PRESIDENT

New Delhi
7th August, 2019

# PREFACE

Mining is a labour intensive industry and creates employment opportunities in the hinterland which has limited potential for other economic activities. Given the present unemployment crisis in the country, it is believed that employment-intensive growth is the key to utilizing India's demographic dividend and ensuring a remarkable growth story.

Mining sector (excluding petroleum and natural gas) which employed around 23.23 lakhs persons in 2012, has suffered massive job losses due to various bans and restrictions on mining. However, the mining sector has a huge potential for employment generation. With the right kind of Government support and reforms, the mining sector can grow to employ about 48.23 lakh persons directly and create (direct and indirect) 5 crore jobs by 2025. If mining is promoted appropriately, more jobs will be created, which will improve the standard of living as well as improve socio-economic condition of the people in tribal and backward areas of the country where the minerals occur.

Prior to auction regime in India, 66,477 applications were pending with both (Central and State) governments including applications of 43,025 mining leases for grant of concessions. All these applications became null and void subsequent to enactment of MMDR Act, 2015. Had even 50% of these applications been approved for grant of mining lease, there would have been huge additional employment generation in the mining sector.

**EMPLOYMENT IN MINING: A case of missed opportunities – prospects for future** is an attempt to highlight the job creation opportunity in the mining sector and to suggest how conducive policies can improve employment outcomes in the sector. The objective of this publication is to showcase the potential of the mining sector in generation of employment, improvement in socio-economic status of the communities and inclusive growth in the country. If managed effectively, the mining sector with 0.52 employment elasticity can generate around 13 times more employment than the agriculture sector and 6 times more employment than manufacturing sector for every 1% increase in sector's GDP, pointing towards relatively high employment generation ability of the sector.

I am sure that this publication will be of immense use for the Government of India as well as State governments to reorient their policies which will lead to the growth of the mining sector which has a lot of potential for job creation not only in the sector but also in its linked sectors.

**(R.K. SHARMA)**
SECRETARY GENERAL

New Delhi
7th August, 2019

# I – UNEMPLOYMENT CRISIS IN INDIA

One of the major hindrances in the growth of any country is unemployment. Unemployment is a serious issue in India. It is not only one of the major obstacles in the country's economic growth but also has several other negative repercussions on the individual as well as the society as a whole. According to Labour Bureau Statistics, employment growth in India slowed down drastically during the period 2012 to 2018. Unemployment is increasing day by day in India. Several sectors including mining and quarrying, textiles and manufacturing also witnessed falling employment growth.

1.2 As per the Periodic Labour Force Survey (PLFS) by the National Sample Survey Office (NSSO), unemployment in India stood at 6.1 % in 2017-18, the highest in 45 years. The trend of unemployment rate is shown below:

**Chart – I**
**Unemployment Rate in India (2012-18)**


**Source**: NSSO, Annual Employment–Unemployment Survey, 2017-18
https://www.gktoday.in/gk/what-are-current-unemployment-rate-lfpr-and-worker-population-ratio-in-india/;

1.3 Unemployment rate has risen dramatically from 2.2% in 2011-12 to 6.1% in 2017-18; workforce has shrunk (job loss) by 47 million during the period and that labour force participation rate (LFPR) has come down from 55.9% to 49.8%, i.e. more than half the working-age population (15-64 years) is out of the job market due to lack of job opportunities in the economy.

1.4 This suggests that there is an urgent need to review India's employment policy and improve regulatory mechanism, without which there can be no possibility of creating employment as well as overall economic growth in India.

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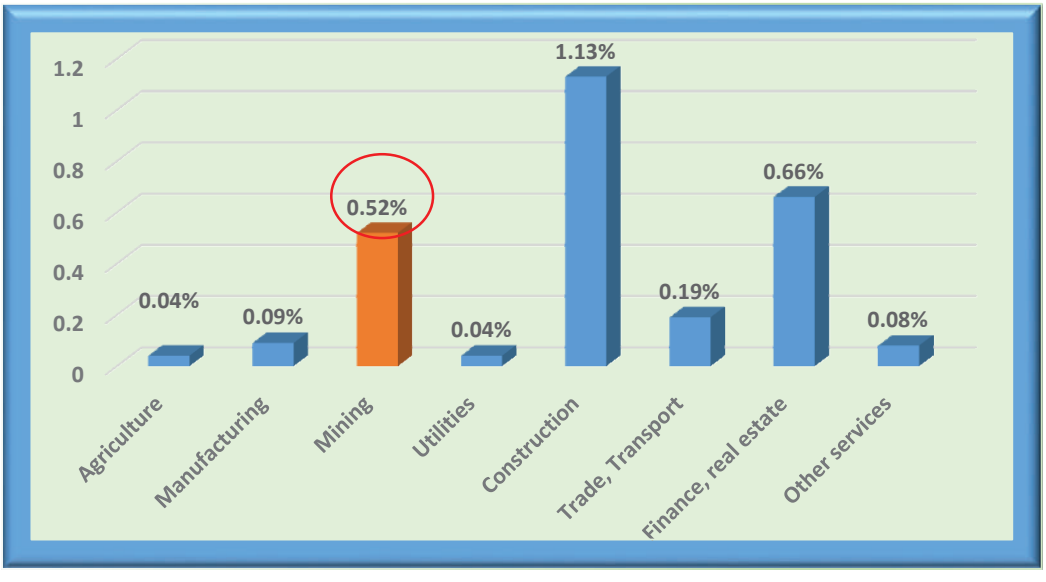
# II – ROLE OF MINING IN EMPLOYMENT

## (i) Employment Elasticity

Mining in India is a labour intensive industry and creates employment opportunities in the hinterland which has limited potential for other economic activities. Given the present unemployment crisis in the country it is believed that employment-intensive growth is the key towards utilizing India's demographic dividend and ensuring a remarkable growth story. In addition, it acts as a significant variable towards achieving a sustainable and inclusive growth. Thus, it becomes imperative to understand the country's employment generation potential that can best be summarized in terms of employment elasticity.

**Chart – II**
**Sectoral Employment Elasticity (2000-2010)**




**Source**: Planning Commission, 12th Five Year Plan 2012-17, Chapter 22

2.2 As per 12th Five Year Plan, the above graph shows the sectoral employment elasticity in India from 1999 to 2010. Employment elasticity is a measure of the percentage change in employment associated with a 1% change in sectoral growth. It indicates the ability of an economy to generate employment opportunities for its population as % of its growth process. **The mining sector emerges as the 3rd largest in terms of generating job per unit increase in the sectoral GDP with an employment elasticity of 0.52, next only to construction**

**and finance and real estate. This implies that with every 1% growth in mining sector's GDP, employment in the sector increases by 0.52%.**

2.3 Mining sector with employment elasticity of 0.52 creates around 13 times more employment than agriculture sector and 6 times more employment than manufacturing sector **pointing towards relatively high employment generation ability of the sector.**

## (ii) Current Employment Scenario in Mining

2.4 The mining sector is widely regarded as the transformational sector for agricultural labourers moving from low skilled to more value added jobs. This is because, historically, economic development has followed a pattern of pulling people out of agriculture, moving them into non-farm activities such as mining, manufacturing and services. Even though current mining's share in India's GDP is 1.53% (2017-18), but has great potential to contribute significantly to reach a level of 5%. It supports economic growth in the country and provides backward and forward linkages in the economy more than any other sector by providing essential raw materials for India's sustainable growth and in so doing, a provider of jobs.

2.5 As per the Deloitte report titled *"Human Resource and Skill requirements study for Indian mining sector"* Indian mining sector (excluding petroleum and natural gas) directly employed around 23.23 lakh people during 2011-12. This includes employment in the public/ private establishments i.e. organized sector and employment in the unorganized sector.

**Table – II**
**Employment in Mining 2011–12**

| Sr. No | Sub-Sectors | Employment (in lakhs) |
|---|---|---|
| 1 | Prospecting and Exploration | **0.29** |
| 2 | Mineral extraction<br>– Fuel minerals<br>– Metallic minerals<br>– Non-metallic minerals<br>– Minor minerals | **20.77**<br>— 5.60<br>— 0.85<br>— 0.55<br>— 13.76 |
| 3 | Associated services | **2.03** |
| 4 | Mineral processing and beneficiation | **0.14** |
| **Total** | | **23.23** |

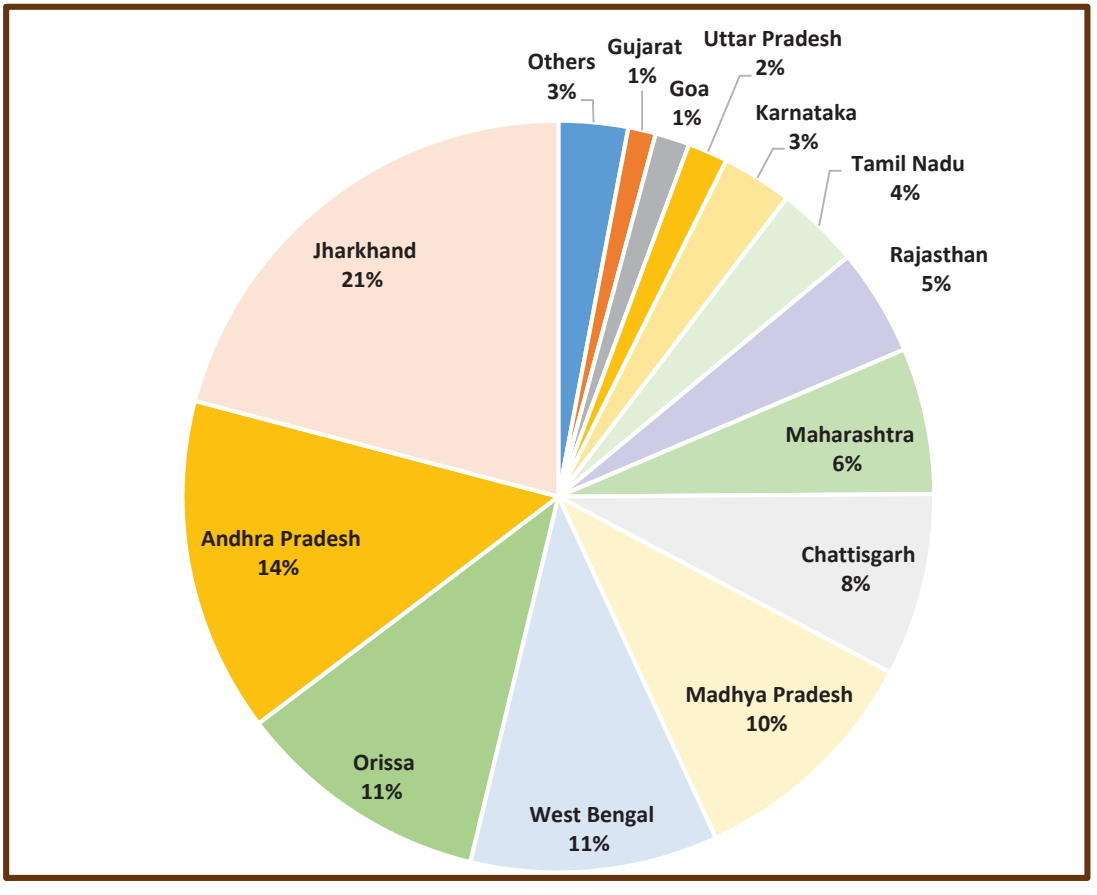
**Source**: Deloitte Report *"Human Resource and Skill requirements study for Indian mining sector"* 2016

2.6 In 2011-12, 3030 major mineral mines (excluding coal and minor mineral mines) reported production and employed 1.4 lakh persons (= 0.85 +0.55) in

mineral extraction only. Taking the proportionate employment in other sub-sectors (prospecting and exploration, associated services, mineral processing and beneficiation), the total employment in 3030 major mineral mines works out to be 1.56 lakhs. Accordingly, the average employment in a major mineral mine is equivalent to 51.5 (=1,56,000 / 3030) i.e. approximately **50 persons per major mineral mine**. In case of minor minerals, the average employment will be much higher as these are more labor intensive and comparatively low mechanization is prevalent.

2.7 Mining in India is predominantly done in 13 States. The States wise employment in mining sector in India is depicted below:

**Chart – II (a)**
**State-wise Employment in Mining Sector in 2011–12**




**Source**: Directorate General of Mines Safety (DGMS)

## (iii) Linkages and Job Multiplier

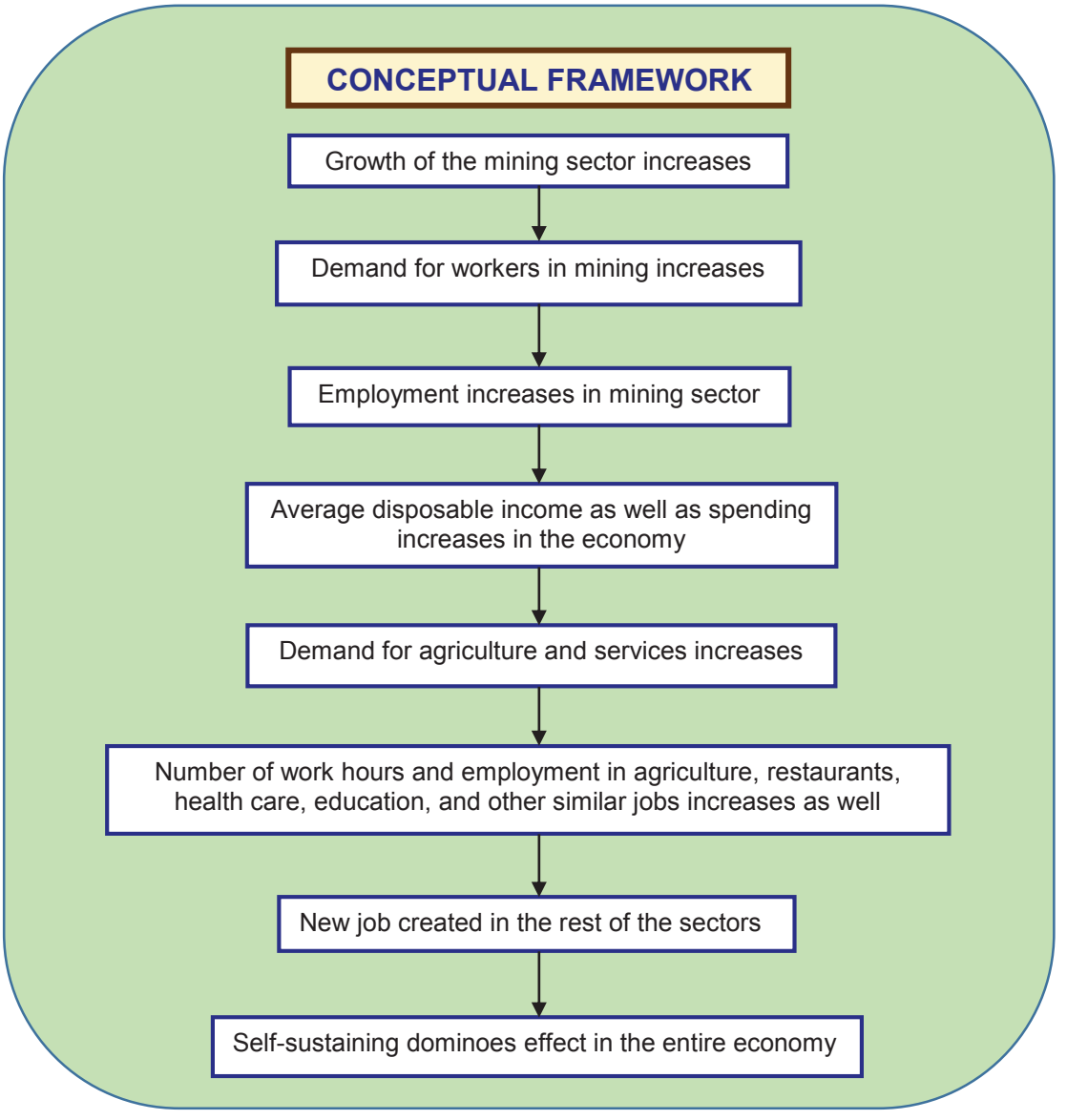
2.8 To understand the linkages between mining and rest of the economy, economists use measures called "multipliers" to summarize their estimates of the size of linkages. Job multiplier is a demand-driven planning tool, which is designed to examine the inter-relationship among the productive sectors in the economy. It shows how many new jobs are created in the rest of the regional economy when one new job in the mining industry is created.

2.9 According to the Government of India's 'National Mineral Policy – Report of the High Level Committee' published in 2006, **the ratio of direct to indirect employment in the mining sector is 1:10** i.e., for every job created in the mining sector another 10 jobs (indirect jobs) are generated along the supply chain. This is typically because of the type of linkages that the mining sector has:

- **Backward linkages** from mining represent the local or regional purchase of inputs. These often include food and catering services, electricity, transportation services, and raw materials. In turn, the regional suppliers of mining purchase their own inputs, which further stimulate regional economic activity.
- **Forward linkages** from mining represent downstream processing of mineral ores or concentrate, including, for instance, smelting, refining, semi-fabrication, fabrication, and manufacture of products.
- **Final-demand linkages** describe the income that miners and their households spend on goods and services produced in the region (e.g., groceries, clothing, entertainment, restaurant etc.).
- **Fiscal linkages** embody the tax and royalty revenues regional governments use to develop infrastructures such as hospitals and schools and to purchase other goods and services.

2.10 There are three sectors in the economy: the agriculture, industry, and service. Now if the mining sector grows, the direct effect of this is the increased employment in the mining sector. The operating mine would need to buy local goods and services provided by other businesses. This is called indirect employment, which refers to the employees working in these other businesses who will benefit from the increase in demand in mining sector. As a result, the average disposable income as well as spending of the economy increases, which in turn increase the demand for other sectors (such as agriculture, manufacturing, trade, etc.). New jobs are created in the rest of the sectors. This means that when due to mining, the demand for agriculture and service sector increases, the number of work hours and employment in agriculture, restaurants, health care, education, and other similar jobs increases as well. Hence, the Government can collect more taxes and royalties from the economy, which, in turn, creates a self-sustaining dominoes effect in the whole economy.

**Chart – II (b)**
**Linkages and Job Multiplier**




2.11 Mining is linked to many other industries and sectors in the economy, including transportation, construction, equipment manufacturing, environmental management, geological services, education and research, among others. If mining is promoted, more jobs will be created indirectly in these sectors, bringing all round growth in the economy.

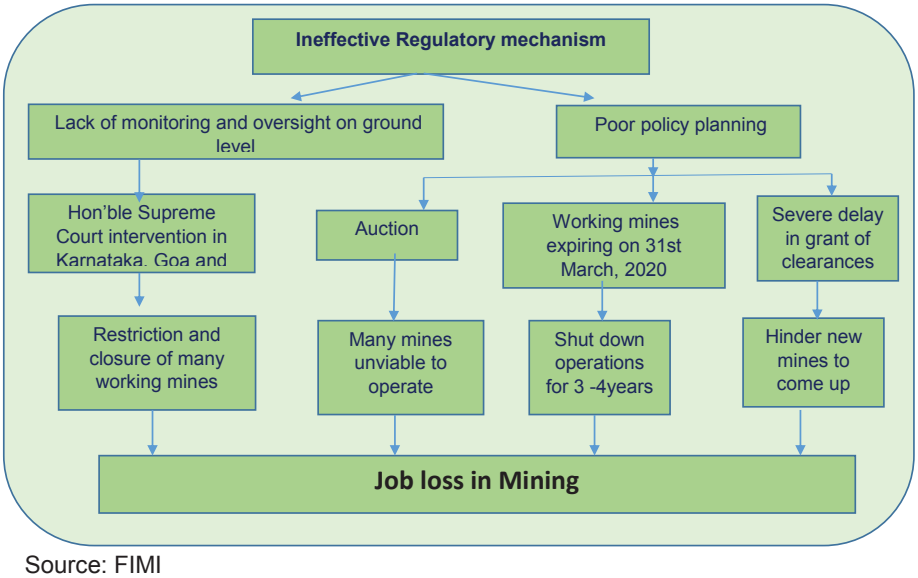
## III – MASSIVE JOB LOSSES IN MINING: RAISON D'ETRE

India is blessed with ample resources of a number of minerals. But, despite being rich in mineral resources and possessing favorable geological environment for production and export, the mining sector is suffering from massive job losses and struggling to create new jobs in India due to a variety of reasons including mining bans and restrictions on mining operations. Such mine closures cause demographic changes and adversely affect the livelihood of communities. Thus, it is essential to identify the reasons behind large scale job losses in the mining sector.

3.2 **Ineffective regulatory mechanism**: Because of a dangerous mix of lopsided, weak institutions and poor monitoring mechanism, Government oversight and regulation, India's mining industry is in a chaos. In the past decade, many of the mines have been closed or suspended due to judicial intervention in different mining regions of the country. Each time the Hon'ble Supreme Court made a judgment in mining matter, it has been the mining industry which had to bear the brunt of the Court, despite the fact that it is the failure of the regulatory mechanism both political and civil, which resulted in irregularities or illegal mining. Closure and suspension of mines across the country has led to large-scale unemployment and job loss in mineral-rich remote and tribal parts of the country.

3.3 Following flow chart depicts the prime reason behind job losses in mining sector:

**Chart – III**
**Job Loss in Mining**




Source: FIMI

## (A) Lack of monitoring and oversight at ground level

### (i) Hon'ble Supreme Court's Intervention in various States

3.4 The systematic lack of monitoring and oversight at the ground level had led to irregularities and inadequate implementation of statutes in mines. As a result of this failure of regulatory mechanism, the mining industry had to face the wrath of the Hon'ble Supreme Court in various States including Karnataka, Goa and Odisha.

3.5 It is rather surprising that industry has been blamed for everything which went wrong in the mining sector, despite checks and balances by the administration at each step and Government machinery being all pervasive. A lessee cannot remove ore from the mines without paying royalty to the State and obtaining transport permit, which is examined at various check-points on road. The transport permit clearly mentions the quantity of ore being moved and thus each tonne of ore is accounted by the Government. For transport over longer distances or for export, a lessee has to pay railway freight, export duty, port charges, etc – all of which involves thorough checks and accounting.

3.6 Iron-ore is a bulk commodity and cannot be produced or transported or consumed in any clandestine way. The moot question is – If ore was illegally produced as decided by the Hon'ble Court, how could the regulators at every step fail to notice it?

3.7 The Hon'ble Court in its decisions in case of Karnataka, Goa and Odisha held the mining industry at fault only and absolved the regulators of any acts of commission or omission. Whereas, it is the systemic failure of regulatory mechanism at the ground-level which led to irregularities/illegalities in mining in the first place and subsequently snowballed to attract wrath of the Hon'ble Court.

For example, in the case of Odisha in 2014, the Hon'ble Supreme Court blamed the mining industry for producing in excess of the EC limit and stopped operation in 102 mines in Odisha, despite the fact that the Central and State governments were fully in know of this and the State gave clearance, transport permits, collected royalties and other taxes.

3.8 The legal lessees are being gradually eased out and replaced with people with doubtful credentials who are not connected with mining. The operators therefore get changed but regulatory machinery remains the same. Since these illegal operators have scant knowledge of mining operations, they do not provide any safety to workers or pay any attention to environment and scientific mining. Further States also stand to lose revenues from minerals.

3.9 As a result of the ineffective regulatory mechanism and subsequent adverse decisions by the Hon'ble Supreme Court in various States, mining sector has been crippled and mines have either shut down as in Goa or working at a reduced level as in Karnataka, Odisha and Jharkhand. As a result, not only the people directly employed in these mines lost their livelihood, it also affected the indirect livelihood of a population 10 times that of the directly employed. It is worth highlighting that when a mine is closed, it is the direct and indirect employees who suffer the most and are devastated. The scenario in case of Aravalli hills, Western Ghats, eco-sensitive areas and minor minerals such as sand mining, stones is no different and large-scale unemployment is prevalent.

3.10 **Karnataka**:

The Hon'ble Supreme Court in its judgement dated 29.07.2011 and 26.08.2011 in the matter of *Samaj Parivartana Samudaya vs. State of Karnataka* banned all mining activities in Bellary, Chitradurga and Tumkur districts, owing to encroachment and dumping beyond the lease area. As a result, mining in 166 leases got stopped.

The Hon'ble Supreme Court directed for compensatory payment for mining beyond lease, bank guarantee for implementing Reclamation & Rehabilitation Plan and categorized mines into 3 categories (A, B, C) for punitive action. A restriction on maximum annual production of 35 MT of iron-ore was placed for Bellary, Chitradurga and Tumkur, allowing only 46 'A' and 69 'B' category mines to operate after R&R, while 51 'C' category mines were cancelled.

**Repercussions**:

a) Direct employment loss in 3 districts was 80,000 along with a loss of indirect employment to the tune of 8,00,000.
b) The Government stood to lose Rs 10,000 crore annually in revenues and commercial banks suffered an asset deterioration of up to Rs. 50,000 crores.
c) Impact on steel sector: it severely affected raw-material supply to the steel plants in Karnataka, who could neither make up the deficit from low grade ore from Goa nor bring in the required quantities from eastern sector due to high transport costs.
d) Loss of production and employment in downstream industries such as automobiles, consumer durables, machine tools and engineering products, resulting in 2,00,000 jobs being jeopardized in downstream industries.

3.11 **Goa:**

The Hon'ble Supreme court in its judgment dated 5$^{th}$ October, 2012 suspended all mining operations in Goa, owing to renewals pending with State for a long time. Later in 2014, after placing new checks and balances, the State granted renewals to leases with an annual production cap of 20 MT. However, on 07.02.2018, the

Hon'ble Court cancelled the renewal orders of 88 mines and operations were stopped w.e.f. 16.03.2018.

**Repercussions:**

a) More than 1,00,000 direct jobs lost in Goa, along with that of 3,00,000 mining dependents (truck owners, drivers, repair shops, petrol-diesel pumps, hotels, vegetable shops, banks and lenders).
b) The closure of iron ore mining in Goa has adversely impacted the state's economy. The total revenue (Central and State governments) of Rs. 5,830 crore has been lost annually.
c) Irreparable damage to Goa's economy and people. Many people had taken loans for trucks, barges were unable to repay it.

3.12 **Odisha:**

Owing to excess production beyond Environment Clearance and other statutory limits, the Hon'ble Supreme Court in its judgement dated 02.06.2017 in the matter of Common Cause v. Union of India, imposed penalty @ 100% of the price of excess production on 102 iron and manganese ore leases in Odisha.

**Repercussions:**

- Many mines were unable to pay the penalty and had to stop operation. Many mines have also become unviable to operate.
- Closure of number of mines has led to huge loss in employment – both direct and indirect.

**Table – III**
**Number of Job Losses in Karnataka and Goa**

| State | Year | No. of mines closed | Districts | Direct job loss | Indirect job loss | Total job loss |
|---|---|---|---|---|---|---|
| Karnataka | 2011 | 166 mines. Out of which, 46 were in Category-A, 69 in Category-B and 51 in Category-C. | (Bellary+ Chitradurga + Tumkur) | 80,000 | 8,00,000 | 8,80,000 |
| Goa | 2012<br>2018 | All mining activities closed in Goa<br>Renewal orders of 88 mining leases were set aside. | Entire Goa | 1,00,000 | 3,00,000 | 4,00,000 |

**Source:**
1. For Karnataka: The Hindu Business Line article "*Mining ban will cripple economy*", Aug 2011 https://www.thehindubusinessline.com/opinion/columns/rajiv-kumar/mining-ban-will-cripple-economy/article20322182.ece1
2. For Goa: Goa Mineral Ore Exporters Association (GMOEA)

## (ii) Impact of Hon'ble Supreme Court Judgment on Mineral Production in various States

3.13 Following figures depict that, after the Judgment of Hon'ble Supreme Court, the iron ore production in Karnataka, Goa and Odisha has declined drastically. The drastic reduction in mineral production in these states has led to huge unemployment, both in the mining sector as well as other sectors having linkages to it.

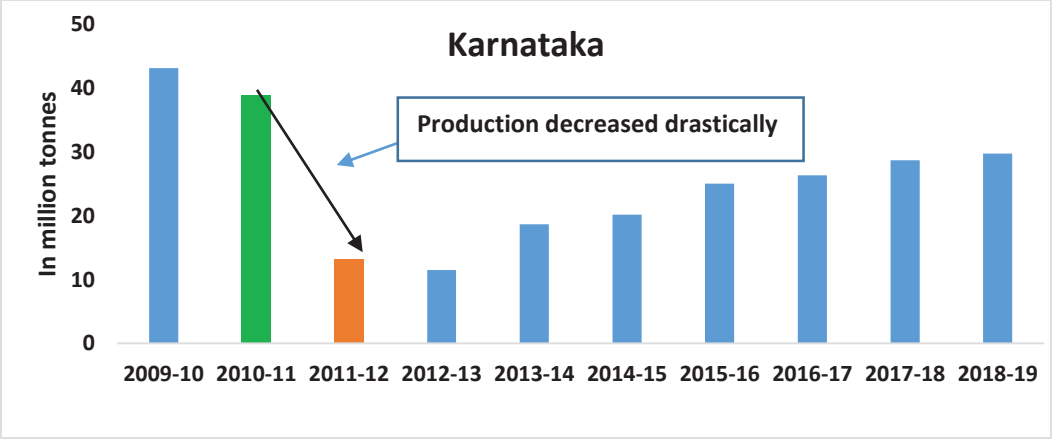
**Table – III (a)**
**Production trend in Karnataka, Goa and Odisha**

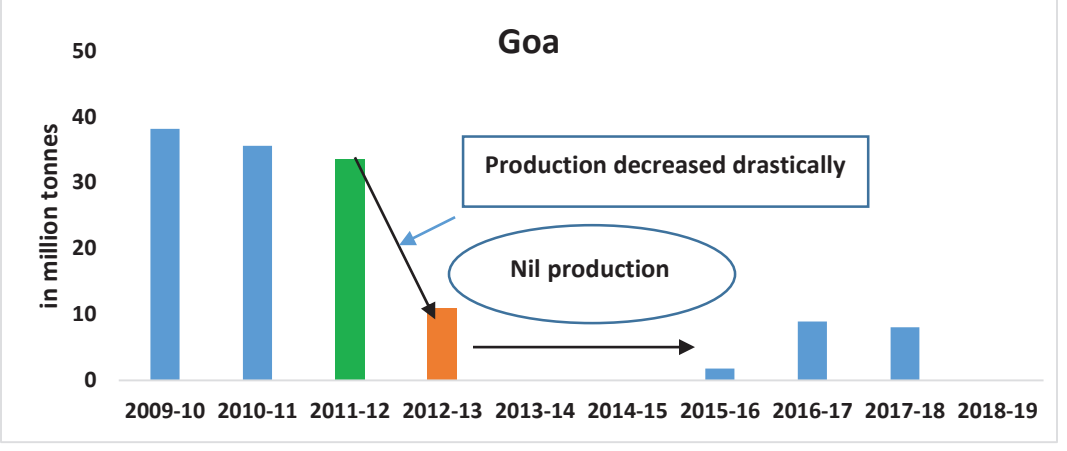
**(in million tonnes)**

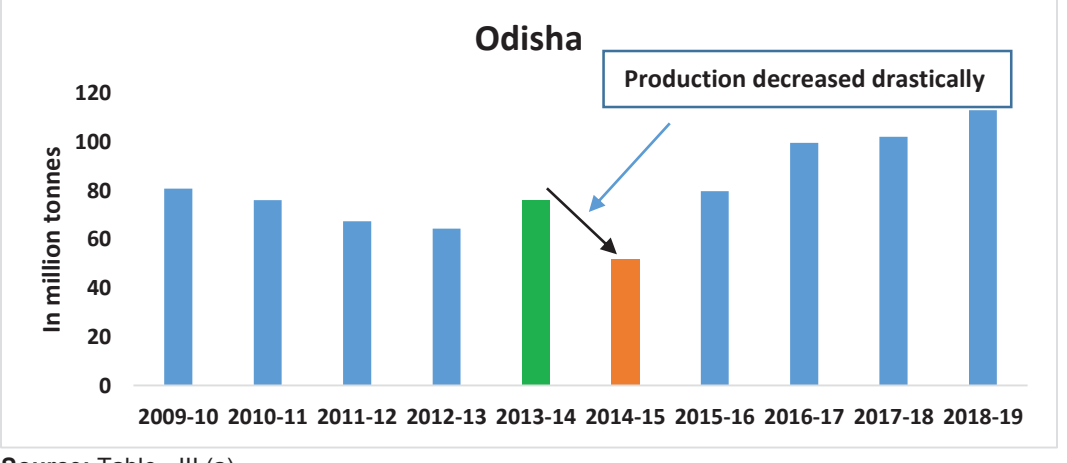
| Year | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Karnataka** | 43.16 | 38.98 | 13.23 | 11.50 | 18.69 | 20.21 | 25.03 | 26.36 | 28.72 | 29.80 |
| **Goa** | 38.14 | 35.56 | 33.64 | 10.90 | 0 | 0 | 1.80 | 8.93 | 8.04 | 0 |
| **Odisha** | 80.90 | 76.13 | 67.41 | 64.44 | 76.19 | 52.02 | 79.86 | 99.61 | 102.18 | 113.06 |

**Source:** Indian Bureau of Mines (IBM), Indian Mineral Yearbook

## Chart – III (a)
## Impact of Hon'ble Supreme Court's judgment on Iron ore production in Karnataka, Goa and Odisha




**Source:** Table - III (a)

3.14 Severe penalties imposed by Hon'ble Supreme Court on the mines in Karnataka, Goa and Odisha have led to devastating impact on mines in these states leading to either stoppage or restricted mineral production.

3.15 As a result, the closure / limitation of production has crippled the mining industry and adversely impacted both direct and indirect employment. Many mines are finding difficulty to operate and closing down one by one, further creating a slump and increasing unemployment rate in remote and tribal regions. Although the mining sector employed 23.23 lakh people in 2011-12, various adverse judgments by the Hon'ble Court in Karnataka, Goa and Odisha has led to significant drop in employment in the mining sector.

3.16 So far, instead of recommending improvement in the regulatory and monitoring mechanism, the Hon'ble Court has blamed the mining industry and directed adverse action against it, resulting in not only closure of several mines, but huge loss of livelihoods for the people – both directly employed and indirectly dependents. Closing of an industry is not the solution. Rather the focus should be on how to improve the regulatory mechanism – both at planning as well as implementation level.

3.17 Frequent mining bans and restrictions on ore production has pushed India out of the league of mining destinations in the world, rated annually on the basis on investment attractiveness and potential in mining. According to the Fraser Institute's Annual Survey of Mining Companies, in 2016, India was among the 10 least attractive jurisdictions globally (ranked 97 out of 104) for mining and exploration. In 2017 and 2018 Surveys, India was not even in reckoning.

## (B) Poor policy planning

### (i) Auction

3.18 Experienced gained so far in auction of mineral blocks- both coal and non-coal – has not at all been encouraging. While, in case of cancelled coal blocks, auction has been unable to operationalize many of the already developed mines, in case of non-coal blocks auction has failed to bring into operation any of the greenfield projects despite lapse of more than 4 years. Auction creates artificial scarcity and is an unnecessary costly way of developing mineral resources.

The details of the current status of the auctioned non-coal blocks is as under:

**Table – III (b)**
**Status of auctioned Non-Coal Mineral Blocks (as on 26th July 2019)**

| | | |
|---|---|---|
| Total concessions (including ML and PL-cum-ML) offered for auction | 120 | - |
| Actually auctioned | 68 | 8 — Prospecting Licence-cum-Mining Lease (PL-cum-ML)<br><br>60 — Mining Lease (42 Greenfield + 14 'C' Category iron ore mines of Karnataka + 4 leases expiring in 2020) |
| — PL-cum-ML (composite license) granted | 1 license | Out of 8 PL-cum-ML |
| — Execution of MLs (Greenfield blocks) | NIL | No ML has been executed out of 42 Greenfield auctioned mineral blocks. |
| — Execution of ML for 'C' category iron ore mines of Karnataka | 4 | These are from 14 'C' category mines auctioned in Karnataka which were already operational earlier and where the Hon'ble Supreme Court had ruled that FC and EC granted to earlier operational lessees will automatically be transferred to successful bidder. |

**Source**: Ministry of Mines

3.19 Out of 120 blocks offered for auction, 68 mining leases have been auctioned – 42 greenfield, 18 brownfields (14 previously operational 'C' category mines of Karnataka having valid EC and FC + 4 leases expiring on 31st March 2020) and 8 PL-cum-ML.

3.20 Even after 3-4 years of auction, all the greenfield projects are far from being operational. None of these has been able to reach mine-development stage and are languishing for want of various clearances. In case of 14 auctioned 'C' category mines in Karnataka, despite being previously operational and possessing valid EC and FC, only 4 have been able to operate and remaining 10 are yet to receive all permissions / approvals to start mining. Only 1 PL- cum- ML has been granted so far under the auction regime in last 4 years.

**Table – III (c)**
**Status of auctioned / allotted Coal Mines (as on 6th March, 2019)**

| | | |
|---|---|---|
| Cancelled by Hon'ble Supreme Court | 204 | - |
| Net auctioned and allotted | 84 | 31 auctioned (but allotment of 6 auctioned coal mines was cancelled). Net effective mine auctioned to private sector are 25 only.<br><br>Balance 59 allotted to Public Sector Undertakings |
| Coal mines under development | 8 | - |
| Coal producing mines | 17 | 13 mines are from 42 Schedule II mines which were already operational / under development prior to cancellation of coal blocks and where EC / FC are transferable as per judgment of the Hon'ble Supreme Court.<br><br>Balance 4 mines are from the Schedule III mines where some advancement was made for development prior to their cancellation. |

**Source**: Ministry of Coal, FIMI analysis

3.21 The Hon'ble Supreme Court in its judgement dated 25th August, 2014 cancelled the allocation of coal blocks**.** Prior to cancellation, 29 of the mines were already producing coal. However, post cancellation and subsequent allocation of 79 mines, only 17 mines have come into production. While coal output was around 50 MT prior to cancellation of coal blocks, post-cancellation and reallocation coal output has barely reached about 25 MT in 2018-19. This adversely affected the employment in the sector.

3.22 Clearly, auction has failed to bring mines into operation and thus create the much needed dominoes effect in the economy. Most adversely, auction has resulted in negative NPV for many potentially viable mineral deposits and has put these out of the list of prospects. Since many of these deposits will not be developed, it means less employment opportunities, lower production and hence lower revenues than what could have otherwise been accrued to States as mineral royalty. The experience of coal mines acquired through auction is a testimony to this; most of the coal mines could not go into production. And the country's imports of coal go on escalating year after year and stood at 235 million tonnes in 2018-19.

3.23 In nutshell, auction has been a total failure in execution and operationalisation of mines in the country. As a result, job creation in mining has almost come to a halt under the auction regime.

3.24 Instead of earning more revenue from auction and other means, which may never be utilised in these backward and tribal areas, the State should attract more investment in mines in these areas which will provide employment and lead to socio-economic development.

**(i) a – Auction score card mine granted pre and post auction**

3.25 The fact that auction system has utterly failed is evident if one compares the grant of mining leases before auction and after the introduction of auction in 2015.

**Table – III (d)**
**Licences granted before and after auction regime**

| | Before auction regime | | After auction regime (2015 - 2019) (as on 26th July, 2019) |
|---|---|---|---|
| | (2006 - 2010) | (2010 - 2014) | |
| RP granted | 74 | 49 | Nil |
| PL granted | 192 | 496 | 1 (PL-cum ML) |
| Execution of ML | 2754 (Mostly Greenfield) | 494 (Mostly Greenfield) | 4 (all Brownfield) |

**Source**: Indian Bureau of Mines (IBM)

**Execution of ML:** While 2754 mining leases were executed during 2006-10 and 494 mining leases were executed during 2010-14, most of which were greenfield, after the auction regime, only 4 brownfield mining leases have been executed, having pre-existing EC and FC. In the auction regime, not even a single mining lease has been executed in case of green field auction blocks.

**Execution of RP and PL:** The experience in case of exploration (RP, PL) under auction regime has been very discouraging: only 1 PL- cum- ML has been granted so far under the auction regime in last 4 years. On the contrary, 123 RPs and 688 PLs were granted prior to the auction regime during 2006-14.

3.26 It can be concluded that, before auction, there was high opportunity to create new jobs through granting the mining leases, but since the auction regime started in India w.e.f. 12th January 2015, the mining sector has been crippled- no exploration and no green field mines- and hence no new employment opportunities in mining.

## (i) b – Pending applications prior to introduction of auction

3.27 As on 05-05-2014, a large number of applications were pending for disposal with various Central and State governments. All these pending applications lapsed with the introduction of auction w.e.f. 12.01.2015. The details are represented in the following table:

**Table – III ( e)**
**Pending applications as on 05-05-2014**

| | State Government level | Central Government level | Total |
|---|---|---|---|
| Reconnaissance Permit | 643 | 15 | 658 |
| Prospecting Licence | 19891 | 123 | 20014 |
| **Mining Leases** | **42861** | **164** | **43025** |
| Letters of intents (LOIs) | 265 | - | 265 |
| Renewals | 2515 | - | 2515 |
| **Total** | **66175** | **302** | **66477** |

**Source**: Ministry of Mines

Prior to auction regime in India, 66,477 applications were pending with both Central and State governments, including 43,025 mining lease applications.

3.28 The reason why such a large number of applications for RP, PL and ML were pending with the State governments was that though MCR, 1960 provided for a timeframe for disposal of RP, PL and ML applications, the State governments did not pass any order within stipulated timeframe. Since no order was passed, no cause for action arose with the applicant to file revision application before the Central Government. The result was that these were left unattended for years together. Even applications for the minerals which were required to be referred to Central Government under First Schedule of the MMDR Act, 1957, it required herculean efforts on the part of the applicant to get these forwarded. Since the recommendations of the State governments were not complete, lot of time was wasted in seeking clarifications by the Central Government. Consequently, applications remained undisposed of for years and years altogether. At the Central Government level, there was no timeframe for final disposal of applications. That explains why 302 RP, PL and ML applications were pending at the Central Government level as on 5$^{th}$ May, 2014.

3.29 Even if 50% of these mining lease applications (21,512 = 43025 / 2) had been accepted, there would have been huge employment generation in the mining sector. Assuming the average employment in a mine to be 50, these 21,512 mining leases could have generated 10,75,600 (=21,512 x 50) i.e. 10.76 lakhs direct employment. With an employment multiplier of 1:10, 107.6 lakhs indirect employment would have been created in the economy, had the above mentioned

applications been accepted timely and granted by the Central and State governments. However, auction system just erased the opportunity for the mining sector to create large number of new jobs in the economy. The following table shows the total number of jobs (direct and indirect) that could be created by the mining sector if there was no auction regime:

**Table – III (f)**
**Loss of Job opportunity due to lapse of pending applications**
**(as on 05-05-2014)**

| | Direct job | Indirect job | Total loss of job opportunity |
|---|---|---|---|
| **Mining** | (21512*50) = 10.76 lakhs | 107.6 lakhs | **118.36 lakhs** |

**Source**: FIMI analysis, based on National Mineral Policy – Report of the High Level Committee, 2006

3.30 Time is a precious factor in business and has significant implications for companies as well as NPV of mining projects. The above mentioned applications were pending due to indifference of the Central and State governments. Had the above mentioned applications been considered and granted timely, the mining sector could have created additional 118.36 lakh jobs in the economy.

## (ii) Working mines expiring on 31st March, 2020

### (ii) a – Non-Captive Leases

3.31 In accordance with Section 8A(6) of the MMDR Amendment Act, 2015 the tenure of the 329 numbers of non-captive mining leases will be expiring on 31st March, 2020 as per the following break-up besides the other non-captive mining leases which will be expiring post-March, 2020 consequent to the end of their 50 years grant period. This is expected to cause serious disruption to mineral supply-chain and employment across India.

**Table – III (g)**
**Status of non-captive leases expiring on 31st March, 2020**

| S. No. | State | Working Mines | Non-Working Mines | Total Mines |
|---|---|---|---|---|
| 1. | Andhra Pradesh | 3 | 6 | 9 |
| 2. | Goa | 0 | 184 | 184 |
| 3. | Gujarat | 5 | 6 | 11 |
| 4. | Himachal Pradesh | 1 | 1 | 2 |
| 5. | Jharkhand | 6 | 12 | 18 |
| 6. | Karnataka | 6 | 42 | 48 |
| 7. | Madhya Pradesh | 1 | 12 | 13 |
| 8. | Maharashtra | 0 | 9 | 9 |
| 9. | Odisha | 24 | 7 | 31 |
| 10. | Rajasthan | 2 | 2 | 4 |
| **Total** | | **48** | 281 | 329 |

**Source**: Ministry of Mines' CCEC meeting held on 12th Oct. 2018 at Ahmedabad

3.32 The details of the mineral-wise mining leases expiring on 31st March, 2020 are as under:

**Table – III (h)**
**Mineral wise leases expiring on 31st March, 2020**

| Mineral | Working | Non-working | Total |
|---|---|---|---|
| Iron ore | 24 | 208 | **232** |
| Manganese ore | 7 | 14 | **21** |
| Bauxite | 6 | 8 | **14** |
| Limestone | 2 | 21 | **23** |
| Chromite | 4 | - | **4** |
| Graphite | - | 2 | **2** |
| Garnet | - | 1 | **1** |
| Others | 5 | 27 | **32** |
| **Total** | **48** | **281** | **329** |

3.33 The closure of mining activities in India has already led to a loss of large number of jobs and lease expiry of additional 48 working mines on 31st March, 2020 will further add to the unemployment crisis. However, many of these mines are large and employ hundreds of workers. 50% of these working mines are of iron ore, most of which have large production capacity, some mines employing 1000 or more people. Assuming the average employment in these working mines to be 500, there will be loss of 24,000 direct jobs (=48 mines x 500 people) and 2,40,000 indirect jobs. Hence, closure of the working mines expiring on 31st March, 2020 will lead to loss of 2,64,000 jobs (=24,000 direct jobs + 2,40,000 indirect jobs). Closure of these mines will create serious disruption to mineral supply-chain and employment across the country.

## (ii) b – Shut down operations for 3-4 years

3.34 Although the process of auctioning of expiring leases can only be commenced once the lease period is over according to Section 8A (4) of MMDR Amendment Act, 2015 and Rule 18 of MCR, 2016, the Government of Karnataka has already put up 4 such leases which have been auctioned in July, 2019. While these mines may obtain relief in the form of transfer of Environment Clearance, they will have to obtain fresh Forest Clearance, as it is co-terminus with the lease period. Obtaining clearances, being a time-consuming process, will result in delay in operations in these mines.

3.35 On the other hand, 50% of the working mines expiring in 2020 are in Odisha which have huge stockpiles. These mines in Odisha have huge stockpiles of iron-ore at the mine-head and thus auction of these mines will lead to additional challenge of valuation and liquidation of these ore-stockpiles. It may lead to litigation as seller (existing lessee) and buyer (new lessee) may fail to reach a consensus over stockpiles and infrastructure in the mine. The auction of cancelled coal blocks is a testimony to this and has been fraught with similar valuation issues, which are yet to be resolved. Further such auctioned blocks are likely to take 3 to 4 years' time for getting the clearances, executing the lease deed and resuming production from such mines. As such it is imperative that the physical output of the minerals from such mines can only be available not prior to year 2024-25. In this way the auction process disrupts the whole production procedures. Any delay in the process will lead to disruptions in mineral production and eventually leading to a significant drop in country's employment as well as the socio economic development.

3.36 Any disruption in supplies, howsoever for limited time, is bound to disrupt the production chain of core industries and has catastrophic consequences on the country's economy. This will result in massive unemployment leading to the social unrest besides adversely affecting the development of the local area. Closure of mines in Odisha and Goa are testimony of the same which has already caused massive job losses and adversely impacted states' revenue. Their livelihood became highly uncertain as production cap, e-auction and lots of other restrictions lowered the mining capacity that has led to stagnation in the mining industry. Lakhs of lives are hanging in uncertainty due to the unfair policies prevalent in India. Such policies will be hard to find anywhere else across the globe.

## (iii) Beach Sand Minerals (BSM)

3.37 As per the Ministry of Mines Notification No. G.S.R. 134(E) dated 20th February, 2019 the mining of beach sand minerals is allowed only for Government companies and the role of the private sector has been eliminated. Private sector has been playing active role in mining BSM and contributing to the current revenue of about Rs. 5000 crores annually since the opening of this sector to private sector. Further, this sector has been exporting BSM to the tune of Rs 4000 crores annually. It happens only in India that instead of improving the regulatory regime, we blame only private industry which in this case resulted in job loss to lakhs of workers engaged directly and indirectly. Closing of an industry is not the solution.

3.38 Due to the closure of BSM mines of private sector, country is now largely dependent on public sector units for beach sand minerals. However, since the public sector is unable to produce enough BSM to meet the country's demand, India has become an importer from being an exporter of BSM.

## (iv) Exploration and mining of minerals in offshore areas

3.39 As if the complete elimination of role of private sector in mining of beach sand minerals was not enough, Department of Atomic Energy vide its Notification dated 27th July, 2019 prohibited the private sector to explore and mine in offshore areas. While 62 offshore mineral blocks were granted for exploration in 2011, the present notification has taken away rights of the LOI holders on the pretext that these offshore blocks occur in continuity with onshore beach sand mineral (BSM) deposits and hence private sector should be banned as in the case of BSM. However, this Notification is also in contravention of the direction given by the Hon'ble Delhi High Court in its judgment dated 26th April, 2019 directing execution of exploration licence in favour of the LOI holders of these 62 blocks.

3.40 Exploration and mining in offshore is a niche area and has lot of potential for unleashing prospects of domestic production of many rare and critical minerals. It requires state-of-the-art technologies, huge investment and skilled expertise, which are usually available with private sector companies only. Prohibiting private sector participation in such areas will only lead to spending of tax payers' money by PSUs, without any development of offshore mineral deposits and continued dependence on imports. With such restrictions, India is also restricting its potential to create new and skilled jobs in such emerging and hi-tech fields.

3.41 It is strange that India does not believe in involving its private sector in atomic or strategic minerals, whereas it is negotiating to procure the same minerals (uranium, rare-earths, etc.) from private mines in countries like Australia.

## (v) Severe delays in grant of clearances

3.42 Despite being rich in mineral resources and potential to create huge jobs in mining sector, the performance of the mining sector presently is limited. Inherent delays in processing and grant of Environment Clearance (EC) and Forest Clearance (FC) is one of the major reasons for low conversion of RP/PL/ML applications into mines and subsequent employment generation in mining sector.

3.43 For instance, deep-seated minerals such as nickel, gold, copper, lead-zinc, diamond, etc. are discovered with latest technology and the success rate generally is 1:100. In such a risky venture such as exploration, where the element of uncertainty is very high, the application has to pass through a minimum of 140 tables (= officials) which includes 41 tables at the office of the Directorate and the Revenue authorities at the State level, 18 tables at the State Mines Secretariat and 40 tables at the Ministry of Mines which includes the Geological Survey of India. In some cases, the PL application has to pass through 41 tables in the Forest Departments of the State and MoEFCC. The movement of an application is illustrated in **(Annexure I).**

3.44 In the current regime and practice, it takes minimum 3-5 years for applicants to obtain EC and FC for grant of mining leases and at times there is no guarantee that mining lease will be granted. For example, after a gap of 25 years, a world-class diamond deposit was discovered by RioTinto in Bunder, Madhya Pradesh in 2004. Although RioTinto was able to obtain EC, but it was later denied permission for FC and had to wind up after having spent 13 years and Rs. 500 crores on the Bunder project.

3.45 As a result of delays as well as uncertainty in obtaining clearances for mining, entrepreneurs are discouraged to invest their time and money for exploration / mining in India. Thus, there is lesser mine development in India compared to its potential and accordingly much less employment generation.

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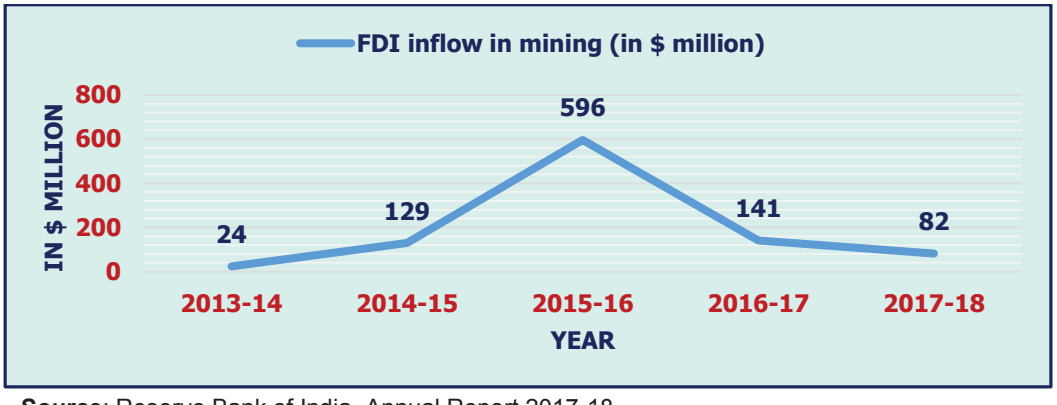
## IV – FLIGHT OF DOMESTIC CAPITAL TO FOREIGN COUNTRIES FOR MINING AND EMPLOYMENT THEREOF

Foreign Direct Investment (FDI) helps to boost the domestic industrial and manufacturing activities which in turn generates massive employment in a country. But, even though, 100% FDI has been permitted in mining sector since Februry 2008, the FDI inflows in the mining sector have now hit the slow lane. After touching a peak of $596 million in 2015-16, FDI inflow into mining has tanked to $82 million at the end of 2017-18.

**Chart – IV**
**FDI inflow in Mining**




**Source**: Reserve Bank of India, Annual Report 2017-18

4.2 In order to increase employment, productivity, export and reduce imports, it is necessary to increase FDI in the mining sector. And for that, India needs supportive mineral regime, to attract both domestic and international companies to explore and mine in India, which will help to create numerous employment opportunities, while attracting high-end technology , modern processes as well as skilled resources.

4.3 However, the prevailing sector unfriendly Act and Rules have not only forced the foreign companies to leave India but has also driven away the domestic mining companies, who have invested over US$ 3.2 billion in 22 mining projects in Australia, Indonesia and Africa alone, during the period 2010-2014 thus depriving remote and tribal parts of India the opportunity for economic development. Over and above this, they have invested in another 23 projects, where the size of the investment is not known **(Annexure-II).**

4.4 An idea of acquisition of mining assets by Indian companies in Australia, Indonesia and Africa during 2010-14 can be had from the following table:

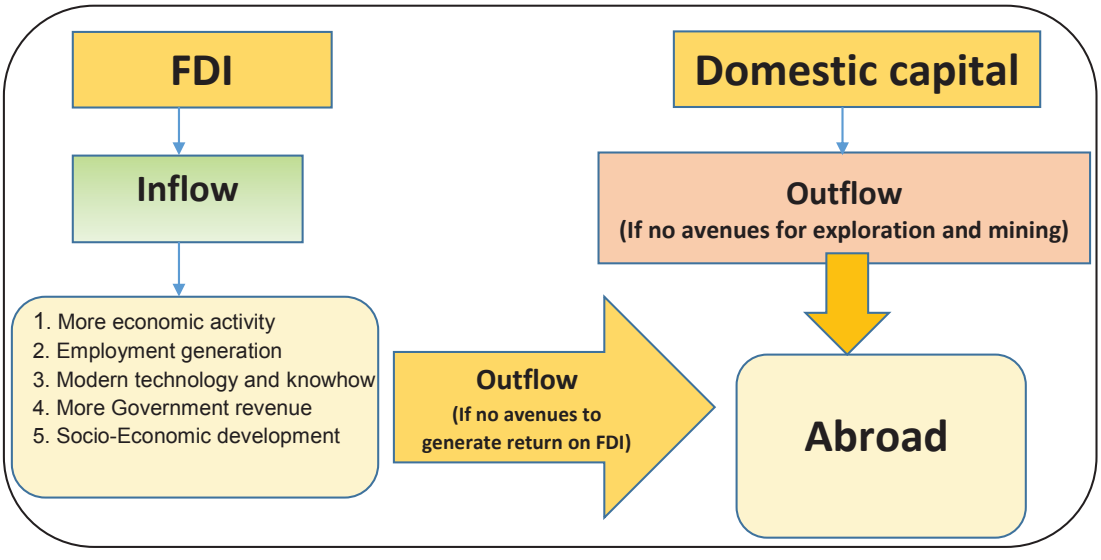
**Table - IV**
**Transaction details**

| Total No. of transactions | Total value of transactions |
|---|---|
| 22 | > US$ 3.2 billion |
| 23 | Undeclared |

**Source**: Blake, Cassels & Graydon LLP

4.5 Ernst and Young (E&Y) analysis of Thomson ONE Data has brought out that in 2015, there were 25 deals of the value of US$ 721 million which went upto 26 deals of the value of US$ 2166 million in 2016. This implies that Indian capital is moving out of the country to generate socio-economic development and create jobs abroad.

**Chart – IV (a)**
**FDI Inflow vs. Outflow**




Source: FIMI

4.6 On the other hand, the countries with supportive regime have been able to attract significant investment. Just the state of Ontario, in Canada, has been able to attract over US$ 2.4 billion only in gold mining projects within a period of only three years between 2012 and 2015 **(Annexure-III)**. This shows that the supportive mineral regimes have been able to attract sizeable investments during the periods when India has seen only trickles of investments.

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# V – FUTURE POTENTIAL TO CREATE EMPLOYMENT

Mining sector is crucial for employment generation and development of an economy. In coming years India is expected to witness significant demographic growth and a disproportionate expansion in the working age population. To absorb much of this labour force, the mining sector need to play an important role. In 2011-12 the mining industry employed 0.5% of India's workforce i.e. approx. 23.23 lakh people in the country, well below its true potential. Mining sector has the potential to generate around 5 crores job by 2025.

5.2 In India, the practice of hiring "casual" labourers rather than permanent employees is widespread. As per Deloitte's report titled "Human Resource & Skill Requirement Study for Mining Sector (2016)", mining sector's employment was around 23.23 lakh in 2011-12 and it is estimated that direct employment in the mining sector will increase to 26.45 lakhs by 2021-22 in business-as-usual (BAU) scenario. However, according to Ministry of Mines Strategy Paper, "Unlocking the Potential of the Indian Minerals Sector (2011)", with proper regulatory mechanism and Government support, the Indian mining sector can create 25 lakhs direct employment and total 5 crores jobs by 2025 in accelerated growth scenario.

**Table – V**
**Future employment by mining (in lakh)**

| Employment | 2012 (Actual) | 2022 (Projected employment in BAU scenario) | 2025 (Projected employment in accelerated growth scenario) |
|---|---|---|---|
| **Direct Employment** | 23.23 lakh | 26.45 lakh | 48.23 lakh |
| **Indirect Employment** | 232.3 lakh | 264.5 lakh | 482.3 lakh |
| **Total employment** | 255.53 lakh | 290.95 lakh | 530.53 lakh |

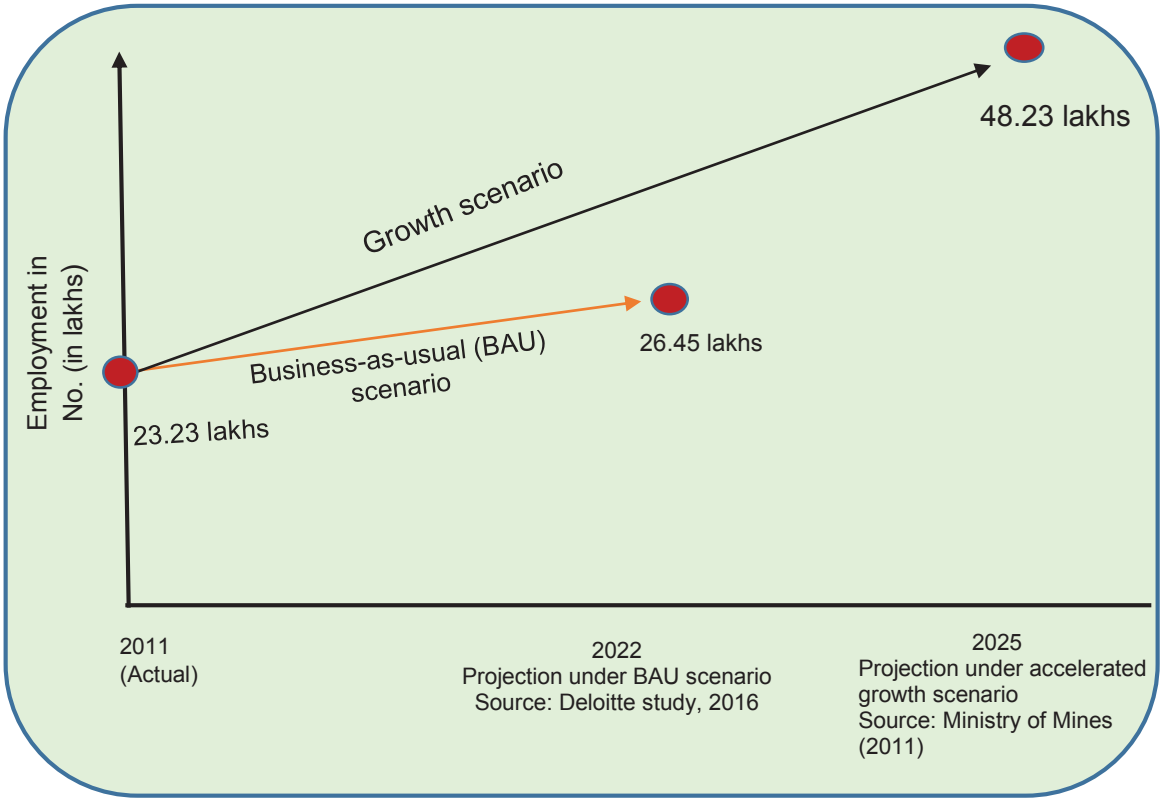
**Source**:
**For Direct Employment**

1. 2012 and 2022 values: Deloitte Report, "*Human Resource & Skill Requirement Study for Mining Sector*", 2016
2. 2025 values: Ministry of Mines, Strategy paper, *"Unlocking the Potential of the Indian Minerals Sector",* 2011

**For Indirect Employment**

1. FIMI analysis, based on National Mineral Policy – Report of the High Level Committee, 2006

**Chart – (V)**
**Direct Employment Potential in Mining Sector**




**Source**: Table V, FIMI

5.3 However, it is sad that India in the last seventy years since Independence in 1947, has not been able to formulate a stable and attractive policy for the development of its resources and continues to be highly unexplored despite having good geological prospectively. Excessive government intervention and uncertain regulatory environment have affected outcomes in the mining sector. The MMDR Act as amended in December 1999, was a good piece of legislation. It is not the Act which failed; rather it is the regulatory regime in the States, right from political to civil servants, which failed and we blamed the statute. Let us therefore reform and streamline the regulatory regime to be in line with modern and positive outlook.

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# VI – REVIVING MINING SECTOR TO CREATE MORE JOBS

Mining is the largest source of employment in remote and tribal regions, next only to agriculture. Mining results in a positive impact on the socio-economic development of local communities and employment of rural youth. Mining imparts livelihood skills to the youth and training for engagement in the industry as well as in the associated service sector. Mining could still bridge India's unemployment gap if its potential is properly tapped.

## 1. Extend the lease period of captive and non-captive mines:

6.2 India is staring at huge employment loss due to expiry of tenure of 329 non-captive mining leases on 31st March, 2020. Out of 329 non- captive, 48 are working mines. The closure of these mines will hit production of about 50-60 million tonnes of raw material, mainly iron ore and is expected to result in loss of about 2,64,000 jobs, direct and indirect.

6.3 Many of the major steel plants in the country are fully dependent on the sourcing of raw materials from these non-captive mines. There would be an adverse impact on the steel sector which do not have captive mines due to crunch of the raw material availability. Manufacturing sectors which are dependent on supplies from non-captive mines will have to resort to imports leading to rise in production cost.

6.4 This will also have cascading effect on the down-stream industries. Since out of the 329 non-captive mines, 101 mines are to be auctioned post their expiry in March 2020, it may take about 3 to 4 years to get these leases into operation and during this interim period, livelihood opportunities of the people dependent on mining activities will be lost.

6.5 Therefore, in order to avert the unemployment crisis there is a need to extend the grant of mining lease period till 2030, and thereafter by 20 years at a time beyond stipulated grant period of 50 years in respect of both captive and non-captive leases of private sector as applicable for Government companies.

## 2. Replace the auction system with FCFS:

6.6 Auction for non-coal minerals was introduced vide amendment of the MMDR Act, 1957 on 12th January, 2015. Although 68 non-coal mineral blocks have been auctioned, out of 120 blocks offered for auction, the experience gained so far has not at all been encouraging and only 4 brownfield blocks (previously operational 'C' category mines of Karnataka having valid EC and FC) have been

able to commence production. Auction has failed to bring into operation any of the greenfield projects despite lapse of more than 4 years.

6.7 Auction is an unnecessary costly way of developing mineral resources and leads to delays in mining. It creates artificial scarcity in the economy and removes the opportunity to create new job opportunity in mining sector as well as in Indian economy. Mechanism of auction is not conducive to mineral development and revenue-earning for the State.

6.8 In the Presidential Special Reference No. 1 of 2012 (Under Article 143(1) of the Constitution of India) dated 27th September, 2012, the Hon'ble Supreme Court of India has observed that –

> *"even auction has a potential of abuse, like any other method of allocation".*
>
> *"Therefore, auction, an economic choice of disposal of natural resources, is not a constitutional mandate".*

6.9 By and large, almost all the resource-rich countries have adopted the system of First-Come-First-Served (FCFS) for their resource development, barring Russia and of late India and Indonesia. China has also adopted hybrid system for resource development (**Annexure-IV**).

6.10 FCFS has led to resource development and made countries resource-rich such as Australia, Canada, USA, Brazil, Chile, etc. Under the FCFS system, an agreement is entered with the Government with full checks and balances whereby there is annual financial/expenditure commitment (which differs from country to country) by the concessionaire to undertake minimum committed level of work, which goes on increasing every year.

**Suggestions for India**

6.11 In order to create more jobs in the mining sector, First-Come-First-Served (FCFS) should be adopted by India with effective checks and balances. This will encourage exploration in the country as well as lead to growth of mining, thereby resulting in generation of employment

- The private sector in future should be the main source of investment in reconnaissance, exploration and mining with right to seamless transition, transferability with security of tenure.

- The government agencies such as GSI, MECL etc. may continue to perform the exploration and surveys on regional basis and in areas where private investment is not forthcoming.

- First-Come-First-Served (FCFS) should be adopted in the case where there is a sole applicant for an area. Selection criteria should be adopted

in case where there are multiple applicants for an area thrown open by Government or otherwise.

- Level playing field should be provided for both private (captive and non-captive) and Government sector companies in terms of tenure of leases, area selection etc.

### 3. Improve the regulatory mechanism:

6.12 Lack of adequate regulatory mechanism including oversight at the ground level has resulted in irregularities and subsequent restriction/closure of mines in the country. Closing of an industry is not the solution. For example, closure of BSM mines of private sector has brought adverse impact on employment, downstream industries. Focus should be to improve the regulatory mechanism – both at planning as well as implementation level. The Government should improve the regulatory mechanism for giving clearances, management of environmental pollution and preservation of natural resources with which the lives and livelihoods of people in mining area are intricately related. It is imperative for the Government to look into its mineral administration and strengthen the monitoring mechanism, especially at the State level.

6.13 One of the fundamental and systemic challenges in mineral administration today is the lack of adequate capacity and expertise at the state-level, which is thwarting serious and timely implementation of reforms initiated by Central Government. While earlier the Directorate of Mines and Geology (DMG) in states used to be a very technically qualified department, its capacity in recent decades has drastically reduced. It is therefore very necessary to improve skills and institutional capacity of state DMGs.

6.14 Considering the role of states in mineral administration in the country and the present capacity of state DMGs, it is recommended to introduce a specialized cadre for mineral administration under the All India Services similar to Indian Forest Service, Indian Railway Traffic Service, Indian Postal Service, etc. Such a system will ensure that bright young officers are groomed particularly for mineral sector development in the country, including administration of royalty. It will ensure that these officers gain in-depth experience of the mining sector dynamics and develop strong insights necessary for ensuring an attractive legal and fiscal regime for mining in India.

6.15 Such an exclusive cadre will facilitate in developing expertise pertaining to exploration and mining and will greatly help in capacity-building of the DMGs over the years. It will greatly help in unlocking the potential of the Indian mineral sector and improve the mining sector's contribution to India's holistic growth as well as employment rate.

## 4. Rationalize the mining tax system:

6.16 The prime objective of mining is to extract and make the mineral available at a competitive price that justifies the investment in mine and employment is generated in the process – mining, supply chain and services all downstream industries. Thus, mineral taxation plays a key role in development of mineral resources and overall growth of the mining sector.

6.17 Mining industry in India is the highest taxed in the world with Effective Tax Rate as high as 64% for existing mines and 60% for new mines granted through auction. This compares with as low as 31.3% in Mongolia and highest at 45.5% in Indonesia. If we add all the imposts mentioned in **(Annexure- V(A),** the total financial burden will go beyond 100% of the cost of a mineral.

6.18 Moreover, India has a complex mix of corporate and mining taxes administered by different authorities **(Annexure- V (B)**). The final scenario which emerges as regards royalty and other taxation [post auctions] in a typical case study of iron ore mine is represented in **(Annexure-V (C)).**

6.19 The high taxation on mining in India along with inordinate delays and in grant and development of mines has already led to almost all major international players exiting the country. While resource-rich nations are competing to attract investors, in India it is difficult for investors with state-of-the-art technologies to explore, mine, contribute to socio-economic growth and create much-needed employment opportunities.

6.20 There is a need to rationalize the taxation and royalty structure for the mining sector in line with the resource-rich countries to ensure sustainable development and derive long-term benefits in terms of sustained raw material security for industries. If tax rates, royalties are reduced, both domestic and foreign investors will be attracted to invest in Indian mining sector, ultimately resulting in exploration and many deposits becoming viable to mine. In this way, new employment will be generated in the sector as well in the economy.

## 5. Export promotion:

6.21 Indian economy is heavily dependent on mineral imports. In 2016-17, total export value for all Minerals (excluding petroleum and natural gas) was Rs. 237,136.44 crores, whereas the import value for all Minerals was Rs. 478,858.57 crores, resulting in a huge trade deficit or negative balance of trade in the economy. Besides a drain on precious foreign exchange, these imports generate jobs in other countries at the cost of employment in India.

The Government of India's Economic Survey 2018-19 has highlighted:

> *"Investment, especially private investment, is the "key driver" that drives demand, creates capacity, increases labour productivity, introduces new technology, allows creative destruction, and generates jobs. Exports must form an integral part of the growth model because higher savings preclude domestic consumption as the driver of final demand. Similarly, job creation is driven by this virtuous cycle."*

6.22 While private investment in the mining sector is key to increased mineral production and subsequent employment creation, an aggressive mineral export regime is essential to stimulate and sustain the increased production. Exports are also essential to liquidate the minerals not required by domestic industry and earn foreign exchange.

6.23 Mine-head stocks of iron ore, chromite and manganese ore have been increasing for the past 10 years and huge stockpiles presumably of low grade ore have built up. For e.g., there is an unsold stockpile of 137.253 million tonnes of iron ore mostly of low grade in two States: 94.134 million tonnes in Odisha and 43.119 million tonnes in Jharkhand, as on 31st March, 2018 **(Annexure-VI).** This ore is neither required by the domestic steel plants nor can be exported because of the export duty of 30% on +58% Fe grade. These stockpiles occupy huge space inside mines, pose a challenge to scientific mining and environmental management.

6.24 Considering the fact that huge volumes of low grade ore are lying unutilized at the mine-heads for more than 10 years, Government of India should consider facilitating export of such low grade ores as are not required by domestic industries by removing export duty and ceiling restrictions. These will definitely lead to creation of additional employment opportunities in addition to earning foreign exchange and contribution to GDP, especially in the present situation when the Government is keen to reduce Current Account Deficit (CAD). It is estimated that the removal of export duty on iron ore and dispensation of ceiling on chrome and manganese ore has the potential to earn forex to the tune of US$ 3 billion per annum.

## 6. Need to protect mineral bearing zones:

6.25 In general, minerals, forests and tribal happen to be in the same location, as can be easily observed by overlapping the forest, tribal and mineral maps of India. Recently, there has been a strategy to systematically shut down the mining industry in forest areas by declaring eco-sensitive zones (ESZ) or wildlife corridors. Not only existing mines are being closed down due to such notifications, even future mining prospects are closed forever as the minerals are being systematically locked up by creating new ESZs and wildlife corridors.

6.26 While forests can be created in new areas and animal habitats can be created. But minerals are site-specific and immovable. It can't be created in new areas where there are no geological settings. With the help of mining generated revenue, we can create forest and animal habitat in new areas. Since minerals are site specific and immovable, there is an urgent need to protect and earmark Mineral-bearing Zones so as to develop these miner resources in to mines and generate employment as well as socio economic development in these areas.

## 7. Strict timeframe for disposal of applications:

6.27 Time is money for business. Ensuring timely facilitation/approvals by Government will significantly improve ease of doing business in India. However, prior to auction regime, 66,477 applications were pending with Central and State governments including 43,025 mining lease applications. More than 99% of these applications were pending at the State level. Although Section 30 of the MMDR Act, 1957 provides for an applicant / aggrieved party to approach the Central Government, however, since no order was passed by the State governments within the stipulated timeframe as provided in MCR, 1960, no cause for action arose with the applicant to file revision application before the Central Government. Infact in absence of any order passed within the stipulated timeframe, cause for action should have been considered as "deemed" for the applicant to approach the revision authority.

6.28 Further, at the Centre, the appeal is heard and decided by a tribunal led by Joint Secretary, Ministry of Mines, for whom this work is additional to his/her regular duties. As a result of this, it takes upto 3-4 years for the tribunal to take decision on a case. Consequently, many RP/PL/ML applications were pending with Government for years (66,175 with States and 302 with Centre, as on 05.05.2014).

6.29 To streamline the grant of mineral concessions (RP/PL/ML), it is suggested to amend Section 30 of MMDR Act, 1957 to incorporate timelines for State and Central Government to dispose the applications.

- There should be strict timeframe of 90 days for disposal of RP/PL/ML and other related applications at State level, failing which an applicant will have a cause for action to appeal to Central Government.
- The Tribunal of Central Government should be made full-time with a dedicated officer of the Ministry of Mines not below the rank of Joint Secretary, exclusively hearing the revision/appeals/pending applications. This Tribunal should give speaking orders on a case within 90 days which is implementable at the State level.

6.30 These reforms will help India to improve its regulatory mechanism in mining and put it on a growth path, this can create up to approximate 5 crore jobs in the mining, both direct and indirect.

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## VII – CONCLUSION: PROMOTE MINING = PROMOTE EMPLOYMENT

Mining generates employment opportunities in remote and tribal regions of the country, where no other industry ventures. Mining involves identifying and extracting mineral resources hidden in the earth, which are of no value unless extracted. Thus mining creates primary value out of nothing and further leads to value-addition through mineral beneficiation. In the process, huge employment is generated, which leads to improvement in socio-economic status of the communities and inclusive growth in the economy.

7.2 For every 1% increase in economic growth, mining sector creates 13 times more employment than agriculture and 6 times more employment than manufacturing sector, according to the 12th Five Year Plan. Mining activities also result in numerous indirect employment avenues for the people such as truck owners, drivers, repair shops, petrol-diesel pumps, tea-stalls, hotels, vegetable shops, banks and lenders, etc. The ratio of direct to indirect employment in the mining sector is 1: 10, i.e., for every job created in the mining sector, another 10 jobs (indirect employment) are created along the supply chain.

7.3 Although the mining sector (including fuel, major and minor minerals) employed around 23.23 lakhs persons in 2012, the sector has suffered massive job losses due to various bans and restrictions on mining. However, the mining sector has a huge potential for employment generation. With the right kind of Government support and reforms, the mining sector can grow to employ about 48.23 lakh persons directly and create a total (direct and indirect) of 5 crore jobs by 2025. If mining is promoted, more jobs will be created, thereby improving the standard of living as well as socio-economic opportunities for the country.

7.4 In order to avoid anticipated acute crisis of basic raw materials and employment in mining sector as well as in the economy post-March 2020, it is imperative that there is no alternative but to extend the validity of tenure of private sector leases period till 2030 and thereafter by 20 years at a time beyond stipulated grant period of 50 years in respect of non-captive leases of private sector as applicable for Government companies. Such a facilitation will not only enable to continue the availability of raw material on sustained basis beyond March, 2020 but will also reduce the level of job loss in the economy – both in the mining sector as well as sectors dependent on it.

7.5 There is a need for strong commitment from Government as well as the industry for the sector to enter the next orbit of high growth and employment generation. **Our economy will grow when mining grows, which will further lead to growth in employment and socio-economic development.**

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**Annexure–I**

# Severe delays in grant of clearances

A PL application has to pass through a minimum of 140 tables (= officials) which includes 41 tables at the office of the Directorate and the Revenue authorities at the State level, 18 tables at the State Mines Secretariat and 40 tables at the Ministry of Mines which includes the Geological Survey of India. In some cases the PL application has to pass through 41 tables in the Forest Departments of the State and MoEF. The movement of an application is illustrated in the following. The number of days an application remains at each table is indicated by the following colour symbols.

COLOUR CODES FOR Number of Days

→ 1 to 5 days → 6 to 10 days

→ 11 to 15 days → 16 to 20 days

→ Above 20 days

**Day one:** Filing of application for PL at the Despatch Section of the Dept of Mines and Geology or at the office of the District Collector → Asst. Director or Mining Officer or Senior Geologist at the district Drawing Section → Section Suptd. → Clerks → District level DMG → back to Collector → Section Suptd → Despatch Clerk → **DIRECTOR, DMG** → Additional Director → Section Suptd. or clerk → Head Drawing Section → Draftsman → Suptd. of the PL section for further verification → Deputy Director or J.D. → Suptd. of the PL section → Section Clerk → Despatch Section → **REVENUE AUTHORITY** Deputy Commissioner → Tahasildar → Revenue Inspector → Village Accountant → back to Tahasildar → Clerk → Despatch Section → Asst. Commissioner → Clerk → Despatch Section → Deputy Commissioner → Section Officer and one or two clerks in DC's office → back to DMG despatch section → Section Suptd → Drawing Branch → Suptd. → Deputy Director or JD → Additional Director → Director → Secretary C & I (Mines) → Director for final signature of the fair copy → Suptd. → Despatch clerk → **STATE GOVT. SECRETARY (Mines)** → Addl. Secretary or Dy. Secretary → Under Secretary to State Govt. → Section Suptd. → Concerned Clerk → Deputy Secretary → Secretary to Govt. (Mines) for approval → back to Dy. Secretary and Under Secretary → Section Officer → Clerk → file goes to **CONCERNED MINISTER or CM** → Principal Secretary to the CM or Pvt Secretary to the Minister → back to Principal Secretary (Mines) → Under Secretary → Section Suptd. → Concerned clerk → for Typist for typing a fair copy and back to Section Officer and Under Secretary for signature → Despatch clerk → **MINISTRY OF MINES, DELHI,** Govt. of India for Approval (Here also the file moves from table to table but faster if pursued daily) → Deputy Secretary → Joint Secretary → Secretary(Mines) → Pvt. Secretary → Deputy or Under Secretary → **DG. GSI, KOLKATA** → Director I/C for RP/PLs → DyDG of Concerned Region → Geologist → DyDG → Back to DG, GSI, Kolkata → Director I/C → Despatch Section → Secretary MoM, New Delhi.

**CONTROLLER, IBM** → Regional Controller of Mines, Goa → Regional of Mines, Bangalore → Controller Mines → Regional Mining Geology → Back to Controller → Despatch Section → Secretary MoM, Delhi → Dy. Secretary or Under Secretary → Secretary → PS to Minister of Mines → **Minister** → PS to Minister → Despatch Section → Secretary to Mines → Dep. Secretary → Section Officer → Clerk → for getting fair copy typed → Dep. Secretary → Clerk → Despatch Section → back to **STATE GOVT. SECRETARY (Mines)** → Addl. Secretary or Under Secretary → Section Suptd. → Clerk → **Preparation for issue of Notification to the applicant** → Suptd. [at this stage, the PL grantee may be asked to obtain Forest Clearance from State CCF and then MoEF;

**(FOREST AUTHORITY (application in 9 sets)** State Nodal Officer → DFO → Assistant Conservator of Forests → RFO → Despatch Section → Back to ACF → Dy. Conservator of Forests → Back to CCF → Back to ACCF → PCCF of the concerned State → Secretary to State Forest Dept. → Secretariat of the State Forest Minister → MoEF, New Delhi under intimation to (may or may not intimate) State DGM → back to the State DMG or Secretary (Mines) of the State → Deputy Secretary → Section Suptd. → Clerk → Suptd. → Secretary for signature of the draft copy → Suptd. → **Deputy Secretary for signature of the final fair copy for issue of grant notification to the applicant** → Despatch clerk → Copy to DMG → Despatch clerk at the DMG Office → Section Suptd. → Applicant approaches the PL Section Suptd. → Section clerk → payment of PL fee and Security deposit at the Treasury or through DD → Clerk → Senior Geologists office for survey and demarcation of the PL area → Draftsman → Asst. Draftsman for preparing minimum 8 copies of the PL sketch for execution of PL deed → back to Draftsman → Suptd. → Clerk → Suptd. → Deputy Director or JD → **DIRECTOR, DMG** → **Execution of the PL Deed** → Suptd → Issue of the Deed copies to the Applicant → **Sub Registrar's Office** at the concerned Tahasil office for Registration (Here 2 clerks + 1 despatch clerk are involved).

**Source:** Geomysore Services (India) Pvt. Ltd

**Annexure–II**

## Acquisition of global mining assets by Indian companies

| India M&A Activity<br>Acquisitions of Australian Mining Assets by Indian Companies | | | | | |
|---|---|---|---|---|---|
| **Dated Announced** | **Value of transaction (USD$ million)** | **Target name** | **Target nation** | **Acquiror name** | **Acquiror nation** |
| 04/25/2014 | 41.74 | Wollongang Coal Ltd. | Australia | Jindal Steel and Power Ltd. | India |
| 11/20/2013 | 16.33 | Legend Iron Ltd. | Australia | Jindal Steel and Power Ltd. | India |
| 06/17/2013 | Not disclosed | Undisclosed Australian Coal Mine | Australia | Coal India Ltd. | India |
| 05/06/2012 | 1.01 | Apollo Minerals Ltd. | Australia | Jindal Steel and Power Ltd. | India |
| 09/16/2011 | 1,260.00 | Hancock Coal-Queensland Coal | Australia | GVK Power and Infrastructure Ltd. | India |
| 07/07/2011 | 3.21 | Winmar Resources Ltd. | Australia | Santosh S Lad | India |
| 05/17/2011 | 19.70 | Legacy Iron Ore Ltd. | Australia | NMDC Ltd. | India |
| 05/06/2011 | 63.39 | Stellar Resource Ltd. | Australia | NMDC Ltd. | India |
| 11/23/2010 | 194.64 | Peabody Pacific Pty. Ltd. | Australia | Coal India Ltd. | India |
| 09/14/2010 | 9.86 | Resource Generation Ltd. | Australia | Integrated Coal Mining Ltd. | India |
| 09/09/2010 | Not disclosed | Riversdale Mining Ltd. | Australia | NMDC Ltd. | India |
| 08/02/2010 | Not disclosed | North Clermont Coal | Australia | Jindal Saw Ltd | India |
| 06/22/2010 | Not disclosed | Undisclosed Coking Coal Property | Australia | International Coal Ventures | India |

| India M&A Activity<br>Acquisitions of Australian Mining Assets by Indian Companies | | | | | |
|---|---|---|---|---|---|
| **Dated Announced** | **Value of transaction (USD$ million)** | **Target name** | **Target nation** | **Acquiror name** | **Acquiror nation** |
| 06/22/2010 | Not disclosed | Undisclosed coal Mine, Perth | Australia | NTPC Ltd. | India |
| 01/13/2010 | Not disclosed | Undisclosed Coking Coal Mine | Australia | Adhunik Metalliks Ltd. | India |

**Source**: Blake, Cassels & Graydon LLP

**India M&A Activity**
**Acquisitions of African Mining Assets by Indian Companies**

| Dated Announced | Value of transaction (USD$ million) | Target name | Target nation | Acquiror name | Acquiror nation |
|---|---|---|---|---|---|
| 11/20/2013 | 17.50 | Cameroon Mining Ltd. | Cameroon | Jindal Steel and Power Ltd. | India |
| 10/21/2013 | 50.00 | Riverdale – Coal Mine & Assets | Mozambique | International Coal Ventures | India |
| 12/20/2012 | 35.50 | Western Cluster Ltd. | Liberia | Sesa Goa Ltd. | India |
| 10/19/2012 | Not disclosed | Undisclosed Iron Ore Mine | Ghana | Jindal Steel and Power Ltd. | India |
| 09/19/2012 | Not disclosed | Sol Mineracao Mozambique | Mozambique | NMDC Ltd. | India |
| 04/19/2012 | Not disclosed | Limestone Mine, Magude | Mozambique | UltraTech Cement Ltd. | India |
| 03/07/2012 | 41.29 | Waterbarg Coal Project | South Africa | Tata Power Co. Ltd. | India |
| 02/09/2012 | Not disclosed | Undisclosed Coal Assets | South Africa | NMDC Ltd. | India |
| 12/16/2011 | Not disclosed | South African Coal Mining Holdings Ltd. | South Africa | JSW Energy Ltd. | India |
| 08/06/2011 | 90.00 | Western Cluster Ltd. | Liberia | Sesa Goa Ltd. | India |
| 06/10/2010 | Not disclosed | Indian Ocean Mining (Pty) Ltd. | South Africa | JSW Energy Ltd. | India |
| 05/10/2010 | 697.97 | Anglo American PLC-Skorpion | Namibia | Hindustan Zinc Ltd. | India |
| 05/10/2010 | 331.55 | Black Mountain Mining | South Africa | Hindustan Zinc Ltd. | India |
| 04/12/2010 | Not disclosed | Not disclosed | Mozambique | NTPC Ltd. | India |
| 03/31/2010 | 5.47 | South African Coal Mining Holdings Ltd. | South Africa | JSW Energy Ltd. | India |

| India M&A Activity<br>Acquisitions of African Mining Assets by Indian Companies | | | | | |
|---|---|---|---|---|---|
| **Dated Announced** | **Value of transaction (USD$ million)** | **Target name** | **Target nation** | **Acquiror name** | **Acquiror nation** |
| 03/31/2010 | 4.50 | South African Coal Mining Holdings Ltd. | South Africa | JSW Energy Ltd. | India |
| 02/08/2010 | Not disclosed | Arcelor Mittal South Africa Ltd. | South Africa | Lakshmi Mittal | India |
| 01/05/02010 | 26.00 | Maamba Collieries Ltd. | Zambia | Nava Bharat (Singapore) | India |

**Source**: Blake, Cassels & Graydon LLP

| India M&A Activity<br>Acquisitions of Indonesian Mining Assets by Indian Companies | | | | | |
|---|---|---|---|---|---|
| **Dated Announced** | **Value of transaction (USD$ million)** | **Target name** | **Target nation** | **Acquiror name** | **Acquiror nation** |
| 07/20/2012 | Not disclosed | Baramulls Sukses Sarana PT | Indonesia | Khopoli Investments Ltd. | India |
| 01/04/2012 | Not disclosed | Bumi Resources Tbk PT | Indonesia | Aditya Birla Mgmt Corp. Ltd. | India |
| 07/18/2011 | 8.75 | Undisclosed Coal Mining Co. | Indonesia | Indian Metals & Ferro Alloys | India |
| 05/19/2011 | Not disclosed | Undisclosed Coal Mines, Sumatra | Indonesia | Reliance Capital Ltd. | India |
| 02/09/2011 | 24.00 | Sarwa Sembada Karya Bumi PT | Indonesia | Monnet Ispat & Energy Ltd. | India |
| 01/27/2011 | Not disclosed | Undisclosed Coal Mine | Indonesia | GMR Infrastructure Ltd. | India |
| 12/15/2010 | Not disclosed | Sinar Mas Group-Coal Assets | Indonesia | Coal India Ltd. | India |
| 12/12/2010 | 56.72 | Undisclosed Coal Mines | Indonesia | K Sera Sera Productions Ltd. | India |
| 11/04/2010 | Not disclosed | MEC Coal-Coal Mine Indonesia | Indonesia | GVK Power & Infrastructure Ltd. | India |
| 08/30/2010 | Not disclosed | Undisclosed Coal Mines | Indonesia | NTPC Ltd. | India |
| 07/15/2010 | Not disclosed | Undisclosed Indonesian Company | Indonesia | Aqua Logistics Ltd. | India |
| 04/24/2010 | Not disclosed | Undisclosed Coal Mines | Indonesia | Karnataka Power Corp. Ltd. | India |
| 03/24/2010 | 148.00 | Aries Coal Mines | Indonesia | Essar Global Ltd. | India |

**Source**: Blake, Cassels & Graydon LLP

**Annexure–III**

## Gold Projects in Ontario

| Company | Project | Listing |
|---|---|---|
| Chalice Gold Mines | Cameron Lake | Advanced exploration |
| Detour Gold | Detour Lake | Operating |
| Cold Canyon Resources | Springpole | Advanced exploration |
| Goldcorp | Borden Lake | Advanced exploration |
| Goldcorp | Cochenour | Under Construction |
| Goldcorp | Hollinger | Operating |
| Gowest Gold | Bradshaw | Advanced exploration |
| HarteGold | Sugar Zone | Advanced exploration |
| IAMGold | Cote Lake | Advanced exploration |
| Agnico Eagle-Yamana | Hammond Reef | Advanced exploration |
| PC Gold | Pickel Crow | Advanced exploration |
| Premier Gold Mines | Hardrock | Advanced exploration |
| Premier Gold Mines | Brookbank | Advanced exploration |
| Argonaut gold | Magino | Advanced exploration |
| Agnico Eagle-Yamana | Upper beaver | Advanced exploration |
| Moneta Porcupine Mines | Golden Highway | Advanced exploration |
| New Gold | Rainy River | Under Construction |
| Northern Gold Mining | Garrison | Advanced exploration |
| Rubicon Minerals | Phoenix Gold | Under Construction |
| St. Andrews Goldfields | Taylor | Under Construction |
| Treasury Metals | Goliath | Advanced exploration |

**Notable transactions in the junior gold space since 2012 (in red), totalling approximately US$ 2.4 billion**

- **IAMGold's purchase of Trelawney valued at $608 million**
- **Argonaut's purchase of Prodigy valued $341 million**
- **Osisko's purchase of Queenston valued $550 million**
- **New Gold's purchases of Rainy River valued at $ 310 million**
- **Goldcorp's purchase of Probe Mines for $526 million**

**Source**: Blake, Cassels & Graydon LLP

**Annexure–IV**

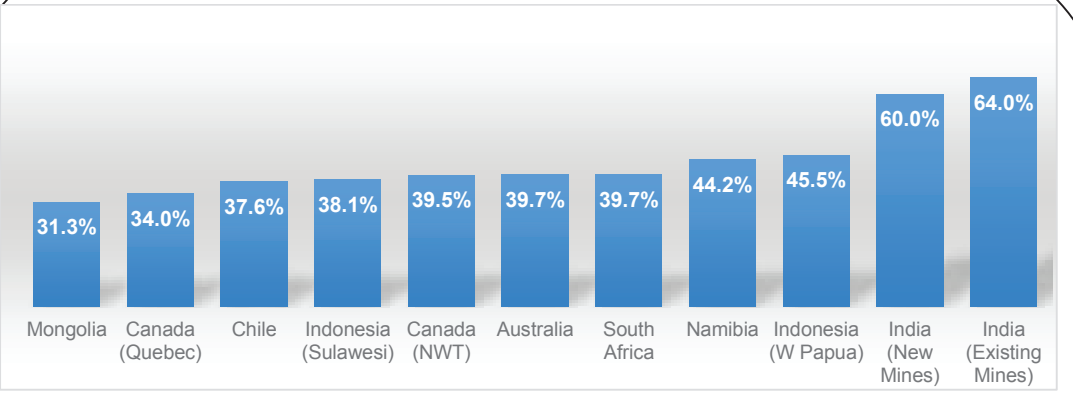
## Model of grant of mining concessions in mineral-rich countries

| Sl. No. | Country | Method of Grant | Initial mining lease tenure | Renewal Provision |
|---|---|---|---|---|
| 1 | Argentina | FCFS | Till Mineral Exhaustion | — |
| 2 | Bolivia | FCFS | 30 years | 30 years |
| 3 | Botswana | FCFS | 25 years | 25 years |
| 4 | Canada | FCFS | 20 years | 10 years |
| 5 | Chile | FCFS | Till Mineral Exhaustion | — |
| 6 | Columbia | FCFS | 30 years | 30 years |
| 7 | Ghana | FCFS | 30 years | 30 years |
| 8 | Mexico | FCFS | 50 years | 50 years |
| 9 | Namibia | FCFS | 25 years | 15 years |
| 10 | USA | FCFS | Till Mineral Exhaustion | — |
| 11 | South Africa | FCFS | 30 years | 30 years |
| 12 | South Australia | FCFS | 21 years | 21 years |
| 13 | West Australia | FCFS | 21 years | 21 years |
| 14 | Mongolia | FCFS | 30 years | 20 years for two successive periods |
| 15 | Mauritania | FCFS | 30 years | Not available |
| 16 | Morocco | FCFS | 10 years | 10 years |
| 17 | Mozambique | FCFS | 25 years | 25 years |
| 18 | China | Hybrid System:<br>– FCFS for the unexplored areas<br>– Auction for already explored areas | – 30 years for large mines<br>– 20 years for medium mines<br>– 10 years for small mines | Extension on request |
| 19 | Indonesia | Auction | – 20 years for metallic mineral<br>– 10 years for non-metallic minerals | Renewal tenure varies for different minerals |
| 20 | Russia | Auction | 25 years | Extension on request |
| 21 | India | Auction | 50 years | No Renewal |
| **Note: FCFS (First-come-First-Served)** | | | | |

**Source:** FIMI analysis
Getting the deal through https://gettingthedealthrough.com/
Thomson Reuters (Practical Law) https://tmsnrt.rs/2KglsPH

**Annexure–V (A)**

## Effective Tax Rate (ETR)




**DMF:10% DMF: 30%**

The above chart of ETR refers to the typical case of iron ore and includes the following components of taxes which are specific to mining as per MMDR Amendment Act, 2015, besides common components like corporate tax, CSR etc.

- Royalty on minerals – Section 9 and Schedule II (royalty on iron ore @ 15%).
- Dead rent on mining leases – Section 9A and Schedule III.
- Contribution to District Mineral Foundation (DMF) – Section 9B and Mines and Minerals (Contribution to District Mineral Foundation) Rules, 2015
  — @ 10 of the royalty in respect of mining leases / PL-cum-ML granted on or after 12-01-2015– Rule 2(a).
  — @ 30 of the royalty in respect of mining leases granted before 12-01-2015 – Rule 2(b).
- Payment to National Mineral Exploration Trust (NMET) @ 2% of the royalty – Section 9C

**Note:**

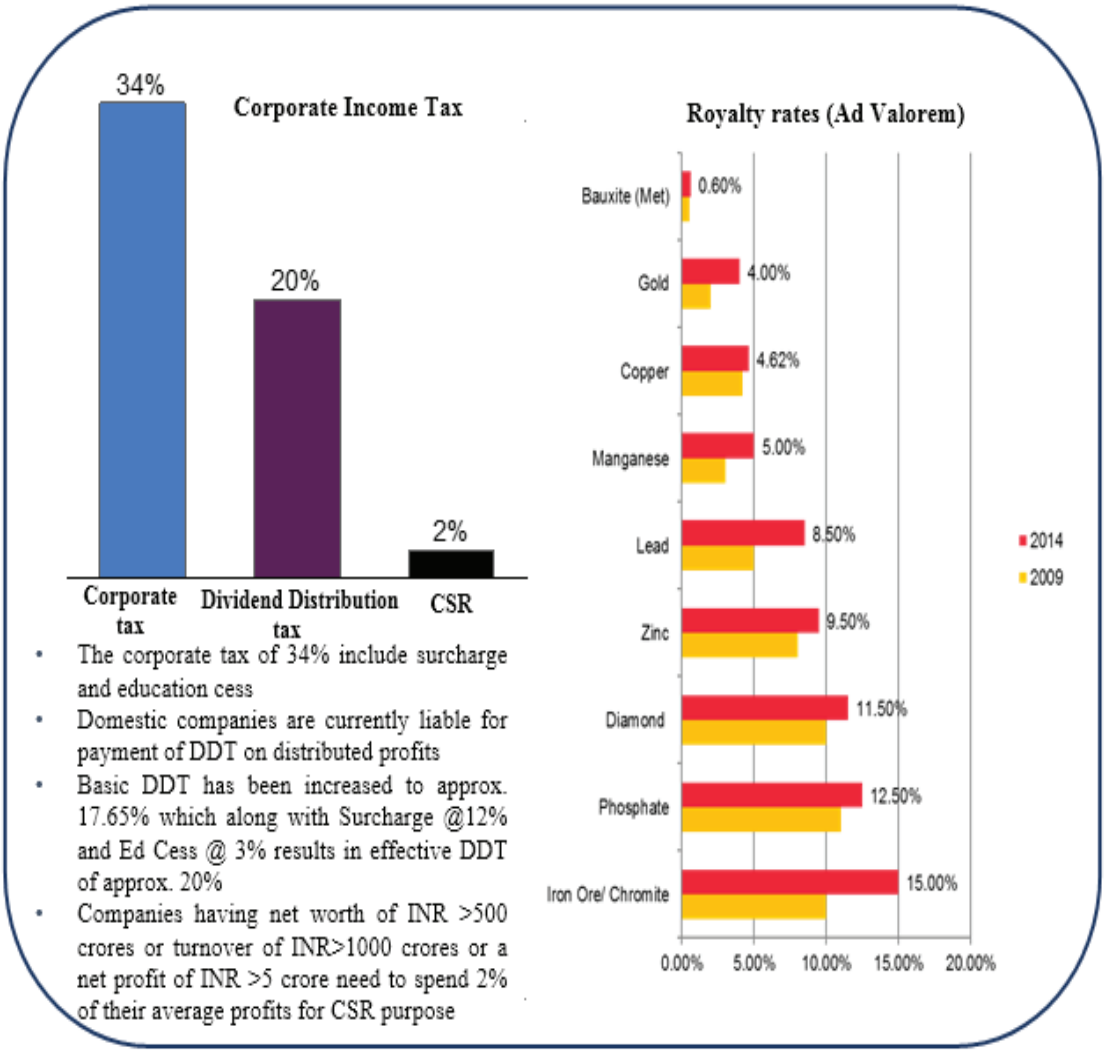
ETR does not include a number of other payments such as

- Auction price (base price + premium)
- Purchase of land for mining
- GST of 18% of royalty made effective w.e.f. 01.07.2017.
- 10% tax levied by Supreme Court in Goa and Karnataka and FDT levied by Karnataka as well as highest rate of royalty on iron ore in Odisha.
- Net Present Value (NPV) in case of survey for:
  - Coal, lignite, ferrous and non-ferrous minerals using core drilling technology having density upto 40% = 2% of total Prospecting Lease (PL) area
  - Coal, lignite, ferrous and non-ferrous minerals using core drilling technology having density upto 70% = 5% of total Prospecting Lease (PL) area
  - Any amount of NPV deposited in the stipulated Government account is non-refundable. However, the NPV deposited for prospecting in the area, will be adjusted against the estimated NPV to be levied, in case the approval is obtained for diversion of the same forest land for mineral extraction, under Section 2 of FCA 1980.
- Net Present Value (NPV) for diversion = Rs 4.38 lakhs to Rs 10.43 lakhs per hectare depending on the density of forests at the time of grant of lease.
- Compensatory afforestation charges which differs from State to State.
- Upfront payment at the time of grant of mining lease = @0.50% of value of estimated resources.
- Performance security = @0.50% of the value of resources

**Source:** FIMI analysis

**Annexure–V-(B)**

## Status of Corporate Income and Royalty Rates

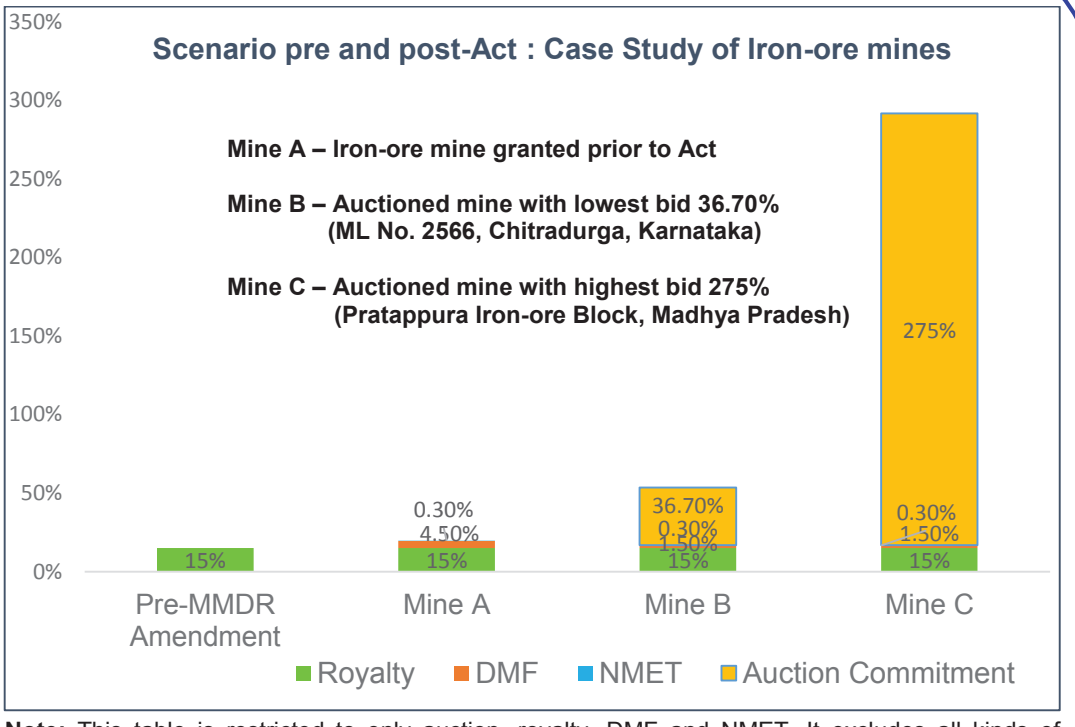



- The corporate tax of 34% include surcharge and education cess
- Domestic companies are currently liable for payment of DDT on distributed profits
- Basic DDT has been increased to approx. 17.65% which along with Surcharge @12% and Ed Cess @ 3% results in effective DDT of approx. 20%
- Companies having net worth of INR >500 crores or turnover of INR>1000 crores or a net profit of INR >5 crore need to spend 2% of their average profits for CSR purpose

**Source:** Indian Bureau of Mines for royalty rates; Ministry of Corporate Affairs for taxes

**Annexure–V-(C)**

## Royalty and Taxation Scenario post auctions: Case study – iron ore




**Note:** This table is restricted to only auction, royalty, DMF and NMET. It excludes all kinds of taxes/levies under other Acts, i.e., corporate income tax and other taxes/levies imposed by local bodies, net present value (NPV) and compensatory afforestation (CA) charges if area is under forest.

**Source:** FIMI analysis

**Annexure–VI**

## Mine Head-Stocks of Iron Ore (in million tonnes)

| | 2017-18 | | | | 2018-19 | | | |
|---|---|---|---|---|---|---|---|---|
| **STATE/ GRADE** | **Lumps** | **Fines** | **Conc.** | **Total** | **Lumps** | **Fines** | **Conc.** | **Total** |
| **Andhra Pradesh** | 0.676 | 0.685 | - | **1.361** | 0.415 | 0.903 | - | **1.318** |
| **Chhattisgarh** | 1.682 | 2.539 | - | **4.221** | 1.358 | 3.159 | - | **4.517** |
| **Goa** | 0.934 | 1.858 | 0.021 | **2.813** | 0.669 | 1.297 | 0.021 | **1.988** |
| **Jharkhand** | 1.820 | 40.582 | - | **42.402** | 1.734 | 41.385 | - | **43.119** |
| **Karnataka** | 5.910 | 4.654 | - | **10.564** | 6.765 | 7.038 | - | **13.803** |
| **Madhya Pradesh** | 0.994 | 2.946 | 0.000 | **3.939** | 0.892 | 2.636 | 0.000 | **3.528** |
| **Maharashtra** | 0.149 | 0.554 | - | **0.703** | 0.119 | 0.104 | - | **0.223** |
| **Odisha** | 10.055 | 75.052 | 0.184 | **85.292** | 13.126 | 80.684 | 0.324 | **94.134** |
| **Rajasthan** | 0.100 | 0.024 | 0.052 | **0.175** | 0.149 | 0.012 | 0.052 | **0.214** |
| **Telangana** | 0.000 | 0.000 | - | **0.000** | 0.001 | 0.000 | - | **0.001** |
| **All India** | **22.320** | **128.893** | **0.257** | **151.471** | **25.228** | **137.219** | **0.398** | **162.845** |

**Source:** Ministry of Mines

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