

# Sustainable Development Framework for the Mining Sector

Historically, the extraction of mineral reserves has always resulted in varying degrees of environmental resource degradation and social impacts, including displacement, all across the globe. The Indian mining sector has been facing severe criticism on several issues relating to its performance vis-à-vis sustainable development.

A High Level Committee which was set up under the Chairmanship of Shri Anwarul Hoda, Member, planning commission in the year 2005, to review the National Mineral Policy recommended that apart from introducing best practices in implementation of environment management, there was also a need to take into account the global trends in sustainable developments. The High Level Committee specifically studied the impact of mineral development with the need to develop principles in mining, best practices, and reporting standards which may be measured objectively.

The committee recommended development of an SDF specially tailored to Indian context taking into account the work done and being done in International Council of Mining and Metals (ICMM and International Union for the Conservation of Nature and Natural Resources (IUCN). The SDF was to comprise principles, reporting initiatives and good practice guidelines.

ERM India Pvt. Ltd. was commissioned by Ministry of Mines to develop a Sustainable Development Framework for the Mining Sector (Non Coal, Non Fuel) in India. The development of the SDF followed through on the commitment of the committee.

## **Process of developing the SDF**

A participatory approach involving consultation and discussions with different stakeholder groups, support of the concerned line departments at the state and central level, feedback and representation from the industry and the civil society groups were the key highlights of the approach adopted for the study. The SDF is informed by ground realities, conflicts, issues, expectations and perceptions with regard to the mining and the different activities associated with it. The key highlights of the consultation process were:

- i) Several rounds of consultations with the agencies at the national level including Ministry of Mines (MoM), Ministry of Environment and Forests (MoEF), Ministry of tribal affairs, Ministry of Rural Development (MoRD), Planning Commission, Water Resources Department (WRD) and other agencies;
- ii) Extensive state level consultations with all relevant stakeholders in Goa, Karnataka, Gujarat, Rajasthan, Meghalaya, Orissa and Tamil Nadu, with a focus on consultations around mining areas with the local communities;

- iii) Regional workshops at Bhubaneswar (Orissa), Goa, Shillong (Meghalaya), Udaipur (Rajasthan), Bangalore (Karnataka) involving representatives from the line departments, Indian Bureau of Mines (IBM), industry, civil society groups, media, district administration etc;
- iv) Consultations with the neighbouring community (living close to the mine), sub contractors, mine workers, transport agencies and other groups;
- v) Discussions with representatives of the research institutions (ISM), Geological Survey of India (GSI), Mining Engineers Association of India, Mining and Business Associations (FIMI, CII) etc

### **Approach to the SDF**

A working definition for 'Sustainable Development' in the mining sector was outlined, based on consultation with sector experts, secondary sources on the subject and the Indian context. The definition provided the framework and boundaries for the ERM team to analyse and prioritise issues while developing the SDF.

"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, cooperation and transparency".

The SDF framework incorporates not only regulatory requirements, but goes beyond that and recommends practices and best in class aspects to address the challenges of sustainable development more fully. It provides a path towards achieving sustainable development aided by guidance steps, measurable outcomes and reporting and assurance.

Since 'continual improvement is the key, the framework approach allows for players in the mining sector at different levels of performance to become compliant over a period of time and continue to improve thereafter. This is significant given the wide diversity in the mining sector's profile and performance in different parts of the country.

The approach anticipates the incorporation of some of the key elements not already in the regulatory regime to become law in the near future, raising the bar on the sector's performance in terms of sustainable development.

The framework approach is a flexible one in that allows for the achievement of sustainable development objectives without being too prescriptive and formulaic. It takes into account the biggest issues facing the sector in the context of existing laws and regulations and defines a set of principles that collectively progress the sector towards sustainable development.

### **Key Principles of the SDF**

The following eight principles form the core of the Sustainable Development Framework for India

1. **Incorporating Environmental and Social Sensitivities in decisions on leases:** This principle integrates sustainable development concepts at the earliest phase of the mining life cycle. The underlying philosophy of the principle is to categorise mineral bearing areas based on an environmental and social analysis taking a risk based approach. At the bidding stage the categorisation of lease areas into High and Low risk will allow the investors to take business decision with the knowledge that the cost and uncertainties of getting approvals as well as operations in high risk areas will be significantly higher than the low risk areas. It will also allow regulators to put additional commitments at an early stage for environmental and social performance. This principle allows for the government to balance environmental and social interests of the nation, with mining priorities in the longer term;
2. **Strategic Assessment in Key Mining regions:** Understanding that mining activities occurs in clusters which have impacts at a regional level, undertake a strategic assessment of regional and cumulative impacts and develop a Regional Mineral Development Plan based on as assessment of the regional "capacity" at periodic intervals. Creating an institutional structure to own and implement such plans in key mining regions and taking critical decisions on mining, new leases, allocation of resources, and even possible moratorium on mining to ensure more sustainable planning and development in such regions;
3. **Managing impacts at the Mine level impact** through sound management systems. The key elements of this principle are impact assessment of key environmental, social, health and safety issues, development of management framework and systems at the mine level and continual improvement of the same on the basis of international standards on a self driven basis. A key elements is disclosing performance on environmental and social parameters to external stakeholder at every stage of the project lifecycle;
4. **Addressing Land, Resettlement and Other Social Impacts.** This principle demands a comprehensive assessment of social impacts and displacement of mining projects at the household, community and mining region level, and management commitment to address those impacts through mitigation measures and management plans;
5. **Community engagement, benefit sharing and contribution to socio-economic development.** This principle seeks commitment to regular engagement with the local community as well as sharing of project benefits with the affected families. It is rooted in the principle of sharing profits with the affected communities already provisioned for the in draft MMDR Act awaiting approval. It dovetails the social impact management of project operations with the CSR initiatives being undertaken and looks at an integrated approach to mitigate impacts and improve local livelihoods and living conditions in the neighbourhood areas/communities.
6. **Mine Closure and Post Closure Mining** operations must prepare, manage and progressively work on a process for eventual mine closure. This process must cover all relevant aspects and impacts of closure in an integrated and multi-disciplinary way. This must be an auditable document and include a fully scoped and accurate estimate of planned cost of closure to the company. The cost estimates must be adequately provisioned to cover national, regional and local legal and regulatory

requirements for closure; and must also include the cost of servicing all agreements/commitments made with stakeholders towards post-closure use;

7. **Ethical functioning and responsible business practices.** This principle underlines the need for ethical business practises and a strong sense of corporate responsibility among mining companies. It recommends companies to go beyond legal compliance; and
8. **Assurance and Reporting.** This principle seeks mining sector stakeholders to assess their performance against this SDF and demonstrate continual improvement on this performance over the life of the project. It requires this performance to be reported in a structured manner in a Sustainable Development Report to be disclosed in the public domain as well as to regulatory agencies to consider during approval processes.

### **How can the SDF be used?**

At the very least, the SDF provides guidance for the mining companies to improve performance on environmental and social aspects, however, over time it can also become the common benchmark against which all mining operations may be evaluated in terms of their comparative performance on sustainable development terms.

The SDF will need to be used by mining companies to demonstrate commitment to sustainable development, and may be submitted to regulators at the time of seeking clearance or renewal or extension. It should also be used by regulators to evaluate the mining company's commitment to achieving environmental and social goals. Investors and financiers may use this to assess risk and could additionally use it to demand better performance of the associated mining operations. Once this SDF is accepted, its use can be determined through more focussed consultations and seeking consensus.

12.15 The Ministry of Mines (MoM) will be engaging with other permitting agencies to integrate this more fully with their existing processes.

### **Who is it for?**

This document has been prepared on behalf of the Ministry of Mines, Government of India, for all concerned stakeholders in the mining sector (non coal, non-fuel, non-atomic minerals, not covering off-shore mining). It is intended to be in the public domain for anyone to access freely. Even as it has a wide audience, the principles are clearly directed at key stakeholder categories involved in the sector, with focused guidance notes for each.

### **Who will drive the SDF process?**

The SDF is a document owned by the Ministry Mines who will undertake to ensure its up-take with the mining sector covering major and minor mineral categories and be the agency in-charge of driving it.

The process of driving the SDF will include several initiatives:

- Inclusion of some elements of the SDF into regulation;
- Inter-departmental cooperation for jointly reviewing performance against the SDF; and

- Evaluating applications and bids using additional criteria from the SDF for environmental and other clearances.

It is expected that the industry could, over time, choose to drive the wider adoption of the SDF as demonstration of performance and commitment to sustainable development goals

Civil society and the local community could use the SDF to drive mining companies and regulators for increased accountability and mining performance related disclosure.

### **Expected Outcomes in the long term**

- Reduced environmental and social conflicts in areas awarded for mining;
- Greater clarity for all concerned stakeholders, on risk levels of mining lease areas;
- Potentially reduced delays in obtaining clearances (environmental, forest) for mines;
- Improved protection of high risk areas in terms of environment and social considerations;
- A Regional Mineral Development Plan for selected mining areas and addressing key regional and cumulative impacts of mining through coordinated and collective action;
- Opportunity for clustering of small operators to become more competitive, and compliant;
- A robust E&S Management framework in mining companies enabled with continual improvement systems guiding sustainable development of mine and which is commensurate to risk category of mineral bearing area as enunciated under Principle;
- A disclosure process that provides stakeholders with relevant and timely information, and allows issues to be raised in engagement forums;
- Opening up of illegal mining activities to intensive stakeholder scrutiny as geo-spatial information regarding mining activity will be published periodically;
- Intensive use of geo-spatial and geo-scientific information at mine level for assessment, planning, management and monitoring of the mining sector;
- Stronger monitoring and assurance systems and processes; and
- SDF reporting on governance and ethical practices.

### **Corporate Social Responsibilities of National Aluminium Company (NALCO)**

NALCO believes in providing a better quality of life for communities residing in the vicinity of its plants and facilities. The Company has comprehensively addressed the problems of rehabilitation of displaced families with adequate compensation, housing and employment to the extent feasible. Creation of infrastructure in the surrounding villages for communication, education, health care and drinking water gets priority in the periphery development plans of the Company. Community participation in innovative farming, pisciculture, social forestry and sanitation programmes apart, encouragement to sports, art, culture and literature are all a part of NALCO's deep involvement as a responsible corporate citizen. As a policy, NALCO has been allocating 1% of its net profit of the year for peripheral development activities

of the succeeding year. Out of this allocable fund; 40% is for Damanjodi sector; 40% is for Angul sector; and 20% is for Bhubaneswar & rest of Orissa.

For taking up CSR activities in a focused manner, NALCO Corporate Social Responsibility (CSR) Foundation was registered under the Indian Trusts Act, 1882 in July, 2010.

The CSR activities of the Company mostly cover the peripheral villages of smelter & power complex, Angul and mines & refinery complex, Damanjodi and the district head quarters of Angul and Koraput. The Govt. of Orissa has constituted Rehabilitation and Peripheral Development Advisory Committee (RPDAC) for Damanjodi and Angul separately under the chairmanship of concerned Revenue Divisional Commissioner(RDC). The RPDAC finalizes the annual peripheral development projects and its estimates. The RPDAC also decides the projects to be executed by the District Administration and by NALCO.

The details amount contributed on such activities by NALCO for the financial years 2004-05 to 2008-09 is given in **Table 12.1**.

**Table 12.1**

Year contributed for (20% of	Total allocable for the company (1% Net Profit of preceding year)	Fund contributed for M&R Complex, Damanjodi (40% of	Fund contributed for S&P Complex, Angul (40% of column 2)	Fund
				corporate level column 2)
2004-05	737.37	294.95	294.95	147.47
2005-06	1234.84	493.93	493.93	246.98
2006-07	1562.20	624.88	624.88	312.44
2007-08	2381.38	952.55	952.55	476.28
2008-09	1631.52	652.61	652.61	326.30
2009-10	1272.00	508.80	508.80	254.40
<b>Total</b>	<b>8819.31</b>	<b>3527.72</b>	<b>3527.72</b>	<b>1763.87</b>

(` in lakhs)

*Note: The sanctioned amount are conveyed to RPDAC who decide the detailed project lists and estimates according to the sanctioned amount. Since the amount earmarked is project wise, sanctioned amount is considered as spent for that particular year irrespective of completion of the work during a particular financial year.*

During the current financial year (i.e. 2010- 11), the total allocation for CSR activities by the NALCO is `814 Lakhs. Out of this, as per Company's policy, an amount of `325.60 Lakhs each for mines & refinery complex, Damanjodi and smelter & power complex, Angul has been allocated and conveyed for finalization for projects in the RPDAC meeting.

### **Hindustan Copper Limited (HCL)**

For HCL, CSR is a planned set of activities, taking into consideration Company's capabilities, and expectations of the communities living in and around the areas of its operations. Objective of HCL is to play a catalytic role in the socio-economic development in the region, where the industry is located,

aiming to create and enabling working environment for HCL, as well as income generation opportunities for the community.

HCL's CSR Policy is based on the guidelines circulated by DPE. The DPE Guidelines essentially embrace the principles of United Nations Global Compact (UNGC) as laid down in the Millennium Development Goals (MDGs) and Targets.

HCL has allocated CSR budget of `40 Lakhs each for ICC and KCC, and `66 Lakhs for MCP for financial year 2010-11. HCL is committed to allocating 2 to 3% of its net profit, subject to a minimum of `3.0 crores per annum, towards social sector activities on a continuing basis.

HCL has assigned a project to National Institute of Rural Development (NIRD), an autonomous organization under the Ministry of Rural Development, Govt. of India for conducting social assessment study at the adjoining areas of ICC, KCC & MCP and for recommending key project interventions with handholding support for a long time sustainable CSR Plan. The focus areas of intervention are as follows:-

- Alternative Livelihood Means
- Drinking Water & Sanitation
- Construction Work
- Medicine, Health Family Welfare
- Education
- Electricity/Energy
- Vocational Training
- Plantation
- Adoption of Villages

#### **Mineral Exploration Cooperation Limited (MECL)**

MECL Under the CSR, stand for raising and improving the Socio-economic status of women and weaker section. For the purpose it provides training to acquire new skills for the career development etc.

MECL also propose to provide sewing machines for the use of Mahila Mandal of the village, stitching training classes for women belonging to SC, ST and weaker section of the society of the villages nearer to MECL projects for improving the socio-economic condition of women belonging to weaker section in the rural areas.