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Prepared by



JHARKHAND SUSTAINABLE MICA POLICY FRAMEWORK AND VISION

PREPARED FOR ALL STAKEHOLDER

NOTE: This document has been prepared based on publicly available information, inputs from mica-related stakeholders in India, global corporations sourcing mica from India, civil society organizations and government agencies. It also includes benchmarked mining related information and policies from other jurisdictions. This is a consultative document prepared specifically for the benefit of the mica sector in Jharkhand and mica-related stakeholders in India.

JULY 15 2020

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1. EXECUTIVE SUMMARY

The Jharkhand Sustainable Mica policy framework and vision has been prepared on the basis of consultations with members of civil society, industry and local community stakeholders; to address lack of a holistic approach to the issue of sustainable mica mining and supply chain issues in Jharkhand. The framing of the Sustainable Mica policy framework and vision follows the principles of multi-stakeholder collaboration enshrined in the [Ranchi Principles for Sustainable Mica](#) to help create a sustainable mica eco-system in Jharkhand. Taking a holistic view of all stakeholder objectives and a critical review of gaps in the mica eco-system has helped identify policy interventions in building a Sustainable Mica value chain in Jharkhand and grow mica-based industries. This is important as each stakeholder has a different set of objectives, namely:

- A. [Government of Jharkhand](#) – Growing Revenue; Attracting Mica Investments; Protecting Labour & Human Rights; Protecting Environment; and Social and Economic Development of Giridih and Koderma.
- B. [Mica Industry](#) – Increasing mica production and supplies; Securing mica exports; Enhancing global acceptance of mica exports from Jharkhand; Improving economic performances of mica industrial activities in Jharkhand; and Ease of doing business’
- C. [Local Communities and Civil Society](#) – Protection and recognition of rights, civic and welfare facilities.

PART A (Section 2-6) of this framework covers background information on mica mining in Jharkhand, existing legal and policy provisions that exist to prevent illegal mining, protect the casual labour, mica-related economics, macro-economic aspects of mica production and exports, and review of applicable regulations.

PART B (Sections 7-9) of the Sustainable Mica framework and vision is intended to be a practical document with analysis that helps arrive estimations for sustainable mica-linked industrial growth and employment generation¹ over next three to five years. Growth scenarios are followed up with nine specific policy interventions that will help Jharkhand revive mica-based industries, develop a Sustainable Mica value chain and establish a global sustainability benchmark for the mica mineral.

KEY TAKEAWAYS

GROWTH OF SUSTAINABLE MICA-LINKED INDUSTRY AND ECO-SYSTEM IN JHARKHAND

- 1) By taking a Sustainable Mica path and implementing the nine recommended policy interventions, the [Government of Jharkhand can drive industrial growth, create new jobs, reduce size of informal sector engaged in mica picking, create additional tax revenue, develop the local economy and communities in the mica-rich regions of Koderma and Giridih and improve labour conditions in the mica supply chain within next 3-5 years](#). Growth assumptions have been drawn up based on three scenarios:
 - a) Change in mix of mica grades exported (increase in mica sheet exports)
 - b) Higher price of exported mica² (export price and potential additional premium)
 - c) Higher induced demand
- 2) Developing a Sustainable Mica eco-system could create [employment for more than 210,000 workers directly and indirectly](#). This would be led by [development of mica-linked industrial or processing units](#) (from 75 currently) in the state over next 3-5 years.
- 3) Mica-based industries in Jharkhand can grow in excess of 2 to 5 times in value over following 3-5 years, [growing from a current estimate of INR 246 crores to INR 490 to 1230 crores](#) (from c USD 35 mn to USD 70 to 175 mn) and [increase Jharkhand’s share of Indian mica exports from 20% to 40%](#).
- 4) Creating Sustainable Mica policies can [reduce size of informal sector engaged in mica picking](#), leading to stronger protection of labour rights and elimination of illegal labour from the supply chain.

MICA-LINKED INDUSTRIAL UNITS	MICA-RELATED EMPLOYMENT	MICA-LINKED INDUSTRY GROWTH	JHARKHAND SHARE OF INDIAN MICA EXPORTS
Significant increase in mica-processing units – from current 75 units	210,000 jobs	2 to 5x growth - estimated if all 3 intervention scenarios play out	40% estimated - from current 20%

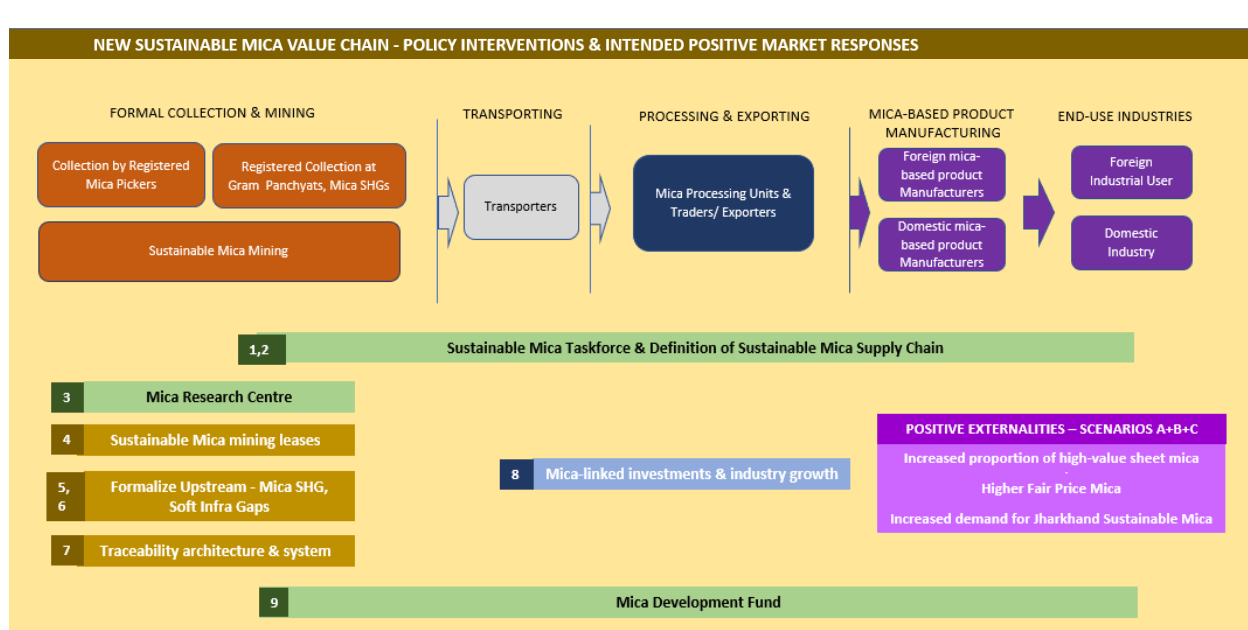
¹This may be further strengthened by undertaking supplemental economic research.

² NOTE: RMI is not a buyers’ group and assumptions should be further qualified by stakeholders and the proposed Sustainable Mica Taskforce.

RECOMMENDED SUSTAINABLE MICA POLICY INTERVENTIONS

Jharkhand can achieve the above socio-economic outcomes by putting in place a Sustainable Mica eco-system quickly by taking a holistic multi-stakeholders view and implementing nine specific policy interventions:

1. Constitution of a Sustainable Mica Taskforce
2. Defining the Sustainable Mica Supply Chain
3. Establishment of a Mica Research Centre to assist economic and social policy planning
4. Creation of a new Jharkhand 'Sustainable Mica' mining lease agreement
5. Creation of Self-Help-Groups (SHGs) to Formalize the Upstream
6. Addressing 'Soft Infrastructure Gaps' in Labour Rights, with a focus on informal, mica pickers
7. Creation of Traceability and Improve Enforcement Capacity across the entire Mica Value Chain
8. Promotion of mica-related private sector investments in Jharkhand
9. Creation of a Mica Development Fund



The Jharkhand Sustainable Mica Framework and Vision has been voluntarily prepared by a multi-stakeholder workgroup.

The intervention areas were discussed at a multi-stakeholder e-consultation on July 7 2020, with contribution from 45 participants, including representation from two departments of the Jharkhand Government (Mines and Geology; Women and Child Development), members from global development and multilateral agencies, members from civil society organizations and members from industry players; before being finalized.

It should now be adopted by a public-private taskforce, constituted for the specific purpose of implementing the policy recommendations in an agreed timeline. Creation of such an executive body that is authorized to act as the implementation agency is critical for achieving the socio-economic outcomes mentioned in the earlier section.

2.BACKGROUND

- 2.1. **HISTORICAL CONTEXT** - Mica-rich regions are concentrated in specific blocks of key districts in four states - Andhra Pradesh (Guntur District), Rajasthan (Bhilwara and Ajmer Districts), Jharkhand (Koderma and Giridih Districts) and Bihar (Nawada District). Historically, India has been a leading global producer of sheet mica, with the best quality mica deposits occurring in Jharkhand³, and Koderma being called the 'mica capital of the world'⁴. The collapse of the Soviet Union, an important export market for Jharkhand mica, and enactment of forest conservation laws, resulted in steady decline of mica exports and an erroneous view that global demand for natural mica diminished. On the contrary, demand for natural mica from India in export markets continues to hold strong, with USD 71.3 million⁵ worth of exports from India in 2019. As an industrial mineral with unique properties, natural mica is an important raw material in multiple end-use industries - from aerospace, electronics, automotive, chemicals and consumer sectors, making it a valuable resource in multiple global supply chains. Its reclassification as a minor mineral gives state governments flexibility in developing mica mining and processing, as well as engaging with global mica investors for direct investments into mica-rich regions. Mica mining and production is underway in Andhra Pradesh and Rajasthan, but no formal mica mining is happening in Jharkhand or Bihar. Despite this, there are a number of mica processing units in Jharkhand that process mica from domestic sources.
- 2.2. **MICA AND MINOR MINERAL MINING IN JHARKHAND** - Jharkhand is the 15th largest Indian state by area⁶ (79,710 km²/ 30,778 sq mi), and 14th largest by population (329 lacs or 33 million). Despite more than 40% of national mineral resources, a significant proportion of its population (over 39%) lives below the poverty line. State gross domestic product (SGDP) of Jharkhand is estimated at ₹3.83 lakh crore (US\$ 54 billion) for 2020-21. The focus of the government has been on major minerals such as iron ore, coal and bauxite, including recent initiatives to develop a sustainable mining framework for iron-ore. In the minor mineral category, sand mining has been prioritized for development and growth, given its importance in the construction sector, and the development of a Jharkhand State Sand Mining Policy 2017 that promotes sustainable practices in sand mining. All mining policy decisions are taken by the Department of Mines and Geology, with the JSMDC leading implementation of the Sand Mining Policy (with Sand as a classified Minor Mineral). The region is marked by difficult terrain surrounded by dense forests, poor connectivity and isolation and lacks civic amenities. Implementation of government welfare schemes is poor and many of these areas are under the protected forest or wildlife sanctuary area and governed by the Forest Conservation Act. There is a lack of official data on mica deposits in Koderma and Giridih, though there have been unsubstantiated reports about mica reserves at about 13.5 million tonnes⁷.
- 2.2.1. **GIRIDIH DISTRICT** - District of Giridih has a population of 24.45 lacs or 2 million (2011 census)⁸ with child population (0-6 years) of 460,251 (18.8% of population), of which the two mica-rich blocks of Tisri and Gawan have population size of 95,081 (child population is 19,292, 20% of population) and 115,962 (child population is 22,682, 19.5% of population) respectively. Giridih is one of the districts in central government's focus on 117 aspirational districts development (currently ranks 97/117)⁹. It is being supported with central and state government fund, with a nominated Prabhari Officer¹⁰ (of Additional or Joint Secretary) and supervised by the Cabinet Secretary. The mica-rich blocks account for about 10% of Giridih district population (2011 census). About 17.41% of Giridih is covered with forests. The total forest area is 864 sq km of which - 98 sq km is very dense forest; 422 sq km of moderately dense forest; and 344 sq km of open forest.
- 2.2.2. **KODERMA DISTRICT** - Koderma has population of 7.16 lacs or 0.7 million (2011 census)¹¹, in which the four mica-rich blocks of Koderma have a population of 93,240¹² - Jainagar has a population of 131,279, Chandwara's population is 84,914 and Markacho's is 94,419. The four mica-rich blocks account for over 50% of Koderma district population. About 42.42% of the Koderma district is covered with forests. The total forest area of Koderma district is 64796.90 hectare spread over 309 forest villages as protected forest under administrative control of Koderma Forest Division together with 15062.77 hectare scattered in 35 forest villages as a reserved forest. In 2018, Central Government notified an area of around 5 kms around Koderma Wildlife Sanctuary as 'Eco-sensitive zone' and all new and existing mining was prohibited with immediate effect.

³ <http://www.jsmdc.in/web/MineralReservesProduction.php>

⁴ <https://www.newindianexpress.com/thesundaystandard/2019/may/05/a-battle-of-equals-for-once-mica-capital-1972759.html>

⁵ <https://www.indiabudget.gov.in/economicsurvey/doc/Statistical-Appendix-in-English.pdf>

⁶ https://en.wikipedia.org/wiki/List_of_states_and_union_territories_of_India_by_area

⁷ https://www.c4rb.org/images/MICA_Roadmap.pdf

⁸ <https://giridih.nic.in/census-data-2011/>

⁹ <https://www.msde.gov.in/assets/images/aspirational/NITI%20Ayog%20-%20Transformation%20of%20Aspiration%20Districts.pdf>

¹⁰ gsa.nic.in/GramSwarajAbhiyanPDF/Prabhari_Officers_List.xlsx

¹¹ <https://cdn.s3waas.gov.in/s3087408522c31eeb1f982bc0eaf81d35f/uploads/2018/03/2018031913.pdf>

¹² <https://koderma.nic.in/demography/>

3.MICA ECONOMICS IN JHARKHAND – PRODUCTION, EXPORTS AND INDUSTRY STRUCTURE

- 3.1. **HISTORICAL PRODUCTION** - Historically, the mica-rich regions in Jharkhand had been a major mica export hub, with over 700 legal mica mines at one time. Environmental regulation and the Forest Conservation Act 1980 effectively put a stop to mica mining, closure of mines and destroyed the mica-led economies in Giridih and Koderma, such that both districts are economically weak districts in Jharkhand. While mica mining has resumed in other mica regions in the country, specifically in Andhra Pradesh and Rajasthan under the aegis of state regulations regulating minor minerals that mica is now classified as, Jharkhand has yet to enact mica-specific rules or regulations that help revive sustainable mica mining and production in the state with a view on proceeding in an environmentally friendly manner. Earlier, the Bihar Mica Syndicate (when Jharkhand was part of Bihar) which then became the Jharkhand State Mineral Development Corporation (JSMDC) has engaged in mica-mining directly, being the only state-owned entity to do so. Since JSMDC's discontinuation of direct mica-mining or production activity, all mica-related activity in the state is undertaken entirely by the private sector. Mica Trading Corporation Limited (MITCO), a subsidiary of the state-owned Minerals and Metal Trading Corporation (MMTC), was a public sector player in mica processing but has withdrawn leaving the industry in the hands of the private sector.
- 3.2. **CURRENT MICA RESOURCES AND PRODUCTION** – As per 2016 estimates of the Indian Bureau of Mines (IBM), total resources of mica in India is estimated at 5,32,237 tonnes, of which 1,90,741 tonnes are reserves and 3,41,496 tonnes under resources category. Andhra Pradesh has 41% of India's total mica resources, followed by 21% in Rajasthan. Since mica was re-designated a minor mineral in 2015, IBM stopped preparing geological studies or estimates of mica deposits, so there are no updated figures for reserves in India. Total resource potential of mica estimated so far in Jharkhand is ~ 13.5 million tonnes (2010-11). As per Indian Mineral Yearbook 2015, there are only 31 mines for crude mica operational in India (25 in Andhra Pradesh, 1 in Bihar, 5 in Rajasthan; responsible for 636 tonnes of crude mica. Production of mica scrap and waste was 11,852 tonnes in the same year. In 2013-14, India produced 21,412 tonnes of mica.
- 3.3. **DHIBRA COLLECTION AND PROCESSING** - The Mining Department permitted private mica traders and processors to source mica-containing waste/ 'dhibra' from waste dump sites of closed mines. Two dhibra /waste dump sites were auctioned to the private sector and mica waste/scrap from these two dhibra sites are sent to processing units, which subsequently export mica flakes, waste, processed mica (as wet or dry powder) and 'reconstituted mica' in the form of mica-paper, through Kolkata and Vishakapatnam. The sourcing of dhibra/waste scrap was allowed through a dhibra auction process prepared by JSMDC, as an interim measure for the mica processing industry to be able to get access to legally sourced mica-waste/scrap/dhibra, but it will have to be synchronized within a wider sustainable framework that looks to revive mica collection, mining and production in a sustainable manner, for all forms of mica.
- 3.4. **EXPORTS** - In 2014-15, despite reported mica production of 12,488 tonnes (crude + scrap and waste), exports for the same year was 140,960 tonnes¹³. In 2018, domestic production of mica was at 21,676 tonnes¹⁴ primarily from Andhra Pradesh and Rajasthan; while mica-exports have been growing across three broad categories of mica-exports (blocks, scraps and waste; excluding mica-paper/ re-constituted mica). In Jharkhand alone, the CAG report on Mining Receipts 2018 mentioned that 26,586.67 MT of mica had been exported without adequate documentation (this alone being in excess of the national annual domestic production amount for the year). This dichotomy between production and exports indicates under-reported mica production and/or illegal collection of mining from mica-rich regions. Civil society organizations alleged the presence of illegal mining and exploitation of labour in the mica-rich regions in Jharkhand and Bihar, leading to closer scrutiny of the mica supply chain in the key mica-rich districts of Jharkhand and Bihar
- 3.5. **INDUSTRY STRUCTURE** - It is estimated that there are 75 mica-processing and exporting units each employing 20 to 25 people, in Jharkhand. This is the domestic mica industry, comprising of units that process and sell mica blocks, scraps (in wet paste or dry paste form) and waste, either to domestic buyers or international buyers (exports). The domestic industry, comprising mostly of local entrepreneurs or businesses that sell to intermediate industrial product manufacturers e.g. pigment manufacturers, in India and in global markets (in China, South Korea, Japan, Singapore, Europe, Middle East or the USA). Some of the leading domestic mica companies have processing units in Jharkhand. A number of global intermediate industrial product manufacturers source mica products from the domestic mica companies.
- 3.6. **RECENT ATTEMPTS TO REVIVE MICA MINING IN JHARKHAND** – Currently, there is no mica-specific policy in Jharkhand but the government is framing rules for development of the sector. The government tried to

¹³ Indian Bureau of Mines (IBM) Statistical Profile of Minerals 2014-15, Section on Mica, pg 82

¹⁴ Indian Mineral Yearbook 2018, published by Indian Bureau of Mines (IBM), Minor Minerals 30.16 Mica

revive mica mining in 2019, by floating tenders for mine leases but the bid process couldn't be completed due to lack of minimum criteria. Private sector cited lack of scientific process for arriving at reserve prices for mining leases and lack of prior industry consultation in bid process as reasons for poor participation.

- 3.7. **GLOBAL DEMAND FOR NATURAL MICA FROM JHARKHAND** - Global demand for natural mica is strong with global players committed to development of a sustainable mica supply chain in Jharkhand. Investors seek an active role by the Government of Jharkhand, as a strategic partner, to create a conducive investment-friendly environment for mica-based industrial activity in the state. International delegations of industry players and mica-stakeholders have made representations to the Government of Jharkhand for creation of a sustainable mica policy framework and creation of a joint public-private partnership to help revive mica production and mica-related industries in Giridih and Koderma.

4. MICA LABOUR AND MICA-ENGAGED COMMUNITIES IN JHARKHAND

- 4.1. **INFORMAL SECTOR IN THE UP-STREAM** - A large number of informal-sector mica-pickers are currently engaged in collecting mica-waste from waste-dumps/ or 'dhibra' and abandoned mica mines, which is transported and sold to mica dealers or mica-processing units. Most informal mica-pickers belong to the Scheduled Tribes (ST) group, primarily from the Santhal tribe, in Tisri and Gawan blocks in Giridih and the four blocks in Koderma. It is estimated that there could be around 300,000 informal mica-pickers and workers engaged in this activity. They are not protected by existing mining labour laws or the casual labour or contract labour laws in Jharkhand. Lack of official estimates is compounded by the fact that no attempt has been made to map and document informal mica pickers, leaving them vulnerable to exploitation. The informal nature of mica-picking activity, encourages economic and social exploitation of mica-pickers and their families, including children. In some cases, lack of livelihood alternatives forces mica-pickers to work in unsafe conditions, at times with their children to augment household income. Addressing this requires combination of policy and administrative measures, as it is a complex socio-economic issue. The continued informality of this segment in two economically weak districts in Jharkhand is cause for concern – for the reputational damage to Jharkhand and the mica industry.
- 4.2. **CIVIL SOCIETY OBSERVATIONS ON CHILD LABOUR IN THE INFORMAL UP-STREAM SECTOR** - CSO organisations estimate that about 18,000 children are involved in mica picking¹⁵. A 2018 report by Terre des Hommes estimated this figure to be 22,000¹⁶. A survey by the National Commission on Protection of Child Rights (NCPCR) of the mica mining areas of Jharkhand and Bihar notes low school participation for children aged 6 to 14 years. A large number of children are not attending school in the mica mining areas with reasons given as lack of aspiration, interest and collection of mica scraps. The survey uncovered information about young children (age group of 6 to 14 years) working in mica scraps collection in 45 habitations in Koderma and 40 habitations of Giridih. These were similar to the figures for older children (age group 15-18 years) working in mica scraps – 47 habitations in Koderma and 34 habitations in Giridih. The survey also found the '1098 Childline' reporting to be ineffective and unresponsive as there were little or no instances of reports, contrary to the information gathered from the survey.
- 4.3. **FORMAL LABOUR IN MICA PROCESSING** - There are an estimated 1,500 people engaged in 75 mica-processing and export units, categorised as formal workers, engaged in formal mica processing in Jharkhand. All processing units maintain employee registers and are required to ensure fair labour standards within factory premises. Processing units are legal entities, incorporated by private businesses (owned by local entrepreneurs), some of whom have been active in this trade for many years.
- 4.4. **SOCIO-ECONOMIC DEVELOPMENT IN KEY MICA BLOCKS IN GIRIDIH AND KODERMA** - As an industrial mineral with wide ranging applications in aerospace, electronics, automotive, plastics, oil drilling and consumer industries, mica occupies a strategic position. Jharkhand's unique position as a global source for high-quality natural mica, means that local tribal communities and gram panchayats have a significant role to play. Formalising and recognizing the labour rights of the informal (artisanal small scale) sector in the supply chain is an important step in bringing the local tribals engaged in mica-picking into the formal supply chain so that they can benefit directly from being part of the formal mica supply chain. Without this recognition, the local tribal community in Koderma and Giridih is unable to play an active and formal part in the mica supply chain. A formal role for mica related SHGs or Gram Panchayats in the mica-rich blocks in Giridih and Koderma, within the 'upstream' mica collection and mining phase has been envisioned in other states such as Madhya Pradesh¹⁷ and Telengana, and would transform local communities who are currently excluded from the benefiting from being part of the global mica supply chain.

¹⁵ CINI Report, 2018

¹⁶ https://www.terredeshommes.nl/sites/tdh/files/uploads/global_mica_mining.pdf

¹⁷ p235, Sec 24.74 Mines and Minerals <https://tribal.nic.in/writereaddata/AnnualReport/TwelfthFiveYearPlan2012-17.pdf>

5. MICA-BASED INDUSTRIES AND SUPPLY CHAIN DEVELOPMENT IN JHARKHAND

- 5.1. **GRADES OF MICA** - There are three broad grades of mica that are exported a) **Crude Mica or Block/Sheet and Splittings** – this has the highest value in export markets and is mined from mica mines (since there is no mica mining in Jharkhand, very little Crude Mica is exported from Jharkhand) b) **Mica Powder - this is exported in Dry-Powder and Wet Powder form** to Pigment manufacturers who in turn cater to different industrial customers. Some of the end-use industries are given below c) **Mica Waste – this can be mica waste from mine or factory and is of the lowest value**. As per SOMO Report 2018, commissioned by Terre des Hommes Netherlands, the majority of Indian mica exports goes to China (88,171 tonnes), and then to a lesser extent Saudi Arabia (8,264 tonnes), Belgium (7,344 tonnes), Japan (6,679 tonnes) and the USA (5,524 tonnes). According to the Industrial Minerals Review 2016, most sheet products used in North America are imported from India (94 percent) and then from China (5 percent). **If Jharkhand were to revive mica mining in a sustainable manner, then it would be able to change the mix of mica exports, and export higher-value crude mica/ block or sheet mica.**
- 5.2. **INDUSTRIAL END USE** – Mica is an important mineral component in multiple global supply chains, with end-uses in – Light Electricals and Electronics industry; Power Plants, Oil Exploration and energy sector; Aerospace and Defence Manufacturing; Transport and Railways; Cables, Foundries and Manufacturing; Paint and Coatings industry; and the Cosmetics Industry.
- 5.3. **MICA-BASED INDUSTRIES** – Mica is an important industrial mineral with uses in multiple sectors (some of these are given above). One immediate priority for the government to promote mica-based industries could be to invite global mica-products manufacturers to set up manufacturing operations, with an assurance that a sustainable mica supply chain will be created. The Department of Industries is the principal agency for development of mineral-based industries in the state and can be engaged to identify sectors that would consider making investments in a sustainable mica supply chain in Jharkhand. Manufacturing of mica paper or ‘reconstituted mica’ is also an important high-value mica-derived product that is exported and used in multiple industries.

6. MICA REGULATIONS, RELATED MINOR MINERAL LAWS AND LABOUR LAWS

There are a number of existing regulations that govern the mica ecosystem, from the central and the state governments. Lack of laws is not an issue though there are existing discrepancies in mica-related definitions. Local implantation and enforcement capacity is a key weakness in Jharkhand. Following are some of the key government regulations governing the sector:

- 6.1. **CENTRAL GOVERNMENT REGULATIONS** – Mica mining is governed by multiple central government regulations. Some of these are as follows:
- 6.1.1. **MINING RELATED REGULATIONS** – Mines Act 1952, The Mines and Mineral (Development and Regulation) Act, 1957 & Amendment Act 2015, Mines Rules 1955; Mineral Concession Rules, 1960; and National Mineral Policy 2019 (which includes a sustainable mining framework introducing right of first refusal for mineral concession holders, long-term import export policy for minerals to help private sector in better planning and stability in business, effective utilization of district mineral fund for development of project affected persons and ensure sustainable development of mining).
- 6.1.2. **TRIBAL AND COMMUNITY DEVELOPMENT-RELATED REGULATIONS** – The Jharkhand District Mineral Foundation (Trust) Rules, 2016 has been established to improve the socio-economic conditions of people directly and indirectly affected by mining, for each district. As per these Rules, mining lease holders have to contribute to the Trust Fund, which is utilized in various public projects around education, sanitation, healthcare, etc.
- 6.1.3. **ENVIRONMENTAL REGULATIONS** – The key forest-related regulations are: (i) Indian Forest Act, 1927 (ii) Forest (Conservation) Act, 1980 (iii) Environment Protection Act, 1986 (iv) Air (Prevention and Control of Pollution) Act, 1981 (v) Water (Prevention and Control of Pollution) Act, 1974 (vi) Wildlife (Protection) Act, 1972. State governments cannot intervene and create exceptions or ‘work around’ the Forest (Conservation) Act 1980, Wildlife (Protection) Act, 1972; or the Environment Protection Act 1986. Any commercial activity within forest areas requires additional forest and environmental compliances.

6.2. STATE GOVERNMENT REGULATIONS – The key Jharkhand regulations governing mica as a minor mineral include - Jharkhand Minor Mineral Concession Rules, Jharkhand District Mineral Foundation (Trust) Rules 2016; Jharkhand Minor Mineral (Evidence of Minerals) Content Rules 2018; Jharkhand Mineral (Prevention of Illegal Mining, Transportation, Storage Rules 2017. The Jharkhand Mineral Dealer’s Rule, 2007 & Jharkhand Minor Mineral Concession (Amendment) Rules, 2017. Other regulations that are relevant include:

6.2.1. JHARKHAND STATE SAND MINING POLICY (FOR MINOR MINERAL) – In February 2017, the Jharkhand State Sand Mining Policy was framed with the need to develop an environmentally sustainable and social centric comprehensive sand mining policy which fulfils the developmental needs of the State as well as regular and adequate supply of sand at a reasonable price for the people of Jharkhand.

6.2.2. JHARKHAND SUSTAINABLE MINING FRAMEWORK FOR IRON-ORE – A Management Plan for Sustainable Mining (MPSM) regulates iron ore mining Chaibasa and Sarananda Sal forest area, in Jharkhand’s West Singhbhum district. Presently, the Indian Council of Forestry Research and Education (ICFRE) is conducting a study to reassess or modify MPSM. The revised plan seeks to draw up – (a) re-digitisation exercise of forest areas, especially in mineralized zones (b) provide guidelines for use of District Mineral Fund (DMF) and corporate social responsibility (CSR) funds for the benefit of affected communities and (c) institutionalize mechanism for monitoring and evaluation of mining and rehabilitation activities.

6.2.3. LABOUR REGULATIONS IN JHARKHAND – The Child Labour (Prevention and Regulation) Act 1988; Child and Adolescent (Prohibition and Regulation) Act, 1986 along with its allied Rules of 2017 (notified in June 2017). Child Labour (Prohibition and Prevention) Amendment Act, 2016 has been a critical step in the endeavour to have child Labour free society that provides for complete prohibition in employment of children below 14 years in all occupations and processes. This Act also bars employment of adolescents (14-18 years) in hazardous occupations and processes. Correspondingly, the Right to Education (RTE), 2009 mandates free and compulsory education to all children in the age group of 6 to 14 years. In addition, the Government is implementing a National Child Labour Project (NCLP) to adopt a sequential process towards focusing on rehabilitation of children working in hazardous occupations. The recognition of labour rights by contract and the unorganized sector is regulated by the Contract Labour Regulation and Abolition Act, 1970 and Unorganized Workers Social Security Act, 2008.

6.2.4. MP / TELEGANA/RAJASTHAN MINOR MINERAL CONCESSION RULES – States such as Andhra Pradesh and Rajasthan have also enacted State-Specific Minor Mineral Concession Rules and govern mica mining within its ambit (after repealing erstwhile state-specific mica legislation of the past as they were in-consistent with subsequent legislation). The Rajasthan State Minor Mineral Concession Rules, 2017 for minor minerals lays out an e-auction process for granting mining leases and quarry licenses. In case of forest land, higher bidder will be asked to get forest diversion from the Ministry of Environment and Forests (MoEF). In case of private land, land holder is offered first right of rejection and in case of his refusal highest bidder is granted lease if he produces registered consent of the land holder. The M.P. Minor Mineral Concession Rules, 1996 and Andhra Pradesh Minor Mineral Concession Rules, 1966 offer similar processes for those regions.

7. RATIONALE FOR ‘SUSTAINABLE MICA’ POLICY FRAMEWORK AND VISION

7.1. COMPLEX, MULTI-STAKEHOLDER ISSUES – The issues concerning mica industry are complex and multi-dimensional with historical, social and economic causes. They cover illegal mining, child labour in the supply chain, non-recognition and inadequate protection of mica pickers, lack of livelihood and economic development opportunities and poor education outcomes, in the mica-rich regions of India. The issues are compounded by the presence of a significant informal/unorganized sector that may be operating in violation of environmental laws and tribal/local community rights. Observed labour rights violations in the mica mining areas, particularly in the informal sector, are in violation of all labour laws, international and national, as well as global labour conventions such as the ILO. Development of a sustainable mica policy framework and reviving the mica economy in Giridih and Koderma requires one to take multiple-stakeholders’ perspectives – and active engagement with industry, government, local communities and civil society, as well as end-users, to direct attention, resources and resolve these issues.

7.2. OBJECTIVES OF A JHARKHAND ‘SUSTAINABLE MICA’ POLICY FRAMEWORK – The State Government of Jharkhand has been keen to revive mica mining, The industry has been collaborating with civil society organisations and local communities to develop a sustainable mica framework, and has submitted a collaboration framework, Ranchi Principles for Sustainable Mica, to the government, for creating a public-private Sustainable Mica workgroup to address eco-system issues.

7.2.1. The common objectives of all mica stakeholders, from the public and private sectors, are:

- a) To create an economically viable model for 'sustainable mica' by understanding the mica value chain, design policy interventions and build a sustainable mica roadmap
- b) Recognize, protect and monitor labour rights across the entire ecosystem (collection, transport, processing, trade and end-use) with emphasis on 'formalizing' the informal sector
- c) Eliminate Child Labour in the mica supply chain
- d) Focus on social and economic development of local communities in mica-rich regions
- e) Expand local government enforcement capacity to promote a sustainable mica supply chain
- f) Promote and increase recognition of 'sustainable mica' worldwide

Jharkhand has an opportunity to emerge as a global hub for 'Sustainable Mica' and gain a competitive advantage over other jurisdictions. The Ranchi Principles for Sustainable Mica and drafting of a Sustainable Mica Policy Framework and Vision 2025 should govern the entire mica value chain. This is a pioneering initiative to build a future-ready supply chain in mica, attract private sector investment, create local jobs, improve socio-economic outcomes from local communities and increase government revenue. It is important to note that such an initiative would specifically benefit the Santhal/ST communities as intended beneficiaries in the mica-rich areas of Koderma and Giridih.

7.2.2. Recognizing the importance of mica for global supply chains is important for an accurate assessment of the socio-economic opportunities available to Jharkhand, starting with a public acknowledgment that:

7.2.2.1. Jharkhand is currently missing a significant exports opportunity from sheet mica and mica-linked industrial development. This can be bridged by encouraging 'sustainable mica mining', formalising the mica value chain and creating mica-based industrial development. The Ranchi Principles for Sustainable Mica that has been submitted to the government by stakeholders and the draft Jharkhand Sustainable Mica Policy Framework and Vision 2025 can help achieve these objectives.

7.2.2.2. [The mica ecosystem \(mining, processing and lined-industrial development\) in Jharkhand is a local employment and livelihood generator.](#) There is an opportunity to formalize the low-skilled 'informal' sector and bring them into the formal mica supply chain. Beneficiaries of such 'formalisation' of the value chain would be potentially 300,000 people, mostly Scheduled Tribes (ST) from the Santhal community in Koderma and Giridih. Creating a 'sustainable mica' eco-system, by formalizing the informal 'upstream' side can position Jharkhand as preferred global source for high-quality mica sheets and processed mica; increasing global acceptance of mica exports from Jharkhand, increase the export price of 'sustainable mica' from Jharkhand and higher tax revenues for the government.

7.2.2.3. [By developing a 'sustainable mica' eco-system through the public-private-partnership route, the state government can focus on creating enabling policies and industry players \(domestic and global\) can develop mica-based industries in the state,](#) in a manner that is beneficial to all. The first step towards this would be creation of a 'Jharkhand Sustainable Mica Task Force' as a planning body, comprising of representatives from the Mining and Labour Departments, as well as global and domestic mica industry representatives and civil society organisations, tasked with finalizing the draft framework and vision within a defined time-period e.g. two-three months.

8. RECOMMENDED SUSTAINABLE MICA POLICY INTERVENTIONS

Nine policy interventions have been recommended for creating a practical Sustainable Mica policy framework and vision. The recommendations focus on addressing planning, development and implementation capacity challenges in Jharkhand, and should be prioritized by policy makers, the government and the industry:

8.1. CONSTITUTE A 'JHARKHAND SUSTAINABLE MICA TASKFORCE'

The Government of Jharkhand should prioritize creation of a mica-focussed taskforce, with participation from industry representatives, local community representatives and civil-society organisations. This is aligned to suggestions made by industry and civil society actors for Ranchi Principles for Sustainable Mica initiative submitted to the Chief Minister's Office and the Office of the Chief Secretary. The key objectives of the 'Jharkhand Sustainable Mica Taskforce' would be to act as the mica-focussed development and planning agency in the state, the first such mica-specific initiative in India, that will be tasked with creation of mica-focussed 'soft infrastructures' or competencies and funding sources.

8.2. DEFINE 'SUSTAINABLE MICA' SUPPLY CHAIN

The 'Jharkhand Sustainable Mica Taskforce' would first define what constitutes a Sustainable Mica Supply Chain and key processes/competencies or 'soft infrastructures' and processes to classify a 'sustainable supply chain'. A Sustainable Mica Supply Chain would be defined as a supply chain that is inclusive and, ethical and in which, economic actors ensure responsible social, economic and environmental practices, and in which economic value is fairly distributed alongside the supply chain to ensure decent living wage from upstream collection and mining, to exports of processed or sheet mica and its end-use in different industrial value chains. It should seek [long-term development and growth of the mica eco-system through multi-stakeholder collaboration](#), seek to 'formalize' and recognize informal labour activity in mica upstream /collection stage, seek to [eliminate child labour across the supply chain](#) and ensure respect for the law of the land by all stakeholders in the supply chain, seek to [protect the environment](#) and allow for [traceability of mica](#), [all mica-related stakeholders](#) with the explicit intention of protecting labour rights, fair distribution of economic value alongside the supply chain and reduce corruption in mineral supply chains. The Taskforce will implement Point 8.9.1 and create a Supply Chain Traceability Architecture and third-party audit framework that will help monitor effective implementation of 'Sustainable Mica' supply chains.

8.3. ESTABLISH A 'MICA RESEARCH CENTRE' TO ASSIST ECONOMIC AND SOCIAL POLICY MAKING

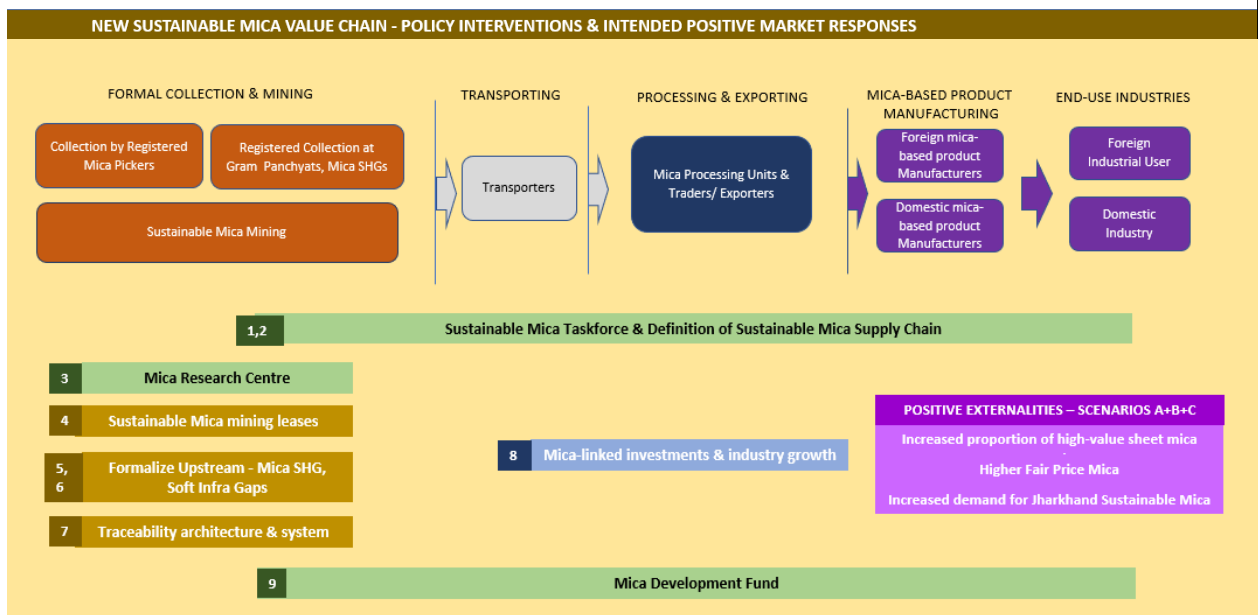
Create a multi-disciplinary repository of mica-specific information and research that will aid in economic and social policy making, as well as support the industry. [Currently such mica-specific information or research capacity does not exist, and the government and the industry will have to co-create, either through a research agency such as IIM-Ranchi or within the Department of Industries or Mines.](#) The Mica Research Centre could have three specific functions:

- 8.3.1. Work with the Department of Mines and Geology and prepare [periodic reviews of Jharkhand's Mica Atlas and Geo-Informatics Mineral Resource Information System](#). With mica being designated as a minor mineral from 2015, the state government is responsible for new geological studies for assessing Probable & Proven (P&P) mica deposits in the state.
- 8.3.2. Support the tech-transformation of the mica industry in Jharkhand, by evaluating [new technologies and processes](#) for global competitiveness of sustainable mica from Jharkhand and [work with third-party technology providers to create an online exchange for trading and settlement of sustainable mica](#) that is open to global registered buyers committed to development of sustainable mica supply chains. Global buyers and local businesses will be required to agree to voluntary industry standards on sustainable mica and contribute to the creation of a Mica Development Fund, as detailed in 8.5.
- 8.3.3. Commission economic research or studies that would help estimate the economic and social benefits of developing a 'sustainable mica' supply chain in the state. The Centre would [undertake economic research to build a development roadmap for sustainable mica mining and exports from Jharkhand](#). Such a study would: a) Estimate existing export market for Mica and Jharkhand's export share; b) Create growth scenarios for mica exports from Jharkhand over next 3-5 years, which would help evaluate – impact of sustainable mica mining and of exports of mica sheets from Jharkhand, impact of exports as a result of stronger mica traceability and implementation of 'sustainable mica' practices; c) Evaluate size of informal sector and recommend steps to 'formalize' it d) evaluate growth of mica firms (processors and exporters) as well as mica-based industries, and estimate impact on government; d) Create new funding sources for mica eco-system development in Jharkhand; e) Evaluate socio-economic development of mica-workers and mica-dependent communities in Koderma and Giridih; f) creating traceability capabilities for the sustainable mica supply chain in Jharkhand.

Responsible Mica Initiative (RMI) voluntarily initiated preliminary economic research through FTI Consulting, to map the mica value chain and prepare growth scenarios over 3-5 year period. Key takeaways indicate:

- 1) Developing a Sustainable Mica eco-system could lead to establishment of significant number of **new mica-linked industrial or processing units (from 75 currently)** that together provide employment to about **107,000 workers directly and indirectly**.
- 2) Mica-based industries in Jharkhand can grow **over 2 to 5 times in value over 3-5 years period**, if all three scenarios play out (see assumptions below)
- 3) **Creating Sustainable Mica policies** can reduce the size of the informal sector engaged in mica picking, leading to **stronger protection of labour rights, elimination of child labour and create more grassroots development for local communities**.

MICA-LINKED INDUSTRIAL UNITS	MICA-RELATED EMPLOYMENT	MICA-LINKED INDUSTRY GROWTH	JHARKHAND SHARE OF INDIAN MICA EXPORTS
Significant increase in mica-processing units – from current 75 units	210,000 jobs	2 to 5x growth - estimated if all 3 intervention scenarios play out)	40% estimated - current 20%



ASSUMPTIONS MADE DURING THE ECONOMIC RESEARCH

- i) Current mica exports from Jharkhand estimated at INR 250 crores (cUSD 35 mn, or 20% of Indian exports).
- ii) Three market scenarios (A, B & C, below, triggered by Policy, Industry and Market Interventions) are expected to be play out in a domino effect, triggered by issue of Sustainable Mica mining leases in Jharkhand. These are covered below:
 - A. **Sustainable Mica mining leases alone will change mix of mica export type (more mica sheets) leading to increase in value of mica exports from Jharkhand, doubling processing capacity, create new mica-linked enterprises or industrial units and associated new direct and indirect jobs.**

B. Higher 'fair value' of Sustainable Mica from Jharkhand leading to increase in value of exports¹⁸.

C. Jharkhand mica exports growth estimated on induced global demand as larger quantities of Sustainable Mica are sourced from Jharkhand, switching from other jurisdictions.

iii) The three scenarios are assumed to play out together and Jharkhand mica industry from current USD 35 mn to USD 70 to 175 mn in 3-5 years (a 2 to 5x increase) and **increase Jharkhand's export share within India from an estimated 20% to 40%**

8.4. CREATE A NEW JHARKHAND 'SUSTAINABLE MICA' MINING LEASE AGREEMENT

The Taskforce should review and create a **new Jharkhand 'Sustainable Mica' lease agreement, in collaboration with industry and other stakeholders**, by benchmarking practices from other minor minerals in Jharkhand, and comparing mica lease agreements in Rajasthan and Andhra Pradesh, and other sustainable practices from other jurisdictions. Addressing industry concerns about the mica lease agreements, the Taskforce should review and benchmark mica mine leases in Rajasthan and Andhra Pradesh, where mica mining has been taking place for a few years, to address the lack of industry interest in the mine leases e-auctions in 2019. The Taskforce should also evaluate an appropriate framework for small mica mines and recommend appropriate market mechanisms. This is to cover mines of less than 5 hectare (estimated to be 40-50 small mica mines) that may be unfeasible for allotment through the leasing and e-auction process.

8.5. CREATE MICA SELF HELP GROUPS (SHGs) TO 'FORMALIZE' THE UPSTREAM

The taskforce should help set up mica SHGs (overseen by Gram Panchayats) or an equivalent cooperative model in and around mica-rich blocks, acting as the formal collection point, who in-turn engage and monitor registered mica-pickers. The cost of setting up and running the mica SHGs and registering mica-picker (who would be issued AADHAAR-linked Mica Worker Cards), or an equivalent cooperative model, will be funded by a Mica Development Fund (explained in 8.5) and governed by existing regulations covering minor minerals.

8.5.1. Mica SHGs will maintain a written register of mica pickers working /registered with it at any time, along with wage payments made that will ensure that all workers are paid the highest of minimum legal wages or local living wages. Failure to maintain the registers would result in fines and potentially closure of the SHG (and loss of economic incentive for the SHG lead). All mica consignments at any point in the supply chain should be traceable to the collection point (mine or mica-picker or mica-SHG that the mica-picker is registered with). Mica traders and processors will be mandated to source/buy mica from officially registered mica SHGs. Any trader or processor found violating this condition would be penalized with stringent fines/penalties and potential loss of 'license-to-operate'. There would be economic incentives to ensure mica-pickers and the formal sector support this initiative, and governed by existing regulations covering minor minerals.

8.5.2. Registered mica pickers (holding a Mica Worker Card) will be eligible for state welfare payments, linked to child education attendance, and social / health benefits at public health centres. Documenting and tracking informal mica-pickers, would be through a Mica Worker Card – linked to an AADHAAR number and a beneficiary zero-balance bank account at the Gram Panchayat level, with welfare payments linked to enrolment/attendance rates for a worker's child/children at the local anganwadi/primary education centre – economically incentivizing parents to send children to schools. The Mica Worker Card would also allow holders to access public health facilities as subsidized costs.

8.5.3. Processing and export units would receive a 'sustainable mica supply chain' certificate from Taskforce, on meeting third-party audit requirements and meeting traceability requirements as mentioned in Point 8.9. The list of 'sustainable mica' processing units would be shared publicly by the Taskforce.

8.6. ADDRESS 'SOFT INFRASTRUCTURE' GAPS IN LABOUR RIGHTS, FOCUS ON INFORMAL MICA PICKERS

Creation of Mica SHGs, with the involvement of Gram Panchayats, has been successfully implemented in Karnataka and Telengana, as well as in the case of Sand Mining (a Minor Mineral) in Jharkhand; addressing the concerns of exploitation of the informal mica pickers. This is a long-term and benchmarked route for protecting labour rights of currently informal mica pickers. The Taskforce should discuss labour rights in the context of social and community development, along-with civil society actors and local community representatives, evaluating the different options for recognizing the right of mica pickers and proceed with the one that delivers most social benefits in the shortest possible time.

¹⁸ NOTE: RMI is not a buyers' group and assumptions should be further qualified by stakeholders and the proposed Sustainable Mica Taskforce.

- 8.6.1. The first step towards protecting labour rights would be to [conduct a survey or census of informal mica pickers](#) and clusters where the communities are based to. Past attempts have been unsuccessful due to difficult terrain/access, lack of fixed habitations and seasonal migration of informal labour.
- 8.6.2. A 'pull-based' intervention that is a combination of economic incentives, in the form of government welfare payments, and non-financial incentives such as education/health services and recognition, could be more effective in bringing the informal labour to come for registration to the mica SHGs.
- 8.6.3. Rights-based legal alternatives that seek to create new laws and regulations for informal workers in the mica supply chains or a new category of Artisanal and Small-Scale Mining (ASM) worker can also be evaluated. Preliminary views suggest that creating new laws and regulations is a more longer-term solution (12-18 months), but this should be deliberated by the Taskforce.
- 8.6.4. The Taskforce should work with nominees of the Labour Department to align recommendations for labour rights with existing regulations for contract workers and the unorganised sector – specifically, through the [Contract Labour Regulation and Abolition Act, 1970](#), and [The Unorganized Workers Social Security Act, 2008](#). These regulations govern social protection for contract workers and the unorganized sector (workers with legal age, provision of fair working hours, rights of women including access to child-care), specifically for workers engaged as weavers, handicrafts and fisheries sectors. Each informal worker receives a [Shram Pehchan](#), a state level identity card program to ensure informal mica pickers are integrated into the broader state-level labour management system, along with a labour complaints redressal system. [Currently, mica-pickers are not included in this list, and the Taskforce should advocate for their inclusion, in the regulations.](#)
- 8.6.5. The Taskforce may also assess the need for setting up a [Mica Labour Welfare Board that oversees projects](#) for welfare of mine pickers and local communities near mica mine areas (focusing on 'priority needs' viz. mine safety, education, healthcare, water and sanitation). The Board would pool all available central and state government schemes (including the Backwards Regions Grant Fund BRGF for Backward Districts, Tribal Development Funds for the Santhal Community, Jharkhand Livelihood Mission programs, development grants from multilateral development agencies, as well as the CSR funds of mica-enterprises).
- 8.6.6. The Taskforce would benchmark mica-specific labour and social development projects with [global occupational health and fair labour standards through the adoption of global conventions and best practices](#) such as those established by ISO (International Organization for Standardization), the International Labour Organization (ILO), and the RMI Workplace Standards (for Processing Units as well as Mines). The Taskforce, through the Mica Labour Welfare Board can also engage with global agencies such as the UN Global Compact and UNICEF.

8.7. CREATE TRACEABILITY & IMPROVE ENFORCEMENT CAPACITY ACROSS THE MICA VALUE CHAIN

The Sustainable Mica Taskforce would work with the Domestic and Global Mica Industry representatives, to put a traceability capability throughout the mica value chain.

- 8.7.1. SUPPLY CHAIN TRACEABILITY ARCHITECTURE – The Taskforce will design a [Supply Chain Traceability Architecture](#) with self-reporting mechanisms by all registered units (Pickers, SHGs, Transporters, Processing Units, Exporters, Buyers) across the mica value chain, and the issue of '[Sustainable Mica Supply Chain](#)' certification by third-parties with six-monthly/annual validity issued by a separate Traceability Committee formed by Taskforce members. All registered mica units in the value chain (including global buyers) will abide by an industry voluntary code of adhering to the Traceability Architecture, self-reporting and cooperate in third-party audits.
- 8.7.2. MICA COMMUNITY OMBUDSMAN AND WHISTLE-BLOWER PROGRAMME – The Taskforce should create [Mica Community Ombudsman](#) in the two districts to register and resolve complaints filed by any registered mica picker, mica SHG or mica worker, using funds from the Mica Development Fund; and operate a [mica labour Whistle-blower bounty programme](#) to flag violations, and incentivize reporting of violations and proven conviction, with strong monetary incentives.
- 8.7.3. THIRD-PARTY AUDIT AND REPORTING – The Taskforce would engage with external partners to conduct regular (monthly/quarterly) audits and decide on penal actions or incentives to promote good practices or dissuade violations. [External third-party auditors can design and check for sustainable practices across mica mining across the supply chain from mining to collection, transport and export point e.g. auditing registers of mica SHG, registers of mica pickers for accuracy, registers of trader/processors on source of mica collected.](#) This will be in addition to the existing tech-aided tracking and monitoring mechanism for movement of minerals on the existing Jharkhand Integrated Mines and Minerals Management System (JIMMS) that covers mobile tracking of

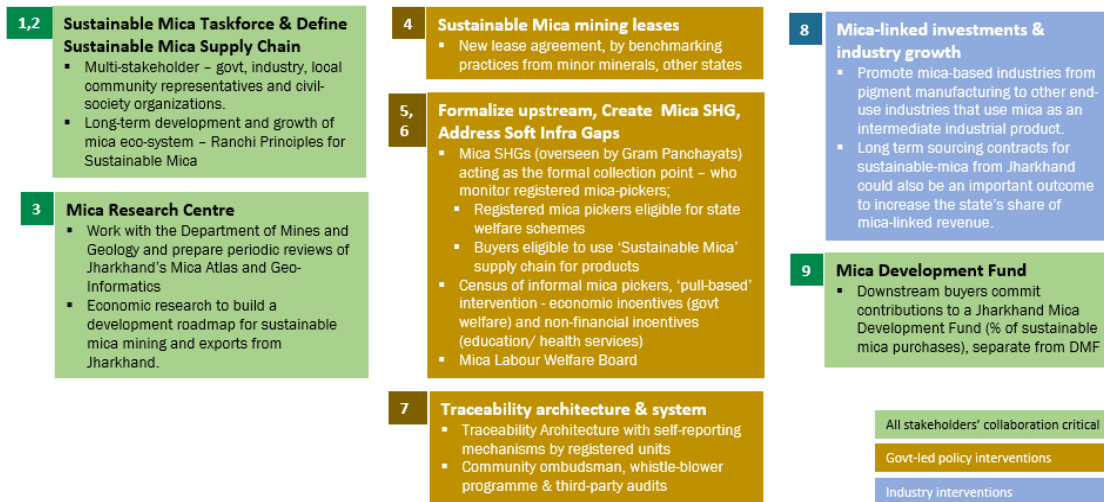
consignments, geo-tagging of mines/vehicles/ units. The third-party agency would present its report to the Taskforce, which would frame a penalties and incentives framework.

8.8. ATTRACT MICA INVESTMENTS TO JHARKHAND

Identify opportunities to attract mica-investments into the state of Jharkhand, to mica-rich districts of Koderma and Giridih, and grow state revenues from development of a sustainable mica value chain in the state (through royalty payments of mica mine leases as well as corporate tax revenues from mica-enterprises/firms based in Jharkhand). The Jharkhand Sustainable Mica Taskforce should identify and expedite sustainable mica mining and promote mica-based industries from pigment manufacturing to other end-use industries that use mica as an intermediate industrial product. Long term sourcing contracts for sustainable-mica from Jharkhand could also be an important outcome to increase the state’s share of mica-linked revenue. The Taskforce should collaborate with Jharkhand mica processors to promote long-term sourcing contracts of ‘sustainable mica’ from India and work with key ports/customs authorities to strengthen capacity of tracing exports of ‘sustainable mica’ from Indian ports. This should be done through development of voluntary industry codes for ‘sustainable mica’ procurement and commitments by global buyers. Taskforce should host a Global Sustainable Mica Conference in Ranchi each year, to highlight ‘sustainable mica’ supply chain in Jharkhand and invite global end-use industries/companies to invest into Jharkhand, and work toward global investment promotion efforts of the Government of Jharkhand.

8.9. CREATE A JHARKHAND MICA DEVELOPMENT FUND

The Taskforce will work with industry players, specifically global buyers of sustainable mica from Jharkhand, to commit contributions to a Jharkhand Mica Development Fund (as a percentage of sustainable mica purchases from Jharkhand-domiciled processors and exporters on the online mica trading exchange mentioned on 8.4.2. The Jharkhand Mica Development Fund, will supplement the District Mineral Fund (DMF) created after the resumption of mica mining in the state, and monitored by the Taskforce and Industries Department, who will be responsible for fund allocation for mica-specific economic development in Giridih and Koderma, working in collaboration with District Taskforces, Gram Panchayat and Labour Department for local development projects in habitations close to mica blocks, and State Police Departments to strengthen local enforcement capacity.



9.PERIODIC REVIEW AND MONITORING

9.1. KEY PERFORMANCE INDICATORS (KPIs) – The Taskforce would set the KPIs for evaluating success of the Sustainable Mica Policy Framework. It would include measurable metrics such as a) creation of the Mica Development Fund b) Number of registered mica SHGs and mica workers (earlier in the informal sector) c) school enrolment levels of mica-dependent households d) Number of Sustainable Mica Supply Chain certified units in Koderma and Giridih (and growth in a 12-18 months period) value and volume of mica exports from Jharkhand f) royalty and tax payment from mica-mining and mica-related enterprises, g) number of mica-related investments.

9.2. PERIODIC REVIEW – The Taskforce should review the Sustainable Mica Policy every two years, to make appropriate modifications, where necessary, to improve social and economic outcomes for Jharkhand, as well as update the policy roadmap to take advantage of new opportunities and proactive manage risks.

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