

District Mineral Foundation FundsEvaluating the Performance

Rajesh Chadha and Ishita Kapoor

Independence | Integrity | Impact

Copyright © Rajesh Chadha and Ishita Kapoor

Centre for Social and Economic Progress (CSEP) CSEP Research Foundation 6, Dr Jose P. Rizal Marg, Chanakyapuri, New Delhi - 110021, India

Recommended citation:

Chadha, R; Kapoor, I. (2022). *District Mineral Foundation Funds: Evaluating the Performance* (CSEP Discussion Note 10). New Delhi: Centre for Social and Economic Progress.

The Centre for Social and Economic Progress (CSEP) conducts in-depth, policy-relevant research and provides evidence-based recommendations to the challenges facing India and the world. It draws on the expertise of its researchers, extensive interactions with policymakers as well as convening power to enhance the impact of research. CSEP is based in New Delhi and registered as a company limited by shares and not for profit, under Section 8 of the Companies Act, 1956.

All content reflects the individual views of the authors. The Centre for Social and Economic Progress (CSEP) does not hold an institutional view on any subject.

CSEP discussion notes are circulated for discussion and comment purposes. The views expressed herein are those of the author(s). All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including copyright notice, is given to the source.

District Mineral Foundation Funds

Evaluating the Performance*

Rajesh Chadha

Senior Fellow Centre for Social and Economic Progress New Delhi, India

Ishita Kapoor

Research Analyst Centre for Social and Economic Progress New Delhi, India

^{*}The authors thank Ganesh Sivamani, Research Analyst, CSEP, for his inputs on the indexing methodology adopted in this note. The comments received during the internal brown bag session on this note are gratefully acknowledged. We thank Laveesh Bhandari for his insightful comments on an earlier version of this note.

Table of Contents

Abstract
Introduction
DMF Collection and Expenditure: Major Mining States
DMF Utilisation Index (DMFUI) 9
Objectives
Methodology. 10
Data Sources
Indicators and Sub-Categories
DMF Utilisation Index: State-Level Results
Background 12
Results
DMF and COVID-19.
Discussion and Policy Implications
References
Annex 1: Royalty (from 2015-16 to 2018-19) and DMF collection, allocation and expenditure (from 2015-16 up to September 2021)
List of Tables and Figures
Figure 1: Share of state-wise DMF collection in total DMF collection—up to September 2021 6
Figure 2: Share of state-wise DMF collection in major minerals (other than coal and lignite) DMF collection—up to September 2021
Table 1: Collection, allocation and expenditure of DMF in major mining states—up to September 2021 (Rs crore)
Table 2: Expenditure to allocation ratio of DMF in top 12 mining states (percent)—up to September 2021 8
Table 3: Distribution of allocations across high-priority and other priority areas for ten states
Table 4: Indexing indicators
Table 5: Data sources
Table 6: Allocation patterns in ten states (percent)
Table 7: Ranks and scores for state-level DMFUI
Table 8: COVID-19 expenditure report of DMF funds

Abstract

The government introduced the District Mineral Foundation Funds (DMF) scheme in 2015 as a benefit-sharing scheme with the mining-affected communities. Under the DMF scheme, the mining companies would pay 30 percent of the royalty amount for leases granted before 2015 and ten percent by the leases granted through the auction mechanism post-2015. DMF funds are non-profit and independent trusts linked to the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY). It implements various welfare programmes for the mining-affected communities and the environment. At least 60 percent of the DMF funds should be utilised for high-priority areas. This note analyses the collection, allocation, and expenditure patterns in India's top 12 mining states through a DMF Utilisation Index (DMFUI). The DMFUI analyses the states on quantitative indicators such as the allocation to collection ratio and expenditure to collection ratio, and the qualitative indicators like the percentage of DMF allocation towards high-priority areas and the spread across priority areas. Chhattisgarh ranks number one and performs consistently better than the other states in all the indicators. The index shows the diversity of DMF welfare spending across select twelve states.

Introduction

Mining is an important primary sector providing raw material to manufacturing sectors. While the mining operations provide employment opportunities and infrastructure facilities to local communities, these may also lead to negative externalities, including adverse environmental, health, and livelihood effects (Antoci, Russu, & Ticci, 2019). The Indian government took cognisance of the welfare of the mining-affected communities, including tribal and forest-dwelling communities and hence, introduced the District Mineral Foundation (DMF) fund in March 2015 under the Mines and Minerals (Development and Regulation) (MMDR) Amendment Act 2015. Section 9B of the MMDR Amendment Act 2015 instructed the establishment of a DMF fund in every district affected by mining activities. Under the DMF scheme, the mining companies would pay 30 percent of the royalty amount for leases granted before 2015 and ten percent by the leases granted through the auction mechanism post-2015.

The DMF aims to work for the interest and benefit of persons and areas affected by mining-related operations (Ministry of Mines, 2015a). The DMF fund recognises local communities as equal partners in natural resource-led development and the protection of the environment. The fund provides a mechanism for benefit-sharing with mining-affected communities. It is a special fund that is not tied to any particular scheme or area of work, and it does not lapse at the end of each financial year. Instead, the unused funds get accumulated over the years. Currently, DMF funds have been set up in 600 mining-affected districts in 22 states of India. Non-profit trusts manage these funds. Each district has a separate trust.

In September 2015, the central government announced the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) to transform people's living standards and develop the mining-affected areas. The overall objectives of the PMKKKY scheme are as follows (Ministry of Mines, 2017):

- (a) To implement various developmental and welfare projects/programs in mining-affected areas. These projects/programs will complement existing ongoing schemes/projects of state and central governments.
- (b) To minimise/mitigate adverse impacts during and after mining on the environment, health and socio-economics of people in mining districts.
- (c) To ensure long-term sustainable livelihoods for affected people in mining areas.

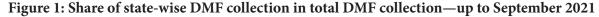
Under Section 20A of the MMDR Act, all the states would incorporate the PMKKKY into DMFs rules. Accordingly, the DMFs shall implement the PMKKKY in their respective districts. At least 60 percent of the DMF funds will be utilised for high-priority areas, including (a) drinking water

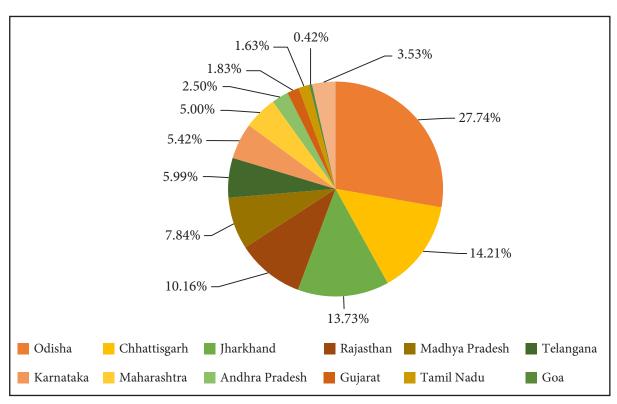
supply, (b) environment preservation and pollution control measures, (c) healthcare, (d) education, (e) welfare of women and children, (f) welfare of aged and disabled people, (g) skill development, and (h) sanitation. The rest of the funds will be utilised for other purposes: (a) physical infrastructure, (b) irrigation, (c) energy and watershed development, and (d) any other measures for enhancing environmental quality in mining districts.

In March 2020, the central government issued additional instructions regarding the DMF funds. The guidelines suggested that up to 30 percent of the funds could be used towards expenditure related to COVID-19. According to the MMDR Amendment Act 2021, the central government may also give direction regarding the composition and utilisation of the fund while state governments continue to prescribe the constitution and functions of the DMF. On July 12, 2021, the central government issued an order detailing that "no sanction or approval of any expenditure out of the DMF fund shall be done at the state level by the state government or any state-level agency" (Ministry of Mines, 2021b).

DMF Collection and Expenditure: Major Mining States

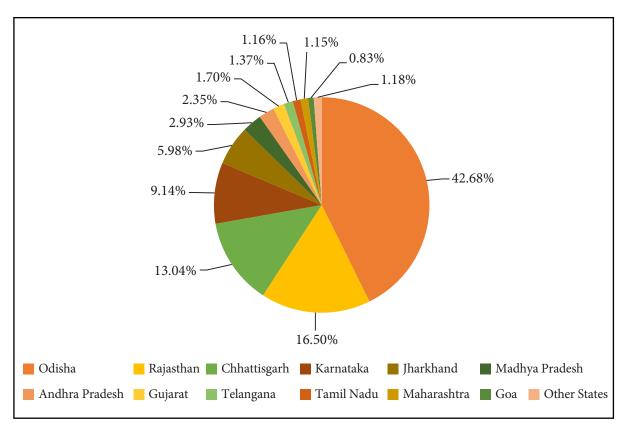
Rs 53,830 crore have been collected towards the DMF funds between 2015 and September 2021. About 39 percent (Rs 20,766 crore) has been collected from coal and lignite, 50 percent (Rs 27,108 crore) from major minerals other than coal and lignite and the remaining 11 percent (Rs 5,956 crore) from minor minerals (Ministry of Mines, 2021a). The key mining states in India are Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Telangana. These top 12 mining states account for 96.4 percent of the total DMF collection in the country. Annex-1 provides the amounts collected, allocated and spent by the top 12 mining states.





Thetopfourstates—Odisha(Rs14,934crore), Chhattisgarh(Rs7,651crore), Jharkhand(Rs7,393crore), and Rajasthan (Rs 5,468 crore)—account for almost 66 percent of the total DMF collection in the country. While a majority of the DMF fund in Odisha (77 percent), Rajasthan (82 percent) and Karnataka (85 percent) come from major non-fuel minerals, Jharkhand collects 78 percent of its DMF from coal and lignite (Figure 2). Other states with high DMF collection from coal and lignite are Telangana (89 percent), Maharashtra (88 percent), Madhya Pradesh (70 percent) and Chhattisgarh (54 percent).

Figure 2: Share of state-wise DMF collection in major minerals (other than coal and lignite) DMF collection—up to September 2021



Odisha has the highest DMF collection at Rs 14,934 crore but has only spent 50 percent of it. On the other hand, Chhattisgarh collected Rs 7,651 crore and spent 68 percent (Ministry of Mines, 2021a) Table 1 shows the collection, allocation and expenditure pattern in the top 12 mining states of India. Four states—Odisha, Telangana, Gujarat and Karnataka—allocated a higher amount than the DMF fund collection. However, the allocation of funds does not necessarily translate into actual expenditure. For example, while Odisha allocated the highest amount, it spent only 49 percent. Similarly, Karnataka allocated about 1.26 times its DMF collection but spent only 31 percent of its allocated funds (39 percent of the total collection).

Table 1: Collection, allocation and expenditure of DMF in major mining states—up to September 2021 (Rs crore)

	Collection	Allocation	Expenditure
Odisha	14934	15351	7461
Chhattisgarh	7652	7477	5171
Jharkhand	7393	5213	3866
Rajasthan	5468	5155	2507
Madhya Pradesh	4219	2653	1846
Telangana	3224	3713	1973
Karnataka	2918	3663	1127
Maharashtra	2691	1882	1205
Andhra Pradesh	1346	1238	408
Gujarat	986	1091	387
Tamil Nadu	875	707	536
Goa	225	71	37
Total	51931	48215	26524

Source: DMF status up to September 2021, Ministry of Mines

Table 2: Expenditure to allocation ratio of DMF in top 12 mining states (percent)—up to September 2021

State	Allocation/ Collection	Expenditure/ Allocation	Expenditure/ Collection
Tamil Nadu	80.8	75.9	61.3
Jharkhand	70.5	74.2	52.3
Madhya Pradesh	62.9	69.6	43.8
Chhattisgarh	97.7	69.2	67.6
Maharashtra	69.9	64.0	44.8
Telangana	115.2	53.1	61.2
Goa	31.5	52.4	16.5
Rajasthan	94.3	48.6	45.8
Odisha	102.8	48.6	50.0
Gujarat	110.7	35.5	39.3
Andhra Pradesh	92.0	33.0	30.3
Karnataka	125.5	30.8	38.6

 $Source: DMF\ status\ up\ to\ September\ 2021,\ Ministry\ of\ Mines$

As mentioned in Section 1, the PMKKKY guidelines suggest that at least 60 percent of the DMF funds are utilised in high-priority areas. However, the distribution within the high-priority and other priority areas has not been prescribed. Given the lack of data and other information, we assume an even distribution across the priority areas is better than concentrating the utilisation over a few. A good measure to evaluate the utilisation of DMF funds is the coefficient of variation (standard deviation divided by mean) across different areas of expenditure. A lower coefficient of variation indicates a better distribution. Table 3 shows the distribution of sector-wise allocations in 10 out of 12 top mining states (issues of data availability). Jharkhand has allocated the largest portion of its DMF funds towards high-priority areas (89 percent). However, the state shows a poor coefficient of variation across high-priority areas and other priority areas. Table 6 shows the detailed sector-wise allocations for the ten states.

Table 3: Distribution of allocations across high-priority and other priority areas for ten states

Chahar	Percent allocated to	Coefficient of Variation			
States	high-priority areas	High-priority areas	Other priority areas		
Jharkhand	88.6	2.4	2.0		
Gujarat	82.3	1.2	1.3		
Karnataka	63.8	0.9	1.4		
Chhattisgarh	61.7	0.9	1.3		
Odisha	57.8	1.1	1.3		
Rajasthan	55.3	1.4	1.7		
Maharashtra	54.4	1.1	1.4		
Tamil Nadu	53.4	1.9	1.1		
Telangana	42.9	0.7	1.9		
Andhra Pradesh	40.9	1.4	1.9		

Source: Individual state DMF websites - https://dmf.gujarat.gov.in/; http://dmf.orissaminerals.gov.in/website/index.aspx?sid=20; https://www.dmf.cg.nic.in/; http://ksdl.karnataka.gov.in/dmg/english/Pages/dmf.aspx; https://www.tnmines.tn.gov.in/dmg-trust-fund.php; http://mines.rajasthan.gov.in/DMFT/index.jsp; CSE 2020 Report (Shalya, 2020) for Andhra Pradesh, Jharkhand, Maharashtra and Telangana

DMF Utilisation Index (DMFUI)

Objectives

The PMKKKY suggests allocating at least 60 percent of the DMF fund to high priority areas such as drinking water supply, education, health, environment preservation and conservation, women and child welfare, the welfare of the aged and disabled, skill development and sanitation (Ministry of Mines, 2015b). The rest of the fund can be used towards other priority areas, including physical infrastructure, irrigation, energy development, and any other measures for enhancing the environmental quality of the mining areas.

The DMF Utilisation Index (DMFUI) is computed as a composite of quantitative and qualitative measures to gauge how well the fund has been spent. While the total DMF allocation and expenditure of a state or a district is the quantitative indicator of DMF utilisation, it is equally important to

analyse the qualitative spread across various priority areas. Some states do better than others in achieving the objectives. The districts within a state also differ in the quantum and quality of their spending. However, updated and pertinent data is not available for all the states and districts. Based on the data available, the present study computes the DMFUI for ten states, viz Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Telangana.

Methodology

The state-level index attempts to study the expenditure patterns in 10 of the 12 top mining states, viz Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, and Telangana. These states are analysed on five different indicators: quantitative indicators such as (a) allocation to collection ratio and (b) expenditure to collection ratio; and the qualitative indicators like (c) the share of allocation on high priority areas, (d) the spread of the allocations across high-priority areas, and (e) the spread of allocations across other priority areas. The other two states, viz Goa and Madhya Pradesh, could not be indexed due to the non-availability of the requisite data.

Each of these five indicators is normalised using the min-max transformation method. The minimum and maximum values have been fixed for each indicator. The normalised score ranges from 0 to 100.

The indicators are given different weights. The quantitative indicators are given a weight of 50 percent—one-third to allocation/collection and the remaining two-thirds to expenditure/collection. While the allocation data signals intentions, the expenditures represent the work being accomplished, and hence a higher weight is assigned to expenditure/collection than to allocation/collection. The remaining 50 percent is equally divided among the three qualitative indicators. A weighted average of these five indicators is used to calculate the final score of each state. The weighting diagram is given in Table 4.

The DMF index study draws upon the methodologies used in the Centre for Social and Economic Progress (CSEP) Sustainable Mining Attractiveness Index (Chadha, Kapoor, & Sivamani, 2021) the Annual Survey of Mining Companies by the Fraser Institute (Canada) (Steadman, Yunis, & Aliakbari, 2020) and the State Investment Potential Index by the National Council of Applied Economic Research (NCAER) (NCAER, 2018).

Table 4: Indexing indicators

Indicator	ndicator		ercent)
Quantitative	Allocation to collection ratio	16.67	F00/
indicators	expenditure to collection ratio 33.33		50%
Qualitative	Percentage of total allocations spent towards high- priority areas	16.67	
indicators	Spread of allocations across high-priority areas	16.67	50%
	Spread of allocations across other priority areas	16.67	

The weighting diagram was checked for heterogeneity by simulating the weight distribution between quantitative and qualitative indicators. Increasing the weight of the quantitative indicators to 60 percent and reducing that of the qualitative indicators to 40 percent did not affect the order of the results. Further, a similar simulation by reducing the weight of the quantitative indicators

to 40 percent and increasing that of the qualitative indicators to 60 percent did not distort the order of the original equal-weights results. Hence, equal weights between the quantitative and qualitative indicators have been chosen.

Data Sources

Data has been collected through various secondary sources on the five indicators mentioned in the previous section. These sources include government data from the central and state levels. Table 5 gives the detailed list of these sources. Six states have the latest data available on their Directorate of Mines and Geology (DMG) website. However, for four states, data from the CSE report (Shalya, 2020) have been used, which provide sector-wise allocations as of November 2019.

Table 5: Data sources

Indicator	Source
Quantitative Indicators—expenditure, allocation and collection of DMF funds	Ministry of Mines—DMF Fund Status (up to September 2021) (Ministry of Mines, 2021a)
Percentage of total allocations spent in each priority area	Individual state DMF portals for six states ¹ as downloaded on November 24, 2021
	CSE report, 2020 (Shalya, 2020) for four states (allocation percentages are available for DMF funds cumulative up to November 2019)

Indicators and Sub-Categories

The DMFUI analyses the quantitative and qualitative aspects of the fund expenditure and its spread. As mentioned in Table 3, the index is based on five indicators:

Allocation to Collection Ratio

This ratio is an important indicator of the longer-term intentions of the states towards spending the DMF funds. A higher ratio indicates better allocation of the DMF collection. As mentioned in section 2, Karnataka has allocated 125 percent of its DMF collection while Goa has allocated only 32 percent of its total DMF collection.

Expenditure to Collection Ratio

The expenditure to collection ratio is an indicator of the real-time expenditure patterns of the state. A higher ratio signifies better current/ongoing performance. Karnataka allocated 125 percent of its DMF collection but spent only 39 percent of its total collection on various projects. Chhattisgarh spent the highest percentage of DMF collection (68 percent) although it allocated almost 98 percent of the DMF collection.

Percentage of Total Allocations to High-Priority Areas

The states and districts could have been directly graded based upon their relative allocation and expenditure patterns. However, at the same time, it is important to capture the qualitative aspects

https://dmf.gujarat.gov.in/; http://dmf.orissaminerals.gov.in/website/index.aspx?sid=20; https://www.dmf.cg.nic.in/; http://ksdl.karnataka.gov.in/dmg/english/Pages/dmf.aspx; https://www.tnmines.tn.gov.in/dmg-trust-fund.php; http://mines.rajasthan.gov.in/DMFT/index.jsp

of their allocation patterns. For example, Gujarat allocated almost 82 percent of its DMF collection to high-priority areas, while Tamil Nadu allocated the lowest percentage (54 percent) towards high-priority areas. This indicator helps us capture the adherence to the PMKKKY rules, which mentions that at least 60 percent is spent on high-priority areas.

Spread of Allocations in High-Priority Areas

The fourth indicator measures the spread of allocations across high-priority areas. The spread of allocations is an important qualitative aspect. There are eight high-priority areas (drinking water supply, environment, health care, education, women and child welfare, the welfare of aged and disabled, skill development, and others). Different states might have different priorities across the eight high-priority areas. In the absence of such information, we assume an even spread would be better than allocating to just a few priority areas. The coefficient of variation is used to measure the spread of allocations across the eight high-priority areas. Telangana has the lowest coefficient of variation, indicating a better distribution of the DMF funds across various high-priority areas. Jharkhand shows the worst spread as it has focussed its DMF fund utilisation on drinking water supply projects (77 percent).

Spread of Allocations in Other priority Areas

The fifth indicator measures the spread of allocations across other priority areas. There are four other priority areas (physical infrastructure, irrigation, energy development, and others). The coefficient of variation is used to measure the spread of allocations across the four other priority areas. Tamil Nadu has the lowest coefficient of variation indicating a better distribution of the DMF funds across various other priority areas. On the other hand, Jharkhand shows the worst spread as it has focussed its DMF fund utilisation on other measures for enhancing the environmental quality in the mining districts (11.4 percent).

DMF Utilisation Index: State-Level Results

Background

Table 6 gives the details of the state-level allocation patterns. The table shows that seven out of ten states (Andhra Pradesh, Chhattisgarh, Karnataka, Maharashtra, Odisha, Rajasthan, and Telangana) allocated a majority of their DMF funds to physical infrastructure projects. On the other hand, Gujarat allocated most of the funds to education, Jharkhand allocated the majority of DMF funds to drinking water supply, and Tamil Nadu allocated the largest share to their drinking water supply.

Table 6: Allocation patterns in ten states (percent)

Expenditure Categories	Andhra Pradesh	Chhattisgarh	Gujarat)harkhand	Karnataka	Maharashtra	sdsibO	Rajasthan	ubsV limsT	Telangana
			High-prio	High-priority Areas						
Drinking water supply	22.2	7.3	8.8	7.97	15.5	16.0	23.8	18.1	37.9	7.6
Environment	0.0	2.8	0.4	0.0	2.4	2.8	1.8	3.5	0.7	3.4
Healthcare	2.1	1.01	12.1	0.5	18.1	21.5	10.1	5.0	7.7	4.2
Education	6.2	22.4	37.5	0.0	16.3	6.2	8.2	26.3	4.3	12.0
Women and child welfare	5.4	4.3	8.0	0.0	4.2	1.0	1.7	1.6	0.7	1.6
Welfare of the aged and disabled	0.0	5.0	0.0	0.0	6.0	1.0	0.0	8.0	0.2	9.0
Skill development	2.2	2.4	13.4	0.0	1.5	4.2	1.2	0.0	0.4	7.6
Other high priority areas	2.8	11.9	2.2	11.4	4.8	1.7	10.9	0.0	1.6	5.9
			Other Pric	Other Priority Areas						
Physical infrastructure	57.3	28.7	13.0	0.0	28.4	34.8	30.6	40.3	22.6	55.0
Irrigation	0.7	3.4	1.3	0.0	3.5	6.7	10.4	3.6	21.8	0.0
Energy development	0.1	4.2	2.9	0.0	2.3	3.0	1.2	0.0	1.7	0.7
Other priority areas	0.7	2.0	0.5	11.4	1.9	1.5	0.0	0.7	0.4	1.0

Source: Individual DMF portals for 6 states - https://dmf.gujarat.gov.in/; http://dmf.orissaminerals.gov.in/website/index.aspx?sid=20; https://www.dmf.cg.nic.in/; http://ksdl.karnataka.gov.in/dmg/english/ Pages/dmf.aspx; https://www.tnmines.tn.gov.in/dmg-trust-fund.php; http://mines.rajasthan.gov.in/DMFT/index.jsp; CSE 2020 report for 4 states - Andhra Pradesh, Jharkhand, Maharashtra and Telangana

Results

The states are ranked according to their index score, which was calculated using the methodology mentioned in section 3.2. Table 7 shows the index score and rank of the ten states. Chhattisgarh ranks first, followed by Telangana (2), Gujarat (3), Karnataka (4) and Odisha (5). The states in the bottom ranks are Tamil Nadu (6), Maharashtra (7), Rajasthan (8) Jharkhand (9) and Andhra Pradesh (10). Chhattisgarh gets a top score on account of its high expenditure to collection ratio (68 percent), high allocation to collection ratio (98 percent), low coefficient of variation in both high-priority (0.92) and other priority areas (1.3) and high allocation to high-priority areas (62 percent). On the other hand, Andhra Pradesh gets the lowest score because of the lowest expenditure to collection ratio (30 percent), high coefficient of variations in high-priority (1.4) and other priority areas (1.9) and lowest allocation to high-priority areas (41 percent).

Table 7: Ranks and scores for state-level DMFUI

State	Score	Rank
Chhattisgarh	68	1
Telangana	64	2
Gujarat	63	3
Karnataka	62	4
Odisha	61	5
Tamil Nadu	59	6
Maharashtra	55	7
Rajasthan	55	8
Jharkhand	53	9
Andhra Pradesh	46	10

DMF and COVID-19

On March 26, 2020, the central government announced that state governments could use DMF funds to augment healthcare including supplementing healthcare facilities, screening and testing requirements, and any other support required (Banerjee, 2020). However, according to the directives issued by the government, the usage of the DMF funds for COVID-19 relief is capped at 30 percent of the funds left unused (Banerjee, 2020). The central government also specified that the funds should be used in those districts where at least one COVID-19 patient has been identified.

While the larger clusters of COVID-19 were concentrated in cities and major town centres, the migration of labourers to rural areas was a cause of concern regarding the spread of COVID-19 to remote areas. In most rural districts, there is a shortage of healthcare facilities such as primary healthcare centres (PHCs) and community healthcare centres (CHCs). As mentioned in the previous sections, the fund's focus is on physical infrastructure including the construction of major roads in most states. Expenditure to other major socio-economic sectors such as women and child welfare, healthcare and livelihood support has not been optimal.

The provision of the DMF funds for COVID-19 relief is crucial for these rural mining districts as it has been used to procure testing equipment, personal protective equipment (PPE) kits, and the equipment required in ICUs, such as ventilators. In addition, it has also been used to train frontline workers.

The second wave of COVID-19 in India was much worse than the spread of the pandemic earlier. In Karnataka, DMF funds were utilised to procure oxygen cylinders and concentrators to mitigate death during the second wave (News 18, 2021). In addition to this, the funds were used to set up oxygen plants in ten district hospitals to ensure uninterrupted supply of oxygen (Hindu BusinessLine, 2021).

Goa also diverted its DMF funds for COVID-19 relief. As Table 8 indicates, Goa spent about 12 percent of its remaining funds on COVID-19. Since the pandemic began in March 2020, the funds have not been utilised for any other sector in the state. Instead, the funds were used to procure thermal imaging cameras, quattro machines, test kits, PPE kits and micro PCR systems for hospitals in the major cities of the state (Vohra, 2021).

Table 8: COVID-19 expenditure report of DMF funds

State	DMF fund available on March 28, 2020 (in Rs crore)	Amount spent on COVID-19 since March 28, 2020 (in Rs crore)	Percentage spent (%)
Andhra Pradesh	623.12	130.80	20.99
Chhattisgarh	1190.04	4.36	0.37
Goa	187.89	22.00	11.71
Gujarat	153.52	15.41	10.04
Jharkhand	1216.17	9.66	0.79
Karnataka	1281.64	114.60	8.94
Madhya Pradesh	1279.69	5.10	0.40
Maharashtra	687.99	59.50	8.65
Odisha	3274.18	99.49	3.04
Rajasthan	2018.59	15.93	0.79
Tamil Nadu	98.93	14.73	14.89
Telangana	1001.20	*	*

Source: Annual Report of Ministry of Mines (2020-21); Annexure 1.2 – Daily expenditure report for COVID-19 from DMF funds as on December 31, 2020

Discussion and Policy Implications

The DMF funds were launched in March 2015 under the MMDR Amendment Act 2015. This note provides an analysis of how well have these funds been utilised across ten states. For DMF objectives to succeed, the districts must focus on spending accumulated resources with due shares on high-priority areas and other priority areas.

The top six DMF-collecting states, cumulative until September 2021, include Odisha, Chhattisgarh, Jharkhand, Rajasthan, Madhya Pradesh and Telangana, accounting for 80 percent of the total DMF collections in the country. On the other hand, the six low DMF collecting states include Karnataka, Maharashtra, Andhra Pradesh, Gujarat, Tamil Nadu and Goa, accounting for 17 percent of the total

^{*}Data has not been received

DMF collections in the country. Only three states spent more than 60 percent of their collections, Chhattisgarh (68.5 percent), Tamil Nadu (61.3 percent) and Telangana (61.2 percent). One state spent more than 50 percent (Jharkhand) and all others less than 50 percent—Goa spent the lowest at 17 percent. However, some states have allocated spending amounts higher than their corresponding collections, Karnataka at 125.5 percent, Telangana at 115.1 percent, Gujarat (110.7 percent) and Odisha at 102.7 percent. Jharkhand, Gujarat, Karnataka and Chhattisgarh have made allocations of more than 60 percent to their high-priority areas. Some states, such as Karnataka, Chhattisgarh, and Telangana, have made relatively even allocations across the eight high-priority areas. Four states, viz Chhattisgarh, Tamil Nadu, Gujarat, and Odisha, have made relatively even allocations in the four other priority areas.

Chhattisgarh emerges as a clear winner, with DMF spending features consistently better than other states. It has allocated about 98 percent of its collections to various PMKKKY-identified areas and spent close to 69 percent of its allocations and collections (cumulative up to September 2021). Apart from these quantitative measures, Chhattisgarh allocated 62 percent of its total collections on the PMKKKY high-priority areas. Further, the allocations are relatively evenly spread across high-priority and other priority areas with low coefficients of variation across areas under the two categories.

Measured on a similar yardstick as Chhattisgarh (1), the other four states in the top five include Telangana (2), Gujarat (3), Karnataka (4) and Odisha (5). The states that should aspire to push up their PMKKKKY objectives include Tamil Nadu (6), Maharashtra (7), Rajasthan (8), Jharkhand (9) and Andhra Pradesh (10). Two of the bottom five states are among the high DMF-collecting states, viz Jharkhand and Rajasthan. The other three are in the low DMF-collecting group, viz Andhra Pradesh, Tamil Nadu and Maharashtra.

While a majority of the states have allocated relatively large proportions of their DMF funds to the improvement of physical infrastructure (not included in high-priority areas), other states have focussed on high-priority areas (Table 6). For example, Gujarat, Tamil Nadu and Jharkhand have allocated large proportions of their funds to the drinking water supply.

A major issue faced while creating the utilisation index was the poor quality of available data. The PMKKKY guidelines mention that each DMF trust fund has to maintain a website that provides updated data relating to affected areas and people and sector-wise details on the funds' collection, allocation, and expenditure. However, only two states' websites have provided updated district-level data on their DMF funds, though not fully.

While the DMF administration comes under the purview of the districts and states, the new 2021 MMDR amendments have given greater power to the central government regarding the composition and utilisation of the funds. The central government has ordered that no sanction or approval of any expenditure out of the DMF fund shall be done at the state level by state governments or any state-level agency. While it may not be easy for the central government to assess specific local needs, the increased supervision would motivate the districts to spend the DMF funds instead of accumulating these without spending. However, the central government must be cautious of the local district-level characteristics. As the DMF fund does not lapse at the end of the financial year, the provisions give a huge scope to plan its use, improve and expand upon what already exists. Currently, the DMF is being treated as any other development or infrastructure fund when it can be utilised for more than that. With the central government getting more decision-making power, the DMF fund might get utilised to improve the livelihoods of mining-affected people and regions. Additionally, the Central Government has directed the DMF trust funds to set up a 2-tier administrative committee to ensure effective implementation of the PMKKKY scheme focussed on the affected mining communities (Ministry of Mines, Government of India, 2021).

The central government allocated part of the accumulated DMF funds for COVID-19 care in March 2020. The directive issued specified that up to 30 percent of the funds can be utilised for COVID-19 relief. The districts utilised the funds to provide PPE kits, procure testing equipment and equipment required in ICUs in areas with poorer healthcare facilities. Andhra Pradesh has spent the largest proportion (almost 21 percent) of its remaining DMF funds on COVID-19. Tamil Nadu, Goa and Gujarat have also spent more than ten percent of their remaining DMF funds towards COVID-19. However, states such as Chhattisgarh, Jharkhand, Madhya Pradesh, and Rajasthan have spent less than one percent towards COVID-19.

References

Antoci, A., Russu, P., & Ticci, E. (2019). Mining and Local Economies: Dilemma between Environmental protection and Job opportunities. *Sustainability*. Retrieved from https://www.mdpi.com/2071-1050/11/22/6244/htm

Banerjee, S. (2020). *Utilising District Mineral Foundation funds to fight the COVID-19 crisis in India: Current and future opportunities.* Brookings India. Retrieved from https://csep.org/blog/utilising-district-mineral-foundation-funds-to-fight-the-covid-19-crisis-in-india-current-and-future-opportunities/

Chadha, R., Kapoor, I., & Sivamani, G. (2021). CSEP Sustainable Mining Attractiveness Index: District-level study of Jharkhand. CSEP. Retrieved from https://csep.org/working-paper/csep-sustainable-mining-attractiveness-index-district-level-study-of-jharkhand/

Hindu BusinessLine. (2021, May 15). Karnataka to utilise DMF fund to buy oxygen tankers, concentrators. Retrieved from https://www.thehindubusinessline.com/news/national/karnataka-to-utilise-dmf-fund-to-buy-oxygen-tankers-concentrators/article34567331.ece

Ministry of Mines. (2015a). *Achievements / Highlights of Ministry in the current tenure of Hon'ble Minister of Steel & Mines.* Retrieved from https://mines.gov.in/writereaddata/Content/highlights.pdf

Ministry of Mines. (2015b). *Order dated September 2015 - PMKKKY*. Retrieved from https://www.dmf.cg.nic.in/pdf/PMKKKYorder.pdf

Ministry of Mines. (2017). *Brief note on Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)*. Retrieved from https://mines.gov.in/writereaddata/UploadFile/Breif%20note%20on%20PMKKKY.pdf

Ministry of Mines. (2021a). *DMF Fund Status upto September 2021*. Retrieved from https://www.mines.gov.in/writereaddata/Content/DMF%20DATA%20Till%20September%202021.pdf

Ministry of Mines. (2021b). *Utilisation of DMF funds - Order Dated 12th July 2021*. Retrieved from https://mines.gov.in/writereaddata/UploadFile/Orderdated12thJuly2021.pdf

Ministry of Mines, Government of India. (2021, December 13). *Mining Sector Welfare Schemes introduced*. Retrieved from Press Information Bureau: https://pib.gov.in/PressReleasePage.aspx?PRID=1780893

NCAER. (2018). *Press Release: NCAER releases its N-SIPI 2018, the NCAER-STATE INVESTMENT POTENTIAL INDEX*. Retrieved from https://www.ncaer.org/news_details.php?nID=260

News 18. (2021, May 15). Karnataka Decides to Utilise DMF Fund to Purchase Oxygen Tankers, Concentrators, Pulse-oximeters. Retrieved from https://www.news18.com/news/india/karnataka-decides-to-utilise-dmf-fund-to-purchase-oxygen-tankers-concentrators-pulse-oximeters-3741689.html

Shalya, C. (2020). *DMF: Implementation Status and Emerging Best Practices*. Centre for Science and Environment. Retrieved from https://www.cseindia.org/dmf-implementation-status-and-emerging-best-practices-10057

Steadman, A., Yunis, J., & Aliakbari, E. (2020). *Annual Survey of Mining Companies*. Fraser Institute. Retrieved from https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2019

Vohra, S. (2021, March 16). Majority of Goa's utilised DMF funds diverted to coronavirus relief. *Mongabay*. Retrieved from https://india.mongabay.com/2021/03/majority-of-goas-utilised-dmf-funds-diverted-to-coronavirus-relief/

Annex 1: Royalty (from 2015-16 to 2018-19) and DMF collection, allocation and expenditure (from 2015-16 up to September 2021)

	Royalty	Tota	l DMF Coll	ection (Rs ci	rore)	Amount	Amount
States	Collection (Rs crore)	Coal & Lignite	Major Minerals	Minor Minerals	Total	Allocated (Rs crore)	Spent (Rs crore)
Odisha	16885	3293	11569	73	14934	15351	7461
Rajasthan	9774	67	4472	929	5468	5155	2507
Chhattisgarh	6045	3884	3535	233	7652	7477	5171
Karnataka	4400	0	2478	440	2918	3663	1127
Jharkhand	3117	5401	1620	372	7393	5213	3866
Madhya Pradesh	1410	3391	796	33	4219	2653	1846
Andhra Pradesh	1512	0	637	709	1346	1238	408
Gujarat	1159	124	461	401	986	1091	387
Telangana	856	1952	370	901	3224	3713	1973
Tamil Nadu	540	363	315	197	875	707	536
Maharashtra	1018	1672	312	708	2691	1882	1205
Goa	619	0	225	0	225	71	37
Total	47335	20148	26789	4994	51931	48215	26524

Source: DMF fund Status up to September 2021, ministry of mines; Annual report 2020-21, Ministry of Mines

Independence | Integrity | Impact

Centre for Social and Economic Progress

6, Dr Jose P. Rizal Marg, Chanakyapuri, New Delhi - 110021, India





