

# The Nexus between the Environment and Human Rights in mining

## What are the Human Rights Implications of Environmental Damages in the Extractive Sector?

Mineral raw materials are essential for the energy and mobility transition as well as the digital transformation. Electronic products and components of solar panels or wind turbines are largely made up of minerals such as copper, aluminum, cobalt and lithium. According to World Bank estimates, the global consumption of minerals will increase considerably by 2050. For example, the **demand for cobalt could exceed current production by up to five times**. The extraction of minerals entails **environmental damage**. This can have an **impact on the living conditions of the local population** and **affect or even violate their Human Rights (HR)**. HR can be affected both directly and indirectly by changes to the environment.

Many resource-rich regions are inhabited by **Indigenous Peoples**, who are particularly affected by environmental degradation due to their connection to and dependence on natural resources. In international law, Indigenous Peoples are entitled to **collective rights** as a community in addition to the individual rights of individual members: The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) serves as a non-binding international framework, while Convention 169 of the international Labour Organisation (ILO) is legally binding. The latter was ratified by Germany in 2021.

### Individual HR affected by environmental damage (selected):

#### Right to



**Life**, Art. 6 para. 1 International Covenant for Civil and Political Rights (ICCPR).



**Health**, Art. 12 International Covenant for Economic, Social and Cultural Rights (ICESCR).

**Adequate standard of living**, Art. 11 para. 1 ICESCR, including



- Adequate food,



- Access to Water and Sanitation,



- Adequate housing.



**Freely chosen work**, Art. 6 para. 1 ICESCR.



**Standard of living adequate for the child's development**, Art. 27 International Convention on the Rights of the Child.



### Indigenous Peoples' Collective Rights affected by environmental damage (selected):

- **Principle of free, prior informed consultation**, Art. 15 para. 2, Art. 16 para. 2 ILO 169 and **consent**, Art. 10, 11 para. 2, 28 para. 1, 29 para. 2 UNDRIP, preceding mining activities on traditional lands.
- **Right to collective ownership and possession** of traditional lands as well as the right to use the natural resources therein, Art. 14, 15 para. 1 ILO 169.
- **Right to fair compensation** for damages by mining activities, Art. 15 para. 2 ILO 169.
- Right to **preserve their culture**, Art. 27 ICCPR.

The following environmental impacts that are typical for mining operations illustrate how they affect not only ecosystems and biodiversity, but also the HR of the local population.

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## Typical Environmental Impacts

### 1. Air Pollution

The processes of mining and the separation of gangue and drying tailings (mined rock with little economic use, partly contaminated with heavy metals or chemicals such as mercury or sulphuric acid), cause dust contaminated with heavy metals. This dust can spread far and wide, affecting the environment beyond the mining area. Inhalation can lead to the following health implications (amongst others) that constitute infringements upon HR:

- Serious **health consequences**, including **death**,
- impaired neurological **development of children**.

#### Example: Kolwezi, Democratic Republic of the Congo (DRC) (2014)

Discovery of Cobalt deposits in the soil of the residential area of Kasulo:

- In the region, the mined ores may contain uranium in addition to cobalt,
- Mining by residents in self-made mines in own backyard,
- Storage of mined rock next to accommodation,
- Processing on site.

#### Consequences

#### HR

Residents overly **exposed to dust contaminated with heavy metals and radioactivity.**



Impact: Severe health damage possible, Kasulo has been evacuated due to safety concerns.



Kitchen utensils, food and toys **contaminated with polluted dust.**



**Increased absorption of trace elements via food.**



### 2. Water Depletion

Large quantities of water are needed to reduce dust-building in mine shafts and processing plants as well as for the chemical separation of minerals. Furthermore, the groundwater level is sometimes artificially lowered to access ore deposits that lie below the water table. As a result, **wells**

for drinking water in the surrounding area could dry up.

HR can be injured by:

- **Insufficient access to drinking water**, and
- as a result, insufficient irrigation of fields. This can impact **food security** as well as the exercise of the right to **freely choose a profession**.



Withered Crops ©GIZ

### 3. Water and Ground pollution

The Ecosystem and **drinking water can be polluted by Acid Mine Drainage (AMD)** and the discharge of tailings into rivers or ores being washed in rivers. This can lead to the following HR violations:

- Poisoning of fish and soil deprives residents of **livelihoods**,
- Toxic water is no longer usable as **drinking water or for agriculture**,
- Contact with toxic water can lead to **adverse health impacts**.

The clearing of vegetation and inadequate mine closure can lead to erosion and reduced soil stability. This can result in the following adverse impacts on HR:

- **Danger to life** from mudslides of open and improperly secured shafts,
- **Impairment of agricultural soils**.

### 4. Uninhabitable land as a result

These environmental impacts on air, soil and water can lead to the local population having to leave their residential areas. Especially **Indigenous Peoples** forced to leave their ancestral lands are violated not only in their individual rights, but also their **collective rights**: For many Indigenous Peoples, the traditionally owned lands and the natural







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resources therein are an integral part of their identity, and they are unable to preserve their culture and way of life without them.

**Example: Collapse of tailings dam of iron ore mine in Brumadinho, Brazil (2019)**

A mudslide contaminated with heavy metals buried parts of the mine site and devastated forests, rivers and communities on about 290 ha in total.

Toxic sludge contaminated the nearby river and covered the soil.

| Consequences  | HR  |
|---|---|
| At least <b>270 people died</b> or went missing.  |    |
| Areas covered by sludge are <b>inhabitable</b> due to the toxins.   |    |
| The <b>ecosystem</b> even far downstream the river Paraopeba is <b>lastingly destroyed</b> . For example, due to the fish mortality, many people can no longer pursue their agricultural occupations such as fishing. |    |
| <b>Water can no longer be used</b> for drinking or as irrigation in agriculture.  |  |
| Due to water and ground pollution, there are <b>risks of toxins being absorbed</b> through the food chain.  |  |
| <b>Indigenous Peoples</b> not only <b>lost</b> their <b>livelihoods</b> , but also an important part of their <b>identity</b> , as e.g. the river was the source of all life for the Pataxó Hã-Hã-Hãe.                |  |

**Approaches to protection of HR**

*The duty to protect human rights ...*

... lies primarily with the **states**. These create a **regulatory framework** to prevent the occurrence of violations as far as possible and ensure that remedial action is taken if violations do occur.

In addition to the state's duty to protect HR, companies also have a responsibility to respect and protect human rights.

A growing number of industrialised countries has introduced binding regulations on **corporate due diligence along global supply chains**. Mining companies face increasing pressure to comply with HR and the environmental due diligence requirements. The **draft of the EU Corporate Sustainability Due Diligence Directive** even provides for a **civil liability provision**, enabling those affected by breaches of due diligence to sue the company for damages. However, the exact preconditions are yet to be determined (as of June 2022).

*German politics ...*

... are also working towards increasing the responsibility of companies regarding environmental damages. For example, Measure 15 of the **German Government's Raw Materials Strategy** provides for the development of a **guideline on environmental due diligence**, to support companies in dealing with environmental risks along the supply chain. Furthermore, the **German Supply Chain Due Diligence Act** (*Lieferkettensorgfaltspflichtengesetz*), which will enter into force on 01.01.2023, contains both human rights and environmental due diligence obligations for companies.

A persistent challenge for corporate due diligence is the complexity of mineral supply chains. Due to the large number of intermediate steps, minerals from large-scale industrial mining can be mixed with minerals from artisanal and small-scale mining (ASM), making **traceability within the supply chain difficult or even impossible**. Regulations on corporate due diligence in the raw materials sector are most effective when

- **local rights holders** are involved,
- companies comply with their local **monitoring obligations**, and
- **regulation by the state** takes place in the mining countries.

Particularly in the largely informal ASM-Sector, there is often a lack of effective state regulation and control in the mining countries. To achieve improvements in this area, **German development cooperation** supports different approaches, for example the reform of national laws, supraregional certification mechanisms, capacity building or business initiatives.

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### Example: Regulating the ASM-Sector in the DRC

Legislation in the mining sector (*Code Minier* and *Règlement Minier*) contains regulation for the ASM-Sector, including:

- Mining of uranium-bearing ore deposits prohibited without specific licence, esp. cobalt.
- Maximum depth of shafts is limited to 30 m, and shafts must be secured by crossbeams every 2 m.
- Use of explosives prohibited.

Additionally, the government can designate special ASM-zones, which are controlled by e.g. cooperatives of local traders or foreign investors.

**BUT:** 90 % of the miners have no knowledge of the rules or their rights → regulations are often not respected.

Cooperatives demand high membership fees or a share of the profit of **up to 50 %** from the miners → few ASM-miners are members.

Designated zones are often not connected to the infrastructure or have not been examined for economic viability.

- Only three ASM operations on designated zones, mainly still (partly illegal) mining on concessions of industrial mining sites.

## The Development of an internationally recognised Human Right to a healthy environment

In recent decades, the realisation that a **clean, healthy, and sustainable environment** (“healthy environment”) is a prerequisite for the realisation of many HR has steadily gained ground. For example, the African Charter on Human and Peoples’ Rights includes the right to a healthy environment. The San Salvador Additional Protocol to the American Convention on Human Rights, reinforced procedurally by the Escazú Agreement, also recognises the right to a healthy environment. While the European Convention on Human Rights (ECHR) does not contain an explicit right to a healthy environment, the European Court of Human Rights has consistently interpreted *inter alia* Article 8 ECHR (right to respect for private and family life) to include a right to protection against serious environmental harm.

On the 8<sup>th</sup> of October 2021, the United Nations Human Rights Council (UNHRC) recognised the **right to a healthy environment** at the international level. Neither the political declaration of intent of the UNHRC nor the resolution of the UN General Assembly, which is scheduled for September 2022 (as of June 2022), are legally binding. However, they could lead to an **increased advocacy for protection from environmental degradation**, as the similar recognition of the right to water in 2010 did for the access to safe drinking water.

**Published by:**  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

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Sector Programme Extractives and Development

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**Publishing location and year:**  
Bonn 2022

**Photo credits/sources:**  
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On behalf of



Federal Ministry  
for Economic Cooperation  
and Development