

**Sustainable Development Framework & District Mineral Foundations –
A new Governance Policy Approach in India to address the issues of
equity and sustainable mining: A Reexamination**

ROHIT JAIN
Associate Professor

**Tata Institute of Social Sciences, Tuljapur Campus
District Osmanabad, Maharashtra, India**

Sustainable Development Framework & District Mineral Foundations – A new governance policy Approach in India to address the issues of equity and sustainable mining: A Reexamination

**Rohit Jain,
TISS – Tuljapur Campus, Maharashtra, India**

Abstract

Mining in India contributes 2% - 3% to India's GDP. India produces 89 minerals (4 fuel, 11 metallic, 52 non metallic and 22 minor). Inspite the fact that mining being one of the oldest sectors in India, it has faced tremendous challenges and controversies. The mining sector has been plagued by poor regulations, weak institutions, inadequate monitoring and feeble enforcement. On the top of this, the mining sector in India has one of the poorest environment performances. Most mining areas suffer from devastating environmental degradation and high levels of pollution. Many coal mining districts in India were identified as critically polluted areas by the Central Pollution Control Board, India.

In addition to this most mining districts in India are also the poorest. The Sustainable Development Framework report of 2011 by the Ministry of Mines, Government of India acknowledges the fact that mining activity in India has resulted in little local benefit. The Planning Commission of India Poverty estimates for the year 2011 -12 states that in the three top mining states of Chhattisgarh, Jharkhand & Odisha, the percentage of population below poverty line is nearly 40%. The situation is far worse in rural area of mining states.

Policy response to the above issues by the Indian state has been in the form of the National Mineral Policy, 2008, the Mines and Metals Development and Regulation Bill, 2011(MMDR Bill, 2011). The unique feature of the MMDR bill was the integration of Sustainable Development Framework, thus providing a legal basis. The Bill also proposed the setting up of District Mineral Foundations for benefit sharing with the mining affected communities. Unfortunately the MMDR Bill, 2011, which was introduced in the parliament in 2011, lapsed in 2014. As a remedial action, the current government introduced an ordinance to amend the MMDR Act, 1957 to address some of the issues discussed above. The ordinance was signed by the President on 12th January, 2015.

The proposed paper attempts to discuss whether the present law can address the issues of sustainable mining and equity by setting up institutions like District Mineral Foundations and have an Sustainable Development Framework. This is especially important in the light of growing Left wing extremism in many of the mining districts in India. Different states where mining is going on have initiated the process of setting up District Mineral Foundations and the mining companies have also started depositing their share in the Foundations. Some of the questions, which the paper tries to address, are whether the current policy approach can address the issues of benefit sharing, environment degradation and pollution, participation of civil society actors and reduce conflict and have a more inclusive approach.

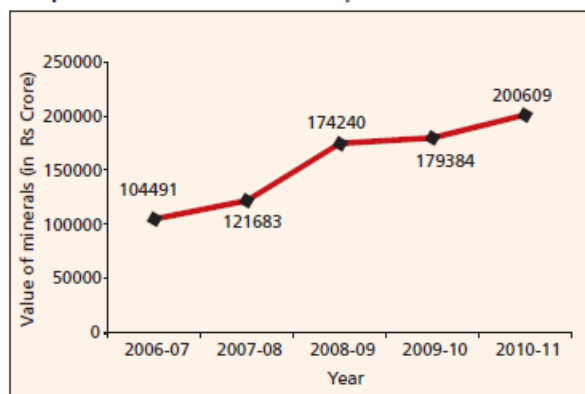
I. Introduction

India is rich in mineral deposits with more than 20,000 mineral deposits and the mining industry competes globally with other mining companies. According to the CSE media briefing note¹ 'India is the second largest producer of chromite, barytes and talc, third largest producer of coal and lignite and fourth largest producer of iron ore and kyanite, andalusite and sillimanite.'

India produces about 90 minerals which are four fuels, 10 metallic, 50 non-metallic, three atomic and 23 minor minerals. In India mining activities are majorly concentrated in the 11 states of Gujarat, Andhra Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Karnataka, Odisha, Tamilnadu, Maharashtra, Chhattisgarh and West Bengal. These states account for 92% of mines in the country.

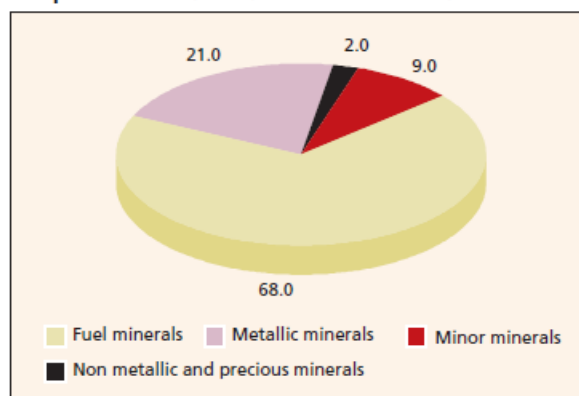
According to the CSE media briefing note² 'The country produced 84 minerals in 2010-11, valued at `2,00,609 crore. The table below gives the value of mineral production over the years and contribution of different minerals to value.

Graph 1.1: Value of mineral production in India



Source: Anon, 2011, *Annual Report 2010-11*, Ministry of Mines, pg. 144.

Graph 1.2: Contribution of minerals to value



Source: Anon, 2011, *Annual Report 2010-11*, Ministry of Mines, pg. 144.

Source: CSE Media Briefing on Mining in India

¹ Centre for Science & Environment(2012): Mining In India, CSE Media Briefing, Centre for Science and Environment, New Delhi

² Centre for Science & Environment(2012): Mining In India, CSE Media Briefing, Centre for Science & Environment, New Delhi

Contributing nearly 2-3 percentage in India's GDP, Mining has been an important economic growth driver of the nation. The mining industry provides direct and indirect employment to people. This has been decreasing over the years even though production of minerals has increased. In recent years the government has been focusing on expansion of the mining sector in India and its contribution to the GDP.

Being one of the oldest sectors, mining operations, have been facing escalating challenges, conflicts and thereby controversies. Poor regulation, inadequate monitoring, feeble enforcements, environmental degradation, land acquisition and resultant displacements are some of the areas where mining activities have courted controversies. We will have a closer look at some of these issues.

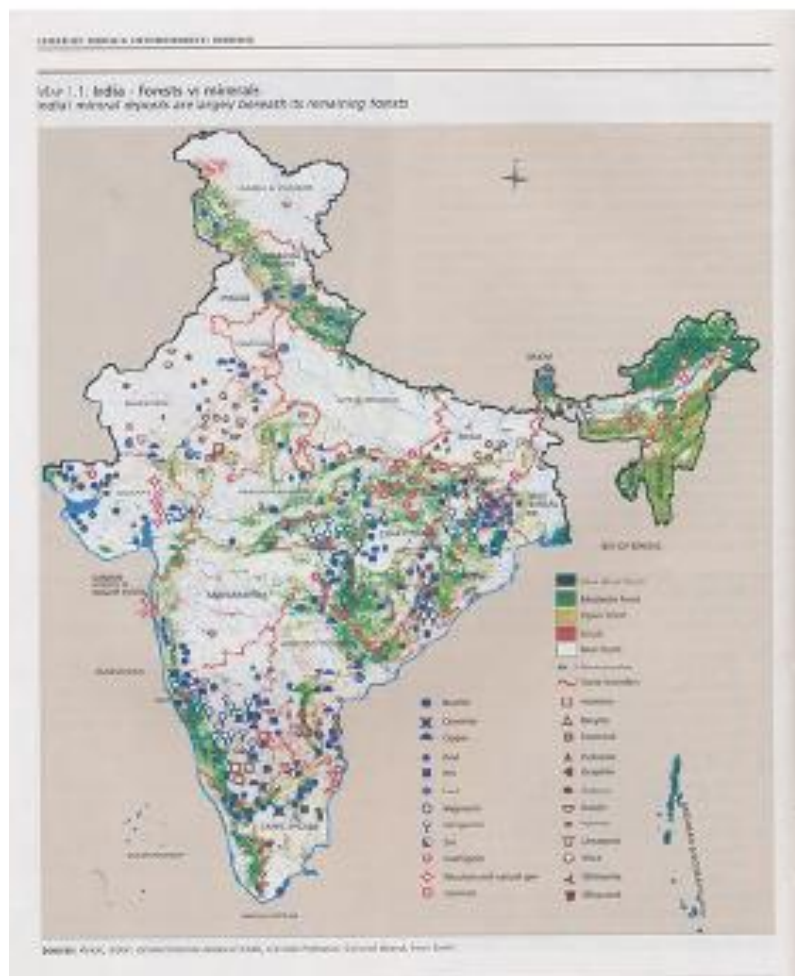
II. Impacts of Mining

The impacts of mining are manifold starting from location of minerals and mining activities, displacement, environmental degradation, pollution, weak regulation and poverty in mining areas.

II A. Involuntary Displacement

Peculiar situation of locations of minerals in India is that they coincide with the forests and the tribal heartland in India. See map below:

India's Forest and Minerals



The above map clearly indicates the overlap between forests and minerals. The same area also happens to be the tribal heartland of India. The adverse impacts of mining have been felt by the tribal and other communities residing in and around the forest region of the country. As per the CSE report on Sharing the Wealth of Minerals³

“ 50 major mineral producing districts stand at 28 per cent. The total forest cover in these districts, 1,18,90,400 ha is about 18 per cent of the country's forest cover. Forest land has constantly been getting diverted for the purpose of mining among other developmental projects. Close to 0.1 million ha of land for 1200 mines has been diverted across India during 1980-2005. The diversion affects the ecosystem of the area and also the livelihood of tribals who depend on it for sustenance.”

³ Centre for Science and Environment (2011): Sharing the Wealth of Minerals – A report on Profit sharing with local Communities, Centre for Science and Environment, New Delhi

One of the main impacts of mining activity is Involuntary Displacement forcing people to leave their land sometimes with no comprehensive rehabilitation package. Other risks associated with involuntary displacement are loss of livelihood, unemployment or extremely low paid employment, societal disintegration and cultural loss.

The Sharing the Wealth of Minerals Report brings out the following facts:

- Almost two million people have been displaced by mining between 1950 – 91. This process continues as more and more new mines are being sanctioned and opened.
- Not more than one fourth of the people have been resettled. This number does not reflect the people who depend on land for their livelihoods or whose land has been rendered wasteland due to mining activities, pollution or dumping of mining waste.
- Tribals have borne the brunt of displacement due to development projects, which is around 40% of all the people displaced. 50% of people displaced due to mining are tribals.

Mining induced displacement like other development induced displacement raises the issue of equity and social justice. Large scale displacement across the country has repeatedly brought out the fact of pauperization, little or no benefit sharing with host or mining affected communities leading to conflicts in the regions. It is no coincidence that most of the mining areas in tribal heartland are grappling with Naxalism or anti mining social movements.

These regions also happen to be one of the most poorest regions of the country. See Map below:

India – Poorest areas and minerals



Large scale displacement has taken place from mining areas pushing people into poverty. As per the CSE Policy Brief on District Mineral Foundation⁴ ,

“According to poverty estimates by the Planning Commission for 2011-2012, in the three top mining states— Chhattisgarh, Jharkhand and Odisha—the percentage of population below the poverty line is nearly 40 per cent, much higher than the national average of 21.9per cent.

⁴ Centre for Science and Environment(2015): Policy Brief on District Mineral Foundation, Centre for Science and Environment, New Delhi

The Planning Commission further has identified 15 districts of Chhattisgarh as backward, while for Jharkhand and Odisha it is 19 and 27, respectively.

The situation is worse for tribal populations in the country, particularly in rural mining districts. As per the latest estimates for 2014 put out by the Ministry of Tribal Affairs, a significant proportion of the tribal population, particularly in the rural areas of mining states, lives below poverty line. In Odisha, more than 75 per cent of the rural tribal population is below the poverty line, while in Chhattisgarh, Jharkhand, Madhya Pradesh and Maharashtra the figure is over 50 per cent.”

II B. Environmental impacts of mining.

Mining has been one of the major reasons for environmental degradation of ecosystems in mining regions in the country. Mining activities require huge quantities of water and in the process also depletes and contaminates ground water and surface water. Mine waste also causes water pollution problems like acid mine drainage, heavy metal pollution, pollution from processing chemicals and erosion and sedimentation. In addition it impacts the air quality in the areas leading to related health diseases.

According to the Sharing the Wealth of Minerals report⁵

“ The major mining districts of the country are not only ecologically devastated and polluted, they are also the poorest and the most backward districts of the country. Consider the following examples:

*_ **Keonjhar (Odisha)**, where mining for iron ore and manganese started in the 1950s and which currently produces more than one-fifth of India’s iron ore, is ecologically devastated. Its forests have turned into wasteland and its rivers and air have been extensively polluted. Even worse, mining has done nothing for Keonjhar’s economic wellbeing. Keonjhar has more than 60 per cent of its population below poverty line and is ranked 24th out of the 30 districts of Odisha in the Human Development Index (HDI).*

*_ **Bellary (Karnataka)** produces about 19 per cent of India’s iron ore (most of which is exported). It boasts of the maximum number of private aircrafts in the country, but majority of its population remains impoverished. Agricultural land has been devastated due to mining and dust levels in the air are leading to large-scale health problems. Bellary is ranked third from bottom in HDI in Karnataka.*

*_ **Gulbarga (Karnataka)** is the biggest limestone producing district of India. It is ranked second from bottom in HDI in Karnataka.*

*_ **Koraput (Odisha)** alone produces about 40 per cent of India’s bauxite. Close to 78 per cent of its population lives below poverty line, and the district ranks 27th in Odisha in HDI.*

⁵ Centre for Science and Environment (2011): Sharing the Wealth of Minerals – A report on Profit sharing with local Communities, Centre for Science and Environment, New Delhi

*_ **Jajpur (Odisha)** produces 95 per cent of India's chromite (most of which is exported) -- the people of Jajpur have got hexavalent chromium pollution in return. Jajpur is ranked 22nd in Odisha in HDI.*

*_ **Bhilwara (Rajasthan)** produces more than 80 per cent of India's zinc. It is ranked 25th out of the 32 districts of Rajasthan in HDI.*

*_ **Cuddalore (Tamil Nadu)** produces three-fourth of India's lignite. Groundwater near the lignite mines has been depleted, leaving local agriculturists high and dry. More than half of Cuddalore's population lives below the poverty line and it is ranked 16th out of the 30 districts of Tamil Nadu in HDI.*

*_ **Sonebhadra** is the most mined district of **Uttar Pradesh**. It produces more than 20 million tonne of coal every year, apart from thousands of tonnes of limestone and dolomite. It is also one of the most backward districts of the state. About 55 per cent of its population lives below the poverty line and its literacy rate is less than 50 per cent.*

*_ **Udaipur** has the maximum area under mining in **Rajasthan**; it is ranked 27th out of the 29 districts of the state in HDI."*

III. Need for Sustainable Development Framework and District Mineral Foundation

The prevailing situation in mining namely conflict, environmental degradation, displacement, large scale poverty in mining areas, non-sharing of benefits with local communities raised a question whether 'sustainable mining' is possible. The Government of India efforts has been continuously dealing with these issues. As a result of these efforts, two important initiatives of the Government emerged. First the Sustainable Development Framework (SDF) for mining and second setting up of the institution of District Mineral Foundation in mining districts of the country. Thirdly the current government initiated the Pradhan Mantri Khanij Kshetra Kalyan Yojana to be implemented through the District Mineral Foundations in different districts. These initiatives by the government was actually the recognition of the prevailing dismal situation and conflict in the mining areas and regions and expression of a political will to take some proactive action to bring about a change in people's lives.

These initiatives of the government we need to look from two broad criteria. One is Equity and the other is Sustainable Mining. Will the above initiatives or policy approach lead to Equity (Benefit Sharing with mining affected communities) and Sustainable Mining.

III A. Sustainable Development Framework

Mining and Mining Companies across the world have been under fire for their dismal record on pollution control, environment degradation in and around mining areas, benefit sharing with local communities and breaking mining and environment laws with impunity. Internationally these concerns started being addressed by different forums of mining companies like International Council of Mining and Metals (ICMM) and International Union for the Conservation of Nature and Natural Resources (IUCN) and whether mining could be made sustainable and socially acceptable by communities being impacted or going to be impacted by mining activities.

This led the Indian government to hold multi stakeholders consultation to develop the Sustainable Development Framework to address social economic and environmental issues arising out of mining and finally it was incorporated in the new Mines and Mineral (Development and Regulation) Bill 2011(MMDR) which was to replace the MMDR Act 1957.

A working definition of Sustainable Development in the mining sector was spelled out in the Sustainable Development Framework (SDF)⁶:

"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 above definition laid down the priorities of SDF and principles to operationalize the framework. The eight principles laid down in the SDF are as follows:

- 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 by categorizing mining areas into High and Low risk areas based on an environmental and social analysis taking a risk based approach.

⁶ Sustainable Development Framework for the mining sector

2. **Strategic Assessment in Key Mining regions:** Since mining activities takes place in clusters having the impact at the regional level, it is important to assess regional and cumulative impact assessment of mining activities and develop a Regional Mineral Development Plan based on the carrying capacity of the region. This would help in taking decisions 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. This would enable in 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.**
5. **Community engagement, benefit sharing and contribution to socio-economic development.**
6. **Mine Closure and Post Closure Mining**
7. **Ethical functioning and responsible business practices.**
8. **Assurance and Reporting.**

SDF principles provide guidance to mining companies to improve their performance on social and environmental criteria and work towards common benchmarking for all mining operations.

III B. District Mineral Foundation

Along with SDF the government initiated the process of setting up the institution of District Mineral Foundations in the mining districts of the country through the amendment of MMDR Act, 1957. District Mineral Foundation is a non-profit trust that would work for the interest and benefit of persons and areas affected by mining related operations. The Act creates provision for lease holders to pay contribution to the DMF as per the rates to be decided by the government. The fund has to be used for designated activities which would benefit the mining affected areas and mining affected communities. DMF trust Rules lays down the structure, procedures and the activities on which the funds have to be spent.

The purpose of setting up of DMF was to set up an institutional mechanism for sharing the benefits of mining with the mining affected communities and improve the living standards and infrastructure in the region.

After the MMDR Amendment Act 2015 and Draft Trust Rules, different mining states in India have brought out notification for formation of District Mineral Foundations and rules for their functioning. Till January, 2017, out of the 12 mineral rich states, all except Tamilnadu had framed rules and established District Mineral Foundations.

The Table 1 below compares different provision of DMF rules for some selective states

Table 1: Comparison of District Mineral Foundation Rules in different States

S.No	Rules	Odisha	Rajasthan	Telangana	Chhattisgarh
1	Objectives of DMF	Objectives not mentioned.	Focus primarily on utilization of funds and not on making it a people's relevant institution. This is against the stated objective of setting up of DMFs. Utilization of funds very loosely defined and scope left for misutilization of funds	To work for the interest and benefit of the persons and areas affected by mining related operations in such a manner as may be prescribed by the state government.	To work for the interest and benefit of persons and areas affected by mining or mining related operations in such manner as specified in the rules.
2	Composition of DMF Trust	Trust dominated by bureaucrats except for representation from PRI or Urban local bodies (maximum of 3 members). No representation from mining affected communities. District Collector both in the Board of Trustees and Executive Committee creating conflict of interest.	Trust dominated by bureaucrats, primarily mining officials. No representation from mining affected communities, local government institutions. Not a people-centric institution	Trust dominated by bureaucrats. No representation from mining affected communities, local government institutions. Not a people-centric institution	Trust dominated by bureaucrats. No representation from mining affected communities, local government institutions. District Collector both in the Board of Trustees and Executive Committee creating conflict of interest. Not a people-centric institution. State level monitoring committee also constituted.
3	Functions of the DMF Trust	Main function to decide priority	Main function to develop	Main function to approve master	Main function to approve master

		areas and sectoral allocations, approve master plan or perspective plan, annual budget and action plan etc.	proposals for use of DMF funds. Since composition is skewed, people's views limited.	plan or perspective plan, annual budget and action plan etc.	plan or perspective plan, annual budget and action plan etc, conduct social audits.
4	Role and Power of DMF Members with respect to utilization of Funds	Powers to award contracts, sanction grants, supervision of projects, preparation of perspective plan, budget etc. Project Director of DRDA to be the Chief Executive of the Trust. Representatives of mining affected communities not in the executive Committee.	Proposal making for utilization of DMF funds a technical exercise as it will be prepared by mining engineers. Engineers also responsible for collection of funds and operation of DMF accounts. Comprehensive perspective missing in proposal making and skewed power distribution.	Collection of Contribution, preparation of master plans, preparation of annual plans and budget, sanctioning projects, monitoring of projects. Representatives of mining affected communities not involved	Collection of Contribution, preparation of master plans, preparation of annual plans and budget, sanctioning projects, monitoring of projects. Preparing and maintaining the website. Representatives of mining affected communities not involved
5	Utilization of Funds	Rules mention that 'proceeds of funds shall be utilized only for direct benefit of the persons but exceptions have been made. Exceptions can lead to misuse of funds. No mention of Benefit sharing with mining affected communities. Provision of obtaining approvals from Gram Sabha in Schedule V areas. Gram Sabhas not involved in making of plans and projects	List of activities where funds can be spent is randomly selected and has no relevance in addressing issues of mining affected communities. Scope of diverting funds exists. No mention of Benefit sharing with mining affected communities and families.	Broad list of activities – overall development of area, creation of local infrastructure, conducting training programmes for skill development, maintain and upgrading of community assets. No mention of Benefit sharing with mining affected communities	Utilization on specific activities, but also includes certain activities which needs to be done by the companies (prevention of pollution of lakes, rivers, setting up of effluent plants etc.) This goes against the 'polluters pay principle' Too Broad activities. Possibility of misuse of funds. No mention of benefit sharing with mining affected communities. Provision of obtaining approvals from Gram Sabha in Schedule V areas. Gram Sabhas not involved in making of plans and projects

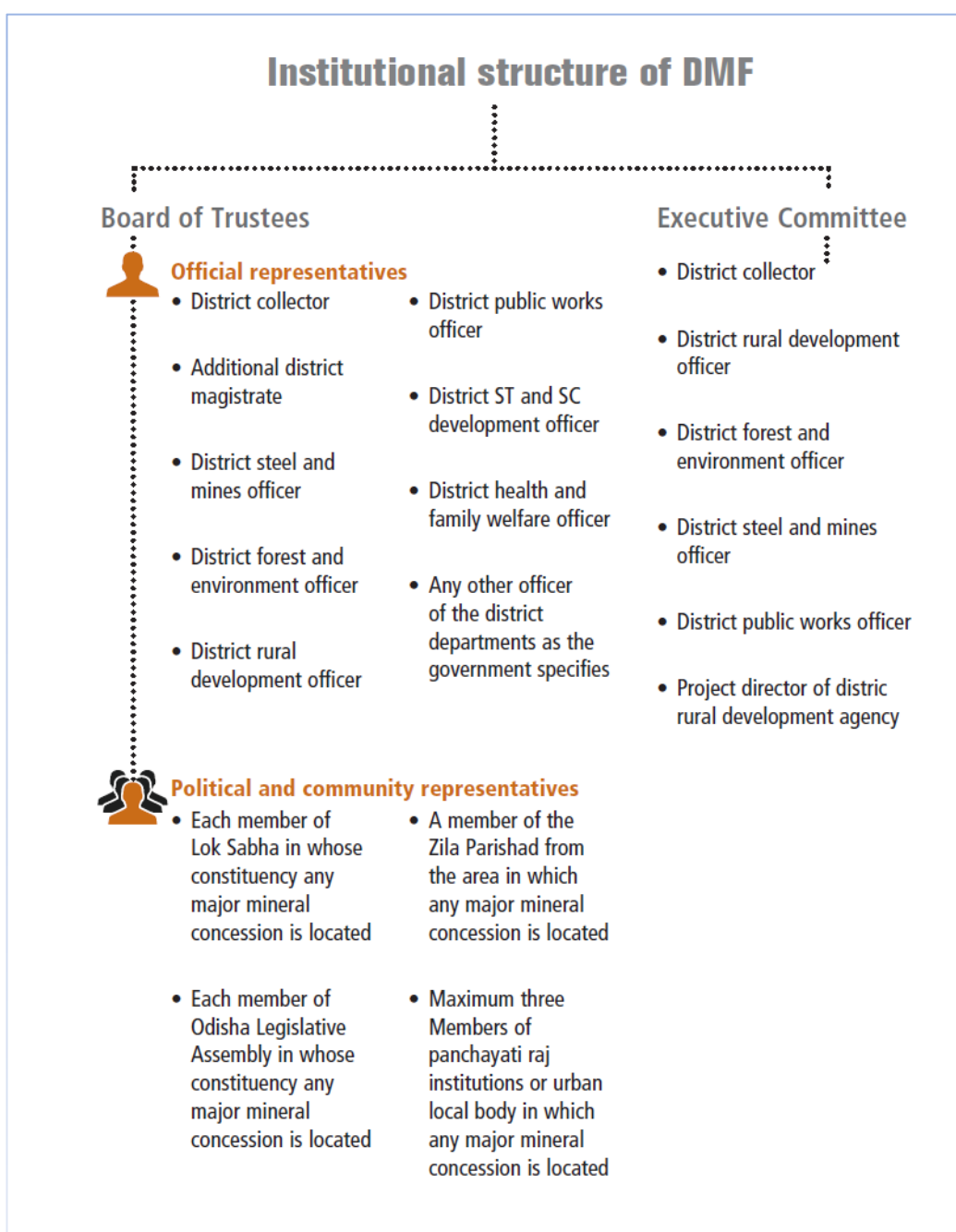
6	Effectiveness, Transparency and Accountability	Audited accounts to be placed in the Assembly. Also through the website information will be displayed.	Though accounts will be audited and will be placed before the state assembly, no provision to place it before the public for public scrutiny. No provision for taking action against members for misuse of funds.	Audited accounts, approved budget action plans to be put in the state, district panchayat and district administration websites. No provision of social audit,	Audited accounts, approved budget action plans to be put in the state, district panchayat and district administration websites. Provision of Social Audit
7	Others		To make DMF people centric – guidelines for identification of affected areas and beneficiaries /mining affected communities to be made		Have defined affected areas and Affected people.

The importance of the DMF rules is that they lay down the guidelines of the nature of the DMF Institution, nature of decision making, allocation of funds and utilization. The policy intent of setting up of DMFs and the final impact is determined by the rules which have been formed by different states. Instead of becoming a people centric institution, the DMFs across states are controlled by the bureaucrats.

This can be further seen from the organizational structure of DMFs in the states of Odisha and Chhattisgarh.

See below the Institutional structure of DMFs in the states of Odisha and Chhattisgarh

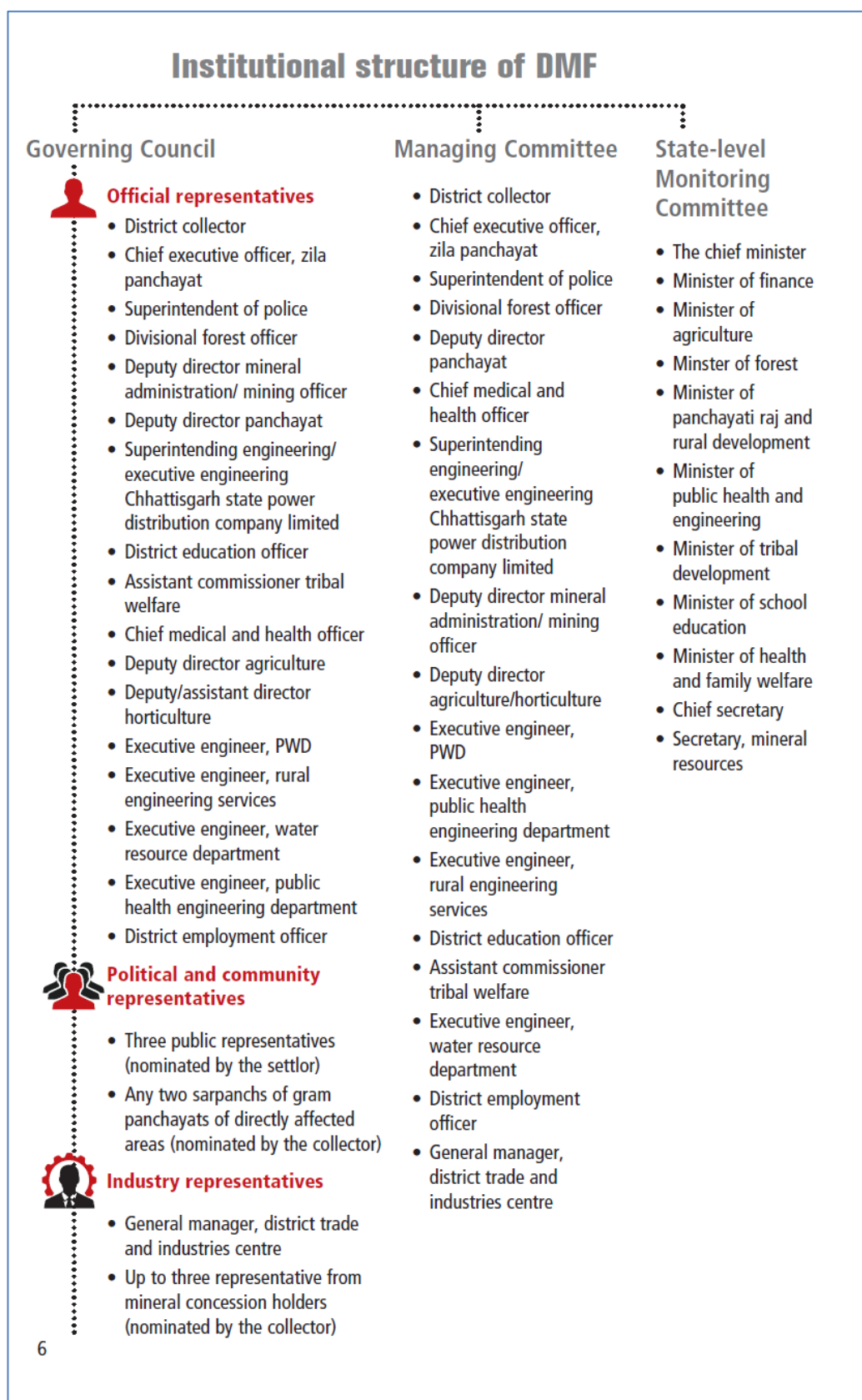
The Institutional Structure of DMFs in the state of Odisha



Source: CSE Community Information Brochures – Odisha DMF

As seen from above framework, the DMF are dominated by representatives of government department and some elected representative but no representatives from mining affected villages or people.

The Institutional Structure of DMFs in the state of Chhattisgarh



Source: CSE Community Information Brochure – Chhattisgarh DMF

The above framework again shows the domination of the representatives of the

government department with small representation from the elected village headmen from the villages directly affected by mining. These will be nominated by the District Collector.

III C. Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

To realize the vision and purpose of creating District Mineral Foundations, the Government of India came out with the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) to implement the development programmes for the mining affected areas which take care the minimum social and infrastructure needs of the population residing in the mining affected area.

The PMKKKY is to be implemented by the District Mineral Foundations (DMFs) of the respective districts using the funds accruing to DMF. The objective of PMKKKY as defined in the order of the Ministry of Mines, Government of India⁷ are:

1. “To Implement various developmental and welfare projects/programmes in mining affected areas and these programmes will be complementing the existing ongoing schemes/projects of the State and Central Government
2. To minimize/mitigate the adverse impacts, during and after mining, on the environment health and socio- economics of people in mining districts
3. To ensure long-term sustainable livelihoods for the affected for the affected people in mining areas.”

The PMKKKY order further defines ‘Affected’ areas, ‘Affected’ people and the activities/programs where the DMF funds can be utilized. It divides Affected areas into Directly affected areas and Indirectly affected areas. In the definition of Affected people it includes both people who have legal and occupational rights over the land being mined and also those with usufruct and traditional rights. The order lays emphasis that as far as possible the affected people should be identified in consultation with local/elected representatives from the gram sabha. This infact is the one of the most positive features of PMKKKY and removes the ambiguity in the rules of the DMF.

The second positive feature is that the PMKKKY order defines activities and areas where the funds can be utilized by dividing into two broad areas – High Priority areas where at

⁷ Ministry of Mines (2015): Order No 16/7/2015 – M.VI (Part) on PMKKKY, Government of India, New Delhi

least 60% are to be utilized and other priority areas where upto 40% can be utilized. High

Priority areas include

- Drinking Water Supply
- Environment Preservation and pollution control measures
- Health Care including Group Insurance Scheme
- Education
- Welfare of Women and Children
- Welfare of the Aged and Disabled people
- Skill Development
- Sanitation

In laying down the guidelines for utilization of funds, two important guidelines stand out

- Activities meant to be taken up under the ‘polluter pays principle’ should not be taken up under the PMKKKY.
- Reasonable sum of the annual receipts should be kept as endowment fund for providing sustainable livelihood.

For mining projects in Scheduled areas, order spells out the process of utilization of funds. It says ‘In respect of villages affected by Mining situated within the scheduled areas:

- i. Approval of the Gram Sabha shall be required
 - a. For all plans, programs and projects to be taken up under PMKKKY
 - b. Identification of beneficiaries under the existing guidelines of the Government
- ii. Report on the works undertaken under PMKKKY in the respective village shall be furnished to the Gram Sabha after completion of every financial year.

This redeeming feature of the PMKKKY carry forward the vision of SDF and removes some of the ambiguities in the rules of the DMFs notified by different states.

IV. Performance of District Mineral Foundations

After the notification of the DMF rules and the PMKKKY guidelines, different mineral rich states have constituted the DMF, made rules and have notified them. As per the Background notes for the 2nd National Enclave on mines and minerals⁸

- ‘Till Jan, 2017 – of the 12 mineral rich states – all except TN, all have framed Rules and established DMFs. TN yet to start collecting funds.
- So far, total 287 districts in 11 mineral rich states are covered under PMKKKY.
- Rs.5817 Crores has been collected as on 31.12.2016.’

The details of DMF collections are given below in Table 2.

Table 2: DMF Collection as on 31.12.2016						
S.No	States	Whether Rules for DMF notified		Total Districts	Total Number of districts in which DMF has been set up	Total Amount collected (in million Rs)
		For Major Minerals	For Minor Minerals			
1	Goa	Yes	No	2	2	632.40
2	Karnataka	Yes	Yes	30	30	2090.90
3	Chhattisgarh	Yes	Yes	27	27	9405.20
4	Odisha	Yes	No	30	30	17818.30
5	Madhya Pradesh	Yes	Yes	51	51	8597.70
6	Jharkhand	Yes	No	24	24	9833.70
7	Rajasthan	Yes	Yes	33	33	5271.20
8	Telangana	Yes	Yes	10	10	916.20
9	Andhra Pradesh	Yes	No	13	13	1276.00
10	Gujarat	Yes	Yes	33	32	1169.60
11	Maharashtra	Yes	Yes	36	35	1163.10
12	Tamilnadu	No	No	32	0	0.00
	Total			321	287	58174.30

Source: Background Notes for the 2nd National Conclave on Mines and Minerals, Ministry of Mines, Government of India, New Delhi, February, 2017

As per the above table, Chhattisgarh, Odisha, Madhya Pradesh, Jharkhand and Rajasthan

⁸Government of India (2017): Background Notes for the 2nd National Conclave on Mines and Minerals, Ministry of Mines, Government of India, New Delhi, February, 2017

have received considerable contributions from mining companies. Secondly a few states have yet to make DMF rules for minor minerals, which will bring additional contributions to the DMFs of the respective states. Tamilnadu is the only state which is lagging behind. It is yet to set up DMFs, make rules and notify them.

IV A. Performance of DMFs in the states of Odisha and Chhattisgarh

For the purpose of this paper we will closely look at the DMFs from the states of Odisha and Chhattisgarh based on the available data.

The Table 3 below provides us the figures for collection and Utilization in select districts (provinces) for the state of Odisha for the financial years of 2015 – 16, 2016-17 and 2017 - 18 (upto 7th June, 2017)

Table 3: Odisha DMF - District Wise Collection & Utilization (in million Rupees)							
		Year 2015 -16		Year 2016- 17		Year 2017 - 18 (upto 7th June, 2017)	
S.No.	District Name	Collection Amount	Utilization	Collection Amount	Utilization	Collection Amount	Utilization
1	Keonjhar	790.70	0.00	5454.00	0.00	1089.20	0.00
2	Angul	994.10	0.00	2573.30	127.60	444.90	0.00
3	Sundergarh	350.40	0.00	2280.90	75.40	399.30	68.30
4	Jajpur	134.20	0.00	1446.60	0.30	470.40	0.00
5	Koraput	0.90	0.00	230.70	0.00	0.50	0.00
6	Rayagada	0.00	0.00	149.20	0.00	44.70	0.00
7	Mayurbhanj	7.10	0.00	84.90	0.00	20.90	0.00
8	Ganjam	1.80	0.00	25.40	0.00	2.10	0.00
9	Baragarh	3.00	0.00	17.60	0.00	3.30	0.00
10	Jharsuguda	0.00	0.00	15.70	0.00	0.10	0.00
11	Khurdha	0.30	0.00	4.00	1.20	0.00	0.00
12	Sambalpur	0.50	0.00	2.50	1.80	0.30	0.00

Source: Odisha DMF Portal

The above table provides an interesting insight that though the funds have been collected, only three districts have utilized a portion of funds. In 2016 – 17, Angul has been able to utilize around 5%, Sundergarh 3.3% and Sambalpur 72% of the DMF funds collected. In 2017 – 18, some funds have been utilized in Sundergarh district. The DMF website of the above districts shows sanctioned projects and sanctioned amounts.

The Table 4 below provides figures for how the states of Odisha and Chhattisgarh have allocated their DMF funds sector wise. These sectors have been determined by the guidelines of PMKKKY.

Table 4: Odisha & Chhattisgarh States Sector Wise Allocation of DMF Funds (in million Rupees)					
		ODISHA		CHHATTISGARH	
S.No.	SECTORS	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount
1	Energy	39	99.80		
2	Education	343	627.80	1603	3411.9
3	Irrigation	262	616.70	164	1415.4
4	Public Facilities	38	52.90		
5	Power	23	413.00		
6	Women & Child Welfare	56	39.40	4273	893.8
7	Skill Development	7	37.40	149	1348.6
8	Physical Infrastructure	315	2398.90	1025	5658.3
9	Drinking Water Supply	276	2042.80	1731	2134.7
10	Environment Preservation and Pollution Control	7	29.40	700	870.2
11	Health Care	91	193.40	416	1852.5
12	Sanitation	11	14.90	487	782.8
13	Housing	3	7.60		
14	Welfare of Aged & Disabled People	3	5.70	115	205.9
15	Sports	3	3.10		
16	Watershed Development	1	1.70		
17	Agriculture & Allied Services			1249	1393
18	Energy & Watershed Development			528	1448.9

Source: DMF portals of Odisha and Chhattisgarh states.

The above table reflects the priorities of each state, though it is not clear how these priorities have been decided. From the Institutional structure of the DMFs, it seems that the representatives of different government departments have taken the decision. Whether affected people have been consulted or not, is not clear. Any needs assessment was done or not is also not clear.

Sector wise, Odisha state has sanctioned larger amounts to Physical Infrastructure, Drinking Water Supply, Education, Irrigation, Power and Health Care. Whereas the state of Chhattisgarh has allocated larger DMF funds to the following sectors – Physical Infrastructure, Drinking Water Supply, Health Care, Sanitation, Education, Energy & Watershed Development, Irrigation, Women & Children Development and Agriculture & Allied Services.

A more detailed inquiry into the projects undertaken under different sectors, show that most of them are construction projects. As per the PMKKKY guidelines, DMF funds should be used for gap filling of regular projects. The State has regular plans for the projects in the above sectors. It is not clear from the table that how much of the funds from States treasury are being utilized and how much fund from the DMF is being used to fill any gaps. If full DMF funds are being used for the above projects then it is a clear violation of the PMKKKY guidelines. In Odisha⁹ there is already a protest against the manner in which DMF funds are being used for regular projects, for which state funds should be used.

Some important sectors like Environment Preservation & Pollution Control, Skill Development, Watershed Development and Agriculture and Allied Services have very little or no allocation. These are very important sectors to enhance the livelihood of the mining affected people and also revive the degraded environment. In Chhattisgarh, there is no allocation of DMF funds for the sectors like Public Facilities, Power, Energy and Housing. There is allocation for Environment Preservation & Pollution Control, it is not clear on what projects the funds are being spent upon. If they are projects for which mining companies should be spending money, then there is a major problem.

The Table 5 below provides District wise Collection and Allocation of funds for selected districts of Odisha:

Table 5: District wise Collection and Allocation of funds in selected Districts of Odisha				
S.No	Districts	Total Collection (in million Rupees)	Sanctioned Projects	Sanctioned Fund (in million Rupees)
1	Keonjhar	7370.40	297	2321.10
2	Angul	4012.30	334	846.00
3	Jajpur	2087.70	65	834.50
4	Sundergarh	3046.10	365	1648.30
5	Jharsuguda	16.60	92	655.40
6	Rayagada	202.30	235	210.00

Source: Odisha DMF district portal

The analysis of the Odisha District wise allocation show that funds have been sanctioned but not yet spent. This picture also emerges from the Table showing district wise

⁹ Mishra Bijay(2016): DMF Money for regular plan works opposed, The Pioneer, 23rd December, 2016, Angul, Odisha

collection over three years. Sanctioned fund for Jharsuguda District is more than the collection.

The Table 6 below provides District wise Collection and Allocation of funds for selected districts of Chhattisgarh:

Table 6: District wise Collection and Allocation of funds in selected Districts of Chhattisgarh (figures in million Rupees)					
S.No	District	Total Collection	Approved Plan	Sanctioned Fund	Spent Fund
1	Korba	3880.00	6150.00	1450.00	380.00
2	Dantewada	1990.00	3030.00	610.00	260.00
3	Raigarh	520.00	1650.00	520.00	110.00
4	Bilaspur	50.00	1670.00	480.00	210.00
5	Sukma	1.00	1320.00	150.00	60.00
6	Janjgir Champa	110.00	330.00	200.00	80.00
7	Bastar	20.00	2980.00	710.00	40.00
8	Kanker	80.00	130.00	30.00	10.00
9	Korea	510.00	630.00	220.00	150.00
10	Surguja	270.00	160.00	130.00	80.00

Source: Chhattisgarh District DMF portal

Interesting aspect emerges from the above Table. Figures for the approved plans are more than the collection. It seems the planning is done in anticipation of future collection. How has the planning been done and whether it reflects the affected people's needs is still a question.

As per the CSE Report titled 'District Mineral Foundation (DMF) – Status Report 2017'¹⁰ Chhattisgarh government has given directions to spend money in the mining affected regions and also spend the DMF funds for regional development i.e sharing of funds with adjoin districts (cluster approach) and use for gap-filling in building of railway corridor. These directions are really not in the spirit of setting up of DMF and PMKKKY guidelines

It is also to be seen that allocation of funds for different sectors meet the real needs of the mining affected communities like health care, environment preservation, skill enhancement, livelihood enhancement etc. As stated earlier, many of these districts are one of the poorest districts in the state and country, low HDI and no benefit sharing has actually taking place. One has to guard against diversion of funds for other purposes. Though the Chhattisgarh state has issued detailed guidelines, the planning is essentially technocratic and done by the bureaucrats. How much involvement is there of the mining affected people is to be seen? Whether DMF funds are able to ameliorate the conditions of the people and pull them out of poverty is also to be seen?

¹⁰ CSE (2017): District Mineral Foundation (DMF) – Status Report 2017, CSE, New Delhi

The Table 7 below gives District wise Sector allocation of funds for the State of Odisha.

Table 7: Odisha State District wise Sector Allocation of DMF Funds

Odisha State Districtwise Sector Allocation of DMF Funds (Amounts in million Rupees) status as on 9 th June, 2017													
		Anugul		Keonjhar		Jajpur		Sundergarh		Rayagada		Jharsuguda	
S.No.	SECTORS	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount	Sanctioned Projects	Sanctioned Amount
1	Energy	0	0.00	0	0.00	0	0.00	39	99.80	0	0.00	0	0.00
2	Education	70	113.50	125	219.90	16	13.60	69	210.00	26	49.00	0	0.00
3	Irrigation	41	30.00	11	110.70	0	0.00	117	40.40	15	9.30	57	403.40
4	Public Facilities	0	0.00			0	0.00	7	31.70	27	19.10	0	0.00
5	Power	7	26.70	12	258.90	0	0.00	0	0.00	3	1.20	1	126.30
6	Women & Child Welfare	13	9.10	26	18.50	0	0.00	3	2.10	0	0.00	6	5.70
7	Skill Development	1	1.90	2	33.10	0	0.00	0	0.00	2	1.50	2	1.00
8	Physical Infrastructure	55	366.10	24	607.60	34	450.60	83	862.90	110	94.10	1	9.30
9	Drinking Water Supply	98	247.60	94	1066.60	8	345.40	31	275.50	27	17.80	9	82.30
10	Environment Preservation and Pollution Control	3	6.00	1	3.90	0	0.00	2	19.00	1	0.50	0	0.00
11	Health Care	46	45.20	2	2.00	6	24.50	3	84.00	20	14.90	13	21.80
12	Sanitation	0	0.00	0	0.00	1	0.50	3	11.90	3	1.70	0	0.00
13	Housing	0	0.00	0%	0.00	0	0.00	2	6.10	0	0.00	0	0.00
14	Welfare of Aged & Disabled People	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	5.70
15	Sports	0	0.00	0	0.00	0	0.00	2	2.10	1	1.00		
16	Watershed Development	0	0.00			0	0.00	1	1.70	0	0.00	0	0.00
17	Afforestation	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

Source: Odisha District DMF portal

In Odisha, planning have been done by the independent districts. As can be seen huge allocations have been done for some sectors like Physical Infrastructure, Drinking Water Supply and Education, other important sectors have very little or no allocations. The main question is how the lopsided allocation will enhance the quality of life and ensure economic, social and environmental well being of the mining affected communities and regions.

V. Critical Issues for Policy making, process and implementation

SDF, DMF and PMKKKY lay down principles, structure and guidelines to address the social, economic and environmental issues of the mining areas and the mining affected communities. But there are areas of concern which if not addressed, will not deliver the desired results.

V A. Issues of Equity

One of the major areas of concerns is the issue of equity and benefit sharing. The reports of the Planning Commission and Ministry of Tribal Affairs says that the poorest population in the country reside in the three top mining states in the country and the conditions of the tribal population is one of the worst in the rural mining districts in the country. The SDF report of 2011 confirms the fact that mining activities have resulted in little local benefit and the country's most mineral rich districts have the poorest people.

DMF and PMKKKY do not address the issue of benefit sharing directly. It only specifies certain activities which can help the mining affected population. Nowhere it talks about monetary benefits to directly affected people. Centre for Science and Environment in its note on DMF recommends¹¹ "Every family should be entitled to equal monetary benefit, which could wither be paid monthly or annually. The directly affected family could include widows, single mothers and old people without family support. A bank account should be opened in the name of the women head of the family."

The report 'Sharing the Wealth of Minerals' by Centre for Science and Environment lays down this principle more clearly. The report says¹²

"Various projects exploiting natural resources need to contribute to the development and welfare of the affected communities in addition to resettlement and rehabilitation. One way to achieve this is to share benefits from the project with these affected communities using monetary or non-monetary options. Monetary benefit sharing mechanisms are based on the premise that natural resource exploitation generates significant economic rent Some of this

¹¹ Centre for Science and Environment(2015): Policy Brief on District Mineral Foundation, Centre for Science and Environment, New Delhi

¹² Centre for Science and Environment (2011): Sharing the Wealth of Minerals – A report on Profit sharing with local Communities, Centre for Science and Environment, New Delhi

economic rent can be shared with the project affected population. Monetary mechanisms also act as a relationship bridge between the project proponent and the concerned communities. The various kinds of monetary benefit sharing mechanisms that can be used are:

- *Revenue/profit sharing*
- *Development funds*
- *Equity sharing*
- *Tax sharing with government services,”*

DMF and PMKKKY needs to build this in their set of activities. The analysis of the sector wise allocation of Odisha and Chhattisgarh does not reflect this concern at all. More emphasis is on construction activities.

Within this the second area of concern is that contribution to DMFs has been reduced by the government. One does not know whether this is due to lobbying of mining companies Contribution to DMF as envisaged by the MMDR Amendment Act 2015¹³ was follows:

“ (5) The holder of a mining lease or a prospecting licence-cum-mining lease granted on or after the date of commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015, shall, in addition to the royalty, pay to the District Mineral Foundation of the district in which the mining operations are carried on, an amount which is equivalent to such percentage of the royalty paid in terms of the Second Schedule, not exceeding one-third of such royalty, as may be prescribed by the Central Government.

(6) The holder of a mining lease granted before the date of commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015, shall, in addition to the royalty, pay to the District Mineral Foundation of the district in which the mining operations are carried on, an amount not exceeding the royalty paid in terms of the Second Schedule in such manner and subject to the categorization of the mining leases and the amounts payable by the various categories of lease holders, as may be prescribed by the Central Government.”

But later it seems the government backtracked and came out with the revised contribution:

¹³ Mines and Minerals (Development & Regulation) Amendment Act, 2015: No 10 of 2015, Gazette of India, Extraordinary Part II – Section 1, dated March 27, 2015, Ministry of Mines (Legislative Department), Government of India, New Delhi

As per the gazette notification of the Ministry of Mines dated 17th September, 2015¹⁴,

“Amount of Contribution to be made to District Mineral Foundation – Every holder of a mining lease or a prospecting license-cum-mining lease shall, in addition to the royalty, pay to the District Mineral Foundation of the district in which the mining operations are carried on, an amount at the rate of –

- a) *Ten percent of the royalty paid in terms of the Second Schedule to the Mines and Minerals (Development and Regulation) Act 1957 (67 of 1957) (herein referred to as the said Act) in respect of mining leases or, as the case may be, prospecting license-cum-mining lease granted as on or after 12th January, 2015; and*
- b) *Thirty percent of the royalty paid in terms of the Second Schedule to the said Act in respect of mining leases granted before 12th January, 2015.”*

Analyzing the two provisions related to contribution to DMF, there is a drastic reduction. From 100% to 30% with respect to mining leases granted before 12th January, 2015 and from 30% to 10% with respect to leases after 12th January, 2015. This implies lesser contribution to DMFs and curtailing of expenditure and creates doubts on the intentions of the government whether it is really interested in welfare of the mining affected communities.

Based on the provisions of the MMDR Amendment Act 2015, CSE has estimated the amount of funds which can flow to the DMFs. As per the CSE Policy Brief on DMF¹⁵:

“The provision of DMF opens a window of opportunity to uplift the socio-economic status of mining-affected communities. Our estimates show that significant resources can go into the DMF. (The projections could be an underestimation as most states feel that the value of mineral production and sale price quoted by the Indian Bureau of Mines are underestimates.) For instance:

- *In major mining states, such as Odisha, Jharkhand and Chhattisgarh, just from iron-ore mining, Rs 8000 million, Rs 1050 crore, and Rs 440 crore, respectively, can go to the DMF annually. In Goa and Karnataka, the amount can be to the tune of Rs 350 crore and Rs 180 crore, respectively, just from iron-ore mining.*
- *In major iron-ore-mining districts, such as Keonjhar, Sundergarh, Singhbhum (West), Dantewada and Bellary, DMF money could amount to Rs 600 crore, Rs 185 crore, Rs 105 crore, Rs 350 crore and Rs 170 crore, respectively.*

¹⁴ Ministry of Mines Notification (2015): Gazette of India, Extraordinary Part II, - Section 3 – Sub Section(i), dated September 17, 2015, Government of India, New Delhi

¹⁵ Centre for Science and Environment(2015): Policy Brief on District Mineral Foundation, Centre for Science and Environment, New Delhi

- *For the major coal-mining states, the DMF share could be as high as Rs 820 crore for Jharkhand, Rs 420 crore for Chhattisgarh, Rs 440 crore Madhya Pradesh and Rs 430 crore for Andhra Pradesh from coal alone. In other states too the share from coal mining can be significant. For instance, it can be to the tune of Rs 290 crore for Maharashtra, Rs 220 crore for Odisha and about Rs 170 crore for both Meghalaya and Uttar Pradesh”*

From the above illustration it is clear there is a dilution in the contribution of funds and puts a question mark on the government’s intention on benefits sharing with mining affected communities. This is clear case of conflict with the goal of maximizing profits and achieving the goal of equity and social justice.

Even when there has been a reduction, the data from Odisha and Chhattisgarh show that the states are slow in utilizing the funds.

V B. People Centric Institution

District Mineral Foundation has been conceptualized as an Institution which will be working for the benefit and interests of mining affected communities. It is ironical that the structure of the Governing Council/Committee and the Executive Committee of the DMF has largely members from different government departments and hardly any members from the mining affected communities. With complete bureaucratic control over process and utilization of funds, whether the objectives of mining affected communities centric development will be fulfilled remains a question mark.

Second issue is the involvement of people in designing, implementing and monitoring the various development schemes to be done through the DMF and PMKKKY. Except for mining regions in Schedule areas, people’s participation is almost nil. Even in scheduled areas people’s participation is limited to approval of plans, programs etc. and identification of beneficiaries. There is no role in designing and implementing the plans and programs. People are looked as beneficiaries and not as people who are entitled to some basic rights to services and better quality of life.

Thirdly provision of social audit is only in Telangana and Chhattisgarh DMF rules. Community based monitoring of programmes like social audits should be made an integral part of all plans and programmes.

Thus to achieve the vision and purpose of the DMFs and PMKKKY, people's involvement in all aspects of DMFs and PMKKKY functioning is important. Provision of consultation with mining affected communities should be extended to all mining regions and not limited to only the scheduled areas as the social and environmental impacts are the same across all mining regions in the country.

The very nature of institutions determines the priorities and delivery of services. Currently the way the DMFs have been constituted will not fulfill the intent of setting up of DMFs. The Odisha and Chhattisgarh DMFs are a pointer in this direction.

V C. Utilization of funds

This is a critical area which will decide whether DMFs and PMKKKY will be successful. A cursory analysis of the rules of the four states, we find that there is a lot of ambiguity on the issues of utilization of funds. This ambiguity to quite an extent is cleared in PMKKKY. But close reading of the clauses points out to some glaring contradictions. Though the PMKKKY general guidelines prohibits utilization of funds on those activities which are meant to be taken under the 'polluters pays principle' i.e. by mining companies. But in listing out the scope of PMKKKY this principle seems to have been forgotten. For eg. see the following clause from the PMKKKY order¹⁶:

“Environment preservation and pollution control measures- effluent treatment plants, prevention of pollution of streams, lakes, ponds, groundwater, other water sources in the region, measure for controlling air and dust pollution caused by mining operations and dumps, mine drainage system, mine pollution prevention technologies, and measures for working or abandoned mines and other air, water & surface pollution control mechanisms required for environment-friendly and sustainable mine development.”

The above activities like putting in place different pollution mitigation measures are the responsibility of the mining companies. Utilization of funds for such activities is helping the mining companies to externalize the environment costs of mining activities. Finally these costs are being absorbed by the communities and reducing the share of their funds for other beneficial activities. If this happens, then it is playing a fraud on the mining affected communities.

¹⁶ Ministry of Mines (2015): Order No 16/7/2015 – M.VI (Part) on PMKKKY, Government of India, New Delhi

The other area of concern in the utilization of funds is that many activities listed are already being undertaken by different departments. Principle of 'Additionality' or 'supplementarity' should be used. Otherwise all the activities of different departments will be funded from DMF funds. Utilization of Funds should be on very specific activities which are designed and approved by the mining affected communities.

Thirdly there is a provision of 'endowment fund' for providing sustainable livelihoods to communities in the PMKKKY guideline. It does not specify any amount or percentage of DMF funds to be put in the 'Endowment Fund'. A certain percent of funds, for instance between 10% - 15% in a year should be used for the 'endowment fund'.

Fourthly after three years, states of Odisha and Chhattisgarh are not in a position to utilize the funds collected. Secondly there is a sure danger of divergence of funds for other activities like Chhattisgarh sharing DMF funds with adjoining districts. This should be done after taking care of the needs of the people in the mining affected area. If surplus funds are available, then one can plan. This perspective is not currently reflected.

V D. Strengthening Regulatory Institutions

To realize the vision of the SDF and its principles, it is important to strengthen the regulatory mechanism. Current Regulatory mechanism is weak. Mining areas are one of the most polluted regions in the country. One of the reasons is the weak functioning of Central and State Pollution Control Boards which have no teeth to take action. The other area is to strengthen the EIA (Environment Impact Assessment) mechanism. Currently it is done by companies who are bidding for mining projects. This system has to be overhauled and along with this there as to be a comprehensive and cumulative environmental and social impact of projects in a region which helps in making up of regional development plan based on the 'carrying capacity' of the region.

VI. Suggestions and Conclusion

The prevailing conditions of mining areas and mining affected communities could not be ignored by the Government. Local and global movements against mining, international treaties, Sustainable Development Discourse have forced the governments across the

world to take cognizance of extreme poverty and environmental degradation in mining areas. Along with the government the onus is also on the mining companies to go beyond profit maximization and Utilitarian approach and pursue the goal of equity, social justice and sustainable development. Mining has always posed the dilemma of balancing the needs of business and environment ethics. The challenge is to take the two together with the view that minerals are not forever and everything cannot be mined out as if there was no tomorrow. This requires a fundamental change in our outlook towards use of non-renewable resources and market and speculative activities cannot decide this.

SDF, DMFs and PMKKKY are a step in the right direction. There are areas of concern which needs to be addressed. Since they are in the formative stage, we would have to wait to see what impact they have. But the government should look into the following suggestions to realize the vision of SDF and DMFs.

Some of the suggestions are:

- Make the DMFs institutions of the people. The constitution of the Governing Council and Executive Committee need to have at least 50% representatives of the people including mining affected communities. Mining affected communities should be involved in designing, approval, implementing and monitoring of plans and schemes. This process should be extended to all the mining regions and not limited to mining regions in scheduled areas.
- Benefit Sharing with mining affected communities need to be thought out carefully. Currently it is not defined and does not guarantee any direct monetary benefits to mining affected communities. Need to look at the international experience and include direct monetary benefits to people. People not to be treated as beneficiaries but people who are entitled to a share of the profit from the national resources of which they are also the owners. The government is a Trustee on behalf of the people. If a resource is being monetized, then the people also have a right to a share of the profit from the resources.
- Utilization of Funds to be done in a manner which does not allow the mining companies to externalize their environmental costs. List of activities in which funds are to utilized needs to be reviewed and clear guidelines have to be made. If

the DMF funds are to be dovetailed with other government schemes, then the principle of ‘Additionality’ should be applied. Specific programs and projects needs to be designed involving the mining affected communities.

- To realize the vision of SDF, the regulatory mechanism for mining has to be strengthened which should include joint monitoring by representatives of the Government, mining companies, representatives from Panchayati Raj Institutions and Urban Local bodies and most important the representatives of the mining affected communities which includes both men and women. These committees should be established at the state, district/block and the village level where mining activities are going on.

References

1. Centre for Science & Environment(2012): Mining In India, CSE Media Briefing, Centre for Science and Environment, New Delhi
2. Centre for Science & Environment (2015): Draft District Foundation Trust Rules (Rajasthan), 2015, Centre for Science and Environment, New Delhi
3. Centre for Science and Environment (2015): Policy Brief on District Mineral Foundation, Centre for Science and Environment, New Delhi
4. Centre for Science and Environment (2015): Pradhan Mantri Khanij Kshetara Kalyan Yojana and District Mineral Foundation, Centre for Science and Environment, New Delhi
5. Centre for Science and Environment (2011): Sharing the Wealth of Minerals – A report on Profit sharing with local Communities, Centre for Science and Environment, New Delhi
6. Centre for Science and Environment (2008): State of India's Environment – A Citizens' Report: Rich Lands Poor People – Is Sustainable Mining Possible, Centre for Science and Environment, New Delhi
7. Centre for Science and Environment (2017):District Mineral Foundation (DMF) – Status Report 2017, CSE, New Delhi
8. Government of India (2017): Background Notes for the 2nd National Conclave on Mines and Minerals, Ministry of Mines, Government of India, New Delhi, February, 2017
9. Industries and Commerce (Mines – I) Department (2015): Government of Telangana Order G.O.MS No 53 dated 21-08-2015 on establishing District Mineral Foundation
10. Khanij Sadhan Vibhag, Chhattisgarh (2015): Chhattisgarh Gazette Extraordinary Notification No F 7- 19/2015/12 dated 22nd December, 2015 on establishing Chhattisgarh District Mineral Foundation Trust Rules
11. Ministry of Mines (2015): Order No 16/7/2015 – M.VI (Part) on PMKKKY, Government of India, New Delhi
12. Ministry of Mines (2011): Sustainable Development Framework (SDF) for Indian Mining Sector, www.erm.com
13. Mines and Minerals (Development & Regulation) Amendment Act, 2015: No 10

- of 2015, Gazette of India, Extraordinary Part II – Section 1, dated March 27, 2015, Ministry of Mines (Legislative Department), Government of India, New Delhi
14. Ministry of Mines Notification (2015): Gazette of India, Extraordinary Part II, - Section 3 – Sub Section(i), dated September 17, 2015, Government of India, New Delhi
 15. Mishra Bijay(2016): DMF Money for regular plan works opposed, The Pioneer, 23rd December, 2016, Angul, Odisha
 16. Sustainable Development Framework for the mining sector
 17. Steel & Mines Department (2015): The Odisha Gazette Notification No 1210, on Odisha District Mineral Foundation Rules, Extraordinary, dated 18th August, 2015, Cuttack