

ANNUAL REPORT 2019-20

Responsible Mining - Sustainable Living





SUSTAINABLE MINING INITIATIVE FEDERATION OF INDIAN MINERAL INDUSTRIES

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SUSTAINABLE MINING INITIATIVE GOVERNING COUNCIL (2019-20)

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	Mr. Sridhar Balakrishnan	CEO & Managing Director ACC Ltd.		
	Mr. Arun Mishra	CEO Hindustan Zinc Limited		
	Mr. Rahul N. Baldota	Joint Managing Director MSPL Ltd.		
	Mr. Sridhar Patra	Chairman-cum-Managing Director NALCO		
MEMBERS	Mr. Sumit Deb	Chairman -cum- Managing Director NMDC Ltd.		
	Representative	Rio Tinto India Pvt. Ltd.		
	Mr. Siddharth Rungta	President Rungta Mines Ltd.		
	Mr. Chanakya Chaudhury	Vice President (Corporate Services) Tata Steel Ltd.		
	Mr. Sauvick Mazumdar	CEO (Iron ore Business) Vedanta Ltd.		
	Mr. Sunil Duggal	President, FIMI		
EX-OFFICIO MEMBERS	Mr. R.L. Mohanty	Vice President, FIMI		
	Mr. Shantesh Gureddi	Vice President, FIMI		
CONVENER	Mr. R.K. Sharma	Secretary General, FIMI		

Contents

1.	Introd	luction	1			
2.	Objectives					
3.	Memb	pership	5			
4.	Code	of Conduct and Sustainable Mining Principles	8			
5.	Activi	ties of SMI				
	5.1.	Implementation of Sustainable Development Framework &				
		Star Rating Scheme	12			
	5.2.	Brand building for the Mining Industry	13			
	5.3.	Sustainability Reviews and Technical Consultancy	14			
	5.4.	Environmental Change Detection Study for Mines	18			
	5.5.	Support to mining industry in the Aravalli Hills matter in the				
		Hon'ble Supreme Court	18			
	5.6.	Preparation of R&R Plans for Iron-ore leases in Karnataka	19			
	5.7.	Evaluation of Production Enhancement proposals	20			
	5.8.	Publications and Knowledge Sharing	20			
	5.9.	Regulatory Interventions	23			
	5.10.	Conferences and Workshops	26			
	5.11.	Networking	35			
	5.12.	FIMI Awards	36			
6.	Way I	Forward	50			
_						
	nexu					
Ar	nexur	e I: Key Action Points of Code of Conduct	52			

1. Introduction

Mining has been an equal partner in the progress of mankind. Absolutely everything we depend on is either made from minerals or relies on minerals for its production. As humankind strives to improve its standard of living and nations push for development and mitigating climate change, demand for minerals is bound to rise exponentially and mining has come to play a more vital role. Given the importance of mining contribution to nation's development both in terms of GDP and employment generation, sustainability has become a key enabler for the mining sector and hinges upon efficient extraction and judicious use of resources with adequate environmental safeguards and social welfare measures in mining jurisdictions.

PEOPLE

Social variables dealing with community, education, equity-social resources, health, well-bring, and quality of life

BEARABLE

SUSTAINABLE

PLANET

Environmental variables relating to natural resources, water & air quality, energy conservation & land use

Realizing the need to mainstream sustainability in the mining sector and to counter the negative perception of mining, FIMI, launched *Sustainable Mining Initiative* (SMI) in 2009. The overarching aim of SMI is to promote the tangible and measurable concepts of sustainable mining, assist the mining sector to inculcate sustainable practices in mining operations and tackle the industry-wide challenges of environmental management and socio-economic development.

SMI, in its 11 years of journey since 2009, has grown in stature for leading the sustainable mining movement in India and continues to serve as a driving force for

change and continual improvement on issues relating to mining and sustainable development in India. SMI engages with all stakeholders including government, industry, communities, civil societies, academia etc. to positively influence Indian policy and regulations to promote sustainable mining. Moreover, SMI has also been entrusted with high level engagements in mining sector both by the Government and the Industry.

- It has also been a great honor for SMI to be recognized by the Central Empowered Committee (CEC) and subsequently entrusted by the Hon'ble Supreme Court to prepare the Reclamation & Rehabilitation Plans (R&R Plans) for 'A' and 'B' category mines in Karnataka in 2011 and to evaluate their production enhancement proposals.
- SMI assisted the Ministry of Mines to implement Sustainable Development Framework (SDF) at individual mine level and has been an integral part in developing the Star Rating Scheme for mines. Owing to SMI's contribution in formulating and finalizing the Star Rating Scheme, the Ministry of Mines has particularly recognized SMI's capacity and appreciated its work. Presently, SMI is part of the 5-member Executive Committee constituted by Ministry of Mines to monitor the Star Rating Scheme in India.

Currently, Mr. Tuhin Mukherjee, Managing Director of Essel Mining & Industries Ltd. is the Chairman of the Governing Council of SMI and Mr. R. K. Sharma, Secretary General of FIMI is the Convener. In addition, the President, Vice-Presidents and Secretary General of FIMI are permanent ex-officio members of the Governing Council of SMI.

SMI has evolved itself as an important encouragement for the inclusive and responsible growth of the mining sector. It has been effectively working with the mining industry to integrate sustainable practices and bring out the optimistic aspects of mining. SMI has defined a pathway through its Code of Conduct and follow-up activities to help the mining sector address sustainability issues. The SMI Code of Conduct is a set of 10 sustainable mining principles for voluntary adoption by companies to become SMI members; and is also the first step towards sustainable mining in India.

This report provides an overview of SMI's path of fulfilling its objectives, milestones achieved, various activities and achievements for the year 2019-20.

SMI - Milestones

 Sustainable Mining Initiative launched by FIMI through 10 leading Indian mining companies. 2009 Sustainable Development Framework launched by the Ministry of Mines. FIMI was member of the Committee to review and approve the SDF. 2010 Hon'ble Supreme Court of India entrusted SMI to prepare Reclamation and Rehabilitation Plans for the 'A' and 'B' Category mines in Karnataka. 2011 SMI launched its Code of Conduct - a set of 10 sustainable mining principles, for voluntary adoption by its members. SMI undertook comprehensive audit for mines to help improve sustainability in mining sector. SMI completed the first Peformance Assessment of its members against its Code of Conduct. 2013 • SMI entrusted with the multi-stakeholder study titled 'Strategic Assessment & Management Plan for mining in the Aravalli range of Rajasthan'. SMI entrusted to coordinate the case in the Hon'ble Supreme Court related to mining in Aravalli range of Rajasthan. SMI started Safety Audit in line with DGMS circulars on Safety Management System. SMI nominated as a representative to the National Committee on Sustainable Development Framework (SDF) - Roll Out Strategy constituted by the Ministry of Mines. SMI assisted the Ministry of Mines and was an integral part in developing as well as finalizing the evaluation template for Star Rating of Mines for Major minerals. • FIMI-SMI signed MoU with technology company for addressing the need for dronebased survey, monitoring and locational intelligence applications for mining industry. • SMI assisted the Ministry of Mines in developing Star rating template for minor minerals. • SMI prepared roadmap for Brand building for the mining industry. SMI's proposal for a single appraisal system for Environmental Forest and Wildlife Clearance was accepted by the High Level Committee for Mines, Minerals and Coal. The same has been incorporated in the HLC's report to the PMO. A cumulative of 87 mine's sustainability reviews have been completed till the

vear 2019-20.

2. Objectives

Mining sector plays an important role in meeting the ever increasing demand for minerals and metals not just to facilitate high economic growth rate of the country, but also to help the population progress its standard of living. The challenge for the sector is to incorporate the environmental, social and sustainability concerns into the business so as to ensure reponsible extraction of minerals and metals in a holistic manner, while contributing to national and community development.

To ensure that the integration process mentioned above happens, SMI has outlined its specific objectives to mainstream sustainability in the mining sector.

OBJECTIVES OF SMI

Promote and foster responsible mining Assist mining companies to incorporate principles of sustainable mining into their business practices Create positive public perception towards mining Identify, develop and promote use of best practices and create enabling framework for proactive pursuance of the fundamental tenets of Sustainable Development Provide platform for sharing of best practices, training and capacity building Assist and advise mining companies for continued improvement of their environmental, social and economic performance Interact with all the stakeholders including Governments, Civil Society Organizations for creating enabling climate for sustainable mining to thrive

3. Membership

Mining companies have become the member of SMI by voluntarily adopting the Code of Conduct, comprising of ten sustainability principles.

Currently, 33 responsible mining companies have adopted the Code and have become SMI members.

Founding and Governing Council Members

10 of the premier mining companies were the first ones to come together and support the formation of SMI. These 10 companies are the **Founding** and **Governing Council Members** of SMI. Subsequently, 23 more mining companies have joined SMI as **Associate Members**.

GOVERNING COUNCIL MEMBERS





















ASSOCIATE MEMBERS OF SMI















































The Governing Council of SMI comprises of ten founding members and the President, Vice-Presidents and Secretary General of FIMI as permanent ex-officio members. The Governing Council meets regularly to review SMI's progress towards achieving its objectives and to provide guidance/direction for undertaking new programmes to accelerate the process. During 2019-20, the Governing Council meetings were held on 10th April, 2019 at Hotel Mayfair Lagoon, Bhubaneswar and on 12th September, 2019 at Hotel Taj Yeshwantpur, Bengaluru.

4. Code of Conduct and Sustainable Mining Principles

SMI launched its 'Code of Conduct' (CoC) on August 4, 2012. The CoC is a set of 10 sustainable mining principles meant for voluntary adoption by FIMI members and on adopting the Code, the FIMI member becomes a member of SMI.

This CoC aims to provide a framework to mining companies and entrepreneurs to demonstrably adopt 'good behavior', open themselves to measurement and scrutiny, and reduce the negative perceptions about the mining sector so widely prevalent today.

Member companies have made a commitment to advance their sustainability performance and are required to report against their progress on an annual basis.



The CoC has been evolved in line with the expectation of the stakeholders, and aligns with international statements like ICMM's Sustainable Development Framework, with suitable modifications to suit Indian requirements.

Sustainable Mining Principles of SMI

Principle 1

 Integrate sustainable development considerations within the corporate decision making

Principle 2

•Conduct business with ethical practices and sound systems of corporate governance

Principle 3

 Implement risk management strategies based on valid data and sound science

Principle 4

•Seek continual improvement in health and safety performance

Principle 5

•Seek continual improvement of our environment performance based on a precautionary approach

Principle 6

• Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities

Principle 7

•Contribute to conservation of biodiversity and integrated approaches to land use planning and management

Principle 8

 Facilitate and encourage responsible use, reuse and recovery of mined materials including associated natural resources

Principle 9

•Contribute to the social, economic and institutional development of the communities in which we operate

Principle 10

• Implement effective and transparent engagement, communication and verifiable reporting arrangements with our stakeholders

Key action points in respect of each of these principles are mentioned in **Annexure-I.**

Adoption of these principles is expected to result in improved sustainability performance of the Indian mining sector, thereby improving the society's perceptions about the mining industry and reduce the tough stance of government, judiciary and society in general.

SMI annually conducts performance assessment of its member companies, through desktop assessment and site visit (optional), against the Code of Conduct to ensure the commitment of the companies to move towards sustainable development. Members' performance assessment against Code of Conduct has been completed for 2018-19 and published on SMI website (www.fedmin.com/smi) as well as Annual Report. Over the years, there has been a remarkable increase in the sustainability performance of SMI members, as measured by the Code of Conduct assessment.

SMI Code of Conduct – Assessment Report

	Assessment Report 2018-19										
Sl. No.	SMI Principles Members	1	2	3	4	5	6	7	8	9	10
	GOVERNING COUNCIL MEMBERS										
1	ACC Ltd.										
2	Essel Mining and Industries Ltd.										
3	Hindustan Zinc Ltd.										
4	MSPL Ltd.										
5	NALCO Ltd.										
6	NMDC Ltd.										
7	Rio Tinto India (P) Ltd.*										
8	Rungta Mines Ltd.										
9	TATA Steel Ltd.										
10	Vedanta Ltd Iron Ore										
	Business		Δς	SOCIATE	MEMBE	RS					
	I		713	5001,112	IVILIVIDL						
11	Wolkem Industries Ltd.										
12	R. Praveen Chandra										
13	M/s. M.G. Mohanty										
14	Mineral Enterprises Ltd.										
15	MGM Minerals Ltd.										
16	M/s. S. N. Mohanty										
17	BALCO										
18	Associate Soapstone Distributing Co. Pvt. Ltd.										
19	BKG Group										
20	M/s. Sri Kumaraswamy Mineral Exports (P) Ltd.										
21	Trimex Industries Pvt. Ltd.*										
22	IMFA Group										
23	Serajuddin & Co.										
24	Dalmia Cement (Bharat) Ltd.										
25	Ambuja Cements Ltd.										
26	JSW Steel Ltd.										
27	Adani Enterprises Ltd.										
28	Hindalco Industries Ltd.										
29	GHCL Limited										
Note: * Members with no working mines during the assessment period 4 members (APMDC, Hothur Ispat Pvt. Ltd, KSMCL, SMIORE) did not provide information for the year 2018-19.											
Thembers (at thise, notiful ispat FYE. Etd, KSIVICE, SIVIIONE) and not provide information for the year 2010-15.											

INDEX FOR COLOUR CODE					
Policies framed and Implementation substantially progressed					
Policies framed and Implementation in progress					
Policies framing in progress, Implementation substantially progressed					
Both Policy framing and implementation in progress					
Information to be provided for desktop assessment					

5. Activities of SMI

SMI undertakes various activities to achieve its objectives, viz., mainstreaming scientific and sustainable mining practices, promoting ethical behavior and ensuring responsible extraction of minerals, thereby enhancing mining sector's contribution to sustainable development in the country.

There are many ongoing activities and projects, which have been undertaken to support the sustainable mining agenda of SMI.

5.1 Implementation of Sustainable Development Framework & Star Rating Scheme

SMI regularly works with the Government of India to create an enabling climate for sustainable mining to thrive in India. SMI has played an integral role in formulating and finalizing the Star Rating Scheme for the Ministry of Mines, alongwith public consultation and on-ground support to numerous mines to implement the system. This has helped in implementation of Sustainable Development Framework at individual mine level.

Owing to SMI's contribution in formulating and finalizing the Star Rating Scheme, the Ministry of Mines has particularly recognized SMI's capacity and appreciated its work. SMI has been part of the Government's various committees on sustainable mining, including:

- National Committee on Sustainable Development Framework (SDF) Roll Out Strategy, constituted by Ministry of Mines
- Executive Committee constituted by Ministry of Mines to monitor the Star Rating Scheme across India

The Ministry of Mines in consultation with SMI has finalized the Star Rating for minor minerals and requested the States for its proper implementation. SMI has also assisted various mines across India to improve their star rating through its Sustainability Reviews.

5.2 Brand Building for the Mining Industry

While many mining companies have become pioneers of sustainable mining and implemented global best practices in environmental protection and socio-economic development of communities, the positive contribution of mining industry is not being highlighted. Rather, the mining industry is being perceived by various stakeholders to be indulging in illegalities, irregularities, damaging land and forests, insufficient effort for the protection of environment and community development. As a result of such a negative public perception, the industry has been facing increasing number of adverse judicial pronouncements and policy decisions that have almost crippled the Indian mining industry.

To change the negative perception of mining in India and to place it at its rightful position as the building block of India's economy and sustainable development, FIMI has been working on this important aspect through various ways including setting up a core committee for brand building under the chairmanship of Mr. S. Vijay Iyer, ex-MD, Rio Tinto India Pvt. Ltd., discussion with professional agencies and brainstorming at FIMI's Managing Committee meetings.

Subsequently, FIMI constituted a High-Level Committee (HLC) under the under the chairmanship of Mr. Sunil Duggal, President, FIMI to collectively devise a strategy and roadmap for brand-building of the mining industry. A dedicated team was set up at FIMI which undertook many brand-building activities, including:

- Panel Discussion titled "Mining Co.s Clearing the Minefield" was telecast on CNBC TV18 on 21st June 2019 featuring:
 - Mr Sunil Duggal, President, FIMI and CEO & Managing Director, Hindustan Zinc Ltd
 - Mr T V Narendran, CEO and Managing Director, Tata Steel
 - Mr R K Sharma, Secretary General, FIMI.
- Panel discussion titled "Commodity Champion", was telecast on CNBC TV18 on 21st September 2019, featuring:
 - Mr Satish Pai, Managing Director, Hindalco Industries Ltd.,
 - Mr Vinay Prakash, CEO (Natural Resources), Adani Enterprises Ltd.,
 - Mr R K Sharma, Secretary General, FIMI.

- Authored articles and special stories published in national and regional newspapers.
- Mine visit by senior journalist from Hindu Business Line.
- Launch of social media handles of FIMI on Facebook and Twitter and subsequent engagement.

FIMI is continuing various brand-building activities like publication, media engagement, stakeholder engagement etc., as part of regular activities of SMI.

5.3 Sustainability Reviews and Technical Consultancy

FIMI-SMI has been assisting and advising mining companies to continually improve their sustainability performance through its Sustainability Review System. It covers 5 key aspects for a mine – compliances, economic, environmental, social and health & safety performance.

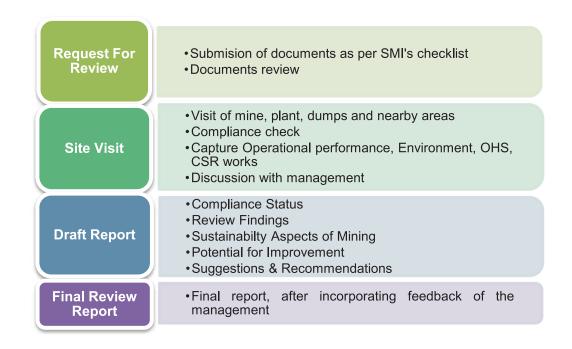
SMI's Sustainability Review helps the mines to:

- Evaluate the present environmental and safety performance of the mine (both from compliance as well as sustainability perspective)
- Identify productivity enhancement measures and improve mine's operational performance
- Review the social welfare activities undertaken for neighboring communities
- Help to improve performance for achieving required Star Rating
- ❖ Manage regulatory risks and compliance system in the mine
- Stay updated about regulatory changes and take preparatory action well in time
- Identify best practices for implementing in the mine and areas of further improvement
- Effectively communicate its sustainability goals to the management

SMI has a team of domain experts having hands on rich experience, knowledge and insight into the regulatory & policy framework and international sustainable mining practices.

During the year 2018-19, SMI completed 11 sustainability reviews and including previous years, SMI has cumulatively completed 87 sustainability reviews for various types of minerals. SMI has helped these mines to review their overall performance (both from compliance as well as sustainability perspective) and identify critical areas of improvement, comply with statutes and reduce long term risks. SMI also undertakes customized studies as per client requirement such as specific Health & Safety reviews, R&R review, etc.

SUSTAINABILITY REVIEW SYSTEM



List of Sustainability Reviews completed

S. No.	Name of the Company	No. of Mines					
Sustainability Review							
1.	Ambuja Cements Ltd., Himachal Pradesh, Maharashtra, Chhattisgarh, Rajasthan, Gujarat (Limestone)	9					
2.	Vedanta Limited, Goa & Karnataka (Iron ore)	5					
3.	Mineral Enterprises Limited, Karnataka (Iron ore)	2					
4.	Mahavir Trading Company, Rajasthan (Soapstone)	1					
5.	S N Mohanty, Odisha (Iron ore, Manganese, Bauxite)	4					
6.	Wolkem Industries Ltd., Rajasthan (Wollastonite)	2					
7.	H L Nathurmal, Goa (Iron ore)	1					
8.	BALCO, Chhattisgarh (Bauxite)	2					
9.	ACC Limited, Karnataka (Limestone)	1					
10.	Magnum Minerals, Goa (Iron ore)	2					
11.	Penguin Trading & Agencies Ltd., Odisha (Iron ore)	1					
12.	Rungta Group, Odisha (Iron ore, Manganese ore)	5					
13.	Ultratech Cement Ltd, Karnataka and Andhra Pradesh (Stone quarries for	2					
	aggregates)						
14.	MGM Minerals, Odisha (Iron ore)	3					
15.	National Enterprises Ltd. (Iron ore)	2					
16.	HZL – Sindesar Khurd Mine, Rajasthan (Lead & Zinc)	1					
17.	Golcha Associated Group, Rajasthan (Soapstone)	2					
18.	S N Mohanty, Odisha – Follow up Audit (Iron ore & Bauxite)	3					
19.	Balasore Alloys Limited, Odisha (Chromite)	1					
20.	NMDC Limited, Chhattisgarh (Iron Ore)	6					
21.	MGM Minerals, Odisha (Iron & Manganese ore)	1					
22.	S N Mohanty, Odisha (Iron ore, Manganese ore, Bauxite)	3					
23.	M G Mohanty, Odisha (Iron ore & Bauxite)	2					
24.	Hindalco Industries Limited (Bauxite)						
25. 26.	Hindalco Industries Limited (Coal) Andhra Pradesh Mineral Development Corporation, AP (Barytes)	1					
27.	A.P. Trivedi & Sons Pvt. Ltd, Madhya Pradesh (Manganese ore)	1					
28.	Atha Group, Odisha (Iron ore)	1					
29.	BALCO, Chhattisgarh (Bauxite)	2					
30.	Balasore Alloys Ltd., Odisha (Iron ore)	1					
31.	NALCO, Odisha (Bauxite)	1					
32.	Hindalco Industries Limited, Jharkhand (Bauxite)	4					
33.	BALCO, Chhattisgarh (Coal)	1					
	Sub-Total	77					
Review of Progressive and Final Mine Closure							
34.	NALCO, Odisha (Bauxite)	2					
Health & Safety Review							
35.	Karnataka State Minerals Corporation Limited (Iron ore, Chromite, Magnesite)	8					
	Total	87					

ACC Limited













Our Hosts









Karnataka State Minerals Corporation Limited













H.I. Nathurmal



Mineral Enterprises Ltd.







5.4 Environmental Change Detection Study for Mines

FIMI-SMI assists mines to evaluate their environmental impact over a period of time through **Environmental Change Detection Study (ECDS).** Objective of this study is to highlight the actual impact of a mine on environment (upto 10 km from mine boundary), with the help of satellite imageries and field surveys.

ECDS is an evidence-based scientific study and helps mines to:

- correlate the environmental impact of the mine on green cover, agriculture, water (ground and surface water), air and noise etc.
- prioritize critical zones for environmental protection and plan for necessary action
- highlight the positive impacts in buffer zone and R&R in mined-out areas
- demonstrate environmental stewardship, especially for obtaining statutory clearances
- integrate sustainability in its mine planning through remote sensing.

ECDS acts as a report card for past environmental performance of the mine and is especially helpful during expansion of Environmental Clearance (EC) capacity, where the MOEF&CC and EAC are keen to understand the mine's actual impact on its surroundings (forest / tree cover, agriculture, water, air and noise, etc.). SMI has completed such a study for a large coal mine and assisted it to increase its EC capacity by 50%.

5.5 Support to mining industry in the Aravalli Hills matter in the Hon'ble Supreme Court

Taking cognizance of the unique ecology of Aravalli hills, heightened environmental awareness, and history of litigations and absence of a regional assessment of impacts of mining on the Aravalli, FIMI-SMI has been entrusted by the mining industry of Rajasthan to coordinate the Aravalli Hills case in the Hon'ble Supreme Court. FIMI-SMI has been supporting the industry with strategy in the case, managing stakeholder interaction, consultation with experts and Government agencies, preparing notes, etc.

To support the Court case, SMI has also prepared a comprehensive scientific study titled "Strategic Assessment & Management Plan for mining in Aravalli range of Rajasthan". The study covered 15 districts of Rajasthan through which the Aravalli range is passing. This study is the first of its kind to scientifically establish the impacts of mining on environment and bridge the existing knowledge gap between the facts and the preconceptions of the regulators and the society at large. Methodology included Land Use Land Cover (LULC) change studies over a decade (2000-14) using satellite imageries, in addition to field surveys, extensive primary and secondary data collection.

The study has brought out the ground-truth about mining and other anthropogenic activities in the region. Some of the key findings are highlighted below:

- It is observed that mining has a very insignificant role in the alleged wanton damage to the ecosystem.
- Loss in forest cover in the 15 districts is primarily due to its conversion into scrubs and agricultural land; and this phenomenon is observed even in areas devoid of any mining activities.
- The study has also established that there is no eastward march of the Thar desert and most of the sand dunes have been stabilized over the years.
- Study of the gap areas in Aravalli range also suggests that there is hardly any apparent signs of Trans-Aravalli sand drifting.
- The study also brought out the role mining has played in socio-economic development in the Aravalli region.

The study has been well appreciated by the Aravalli Stakeholders group. In addition, SMI has been assisting the mining industry of Rajasthan in the Aravalli hills legal matter in the Hon'ble Supreme Court.

5.6 Preparation of R&R Plans for Iron-ore leases in Karnataka

On recommendations of Central Empowered Committee (CEC), SMI was entrusted by the Hon'ble Supreme Court of India in 2011 for preparing Reclamation & Rehabilitation Plans (R&R Plan) and Supplementary Environment Safeguard Plans (SESP) for Iron-ore mining leases located in three districts – Bellary, Chitradurga and Tumkur – of Karnataka, based on which the mines are allowed to reopen subject to Category, CEC approval and compliance of other conditions

prescribed by the Hon'ble Supreme Court of India. SMI has prepared and submitted R&R reports of 100 leases of A & B category mines.

5.7 Evaluation of Production Enhancement proposals:

CEC has directed SMI to evaluate the production enhancement proposals of leases of A & B category mines of Karnataka. The proposals are from the mines which have resumed the operations after successful implementation of R&R plan, enhanced resource base by exploration and/or addressed issues related to dump and road capacity.

SMI has completed production enhancement proposals for 50 mines out of the 56 proposals received. Evaluation of 2 proposal is under process and evaluation of 4 proposals are pending as lessees' inputs are awaited.

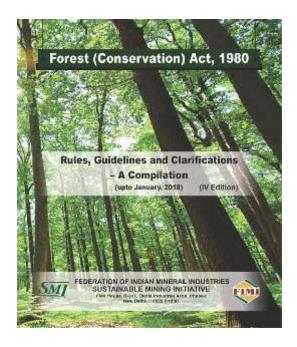
Out of the 50 production enhancement reports submitted by FIMI-SMI:

- 39 have been approved by CEC on Technical Committee's Report on SMI's evaluation and 01 proposal was not considered by CEC.
- 09 proposals are pending at various levels at ICFRE/Technical Committee and 01 proposal is closed as lessee reinitiated the proposal afresh.

5.8 Publications and Knowledge Sharing

SMI is engaged in research and brings out publications on a variety of topics for the benefit of the mining industry and other stakeholders, with an aim to keep them updated with the dynamic mining scenario in India and to provide relevant information in an easy and readily accessible manner. SMI acts as a platform for knowledge sharing on sustainable mining in India.

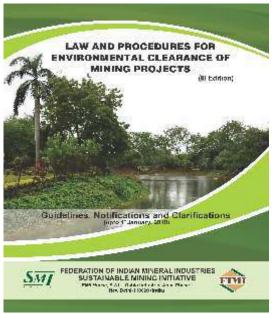
SMI has brought out the following publications for the benefit of mining stakeholders:

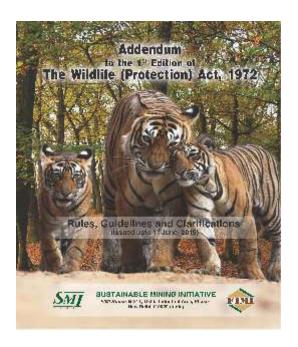


Forest (Conservation) Act, 1980 — Rules, Guidelines and Clarifications — A Compilation (IV Edition)) (updated till date)

Compilation of all the amendments in the Act and guidelines

Law and Procedures for Environmental Clearance of Mining Projects (III Edition) — Guidelines, Notifications and Clarifications (updated till date)



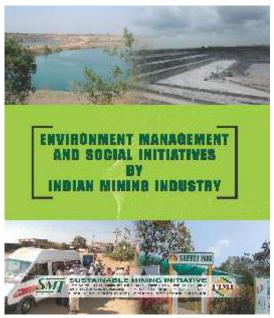


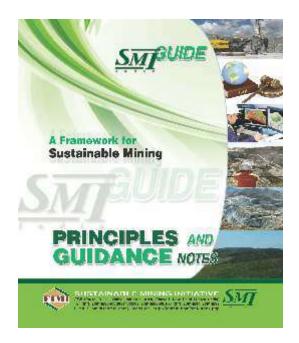
Addendum to the 1st edition of The Wildlife (Protection) Act, 1972 : Rules, Guidelines and Clarifications

Compilation of all the amendments in the Act and guidelines

Environment Management and Social Initiatives by Indian Mining Industry

Highlights the best practices in environment management, R&R and socio-economic development by mining industry. Aims to bring out the positive aspects of mining and improve the public perception towards mining





SMI Guide: A Framework for Sustainable Mining

Practical tips & guidelines for carrying out sustainable mining

5.9 Regulatory Interventions

At SMI, we believe that regulatory environment - laws and regulations including enforcement thereof — plays an extremely crucial role in determining the performance and behavior of individuals and industry sectors. SMI believes that laws should be rational, implementable, and cost-effective (in the sense that benefits to the society should exceed the cost to the society due to the additional regulation).

Since a complex regulatory scenario for mining sector runs counter to the objective of promoting sustainable mining practices, SMI therefore advocates for a simpler and rationalized regulatory framework by the Government which will be easier to comply and enforce. SMI makes representations to the Government taking into account the inputs from mining companies, facts, statutory provisions and follows it up. These interventions have received positive response from the Ministries in the form of representations in their Committees and amendments to various regulations, which has been appreciated by the members as well.

Among numerous representations, some of the important regulatory interventions undertaken by FIMI-SMI during 2019-20 are listed below:

- 1. Impact of NEERI recommendation on mining industry in the State of Odisha- A representation was sent to MOEFCC, Ministry of Mines, NITI Aayog and Government of Odisha on 22 April, 2019 requesting not to include NEERI recommendations as a condition in the Environmental Clearance, till the suggested infrastructure such as concrete road, railway network, conveyor belt system are put in place by the concerned agencies and also kindly direct the EAC not to insist on compliance of NEERI recommendations.
- 2. Comments on the Draft notification dated 27th February, 2019 issued by MOEF&CC regarding EC process for auctioned mines, where validity of EC may not have expired- MOEFCC had sought inputs/suggestions from the stakeholders on the draft notification dated 27th February, 2019. In this regard, FIMI-SMI has submitted comments on the draft notification on 29th April, 2019. Additional inputs were submitted on 3rd May, 2019.
- 3. **Comprehensive revision of EIA Notification, 2006**: FIMI-SMI vide its communication dated 16th August, 2019 submitted its comments on comprehensive revision of EIA Notification, 2006.
- 4. Comments on the Draft National Resource Efficiency Policy 2019 issued by MOEF&CC: In response to draft National Resource Efficiency Policy 2019 dated 23rd July, 2019 issued by MoEFCC, FIMI-SMI submitted its comments / suggestions on the draft policy on 23rd August, 2019.
- Request to issue clarification on the EC proposals listed in EAC non-coal, which have already been dealt in the matter of Common Cause vs. Union of India judgment dated 2nd August, 2017- A representation was sent to MOEFCC on 27th June, 2019 requesting to issue clarification that EC proposals, which have already been dealt under the Common Cause judgement, will not be deferred to Violation Committee and the appraisal for such cases will be considered by respective EAC/SEAC. Subsequently, a reminder representation was sent on 26th August, 2019.
- 6. Non-issuance of NOC for groundwater withdrawal from Central Ground Water Authority (CGWA) A representation was sent to Ministry of Jal Shakti, Department of Water resources, River development and Ganga Rejuvenation on 4th September 2019 requesting to direct Central Ground Water Authority (CGWA) to expeditiously consider and grant NOC to the pending applications for groundwater withdrawal.
- 7. Comments on draft Eco Sensitive Zone (ESZ) notification dated 10th July, 2019 issued by MOEF&CC for proposed eco sensitive zone around Radhanagari Wildlife Sanctuary, District Kolhapur, Maharashtra Based on inputs received from members, FIMI-SMI submitted its comments to MOEFCC on 9th September, 2019 requesting to exclude the mineral bearing villages such

as Durgamanwad, Padsali and other nearby area of such villages from the notification. 8. Clarification regarding applicability of 1 km distance around Protected Areas after ESZ has been notified- A representation was sent to MOEFCC on 30th September, 2019, requesting to consider issuing directions that 1 km safety zone shall be maintained around Protected Areas, until the final ESZ is notified by the MOEFCC. 9. Request for exemption of Compensatory afforestation (CA) for small mines (<5 ha)- A representation was sent to MOEFCC on 7th October, 2019 requesting to consider exemption for CA to small mines having area less than or equal to 5 ha as provided to public infrastructure projects upto 5 ha in LWE districts. 10. Comments on the ICMM's draft on Global Tailings Standard- Based on the comments received from our members a representation was sent to International Council on Mining & Metals (ICMM) on 3rd December, 2019. 11. Specific guidelines issued by MOEFCC for hydrocarbon sector for undertaking seismic surveys and exploratory drilling in forest areas-Request for extending the guideline to mining sector including coal -A representation was sent to MOEFCC, Ministry of Coal and DG Forest on 16th December, 2019 requesting for extension of applicability of the MOEFCC guidelines dated 30.09.2019 to the mineral sector including coal, for undertaking survey and exploratory drilling in forest areas. Owing to FIMI's persuasion and follow-up MOEFCC has issued guidelines on 14.01.2020 and clarified that the provisions of guidelines dated 30.09.2019 will be applicable to seismic surveys for prospecting of different minerals including coal also. 12. Request to issue clarification on the EC proposals listed in EAC non coal committee, which have already been dealt in the matter of Common Cause vs. Union of India judgment dated 2nd August, 2017- A representation was sent to MOEFCC on 06th January, 2020 requesting to issue clarification that EC proposals, which have already been dealt under the Common Cause judgement, will not be referred to Violation Committee and the appraisal for such cases will be considered by respective EAC/SEAC.

5.10 Conferences and Workshops

SMI organizes conferences and workshops around the country to promote sustainable mining. The events focus on updating stakeholders about legal requirements & compliance matters in mining projects, sustainable mining practices adopted in different parts of the world, other aspects of sustainable mining stakeholders' engagement processes, social and environmental issues etc.

Events

SMI events have been receiving active support of the industry and government. SMI organizes the Sustainable Mining Summit every year, with an objective to share views and issues of the sector including regulations, technical aspects, etc.

2012: The "Sustainable Mining Summit 2012" was organized in Goa on 13th-14th January, 2012. Theme: Mining for Sustainability- Beyond Compliance.

2013: The "Sustainable Mining Summit 2013" was organized in Goa on 22nd-23rd April, 2013. Theme: Raw Material Security for metal industries and Sustainable Mining.

2014: The "Sustainable Mining Summit 2014" was organized in Goa on 17th-18th July, 2014. Theme: Raw Material Security and Sustainable Mining.

2015: The "Sustainable Mining Summit 2015" was organized in Goa on 17th-18th April, 2015. Theme: Sustainable Mining for Unlocking Indian Mineral Resource.

2016: The "Sustainable Mining Summit 2016" was organized in Bhubaneswar on 10th-11th May, 2016. Theme: Environmentally sound practices and technologies in the mineral sector.

2017: The "Sustainable Mining Summit 2017" was organized in Goa on 20th – 21st April, 2017. Theme: Sustainability in the changed regulatory economic scenario.

2018: The "Sustainable Mining Summit 2018" was organized in Bhubaneswar on 31st May – 1st June, 2018. Theme: Mining and Sustainable Development Framework.

2019: The "Sustainable Mining Summit 2019" was organized in Bhubaneswar on 11th – 12th April, 2019. Theme:

- Mining: Global and Regulatory Scenario
- Sustainability in the existing regulatory economic scenario
- Sustainable development framework

Mr. Sanjeev Chopra, Principal Secretary, Industries Department, Government of Odisha and Chairman, Odisha Mining Corporation Ltd., Bhubaneswar inaugurated the Summit and addressed the participants. Mr. Sunil Duggal, President, FIMI, delivered the Welcome Address. Mr. Tuhin Mukherjee, Managing Director Essel Mining & Industries Ltd. delivered the keynote address at the summit. Mr. T K Chand, Chairman-cum-Managing Director, NALCO Ltd. was Guest of Honor and also addressed the participants. The Vote of Thanks was delivered by Mr. R L Mohanty, Vice-President, FIMI in the Opening Session. Mr. Shantesh Gureddi, Vice-President, FIMI delivered the Valedictory Address. The Summit was attended by more than 135 delegates and 18 Technical Papers were presented during the Summit.



Shri Sunil Duggal, President FIMI, delivering welcome address



Lighting of lamp by Shri Sanjeev Chopra, Principal Secretary, Industries Department, Government of Odisha, and Chairman, Odisha Mining Corporation Ltd.



Lighting of lamp by Shri T.K Chand, CMD, NALCO Ltd.



Lighting of lamp by Shri Sunil Duggal, President, FIMI



Vote of Thanks by Shri R.L Mohanty, Vice President, FIMI



Vote of thanks by Shri Shantesh Gureddi, Vice President, FIMI





Participants at the Sustainable Mining Summit

Other Conferences & Workshops:

SMI also actively participates and shares its views in other forums, mining conferences and seminars to promote sustainability in the sector. Some of the seminars attended by delegates of SMI in the year are:

Xynteo Exchange / India 2022 Coalition Launch on Sustainable Mining in India

Mr. Ashis Dash, CEO, SMI attended the Workshop on "Sustainable Mining" organized by Xynteo / Hindalco Industries Limited on behalf of India 2022 coalition on 2nd April, 2019 in Hotel The Taj Mahal Palace, Mumbai.

Visit of Goa Mining People's Front (GMPF) delegation in FIMI Office

A delegation of Goa Mining People's Front (GMPF), Goa headed by its President, Mr. Puti Gaonkar called on Mr. R.K. Sharma, Secretary General, FIMI on 4th April, 2019 in FIMI Office, New Delhi with regard to taking up the matter with appropriate authorities for resumption of mining operations in the State of Goa. Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

23rd Governing Council meeting of Sustainable Mining Initiative

23rd Governing Council meeting of Sustainable Mining Initiative (SMI) was held on 10th April, 2019 at Hotel Mayfair Lagoon, Bhubaneswar (Odisha) under the Chairmanship of Mr. Tuhin Mukherjee, Managing Director, Essel Mining and Industries Ltd.

Visit of Russian Delegation

Mr Aleksandr Volkov, Managing Director (Investment Department), Ms. Alexandra Chernova, Director (Republic of India, Cooperation Division), Ministry for the Development of the Russian Far East and Mr Pavel V Komarov, Dy. Trade Commissioner, the Trade Representation of the Russian Federation in the Republic of India called on Mr. R. K. Sharma, Secretary General, FIMI on 15th April, 2019 to know about possible business development interests on investment opportunities in metal and mining in the Russian Far East. Mr. Pramod Tyagi, Additional Secretary General, Mr. B. K. Bhatia, Joint Secretary General, FIMI, Mr. Ashis Dash, CEO, SMI and Mr. Ravindra Singh, COO, SCMS were also present in the meeting.

MEAI's Delhi-NCR Chapter — paper meeting

Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI attended the Paper Meeting (presentation by *Brookings Institution India Centre on India's coal and energy ecosystem*) on 25th April, 2019 at TATA Steel, Hindustan Times Building, New Delhi, organized by Mining Engineers' Association of India (MEAI), Delhi-NCR Chapter.

Meeting of the High Level Committee on Mines, Minerals & Coal sectors

FIMI was invited to make the presentation before High Level Committee on Mines, Minerals & Coal sectors constituted under the chairmanship of Vice Chairman, NITI Aayog on 26th April, 2019 with the objective of enhancing exploration, domestic production, reducing imports, giving impetus to value addition and achieving rapid growth in exports. FIMI's delegation led by Mr. Sunil Duggal, President and Mr. R.K. Sharma, Secretary General besides Mr. B.K. Bhatia, Joint Secretary General and Mr. Ashis Dash, CEO, SMI participated in the meeting. Mr. R K Sharma, made the presentation before the Committee highlighting the need for structural reforms in the MMDR Act and other statutes besides other related procedural and other regulated changes for the revival and sustained growth of the Indian mining sector.

Meeting with Director, MoEFCC

Mr. Ashis Dash, CEO, SMI had a meeting with Mr. Sharath Kumar Pallerla, Director, MoEFCC on 14th May, 2019 with regard to MoEFCC's draft notification dated 27th February, 2019 on environmental clearance process for auctioned mines.

Visit of Mexican Delegation in FIMI Office

A delegation of Mexican Government called on Mr. R.K. Sharma, Secretary General, FIMI on 19th June, 2019 at FIMI House, New Delhi with regard to evincing their interest in India's mineral exploration and mining sector. Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, FIMI, Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Interactive Workshop on Implementation of Recommendations of NEERI Report

Mr. Ashis Dash, CEO, SMI attended the Interactive Workshop on Implementation of Recommendations of NEERI Report on 24th June, 2019 at Mayfair Convention Hall, Bhubaneswar (Odisha) organized by Directorate of Mines, Bhubaneswar, Odisha. The Workshop was inaugurated by Mr Aditya Prasad Padhi, Chief Secretary to the Government of Odisha. Mr R K Sharma, Additional Chief Secretary, Government of Odisha also addressed the participants. Mr Ashis Dash, CEO, SMI-FIMI presented a paper on FIMI's submission on NEERI Report.

The Union Budget 2019-20: Reforms and Development Perspectives

Mr. Ashis Dash, CEO, SMI attended the Union Budget 2019-20 Reforms and Development Perspectives on 22nd July, 2019 at Hotel The Imperial, Connaught Place, New Delhi, organized by India's leading Economic Policy Research Institutes (five) with respect to more reflective assessment of the Union Budget 2019-20.

MEAI Delhi Chapter Annual General Meeting and Paper Meeting

Mr. B K Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI attended the MEAI Delhi Chapter Annual General Meeting on 24th July, 2019 at India Habitat Centre, New Delhi.

Meeting regarding Comprehensive Revision of EIA Notification 2006

Mr. Ashis Dash, CEO, SMI attended the meeting on Comprehensive Revision of EIA Notification 2006 held under the chairmanship of Mr. Anil Kumar Jain, Special Secretary, MoEFCC on 29th July, 2019 at Indira Paryavaran Bhawan, MoEFCC, New Delhi with respect to revision of the EIA Notification, 2006.

Visit of Senior Executives of International Labour Organization (ILO)

Ms. Sudipta Bhadra, National Professional Officer, ILO, New Delhi and Mr. Ambuj Kishore, National Project Coordinator, ILO, Jaipur (Rajasthan) called on Mr. R. K. Sharma, Secretary General, FIMI on 29th July, 2019 at FIMI House, New Delhi with respect to ILO's initiative in Rajasthan focusing on paving the way for a sustainable natural stone industry in India as well as to get benefit from FIMI's inputs on the subject. Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K.

Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of High-Level IDAN team (Investment and Development Authority of Nagaland), Government of Nagaland

A High-Level team from IDAN, Government of Nagaland headed by Mr Alemtemshi Jamir, CEO (State Cabinet Minister level) visited FIMI office on 7th August, 2019 and had detailed deliberation with regard to the possibility of exploration and mining prospects in the state of Nagaland and to have collaboration with FIMI for preparing a detailed mining scheme including legislation framework. On behalf of FIMI, the team was led by Mr. R.K. Sharma, Secretary General, FIMI, Mr M L Majumdar, IAS (Retd.) alongwith Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI, Mr. Ravindra Singh, COO, SCMS and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of founder of Sorterra, Queensland, Australia

Mr. Jan Verboomen, founder of Sorterra, a company from Queensland, Australia into 'dry beneficiation' joined by Mr. Gitesh Agarwal, Queensland Trade and Investment Commissioner, Bangalore called on Mr. R.K. Sharma, Secretary General, FIMI on 14th November, 2019 with regard to presenting unique capabilities on 'dry beneficiation'. Mr. Pramod Tyagi, Additional Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of Senior Executives from Mitsubishi Corp.

Senior Executives from Mitsubishi Corp. (Tokyo HQ based) joined by Mr. Ankush Girdhar, DGM – Mineral Resources Group, Mitsubishi Corp. India Pvt. Ltd., New Delhi called on Mr. R.K. Sharma, Secretary General, FIMI on 19th November, 2019 regarding iron ore market related general discussions. Mr. Pramod Tyagi Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of delegation of Far East Investment and Export Agency (FEIEA)

A delegation headed by Mr. Alexander Volkov – Managing Director, FEIEA, a development Institute, a subsidiary of Ministry for Development of Russian Far East established by the Russian Government accompanied by Ms. Alexandra

Chernova – Head of International Cooperation Department for India & Korea and Mr. Maksim Korobov – Institute of Volcanology (Rhenium production) called on Mr. R. K. Sharma, Secretary General, FIMI on 22nd November, 2019 with regard to investment / business opportunities in Russia for Rhenium Project. Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of Senior Executives of Argus Media Singapore Group Pte Ltd.

Mr. Feisal Sham, Sr. VP – Sales & Marketing, Asia Pacific, Mr. Debjyoti Dutt, Sr. Accounts Manager and Mr. Saurabh Chaturvedi, Associate-Solid Fuels, Argus Media Singapore Group Pvt. Ltd called on Mr. R.K. Sharma, Secretary General, FIMI on 11th December, 2019 with regard to commercial coal mining scenario. Mr. Pramod Tyagi, Addl. Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI were also present in the meeting.

Visit of Senior Representatives of Elara Securities (India) Private Limited, Mumbai

Senior Representatives — Mr. Ravi Sodah, Sr. Research Analyst, Ms. Anita Nazareth, Corporate Access and Ms. Garima Kapoor of Elara Securities (India) Private Limited, Mumbai, a London based investment bank called on Mr. R.K. Sharma, Secretary General, FIMI on 16th December, 2019 with regard to have knowledge of mining sector as well to understand other issues viz. scenario of noncaptive mining leases are set to expire in March, 2020 etc. Mr. Ashis Dash, CEO, SMI-FIMI was also present in the meeting.

Meeting with Joint Secretary(s) and Director, Ministry of Mines

Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI-FIMI paid a courtesy visit to Mr. Satendra Singh, Joint Secretary, Mr. Upendra C. Joshi, Joint Secretary and Dr. D. Veena Kumari, Director, Ministry of Mines on 2nd January, 2020 and discussed the current key issues of mining industry.

Meeting with Director (Technical), Ministry of Coal

Mr. Ashis Dash, CEO, SMI-FIMI had a meeting with Mr. Peeyush Kumar, Director (Technical), Ministry of Coal on 2nd January, 2020 with regard to interactions on current scenario of coal mining industry.

Meeting with Joint Secretary, Ministry of Coal

Mr. Pramod Tyagi, Additional Secretary General and Mr. Ashis Dash, CEO, SMI-FIMI had a meeting with Mr. Bhabani Prasad Pati, Joint Secretary, Ministry of Coal on 10th January, 2020 with regard to Sustainable Development for coal mining.

Workshop organized by Indian School of Mines, Dhanbad

Mr. Ashis Dash, CEO, SMI-FIMI delivered a technical session on Sustainable Mining in India - Evolution and Best practices on 18 January, 2020 at IIT (ISM), Dhanbad.

India Resources Conclave

Mr. Ashis Dash, CEO, SMI-FIMI attended the India Resources Conclave on 22nd January, 2020 at Hotel the Imperial, New Delhi organized by Centre for Economic Policy Research, CEPR.

Meeting of High Level Committee for Brand Building for Mining Industry

Meeting of High Level Committee for Brand Building for Mining Industry was held under the chairmanship of Mr. Sunil Duggal, President, FIMI and CEO & MD, Hindustan Zinc Limited on 27th January, 2020 at FIMI House, New Delhi with regard to deliberations for eliciting the views and suggestions from the representatives of High Level Committee. Mr. R.L. Mohanty, Vice-President, FIMI, Mr. Arvind Singhal, Chairman, FIMI's Standing Committee for Non-Metallic Minerals, Mr. Chanakya Chaudhary, Vice President (Corporate Services), Tata Steel, Mr. Upendra Kumar, Advisor, Essel Mining & Industries Limited, Mr. Abhishek Kumar, Sr. Manager – Group Corporate Affairs, Aditya Birla Group, Mr. Joy Kachapilly, Manager – Group Corporate Affairs, Aditya Birla Group, Mr. T.R. Gupta, Vice-President, Corporate Affairs, HZL, Mr. R.K. Sharma, Secretary General, Mr. Pramod Tyagi, Additional Secretary General, Mr. B.K. Bhatia, Joint Secretary General, FIMI, Mr. Ashis Dash, CEO, SMI and Mr. Pavan Kaushik, Director (Communications and Public Relations), FIMI were also present in the meeting.

Visit for exploring collaboration on sustainability charter for Hindalco Mines

Mr. Ashis Dash, CEO, SMI-FIMI visited Bagru Mines of Hindalco on 29 January 2020 for providing help on preparing sustainability charter for the mines.

4th Indian Iron Ore Pellet and DRI Summit

Mr. B.K. Bhatia, Joint Secretary General, FIMI and Mr. Ashis Dash, CEO, SMI-FIMI attended the 4th Indian Iron Ore Pellet and DRI Summit on 2nd March, 2020 at Hotel the Lalit, New Delhi, organized by SteelMint.

5.11 Networking

Realizing the importance of sharing information in mining to move together towards sustainability, SMI regularly interacts and collaborates with national and international level organizations, mining companies, think-tanks and regulators. Networking provides for a platform to absorb as well as share global best practices in the sector. All these enable SMI to be at the forefront of knowledge related to sustainable mining, which SMI disseminates with the mining industry and other stakeholders.

List of few organizations with whom SMI constantly interacts and networks is given below:

- 1. International Council on Mining & Metals (ICMM)
- 2. International Union for Conservation of Nature (IUCN)
- 3. United Nation Environment Programme (UNEP)
- 4. World Economic Forum (WEF)
- 5. International Labour Organization (ILO)
- 6. Global Reporting Initiative (GRI)
- 7. Extractive Industry Transparency Initiative (EITI)
- 8. International Finance Corporation (IFC)
- 9. Indian Council for Research on International Economic Relations (ICRIER)
- 10. Minerals Council of Australia
- 11. Centre for Science and Environment (CSE)

5.12 FIMI Awards

In order to motivate and recognize the efforts of the Indian mining industry for having addressed various sustainability challenges through exemplary ways, FIMI had constituted awards and SMI administers the FIMI Award Scheme.

There are ten awards under various categories for the FIMI Award Scheme:

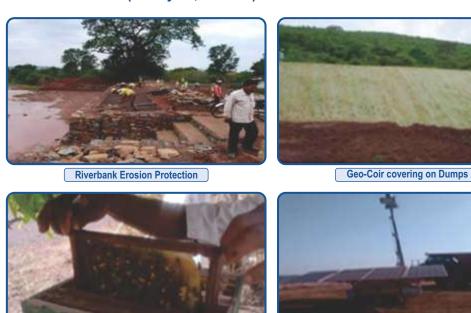


The Awards and the assessment process is overseen by a distinguished Jury comprising of national experts. The Awards help in benchmarking the excellent standards adopted by the mining industry and in spreading the message of sustainable mining among the members.

During 2019-2020, 46 applications were received from 32 mines for various categories of Awards.

For FIMI Awards 2018-2019, the following mines were considered as the Awardees:

 Bala Gulshan Tandon Award of Excellence – Joda East Iron Mine of Tata Steel Limited (Keonjhar, Odisha)







Solar Hybrid Tower



Zero discharge Slime Dam

2. Tata Steel Award for Sustainable Mining – Jajang Iron & Manganese Mine of Rungta Mines Limited (Keonjhar, Odisha)



Rain Water Conservation

Extensive Plantation on dump





Livelihood opportunities for local villagers







Efforts in education

3. Subh Karan Sarawagi Environment Award – Diamond Patharia Limestone Mines of Diamond Cements (Damoh, Madhya Pradesh)



21 km OLBC connecting Mines to Plant



View Point and Covered Crusher Hopper



Panchwati and Nawagrah Vatika



Afforestation on Reclaimed area

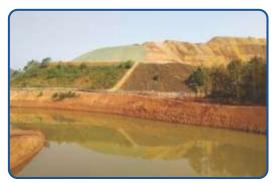


Ecological and Biodiversity Restoration



Water Reservoir in Old Quarry

4. Abheraj Baldota Environment Award – Sanindpur Iron & Bauxite Mine of Rungta Sons Private Limited (Sundergarh, Odisha)



Rain water harvesting pond



Wheel washing system



Dry Fog System in mineral handling plant



Road Sweeper



Systematic dump management with coir mat and vetiver



Plantation within lease

5. Gem Granites Environment Award – Jilling Langalota Iron & Manganese Mine of Essel Mining & Industries Limited (Keonjhar, Odisha)





Fume Extractor

Rainwater Harvesting Pond





Implementation of Miya-waki method for waste dump





Plantation area

6. Misrilall Jain Environment Award – Chotia Coal Mines of Bharat Aluminium Company Limited (Korba, Chhattisgarh)



Mass plantation programme



Afforestation in Mined out area



Sewage treatment plant



Effluent treatment plant

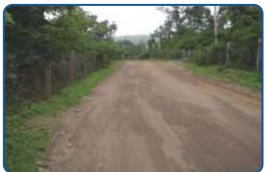


Garden developed with treated water



Balco Sustainability App Interface

7. Jury Special Environment Award – Ramrama Manganese Mine of M/s A.P. Trivedi Sons (Balaghat, Madhya Pradesh)



3.0

Plantation along transport road

Green belt developed





169 Kw solar power plant



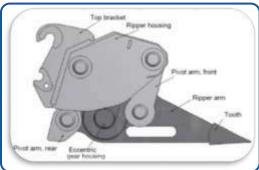




Water tanker for dust suppression

8. Jury Special Environment Award – Pudupalayam North Limestone Mines of The Ramco Cements Limited (Ariyalur, Tamil Nadu)





Xcentric ripper in operation





Plantation along the haul roads





Miyawaki method of plantation

9. Sita Ram Rungta Award for Social Awareness – Mangampet Barytes Mine of Andhra Pradesh Mineral Development Corporation Limited (Kadapa, Andhra Pradesh)





APMDC School

Class Room







RO Water Plant







10. NMDC Award for Social Awareness – Bhusar Bauxite Mine of Hindalco Industries Limited (Lohardaga, Jharkhand)



Study material and sweater distribution at Balwadi



Support to education in high schools



Free School Bus Services



Rural Health Check-up Camp



Women Self Help Group



Tribal mela- Paryavarn Jatra

11. Jury Special Social Awareness Award – Bhimdeval Limestone Mine of GHCL Limited (Gir-Somnath, Gujarat)





Support to agriculture by providing organic manure to farmers



Drip irrigation system



Farming by the use of drip irrigation



Cancer detection programme



Medical facilities provided to villagers

12. Rio Tinto Health & Safety Award – Naokari Limestone Mine of Ultratech Cement Limited (Chandrapur, Maharashtra)



Alcohol Testing

First Aid Training



Display of Safety features in dumper



Periodic Medical Examination of the employees





Loading & Transportation

13. Hindustan Zinc Health & Safety Award – 6&7 Pits Colliery, Jharia Division of Tata Steel Limited (Jharia, Jharkhand)



Load Haul Dumper (LHD) in mining



Fire Tender



Chair - lift System in 6&7 Pits colliery



Improved gallery profile with hand rails



Pit Safety Committee meeting



Joint Mass communication

6. Way Forward

India, being the second most populated country with the largest percent of aspiring young generation, is witnessing a fast growth in middle class, leading to urbanization and infrastructure development. Mining is an important sector which contributes significantly to our gross domestic product and generates employment in remote and far-off regions. India is endowed with abundant reserves of key minerals such as iron ore, coal, bauxite, dolomite, limestone, chromite, manganese ore, zinc etc. which accords significant opportunities in mining sector. However, there are many areas that need to be explored.

Many mining companies are involved in various voluntary initiatives that go beyond the social and environmental performance set by the legislation. Innovation and adoption of new technologies helps in the productivity of mining sector. While concerns for shortage of metals can be offset by improved technology but focus today is on other sustainability challenges such as access to land, mitigating the environmental impacts, achieving high health and safety standards and proactively engaging in community development. With the increase in rate of extraction, direct as well as indirect jobs in mining sector are also augmented.

Mining being a site specific activity needs to systematically address the issues of its environmental and social impacts in a sustainable manner. The mining business has crossed geographical boundaries to face stiff global competitions. Fast and effective communication has increased the global networking and awareness. The complex regulatory system needs to be simplified and rationalized. All these factors resulted in the following emerging issues:

- Growing concerns of inequality, impacts of project affected families, mines safety, community health, water consumption, climate change, biodiversity, cultural diversity etc.
- 2. "Concerns" shifting to "Rights" through intervention of judiciary system, green tribunals and NGO activities.
- 3. Increasing public pressure for transparency and accountability on business houses.
- 4. Thrust on collaboration approach by all industry members to resolve the issues.
- 5. Emphasis on innovation and digitalization in mining.

Under the situation of huge growth potential of mining industry in the country coupled with these emerging trends, Sustainable Mining Initiative (SMI) envisages pivotal role to assist its member by updating critically on anticipating changes and emerging issues so that members can better understand evolving values, proactively address risks, avoid crisis and serve in a leadership position in resolving issues of public concerns. It is necessary to improve the basic building blocks of governance required for the extractive industry to contribute to sustainable development.

Our focal thrust areas are:

- 1. Communicating the importance and contribution of mining and metal in the sustainable socio-economic development of the nation.
- 2. Facilitating the strengthening of mining industry and community relationship.
- 3. Providing technical support for better environment & climate change management, and better health and safety performance over and above the regulations.

SMI will keep evolving itself in developing comprehensive programs and models which will help in identification and mitigation of sustainability related risks in the Indian mining industry.

KEY ACTION POINTS OF CODE OF CONDUCT

Principle 1

- 1 Integration of sustainable principles into company policies.
- 2 Plan, design, operate & close operations to enhance sustainable development.
- 3 Encourage and ensure good practice & innovation to improve sustainable performance.
- 4 Encourage customers, business partners and suppliers of goods and services to adopt principles that are comparable to our own.
- 5 Provide sustainable development training at all levels.
- 6 Support public policies and practices that foster open and competitive markets.

Principle 2

- 1. Develop and implement ethical business practices.
- 2. Comply with or continually exceed the requirements of the laws and regulations.
- Work with the governments, industry and other stakeholders to evolve appropriate public policy, laws and regulations that contribute to national sustainable development.

Principle 3

- Conduct base line survey.
- 2. Stakeholder's engagement in management of social, health, safety, environmental and economic impacts.
- 3. Undertake risk management systems.
- 4. Inform potentially affected parties of significant risks.
- 5. Develop and maintain effective emergency response measures.

Principle 4

- 1. Focused systems for improvement of all aspects of operations that could have impact on the health and safety.
- 2. Provide necessary medical facilities.
- 3. Talk all practical measures to eliminate workplace fatalities, injuries and diseases.
- 4. Provide all employees and those of contractors with health and safety training.
- 5. Implement regular health surveillance and risk based monitoring of employees.

Principle 5

1. Assess the positive and negative, the direct and indirect and the cumulative environment impacts of new projects.

- Focused environmental management system to mitigate adverse environmental impacts.
- 3. Involve local communities and authorities to avoid or minimize local and regional environmental impacts.
- Rehabilitate land disturbed or occupied by operations with appropriate post mining land uses.

Principle 6

- Ensure fair remuneration and work conditions and ban forced, compulsory or child labour.
- Provide for the constructive engagement of employees in upholding the freedom of association and right to collective bargaining.
- 3. Implement policies and practices to eliminate unfair discrimination.
- 4. Provide all staffs including subcontractors with appropriate cultural and human rights training.
- 5. Minimize involuntary resettlement and compensate fairly for adverse effects on the community where they cannot be avoided.

Principle 7

- 1. Respect legally designated protected areas and culturally sensitive sacred grooves.
- 2. Emphasis on restoration of natural ecosystems to rebuild local bio diversity.
- 3. Disseminate scientific data and promote practices in biodiversity assessment and management.

Principle 8

- Advance understanding of the properties of mined out resources and their lifecycle effects.
- 2. Conduct and support research that promotes effective use of resources.
- 3. Develop and promote the concept of integrated resource management.
- 4. Provide regulators and other stakeholders with scientifically sound data.
- 5. Support the development of scientifically sound policies, regulations, standards and material choice decision that encourage the safe use of mined out material.
- 6. Provide for safe storage and disposal of residual wastes and process residues.

Principle 9

- 1. Engage community to discuss and respond to issues and conflict concerning the management of social impacts.
- 2. Involve affected communities in developing work programs and determining outcomes.

- 3. Encourage partnerships with governments and non-governmental organizations for effectively delivered of programmes.
- 4. Contribute to skill and capacity building of individuals and community groups.

Principle 10

- 1. Engage with and respond to stakeholders through open and a participative consultation process.
- 2. Constantly document and report on economic, social and environmental performance.
- 3. Exchange data, implementation procedures, and experiences even personal wherever necessary.
- 4. Provide information that is independently verifiable.

SUSTAINABLE MINING INITIATIVE

Chairman - Past and Present

1. Mr. Rana Som (NMDC Limited)	2009-2011
2. Mr. H. M. Nerurkar (Tata Steel Limited)	2011-2014
3. Mr. T. V. Narendran (Tata Steel Limited)	2014-2017
4. Mr. S. Vijay Iyer (Rio Tinto India Private Limited)	2017-2018
5. Mr. Tuhin Mukherjee (Essel Mining & Industries Limited)	2018-till date

Convener – Past and Present

1. Dr. Nik Senapati (Rio Tinto India Private Limited)	2009-2015
2. Mr. R. K. Sharma (FIMI)	2015-till date

Chief Executive Officer - Past and Present

1. Mr. K. P. Nyati	2009-2012
2. Mr. R. K. Bansal	2012-2013
3. Mr. Sitaram Kemmannu	2016-2017
4. Mr. B. K. Bhatia	2017-2018
5. Mr. Ashis Dash	2018- till date





SUSTAINABLE MINING INITIATIVE FEDERATION OF INDIAN MINERAL INDUSTRIES

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