KEY ISSUES FOR IMPLEMENTATION OF
SUSTAINABLE DEVELOPMENT FRAMEWORK (SDF)
IN MINING SECTOR IN INDIA

R.K. BANSAL

Sustainable Mining and the UNFC - Challenges & Opportunities in India

New Delhi, 29-Oct-2013
Overview of FIMI/SMI

- FIMI is the only India-wide body representing the entire mining industry in the country.

- It has around 400 members including all large and medium mining companies including 20 Regional Associations and Federations representing most of the small miners.

- Sustainable Mining Initiative (SMI) was launched by ten large mining companies in 2009 as an arm of FIMI to address sustainability issues in mining sector.

- FIMI and SMI have undertaken various initiatives towards improving the sustainability performance of the sector, improving communications with the society, and making the regulatory environment more conducive to promote sustainable mining.
Background to SDF

• The Hoda Committee recommended preparing a SDF for India’s mining sector in view of inadequacy of environment and forest laws to address the issues.

• The National Mineral Policy 2008 reiterated the need to devise a SDF for the mining sector.

• Ministry of Mines got a SDF report prepared in 2011 for the non-coal, non-fuel, non-atomic minerals, not covering off shore mining.

• MMDR Bill 2011 provides for development of a National Sustainable Development Framework containing guidelines enabling formulation of project – level practices for sustainable mining.

• FIMI was a part of the working group, which reviewed and approved SDF. Ministry of Mines has constituted a Committee to frame guidelines for roll-out of pilot SDF in 2 States. FIMI is a part of this committee too.
What is Sustainable Development

Brundtland Commission (1972) – “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

“Biocentric Preservation” (John Muir, USA – Early 20th Century) – “Nature deserves to exist for its own sake, regardless of its usefulness to humans.”

“Utilitarian Conservation” (Gifford Pinchot, USA 1905) – “Resources should be used for the greatest good, for the greatest number, for the longest time. There may be just as much waste in neglecting the development and use of certain natural resources as there is in their destruction.”

Eliminating poverty and protecting our common environment are inextricably interlinked. Poor people are often forced to meet short-term survival needs at the cost of long-term sustainability – move into virgin forests or cultivate steep, erosion prone hillsides – exhausting soil nutrients within a few years; others migrate to slums and with inadequate disposal of waste result in air and water contamination, no choice but to overharvest resources.

It is in our self-interest to help everyone find better ways to live.
What is Sustainable Development

Definition of Sustainable Development in the SDF document “Mining that is financially viable; socially responsible; environmentally, technically and scientifically sound; with a long term view of development; uses mineral resources optimally; and ensures sustainable post-closure land uses. Also, one based on creating long-term, genuine, mutually beneficial partnerships between government, communities and miners, based on integrity, co-operation and transparency.”

The SDF document provides a framework in which this balance is to be approached.

Distribution of benefits from mining :- National, State and Local.
Global Frameworks / Initiatives

GRI (1997) – Global Reporting Initiative – a long-term, multi-stakeholder inter-national undertaking to develop globally applicable sustainability reporting. Mining and Metals supplement

GMI (1998) – Mining Minerals Sustainable Development (MMSD) Project to identify “how mining and minerals can best contribute to the global transition to sustainable development”.

UNEP (2000) – “Mining and Sustainable Development II : Challenges and Perspectives”

“To succeed, we believe a policy mix including regulatory measures, economic incentives and voluntary initiatives will be necessary”. Berlin Guidelines 1991, revised 1999.

Also mention that “Associations hold key to programme of change”.

29/10/2013
Global Frameworks / Initiatives

**ICMM (2002)** – Leading mining and metals companies working together and with others to strengthen the contribution to sustainable development. Working as a catalyst for improving environmental and social performance in mining and metals industry. 10 Principles and 6 Position Statements, 22 Member Companies; 35 Association Members.

**EITI (2003)** – Extractive Industries Transparency Initiative: requiring countries’ commitment to ensure transparency on how the country’s natural resources are governed, and full disclosure of government revenues from its extractive sector (oil, gas and minerals). 23 Compliant and 16 candidate countries.
Global Frameworks / Initiatives

IGF (2005) – The Intergovernmental Forum on Mining Minerals, Metals and Sustainable Development; “….. to improve, enhance, and promote the contribution of the mining, minerals and metals sector to sustainable development and poverty reduction. India is a member, along with 42 other countries. IGF is recognized by the UN as a partnership linked to the Johannesberg Summit; hosted by UNCTAD.

WEF (2010) - Responsible Mineral Development Initiative (RMDI) – 6 building blocks to unlock the potential socio-economic benefits of mining to countries

IFC (2012) – Sustainability Framework, Performance Standards– used along with other strategies, polices, and initiatives to direct the business activities of IFC in order to achieve its overall development objectives.

(1) “Recognize environmental management as a high priority, notably during the licensing process…..”.

(9) “Adopt risk analysis and risk management in the development of regulation and…”

(11) Avoid the use of such environmental regulations that act as unnecessary barriers to trade and investment.

(13) Evaluate and adopt, where appropriate, economic and administrative instruments such as tax incentive policies to encourage the reduction of pollutant emissions and introduction of innovative technology.

(15) Encourage long – term mining investment by having clear environmental standards with stable and predictable environmental criteria and procedures.
Potential of Mining Growth as a tool for Socio-economic Development

Country segmentation clustered by potential for mining sector growth and potential for socio-economic development

Country’s resource value divided by annual GDP contribution of mining industry (2009)

1. United Nation’s Human Development Index is a composite index including per capita GDP, life expectancy, adult literacy rates and enrollment in educational institutions.
2. Resource value of estimated resources in the ground at current market prices (five-year average commodity price between 2008-2010) divided mining industry contribution to the country’s GDP in 2000.

Source: RMQ, USGS, EU, UNDP
Note 1: Only considered top 30 mining countries in terms of mining revenues in 2000.
Note 2: For calculations of the multiplier the resources considered were bauxite, copper, diamond, gold, iron ore, nickel, PGMs, silver, tin, zinc and coal.
Mining related FDI

Source: UNCTAD; Investment Trade Centre
Note: Based on FDI flow data in 2009 or nearest available year
IGF’s Mining Policy Framework

A mature modern legislative regime is one that provides clear lines of responsibility and accountability. Such a regime provides the foundation of good governance and contributes to sustainable development in all aspects of social and economic life. To this end, Governments should consider:

→ The ongoing generation of and access to geological information.

→ The revision and periodic updating of mining codes and standards.

→ A permitting process that requires:
  o Mining entities to consult with stakeholders and communities.
  o Submission of integrated social, economic and environmental assessments.
  o Identify and quantify opportunities and propose programmes for creation of sustainable benefits over life of the project.
IGF’s Mining Policy Framework

- Include acceptable plans for closure.
- Address indigenous peoples, cultural heritage, resettlement, community safety and security.
- Completion of the process in a timely, transparent, unambiguous and consistent manner.

→ Financial Benefits Optimization
→ Socio-economic benefits optimization.
→ Environmental Management.
→ Post-mining transition.
→ Integrating Artisanal and Small Scale Mining (ASM) activities into the legal and economic systems.
# 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 1</th>
<th>Incorporating Environmental and Social Sensitivities in Decisions on Leases</th>
</tr>
</thead>
</table>
| **Theme**   | More systematic approach required to categorize mining areas based on identified sensitivities (risks)  
- Environmental and social; Assess SD capacities during biddings. |
| **Coverage**| Leases to be awarded. Leases in operation. Ministry of Mines, State Governments, MoEF  
To be used as a decision tool by Governments and miners. |
| **Regulatory scenario** | - No current regulations (FC Act, WLP Act, EP Act, Air / Water Acts, etc.)  
- Protected areas, dense forests, schedule areas; fragile ecosystems, etc  
- Multiple Court orders; several pending |
### 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 2</th>
<th>Strategic Assessment in Key Mining Regions at Periodic Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes</td>
<td>Regional ESIA study to determine sustainable capacity, at periodic intervals, for identified “Mining Regions”. To aid in regional resource planning, optimize number and size of mining lease and scale of operations, technologies, infrastructure etc.</td>
</tr>
<tr>
<td>Coverage</td>
<td>Major and minor minerals (non-coal, non-fuel) State Governments?? MoEF? IBM?</td>
</tr>
<tr>
<td>Regulatory scenario</td>
<td>Current regulations do not prescribe Regional Assessments</td>
</tr>
</tbody>
</table>
# 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 3</th>
<th>Managing Impacts at the Mine Level through Sound Management Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Themes</strong></td>
<td>− Avoid gaps and duplication / overlaps in regulatory systems.</td>
</tr>
<tr>
<td></td>
<td>− Comprehensive ESIA commensurate with risk category</td>
</tr>
<tr>
<td></td>
<td>− Management Framework and systems to address risks and impacts, align with regional ESIA</td>
</tr>
<tr>
<td></td>
<td>− Incorporate Continual Improvement approach.</td>
</tr>
<tr>
<td></td>
<td>− Ethical Functioning</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>− Mining Companies (All non-coal, non-fuel minerals)</td>
</tr>
<tr>
<td></td>
<td>− Regulatory agencies (MOM, IBM, SGs, MoEF)</td>
</tr>
<tr>
<td></td>
<td>− Stakeholders</td>
</tr>
<tr>
<td><strong>Regulatory scenario</strong></td>
<td>- Composite EMP format agreeable to MoEF &amp; IBM?</td>
</tr>
<tr>
<td></td>
<td>- Regulatory review based on Key Performance Indicators (KPIs).</td>
</tr>
<tr>
<td></td>
<td>- Integrated monitoring mechanism to avoid duplicity (MoEF, DMG, IBM, SPCB)</td>
</tr>
</tbody>
</table>
## 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 4</th>
<th>Addressing land, resettlement and other social impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Themes</strong></td>
<td>Comprehensive assessment of social impacts and displacement of mining projects at household, community and regional level, and management commitment to address the impacts.</td>
</tr>
<tr>
<td></td>
<td>− Free, Prior, Informed Consent (FPIC)</td>
</tr>
<tr>
<td></td>
<td>− R&amp;R; livelihood restoration</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>All mining activity; lessees / mining companies; including existing operations</td>
</tr>
<tr>
<td><strong>Regulatory scenario</strong></td>
<td>− New Act on Land Acquisition and R&amp;R to become operational from 2014. Includes SIA.</td>
</tr>
<tr>
<td></td>
<td>− Forest Rights Act</td>
</tr>
<tr>
<td></td>
<td>− Separate SIA not mandatory</td>
</tr>
<tr>
<td></td>
<td>− PESA 1996</td>
</tr>
</tbody>
</table>
7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 5</th>
<th>Community Engagement, Benefit Sharing and contribution to socio-economic development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes</td>
<td>(i) Regular engagement through life of project, disclosure, timely resolution of issues and conflicts. FPIC, SIA</td>
</tr>
<tr>
<td></td>
<td>(ii) Establish mechanism and systems for dialogue with affected communities</td>
</tr>
<tr>
<td></td>
<td>(iii) Assess local needs and contribute to the socio-economic development of the local communities through life of project.</td>
</tr>
<tr>
<td></td>
<td>(iv) Benefit sharing – State Governments to share part of royalties with district, block and Panchayats.</td>
</tr>
</tbody>
</table>
## 7 SDF Principles

<table>
<thead>
<tr>
<th>Coverage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- All scales of projects; Major, minor minerals</td>
<td>- Involvement of local bodies, consultative mechanisms to oversee benefit sharing arrangements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory scenario</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Public hearing under EIA Notification</td>
<td>(ii) Disclosures on websites (MoEF; Lessee)</td>
</tr>
<tr>
<td>(iii) NOCs from Gram Sabhas (PESA; FRA)</td>
<td>(iv) New Land Acquisition Act SIA, Public Consultation</td>
</tr>
<tr>
<td>(v) No benefit sharing regulations; MMDR Bill proposes DMF;</td>
<td>(vi) Companies Act 2013 – 2% of net profits on CSR (only large Companies)</td>
</tr>
<tr>
<td>(vii) State-specific policies (Odisha, HP) for contribution to local / peripheral area funds. No clarity on institutional mechanism, capacities, legal provisions, stakeholder consultations.</td>
<td></td>
</tr>
</tbody>
</table>
## 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 6</th>
<th>Mine Closure and Post-Closure</th>
</tr>
</thead>
</table>
| **Themes**  | - Prepare, manage and progressively work on a process for eventual mine closure and post-closure.  
               - Adequate financial provisioning for closure costs (including post closure) |
| **Coverage**| - All mining sites  
                - Immediately for high-risk closures |
| **Regulatory scenario** | (i) MCDR 1988 :- Rules & guidelines  
                            - PMCP & FMCP as part of Mine Plans  
                            - Financial Assurance  
                            (ii) NMP 2008  
                            (iii) Conditions in FC, EC, Consents  
                            (iv) Responsibility for orphan sites? |
## 7 SDF Principles

<table>
<thead>
<tr>
<th>Principle 7</th>
<th>Assurance &amp; Reporting</th>
</tr>
</thead>
</table>
| Themes      | - Report on a regular basis performance against the SDF  
             - Provide 3rd party assurance  
             - Involve stakeholders in reporting & assurance and respond to their concerns.  
             - Consider SDF performance for approvals |
| Coverage    | - All mining Companies  
             - Government Institutions  
             - PL Licensees |
| Regulatory scenario | - RTI Act 2005 – applicable only on Govt. and PSUs  
                          - Companies Act – only on large Cos – disclosures w.r.t. CSR |
Observations in SDF Report

→ Better enforcement rather than more regulation required in the mining sector.

→ Lack of capacity and usable information / data to regulators.

→ Capacity issues within mining companies (small and medium) limit their ability to undertake scientific mining.

→ Vulnerable sections (women, children, old people) sustain several negative impacts and little benefits from mining.

→ Irregularities, illegalities, under-reporting, widespread violations of labour and safety norms, persistence of child labour, poor working conditions, and a general disregard for environmental safeguards reported in minor mineral segment even though providing significant employment opportunities.
Observations in SDF Report

→ Multiple agencies responsible for regulation, lack of proper documentation and approvals in practice though more stringent regulations on paper.

→ States would like more localized regulation and control.

→ Gujarat provides 90% of royalties collected (from minor minerals) to flow back to the source district, and 20% of that amount to the source Tehsil, for local development.
2012 – 13 “Annual Survey of Mining Companies” by Fraser Institute

• “To measure, study and communicate the impact of competitive markets and government interventions on the welfare of individuals”.

• “To assess how mineral endowments and public policy factors such as taxation and regulation affect (encourage or discourage) exploration investment”.

• Results based on responses received from 742 explorations / mining Companies around the world.

• 17 policy factors examined, max score of 100
<table>
<thead>
<tr>
<th>Factor</th>
<th>India’s Score</th>
<th>Rank (2012-13)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertainty concerning the administration, interpretation and enforcement of existing regulations</td>
<td>69 / 100</td>
<td>73 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Uncertainty concerning environmental regulations (stability of regulations, consistency and timeliness of regulatory process, regulations not based on science)</td>
<td>63 / 100</td>
<td>70 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Regulatory duplication and inconsistencies (includes federal / provincial, federal / state, interdepartmental overlap etc.)</td>
<td>75 / 100</td>
<td>80 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Legal system (legal processes that are fair, transparent, non-corrupt, timely, efficiently administered etc.)</td>
<td>88 / 100</td>
<td>83 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Taxation regime (includes personal, corporate, payroll, capital and other taxes and complexity of tax compliance)</td>
<td>66 / 100</td>
<td>77 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Uncertainty concerning disputed land claims</td>
<td>62 / 100</td>
<td>74 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Uncertainty concerning what areas will be protected as wilderness, pales or archaeological sites etc.</td>
<td>73 / 100</td>
<td>92 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>Infrastructure (includes access to roads, power availability etc.)</td>
<td>69 / 100</td>
<td>71 / 96</td>
<td>Score reflects &quot;Does not encourage investment&quot;</td>
</tr>
<tr>
<td>Socio-economic agreements / community development conditions (includes local purchasing or processing requirements, or supplying social infrastructure such as schools or hospitals etc.)</td>
<td>50 / 100</td>
<td>59 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
</tbody>
</table>
2012 – 13 “Annual Survey of Mining Companies” by Fraser Institute

<table>
<thead>
<tr>
<th>Factor</th>
<th>India’s Score</th>
<th>Rank (2012-13)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Trade barriers (tariff and non-tariff barriers, restrictions on</td>
<td>67 / 100</td>
<td>76 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>profit repatriation, currency restrictions etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Political stability</td>
<td>33 / 100</td>
<td>47 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>12. Labour regulations / employment agreements and labour</td>
<td>67 / 100</td>
<td>83 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>militancy / work disruptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Quality of the geological database (includes quality and</td>
<td>47 / 100</td>
<td>60 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>scale of maps, ease of access to information etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Level of security (includes physical security due to threat</td>
<td>62 / 100</td>
<td>71 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>of attack by terrorists, criminals, guerilla group etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Availability of labour / skills</td>
<td>44 / 100</td>
<td>59 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>16. Level of corruption (or honesty)</td>
<td>94 / 100</td>
<td>88 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>17. Growing (or lessening) uncertainty in mining policy and</td>
<td>53 / 100</td>
<td>53 / 96</td>
<td>Score reflects “Does not encourage investment”</td>
</tr>
<tr>
<td>implementation</td>
<td></td>
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</tbody>
</table>
## Composite Scores

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>India’s Score</th>
<th>Rank</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Policy Potential index (PPI) (provides a comprehensive assessment of the attractiveness of mining policies in a jurisdiction) – all above factors except 16 and 17</td>
<td>21.1 / 100 (Finland 95.5)</td>
<td>81 / 96</td>
<td>Score reflects ‘encourage investment’</td>
</tr>
<tr>
<td>2</td>
<td>Current mineral potential (assuming current regulations and land use restrictions)</td>
<td>28 / 100</td>
<td>76 / 96</td>
<td>Score reflects ‘encourage investment’</td>
</tr>
<tr>
<td>3</td>
<td>Policy / Mineral Potential assuming no land use restrictions in place and assuming industry “best practices”</td>
<td>69 / 100</td>
<td>25 / 96</td>
<td>Score reflects ‘encourage investment’</td>
</tr>
<tr>
<td>4</td>
<td>Room for improvement (Shows the gap between “Current” and “best practices’ mineral potential and the greater “room for improvement””)</td>
<td>41 / 100</td>
<td>12 / 96</td>
<td></td>
</tr>
</tbody>
</table>

**Number of respondents indicating India as – Most Favourable Policies towards Mining**: 3

**Number of respondents indicating India as – Least Favourable Policies towards mining**: 25
FIMI CODE OF CONDUCT

**Principle 1: Integrate sustainable development considerations within the corporate decision making**

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

**Principle 2: Conduct business with ethical practices and sound systems of corporate governance**

- Develop and implement ethical business practices.
- 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: Implement risk management strategies based on valid data and sound science**

- Conduct base line survey.
- Stakeholder’s engagement in management of social, health, safety, environmental and economic impacts.
- Undertake risk management systems.
- Inform potentially affected parties of significant risks.
- Develop and maintain effective emergency response measures.
FIMI CODE OF CONDUCT

Principle 4: Seek Continual Improvement in health and safety performance
- Focused systems for improvement of all aspects of operations that could have impact on the health and safety.
- Provide necessary medical facilities.
- Take all practical measures to eliminate workplace fatalities, injuries and diseases.
- Provide all employees and those of contractors with health and safety training.
- Implement regular health surveillance and risk based monitoring of employees.

Principle 5: Seek continual improvement of our environment performance based on a precautionary approach
- 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.
- 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: Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities
- 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.
- Implement policies and practices to eliminate unfair discrimination.
- Provide all staffs including subcontractors with appropriate cultural and human rights training.
- Minimize involuntary resettlement and compensate fairly for adverse effects on the community where they cannot be avoided.
FIMI CODE OF CONDUCT

Principle 7: Contribution to conservation of biodiversity and integrated approaches to land use planning and management

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

Principle 8: Facilitate and encourage responsible use, reuse and recovery of mined materials including associated natural resources

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

Principle 9: Contribute to the social, economic and institutional development of the communities in which we operate

• Engage community to discuss and respond to issues and conflict concerning the management of social impacts.
• Involve affected communities in developing work programs and determining outcomes.
• Encourage partnerships with governments and non-governmental organizations for effective delivery of programmes.
• Contribute to skill and capacity building of individuals and community groups.

Principle 10: Implement effective and transparent engagement, communication and verifiable reporting arrangements with our stakeholders

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

• SDF is limited in coverage – excludes coal, fuel, atomic minerals, off-shore mining

• MoEF, MoTA, MORD, State Governments not involved

• Current regulatory environment does not facilitate SDF - Regulatory reforms and integrated approach essential

• Large mines/companies only can possibly understand and implement SDF

• Minor mineral sector needs to be viewed and regulated differently

• Industry has taken initiative for self-regulation

• Govt needs to take lead role in bringing integration of sustainability, regulatory and business requirements
ISSUES AND CHALLENGES

• Small and minor mineral sector
  – Thousands of mines (Rajasthan alone has 22000 leases < 1 hectare); reservation for vulnerable sections in concessions
  – no capacity for SDF; poor compliance and enforcement
  – Significant employment potential
  – Inadequate area for scientific mining, processing, infrastructure, green belt, exploration
  – Lease period small to medium – no long-term vision
  – Severe regional impacts on land, water, air, biodiversity, health & safety, community
  – Tendency of courts to put blanket bans – leads to illegal mining
  – Regulatory reforms at State Govt level needed, aligned with Principles 1 and 2, to change the situation
  – Lease size and tenures need reviewing
## Area Wise Distribution of Mining Leases*
(Frequency in Hectare) (as on 31.3.2011)
(All India)

<table>
<thead>
<tr>
<th>Frequency Group area in Hects.</th>
<th>Number of Mining Leases</th>
<th>Percentage of Total Leases</th>
<th>Area in ‘000 Hects.</th>
<th>Percentage of Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>6,714</td>
<td>61</td>
<td>27</td>
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<td>10-20</td>
<td>1064</td>
<td>10</td>
<td>15</td>
<td>3</td>
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<td>20-50</td>
<td>1358</td>
<td>12</td>
<td>45</td>
<td>8</td>
</tr>
<tr>
<td>50-100</td>
<td>919</td>
<td>8</td>
<td>68</td>
<td>12</td>
</tr>
<tr>
<td>100-200</td>
<td>447</td>
<td>4</td>
<td>63</td>
<td>12</td>
</tr>
<tr>
<td>200-500</td>
<td>293</td>
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<td>89</td>
<td>16</td>
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<tr>
<td>Above-500</td>
<td>208</td>
<td>2</td>
<td>241</td>
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<tr>
<td>All Groups</td>
<td>11,003</td>
<td>100</td>
<td>548</td>
<td>100</td>
</tr>
</tbody>
</table>

83% of Leases occupy only 16% of area

* Excluding Fuel, Atomic & Minor Minerals

Source: Indian Bureau of Mines, Nagpur
Pending Mineral Concession applications as on 12-Aug-2013

<table>
<thead>
<tr>
<th>No. of Pending Applications</th>
<th>No. of Pending LOIs*</th>
<th>No. of Pending Renewal Applications*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>640</td>
<td>19,651</td>
</tr>
<tr>
<td>RP</td>
<td></td>
<td>44,985</td>
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<tr>
<td>PL</td>
<td></td>
<td>65,276</td>
</tr>
<tr>
<td>ML</td>
<td></td>
<td>638</td>
</tr>
<tr>
<td>Total</td>
<td>2,421</td>
<td></td>
</tr>
</tbody>
</table>

*: As on 1 January, 2013; Source: Ministry of Mines
Enjoyment area

Lease area as per JT sketch

Overlapped area of Forest and Revenue Boundary

MINE A

MINE B

MINE C

MINE D

MINE E

MINE F

MINE G

CONSOLIDATED LEASE SKETCH
WAY FORWARD

• Principle 1 (Environmental & Social Risks) and Principle 2 (Regional Assessments) are key to decisions on leases.
• Regional geo-socio-environmental assessments to be the basis for decisions on lease sizes, capacities, infrastructure, technology, capacity of applicants
• MMDR Act, MCR, MCDR to be amended accordingly; EP Act, other laws to reflect corresponding changes; integration of regulation and inspections/monitoring
• State Governments to be responsible for regional assessments
• India should become member of Extractive Industries Transparency Initiative (EITI).
• Increased engagement in Intergovernmental Forum (IGF)
• SDF can be a strong tool for sustainable growth of India’s mining sector, thereby contributing to India’s sustainable development and poverty alleviation.
• Industry has started the movement for self-regulation; willing to partner with Governments on this challenging but exciting path.
IF NATURE CARES FOR YOU
WHY NOT YOU?

THANK YOU.