BEAUTY AND A BEAST
CHILD LABOUR IN INDIA FOR SPARKLING CARS AND COSMETICS
COLOPHON

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MARCH 2016

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Cover photo: © Oscar Timmers, February 2016

This publication has been made possible by the financial support of Terre des Hommes Netherlands. The content of this publication is the sole responsibility of SOMO and does not necessarily reflect the views of Terre des Hommes Netherlands.

PUBLISHED BY:
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3
Children's rights are violated all over the world – in developing countries and developed countries, and in conflict areas. Terre des Hommes Netherlands (hereinafter Terre des Hommes) is an international non-governmental organisation that works to create a world free of child exploitation. Since 1965 it has protected tens of millions of children from violence, child labour, trafficking, sexual exploitation, malnutrition, and other challenges.

Terre des Hommes uses evidence-based strategies to promote, prevent, protect, and prosecute within the context of children’s rights. It researches, documents, and takes action to expose and confront violations of children’s rights, guided by the UN Convention on the Rights of the Child (UNCRC). Its ‘5 Ps’ approach – partnership, promotion, prevention, protection, and prosecution – is multi-faceted and holistic. A prerequisite for Terre des Hommes’ work is that it works together with local partners. By promoting children’s rights through advocacy and raising policy awareness, it calls upon authorities and legislators to step up to comply with their responsibilities.

Terre des Hommes’ target group is vulnerable children. Vulnerable children are marginalised socially, economically, physically or culturally and, as such, interfere with the child’s education or leisure activities. Child labour refers to all kinds of labour that jeopardize a child’s physical, mental, educational or social development. Hazardous child labour is prohibited for a child’s physical, mental, educational or social development. Hazardous child labour is prohibited for a child’s physical, mental, educational or social development.

In its fight against child labour, Terre des Hommes makes a distinction between child work and child labour, and gives top priority to eradicating the latter. Child work refers to the participation of children in an economic activity which is not detrimental to their health or mental and physical development. Child work is regarded as light work for a limited amount of hours, according to the child’s age and abilities, that doesn’t interfere with the child’s education or leisure activities. Child labour refers to all kinds of labour that jeopardize a child’s physical, mental, educational or social development. Hazardous child labour is prohibited for all children, in line with Convention 182.

Today, 168 million children are involved in child labour. More than half of them do hazardous work, which is one of the worst forms of child labour. Children are in high demand because they work for a small wage or even for free and are easy to influence and deter. However, they are also more vulnerable and at risk of exploitation. Children are in high demand for their cheap labor, which is one of the worst forms of child labor.
face high risks of abuse, violent acts and other violations of their fundamental rights. In the majority of these cases, and regardless of the type of exploitation they endure, children have no access to the basic services guaranteeing the fulfilment of their fundamental rights (schooling, social services, healthcare, sanitation, recreation centres, and psychosocial support). All too often, the sole aim of legislators is to prohibit child labour, without taking into account individual situations and the root causes of this phenomenon, and above all without offering alternative income-generating possibilities to the families concerned.

Terre des Hommes chooses dialogue as intervention between the private and public sectors. Dialogue is necessary to address the root causes of child labour. To enable progress toward the Sustainable Development Goals, as an integral part of a genuine policy of social responsibility, in formal and informal enterprises, we seek to confront the private sector with our findings. Alarmed by the prevalence of violations of children’s rights, Terre des Hommes has recently started programmes in India’s Jharkhand and Bihar provinces, specifically addressing the situation of children involved in mining the mineral mica. Working with its partner organisation Bachpan Bachao Andolan (BBA, whose registered name is Association for Voluntary Action), Terre des Hommes is improving children’s lives through education and by supporting the ‘child-friendly village’ approach, as developed by BBA.

This report shows that although accurate data on the number of children involved in mica mining is lacking, children are inevitably involved and exploited. Each child counts, and the life and voice of each individual child matters.

Terre des Hommes would like to thank the research team at SOMO for its work and persistence. This report is the work of SOMO, supported by Terre des Hommes, and will guide Terre des Hommes in its programming, advocacy and future research.

Terre des Hommes Netherlands

EXECUTIVE SUMMARY

MICA

Mica is a mineral. It provides for the sparkling effect of car’s bodyworks. Moreover, it is a regular ingredient in cosmetics for nails, eyes, lips and faces.

Mica is named after its ability to reflect and refract light. Other qualities include its resistance to high temperatures and its ability to insulate against electricity. Mica has a crystalline and layered structure and can be split into very thin sheets.

Mica is mined mostly in India and China, followed by the US and Europe. In India some three-quarters of the mining takes place around the border of Jharkhand State and Bihar State, and around 90% of the mining is illegal. The Indian states of Jharkhand and Bihar are home to the world’s largest mica mining area, and account for an estimated 25% of the world’s total production.

Jharkhand and Bihar are among the Indian states with the highest poverty rates, and literacy and school attendance are also below average. Within the main mica mining area of Jharkhand/Bihar the illiteracy rate of the rural population was 46% in 2011, according to India’s latest extensive Census survey. Poverty and illiteracy are root causes of child labour.

This report focuses on child labour in Jharkhand/Bihar for mica mining and processing, and the role of Dutch companies and main manufacturers of pearlescent pigments globally.

Photo: Mica and quartz containing rock from Jharkhand.
CHILD LABOUR

JHARKHAND/BIHAR

The mica mining area of Jharkhand/Bihar comprises an estimated 300 rural villages, and child labour occurs in these remote villages, including collecting/mining mica and cobbing (hammering minerals other than mica) from the mined rocks – the first stage of mica processing. At the time of writing (2016), the number of child labourers involved in mica mining in Jharkhand/Bihar is estimated to be up to 20,000.

Recent documented cases substantiate the significant use of child labour:

• During field research by SOMO in October 2015, a dozen children under ten were seen working in places where locally mined crude mica is gathered. This was in the subdistricts Tisri and Domchance, and outside school hours.

• During the field research, a local representative of BBA for the mica mining village Dhah (around 4,500 inhabitants) stated that about 10% of the children presently don’t go to school and likely work in the mines.

• BBA’s district coordinator for Jharkhand/Bihar told SOMO in October 2015 that Giridih district is a very difficult area to effectively ban child labour. BBA’s work in twenty villages in the district is ongoing, but they constantly observe that groups of children in the district still go to the mines.

• In late January 2016, Kalpana Padhih, a journalist accompanying SOMO during its field investigation, went back to the rural area of subdistrict Tisri. She saw a mine within the forest where at least nine young girls (aged between nine and thirteen) were working.

• In January 2016 a team from television broadcaster France 2 went to a mica mine in the area, and estimated that a third of the miners were under twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old, “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it till they are twelve years old. “They start at five or six years old, when they are able to recognize mica. 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one of the biggest after merging Procter & Gamble’s
procedures and techniques of coating and paints. A few coatings
industries. Large user of mica tape for cables. Significantly
Unilever World’s number three cosmetics/personal care company. Largest
cosmetics company in India. Uses mica for cosmetics in India and
for personal care products globally. Significantly
Royal Philips One of the leading global producers of hair dryers and toasters,
which contain mica. Not found
DSM The world’s number nine company manufacturing plastic materials
and resin. Uses mica for its plastics engineering. Significantly
A.S. Watson Benelux Largest cosmetics retailer in the Netherlands (Krovidat, Ici Paris,
Treklepleister etc.). Sells mica mainly in products of well-known
cosmetics brands. Not found
Ahold One of the big three cosmetics retailers in the Netherlands (Etos).
Sells mica in products of well-known cosmetics brands and in its
own cosmetics brand products (Etos). Significantly
HEMA One of the big three cosmetics retailers in the Netherlands. Sells
mica in products of its own cosmetics brand (HEMA). Not found

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<tr>
<th>COMPANY</th>
<th>BUSINESS SECTOR AND MICA USE</th>
<th>DUE DILIGENCE CONDUCTED ON MICA</th>
<th>MICA FROM JHARKHAND/BIHAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AkzoNobel</td>
<td>World’s number two paint/coatings manufacturing company. Large user of mica for coatings on aircrafts, cars, building roofs, metal surfaces etc.</td>
<td>Significantly</td>
<td>Yes</td>
</tr>
<tr>
<td>Prysman/Draaka</td>
<td>World’s largest supplier of cables to the energy and telecom industries. Large user of mica tape for cables.</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
<tr>
<td>Unilever</td>
<td>World’s number three cosmetics/personal care company. Largest cosmetics company in India. Uses mica for cosmetics in India and for personal care products globally.</td>
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<td>Yes</td>
</tr>
<tr>
<td>HEMA</td>
<td>One of the big three cosmetics retailers in the Netherlands. Sells mica in products of its own cosmetics brand (HEMA).</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
</tbody>
</table>

Table 1: Dutch companies and due diligence in relation to mica and child labour

GLOBAL PEARLESCENT PIGMENTS PRODUCERS

The world’s largest manufacturers of natural mica pearlescent pigments are the German company Merck and the Chinese company Kuncai. Together, Kuncai and Merck import some 25% of the mica exported from Jharkhand/Bihar. Manufacturers of pearlescent pigments account for at least 60% of the mica imported from Jharkhand/Bihar. Table 2 below shows to what extent the world’s largest manufacturers of natural mica pearlescent pigments have conducted due diligence with regard to child labour for mica mining and processing.

GLOBAL PAINT/COATINGS AND COSMETICS COMPANIES

SOMO has assessed the due diligence conducted for some of the world’s largest companies in the paint/coatings and cosmetics sectors. Paint/coatings and cosmetics companies are major customers of the pearlescent pigment producers. The three largest coatings companies in the world are PPG Industries, AkzoNobel and Sherwin-Williams. The main global cosmetics and personal care companies are L’Oréal, Procter & Gamble and Unilever, with Coty becoming one of the biggest after merging Procter & Gamble’s beauty business into its company. It appears that, comparing the cosmetics sector with the paints/coatings sector globally, due diligence has been lowest in the paints/coatings sector. This research did not focus on electronics, automotive, construction, and oil industries. During desk research, however, no examples could be found of any company in these sectors having conducted due diligence on mica supplies.

RECOMMENDATIONS

FOR MICA MINING/PROCESSING/USING COMPANIES:
- Conduct due diligence on the risk of child labour in your mica supply chain. This report shows that only a few companies sourcing from the mining area of Jharkhand/Bihar have identified, prevented and mitigated the adverse impacts of child labour. Even fewer companies have publicly accounted for how they address this issue.
- Companies should not rush to find alternatives to Jharkhand/Bihar for their mica as this will not solve the problems of child labour, rampant poverty and low health, safety and environmental (HSE) standards. It is better to stay involved and seriously conduct due diligence.

Table 2: Global pigment producers and due diligence in relation to mica and child labour

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>DUE DILIGENCE CONDUCTED ON MICA</th>
<th>MICA FROM JHARKHAND/BIHAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck</td>
<td>Comprehensively</td>
<td>Yes</td>
</tr>
<tr>
<td>Kuncai</td>
<td>Marginally</td>
<td>Yes</td>
</tr>
<tr>
<td>BASF</td>
<td>Significantly</td>
<td>No for its pigment production. Possibly for its coatings.</td>
</tr>
<tr>
<td>Other Chinese companies: Ruicheng, Chesti, Rika, Oxen and ZhouFa</td>
<td>Not found</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudarshan</td>
<td>Significantly</td>
<td>Yes</td>
</tr>
<tr>
<td>DIC Corporation (including its subsidiary Sun Chemical)</td>
<td>Not found</td>
<td>Yes</td>
</tr>
</tbody>
</table>

FOR THE GLOBAL MARKET:

- Do not amend the Child Labour (Prohibition and Regulation) Act of 1986 so that it may hinder the rescue of children and enforcement of child labour laws. Make better provisions to prevent child labour in hazardous work.

FOR THE DUTCH GOVERNMENT:

- Facilitate cooperation between stakeholders involved in the Dutch mica supply chain and make sure that Dutch companies use their leverage in the global mica supply chain. This is in line with the government’s strategy to create covenants with companies to engender responsible supply chain management practices. This report shows that Dutch companies have direct links with child labour in mica mining through their business relationships, and have leverage in the global mica supply chain to prevent and mitigate this.
- Consider a requirement for Dutch companies to conduct risk-based due diligence. This report shows that many Dutch companies failed to identify child labour as a problem in the mica supply chain, despite this problem being well-known and well-documented by numerous international media outlets in recent years. The Dutch government has stated its openness to make due diligence a requirement for Dutch companies.
- Encourage other countries to speed up progress to eliminate the worst forms of child labour. Among other things, aim for European Council conclusions with regard to the worst forms of child labour during the Dutch Presidency (the first half of 2016).
1. INTRODUCTION

OBJECTIVE

Terre des Hommes Netherlands commissioned SOMO to conduct research on child labour for mica mining and processing. The objective of the research was threefold. First, to determine the current magnitude and seriousness of child labour in India. Second, to provide insight into the main companies involved in the mica supply chain (especially Dutch companies) and the due diligence they have conducted on child labour. Third, to look into pending initiatives to eliminate child labour and come up with recommendations in this regard.

METHODOLOGY

SOMO used a variety of methods for the contents of this report:

- Desk research. Many reports and news articles were used to inform this report:
  - SOMO used a variety of methods for the contents of this report. A typical chemical composition of muscovite mica is:
    - A 10-day period of field research was done in October 2015 in Jharkhand/Bihar. The research was carried out by a SOMO researcher, with assistance from a local journalist with expertise on mica and contacts in the region. Three villages, three mines, two processing plants and a school were visited. There were interviews with children, parents, BBA, exporters, mine managers and intermediaries.
  - Two sets of trade data on mica (one on US imports and one on Indian exports) were acquired and analysed, following further tracking of the main companies in the mica supply chain. Unfortunately, no trade data can be acquired for imports into the EU.
  - Eight selected Dutch companies were questioned on the origin and quantity of mica used, their policies on child labour and the human rights due diligence they conducted (if any) on mica. The eight companies were AkzoNobel, Prysmian/Draka, Unilever, Royal Philips, DSM, Ahold, A.S. Watson Benelux and HEMA.
  - Four main global mica pigment producers were also questioned: Merck, Kuncal, BASF and Sudarshan. These companies supply the main global paint/ coatings and cosmetics companies.
  - Several experts on the mica sector, and specifically the Indian mica sector, were interviewed. One Indian NGO, Bachpan Bachao Andolan (BBA), with extensive knowledge and work in the main Indian mica mining area, was interviewed on multiple occasions.
  - A total of twenty companies/NGOs/experts was given the opportunity by 20 December 2015 to review the parts of the draft report written about them. The companies had until 12 January 2016 to respond.
  - A 10-day period of field research was done in October 2015 in Jharkhand/Bihar. The research was carried out by a SOMO researcher with assistance from a local journalist with expertise on mica and contacts in the region. Three villages, three mines, two processing plants and a school were visited. There were interviews with children, parents, BBA, exporters, mine managers and intermediaries.

2. BASIC FACTS ABOUT MICA

2.1. MICA AND ITS MAIN USES

WHAT IS MICA?

Mica is a group name, and the Latin word micare means to shine, to flash or to glitter.1 The mica group represents a total of 37 different types of mica, such as muscovite, phlogopite, biotite and vermiculite.

Muscovite and phlogopite are important micas for commercial application. Muscovite is by far the most frequently mined and used type of mica.2 A typical chemical composition of muscovite mica is:

<table>
<thead>
<tr>
<th>Chemical Component</th>
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<tr>
<td>Silica (SiO₂)</td>
<td>45%</td>
</tr>
<tr>
<td>Alumina (Al₂O₃)</td>
<td>38%</td>
</tr>
<tr>
<td>Potassium oxide (K₂O)</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Phlogopite contains less alumina, but its composition also includes magnesium oxide.3 Mica has a crystalline and layered structure and can be split into very thin sheets. It exhibits outstanding physical properties and no other natural substance possesses all the same properties. Mica is:

- chemically inert, meaning it does not react to water, acids, oil or solvents;
- lightweight, flexible and strong;
- able to resist extremely high temperatures or sudden changes in temperature;
- able to withstand high voltages and insulate with low power loss;
- able to absorb or reflect light, which enables a decorative effect and protects against ultra-violet (UV) light.

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<tr>
<td>Alumina (Al₂O₃)</td>
<td>38%</td>
</tr>
<tr>
<td>Potassium oxide (K₂O)</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Phlogopite contains less alumina, but its composition also includes magnesium oxide.3 Mica has a crystalline and layered structure and can be split into very thin sheets. It exhibits outstanding physical properties and no other natural substance possesses all the same properties. Mica is:

- chemically inert, meaning it does not react to water, acids, oil or solvents;
- lightweight, flexible and strong;
- able to resist extremely high temperatures or sudden changes in temperature;
- able to withstand high voltages and insulate with low power loss;
- able to absorb or reflect light, which enables a decorative effect and protects against ultra-violet (UV) light.

MICA AND ITS MAIN USES

Based on informative studies,4 trade data5 and company websites, SOMO has inventoried the use of mica for several applications. Figure 1 shows a simplified overview of the main uses of mica. Seven main sectors of mica use are identified. Precise estimations of amounts per sector are not available:

- The paint/coatings sector: The paint/coatings sector is generally seen as the leading application segment for pearlescent pigments. Pigments6 (and mica powder) are used mainly for automotive (bodywork) and architectural coatings.
- The cosmetics and personal care companies: This sector especially uses pearlescent pigments for make-up for the face, eyes, lips, and for nails. To a lesser extent mica is used as a filler in cosmetics and personal care applications such as shampoos and conditioners.
- The plastics and printing ink manufacturers: As is the case for paint/coatings and cosmetics, pearlescent pigments are also often used for plastics and printing ink. Additionally, mica powder is used as a filler in plastics.
- The electronics sector: Mica is used in a wide range of electronic appliances, such as hair dryers and toasters. Electrical insulation of cables, capacitors and commutators is also a main application of mica in the sector.
- The automotive sector: Next to coatings there are several mica applications in the automotive sector: rubber tyres, bitumen foils, brake pads, clutches etc.
- The construction industry: Mica is regularly used as a filler for fibre cement and plasterboard.
- The oil industry: Mica is often used in oil-well drilling fluids.

When mica is to be used as flakes and powders, mica blocks and splittings may be glued together also. If mica is to be used in sheet form, labourers will split the intended end products, processes the mica might undergo, depending on the final intended use. 

**CATEGORIES OF MICA PROCESSING**

After mining and cobbing—there are several further processes the mica might undergo, depending on the intended end products:
- If mica is to be used in sheet form, labourers will split and cut the cobbed mica with knives (this process is called ‘splitting’) and scissors (to remove ragged edges). For some electrical applications of mica, the mica will be cut and punched according to required specifications with a simple machine. The resulting products are named ‘mica blocks’ and ‘splittings’.
- Mica blocks and splittings may be glued together also using layers of other products and become a laminate product (micanite or built-up mica).
- Whenever mica is to be used as flakes and powders, the cobbed mica will be crushed/pulverised and cleaned. Mica flakes are mainly used to produce pearlescent pigments, but also for oil-well drilling. Pearlescent pigments often contain natural mica coated with titanium dioxide or iron oxide. Instead of natural mica, synthetic mica or aluminium oxide may be used. The natural mica content of pearlescent pigments may vary, but is usually more than 50%.
- Mica paper is produced from mica scrap, pulped with various binders and pressed into paper-like sheets. Mica electrical insulation tape is a main product sold after this process. Mica paper can also be part of insulation laminates for industrial high heat and voltage applications.

**MINING ESTIMATES**

The US Geological Survey (USGS) and British Geological Survey (BGS) have recently and separately estimated where most mica mining takes place worldwide. The two organisations’ estimates differ and do not tally with levels of exported mica as registered in the UN Comtrade database.

UN Comtrade figures underestimate the amount of mica mining for these reasons: first, mica that reaches its end use in the country in which it is mined is not accounted for; second, mica may be further processed in the mining country, and exported under different categories in the UN Comtrade database. The UN Comtrade figures relate only to trade of mica that will still undergo some processing before appliance by end users.

Table 3 compares estimates from the three sources of information. There are large differences, especially for China and India. The USGS replied to SOMO’s questions about this. For years, the USGS had published “not available” for the amount of mica produced in China. In 2011 they had pressured their China expert, and the expert got a report of Chinese mica production. The expert is now, however, retired, and the USGS does not have a copy of this report (in Mandarin). For India the USGS just publishes the data from the Indian Bureau of Mines.

Most mica mining in India is conducted illegally. This explains the low estimates of USGS and BGS shown in Table 3. According to the Indian government’s Bureau of Mines, (legal) Indian mica mining amounted to 19,000 tonnes in the period 2013/2014. The UN Comtrade data show that India is a very large source of mined mica, exporting 138,000 tonnes in 2014. Other databases – ones that show harbours and airports of loading – also register massive exports from India. It is difficult to make a reasonable estimate of mica mining in China. In 1997, mining production was estimated at 154,000 tonnes, with mining carried out in five provinces: Sichuan, Xinjiang, Inner Mongolia, Hebei and Hubei. According to UN Comtrade, China’s 2014 mica export amounted to 159,000 tonnes. The main importer was Japan (66% of the total). China is also a large importer of mica. It imported 101,000 tonnes in 2014, of which 86% came from India.

**MINING COUNTRIES MINING AND PROCESSING MICA**

### Table 3

<table>
<thead>
<tr>
<th>Country</th>
<th>2014 Mica Production (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>159,000</td>
</tr>
<tr>
<td>China</td>
<td>154,000</td>
</tr>
<tr>
<td>Japan</td>
<td>101,000</td>
</tr>
</tbody>
</table>

---

9. Cobbing is the process of manually hammering minerals other than mica from mined rocks (which needs to be done for all produce from mines).
17. E-mail USGS to SOMO on 19 January 2016.
Table 4 shows the main mica importing countries. Japan and China are the largest importers, followed by Germany and the US. Large import figures suggest a large domestic market for mica (combined with little mining activity) and/or large mica processing activities in the country. The UN Comtrade figures are, however, for trade of mica that will still undergo some processing before appliance by end users, so the mica may be re-exported in another category. For other categories, tonnages provided in the UN Comtrade database include other materials, so mica tonnages cannot be provided.

The Netherlands is not a large user of mica, especially as one-third of its import was re-exported in 2014. This would leave 4,000 tonnes for internal processing by companies, less than 1% of global use. This suggests that the Netherlands has no large industry adding value to mica.

### Table 3: Estimated main mica mining countries (1,000 tonnes)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>MICA PRODUCTION</th>
<th>MICA EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US GEOLOGICAL SURVEY, 2015</td>
<td>BRITISH GEOLOGICAL SURVEY, 2014</td>
</tr>
<tr>
<td>China</td>
<td>780</td>
<td>159</td>
</tr>
<tr>
<td>India</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>United States of America</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>Canada</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>South Africa</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Madagascar</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>France</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Finland</td>
<td>54</td>
<td>12</td>
</tr>
<tr>
<td>South Korea</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>Russia</td>
<td>101</td>
<td>9</td>
</tr>
<tr>
<td>Brazil</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Other countries</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>World total</td>
<td>1,123</td>
<td>343</td>
</tr>
</tbody>
</table>

Table 4: Main mica importing countries

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>MICA IMPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1,000 tonnes)</td>
</tr>
<tr>
<td>#1 Japan</td>
<td>1,000</td>
</tr>
<tr>
<td>#2 China</td>
<td>127</td>
</tr>
<tr>
<td>#3 Germany</td>
<td>101</td>
</tr>
<tr>
<td>#4 United States of America (USA)</td>
<td>34</td>
</tr>
<tr>
<td>#10 Netherlands</td>
<td>6</td>
</tr>
</tbody>
</table>

Sources:

The US Geological Survey estimates that 413,000 tonnes of scrap and flake micas were mined in the US in 2015. A 2015 inventory for the EU, leading to the first edition of the European Minerals Yearbook, showed that France (26,000 tonnes) and Finland (11,000 tonnes) were the leading mica mining countries in Europe in 2013. Mica is also mined in Austria, but quantities are not known. All in all, SOMO estimates that China and India are the largest mica mining countries with a yearly production in the range of 150,000 – 200,000 tonnes each, followed by the US (42,000 tonnes) and Europe. SOMO estimates that total global mica mining production amounts to 500,000 tonnes. In India, some three quarters of the mining takes place in Jharkhand/Bihar. Therefore, it is estimated that the Jharkhand/Bihar region accounts for 25% of global mica mining.

25. Mica export statistics sourced from [https://www.zauba.com](https://www.zauba.com). The export statistics show the harbours and airports of loading for the three mining regions. The estimated percentages are for mica that is exported within the HS code group 2525, which represents the trade of mica that not yet processed for use by end users (scrap and crude mica).

Main mica mining countries

<table>
<thead>
<tr>
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<tbody>
<tr>
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</tr>
<tr>
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<tr>
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Main mica importing countries

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<tr>
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</tr>
</tbody>
</table>

The Netherlands is not a large user of mica, especially as one-third of its import was re-exported in 2014.

"The Netherlands is not a large user of mica, especially as one-third of its import was re-exported in 2014."
3. THE MICA SECTOR IN INDIA

3.1. MINING LOCATIONS AND EXPORT FIGURES

MINING LOCATIONS

Figure 2 shows that India has three main mica belts. These mica belts are located in the states of Jharkhand/Bihar, Andhra Pradesh and Rajasthan. Export statistics for the first half of 2015 show that around 74% of India’s mica export value was derived in Jharkhand/Bihar, 15% in Rajasthan and 11% in Andhra Pradesh. This reveals the present mica mining activity in India.

EXPORT FIGURES

India’s mica exports have been growing steadily over the past 10 years. The quantity of mica sold abroad comprised 78,000 tonnes in 2006. In 2015, the figure stood at 136,000 tonnes, an increase of 75%.

Table 5 shows the main countries importing mica from India in the first half of 2015, measured in export value of the mica. China imported most of India’s mica (67%), followed by Japan (9%), Belgium (7%) and the US (6%). These four countries are the main mica importers from the mining regions of Jharkhand/Bihar and Andhra Pradesh. China covers almost all imports from Rajasthan.

Table 5: Main mica importing countries from India, first half 2015, per mining region

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>JHARKHAND/BIHAR (74%)</th>
<th>RAJASTHAN (15%)</th>
<th>ANDHRA PRADESH (11%)</th>
<th>ALL MICA EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>67</td>
<td>86</td>
<td>42</td>
<td>67</td>
</tr>
<tr>
<td>Japan</td>
<td>10</td>
<td>1</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>Belgium</td>
<td>7</td>
<td>0</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>United States (US)</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Other countries</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5: Main mica importing countries from India, first half 2015, per mining region

Source: Export statistics from https://www.zauba.com. The export statistics show the harbours and airports of loading for the three mining regions. Estimated percentages are for mica exported within HS code group 2525.

Statistics for the past five years show the same domination of China, Japan, the US and Belgium with regard to mica imports from India. Figure 3 shows that China’s share has been rising, while the share accounted for by the ‘other countries’ category has fallen dramatically. Imports via Belgian harbours do not necessarily mean that the mica is processed there. The main German producer of pigments, Merck, imports some 5,000 tonnes of mica yearly from Jharkhand/Bihar to Belgium, but the mica is processed in Germany (see section 7.3).

Figure 2: The three mica belts in India (marked with purple squares)


Figure 3: Main importing countries of India’s mica


29. Mica export statistics sourced from https://www.zauba.com. The export statistics show the harbours and airports of loading for the three mining regions. The estimated percentages are for mica that is exported within the HS code group 2625, which represents the trade of mica that not yet processed for use by end users (scrap and crude mica).
31. Mica export statistics sourced from https://www.zauba.com. The export statistics show the harbours and airports of loading for the three mining regions. The estimated percentages are for mica that is exported within the HS code group 2525 in the first half of 2015.
3.2. THE MINING AREA OF JHARKHAND/BIHAR AND ITS PEOPLE

JHARKHAND/BIHAR

Figure 4 shows (in red) the main mica mining area of Jharkhand/Bihar, where currently three quarters of India’s mica mining takes place. The main mining area measures some 75 by 20 kilometres, while the entire mica belt of the area is estimated to be 160 by 20-40 kilometres. Jharkhand State has existed since November 2000, when it was carved out of Bihar State.

Table 6 shows statistics on poverty and education for the rural population of Jharkhand and Bihar, compared to India averages. Both Jharkhand and Bihar are among the Indian states with the highest poverty rate, and literacy and school attendance are also below average.

THE MAIN MICA MINING AREA

Figure 5 provides a more detailed view on the main mica mining area, and its administrative divisions. Based on various mining activity reports, SOMO estimates that most of the mining takes place within the orange boundary. People are occupied with the small-scale mining of mica in hundreds of villages in Jharkhand/Bihar. Families with children presently working in the mica mines are often landless. Often the mining takes place at mines that were legal in the past. Some families moved to the area many decades ago, when legal mica mining provided an income. For example, in 1960, 18,000 people were officially employed in Bihar’s mica mines. Table 7 provides more information about the rural population within the main mica mining area. The high illiteracy rate in the area is striking (40%), compared to the averages for Jharkhand State (34%) and India (27%).

Table 6: Poverty and education, Jharkhand/Bihar versus the whole of India

<table>
<thead>
<tr>
<th></th>
<th>JHARKHAND</th>
<th>BIHAR</th>
<th>INDIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>% living below poverty line</td>
<td>41</td>
<td>34</td>
<td>26</td>
</tr>
<tr>
<td>% illiterate</td>
<td>34</td>
<td>38</td>
<td>27</td>
</tr>
<tr>
<td>% children not enrolled in school (age 6-14)</td>
<td>4.3</td>
<td>4.1</td>
<td>3.3</td>
</tr>
<tr>
<td>% children enrolled in primary school, but not present</td>
<td>38.3</td>
<td>41.8</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Table 6 shows statistics on poverty and education for the rural population of Jharkhand and Bihar, compared to India averages. Both Jharkhand and Bihar are among the Indian states with the highest poverty rate, and literacy and school attendance are also below average.

Table 6: Poverty and education, Jharkhand/Bihar versus the whole of India


Figure 4: Main mica mining area in Jharkhand/Bihar

Sources: D-maps.com, “Map of India (outline, states, names, white)”, http://bit.ly/1w6VhUL
Main mica area: various mining activity reports.

Figure 5: Main mica mining area of Jharkhand/Bihar (subdistrict, district, state)

Sources: Google Earth; district data of the 2011 Census of India; various mining activity reports.

34. Interviews with families in the village of Dhab during field investigation SOMO, 11 October 2016.
As can be seen in Figure 5, the actual mining area comprises about half of the total area of the subdistricts. Assuming that half of the population in the subdistricts lives within the actual mica mining area, the rural population in the mica mining area would be 270,000 people, with 52,000 children below seven years of age. Assuming also that half of the villages in the subdistricts are situated within the actual mica mining area, means there would be 86 villages with more than 150 households, and 213 villages with fewer than 150 households. This is a total of 300 villages.

### SCHEDULED CASTES AND SCHEDULED TRIBES

Scheduled castes and scheduled tribes are notified as such in the Constitution of India, and refer to certain communities needing special consideration for safeguarding their interests and for their accelerated socio-economic development. The social, educational and economic neglect of these communities arises out of the age-old practice of untouchability and on account of primitive agricultural practices, specific cultures, lack of infrastructure facilities and geographical isolation. Scheduled castes are often referred to as Dalits, though scheduled castes represent a larger group of communities. Dalits are the "untouchables" within Hinduism and subject to caste discrimination. Scheduled tribes are often referred to as Adivasis, literally meaning ‘indigenous people’ or ‘original inhabitants’. Scheduled castes and scheduled tribes amount to 19% and 5% of the population respectively in the main mica mining area, while the Indian average stands at 16% and 8% respectively. The Rajauli subdistrict has a high percentage of scheduled castes (29% of the population), while Tisri has a high percentage of scheduled tribes (22% of the population). Both Rajauli and Tisri also have the highest illiteracy rate of the subdistricts within the main mica mining area.

<table>
<thead>
<tr>
<th>SUBDISTRICT</th>
<th>TOTAL POPULATION</th>
<th>ILLITERACY 7+ YEARS</th>
<th>SCHEDULED CASTES POPULATION</th>
<th>SCHEDULED TRIBES POPULATION</th>
<th>CHILDREN BELOW AGE 7</th>
<th>VILLAGES &gt; 150 HOUSEHOLD</th>
<th>VILLAGES &lt; 150 HOUSEHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domchance</td>
<td>110,000</td>
<td>39%</td>
<td>14%</td>
<td>2%</td>
<td>22,000</td>
<td>39</td>
<td>62</td>
</tr>
<tr>
<td>Gawan</td>
<td>116,000</td>
<td>39%</td>
<td>16%</td>
<td>5%</td>
<td>23,000</td>
<td>29</td>
<td>108</td>
</tr>
<tr>
<td>Kodarma</td>
<td>80,000</td>
<td>35%</td>
<td>18%</td>
<td>0%</td>
<td>15,000</td>
<td>35</td>
<td>41</td>
</tr>
<tr>
<td>Rajauli</td>
<td>136,000</td>
<td>43%</td>
<td>29%</td>
<td>0%</td>
<td>24,000</td>
<td>44</td>
<td>58</td>
</tr>
<tr>
<td>Tisri</td>
<td>95,000</td>
<td>45%</td>
<td>14%</td>
<td>22%</td>
<td>19,000</td>
<td>26</td>
<td>157</td>
</tr>
<tr>
<td>Total</td>
<td>537,000</td>
<td>40%</td>
<td>19%</td>
<td>5%</td>
<td>103,000</td>
<td>173</td>
<td>426</td>
</tr>
</tbody>
</table>

Table 7: Rural population 2011 in the main mica mining areas of Jharkhand/Bihar


300 VILLAGES

37. The official term, as used for the Census of India, is not subdistrict, but community development block (C.D. Block).
3.3. ILLEGAL MINING
Almost all mica mining in Jharkhand/Bihar is illegal, but tolerated by the government.44 Mining licences were not renewed after the Forest Conservation Act 1980 of India’s central government entered into force. Even before 1980 the number of legal mines had been decreasing steadily. In 1980 there were 43 legal mica mines operating in Bihar (which included Jharkhand until November 2000); by 1986 the number had decreased to 147, and in 1986 there were only 73 legal mica mines left in the area.45 The study ‘Problems and Prospects of Mineral Industry in India: A study of Mica industry’, which was published in 1993, reported: ‘The case of illicit mining and underreporting of production is a well-known fact. This situation is very much prevalent in the Bihar mica belt. A large number of mines in this state have been closed and lie abandoned in the forest areas and they are accessible to those who collect whatever mica they can get. Mica is taken away and then sold to the dealers.’46

Currently there are no legal mines listed by the Indian Bureau of Mines in Jharkhand, and in Bihar there are only two legal mining leases (Table 5). One of them is Sharda in Mauza Chakriar, owned by Modi Mica Enterprises.47 The other legal lease is owned by the company Chattu Ram Darshan Ram.48 This lease comprises four or five mines.49 It is not clear whether there is active mining production in all these mines.50 Within the Sharda lease area there is active mining production. The Chinese pearlescent pigment producer Ruicheng imported 1,600 tonnes from the Sharda Mine in the first half of 2015.51 The German pigment producer Merck and the Indian pigment producer Sudarshan are also customers of the Sharda mine. Customers of the mines within the legal lease of the Chattu Ram Darshan Ram mines also include (at least) Merck and Sudarshan.52

Indian Bureau of Mines data may not be complete, as the German pigment producer Merck has stated that it sources from legal mica only. Merck sources 9-9,000 tonnes of mica flakes from the area of Jharkhand/Bihar annually.53 SOMO has seen confidential documentation provided by Merck in relation to the legality and locations of the mines. Merck presently sources from six mines. Three of the mines are located in Bihar State, while the other three are in Jharkhand State. Despite the fact that these leases are not listed by the Indian Bureau of Mines, it appears that these mines are legal: recent mining inspection reports (produced by the Indian central government) and mining lease documentation were provided by Merck.54 The calculations are an underestimate. For example, earlier in this report the mining production in Jharkhand/Bihar was estimated to be 15,000 tonnes yearly.

Table 9 provides an estimate of the magnitude of illegal mica mining in India.43 For Jharkhand/Bihar the yearly legal mica production is estimated to amount to 11,000 tonnes. This estimate is based on the production according to the Indian Bureau of Mines (Bihar 3,500 tonnes and Jharkhand 2,500 tonnes) and the known sourcing from legal mines by Merck, Sudarshan and Ruicheng (the latter sources partly from legal mines through the Sharda mine). It remains a contradictory situation that the Bureau of Mines reports estimations of legal production in Jharkhand State, while it does not list legal mines in Jharkhand State.55

The production data were compared with tonnes of mica exported by India. The export data provide for a slight underestimation of mica production data. First, mined mica that is sold within India is not included into the export data. Second, mica may be further processed in India, and exported under different categories of the export database. The calculations are an underestimate. For example, earlier in this report the mining production in Jharkhand/Bihar was estimated to be 115,000 tonnes yearly.

Table 9: Estimates of illegal mica mining in India

<table>
<thead>
<tr>
<th>STATE</th>
<th>LEGAL PRODUCTION (TONNES)</th>
<th>EXPORTED MICA 2015 (TONNES)</th>
<th>ESTIMATE ILLEGAL MINING (TONNES)</th>
<th>ESTIMATE ILLEGAL MINING (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jharkhand/Bihar</td>
<td>11,000</td>
<td>100,600</td>
<td>89,600</td>
<td>89</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>9,200</td>
<td>15,000</td>
<td>5,800</td>
<td>39</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>4,700</td>
<td>20,400</td>
<td>15,700</td>
<td>77</td>
</tr>
<tr>
<td>Haryana/Maharashtra</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>24,900</td>
<td>136,000</td>
<td>111,100</td>
<td>82</td>
</tr>
</tbody>
</table>


50. Interviews by SOMO with some exporters and the Indian NGO Bachpan Bachao Andolan (BBA) in October 2015.
51. infinitiindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.
52. Meeting between Merck and SOMO representatives in Darmstadt, Germany, on 17 December 2015.
53. Meeting between Merck and SOMO representatives in Darmstadt, Germany, on 17 December 2015.
3.4. TRADE DATA ON JHARKHAND/BIHAR

EXPORTS PER MICA PRODUCT

The Indian region of Jharkhand/Bihar represents the world’s largest mica mining area, with an estimated 25% of the world’s total production (see also section 2.2). For this region SOMO has been able to track down data on mica use, as trade data could be retrieved. These trade data showed the mica product sold, quantities sold, the export value, the exporters, and the importers. Table 10 shows a breakdown of trade data per mica product. The following can be said about the mica products:

- Manufacturers of pearlescent pigments account for 59% of the tonnages of mica shipped from the region and two-thirds of the export value. Pearlescent pigments are used in paint/coatings, cosmetics, plastics and ink.

- For the traded mica powder/scrap (35%) there are several possible applications: plasterboard, rubber tyres, automotive brake friction materials, clutches, fibre cement, paints, coatings, plastics, cosmetics, personal care products (shampoos) etc. Moreover, mica paper/tape can be made from mica powder. The electronics sector is also a large user of mica paper/tape, especially for insulation purposes.

- An estimated 7% of the mica sold from Jharkhand/Bihar comprises mica to be used for oil-well drilling. The export value of mica used for oil-well drilling amounted to an estimated 2% only. The mica sold for this purpose is of a low quality compared to other mica products, and is therefore cheaper.

- Some 8% of the export value from Jharkhand/Bihar comprised mica blocks and splittings, while in tonnages the share was only 2%. Blocks/splittings are mostly used in the electronics sector. This mica is the most expensive.

<table>
<thead>
<tr>
<th>MICA PRODUCT</th>
<th>TONNAGES</th>
<th>% OF TOTAL TONNAGE</th>
<th>EXPORT VALUE (INR MILLION)</th>
<th>% OF EXPORT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flakes for pearlescent pigments</td>
<td>34,800</td>
<td>59</td>
<td>1,061</td>
<td>67</td>
</tr>
<tr>
<td>Mica powder/scrap</td>
<td>18,600</td>
<td>31</td>
<td>339</td>
<td>22</td>
</tr>
<tr>
<td>Flakes for oil well drilling</td>
<td>3,900</td>
<td>7</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Blocks/splittings</td>
<td>1,000</td>
<td>2</td>
<td>128</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>500</td>
<td>1</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58,800</strong></td>
<td><strong>100</strong></td>
<td><strong>1,571</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 10: Exports of mica from Jharkhand/Bihar, first half 2015, per mica product

Source: Infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. The trade data have been corrected as much as possible for double counting that came to light, but some double counting may still remain.

Table 11: Main mica importing companies from Jharkhand/Bihar in the first half of 2015

Source: Infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. For 30% (INR 473 million) of the total export value (INR 1,571 million) the importer was not disclosed. This means that companies mentioned in the table may have imported more than presented in the table, and that some companies are not listed as a main importing company in the table. The trade data have been corrected as much as possible for double counting that came to light, but some double counting may still remain.
Table 12: Main mica exporting companies from Jharkhand/Bihar; first half 2015

<table>
<thead>
<tr>
<th>EXPORTER IN INDIA</th>
<th>TOTAL EXPORT VALUE (INR MILLION)</th>
<th>SALES TO MAIN CUSTOMERS (INR MILLION)</th>
<th>KUNCAI</th>
<th>MERCK</th>
<th>RUICHENG</th>
<th>CHESIR</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunpatroy</td>
<td>197</td>
<td>14</td>
<td>22</td>
<td>161</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mount Hill’s</td>
<td>195</td>
<td>102</td>
<td>20</td>
<td>73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jai Mica</td>
<td>130</td>
<td>33</td>
<td>97</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pravin</td>
<td>117</td>
<td>31</td>
<td>10</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modi Mica</td>
<td>95</td>
<td>23</td>
<td>50</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vedant</td>
<td>93</td>
<td>8</td>
<td>25</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pachisia</td>
<td>67</td>
<td>57</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mohan Mica</td>
<td>36</td>
<td>31</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kritika Enterprises</td>
<td>40</td>
<td>4</td>
<td>36</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ramdew Modi</td>
<td>39</td>
<td>38</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpha International</td>
<td>37</td>
<td></td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratan Mica</td>
<td>36</td>
<td></td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kedarnath Ramgopal &amp; Sons</td>
<td>33</td>
<td></td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daruka</td>
<td>26</td>
<td></td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mohan International</td>
<td>26</td>
<td></td>
<td>26</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manoj Kumar Bhadani</td>
<td>23</td>
<td></td>
<td>23</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearlescent Minchem (India)</td>
<td>22</td>
<td></td>
<td>8</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>359</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>349</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,571</td>
<td>201</td>
<td>167</td>
<td>87</td>
<td>80</td>
<td>1,036</td>
<td></td>
</tr>
</tbody>
</table>

Source: infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.

MAIN IMPORTING COMPANIES
Table 11 (see next page) shows which companies imported most mica from Jharkhand and Bihar during the first half of 2015. Leading importers were Kuncai and Merck, together accounting for 23% of the total export value. Both companies manufacture pearlescent pigments and sell these to industries specialising in cosmetics, paint, plastic and ink. The top 10 companies importing most mica from Jharkhand/Bihar include seven companies that use mica to manufacture pearlescent pigments. Together these seven companies account for 42% of the total export value, and 84% of the export value of the top 10 companies.

MAIN EXPORTING COMPANIES
Table 12 shows the main mica exporting companies from Jharkhand/Bihar, and their sales to the three biggest importers from Jharkhand/Bihar. Gunpatroy and Pravin were the companies that were most reluctant to disclose information on their customers. Their trade data usually stated “to order” instead of naming the importer.

3.5. LABOUR-INTENSIVE MICA PROCESSES
For mica mining and processing, a lot of manual labour is needed. Most labour-intensive mica processes take place in the villages:
- People are occupied with small-scale mining of mica in hundreds of villages in Jharkhand/Bihar. Often the mining takes place at mines that used to be legal. Due to the illegal character, little heavy machinery is used. The mining mainly involves manual labour with some simple tools to get the crude mica loose from the rock formation, although often also explosives and compressed air operated jack hammers are used.
- All crude mica produced from the workings is cobbed manually with hammers to remove the gangue minerals like quartz, feldspar and other associated minerals, including waste mica. During this process the mica will also be sieved to remove dust. This first rough preparation of the crude mica may be done at the mine itself, or in places where the locally mined crude mica is gathered. After this, the mica will usually be sold to local traders.
- Whenever mica is to be used as a sheet, labourers will dress the cobbed mica with knives and scissors. Sharp knives are used to split the mica into fine pieces of the required thickness. This process is called splitting, and typically this skilled labour is conducted by women only. Scissors are used to remove ragged edges. Probably due to low wages (and also the nearby availability of good quality mica), India - and especially the area of Jharkhand/Bihar, is the world’s largest producer of mica blocks and splittings. For some electrical appliances of mica, much manual labour is used to cut and punch the mica according to needed specifications with a simple machine.

Child labour occurs mainly in the processes of mining and cobbing in villages. The jobs of cutting, splitting and punching mica seem to be rarely conducted by children.

4. CHILD LABOUR

4.1. JHARKHAND/BIHAR

THE SITUATION IN 2005

The Indian NGO AID India estimated in 2005 that there were 18,000 mica child labourers in the entire state of Jharkhand. Already in 1998 the NGO had traced 3,000 tribal children involved in mining-related work in the Tisri subdistrict of Giridih district.65

Alongside this, an estimate of 5,000 child labourers is often quoted in reports and news articles about mica mining. This figure stems from 2005, when the NGO Bachpan Bachao Andolan (BBA) started activities in the mica belt area. The number of 5,000 is based on a much smaller area than the number of 18,000 as BBA did an assessment in 50 villages only.66 The mica mining area of Jharkhand/Bihar includes an estimated 300 rural villages (Indian Census data).

In 2005, there were hardly any schools in rural areas, and - except for the police - the state presence (including teachers) was low. The presence of local Naxalites - a Communist guerrilla group - was at its peak. In 2009 Naxalites were still targeting and killing teachers.67

Since 2005 much has changed. The government (also the Indian state of Jharkhand) is running a much greater number of development schemes.68 In 2009 Naxalites were still targeting and blowing up state-run schools, while police and paramilitary forces were disrupting education for long periods by occupying schools as part of anti-Naxalite operations.69

INITIATIVES TO ELIMINATE THE CHILD LABOUR

Since 2005 much has changed. The government (also with its goal of decreasing the influence of the Naxalites) is running a much greater number of schools now for children between the ages of six and fourteen (with much-appreciated free meals), and has made people aware of governmental welfare and development schemes.67 The Naxalites are less active.

The Indian government considers poverty and illiteracy the root causes of child labour and has formed the following multi-pronged strategy to tackle this problem: "Educational rehabilitation of these children has to be supplemented with economic rehabilitation of their families so that they are not compelled by economic circumstances to send their children to work."70

Since 2010 the NGO BBA has declared 60 villages child-friendly (or 165 villages if using the official Indian Census), and enrolled 2,200 children in governmental schools for children aged six-fourteen (the work of BBA is described in section 6). Presently it is working in 20 extra villages, sponsored by the Natural Resources Stewardship Circle (NESC, established by a collective of main cosmetics companies).71

The German pigment producer Merck supported BBA and its concept of child-friendly villages from 2010 until 2015. At this moment Merck runs three schools and a local health centre in the mica mining area.72

Merck says it has eliminated child labour in the mining and processing of its mica, and it claims to source from legal mines only. A detailed company profile of Merck can be found in section 7.3 of this report.

Some smaller initiatives to eliminate child labour have included:

- An Indian mica supplier has been running the RP Modi international school in Koderma city since 2013.73

- The cosmetics company Estée Lauder has raised funds to purchase and donate bicycles to more than hundred children in mica mining communities. Children found it difficult to get to school because they had no transportation and bicycles (US$56) were too expensive for most families.74

- The US-based NGO Made in a Free World has raised US$60,000, which led to the creation of four child-friendly villages.75

- The NGO ASK India (Association for Stimulating Know How)76 is working for the Indian pigment producer Sudarshan in the area. Sudarshan had observed that there was no evidence of a robust system in place to avoid the incidence of child labourers entering mines in Bihar. The company works with ASK to implement systems to prevent child labourers from entering the mining areas.

- The NGO AID India has run an education programme for children working with mica in the Tisri block of Giridih district.77

THE PRESENT SITUATION

Over the past ten years the tonnages of mica exported from the area have increased by 75%.78 This has likely led to an increase of child labourers. At this moment the number of child labourers in the mica mining area is estimated by BBA to be up to 20,000, despite the above mentioned initiatives and governmental measures. Nobody knows exactly how many children are presently collecting/mining and cobbing mica. There has been no assessment by NGOs and/or the government for the larger part of the remote mica mining area. SOMO was also not able to capture the situation in these hundreds of villages. SOMO’s rough estimate is substantiated by calculations (see below), its field research, and the fact that child labour cases are observed frequently by different persons and organisations:

- During SOMO’s field research, a dozen children under ten years were seen working in places where the locally mined crude mica is gathered. This was in the subdistricts Tisri (Kodaibak village) and Domchance (Dhab village), and outside school hours. The children were cobbing (hammering the other minerals than mica from the mined rocks) and/ or sieving the mica to remove dust.79

- During the field research, a local representative of BBA for the mica mining village Dhab (around 4,500 inhabitants) stated that about 15% of the children presently don’t go to school and likely work in the mines.80

- BBA’s district coordinator for Jharkhand/Bihar told SOMO in October 2015 that the Giridih district is a very difficult area to ban child labour effectively. BBA’s work in twenty villages in the district is ongoing, but they observe constantly that groups of children in the district still go to the mines.81

In late January 2016, journalist Kalpana Pradhan (who was accompanying SOMO during its field investigation) went back to the rural area of subdistrict Tisri and saw a mine in the forest where at least nine young girls (aged between nine and thirteen) were working.82

In January 2016 a TV team from broadcaster France 2 went to a mica mine in the area, and estimated that a third of the miners was less than twelve years old. “They start at five or six years old, when they are able to recognize mica. They harvest it with us,” said one mother.83


82. Field investigation SOMO, visit to Tisri on Saturday 10 October 2015 and visit to Dhab on Sunday 11 October 2015.

83. Interview by SOMO with the local representative of BBA for Dhab village on 11 October 2015.

84. Interview by SOMO with the district coordinator Jharkhand/Bihar of BBA on 15 October 2015.

85. E-mail from Kalpana Pradhan to SOMO on 1 February 2016.

In March 2015, a ten-year-old local girl was crushed to death when the roof of a mica mine, in which she was working, collapsed on her.87
In August 2015 Agence France-Presse (AFP) interviewed an eight-year-old girl who was mining and not attending school. Additionally, a father-of-four acknowledged that his children spent their days mining for mica to keep the family’s heads above water.88
In March 2014, two children were buried alive when the roof of an illegal mica mine collapsed on them.89
In December 2013, the NGO Danwatch published interviews with three children aged five, seven and ten years respectively. They were mining mica and were not going to school.90 The field investigator photo-documented a few dozen child labourers.91
In October 2015, Ram Bachan Paswan, a district labour superintendent, said to AFP referring to the area of Jharkhand/Bihar: “In a place where poverty is so entrenched it is difficult to convince parents to send kids to school.”92

In recent years, Jharkhand State has emerged as a major source area for intra-country trafficking of tribal women and children in India. Thousands of children from Jharkhand are traded and trafficked by placement agencies to domestic homes in Delhi. The children and women remain in slavery and bonded labour-like conditions. The trafficking seems to be conducted mainly from other districts in Jharkhand than the Giridih and Kodarma districts situated in the mica mining area of Jharkhand/Bihar:93

ESTIMATING THE NUMBER OF CHILD LABOURERS

**SOMO**’s estimate that there are up to 20,000 mica child labourers within the mining area of Jharkhand/Bihar is based on the following calculations:

- In 2005 it was estimated that there were 18,000 mica child labourers in the state of Jharkhand, spread over the districts of Kodarma and Giridih.94 The estimate seems reasonable, as, two NGOs have estimated the amount of mica child labourers for parts of the main mica mining area. Already in 1996 the NGO AID India had traced 3,000 tribal children involved in mining-related work in the Tisri subdistrict of Giridih, which is one of the five subdistricts in the main mica mining area. In 2005 the NGO BBA estimated that there were 5,000 mica child labourers in 50 villages (which would be around 50 villages following the official Indian census, while the main mica mining area of Jharkhand/Bihar includes an estimated 300 official Indian Census villages). Extrapolating from these two NGOs estimates the amount of mica child labourers in 2005 would be in the range of 15,000-20,000 for the main mica mining area, which matches with the figure of 18,000.

- The main mica mining area of Jharkhand/Bihar includes an estimated 300 official Indian Census villages. In the period 2010-2015 the NGO BBA declared 60 villages child friendly, some were actually clusters of small villages. Following the official Indian Census the number would be 165 villages. The 165 villages are all located within the main mica mining area. This suggests that one-third of the child labour problem has been taken care of through the implementation of child-friendly villages, with much governmental help. Assuming one-third of the child labour problem is taken care of, this would leave 12,000 mica child labourers.

- However, over the past ten years the tonnages of mica exported from the area have increased by 75%. This has likely led to a proportionally increase of child labourers, bringing the total amount of present child labourers at a figure of 21,000. On the other hand, governmental measures have changed the situation for the better over the last ten years with regard to education and poverty. The effect of these measures is unknown, and likely the figure of 21,000 represents the upper limit of the amount of child labourers.

91. E-mail 10 December 2015 from Peter Bengtsen, field researcher for the Danwatch report.
THE WORK DONE BY CHILDREN
In many villages there are places where locally mined crude mica is gathered, and early processing takes place in the form of cobbing - the process of hammering minerals other than mica from the mined rocks - and/or sieving. Child labour occurs in mica-mining remote villages, where they are involved in mining and also cobbing.

The severity of the child labour differs. Some children between six and fourteen years do not go to school at all. Some of them do the extremely dangerous work of mining in tight holes to about ten metres deep. Some children only work after school, as SOMO witnessed in Kodaibak and Dhab villages during its field investigation.100 SOMO also witnessed that some of the work is outsourced to the family home. This homework involves cobbing and cutting/splitting mica, and it is difficult to determine to what extent children are involved with this homework.

Importers and exporters sometimes downplay the severity of child labour. In July 2009 German importer, Mahlwerk Neubauer Friedrich Goffers acknowledged the problem but claimed that “children work playfully in a family setting”.101 During its field investigation SOMO also met one main mica exporter who stated that the issue of child labour was often confused with women also met one main mica exporter who stated that the issue of child labour was often confused with women

PROCESSING UNITS IN THE CITIES
Most of the processing units that make the mica ready for export are located in the cities of Giridih (115,000 inhabitants), Jhumri Telaiya (88,000 inhabitants), and to a lesser extent in Koderma (125,000 inhabitants) and Domchance (16,000 inhabitants). The total population of these four cities amounts to 244,000.102 Typically, the town of Giridih has the most mica processing factories, while it is located some 40 km southeast of the main mining area (see Figure 6). For the cities of Giridih, Jhumri Telaiya, Koderma and Domchance, mica is an important economic activity.

During the field investigation in Jharkhand/Bihar in October 2015, SOMO spoke to several mica exporters and processors in the cities. They stated that there is no more child labour in processing units that make the mica ready for export. The argument mostly used was that the risk of getting fined by the government or being vulnerable to corruption (the government sometimes conducts sudden visits) was too high, as compared to paying a few rupees less for personnel costs. This seems a plausible argument, and indeed in the two units visited by SOMO no child labour was seen.103 Documents received from the main Chinese pigment producer Kuncai strengthened SOMO’s impression that there is no child labour in the processing units that make the mica ready for export. Documents of June 2014 and December 2015 showed labour officials of the local Giridih government declaring that there was no child labour in the processing units of Kuncais’s main exporters.104

Next to the risk of mines caving in and exposure to silica dust, there are other health and safety issues associated with mica mining/processing by children, according to testimonials of children. Several mentioned fears of snake bites and malaria. Others said they had suffered broken bones, exhaustion and heatstroke.105 Getting stung by scorpions and getting cuts and bruises from sharp stones are also mentioned.106 The fact that the mining is illegal has made the families - including the children - fear outsiders.107

4.2. NGO PROFILE: BACHPAN BACHAO ANDOLAN (BBA)
ONE OF THE LEADING CHILD RIGHTS ORGANISATIONS IN INDIA
Bachpan Bachao Andolan (BBA) or Save the Childhood Movement - is one of the leading child rights organisations in India. It is a non-profit organisation dedicated to protecting children from child labour and trafficking. It was set up in 1978 by Kailash Satyarthi, who won the Nobel Peace Prize in 2014.108 Since 1983 BBA has rescued more than 54,500 child/bonded labourers and has worked towards rehabilitation of a large number of rescued children. BBA has also worked for convergence of government schemes, policies and legislation through advocacy, judicial and legal interventions, and sustained efforts at the village level through community mobilization.109

In September 2014 BBA organised a campaign/march in the mica mining areas of Kodarma and Giridih. A memorandum, signed by over 3,500 children and parents, was handed over to the District Collector (DC), including demands for (a) improving teacher-student ratios; (b) ensuring teachers’ attendance in schools; (c) ensuring sanitation facilities, toilets and clean drinking water; and (d) ensuring access to education for all.110

MICA, THE FIRST 60 CHILD-FRIENDLY VILLAGES
In 2005-2006, BBA began exploring the mica mining area of Jharkhand/Bihar, and it started to run nine schools. Seven of these schools were later handed over to the government.111 BBA believes that schools should always be eventually handed over to the government to ensure continuity.

Since 1983 BBA has rescued more than 54,500 child/bonded labourers and has worked towards rehabilitation of a large number of rescued children.112

99. Field investigation by SOMO; visit to Tisri on Saturday, 10 October 2015 and visit to Dhab on 11 October 2015.
101. Interview by SOMO with several exporters during the field investigation in October 2015.
103. Interview by SOMO with several exporters during the field investigation in October 2015.
107. Documents received in confidentiality by SOMO from Kuncai, January 2016.
109. Email by BBA to SOMO on 22 January 2016.
111. E-mail from BBA to SOMO on 22 January 2016; Center for Victims of Torture, report by Bhuwan Ribhu (an activist of BBA) “Building child labourers, it is logical for BBA to make rural areas the focus of its preventive work. The CFV programme of BBA envisions transforming every village in India into a child friendly village where child rights are protected and children act as change agents for holistic development of their respective villages.”112
In 2007 BBA discussed the matter of child labour with pigment producers Merck and BASF, both of which stopped sourcing from the area.111 In July 2009 the child labour issue was brought into the spotlight internationally, when the UK Sunday Times published an article linking child labour to cosmetics industry companies sourcing from the area.112 In October 2009, BBA organised a conference in Delhi, where it brought together two major purchasers (Merck and Eckart), community leaders and traders. It was agreed that implementing the concept of child-friendly villages looked most suitable and sustainable. A steering committee, including representatives of Merck, local communities, traders, processors and exporters, identified 30 villages. In July 2010, BBA began working in these 30 villages, located in three districts of Jharkhand/Bihar – Koderma, Giridih and Nawada. Merck sponsored the activities for 20 villages, while Eckart supported 10 villages. In the course of the project, BBA worked with local communities and stakeholders such as government officials, teachers and especially with the children and young people in the villages to gain acceptance for the project and to develop a sound relationship. Various activities were carried out to create awareness of the importance of education, to enrol children in school and to disseminate information about the concept of child-friendly villages. Both Merck and BBA claim the project has made visible progress.113 According to BBA an initial survey showed that 975 children of school age were found to be out of school in the 30 villages. Most of the children were going mica mining with their parents, and among the villagers there was little motivation for getting children educated.114

Merck stopped sponsoring the concept in 2013, while Eckart sold its mica portfolio in 2011.115 BBA continued the work. In 2012 it started in 30 more villages. This work was sponsored by the Natural Resources Stewardship Circle (NRSC, a collective of the main cosmetics companies). At present BBA has declared the 60 villages child-friendly (some villages are clustered by BBA and following the official Indian Census, BBA would be 105 villages). It has enrolled 2,200 children in governmental schools for children aged six-fourteen.116 Next to the 60 villages mentioned, BBA is currently working in 20 extra villages in the area of district Giridih, also sponsored by NRSC.

For this report, BBA has provided a list of development achievements in the 60 villages that have been proclaimed child-friendly villages:
- 2,750 children enrolled in schools.
- Two schools upgraded to middle and high schools respectively, one new school built.
- Bal Panchayats (children’s councils) formed in 60 villages.
- Improvement in school infrastructure including provision of a blackboard, water facilities, toilet facilities, construction of a kitchen and 24 new classrooms.
- Teachers attendance improved, with eleven teachers recruited, including one para teacher.
- Midday meals in schools became regular.
- Bank accounts opened for 165 students who were eligible for scholarship from the government. Stakeholders groups (a youth group and women groups) were formed in all 60 villages.
- The opening hours of eight primary health centres became regular, and one new primary health centre was built.
- 165 hand-pumps installed, seven repaired with the support of the government department. Seven check dams built to prevent flooding of villages and schools.
- 45 ponds constructed under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- One Anganwadi centre (neo- and postnatal care centre) was opened.
- Around 3,951 individuals benefited from social security schemes.
- Through BBA’s efforts with communities, the Jharkhand State Government decided to provide uniforms to children in all government schools in Jharkhand and to serve a midday meal.
- BBA outreach involved 2,410 people: 6,600 men, 6,300 women, 3,900 boys and 3,500 girls.117

4.3. ANDHRA PRADESH AND RAJASTHAN

An employee of the Indian NGO Association for Rural Development (ARD) reported in January 2013 that children from the age of seven work in illegal mines in the Gadur area of Nellore district, Andhra Pradesh.118 There are more recent reports about illegal mica mining and inhumane working conditions in this area.119 Some older information was also found.120 However, the information found during desk research did not allow for a conclusive view on social impacts, specifically child labour.

For mica mining in Rajasthan, which is predominantly taking place in Bhilwara district, no information could be found on prevalence of child labour during the course of this report.

4.4. LAWS AND GOVERNMENTAL/COMPANY POLICIES ON CHILD LABOUR

INDIAN LAWS ON CHILD LABOUR

The most important Indian laws related to child labour are:

• The Right of Children to Free and Compulsory Education Act of 2009. This law states that every child between the ages of six and fourteen years has a right to free and compulsory education in a neighbourhood school until completion of their elementary education.121

111. BASF e mail to SOMO on 22 January 2016
117. The Indian government is currently in the process of amending the Child Labour (Prohibition and Regulation) Act of 1986. This law prohibits children under fourteen years from working in eighteen hazardous occupations and processes. Most relevant to mica are the following prohibited occupations and processes: mining (underground); mica-cutting and splitting; processes involving exposure to free silica.122

119. E-mail from BBA to SOMO on 22 January 2016
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128. “The changes would outlaw child labour below the age of fourteen in all sectors, but an exemption is made for children under fourteen working in family enterprises.”
INTERNATIONAL LABOUR ORGANIZATION CONVENTIONS 138 AND 182

The two main Conventions of the ILO (which is part of the United Nations) focusing specifically on child labour are:

- **C138 - Minimum Age Convention, 1973:** This convention sets the age at which children can legally be employed or otherwise work. The minimum age for work should not be below the age for finishing compulsory schooling and in any case not less than fifteen. Hazardous work should not be done by anyone under the age of eighteen.126

- **C182 - Worst Forms of Child Labour Convention, 1999:** This convention commits its members to take immediate action to eliminate the worst forms of child labour within their state.127 These involve children being enslaved, forcibly recruited, prostituted, trafficked, forced into illegal activities or exposed to work that is likely “to harm the health, safety or morals of children” (hazardous work).

As specified in the ILO Declaration on Fundamental Principles and Rights at Work (1998), ILO Conventions 138 and 182 on child labour are considered “core” conventions.128 Under the ILO Declaration, even the member states that have not yet ratified these conventions should respect, promote and realise the principles. This means that all Member States are required to prevent children from being involved in such situations, remove children already in these worst forms of child labour, ensure access to education instead of child labour, identify at-risk groups and reach out to them, and to take the special situation of girls into account.

India has not (yet) ratified both conventions.129 After the passing in parliament of the present proposals to amend India’s Child Labour (Prohibition and Regulation) Act, the country’s laws still seem weaker than the child rights presented in Core Conventions 138 and 182. This is due to the exemption proposed for children under fourteen working in family enterprises, and the amendment to define only a few occupations as forbidden hazardous work for children between the ages of fifteen and eighteen.

India is by far the largest country that has not ratified ILO Conventions 138 and 182.130

UNITED NATIONS CONVENTION ON THE RIGHTS OF THE CHILD (UNCRC)

The United Nations Convention on the Rights of the Child (UNCRC) is a human rights treaty which sets out the civil, political, economic, social, health and cultural rights of children. The Convention defines a ‘child’ as a person below the age of eighteen, unless the laws of a particular country set the legal age for adulthood younger. All governments except the United States have ratified the UNCRC. Governments of countries that have ratified the Convention are required to report to, and appear before, the United Nations Committee on the Rights of the Child periodically to be examined on their progress with regard to the advancement of the implementation of the Convention and the status of child rights in their country. Their reports and the committee’s written views and concerns are available on the committee’s website.

India ratified the UNCRC on 11 December 1992, though it made some reservations related to child labour. Article 32 of the UNCRC deals with child labour. Paragraph 2(a) of the article states that states should provide “for a minimum age or minimum ages for admission to employment”. The Government of India has made the reservation that “it is not practical immediately to prescribe minimum ages for admission to each and every area of employment in India”. Moreover, India has stated that progressive implementation of economic, social and cultural rights of the children are “subject to the extent of available resources”.131 In its latest report of July 2014, reviewing India’s latest progress report, the United Nations Committee on the Rights of the Child reiterated its serious concern that there are still a large number of children involved in economic exploitation in India, including child labour in hazardous conditions, such as in mining, and bonded labour in the informal sector as domestic servants and in agriculture.132

UN GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS

Where the previously noted international treaties aim to commit states to the protection of human rights, the UN Guiding Principles on Business and Human Rights (UNGPs, 2011) also take the responsibility of businesses to respect human rights (including children’s rights) into account.

The UNGPs prescribe that business enterprises, in order to meet their responsibility to respect human rights, should have in place policies and processes appropriate to their size and circumstances, including:

- a policy commitment to meet their responsibility to respect human rights; a human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights; processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute.133

Thus, businesses are made responsible for human rights violations in their entire supply chain and should, for example, prevent the use of child labour by all their suppliers. However, the UNGPs are not binding in any way. Professor John Ruggie, who has been leading the process towards the UN Guiding Principles on Business and Human Rights, has recently stated that governments’ social development initiatives (such as the running of schools and health centres by companies) cannot substitute for measures to address the negative human rights impacts their operations and relationships may have.134

OEC GUIDELINES FOR MULTINATIONAL ENTERPRISES

In order to ensure responsible business conduct by companies operating globally, OECD Member States created Guidelines for Multinational Enterprises (OECD Guidelines). These are a set of normative standards for responsible business conduct on topics such as human rights, labour standards, environmental standards, corruption, disclosure, taxation and other issues. The recommendations are addressed by governments to multinational enterprises operating in or from the 45 adhering countries.135 Adhering governments have signed a binding commitment to implement the OECD Guidelines, but the recommendations are not legally binding on companies.

To stimulate the OECD Guidelines’ implementation, members are required to create National Contact Points (NCPs) – offices tasked with promoting their use. At these NCPs, people who have had their rights violated by a business practice in contravention of the OECD Guidelines can file a complaint concerning that company. For example, a hypothetical Indian community whose children have been employed by a Dutch company could file a complaint against that company at the Dutch NCP. The NCP will then attempt to resolve the issue through mediation or conciliation. If mediation/conciliation is unsuccessful, the NCP can conduct an investigation to determine whether a breach of the Guidelines has occurred and make a public statement with recommendations to the company to improve implementation of the Guidelines.
In June 2013, the Dutch government announced its intention to identify the most risky Dutch business sectors in relation to adverse corporate impacts on the environment, labour rights and human rights.141 A study by KPMG concluded that there were thirteen sectors deemed as high risk yet important to the Dutch economy: construction, chemicals, retail, electronics, energy, financial sector, wholesale, wood and paper, land and horticulture, metal, oil and gas, textiles and clothing, and food. Child labour was especially linked to the electronics, textiles and food sectors.142

The Dutch government now aims to create covenants with sectors towards responsible supply chain management practices143– one of which will be on gold.144 It is expected that child labour will be addressed in these covenants too. This report shows that a number of Dutch companies are directly linked to child labour through their business relationships in the global mica supply chain and have leverage to prevent or mitigate this adverse impact, either individually or in cooperation with each other. This makes mica a relevant candidate for the Dutch government to facilitate cooperation between stakeholders involved in the Dutch mica supply chain and make sure that Dutch companies use their leverage in the global mica supply chain.

"Child labour was especially linked to the electronics, textiles and food sectors"
5. SOCIAL IMPACTS, OTHER THAN CHILD LABOUR

5.1. HEALTH AND SAFETY

THE DANGER OF COLLAPSING MINES

Underground mines produce dangerous gases that can suffocate people if ventilation is inadequate. The biggest risk of underground mines is, however, the threat of collapse. Tragic accidents regularly happen underground in Jharkhand/Bihar’s illegal mines:

- In November 2015 three people died when a section of the tunnel in which they were extracting mica collapsed.151
- In March 2015 a ten-year-old local girl was crushed to death when the roof of a mica mine where she was working collapsed.152
- In March 2014 two children were buried alive when the roof of a mica mine caved in.153

LUNG DISEASES

During drilling in rocks to extract mica, workers may inhale silica dust, long-term exposure to which may lead to silicosis - a potentially deadly lung disease. This ‘respirable’ dust - which is not visible to the naked eye - consists of particles so fine that that they can enter deep into the lungs. In 1953 a total of 62 mica hand-drillers in Bihar were examined - of these, seventeen had silicosis. Two patients had worked fifteen and twenty years respectively, while the fifteen others with silicosis had an average exposure of eleven years. Respirable quartz in silica dust is also associated with the development of lung cancer, pulmonary tuberculosis and other respiratory diseases.154 Silicosis is also reported among mica miners in Andhra Pradesh.155 A 1999 report of the Indian Council for Medical Research estimated that 650,000 workers in the glass and mica industry of India are at high risk of silica exposure. Through wet drilling, mechanical ventilation and other protective measures inhalation can be reduced. However, with the rampant illegality of the mining underway, the prevalence of these protective measures is unclear.156

Exposure to mica powder, which is free from silica dust, may also lead to lung problems. A study in 2003/2002 among mica workers (not miners) in Giridih, Jharkhand, showed that 37 of the 420 mica workers were suffering respiratory problems, including chronic obstructive respiratory diseases, coughs with breathlessness etc. The workers had tasks such as mica picking, screening, cutting, grinding of mica powder, splitting and packing. The study concluded that it was confirmed that exposure of workers to mica powder may cause irritation of the respiratory tract, which may lead to pneumococciosis.157

5.2. WAGES

LEGAL WAGES

The Indian Ministry of Labour and Employment regularly surveys the basic wages earned by workers in India’s main manufacturing, mining and plantation industries. The survey covers 21 industries, of which fourteen are manufacturing industries, four are mining industries and three are plantation industries. In 2014 workers in the mica mining sector received an average daily wage of INR 123 (equivalent to € 1.7).158 During 2014, the average daily wage for the 21 industries amounted to INR 272 (equivalent to € 3.7). This means that the average daily wage of a mica miner is 45% of the average daily wage of a legal worker in India. Of all 21 industries, only tea plantation workers in North-East India received a lower basic wage than mica mining sector workers.159

As of 1 October 2015 the Indian minimum wage of a semi-skilled mica miner amounts to a daily INR 150 (equivalent to € 2.1) for mining above the ground and INR 130 (equivalent to € 1.8) for underground mining.160 Semi-skilled workers in the category Mica Works (Factories and Establishments Excluding Mines) should have earned at least INR 134 (equivalent to € 1.8) daily in Jharkhand between October 2014 and March 2015.161

All in all, wages earned by legal workers in the mica mining and processing sector appear to be very low in comparison to other sectors in India. During its field investigation SOMO discovered:

- Older men cutting mica along the streets of Domchanch were earning INR 120 (equivalent to € 1.7) per day in October 2015, while the salary of their direct supervisors amounted to INR 150 (equivalent to € 2.1) per day.162
- A group of 20-30 people working in a pit above the ground in a probably legal mine in Faguini (Bihar) was reported to earn 10 rupees per kilogram of mica mined in October 2015.163 The group did not receive a daily wage and their earnings depended on their production. The German pigment producer Merck is thought to be one of this mine’s customers.164 The company has stated that it checks whether its supplying mine owners are paying the minimum wages, and that Indian law allows for wages based on productivity as long as earning a daily wage similar to the minimum wage is realistically achievable.165

INFORMAL EARNINGS

Price earned per kilogram for collected or illegally mined mica seems to be in the range of INR 3.5 and occasionally INR 26 per kilogram. It is not clear whether these figures include cobbing after mining. Moreover, the quality of the mica delivered may differ. Figures appear to indicate that in villages, a maximum of INR 10 (equivalent to € 0.14) is earned per kilogram of mined/collected and cobbed mica. The average price paid by the pigment producers Merck, Kuncai and Ruicheng for their mica flakes was INR 32 (equivalent to € 0.44) per kilogram in the first half of 2015.166

158. Used exchange rate (€1 = 72.7145) for this section is the average between Sunday 2 August 2015 and 26 January 2016, http://bit.ly/1RRPfw3.
162. Personal communication with the mica cutters during field investigation by SOMO, 11 October 2015.
163. Personal communication with mine supervisor of a (probably legal) mine at Faguni (Bihar) during field investigation by SOMO, 13 October 2015.
164. Field investigation by SOMO, anonymous source, 13 October 2015.
165. Documents received in confidentiality by SOMO from Merck, January 2016.
166. Infodrivendia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.
There is some documentation on what villagers illegally mining in Jharkhand/Bihar may earn:

- In its February 2014 report, Danwatch reported that workers (children and adults) illegally collecting mica in Jharkhand/Bihar earned between INR 100 (equivalent to € 1.4) and INR 150 (equivalent to € 2.1) per person per day.  
- A September 2014 newspaper article by Al Jazeera reported earnings of INR 20 (equivalent to € 0.3) after mining mica for seven to eight hours by a boy of five.  
- A woman of 25 who was cobbing and sieving mining produce in the Tisri area reported in October 2015 that she earned INR 900 a week, which is INR 150 (equivalent to € 2.1) per day.  
- The Australian newspapers *The Age*/*Sydney Morning Herald*, visiting the area in January 2014, reported payments of INR 50 (equivalent to € 0.7) for 10 kilograms of mica gathered in a day by a boy of twelve.  
- In May 2015 a woman of 22 who was mining mica illegally in the village of Dhab told a photographer: “I can make up to 20 kilos of mica per day, selling it at 10 rupees per kilo.” She was mining underground. In the rainy season she could not mine, as the mines were waterlogged and in danger of collapse. Another woman of 22 was reported to earn INR 7 per kilo. A woman of 60, only being able to collect scrap mica from the surface, was reported to be earning as low as INR 5 per kilo.  
- A New York Times article of May 2012 mentioned families in a village who were trying to collect at least 15 kilograms of mica each day, to be sold for INR 3 a kilo.  

Medical bills may worsen the poverty situation. For example, in February 2015 a 25-year-old woman from the village of Dhab fractured her right leg when the mine where she was working subsided, completely burying her. The family took an INR 100,000 loan (equivalent to € 1,500) to pay for her hospital expenses.  

### 6.1. A STRONG PRESENCE IN THE GLOBAL SUPPLY CHAIN

There are a considerable number of Dutch companies with leverage (power to influence others and the ability to change wrongful practices of the business partner causing or contributing to the impact) in the global mica supply chain:

- **AkzoNobel** is the world’s number two paint/coatings manufacturing company. It is a large user of mica in pearlescent pigments to create a sparkling paint effect on aircraft, cars, building roofs, metal surfaces etc.
- **Prysmian/Draka** is the world’s largest supplier of cables to the energy and telecoms industries. The Prysmian Group has two commercial brands: Prysmian and Draka. In the Netherlands the Prysmian Group is present in six locations: Amsterdam, Delft, Emmen, Nieuw Bergen, Delfzijl and Eindhoven. The company uses mica tape for a wide range of cables. Its large presence in the Netherlands is due to its take-over of the Dutch cable company Draka in 2011.
- **Unilever** is the world’s number three cosmetics/personal care company. It is the market leader for cosmetics (foundation, eye shadow, lip gloss, nail polish etc.) in India, and uses mica in pearlescent pigments for this. Worldwide the company also uses mica for personal care products, such as shampoo and conditioners.
- **Royal Philips** is a leading producer of hair dryers and toasters worldwide. Mica sheets are a component of both hair dryers and toasters.
- **Royal DSM** is the world’s ninth biggest company manufacturing plastics material and resin. The company uses mica for its plastic engineering.
- **Mica-containing cosmetics are sold in many retail chains in the Netherlands - in drugstores, perfumeries and warehouses. The largest owners of the retail chains are A.S. Watson Benelux (owns the Kruidvat and Trekpleister chains, among others), Ahold (Eto's drugstore chain and Albert Heijn supermarkets) and Lion Capital (HEMA).**

Whether a company is Dutch was decided on the basis of having its main registration/headquarters in the Netherlands or having main activities in the Netherlands. The eight companies mentioned above have all been questioned by SOMO about the origin and quantity of mica used, and about the due diligence they have conducted on human rights in their mica supply chain. Profiles of these companies, including their response to SOMO’s questions, can be found in sections 6-8.9 of this chapter.

"There are a considerable number of Dutch companies with leverage in the global mica supply chain.”
6.2. DUE DILIGENCE CONDUCTED BY DUTCH COMPANIES

While all eight Dutch companies questioned for this report are not actively mining/processing mica in Jharkhand/Bihar, all eight are purchasers of mica and/or mica-containing products from the region, which means they are directly linked to actual or potential adverse human rights impacts through their business relationships.

The United Nations, the OECD and the Dutch government all stipulate that companies should carry out human rights due diligence when engaged in a supply chain with serious human rights issues.

Carrying out due diligence means that a company should identify, prevent and mitigate any actual or potential adverse human rights impacts. Moreover, a company needs to be transparent on how it addresses the issues.175

Table 13 below shows to what extent the eight Dutch companies have conducted due diligence with regard to the issue of child labour for mica mining and processing, and whether (some of) the mica the companies use comes from Jharkhand/Bihar.

It appears that four companies had significantly conducted due diligence (AkzoNobel, Unilever, DSM and Ahold), while for the other four companies (Prysmian/Draka, Royal Philips, A.S. Watson Benelux and HEMA) there was no indication of any due diligence conducted.

For this report SOMO also questioned Royal Dutch Shell on its possible use of mica for oil-well drilling. Disappointingly, the oil company did not respond.

Supply chain due diligence can be more effective when conducted in collaboration with other companies operating in the same sector. None of the eight companies questioned by SOMO reported any activity to collaborate with their business colleagues.

Figure 7 shows how the Dutch companies are situated in the global mica supply chain.

Table 13: Dutch companies and due diligence in relation to mica and child labour

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>DUE DILIGENCE CONDUCTED ON MICA</th>
<th>MICA FROM JHARKHAND/BIHAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AkzoNobel</td>
<td>Significantly</td>
<td>Yes</td>
</tr>
<tr>
<td>Prysmian/Draka</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
<tr>
<td>Unilever</td>
<td>Significantly</td>
<td>Yes</td>
</tr>
<tr>
<td>Royal Philips</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
<tr>
<td>DSM</td>
<td>Significantly</td>
<td>No</td>
</tr>
<tr>
<td>A.S. Watson Benelux</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
<tr>
<td>Ahold</td>
<td>Significantly</td>
<td>Yes</td>
</tr>
<tr>
<td>HEMA</td>
<td>Not found</td>
<td>Possibly</td>
</tr>
</tbody>
</table>

**6.3. COMPANY PROFILE: AKZONOBEL**

**THE WORLD’S SECOND LARGEST PAINT COMPANY**

The Dutch-Swedish company AkzoNobel is the world’s second largest paint manufacturing company.²⁰⁹ Its revenue amounted to € 14.3 billion in 2014. AkzoNobel’s production facilities in Europe (49%), Asia (25%) and USA/Canada (16%) accounted for most of the revenue.²¹⁰

AkzoNobel has three business areas: performance coatings (39%), specialty chemicals (34%) and decorative paints (27%). Performance coatings (the main part of the business) include coatings for cars, vessels, aircraft, yachts, architectural components, consumer goods and oil/gas platforms. Clients include Airbus, Boeing, Bosch, Dell, IKEA, Philips, Samsung, Shell, Toyota, Volkswagen and Whirlpool.²¹¹

**MICA USE**

AkzoNobel produces a wide range of coatings to which mica-containing pearlescent pigments are added to create a sparkling special effect. These pearlescent pigments contain not only mica, but also titanium dioxide or iron oxide.²¹²

AkzoNobel primarily uses natural mica. The company prefers natural mica (as opposed to synthetic mica) because of the impurities of the natural mica, which creates a special sparkling effect. The company also mentioned that repair of car coatings, which is a large business area, cannot be done with synthetic mica if the original paint was produced with natural mica, as the difference would be visible. As long as the automotive industry does not switch to synthetic mica, AkzoNobel also cannot make the switch. Finally, synthetic mica is more expensive.²¹³

In future, however, volumes of synthetic mica are expected to grow and AkzoNobel is looking to actively transfer from natural to synthetic mica whenever this is possible. They are working together with the Chinese company Fujian Kuncai Material Technology (Kuncai) and others on this.²¹⁴ Kuncai is rapidly expanding its capacities to produce synthetic mica.

AkzoNobel has not responded to SOMO’s questions with regard to the quantity of mica it uses.²¹⁵

**SUPPLIERS AND CHILD LABOUR**

In a telephone conference with SOMO on 24 September 2015, AkzoNobel disclosed that worldwide it sources 95% of its mica from two companies: Merck KGaA and BASF. Merck is the biggest supplier to AkzoNobel.²¹⁶ The remaining 5% is bought from 10 other companies, mainly in the Asia-Pacific area. Kuncai (1%), Sudarshan Longhua and Oxen are among these companies.²¹⁷ Merck, Kuncai, Sudarshan and Oxen are known to source mica from Jharkhand/Bihar.²¹⁸

AkzoNobel expects its suppliers to comply with its Code of Conduct, which states that child labour is not permitted. The company expects the child labour to be a temporary issue.²¹⁹

**INTERVENTIONS**

- AkzoNobel adheres to the legal minimum age requirements in all countries in which the company is active.
- Moreover, in adhering to the International Labour Organization’s (ILO) Convention 138 on “Minimum Age,” and Convention 182 on the “Ban of Worst Forms of Child Labour”, AkzoNobel does not employ children under the age of sixteen.
- If children between sixteen and eighteen years are employed, the company ensures that this work does not affect or preclude schooling.²²⁰ During the telephone conference between AkzoNobel and SOMO, AkzoNobel stated that it does not allow child labour in its first, second and third tier of suppliers.²²¹
- AkzoNobel has stated that it knows where BASF and Merck are mining the mica used for the special effect pigments it buys. Merck has asked AkzoNobel to sign a confidentiality agreement on this, meaning AkzoNobel could not share the mining locations with SOMO.²²²
- AkzoNobel has a vendor policy in place.²²³ All the suppliers are asked to sign a Vendor Compliance Letter, which confirms the exclusion of child labour. Kuncai and Sudarshan, small suppliers of AkzoNobel, have signed such a letter, according to AkzoNobel. The compliance of Sudarshan has not been further checked, while AkzoNobel stated that compliance checking of Kuncai was ongoing at the beginning of October 2015.

**Supportive Supplier Visits (SSV)**

Supportive Supplier Visits (SSV) are implemented to develop regular business partnerships. The aim is to identify and nurture these critical suppliers as sustainable business partners.

**Ensure Compliance**

- Merck and BASF are not considered for SSV by AkzoNobel. This is in part because Merck and BASF have, according to AkzoNobel, shown proof that they conduct audits on a regular basis, in order to safeguard compliance with their own business principles.²²⁴

**6.4. COMPANY PROFILE: PRYSMIAN/ DRAKA**

**THE WORLD’S LARGEST SUPPLIER OF CABLES**

The Prysmian Group is the world’s largest supplier of cables to the energy and telecoms industries. Its 2014 revenue was € 6.8 billion, 64% of which came from Europe, the Middle East and Africa.²²⁵

The Prysmian Group has two commercial brands: Prysmian and Draka. Both brands are active in the Benelux market. Draka operates in the low-voltage and telecoms market while Prysmian cables are used in high voltage and energy distribution networks. The Dutch company Draka was taken over by Prysmian in 2011. In the Netherlands, the Prysmian Group is present in six locations: Amsterdam, Delft, Emmen, Nieuw Bergen, Delfzijl and Eindhoven.²²⁶

**SUPPLIERS AND CHILD LABOUR**

Prysmian/Draka uses mica tape for a wide range of cables. The company has not revealed any information about the origin and quantity of mica used. The Chinese company Silimica, a large importer of mica from Jharkhand/Bihar, claims to be a supplier to Prysmian and Draka.²²⁷

In 2014 the Prysmian Group adopted a Code of Business Conduct that will apply to all employees and suppliers from 2015.²²⁸ In this document the Prysmian Group does not forbid its suppliers to use child labour, but the company “supports the commitment of employees and suppliers to eliminate child labour.”²²⁹ No specific information could be found on the company’s website with regard to human rights due diligence on mica.
6.5. COMPANY PROFILE: UNILEVER

CONSUMER GOODS GIANT

With a global revenue of €48.4 billion, the Anglo-Dutch consumer goods giant Unilever ranked 13rd on the Fortune Global 500 during 2014. Its portfolio consists of 400 brands divided into four categories: personal care, foods, refreshment and home care. With a revenue of €17.7 billion in 2014, the personal care category is Unilever’s largest in terms of revenue. Unilever’s biggest personal care brands are Dove, Rexona, Axe, Lux and Sunsilk.

MICA USE BY UNILEVER

In response to information and questions sent by SOMO, Unilever has stated that it is ‘a relatively small buyer of mica globally’. According to the company its mica use is less than 0.1% of global mica production, which is estimated at 500,000 tonnes.

Andrélon Shampoo Levendige Kleur
Opacifier

Dove Nutritive Therapy Shampoo Nourishing Oil Care
Opacifier

Dove Shower Men Daily Purifying
Opacifier

AXE Shampoo 2in1
Opacifier

AXE Shower Gel Cool Metal
Opacifier

AXE Shampoo Peace
Pearlescer

Dove Nutritive Therapy Shampoo Nourishing Oil Care
Coloarant

Dove Repair Therapy Shampoo Color Care
Opacifier

Table 14: Examples of Unilever products containing mica and sold in the Netherlands

Source: Unilever, “What’s in our Products, Netherlands”, Andrélon: http://bit.ly/1Y9pQD1,

Unilever is the majority-owner of the Indian Lakmé cosmetics brand and the Elle18 cosmetics brand, focusing on cosmetics for young people.204 Lakmé leads the Indian market for cosmetics products. Its market share is estimated to be between 17.7% and 30%.205 This also means that Unilever uses substantial amounts of mica. India is the only country where Unilever sells make-up.

Lakmé sells the following range of products:

- Lakmé moisturising creams/lotions
- Skin lightening/Lakmé perfect radiant products
- Sun protection/Lakmé sun expert products
- Face: foundation, compact, make-up remover
- Eyes: eye shadow, eyeliner, mascara
- Lips: lip liner, lip gloss, lip colour
- Nails: nail colour and nail tip

Lakmé, a subsidiary of the Indian conglomerate Hindustan Unilever Limited, is India’s leading skin and personal care brand. Lakmé accounts for 16.4% of Hindustan Unilever’s net revenue, which was €17.7 billion in 2014. This figure, 16.4% of Hindustan Unilever’s net revenue, includes shaving products and deodorants and excludes hair and oral care.206

Hindustan Unilever’s personal products business segment generated INR 90 billion (equivalent to €1.3 billion) revenue in the year ending 31 March 2015. This figure, 29% of Hindustan Unilever’s net revenue, includes products in the categories of oral care, skin care (excluding soaps), hair care, deodorants, talcum powder, colour cosmetics, Ayurveda (Ayurveda, Yoga and Naturopathy), Unani, Siddha and Homoeopathy) services, etc.207

Worldwide, Unilever uses mica for personal care products, such as shampoo and conditioners. According to a cosmetics database of the US-based non-profit organisation Environmental Working Group, mica is an ingredient for 65 conditioners, shampoos, and body wash/cleansers sold by Unilever on the US market under the brand names Axe, Dove, Suave, Finesse, Clear and Carex.208 Unilever also self-discloses the ingredients of its products. In the Netherlands it sells mica-containing products through its brands Dove, Andrélon and AXE. Table 14 shows some examples of Unilever products containing mica and sold in the Netherlands.

Unilever has a Code of Business Principles which states that Unilever “will not use any form of forced, compulsory, trafficked or child labour.”209 In 2014, Unilever launched its Responsible Sourcing Policy (RSP), which contains mandatory requirements and best practices on human rights. One of the requirements is that all workers are of an appropriate age, meaning that “under no circumstances will a supplier employ workers under the age of 15 or under the minimum age for work or mandatory schooling as specified by the local law, whichever is higher.”210 Unilever also requires its suppliers to ensure that their extended supply chains are free from child labour and all forms of exploitation. According to Unilever, 85% of its strategic suppliers met the RSP criteria as of March 2015.211

Unilever has confirmed that Merck and Sudarshan are compliant with the Mandatory Requirements of the RSP and both have confirmed they will work with Unilever to advance to Good Practice level. In addition, both companies have their own Business Codes and enforcement programmes, including principles to ban child labour. Their principles are directly targeted at mining companies, including those in Jharkhand and Bihar, according to Unilever.212

Unilever is the majority-owner of the Indian Lakmé cosmetics brand and the Elle18 cosmetics brand, focusing on cosmetics for young people.

206. E-mail response by Unilever to questions sent by SOMO, 6 October 2015.
209. E-mail response by Unilever to questions sent by SOMO, 6 October 2015.
Philips has stated that, of its annual 309 tonnes of mica, 300 tonnes originate from China and nine tonnes from India.210 SOMO has asked Philips to further check this information as mica sheets usually originate from India and perhaps Russia, not China.211 Philips is in contact with its suppliers to retrieve the origin of mica material sourced in both China as well as India. At moment of publication of this report Philips has not yet been able to disclose the answer to this extra question.212

Table 15: Breakdown of Philips' revenue during 2014 (€ billion)

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>REVENUE</th>
<th>REVENUE</th>
<th>SUB SEGMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>9.2</td>
<td>3.2</td>
<td>Imaging systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.9</td>
<td>Patient care and monitoring solutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5</td>
<td>Customer services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.6</td>
<td>Informatics, solutions and services</td>
</tr>
<tr>
<td>Consumer lifestyle</td>
<td>4.7</td>
<td>2.2</td>
<td>Domestic appliances</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.5</td>
<td>Personal care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.0</td>
<td>Health and well-being</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.1</td>
<td>Light sources and electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4</td>
<td>Professional lighting solutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.4</td>
<td>Consumer luminaires</td>
</tr>
<tr>
<td>Innovation, group and services</td>
<td>0.6</td>
<td>0.6</td>
<td>Innovation, group and services</td>
</tr>
<tr>
<td>Total</td>
<td>21.4</td>
<td>21.4</td>
<td></td>
</tr>
</tbody>
</table>

Philip has stated that the company is a leader in cardiac care, acute care and well-being, meaning that Philips is a very small player in the global healthcare market, according to the company.213 This puts Philips mica use at an estimated 0.05% of global mica use, meaning that Philips is a very small player in the global mica supply chain, according to the company.214

Almost all mica used by Philips ends up in hair dryers and toasters - mica sheets are used for both. According to Philips, both the total mica use as well use of mica per iron has declined over the past few years. One of the reasons Philips cites is that the rise in global demand for mica (backed up by research)215 is leading to higher prices of mica washers and a growing search for alternative materials.216

6.7. COMPANY PROFILE: ROYAL DSM

ACTIVE IN HEALTH, NUTRITION AND MATERIALS

Royal DSM is a Dutch company manufacturing products in three fields: health, nutrition and materials (the latter refers to engineering plastics and resins mostly). It is active in seventeen global markets, ranging from construction to textiles and fragrances. It ranks ninth in the list of global plastics material and resin manufacturing companies.217 The company has 25,000 employees and its net sales amounted to € 9.3 billion in 2014.218

SOMO's enquiry.225

Philips says that "responsible sourcing of minerals is an important part of our supplier sustainability commitment."219 The company is a member of the "Conflict Free Sourcing Initiative" and the "Conflict Free Smelter (CFS) program". These efforts are dealing with conflict minerals (tungsten, tantalum, tin and gold). Regarding specific materials like mica there is no reference in the Philips documents and policy. The company stated that it had not conducted any human rights due diligence on mica specifically before SOMO’s enquiry.220

Philips says that "putting the global mine production of mica at an estimated 300,000 tonnes per year, DSM’s share of global mica use would be less than 0.1%.”221

One of DSM’s suppliers, as identified by SOMO, is the German company Quarzwerke GmbH. This company sources its mica from an Austrian mineral deposit operated by the company Aspangwerke Bergbau and Mineralerwerke GmbH. Quarzwerke delivered 21 tonnes of mica powder to DSM-EP in the US in the first half of 2015.222 DSM has stated that this quantity covers the complete annual mica consumption by DSM-EP in the Americas. Its consumption in the EU, which is from the same supplier, is somewhat higher.223

6.6. COMPANY PROFILE: ROYAL PHILIPS

HEALTHCARE, CONSUMER LIFESTYLE AND LIGHTING

Netherlands company Royal Philips is a diversified technology company manufacturing companies segments: healthcare, consumer lifestyle and lighting. The company is a leader in cardiac care, acute care and well-being, healthcare, energy efficient lighting solutions and new lighting applications, as well as male shaving and grooming and oral healthcare.210 Table 15 shows a breakdown of Philips’ revenue of € 21.4 billion during 2014.211

As a result of the transition towards a health and well-being company, Philips is selling off parts of the business not related to these activities.

MICA USE

Philips’ mica use is limited to its consumer lifestyle segment. The products containing mica are hair dryers, toasters, irons, coffee makers, induction cookers and pressure cookers.Philips’ total mica use amounts to 309 tonnes per year, according to the company.212 This puts Philips mica use at an estimated 0.05% of global mica use, meaning that Philips is a very small player in the global mica supply chain, according to the company.213

Almost all mica used by Philips ends up in hair dryers and toasters - mica sheets are used for both. According to Philips, both the total mica use as well use of mica per iron has declined over the past few years. One of the reasons Philips cites is that the rise in global demand for mica (backed up by research)215 is leading to higher prices of mica washers and a growing search for alternative materials.216

211. Philips, “Company Profile”, http://philips.to/1kZQGzG.
213. Meeting between Philips and SOMO representatives, 22 December 2015.
215. E-mail responses on 4 December 2015 and 12 January 2016 by DSM to SOMO.
217. Meeting between Philips and SOMO representatives, 22 December 2015.
219. Meeting between Philips and SOMO representatives, 22 December 2015; E-mail from SOMO to Philips, 23 December 2015.
224. Philips, “We are working to make our supply chain conflict free”, http://philips.to/1l62GuC (13 November 2015).
225. Meeting between Philips and SOMO representatives on 22 December 2015.
229. E-mail responses on 4 December 2015 and 12 January 2016 by DSM to SOMO.
231. E-mail responses on 4 December 2015 and 12 January 2016 by DSM to SOMO.
Half of DSM’s mica consumption takes place in Asia. In Asia, DSM makes use of three suppliers that source mica from different mining areas. DSM did not want to disclose the names of the suppliers and mines due to confidentiality. The company stated however that it has an audit plan, and that no mica is sourced from the Jharkhand/Bihar area in India. Moreover, DSM received statements from all its four mica suppliers that they are compliant with DSM’s Supplier Code of Conduct (S-CoC).  

CHILD LABOUR

DSM rejects and condemns any form of forced labour or child labour, “either at our own premises or within our supply chain”.  

With regard to health and safety.  

Compliancy to the Minimum Age and Worst Forms of Child Labour (S-CoC), which refers to the ILO Conventions 138 and 182 (Worst Forms of Child Labour) (S-CoC). DSM has a Supplier Code of Conduct supply chain.

either at our own premises or within our

DSM rejects and condemns any form of forced labour or child labour, “either at our own premises or within our supply chain”.  

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either at our own premises or within our

DSM rejects and cond...
Mica containing products are supplied to Ahold by many companies, as branded products or as own brand. Manufacturers of its own-brand decorative cosmetic products are in the main supplied by Merck and BASF (2nd tier suppliers of Ahold). Ahold knows the countries of origin for the used mica by these suppliers.256

CHILD LABOUR
Ahold has defined “Standards of Engagement”, which set minimum standards for its suppliers. One of the standards is on prohibition of child labour, “Child labour is forbidden as defined by ILO and United Nations Conventions and/or applicable law. Any forms of exploitation of children are forbidden. Working conditions resembling slavery or harmful to children’s health are forbidden.”259

Ahold claims it is in the process of mapping its own-brand suppliers and manufacturers.261 In its “Responsible Products” programme, Ahold explains how it collaborates with suppliers, producers and farmers on sustainable sourcing, but this is mainly aimed at six “critical commodities” (e.g. coffee, tea and soy) and does not specifically include mica.262

In its response to SOMO, Ahold stated that it has identified child labour as an issue in mica production. Where potentially sourcing from India, it has asked its suppliers. The company enjoys virtually 100% brand awareness in the Netherlands.263

COMPANY PROFILE: HEMA

100% BRAND AWARENESS IN THE NETHERLANDS
HEMA is a limited liability company with its registered seat and head office in Amsterdam. HEMA’s shares are ultimately 100% held by Dutch Lion Cooperatief U.A., an investment company owned by several investment funds advised by Lion Capital. Lion Capital is a British private equity firm specialising in investments in the consumer sector. HEMA’s net sales amounted to 1.1 billion in 2014, of which 0.8 billion was derived from retail customers and 0.3 billion from franchisees. Net sales in the Netherlands were 0.8 billion.

HEMA has over 700 stores across the Netherlands, Belgium, Luxembourg, France, Spain, Germany and the UK. It offers an extensive range of products from everyday basic household goods and a limited food assortment to affordable items including cosmetics, stationery, basic ladieswear and menswear, babywear and kidswear, home textiles and ‘impulse-driven’ purchases. The company enjoys virtually 100% brand awareness in the Netherlands.264

MICA USE
SOMO contacted HEMA at the beginning of October 2015 with questions on the origin and quantity of mica used, and their conducted human rights due diligence on mica. HEMA has its own cosmetics brand of around 650 products, which can be bought online and in its stores.265 HEMA knows which products contain mica. The percentage of mica per product varies from a few up to 30%.266

CHILD LABOUR
HEMA’s suppliers are required to adhere to HEMA’s Code of Conduct, which states “Child labour is forbidden as defined by ILO and United Nations conventions and/or by national law. The most stringent of the requirements must be adhered to.”267 In addition, suppliers sign a specific supplier declaration on social compliance, which refers to and is based on the Code of Conduct and the principles of BSCI (Business Compliance Initiative). The suppliers agree that all products and/or services provided shall be produced, delivered and/or provided in accordance with those rules and that they impose the obligations on their employees and third parties.

In its Annual Report 2014, HEMA states: “We aim for transparency in our sustainability strategy regarding the origins of our products, the production chain and the use of supplements and additives.”268 However, HEMA did not disclose where the mica in its cosmetics is sourced. The company stated on 11 January 2016, which was just before the finalization of this report, that it is following up with its suppliers on this specific issue. It is HEMA policy not to disclose the name of its supplier(s) for commercial reasons.269

6.9. OTHER DUTCH COMPANIES
ROYAL DUTCH SHELL
Mica is often used in drilling fluids to prevent the loss of circulation and as a sealant, strengthening the wellbore. Many types of lost circulation materials (LCMs) are available. Sliced calcium carbonate, mica, fibrous material, cellulose and crushed walnut shells have been used for decades.270 On 9 January 2016, by e-mail and phone, SOMO has asked oil and gas company Royal Dutch Shell about possible mica use, including the question: “Could your company elaborate on the amounts of mica used, the origin of the mica, and whether your company has conducted human rights due diligence in this issue of mica and child labour?”271 The company has not responded, and no information on mica use, mica origin, or conducted human rights due diligence on this matter could be found on the company’s website.

254 E-mail response on 15 January 2016 by Ahold to SOMO.
257 E-mail response on 15 January 2016 by Ahold to SOMO.
258 E-mail response on 15 January 2016 by Ahold to SOMO.
262 E-mail response on 15 January 2016 by Ahold to SOMO.
265 Response on 11 January 2016 by HEMA to draft company profile sent for review by SOMO.
268 Response on 11 January 2016 by HEMA to draft company profile sent for review by SOMO.
270 E-mail by SOMO to Royal Dutch Shell on 9 January 2016.
KUNCAI EUROPE B.V.

In April 2015, Chinese company Kuncai, the largest importer of mica from Jharkhand/Bihar registered a Dutch company called Kuncai Europe B.V.271 The new company is a marketing/sales company. Kuncai Europe is a joint venture of Kuncai with the Dutch company Peak B.V. (which owns shares of the company QolorTech B.V.). Kuncai has the majority of the votes. QolorTech is a marketer of pigments located in Vaassen (Netherlands).272 A company profile of Kuncai can be found in section 7.4 of this report.

SUDARSHAN EUROPE B.V.

The large Indian pigment company Sudarshan has a Dutch company taking care of deliveries to Europe. The company is called Sudarshan Europe B.V.273 A company profile of Sudarshan can be found in section 7.7 of this report.

GEOTECH INTERNATIONAL B.V.

Geotech International B.V is a family-owned company based in Haarlem in the Netherlands. The company offers a range of special-effect pigments for the plastic, coating and cosmetics industries. Its branded products are sold mainly in Europe. Some of its Geopearl® pearlescent pigments contain natural mica. In addition, its Sunrise® functional fillers for cosmetics contain natural mica.274 A thousand kilogram of Geotech’s Sunrise-SVA mica powder was imported from Chennai Sea in June 2015,275 suggesting that the mica was mined in Andhra Pradesh.

VDL GROEP

The Dutch automotive company VDL Groep had a consolidated turnover of €2.3 billion during 2014. Most revenue was generated in Germany (€0.9 billion) and the Netherlands (€0.5 billion). The company has four divisions: subcontracting (€0.8 billion), car assembly (€0.8 billion), buses and coaches (€0.4 billion) and finished products (€0.5 billion).276 SOMO has not questioned the VDL Groep for this report, though the company may use mica for car coatings and other automotive purposes.

CEBO HOLLAND

Cebo Holland is a major supplier for the oil and gas drilling industry in the North Sea area. It is located in Ijmuiden, and its products include mica-containing lost circulation materials for wellbores.277 The parent of Cebo Holland is Cebo International B.V., which is owned 50% by Halliburton (one of the world’s largest oil field services companies). The other 50% is owned by Imerys (a large supplier of specialist mineral-based products to industry).278

DUMICO

The company Dumico in Capelle aan den IJssel produces mica protection discs and shields, mica applications for electrical insulation and mica window plates for furnaces and heating stoves.279

SINIAT

Siniat is one of the leading suppliers of gypsum-related boards in Europe. Its hydro-panel cement boards contain mica. In the Netherlands, Siniat is based in Delfzijl. It also has operations in nine other European countries.280 Siniat is part of Etex, a company specialising in building materials.281

7. GLOBAL: PEARLESCENT PIGMENT PRODUCERS

7.1. THE MAIN COMPANIES

Leading importers from Jharkhand/Bihar pearlescent pigment producers account for more than 60% of mica imports from Jharkhand/Bihar.282 Table 17 shows the main importers from Jharkhand/Bihar among the pearlescent pigment producers. Leading importers were Kuncai and Merck, together accounting for 25% of the total export value. Six Chinese companies are also substantial buyers: Ruicheng, Chesir, Rika, Oxen, Zhenfa and Volor. Table 17 is not complete as the export data did not reveal all importers. The actual ranking may be different.283 The top three are correct, however. According to a small Chinese producer of pearlescent pigments, the top three in the Chinese pearlescent pigments market comprised Merck, Kuncai and Ruicheng in 2012.284

Table 17: Main pearlescent pigment manufacturers importing from Jharkhand/Bihar

<table>
<thead>
<tr>
<th>PIGMENT PRODUCER</th>
<th>COUNTRY OF REGISTRATION</th>
<th>EXPORT VALUE (INR MILLION)</th>
<th>% OF EXPORT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuncai</td>
<td>China</td>
<td>201</td>
<td>13</td>
</tr>
<tr>
<td>Merck</td>
<td>Germany</td>
<td>167</td>
<td>11</td>
</tr>
<tr>
<td>Ruicheng</td>
<td>China</td>
<td>87</td>
<td>5</td>
</tr>
<tr>
<td>Chesir</td>
<td>China</td>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td>Rika</td>
<td>China</td>
<td>62</td>
<td>4</td>
</tr>
<tr>
<td>Oxen</td>
<td>China</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>ZhenFa</td>
<td>China</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>Volor</td>
<td>China</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>279</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total pigment producers</strong></td>
<td></td>
<td><strong>958</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

Source: infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.

 globalization: pearlescent pigments

GLOBAL MARKET

There are no publicly available figures on company shares for the specific market of natural mica pearlescent pigments. According to BASF in 2007 Merck had a share of 50-60% in the worldwide market for pearlescent pigments, while BASF’s share stood at 20-30% and Kuncai’s share at 0-5% only.285 However, Kuncai has apparently surpassed Merck in mica use with its estimated import of 10-12,000 tonnes of mica flakes annually from Jharkhand/Bihar, as compared to 8-9,000 tonnes by Merck.286 This leads to our assessment that Merck and Kuncai are the largest manufacturers of natural mica pearlescent pigments worldwide. It is not known how much mica BASF currently uses to produce pearlescent pigments. It sources its mica from the US. The ranking of 2007 also named the following companies: Altana/Eckart (0-5%), Sun Chemical (0-5%) and Taizhou (0-5%).287 The natural mica pearlescent pigment business of Altana/Eckart was taken over by the Indian company Sudarshan in 2011. Merck acquired Taizhou in 2009 (and sold the business in 2014). Sun Chemical is part of the Japanese DIC Corporation.

For this report, SOMO compiled company profiles for five companies: Merck, Kuncai, BASF, DIC Corporation and Sudarshan. The profiles provide an overview of the company’s mica use, mica origin, child labour policies and human rights due diligence conducted. Merck, Kuncai, BASF and Sudarshan were given the opportunity to respond to a draft version of the profiles, which all four companies did. Confidential information was shared by Merck and Kuncai. SOMO also contacted the DIC Corporation, but there was no response, apart from an automated e-mail reply from the company that it would follow-up on the e-mail sent.288

Figure 8 shows customers of the pigment producers. These customers were tracked down during the research for this report.289

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282. InfoDrivIndia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. The identified eight largest importers among the pearlescent pigments producers accounted for 44% of the total export value. The other 13% was calculated by selecting the product name (mica flakes), and the unit price range (INR 24,000-34,000 per tonne) of the eight largest importers among the pearlescent pigments producers. This led to a total export value of INR 986 million, with delivery of flakes suitable for the production of pearlescent pigments. Often the name of the importer was not disclosed, especially for harbours with destinations including Shanghai, Wenzhou and Hong Kong.

283. InfoDrivIndia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. For 30% (INR 473 million) of the total export value (INR 1,571 million) the importer was not disclosed. This means that companies mentioned in the table may have imported more than presented in the table, and that some companies are (wrongly) not listed as a main importing company in the table.


286. InfoDrivIndia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. Meeting between Merck and SOMO representatives, Darmstadt, Germany, 17 December 2015.


288. E-mail automatically sent by a computer system of DIC Corporation to SOMO on 28 December 2015.

289. References can be found throughout the report.
lacks a tracking system to rule out any sourcing of mica prevalent - mining and cobbing. So far the company due diligence on child labour is still weak for the stages and the impacts of its due diligence activities. Kuncai’s 2010; it now reports specifically about its mica sourcing whether (any of) the mica the companies use comes child labour for mica mining and processing, and conducted due diligence with regard to the issue of Table 18 shows whether the pigment producers have Table 19 shows which Merck companies worldwide have imported mica from Jharkhand/Bihar in the first half of 2015. This information was retrieved through a trade database showing exporters, importers, quantities and value exported. Most mica was imported by Merck’s production facilities in Germany, forwarded from a Belgian port of destination. Large amounts also go to production facilities in the US, while Merck Ltd. in Japan is a smaller importer. The pigment production sites of Merck are located in Germany, United States and Japan. according to the company. If it transpires that the miners are not exclusively supplying Merck after all, this would make the tracking system questionable. And this seems to be the case based on documents provided by Kuncai. According to documents from two mine owners, Kuncai buys from two mines that are supposed to supply Merck only—SOMO cannot verify the authenticity of these documents and whether deliveries to Kuncai have indeed taken place. Therefore it can only conclude that it has received contradictory information.

7.3. COMPANY PROFILE: MERCK

WORLD LEADER IN EFFECT PIGMENTS

With a global revenue of €12.5 billion, the German multinational enterprise Merck KGaA ranked 2,410 on the Fortune Global 500 during 2014. Merck’s business is divided into three separate sectors. The contribution to Merck’s 2014 revenue was largest for healthcare (59%), second for life science (23%), and smallest for performance materials (18%).

Merck claims to be the global market leader in effect pigments, which are part of its business sector ‘performance materials’. The sold pigments are mostly used for coatings (automotive and industrial) and cosmetics. Merck states that natural mica from India has properties that make it a necessary ingredient in the manufacture of top-grade pigments. As well as

#pigments, Merck sells mica as a functional filler to the cosmetics industry.” The company mentions that the automotive industry boom in emerging markets is beneficial for its effect pigments business.295

MICA USE

By far most of the mica used by Merck stems from Jharkhand/Bihar. In the first half of 2014 it imported 5,400 tonnes of mica flakes from the region, which was equivalent to 11% of export value.296 According to Merck, it sources 8-9,000 tonnes from the region yearly.297

It is important to note that some of the information provided confidentially to SOMO contains contradicting information. Merck claims that at least five of the six mines it sources from are exclusively supplying mica flakes to Merck. The fact that these mines are only supplying Merck makes it possible to implement their tracking system whereby the total daily mine production is recorded in a logbook. Exactly this production goes to Merck after processing. This way no mica from uncontrolled sources is added, from uncontrolled sources, and activities to prevent and mitigate child labour have yet to start. The company has partly relied on statements from its exporters, which claimed that no child labour was used. Its exporters however mainly source from uncontrolled sources, and have conducted little due diligence. Kuncai is presently actively looking at how to increase its due diligence. BASF identified the issue in 2007, and decided to stop sourcing from India for its pigment production in 2008. Sudarshan changed its sourcing policy in 2015. It presently buys from two legal mines in Jharkhand/Bihar and stated that audits showed that there was no child labour involved. The company works with the Indian NGO ASK to implement systems to prevent child labourers from entering mining areas.

291. Documents received in confidentiality by SOMO from Merck, January 2016; Documents received in confidentiality by SOMO from Kuncai, January 2016


296. infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied by Infodrive on 25 July 2015, corrected for some double counting in the database received.

297. Meeting between Merck and SOMO representatives, Darmstadt, Germany, 17 December 2015.

298. Panjiya.com, search term "Emi Chemical", as viewed on 6 October 2015. The name of the Brazilian supplier is Benton Ultra Nordeste Industria. Total deliveries were 542 tonnes. For 241 tonnes there was no recording that this was actually mica, but these deliveries fitted in the timeline and had the same volumes as the mica deliveries.

299. A Merck document of May 2011 mentions also a mica-containing pigment production site in China (Source: Merck, “Merck’s Mica Supply Chain Update,” May 2011, http://bit.ly/1LwYVQ). During the meeting between Merck and SOMO in Darmstadt, 17 December 2015, Merck however disclosed that this site was sold by Merck in 2014.
In September 2011 a heavy-weight delegation from Merck visited the Jharkhand state government. The Merck representatives were accompanied by two exporters, who were interested in applying for mica mining in the region. The state industry secretary of Jharkhand, A.P. Singh, said: “Merck is interested in mica trade and wants to help in legal mining of the precious mineral. At present the majority of mica mining and trade is illegal. We are hoping for a good deal with the company.”

The secretary also stated that only about 2,000 metric tonnes of mica was produced by five legally operating mines in Koderma and Giridih, while Merck was aiming to tap 10,000 tonnes of the mineral annually. Merck was interested in procuring from legal mines without involving child labourers and wanted to open up an employment lifeline for many in the neighbouring districts. A source from the state mining department said that Merck wanted allotment of mica mines in Jharkhand’s mica zone in favour of Merck’s six suppliers. The source also revealed (in 2011) that Merck’s suppliers had not (yet) provided the required documents needed for mining leases to the state government. Presently Merck claims that it sources from legal mines only, that the production of these mines is exclusively exported to Merck, and that there is no child labour involved during the mining and processing of the mica.

**Table 19: Imports by Merck companies from Jharkhand/Bihar in the first half of 2015**

<table>
<thead>
<tr>
<th>Merck Company</th>
<th>Port of Destination</th>
<th>Quantity (Tonnes)</th>
<th>Export Value (INR Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck KGaA</td>
<td>Belgium</td>
<td>2,692</td>
<td>86.3</td>
</tr>
<tr>
<td>End Chemicals/Performance Materials</td>
<td>United States</td>
<td>2,239</td>
<td>72.8</td>
</tr>
<tr>
<td>Merck Ltd.</td>
<td>Japan</td>
<td>256</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,187</td>
<td>167.1</td>
</tr>
</tbody>
</table>

Source: infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, corrected for some double counting in the database received.

**Table 20: Merck’s mica suppliers from Jharkhand/Bihar in the first half of 2015**

<table>
<thead>
<tr>
<th>Indian Exporter Name</th>
<th>Quantity (Tonnes)</th>
<th>Export Value (INR Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pachisia &amp; Co</td>
<td>1,772</td>
<td>57.5</td>
</tr>
<tr>
<td>Ramdew Modi</td>
<td>1,182</td>
<td>38.3</td>
</tr>
<tr>
<td>Mohan International</td>
<td>833</td>
<td>26.0</td>
</tr>
<tr>
<td>Modi Mica Enterprises</td>
<td>705</td>
<td>22.8</td>
</tr>
<tr>
<td>Manoj Kumar Bhadani</td>
<td>695</td>
<td>22.5</td>
</tr>
<tr>
<td>Total</td>
<td>5,187</td>
<td>167.1</td>
</tr>
</tbody>
</table>

Source: infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied by Infodrive on 25 July 2015, corrected for some double counting in the database received.

**MERCK’S SUPPLIERS OF MICA**

Table 20 shows the companies that exported mica from Jharkhand to Merck in the first half of 2015. There are five Indian companies currently supplying Merck.

**MERCK DISCOVERS CHILD LABOUR**

Merck had been sourcing mica from Jharkhand/Bihar for many years, but it wasn’t until a 2008 study by the Indo-German Export Promotion Foundation that the company realised it had to address the child labour problem in its mica supply chain. A Merck spokeswoman stated in August 2009 that the study had found that “children are indeed involved in the collection of mica - however exclusively within the scope of family groups. It is an important result for us that no axes of permanent work, bonded or slave labour were found.” The study had apparently not signalled the extremely dangerous circumstances children are exposed to, and the fact that many children in the area do not go to school at all.

However, Merck took action. In its Corporate Responsibility report 2009 Merck mentioned that it had contractually obligated the suppliers of Merck KGaA in Germany to rule out forced and child labour. Merck met with SOMO on 17 December 2015, and during this meeting some additional information was provided by the company. Finally, Merck and SOMO signed a confidentiality agreement, enabling SOMO to further check Merck’s supply chain management.

Of all companies importing mica from Jharkhand/Bihar, Merck has been by far the most active company in attempting to get its sourcing child-labour free and to enhance the living conditions in the area. In May 2011 the company claimed its supply chain would be child-labour-free by the end of 2011. In the following sections SOMO will assess the value of the Merck’s initiatives, assessing:

- the legality of Merck’s mines;
- Merck’s mica tracking system;
- stopping suppliers using child labour;
- Merck’s audit system;
- Merck enhancing the living conditions in mica mining areas.

**DUE DILIGENCE**

Merck’s position in relation to child labour is captured in its Human Rights Charter and its Responsible Sourcing Principles. These documents also reveal Merck’s stance towards other working conditions. Merck’s Human Rights Charter states: “We will only conduct business with suppliers who share our commitment to human rights and to operate in a responsible manner towards their employees and their own suppliers.”

Merck has recently exhibited its sustainability activities in relation to Jharkhand/Bihar in its Corporate Responsibility report 2014 and in a leaflet called “Mica sourcing at Merck” (dated August 2015). Subsequently, Merck met with SOMO on 17 December 2015, and during this meeting some additional information was provided by the company. Finally, Merck and SOMO signed a confidentiality agreement, enabling SOMO to further check Merck’s supply chain management.

**THE LEGALITY OF MERCK’S MINES**

Merck states that it no longer uses any mica that is sourced in an informal work environment. For mica that is mined by villagers and further brought to the market by local traders (i.e. informal), Merck cannot guarantee that child labour is not being used. The raw materials used by Merck are said to come exclusively from legal mines and not from uncontrolled sources. SOMO has seen confidential documentation provided by Merck with regard to the legality and locations of the...
three of the six mines are not registered by the Indian Bureau of Mines as being legal. Merck was able to show mining lease documentation for the other three mines. SOMO has however not been able to conduct a thorough assessment on the legality of these three mines.

**MERCK’S MICA TRACKING SYSTEM**

Merck has established a mica tracking system. The mine owners record the output of a mine on a daily basis in a production log book. These documented mica amounts are the basis for licensing fees that the mine owners have to pay to the government. If mica from uncontrolled sources were additionally used, the mine owners would also have to pay licensing fees for these mica amounts. In that case the sellers of mica from uncontrolled sources would have to sell the mica for a lower price. This would not make sense economically, it is argued. This argument sounds reasonable, though during SOMO’s field investigation many exporters said that for illegal (unofficial) mining illicit sums are paid to the government.

Once a month Merck crosschecks the mica amounts recorded in the log book of the mine owners against those delivered to the processors.317 The mica is finally sold to Merck by the mine owners directly.

Except for the Sharda mine, all mines are exclusively supplying mica flakes to Merck (out of specifically defined and fenced pits), according to Merck. Some mica of lesser quality - a small amount not used for the production of mica flakes - may be sold separately to other parties. The trade data that SOMO acquired, relating to exports from Jharkhand/Bihar during the first half of 2015, support Merck’s statement that except for the Sharda mine, all mines are exclusively supplying mica flakes to Merck.316 However, documents received confidentially by SOMO from Kuncai included letters by two mine owners that had promised exclusivity of supply from specific mines to Merck. The two mine owners declared that they were also supplying Kuncai’s suppliers from the same mines.318 SOMO could not verify the authenticity of the documents and whether deliveries to Kuncai had indeed taken place.

**PROHIBITING SUPPLIERS USING CHILD LABOUR**

Merck contractually prohibits its suppliers to use child labour.319 This applies for all mica, not only sales to Merck.320 Merck has stated on this that its audit and control processes are only applied to those parts of the supply chain that are actually associated with Merck’s business (e.g. mining pits producing material for Merck are checked and audited as per established processes, whilst pits that do not produce material for Merck are not).321

Merck has also stated that it is working with suppliers to make them aware of its values and the importance of adhering to these. Merck’s employees in Jharkhand are said to be in regular contact with suppliers (about twice a month) and address these issues.322 However, there is no control mechanism in place that prevents suppliers from, for example, starting another company exporting mica with lower social responsibility requirements. Among the mica exporters there are many families with more than one company. It is often not clear which family members are a beneficiary of the mining operations. All in all, SOMO thinks that for those parts of the supply chain that are actually associated with Merck’s business, Merck’s suppliers are working along with Merck’s demands. It seems that there are little extra effects from Merck’s general campaign of child labour towards its suppliers. The effect seems to be limited to Merck’s demand from the area.

**MERCK’S AUDIT SYSTEM**

Merck has developed an audit system to ensure that miners and processors comply with its requirements for environmental protection, safety and working standards (including minimum wages). Local Merck employees audit business partners. Additionally, third party audits by the independent Environmental Resource Management (ERM) and the Indo-German Environment Partnership (IGEP) are performed. IGEP is also running three schools and a health centre for Merck in Jharkhand/Bihar, so it can’t be considered independent. While IGEP checks the working standards as well as compliance to safety requirements monthly during surprise visits, ERM performs scheduled annual audits to monitor working standards, as well as environmental, safety and health aspects. Identified deficiencies are documented in the audit reports and the suppliers have to implement corrective action.

Merck’s employees in Jharkhand monitor the implementation of these measures.

There are also annual mining inspections performed by the DGMS which can be considered independent. For all six mines Merck has provided with a recent DGMS mining inspection report.323 SOMO also asked Merck how it conducts surprise audits to make sure the mining site is child-labour free, as this is very difficult for remote areas. Merck has replied by stating that the inspection itinerary is not known to suppliers and even IGEP inspectors are only informed about the schedule shortly before the audit is due, meaning the mines and processors can’t prepare for visits. Moreover, inspectors are very familiar with the region (as they live there), move around independently and therefore it is not likely that their visits are known about beforehand.

In its Corporate Responsibility report 2014, Merck states that it conducted 14 audits on its mica suppliers in 2013 and 2014. It terminated business relations with two suppliers because they failed to carry out the required corrective action in a satisfactory manner.

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310. Documents received in confidentiality by SOMO from Merck, January 2016.
311. Meeting between Merck and SOMO representatives, Darmstadt, Germany, 17 December 2015.
316. E-mail response on 22 January 2016 by Merck to SOMO.
319. Documents received in confidentiality by SOMO from Merck, January 2016.
321. Interviews by SOMO with several exporters during the field investigation in October 2015.
323. infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.
324. Documents received confidentially by SOMO from Kuncai, January 2016.
327. E-mail response on 12 January 2016 by Merck to SOMO.
328. E-mail response on 22 January 2016 by Merck to SOMO.
329. Merck, “Mica sourcing at Merck”, August 2015, http://bit.ly/1f1mIe. E-mail on 11 January 2016 by Merck to SOMO.
330. Documents received in confidentiality by SOMO from Merck, January 2016.
332. E-mail response on 12 January 2016 by Merck to SOMO.
According to Merck this had nothing to do with child labour: “Neither our audits nor the self-reported supplier information revealed significant risks regarding violations of the right to assemble or engage in collective bargaining, nor with regard to child labor, forced labor or compulsory labor.”334 Merck has stated that one of the main reasons for terminating the business relationship was the lack of willingness to comply with its requirements regarding working and safety conditions.335 One of the dropped suppliers is probably Tarway Powdering Works. This company started exporting to Merck in the US in the first half of 2010, but deliveries stopped after the first half of 2013.336

ENHANCING LIVING CONDITIONS IN THE MICA MINING AREAS

As well as providing workers in the mines and processing units with at least the minimum wage (by Indian law), Merck has developed educational and health care programmes in order to enhance living conditions in the mica mining areas:337

- Merck runs, through IGEF, three schools with adjacent nursery schools in the villages Tisi (Giridih, Jharkhand), Barkistand (Giridih, Jharkhand) and Saphi (Bihar). More than 500 students attend these schools. The school in Tisi also provides vocational training for carpentry and tailoring. The education provided is holistic and includes civics, hygiene and health education. Additional benefits comprise free midday snacks, drinking water, uniforms, books and school supplies. Merck supports a fourth school in Saphi (Bihar). More than 500 students attend these schools. The school in Tisi also provides vocational training for carpentry and tailoring. The education provided is holistic and includes civics, hygiene and health education.
- Merck funds a local health centre in the village of Saphi in a region that has around 20,000 inhabitants. The health centre is operated by IGEF. The facility has two doctors and a nurse on duty every day. As part of their routine activity, they check and follow up medical conditions among the villagers. The services offered also include vaccinations and health awareness programmes and education on everyday health issues. On average, about 250 patients per month are treated at the health centre. The doctors and nurse also pay visits to the schools and villages in the vicinity.
- Between 2010 and 2013, Merck and BBA jointly carried out a project with the goal of creating 20 child-friendly villages in Jharkhand (see section 6).338 As far as SOMO was able to assess, Merck has indeed contributed to the living conditions in the mica mining areas. During the field research SOMO visited one of the three schools, and conducted interviews with teachers. The school seemed to function properly.339 In the opinion of the Indian NGO BBA, the schools and healthcare centre should be put in a process to be handed over in time to the local government as being in the hands of a company risks problems with continuity.340

7.4. COMPANY PROFILE: KUNCAI

A LEADING PEARLSCENT PIGMENT PRODUCER

Fujian Kuncai Material Technology Co. Ltd. (Kuncai) is a Chinese pearlescent pigment producer that specialises in both natural and synthetic mica-based pigments.

Over the past six years Kuncai’s business has been expanding rapidly. In 2009 the company produced 5,000 tonnes of pearlescent pigments; in 2014, production had risen to 15,000 tonnes. The company is also a large producer of synthetic mica with an annual production capacity of 10,000 tonnes. Kuncai is building additional capacities, including a new plant (set to be operational in 2016) which is designed for the yearly production of 30,000 tonnes of pearlescent pigments (both synthetic and natural mica based) and 10,000 tonnes of synthetic mica.341

Kuncai claims on its website that it is the world’s largest producer of synthetic pearlescent pigments and that its production of natural mica-based materials ranks third in the global market and first in Asia.342 The company produces pigments focused on a wide variety of sectors, ranging from the coating industry (including automotive), to the cosmetics, plastic printing paper, ink and leather industries.343

Information regarding the company’s annual revenue is not made available by Kuncai. The company states that more than 60% of its products are exported to Europe, North America, South East Asia, the Middle East, Korea and Africa.344 Kuncai claims: “With years of effort we have established the close cooperation relationship with AkzoNobel, BASE, PPG, Nippon, Sherwin-Williams, AkzoNobel, Polyure, D&Oval and Clarient etc.”

Kuncai has a modern and efficient production facility that can produce high-quality synthetic mica-based pigments. The company is expanding its production capacity both in China and abroad. Kuncai has committed to meeting the increasing demand for mica-based pigments in the global markets. Kuncai is a well-established company with a strong reputation for quality and reliability. The company has a diverse range of products and is able to meet the needs of a wide variety of customers.

In April 2015 a Dutch company called Kuncai Europe B.V was registered.345 The new company is a marketing/sales company, aiming to better service Kuncai’s European market.346 Kuncai Europe is a joint venture of Kuncai with the Dutch company Peak B.V. (which owns the shares of the company QolorTech B.V.), Kuncai has the majority of the votes. QolorTech markets pigments and is located in Vaassen.347

MICA USE

SOMO estimates that Kuncai’s mica import from Jharkhand/Bihar was in the range of 10-12,000 tonnes in 2015. This estimate is based on trade data of exports from Jharkhand/Bihar. According to these trade data, as specified in Table 21, Kuncai imported 6,180 tonnes in the first half of 2015. The trade data have been corrected as much as possible for any double counting that came to light, but some double counting may still remain.348

Table 21: Mica imports by Kuncai from Jharkhand/Bihar in the first half of 2015

<table>
<thead>
<tr>
<th>INDIAN EXPORTER NAME</th>
<th>QUANTITY (TONNES)</th>
<th>EXPORT VALUE (INR MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount Hill’s/Hari Narayan Bagaria</td>
<td>3,120</td>
<td>102</td>
</tr>
<tr>
<td>Mohan Mica</td>
<td>960</td>
<td>31</td>
</tr>
<tr>
<td>Pravin</td>
<td>960</td>
<td>31</td>
</tr>
<tr>
<td>Gunpatroy</td>
<td>420</td>
<td>14</td>
</tr>
<tr>
<td>Pearlescent Minchem (India)</td>
<td>240</td>
<td>8</td>
</tr>
<tr>
<td>Vedant</td>
<td>240</td>
<td>8</td>
</tr>
<tr>
<td>Kritika Enterprises</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>Sedmal Kanhaiya Lal</td>
<td>120</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>6,180</td>
<td>201</td>
</tr>
</tbody>
</table>

Source: infodirinfraindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015.

335 Meeting between Merck and SOMO representatives in Darmstadt, Germany, on 17 December 2015.
340 Visit to Merck’s school in Tisi, 10 October 2015, during SOMO’s field investigation.
341 Meeting between BBA and SOMO on 23 October 2015.

345 Kuncai, booklet “Company profile”, 2015.
350 infodirinfraindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied by Infodoor on 25 July 2015. Comparison with trade data on US imports revealed that this database contained double counting. Through comparison with other data bases, and through looking at dates, values and invoice numbers corrections could be made for most of the double counting.
According to the company, as well as Jharkhand/Bihar it also sourced mica from Brazil and Pakistan in 2015. Quantities were not disclosed by the company. Table 21 shows which exporters from Jharkhand/Bihar delivered mica to Kuncai in the first half of 2015.

CHILD LABOUR AND DUE DILIGENCE

Kuncai’s Code of Conduct, dated July 2014, states: “Kuncai is resolutely against the use of child labour in the whole production process.” The company is committed to comply with national laws and core conventions No. 138 and No. 182 of the International Labour Organization in this respect.351

In January 2016 SOMO received documents from Kuncai on its conducted due diligence to prevent child labour in Jharkhand/Bihar. Documents dated June 2013 and signed by most of Kuncai’s main exporters show exporters declaring that no child labour was employed in the supply of mica flakes to Kuncai. The exporters also stated that at reasonable intervals they had inspected their suppliers’ mines and had found that no child labour was employed in them.352

In documents dated June 2014 and December 2015, labour officials of the local Giridih government declared that there was no child labour in the processing units of Kuncai’s main exporters. These findings are in line with SOMO’s findings during the field investigation in October 2015.353

In the beginning of 2015 Kuncai sent a team for an on-site investigation that focused on processing units and interviews with exporters. During 2015 Kuncai also sent out questionnaires to exporters. The exporters and signed by most of Kuncai’s main exporters show exporters declaring that no child labour was employed in the supply of mica flakes to Kuncai. The exporters also stated that at reasonable intervals they had inspected their suppliers’ mines and had found that no child labour was employed in them.354

In documents dated June 2014 and December 2015, labour officials of the local Giridih government declared that there was no child labour in the processing units of Kuncai’s main exporters. These findings are in line with SOMO’s findings during the field investigation in October 2015.355

In December 2015 the president of Kuncai, Mr Bingkun Xie, initiated a conference for senior management. The final decision of this conference was that Kuncai would further increase its efforts to ensure that its suppliers of mica do not use child labour. The company said it would also more publicly communicate its position, which it did by putting a statement on its website356 setting out its Code of Conduct357 and by explaining SOMO’s efforts to prevent child labour in their supply chain, including the sharing of relevant documents.

Kuncai is now looking at how to increase its due diligence and has contacted NGOs to assist them. First, it wants to implement sustainable control mechanisms to ensure that its supply chain is free from child labour. Second, it wants to contribute to the education and well-being of children in the area.358

7.5. COMPANY PROFILE: BASF

THE WORLD’S LARGEST CHEMICAL COMPANY

With sales of € 74 billion, BASF ranked 76th on the Fortune Global 500 during 2014. BASF is the world’s largest chemical company.360 Among many other segments, BASF is a large producer of pearlescent pigments and paint/coatings.361 BASF states that “with sales of about € 1 billion in 2014”, it holds a “leading position in the pigments market”.362 BASF uses mica to produce special-effect pigments for the cosmetics, printing ink, coatings and plastics industries and these may contain either synthetic or natural mica.363 According to BASF, in 2007, it had a share of 20-30% of the worldwide market for pearlescent pigments, and the same market share within the European Economic Area.364 BASF’s net sales of coatings amounted to approximately € 3 billion in 2014, making the company the seventh largest coatings company in the world.365

ORIGIN OF MICA USE

SOMO asked BASF to provide a country breakdown of the mining origin of the natural mica content used in BASF’s pearlescent pigment production. In response, BASF stated that its pearlescent pigment production does not source “natural mica from India, but from its own mine in north America”.366 BASF’s muscovite mica mine is located in Hartwell, Georgia, USA.367 BASF did not reveal any information in relation to its possible purchase of pearlescent pigments from elsewhere.

STOPPED SOURCING FROM JHARKHAND/BIHAR

BASF has stopped sourcing mica directly from the area of Jharkhand/Bihar.368 BASF made the following statement in November 2015: “BASF’s product line for special-effect pigments was acquired as part of the acquisition of the company Engelhard in mid-2006. BASF also acquired the mica mine in North America as part of this transaction. For strategic reasons, we decided to pursue a complete in-house mica sourcing strategy which in addition offers us quality and consistency advantages. As a consequence we stopped sourcing mica from India for this product line: the last such orders for mica from India were placed in 2008. Engelhard had sourced mica from India. The former direct suppliers of mica from India provided BASF with certificates that stated that their products were produced without the use of child labor. In 2007, we were nevertheless concerned to learn of possible issues with child labor higher up in the mica supply chain. BASF therefore commissioned a study in India from local experts and local NGOs - institutions which have a long experience in combating child labor. We asked these organizations to assess our direct suppliers, to analyse the situation higher up the supply chain and to evaluate different scenarios for improving labor conditions in general within the mica supply chain. We found that children were indeed involved in the collection of mica. There was no evidence, however, of permanent work, bonded labor or slavery.”369

BASF AND CHILD LABOUR

In its statement of November 2015, BASF said that - as part of its global Code of Conduct and its aim to “create chemistry for a sustainable future” - it condemns all forms of child labour. The company expects suppliers and business partners to behave accordingly.
BASF’s Supplier Code of Conduct is based on internationally recognised guidelines, such as the ILO conventions. To check suppliers’ compliance with international labour and social standards - as well as the global chemical industry’s Responsible Care programme - BASF conducts external audits or sustainability assessments in compliance with a risk-oriented approach through an external service provider. If it identifies potential for improvement, BASF supports the supplier in developing measures to fulfil standards and will conduct another review according to a defined timeframe. If the weak points discovered were particularly severe and it cannot find any improvement, BASF reserves the right to terminate the business relationship with that supplier.29

7.6. COMPANY PROFILE: DIC CORPORATION

THE WORLD’S LARGEST INK COMPANY

The Japanese DIC Corporation (DIC, formerly Dainippon Ink & Chemicals) - including its subsidiary Sun Chemical (Sun Chemical) - is the world’s largest ink company.374 Sun Chemical is mainly active in the US and Europe, while DIC is the common name used for the company’s Asian operations. DIC’s revenue comprised JPY 830 billion (equivalent to € 5.7 billion) in 2014. Printing ink generated half of the revenue, while the sales of pigments accounted for 17% (equivalent to € 1.6 billion).375

PEARLESCENT MICA

Sun Chemical has a product line of pearlescent natural mica pigments, called SunMICA. These pigments are used for coatings (automotive, industrial), packaging, paper and other uses.376 Pearlescent natural mica pigments under different names are aimed at the US market, while DIC is the main supplier of pearlescent pigments in the US.377

In its universal CSR procurement guidelines, DIC Corporation states that “business partners shall prohibit inhumane labor practices, such as forced labor, child labor, low-wage labor, etc.”378 However, DIC Corporation provides no public information whether and to what extent it has conducted due diligence with regard to mica and the issue of child labour in Jharkhand/ Bihar.379

7.7. COMPANY PROFILE: SUDARSHAN

INDIA’S LEADING PIGMENT PRODUCER

Sudarshan Chemical Industries Limited (Sudarshan) is India’s leading pigment supplier with an alleged 35% market share in India. It reported a revenue equivalent to €166 million for the year ending 31 March 2015, of which 66% was derived from selling pigments. Exports generated approximately half of the pigment sales. Sudarshan has overseas sales offices for Europe (located in Amsterdam), North America (New Jersey) and recently also in China (Shanghai). The company manufactures pigments mainly for coatings, plastics, inks and cosmetics. Its factories are located in Roha and Mahad, Raigad district, Maharashtra State.380

MICA USE

Sun Chemical provides no public information whether and to what extent it has conducted due diligence with regard to mica and the issue of child labour in Jharkhand/ Bihar.

Sudarshan has three brands of pearlescent pigments, which all contain natural mica. Sumicos and Prestige pearlescent pigments are used for cosmetics and personal care applications. Its Sumicos pearlescent pigments are used in different products and sectors, including coatings, plastics, inks and agricultural (seed) coatings.381 In 2011, Sudarshan bought a natural mica-based cosmetics pigment portfolio from the German company Eckart GmbH, thereby expanding its natural mica use.382

DIC Corporation is a shareholder of Sudarshan, with 8% of the shares.383 Dutch customers of Sudarshan include Unilever384 and AkzoNobel (less than 1% of AkzoNobel’s mica use).385

CHILD LABOUR

In its Annual Report 2014-2015, Sudarshan confirms its commitment to operating in a socially and environmentally responsible manner and, the need to comply with regulations. However, there is no mention of the need for compliance and responsible conduct along its supply chain.386

In response to questions by SOMO, Sudarshan has stated that it mainly buys mica flakes originating from two legal mines in Bihar. These are the Sharda mine in Mauza-Chatkari (owned by Modi Mica Enterprises) and one of the Chhatt Ram Darshan Ram mines (Universal Mica,387 owned by Bhardani families).388 Sudarshan did not provide information on the specific mine within the legal lease of Chhatt Ram Darshan Ram.

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According to Sudarshan, audits have been carried out at the mine on its behalf and no child labour has been observed. The company described its auditing as follows: “The audit was conducted by interacting with organization management; workers working in all areas, verifying actual activities, verifying applicable regulations, verifying documents and records, collecting objective evidences by taking photographs, use of sampling principles, strict adherence to confidentiality clause, and sharing the outcome of the audit in the form of gaps at the end of the audit.”389

The NGO ASK India (Association for Stimulating Know How)390 is working for Sudarshan in the area. Sudarshan described ASK’s role as follows: “While no child labour was observed at the mines, there was no evidence of a robust system in place to avoid the incidence of child labourers entering the areas. ASK is working with the mines to educate them and implement the necessary systems to prevent possible incidence of child labour.”391

According to Sudarshan it changed its sourcing policy in 2015 and curtailed buying from a particular mica supplier, with the intention of stopping all together. This decision was taken because of the suppliers’ inability to improve systems to prevent child labour.392

In response to questions by SOMO, Sudarshan has stated that it mainly buys mica flakes originating from two legal mines in Bihar.393

"In response to questions by SOMO, Sudarshan has stated that it mainly buys mica flakes originating from two legal mines in Bihar.”

372. BASF, e-mail to SOMO “BASF Statement on Mica Sourcing”, 26 November 2015.


381. Sources from Sudarshan’s website (19 January 2016).


384. E-mail response of Unilever to questions sent by SOMO 6 October 2015.

385. Telephone call between AkzoNobel and SOMO representatives on 24 September 2015.


388. Telephone call between Sudarshan and SOMO representatives, 1 December 2015.

389. E-mail response on 14 January 2016 by Sudarshan to SOMO.


391. E-mail response on 14 January 2016 by Sudarshan to SOMO.
8. GLOBAL: OTHER MAIN COMPANIES

8.1. INFORMATION FROM TRADE DATABASES

The manufacturers of pearlescent pigments described in chapter 7 together account for about 66% of the mica import from Jharkhand/Bihar.

Table 22 shows the other main companies importing mica from Jharkhand/Bihar in the first half of 2015. This is a diverse group of companies, except for the three companies that produce electrical insulation and related products.

<table>
<thead>
<tr>
<th>IMPORTER FROM JHARKHAND/BIHAR</th>
<th>COUNTRY OF REGISTRATION</th>
<th>EXPORT VALUE (INR MILLION)</th>
<th>MAIN USE OF MICA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silimica/Pamica</td>
<td>China</td>
<td>48</td>
<td>Electrical insulation and related products</td>
</tr>
<tr>
<td>Yamaguchi Mica</td>
<td>Japan</td>
<td>45</td>
<td>Mica powder</td>
</tr>
<tr>
<td>Nihon Shoji</td>
<td>Japan</td>
<td>35</td>
<td>Mica flakes and powder[393]</td>
</tr>
<tr>
<td>Shanghai Foreign Trade Enterprises</td>
<td>China</td>
<td>25</td>
<td>Trader</td>
</tr>
<tr>
<td>National Factory</td>
<td>Saudi Arabia</td>
<td>23</td>
<td>Most likely drilling fluids[394]</td>
</tr>
<tr>
<td>Mahlwerck Neubauer Friedrich Geffers</td>
<td>Germany</td>
<td>20</td>
<td>Mica as a filler + for the rubber industry</td>
</tr>
<tr>
<td>Dean &amp; Tranter</td>
<td>UK</td>
<td>15</td>
<td>Trader</td>
</tr>
<tr>
<td>Elfin Group (Cogebi and Elinar)</td>
<td>Luxembourg</td>
<td>15</td>
<td>Electrical insulation and related products</td>
</tr>
<tr>
<td>Okabe Mica</td>
<td>Japan</td>
<td>15</td>
<td>Electrical insulation and related products</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>372</td>
<td></td>
</tr>
<tr>
<td>Pearlescent pigment producers</td>
<td></td>
<td>958</td>
<td></td>
</tr>
<tr>
<td>Total export value</td>
<td></td>
<td>1,571</td>
<td></td>
</tr>
</tbody>
</table>

Table 22: Main other (not producing pigments) companies importing from Jharkhand/Bihar

Source: infodriveindia.com, HS code 2525 group, port of loading Kolkata Sea, first half 2015, as supplied on 25 July 2015. For 36% (INR 473 million) of the total export value (INR 1,571 million) the importer was not disclosed. This means that companies mentioned in the table may have imported more than presented here, and that some companies are wrongly not listed as a main importing company in the table. The trade data have been corrected as much as possible for double counting that came to light, but some double counting may still remain.

Table 23 shows the largest mica importing companies of the US. The data were extracted using the search term “mica” in a trade database for imports from 1 January 2014 to 5 June 2015.[395] The data, covering 29,000 tonnes of trade, probably do not reflect all mica imports made by the US, as another trade database registered mica imports totalling 34,000 tonnes in 2014.[396] The data refer to trade in mica that is not yet processed for use by end users and does not include fabricated mica or pigments.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>IMPORTS TO THE USA (TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mintech International</td>
<td>11,400</td>
</tr>
<tr>
<td>Merck (Emd Chemicals)</td>
<td>4,900</td>
</tr>
<tr>
<td>Kish Company</td>
<td>4,000</td>
</tr>
<tr>
<td>Isovolta</td>
<td>1,200</td>
</tr>
<tr>
<td>Imerys</td>
<td>1,200</td>
</tr>
<tr>
<td>Axim Mica</td>
<td>800</td>
</tr>
<tr>
<td>Other</td>
<td>5,500</td>
</tr>
<tr>
<td>Grand total</td>
<td>29,200</td>
</tr>
</tbody>
</table>

Table 23: Largest mica-importing US companies

Source: Panjiva.com, search term “mica”; imports from 1 January 2014 to 5 June 2015.

393. Probably the importer is the Japanese Itochu Corporation. One of the companies supplying Nihon Shoji is the Jai Mica company, and Jai Mica states on its website that the Itochu Corporation is one of its main clients. Sources: Jai Mica, “Company Profile”, http://bit.ly/1Ik0vZ, Itochu Chemical Frontier company, “Products List”, http://bit.ly/1LNF0u.


395. The origin of the mica is not known.

8.2. PAINT/COATINGS COMPANIES

Mica is used in many coatings, not just paints. Table 24 lists the world’s largest coatings companies, measured by their 2014 revenue.[398] The leading global coatings companies are PPG Industries (US-based), AkzoNobel and Sherwin-Williams (US-based). Recently, Sherwin-Williams has announced that it will acquire the

<table>
<thead>
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</tr>
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</table>

Table 23: Largest mica-importing US companies

Source: Panjiva.com, search term “mica”; imports from 1 January 2014 to 5 June 2015.


US-based coating company Valspar. The new company would become the world’s largest coating company.401

The leading coatings companies in Europe are AkzoNobel (Netherlands) and BASF (Germany).

For this report, PPG Industries and Sherwin-Williams have not been questioned by SOMO. The Supplier Code of Conduct of PPG Industries states: “Suppliers shall adhere to the minimum employment age limit defined by national law or regulation and shall comply with relevant International Labor Organization (ILO) standards.”402 The Supplier Code of Conduct of Sherwin-Williams states: “Suppliers shall employ only workers who meet applicable minimum legal age requirements and must comply with all other applicable child labor laws.”403 Both companies are large users of mica. However, on both companies’ websites no information could be found about quantities used, or the origin of their mica. The websites also contained no information about the extent to which companies had already identified the issue of child labour in the mica supply chain or the extent to which they had sought to prevent or mitigate adverse impacts on human rights.

AkzoNobel has been questioned for this report on the company’s mica use, mica origin and measures to prevent or mitigate adverse impacts on human rights.

Table 25 shows the world’s 50 main cosmetics and personal care brands, and to which of the larger companies they belong. The ranking of the brands is shown in brackets.

Table 25: The world’s main companies and brands in cosmetics and personal care


8.3. COSMETICS AND PERSONAL CARE COMPANIES

THE MAIN COMPANIES AND THEIR BRANDS

The world’s largest cosmetics and personal care companies are Procter & Gamble, L’Oréal and Unilever, together accounting for almost 30% of the global market.404 These three companies also own many of the world’s main personal care brands. The US-based company Coty Inc. is expected to become one of the world’s largest beauty companies in 2016, as it is in the process of transferring Procter & Gamble’s Beauty Business (with brands such as Clairol, CoverGirl, Max Factor and Wella) into its company.405
MICA USE

Mica is one of the most important mineral ingredients used in cosmetics.\(^{406}\) According to the cosmetics database of the American NGO EWG (Environmental Working Group), there are presently 11,235 mica-containing cosmetics and personal care products sold on the US market.\(^{407}\) Unfortunately, for other markets (especially the European and Asian markets) there is no such database. Table 26 above shows the main companies and brands using mica sold on the US market. The five companies selling most mica products account for 32% of all mica products sold.

The cosmetics database can also be used to analyse which cosmetics and personal care companies use mica. Mica is seldom found in fragrances and is not commonly found in body sprays, hair products or toothpaste. The mica is used mainly for make-up - mascara, foundation, blushers, facial powder, concealer, moisturizer, eye liner, eye shadow, lipstick, lip balm, lip gloss, lip liner - and nail polish.

**Table 26: Main companies and brands using mica sold on the US market**


<table>
<thead>
<tr>
<th>COMPANY</th>
<th>PRODUCTS WITH MICA CONTENT</th>
<th>PRODUCTS WITH MICA CONTENT</th>
<th>MAIN BRANDS WITH MICA CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>L’Oréal</td>
<td>948</td>
<td>553</td>
<td>Maybelline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>363</td>
<td>L’Oréal Paris</td>
</tr>
<tr>
<td>Markwins International</td>
<td>732</td>
<td>364</td>
<td>Wet ’n Wild</td>
</tr>
<tr>
<td></td>
<td></td>
<td>288</td>
<td>Physicians Formula</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80</td>
<td>Black Radiance</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>710</td>
<td>651</td>
<td>CoverGirl</td>
</tr>
<tr>
<td>Revlon</td>
<td>710</td>
<td>576</td>
<td>Revlon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>134</td>
<td>Almay</td>
</tr>
<tr>
<td>Coty</td>
<td>466</td>
<td>273</td>
<td>Sally Hansen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>123</td>
<td>Rimmel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>63</td>
<td>OPI</td>
</tr>
<tr>
<td>Total main companies</td>
<td>3,566 (32%)</td>
<td>All mica containing products</td>
<td>11,235 (100%)</td>
</tr>
</tbody>
</table>

**COMPANY PROFILES**

For this report company profiles are made for the world’s largest cosmetics and personal care companies. In the following sections, L’Oréal, Procter & Gamble and Coty are described, including their mica use and stance on child labour. Unilever’s company profile can be found in section 6.

All four companies were given the opportunity to review a draft of their company profile. SOMO has processed the responses of the companies.

**COMPANY PROFILE: L’ORÉAL GROUP**

**THE WORLD’S LARGEST MAKE-UP COMPANY**

L’Oréal has a wide portfolio of 32 international brands, including L’Oréal Paris, Lancôme, Garnier, Maybelline, Vichy, The Body Shop and Biotherm.\(^{408}\) Together, they accounted for sales of € 22.5 billion in 2014. L’Oréal’s top three business segments are skincare (30%), make-up (22%) and haircare (26%).\(^{409}\) Its products are sold both to consumers and to professional hairdressers and make-up artists.

**MICA USE AND SUPPLIERS**

According to the EWG cosmetics database, L’Oréal sells 948 products on the US market that contain mica, such as foundations, concealers, lipstick, mascara and eye shadows. Brands owned by the L’Oréal Group that have the most products containing mica comprise Maybelline (553 products) and L’Oréal Paris (363 products).\(^{410}\)

For this report L’Oréal has stated that the majority of the natural mica used by its suppliers is sourced from the United States. The remainder comes from other countries, such as India. Most of the Indian mica used by L’Oréal is supplied by the pigment producer Merck. On Merck, L’Oréal states that it “only sources mica from legal, gated mines and has submitted proof that its entire supply chain is secured.”\(^{411}\)

**DUE DILIGENCE ON SOURCING FROM INDIA**

Since L’Oréal became aware of the issue of child labour in 2009 it has reduced its sourcing from India. However, the company has also maintained its use of mica from the region of Jharkhand/Bihar and it wants to contribute to better living conditions in the region.\(^{412}\)

In January 2016, in a response to SOMO, L’Oréal stated the following about its due diligence with regard to sourcing mica from India:

**CHILD LABOUR POLICY**

L’Oréal has a Code of Business Ethics that applies to all of its employees and subsidiaries worldwide. The company is committed to complying with national laws and the core conventions of the International Labour Organization, and “in particular (...) wants to help end the exploitation of children in the workplace”.\(^{413}\)

L’Oréal’s Code of Business Ethics has a separate document on “Suppliers/Subcontractors and Child Labour”. This document states: “Our suppliers and our subcontractors cannot hire employees who are under the minimum local legal age or who have not yet finished their mandatory schooling and in any case who are under the age of sixteen. No person under the age of eighteen may carry out dangerous or night work for our suppliers and subcontractors.”\(^{414}\)

In addition L’Oréal’s Code states: “When a case of child labour is found, the supplier/subcontractor is obliged to ensure that the child returns to school. This includes, if necessary, providing his/her family with an additional income and includes making an offer of reemployment to the child when he/she reaches the permissible age.”\(^{415}\)


\(^{411}\) E-mail response on 15 January 2016 by L’Oréal to SOMO; Abhaya Srivastava, “Indian children labour to bring sparkle to make-up”, 12 October 2015, http://yhoo.it/1LWwrUs.
"In India, the supply chain of mica is very difficult to control as it involves multiple stakeholders (from mine owners to our suppliers) and mostly takes place in socially and economically unstable regions. Despite these challenges, L’Oréal is committed to stay in India and help lead the necessary change with its suppliers and subcontractors to ensure that our supply chain is fully secured. Indeed, we strongly believe that discontinuing the use of Indian mica would further weaken the situation in the region.

We have thus chosen to work only with trusted suppliers willing to set up a compliant and fair procurement policy in order to uphold human and social rights. In order to be selected as a partner, our suppliers have to implement the following actions:

- Source mica from legal, gated mines only to ensure full traceability of the mica.
- Conduct regular social audits by independent third parties and organise mine visits regularly.
- Invest in community building activities to improve the living conditions in the mining area. This can be done through educational programs, access to potable water or running of a health centre.

L’Oréal’s dedicated team has visited India twice in the last 12 months and will return to India in February this year.

Indeed, we want to personally ascertain facts by visiting our trusted suppliers, the mines and communities in the mining area. We are also in contact with independent partner organisations and specialized NGOs to challenge and verify our strategy. Today, 100% of on-site visits and independent audits have reported the absence of child labor in mines operated by our suppliers.

L’Oréal also believes that collaborative action by stakeholders across industries and along the value chain is necessary and we are therefore actively participating in the Responsible Mica Sourcing Summit organized by The Natural Resources Stewardship Circle (NRSC) and Business for Social Responsibility (BSR) in February 2016."
8.4. ELECTRICAL INSULATION MANUFACTURERS

Electrical insulation manufacturers often produce mica paper and mica tape, which are supplied to companies manufacturing cables or electrical household appliances. The main global electrical insulation companies are thought to be the Chinese company Silimica/Pamica and the Swiss company Von Roll.

SILIMICA/PAMICA

The Pamica Group Limited is the largest Chinese producer of mica paper and tape. The company is located in Hebei Province. Silimica seems to be a joint developed brand by Pamica and Haishine Chemical (HK) Co. Ltd., although Silimica’s website does not disclose this. Silimica is said to contain Pamica’s mica paper and Haishine’s silicones.

Both Silimica and Pamica list their customers on their websites, and these lists are almost identical. The customers are usually manufacturing companies or electrical household appliance manufacturers. It says that it supplies companies including Shangshang, Midea, 3x-dl, Elekta, Eterep, Airmate, Elecpro, Galanz, Domlin, Prysmian/Draka and Fujikura. Silimica has also added Panasonic, China Nanyang and Nexans to the list.

SOMETHING ELSE COSMETICS COMPANIES

- In March 2014, bath and body brand Lush announced its decision to remove mica from its range of products. Mark Constantine, who co-founded Lush, said the company usually performs unannounced checks on its suppliers, but the area in which mica is mined is too dangerous for auditors to arrive unaccompanied. “We have been moving across to synthetic mica on things like the bath bombs,” he said. “Really, we would like to be able to get mica that was mined correctly. At some stage, the whole industry should take responsibility for that.”

- Estée Lauder Companies is an American group selling luxury make-up, fragrances, and skincare and haircare products. Its portfolio of brands includes Estée Lauder, Clinique, Aveda, La Mer and MAC. In the fiscal year 2014, the company had net sales of almost US$11 billion. In the Netherlands, Estée Lauder’s products are sold in boutiques, luxury department stores (like Bijenkorf) and perfumery stores like ICI Paris and Douglas. According to the EWG database, mica is an ingredient for only 29 products of the company that are sold on the US market.

- Estée Lauder has a Supplier Sustainability Assessment Programme, and in addition launched a Supplier Sustainability Scorecard in 2014. In its Code of Conduct, it writes: “Under no circumstances shall Company suppliers use child labor (under the age of 16), prisoners, or slave labor.” In its Corporate Responsibility report 2012, Estée Lauder stated that it sources less than 10% of its mica from India. At the beginning of 2014 a spokeswoman said: “The Estée Lauder Companies [are] aware of the complexities surrounding mica sourcing in India, and recognise the need for practical solutions to the complex socio-economic challenges within sourcing communities. Since 2006, we have partnered with a local NGO, Bachpan Bachao Andolan (BBA), to promote access to education as an approach to work towards the elimination of child labour in mica sourcing communities.”

- On 18 October 2013 the cosmetics company Revlon stated the following about its mica sourcing: “Our main suppliers, including BASF and MERCR, have confirmed that our mica material is sourced from gated mines, and confirmed their compliance with our terms of engagement forbidding the use of child labor in their extended supply chain.”

VON ROLL

The Swiss-based company Von Roll claims to be the market leader in the fields of insulation products and systems for the electrical machinery industry, as well as for composite materials and parts for various industrial applications. In addition, Von Roll provides special thermal and fire-resistant insulation products to the cable, electronics and other industries.

The company had a revenue of CHF 415 million in 2014 (equivalent to € 348 million) of which Von Roll Insulation generated 67%.

Von Roll USA, Inc. imported some 18 tonnes of mica paper to the US from the Von Roll subsidiary Tongcheng Xinyu Mica Products Co. Ltd.

Silimica/Pamica is a large importer of mica from Jharkhand/Bihar. In the first half of 2015 the company bought 1,104 tonnes of mica scrap from the area. The main exporters were Jai Mica Supply Co Pvt Ltd, Modi Mica Enterprises and Mount Hills Industries.

ELFIN GROUP

ELCIM Group B.V. is a holding company located in the Netherlands and is part of the Luxembourg-based Elfin Group. ELCIM comprises all industrial activities of the ELINAR and COGEBI groups. ELINAR is the market leader of mica-based thermal and electrical insulation materials in Russia and CIS countries. COGEBI supplies mica insulation in Europe, America and other world regions. The Elfin Group derived revenues of € 54.1 million from sales related to mica insulation in 2013, mainly in Europe and Russia.

The company focuses on fire protection (cable tapes, aircraft flame barriers); high-voltage insulation (resin rich tapes, VPI tapes and other complementary insulation products); and industrial applications (induction furnaces, commutator insulation, and thermal protection). It has its sites in Russia, Belgium, the Czech Republic, the US, Brazil, China, Malaysia and India. Its customers are industrial giants in power and electrical engineering, transport and cable industries.

The Elfin group imported 36 tonnes of mica blocks and scrap from Jharkhand/Bihar in the first half of 2015.
9. CONCLUSION AND RECOMMENDATIONS

OBJECTIVE

Terre des Hommes Netherlands commissioned SOMO to conduct research on child labour for mica mining and processing. The objective of the research was threefold. First, to determine the current magnitude and seriousness of child labour in India. Second, to provide insight into the main companies involved in the mica supply chain (especially Dutch companies) and the due diligence they have conducted on child labour. Third, to look into pending initiatives to eliminate child labour and come up with recommendations in this regard. The following sections present conclusions on each of these objectives.

MAGNITUDE AND SERIOUSNESS OF PRESENT CHILD LABOUR IN INDIA

The Indian region of Jharkhand/Bihar represents the world’s largest mica mining area, with an estimated 25% of the world’s production. An estimated 300 villages in this remote and poverty-entrenched region are involved with mica mining and the initial processing of the mineral. In 2005, it was estimated that there were 18,000 mica child labourers in the area.

At this moment, the number of child labourers in the mica mining area is estimated by SOMO to be up to 20,000. On the one hand, over the past ten years, the tonnages of mica exported from Jharkhand/Bihar have increased by 75%. On the other hand, measures have been taken to reduce child labour. This is because of the hazardous nature of the work, the Indian Child Labour (Prohibition and Regulation) Act of 1986 prohibits children under 14 from working in underground mines; to cut/split mica; or working on processes involving exposure to free silica. Hazardous work is considered by the International Labour Organization (ILO, part of United Nations) to be one of the worst forms of child labour.

Around 90% of mica from Jharkhand/Bihar is mined illegally. The illegality causes negative social impacts, such as child labour, miners (including children) being buried under collapsing mines, and wages below India’s legal minimum. Over the past 10 years, the tonnages of mica exported from the area have increased by 75%.

COMPANIES IN THE MICA SUPPLY CHAIN AND THEIR CONDUCTED DUE DILIGENCE

The United Nations, OECD and the Dutch government all stipulate that companies should carry out human rights due diligence when engaged in a supply chain with serious human rights issues. Carrying out due diligence means that a company should identify, prevent and mitigate any actual or potential adverse human rights impacts related to their own activities and in their supply chains. Moreover, a company needs to account for and be transparent about how it addresses the issues.

There are considerable number of Dutch companies with leverage (power to influence others) in the global mica supply chain. For this report eight Dutch companies were identified and questioned:

- AkzoNobel, the second largest coatings company of the world, is by far the largest user of mica among the Dutch companies. The company had conducted due diligence by pressuring its suppliers of pearllescent pigments.
- Prysmian/Draka, the world’s largest cable supplier, has many operations in the Netherlands and is estimated to be a major user of mica. The company did not respond to SOMO’s repeated questioning, and did not even have a policy in place to eliminate child labour in its supply chain. We found no evidence that the company conducted any kind of due diligence in the case of mica.
- Unilever, Royal Philips and DSM all claimed to be relatively small users of mica. Unilever and DSM had conducted due diligence on mica; Philips had not.
- The three main retailers selling cosmetics in the Netherlands are A.S. Watson Benelux, Ahold and HEMA. Ahold and HEMA also have their own cosmetics brand, including mica-containing make-up for the face, eyes, lips and nails. While Ahold had conducted due diligence on mica, HEMA and A.S. Watson Benelux had not.

Due diligence can be more effective when conducted in collaboration with other companies operating in the same sector. None of the eight companies reported any activity in this regard.

Pearlescent pigment producers account for more than 60% of mica imports from Jharkhand/Bihar. For this report the main manufacturers of pearlescent pigments were identified and questioned:

- The two main pigment producers are Merck (Germany) and Koncai (China). They account for some 25% of the mica export value of Jharkhand/Bihar. Of all companies importing mica from Jharkhand/Bihar, Merck had been practicing due diligence the most in order to get its sourcing child-labour-free and to enhance living conditions in the area. Koncai had conducted little due diligence so far. The company is currently looking at how to ensure its supply chain is child-labour free and how to contribute to the education and well-being of children in the area.
- The Indian company Sudarshan had conducted due diligence significantly, as had the German company BASF.
- Other pigment producers using mica from Jharkhand/Bihar are Japanese company DIC Corporation and a range of Chinese producers (Ruicheng, Chexir, Rika, Oxen and ZhenFa). We found no evidence that the company conducted any kind of due diligence in the case of mica.

The report shows that for the majority of mica imported from Jharkhand/Bihar, no due diligence had been conducted by pigment producers and/or exporters of mica.

The three main retailers selling cosmetics in the Netherlands are A.S. Watson Benelux, Ahold and HEMA. Ahold and HEMA also have their own cosmetics brand, including mica-containing make-up for the face, eyes, lips and nails. While Ahold had conducted due diligence on mica, HEMA and A.S. Watson Benelux had not.

PEARLESCENT PIGMENT PRODUCERS ACCOUNT FOR MORE THAN 60% OF MICA IMPORTS FROM JHARKHAND/BIHAR.

PENDING INITIATIVES TO ELIMINATE THE CHILD LABOUR

Since 2005, when it was estimated that there were 18,000 mica child labourers, much has changed. The government (also with its goal of decreasing the influence of the Naxalites) is now running a much greater number of schools for children between the ages of six and fourteen (with much-appreciated free meals), has built many roads (using a local workforce), and has made people aware of governmental welfare and development schemes. The Naxalites are less active.

In the period 2010-2015 the NGO BBA has worked in one-third of the villages in the main mica mining area, with much government help. These villages have been declared child-friendly, after BBA implemented its concept of child-friendly villages (Bal Mitra Gram, BMG). One of the largest importers from the area, the German pigment producer Merck, has changed its practices to source from legal, controlled mines only. The company also runs three schools and a local health centre. There have been more initiatives by companies and NGOs, at a smaller scale.

For Andhra Pradesh - a medium-large player in the global mica supply chain - some documentation has shown that there is child labour involved for mica mining/processing. There seem to be no pending initiatives for this region and also no company in the mica supply chain has reported conducting any due diligence.

MICA IS USED IN MANY INDUSTRIES WORLDWIDE: PAINT/COATINGS, COSMETICS, PLASTICS, ELECTRONICS, AUTOMOTIVE, CONSTRUCTION. IT APPEARS THAT, EXCEPT FOR SOME COMPANIES IN THE COSMETICS SECTOR, DUE DILIGENCE HAS BEEN AT A LOW LEVEL IN RELATION TO THESE INDUSTRIES AT A GLOBAL LEVEL. THIS IS STRIKING, AS THE PROBLEM OF CHILD LABOUR FOR MICA IN JHARKHAND/BIHAR IS QUITE WELL-KNOWN AND HAS BEEN DOCUMENTED BY INTERNATIONAL MEDIA OVER THE YEARS.
RECOMMENDATIONS

FOR MICA MINING/PROCESSING/USING COMPANIES:
• Conduct due diligence on the risk of child labour in your mica supply chain. This report shows that only a few companies sourcing from the mining area of Jharkhand/Bihar have identified, prevented and mitigated the adverse impacts of child labour. Even fewer companies have publicly accounted for how they address this issue.
• Companies should not rush to find alternatives to Jharkhand/Bihar for their mica as this will not solve the problems of child labour, rampant poverty and low health, safety and environmental (HSE) standards. It is better to stay involved and seriously conduct due diligence.
• Seek collaboration with other companies involved in the mica supply chain, thereby increasing leverage for more effective due diligence to address the issue of child labour.
• Pigment producers sourcing from Jharkhand/Bihar should make their audits by independent parties publicly available.
• Social development initiatives (such as schools or health centres run by companies) may help the well-being of people living in the area but with two pre-conditions. First, they should be complementary to government efforts and provide a long-term addition to development. Second, they cannot substitute for measures to address the negative human rights impacts related to the operations and business relationships of companies.

FOR THE INDIAN GOVERNMENT:
• Ensure that every child between the ages of six and fourteen years has free and compulsory education in a neighbourhood school. Monitor and improve the quality of education and children's well-being through indicators such as water and sanitation facilities, teacher attendance/quality, children's attendance and free midday meals.
• Continue to implement welfare/development schemes in Jharkhand/Bihar's mica mining area.
• Increase the minimum wages for workers legally mining/processing mica.
• Stimulate an increase of legal mining leases in Jharkhand/Bihar, and make sure that this will increase the income of the local population presently collecting/mining mica. Currently, the demand from importing companies for legal and child-labour free mica is much larger than the Jharkhand/Bihar region is able to supply. More legal mines could help to reduce child labour, increase health and safety, and create more government revenue.
• Develop sustainable alternative income-generating possibilities for the families concerned in the mica mining area of Jharkhand/Bihar.
• Do not amend the Child Labour (Prohibition and Regulation) Act of 1986 so that it may hinder the rescue of children and enforcement of child labour laws. Make better provisions to prevent child labour in hazardous work.

FOR THE DUTCH GOVERNMENT:
• Facilitate cooperation between stakeholders involved in the Dutch mica supply chain and make sure that Dutch companies use their leverage in the global mica supply chain. This is in line with the government's strategy to create covenants with companies to engender responsible supply chain management practices. This report shows that Dutch companies have direct links with child labour in mica mining through their business relationships, and have leverage in the global mica supply chain to prevent and mitigate this.
• Consider a requirement for Dutch companies to conduct risk-based due diligence. This report shows that many Dutch companies failed to identify child labour as a problem in the mica supply chain, despite this problem being well-known and well-documented by numerous international media outlets in recent years. The Dutch government has stated its openness to make due diligence a requirement for Dutch companies.
• Encourage other countries to speed up progress to eliminate the worst forms of child labour. Among other things, aim for European Council conclusions with regard to the worst forms of child labour during the Dutch Presidency (the first half of 2016).