

CHILD LABOUR IN INDIA'S MICA MINES

The Global Beauty Industry

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Geography Syllabus Links

- Natural Resources: Mica, minerals (Stage 6)
- Human Wellbeing: Child labour (Stage 5)
- Interconnections: Production, consumption, trade impacts (Stage 4)
- Cross- curriculum priorities: Asia, Sustainability

All that glitters is not gold!

The 'sparkly' mineral called mica is a key component in the billion-dollar beauty industry. It provides the extra 'shiny pop' to lipstick, eyeshadow, nail polish and blush, and other types of beauty products. Additionally, this highly sought after silver coloured mineral is utilised as snowflakes in Christmas decorations, and valued in industries such as construction, automotive, medical (X-ray machines and atomic microscopes) and defence (missiles, lasers and radar). In the modern, technological world, mica is virtually used everywhere!

Enabling us to enjoy these luxury items, poor Indian children as young as five years old work in dangerous illegal mica mines that are either abandoned 'ghost' mines or unregulated collapsing mines. These children suffer head injuries, respiratory infections like silicosis, and even death. These children have no idea why adults are so obsessed with this shiny mineral. Now you know why!

The ultra-rich cosmetics industry aims to maximise profits by sourcing mica using low cost labour. Desperate, unemployed Indians and child labourers excavate mica from the ground. The mica sheets are then crushed into a fine powder that refracts (bends) light to create the shimmering effect in makeup. Aware of the problem, beauty industry companies such as Lush and L'Oréal aim to clean up their glittery supply chain.

Now go through your makeup bag for anything that glistens, sparkles or glitters, and chances are it contains mica. So, next time you look in the mirror, think about the ethics of the makeup on your face



Image source: <http://sonailicious.com/wp-content/uploads/2014/03/red-lips.jpg>

Links between mica rock, mica flakes and shiny makeup

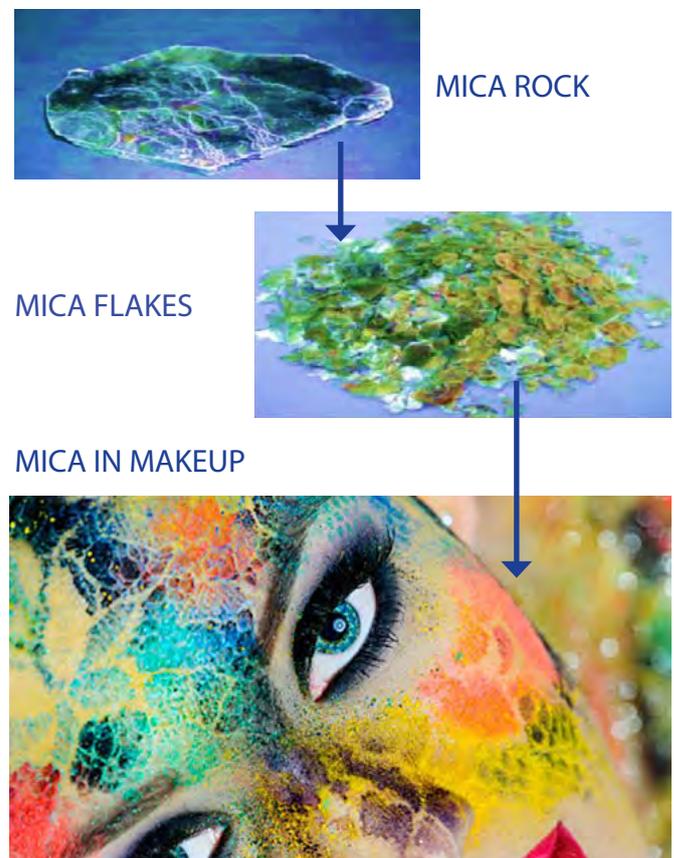


Image source: <http://www.cosmeticsdesign-europe.com/Formulation-Science/Mica-and-child-labour-in-focus-due-to-Lush-s-latest-stand>

Child labour in India's mica mines

Global connections: production and exports

China is the top global producer of mica but according to the British Geological Survey the Koderma district in India's Jharkhand Province contains the world's largest mica deposits.

In 2016 India officially produced 19,000 tonnes of mica but exported 140,000 tonnes. This imbalance is a clear indication of the magnitude of illegal mica mining occurring in India. About 62% of India's mica is exported to China where some is channelled to European and US cosmetic giants.

Main mica mining countries (1,000 tons)

COUNTRY	MICA PRODUCTION		MICA EXPORTS UN COMTRADE, 2014
	US GEOLOGICAL SURVEY, 2015	BRITISH GEOLOGICAL SURVEY, 2014	
China	780	159	159
India	20	1	138
United States of America	42	50	9
Canada	22	16	21
South Africa	0	0	13
Madagascar	10	12	12 (17 in 2015)
France	20	20	13
Finland	54	12	8
South Korea	30	24	0
Russia	101	9	0
Brazil	12	10	4
Other countries	32	30	44
World total	1,123	343	421

Table: <https://www.somo.nl/wp-content/uploads/2016/05/Beauty-and-a-Beast.pdf>

India: Mica production changes over time

Mica is a component in igneous and metamorphic rocks. About 4,000 years ago it was first mined in India to be consumed as a medicine. In the late 19th century the British discovered mica in a belt spanning Jharkhand's Koderma, Giridih and Hazaribag districts, and Bihar's Nawada, Jamui, Gaya and Bhagalpur districts

The profitable booming mica industry escalated, with over 700 legal mines employing about 24,000 people. The Koderma district, once called the mica capital of India, witnessed the growth of mica tycoons and the construction of palatial dwellings. The mine employees enjoyed steady jobs and their family had access to healthcare.

However changes were ahead:

- 1943 discovery of a mica substitute
- 1980 Forest Act imposed restrictions on mining in forested areas
- 1991 dissolution of the USSR, India's biggest mica importing country

As a result, the Indian mica industry slowly declined, legal mines were forced to shut down, unemployment increased, and poverty in mining villages intensified. Thousands of miners without land and farming knowledge, were forced to migrate to cities or starved

By 2014, the mica industry in India had declined to only 38 legal mica mines. These legal mines were unable to supply the expanding global demand for mica, especially from China's demand for 'natural cosmetics'.

Unfortunately, by this stage mica production had evolved into a black market or called the 'mica mafia'. Impoverished families and their children gained employment working in dangerous illegal pits without protective gear. In response the state established mining and forest officers to crack down on illegal mining. However, by greasing officers' palms with money, the scam continued.

Recently, mica was re-classified as a 'minor' mineral, making it easier for an Indian state to issue a licence to small operations. Plans are underway to regulate Jharkhand's mica industry that could generate revenue, bring jobs to the area, promote development of local villages and help curb child labour.

Nonetheless the main hurdles in the mica industry today are:

- 70% of production is from illegal mines in protected forested areas and abandoned mines.
- Most illegal mines continue to use child labour and exploit adult labour.

Main mica production areas in India

Around 95% of India's mica is distributed in three states of Jharkhand, Andhra Pradesh and Rajasthan. The world's largest deposit of mica is in the Koderma district in Jharkhand.

India's mica belt runs through the dense forests of northern Jharkhand and southern Bihar. The belt loops across seven districts-Jharkhand's Koderma, Giridih and Hazaribag and Bihar's Nawada, Jamui, Gaya and Bhagalpur. The entire landscape glitters in the sunlight. Imagine a giant brush coating the baked earth with rouge -- the shimmer is uncannily similar because top cosmetics brands use mica powder, sourced from this region, to give lipstick and eye shadow their sparkle.

Adapted <http://timesofindia.indiatimes.com/india/The-lost-childhood-of-Indias-mica-minors/articleshow/51871390.cms>

In NE India in Jharkhand/Bihar most of the mica is collected informally from the top soil using simple hand tools. Because of the remote location and lack of resources in the area, the population rely on mica to maintain their livelihood.

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Main mica producing areas in India



Map http://news.trust.org/application/assets/shorthand/mica/media/mica_investigation_map1-mr.jpg

1. Andhra Pradesh

- Area 97km long and 24–30 km wide.
- Found in Nellore district

2. Rajasthan

- Area 322 km long and 96 km wide
- Extends from Jaipur to Udaipur.
- Main producing districts are Bhilwara, Jaipur, Tonk, Sikar, Dungarpur and Ajmer

3. Jharkhand

- Area 150km long and 32km wide
- Spreads from Gaya district in Bihar to Hazaribagh and Koderma districts in Jharkhand.

4. Other Producers

- 11% mica production in India.
- Main states are Maharashtra, Karnataka, Kerala, Tamil Nadu, Orissa, Madhya Pradesh, West Bengal, Haryana and Himachal Pradesh

Mica supply chain in Koderma district

The mica supply chain is complex and globalised, changing hands many times from miner to consumer.

Once the mica is collected and weighed, it is bought by traders and transported to Domchanch, a small town in the Koderma district. It is sold to middlemen, before being cut, refined and sorted at Domchanch.

Industry insiders value India's export trade- both legal and illegal at about Rupees 125 crore. (*1 crore is ten million (10,000,000))

Map locating Koderma, Domchanch and Dhab



Source: <http://jharkhanddarshan.com/graphics/koderma.jpg>

Workers wait to weigh their bags of mica. From here it is sent to Kolkata for export



Image source: <http://www.wired.co.uk/article/mica-illegal-mining-india>

Mica supply chain

The mica is sold to traders, processors and exporters with deals conducted on mobile phones, leaving no paper trail as it leaves India for manufacturers overseas

1. MINERS
2. COLLECTORS
3. TRADERS
4. PROCESSORS
5. EXPORTERS
6. SECONDARY PRODUCER – FINISHED GOODS
7. RETAILER MARKETTER
8. CONSUMER

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Domchanch

Domchanch's main road is lined with mica workshops. Here skilled Indians cut and cleave the transparent mica sheets with knives and scissors. They then sort the mica into different qualities. The lowest quality mica remains in India and the best quality is exported to USA, where it is then sold to China. Everything is used and nothing is wasted.

Worker processing mica sheets in Domchanch to be exported to China



Source: <http://matildegatonni.photoshelter.com/image/I0000gQVlgUCwyYk>

Dozens of mica processing shops are lined up along the main road of Domchanch



Source: http://matildegatonni.photoshelter.com/image/I0000R_0j5QCboYs

Financially viable to mine in India

The mica industry is not financially viable for most countries, as it requires expensive manual labour. However in India where miners earn a pittance for extremely dangerous work, and child labour and bonded labourers (work to repay loans taken out by their fathers) are employed, it is a financial winner for industries dependent on mica as a major component in the production process.

Landless and illiterate mica miners are at the mercy of unscrupulous agents, middlemen and exporters.

Here lurks the hidden secret of human rights abuses and environmental degradation, as some Indians work to merely survive, while others exploit resources and miners for wealth.

Cheap labour creates large profits:

- Child earns 8 cents for 1kg (collects around 10kg a day for 80 cents).
- World market ranges from \$1,000–\$2,000 for 1kg. Top quality sheet mica used in electrical components sells for \$2,000 per 1kg

Woman collecting mica chips



Image source: <https://www.somo.nl/wp-content/uploads/2016/05/Beauty-and-a-Beast.pdf>

Exploited women miners

Women who work in the mica industry in India are poor. They lack training, an education, legal status, and have no control over land or the mineral resources contained therein.

Women are at the bottom of the hierarchy of mica production. Bondage, a contemporary form of slavery, is a widely used method of employment.

Employment profile of women working in mica mines in India

- Experience physical exploitation
- Casual workers, in low technology, labour intensive processes
- Work long hours
- Lack social protection
- Subject to occupational health hazards

Child labour in India's mica mines

Children mica mining



Image source: <https://s-media-cache-ak0.pinimg.com/564x/49/d5/f9/49d5f93a55122ef60506ab7c2750f4f8.jpg>

'Blood' mica-not a pretty picture

India's shameful child labour mica mining for the beauty industry sparkle!

Child labour persists despite the Indian law forbidding children under 18 years working in mines and is also against United Nations Child Conventions. However families living in extreme poverty rely on children to boost their household income.

United Nations Child Conventions states it is illegal for children under 14 years to work with mica extraction or in mining in general.

According to the International Labour Organisation (ILO), mining is one of the worst forms of child labour.

DanWatch, a non-government organisation, stated that 12 out of 16 international cosmetic companies knowingly or unknowingly used child labour in the production of their products



Image source: <https://www.theguardian.com/sustainable-business/2016/jul/28/cosmetics-companies-mica-child-labour-beauty-industry-india->

About 500 Indian villages depend on the mica trade for their livelihood and survival. However, India's mica 'ghost' mines are death traps. In June 2016, *Save the Childhood Movement* documented over 20 mica-

related child deaths in India. Although there are no official figures on child deaths in mica mines as it is illegal, villagers advocate an average of ten fatalities a month. The statistics are even higher for adult fatalities.

Unfortunately, victims' families and mine operators, do not report deaths. Instead they choose to accept payment for the loss of a child rather than risk ending illegal mining that brings income to some of India's poorest people.

Abuse, violence and intimidation taint the industry. Activists state it is a double crime as it is both illegal and they engage child labour.

Jharkhand and Bihar mica mining area

The Indian states of Jharkhand and Bihar are responsible for 25% of the world's production of mica. However, there has been a huge decline in legal mines from 1961 (432), 1986 (73) to 2016 (2).

Approximately 37% of the population in Jharkhand and 34% in Bihar live below the poverty line. Oppressive poverty implies that children tend to be more vulnerable into being coerced to work, as families rely on them to supplement the household income. The Dutch campaign group Centre for Research on Multinational Corporations (SOMO) found 20,000 children were involved in mica mining in this area.

The Jharkhand/Bihar area contains of 300 rural villages, such as Dhab (refer to previous map). This poor village with its mud-and-straw dwellings houses 2,000 people. Here, in the deep forest, mica is so abundant that it is found in most gardens. About 10% of children do not attend school as they are forced to work in the mica mines. Aimed to address this problem, the government is administrating more schools for children aged 6-14 years, and Save the Childhood Movement India, declared 100 of the villages as child-friendly villages. Mica traders could be prosecuted as employers under the Child Labour (Prohibition and Regulation) Act, 1986, if caught buying the mineral from a minor. However, attempts to combat child labour is limited, if companies continue to remain silent on governments' inaction on human rights abuses.

Companies using mica from Jharkhand/Bihar region:

- Unilever – World's third largest cosmetics and personal care company. Largest cosmetics company in India
- Ahold – One of big three cosmetic retailers in Netherlands (Etos). Sells mica in products to well-known cosmetic brands

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Main mica mining area in Jharkhand/Bihar (in red)
75km by 20km.



Map: <https://www.somo.nl/wp-content/uploads/2016/05/Beauty-and-a-Beast.pdf>

Working conditions

As soon as children are able to walk in Jharkhand, India, they are often forced to work in mica mines to supply the world with sparkling products.

'As the sun crawls up the sky in Koderma, abandoned mica mines start shimmering in its reflection. Driven by hunger pangs, a group of sleepy children from a neighbouring village trudges towards the Charki mines, holding mining tools in their hands.'

'Five-year-old Ajay Das hurriedly slips into a narrow hole and starts his day. His tiny hands can barely balance the hammer, but he still hits the shimmering wall accurately and breaks the flakes off it. The mineral that falls off in flakes is called mica, which is used to add glitter in natural cosmetics.'

Ajay works six days a week!... 'After toiling for 7-8 hours a day, Ajay manages to earn a paltry sum of 20 Rupees.' (40 Australian cents)

Source: <http://www.pointblank7.in/?p=3220>

This is not a sandbox – children are collecting mica



Source poster: <https://s-media-cache-ak0.pinimg.com/originals/9e/9f/c0/9e9fc087710994c3f907a62992f37469.png>

Suddenly, shining under the baking sun, dozens of piles of a glittery, flaky minerals appear at the side of the road. The source of these stacks lies a little further inside the forest. Hidden in the woods, small groups of miners are busy working in what look like giant rat-holes, pounding at cave walls with rudimentary tools and sorting the debris with their bare hands. Their wicker baskets are full of a translucent sheet mineral called mica.

At the end of today, the few dollars they have earned will just be enough to provide for their families. The material mined will end up in products found in every western home.

Source: <http://www.wired.co.uk/article/mica-illegal-mining-india>

In Bhilwara district in Rajasthan, boys as young as five year old climb down narrow, crumbling shafts to cut mica with a hammer and chisel. They work up to eight hours a day. Operated by mining syndicates to cater to the growing global demand for quality mica at cheap prices, these mines are the backbone of local villages, steeped in grim poverty.

As they work in makeshift underground holes, miners are often exposed to collapses and landslides-which can be fatal. 'Whenever I venture inside those holes, I don't know if I will come back alive,' explains 35-year-old Mantu Turi, who has been mining since he was ten. 'The only thing I know is that if I don't go, my family will not eat.'

Source: <http://www.wired.co.uk/article/mica-illegal-mining-india>



Women collecting and transporting rocks containing mica.

Photo Credit: Manan Ansari via MTV Voices

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What is being done?

1. Responsible Mica Sourcing Summit Beauty

The Business for Social Responsibility (BSR) and the Natural Resources Stewardship Circle (NRSC) hosted a Responsible Mica Sourcing Summit in Delhi. The goal was to present to 63 stakeholders the social and economic risks of the mica supply chain. Stakeholders included: brands such as Estee Lauder, Chanel, Yves Rocher, Clarins and L'Oreal; and representatives from Jharkhand/Bihar child labour commissions.

An agreement was reached focusing on 'traceability and transparency, community empowerment and multi-stakeholder governance'.



2. Child friendly villages

Bal Mitra Gram (BMG) or 'child friendly' village was adopted by Indian NGO Bachpan Bachao Andolan (BBA) in 2001. The villages are classified as 'friendly' for children measured by three factors –health, education and safety. The majority of children in the child friendly village have been deprived of their childhood. Most of them were engaged in economic activities such as mica mining, and as a consequence denied an education.

- BMG village ensures no child labour and all children are enrolled in schools.
- BBA has successfully established 105 BMG. However, this leaves about 400 villages or 60,000 children still at risk.

Fortunately, there emerges a light at the end of the tunnel as BBA's model of empowering villages through education appears successful. For example, in Jharkhand. Giridih's Tisri Block education officer claims over 90% of 35,000 children in BBA villages remain in school.



Child labourer

Source: <https://www.graceandable.com.au/wp-content/uploads/2016/10/mica-indian-child-labour-data-1.jpg>

By the numbers

BY THE NUMBERS	
Mica belt	4,000sqkm
Industry size	₹125 cr
Villages dependent on mica trade	500
BBA's child friendly villages	105
Still at risk	60,000 children
Now in school	30,000 children

Source: Approximate figures from BBA & Interviews



Image source: http://www.indpaedia.com/ind/images/8/84/Mica_belt_and_industry_size%2C_Bihar.jpg

Child Friendly Village – Girls able to attend school with the aid of donated bicycles.

In the mica mining areas of India access to education particularly for girls is very low for many reasons; no schools, schools too far away, no bathroom facilities for girls; little understanding amongst adults on the need for education for girls as opposed to boys. In the mica mining areas the % age of girls/women who are literate falls to as low as 20%. In most villages no girl has ever gone to middle school, let alone high school.

A major challenge for girls to get access to school is the travel, often through the jungle, avoiding, bears, leopards and snakes, these paths may be as long as 10 km. For boys this does not seem to be such a challenge and they can often stay overnight in the school, for girls this travel is a major challenge and the girls also cannot stay overnight as this is seen to be culturally incorrect, also this travel can expose the girls to child traffickers who may steal them. This is an area of child marriages, from the age of 10, often much older men, sometimes these men are fronts for child prostitution, and they may provide a small dowry and gain rights to the girls. In many cases the families have no choice as they are in debt to the local traders/money lenders and are forced to sell their children, especially girls. However, a donation of bicycles has enabled more girls to attend schools in Child Friendly Villages.

Source: <http://www.bba.org.in/?q=content/mica-bike-clubs-help-provide-access-education-mica-mining-areas-india>

3. L'Oréal

L'Oréal owns brands such as Body Shop and Maybelline. The company as a signatory to the United Nations Global Compact, is committed to respecting and promoting human rights along its mica supply chain. However the supply chain is not always traceable and transparent and child labour, low wages and unsafe working conditions prevail.

Instead of leaving India, L'Oréal is committed to sourcing mica only from legal and fenced mines, thereby avoiding

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the informal sector where child labour is most prevalent. The company aims to monitor working conditions and ensure human rights are respected. By the end of 2016, 97% of L'Oréal's mica came from secured sources.

4. Lush

This British cosmetics company is committed to remove all traces of natural mica from its products, following a *Guardian* article about child labour. However, at present the company has been unable to eradicate the mineral from its complex supply chain.

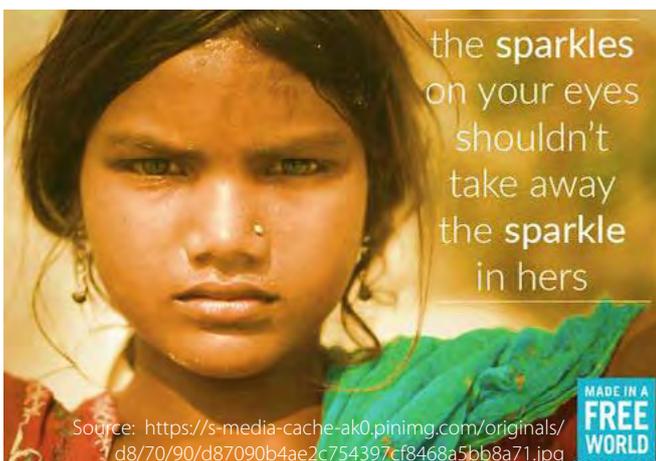
Future of India's mica industry

India has experienced a glittering past but faces an uncertain future for the production of the mineral, mica. The country has enjoyed a large percentage of global mica production and its exports, particularly sheet mica. However, the industry may not continue to grow at the anticipated rate as:

- shallow deposits are running out
- villagers lack technology to search for deeper deposits of mica
- young people are faced with the dilemma of leading a hard life in the mines or moving to cities
- governments have imposed strict mining regulations

Fortunately, the mica market earns a dominant share of its revenue from the electronics industry. With the growth in this industry, and rising applications of mica in the robotics industry, the demand for mica is anticipated to grow. Transparency Market Research estimates that the global mica market will expand at 2.6% between 2016 and 2024. The large and growing populations in India (1.3 billion) and China (1.4 billion) have stimulated the flourishing construction industry, and mica is crucial to its development. These two countries are among the largest producers of mica in the world, and India contains some of the world's largest mica reserves. These economies are crucial for the growth of the global mica market.

Made in a free world campaign poster



Source: <https://s-media-cache-ak0.pinimg.com/originals/d8/70/90/d87090b4ae2c754397cf8468a5bb8a71.jpg>



What can governments, organisations, groups and individuals do to improve the glitter supply chain in your makeup?

Aidan McQuaide, director of NGO *Anti-Slavery International*, says the answer to child labour will not be found in company boycotts or social projects, however well meaning, but instead in efforts that push recalcitrant governments to act.

- Boycott mica: boycotts are not the best approach as 'livelihoods of many poor people can be threatened'
- Trace mica supply chain: aim to eliminate child labour, bonded labour and violations of human rights
- Effective government action: there is legislation to protect working children but there is little enforcement of the law due to corruption and unregistered children
- Actions by businesses: companies must report on labour conditions in their supply chain and publicly release the information. Accountability allows consumers to choose products that best meets their ethical standards.
- Expand number of child friendly villages to enhance educational opportunities

Did you know?

- VW suspends ties with some Indian suppliers after exposure of child deaths in mica mines
- About 25% of the world production of mica originates from illegal mines
- Sand is the most mined mineral in the world. UNEP states that sand and gravel account for up to 85% of everything mined globally each year (*The Economist*)
- Desert sand is too smooth and therefore cannot be used for most commercial purposes
- Australia's sand was transported to Dubai's Burj Khalifa tower located in a desert environment

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Photograph: Oscar Timmers/Terre des Hommes. Source: <https://www.theguardian.com/sustainable-business/2016/jul/28/cosmetics-companies-mica-child-labour-beauty-industry-india-#img-2>

While rich cosmetic companies count their cash, children risk their lives to put the 'sparkle' into cosmetics



Source: <http://i.huffpost.com/gen/1763712/images/o-INDIA-CHILD-SLAVES-facebook.jpg>

Activities

- Explain the two faces of SHINE in the photograph (Above right).
- What is mica?
- Where is mica found in India?
- What is mica's use in everyday life?
- List the advantages and disadvantages of mining mica illegally. Present your findings as a two column table.
- Imagine you were a child working in a mica mine. Describe your life.
- Mica is a key ingredient in cosmetic products and is used not only to add sparkle to products, but to absorb excess oils and give it a consistent texture. Research three cosmetic products that use mica. Investigate if they involve child labour in India.
- Read *The lost childhood of India's mica minors*. Summarise the article as a TV report – <http://timesofindia.indiatimes.com/india/The-lost-childhood-of-Indias-mica-minors/articleshow/51871390.cms>

ICT

- Child labour behind international cosmetic brands – <http://www.corporatejustice.org/Child-labour-behind-international.html?lang=cs>
- Children in India risk illness and death to mine an ingredient found in cosmetics – <http://assets.inhabitots.com/wp-content/uploads/2014/01/Child-Labor-Behind-Key-Cosmetic-Ingredient-537x402.jpg>
- ITV News investigates: India's shameful child labour mining for beauty industry sparkle – <http://www.itv.com/news/2017-02-22/itv-news-investigates-indias-shameful-child-labour-mining-for-sparkling-mica/>
- Blood Mica: Deaths of child workers in India's mica 'ghost' mines covered up to keep industry alive – <http://www.reuters.com/article/us-india-mica-children-idUSKCN10D2NA>
- India cracks down on illegal mica mines after exposure reveals child deaths – <http://news.trust.org/item/20160930143525-xvpxy>
- The mica ghost mines of Jharkhand – <http://www.newindianexpress.com/thesundaystandard/2016/nov/12/the-mica-ghost-mines-of-jharkhand-1537870.html>
- Beauty companies and the struggle to source child labour-free mica – https://www.theguardian.com/sustainable-business/2016/jul/28/cosmetics-companies-mica-child-labour-beauty-industry-india?CMP=new_1194&CMP
- Blood Mica: Key findings of investigation into child deaths in India's illegal mica mines – <http://www.reuters.com/article/us-india-mica-children-findings-idUSKCN10D2NG>
- Child labour in mica products – <http://www.terredeshommes.org/wp-content/uploads/2016/05/Pic-front-report-Child-labour-in-Mica-Mine-India-TDH-NL-e1463654931358.png>



Reduced version of Times of India article, link above.