

Cumulative and Project-Level Impacts



Part 5

Cumulative and Project-Level Impacts

Overview of Part 5

The following chapters present the findings and analysis from the field research carried out for the Mining SWIA Research teams visited large-scale, small-scale and subsistence mining projects and activities. For areas visited see Annex A. The data from the field research is anonymised. This is because the intention of the SWIA is to focus attention on trends in the mining sector, rather than the practices of particular companies. Anonymity is also intended to ensure the safety and security of those interviewed. The research findings should not be taken to apply to all situations, organisations, or companies interviewed.

Each chapter presents common cumulative and project-level impacts related to limestone, gold and tin mining, divided according to seven issue areas:

1. Community Engagement and Grievance Mechanisms
2. Community Impacts and Development
3. Land
4. Labour
5. Women and Children
6. Security and Conflict
7. Environment and Ecosystem Services

Each chapter follows the same structure, presenting:

- A. National Context
- B. Field Assessment Findings
- C. Relevant International Standards, Guidance & Initiatives

Cumulative impacts

Cumulative impacts are the successive, incremental and combined impacts from multiple projects or multiple activities located in the same region or affecting the same resource (e.g. a watershed or an airshed).²⁶⁸ Different projects or different phases of the same project contribute incremental impacts to other existing, planned, or reasonably predictable future projects and developments, leading to an accumulation of impacts.

Often, environmental and social impacts from one mining project alone may not necessarily be significant. Instead, it is the building up of smaller impacts over time or within the same physical footprint that have a cumulative effect. Sometimes a series of smaller events can

²⁶⁸ Daniel M. Franks, David Brereton and Chris J. Moran, 'Cumulative Social Impacts' in Frank Vanclay and Ana M. Esteves (eds.), *New Directions in Social Impact Assessment: Conceptual and Methodological Advances* (Cheltenham: Edwards Elgar, 2011) pp. 202-220. They are sometimes also referred to as collective impacts.

trigger a much bigger environmental or social response if a tipping point is reached, changing the situation abruptly. A response can also be triggered by poorly designed policies that prompt companies to repeat the same mistakes. The resilience of the environment or society to cumulative impacts depends upon the nature of the impacts and the vulnerability (or sensitivity) of the society or ecosystem. In other words, resilience is the degree to which the environment and society are susceptible to, and able to cope with, injury, damage, or harm.²⁶⁹

Cumulative impacts of the mining sector can be negative (e.g. multiple mines relying on the same water source, thereby reducing access to water for local communities) or positive (e.g. cumulative economic developments in a mining area justify opening a public healthcare clinic or a secondary school). In some cases, cumulative impacts can have both positive and negative effects. Cumulative impacts are particularly relevant to the mining sector as it involves localised mineral deposits that determine the location of mining activities, regardless of whether the local social and natural environment can support and benefit from such activities. Furthermore, the existence of a deposit may result in a number of operations in the same region, meaning that impacts may be substantial within a small area, often with the effect of creating additional, cumulative impacts.

If not managed with care, cumulative impacts can overwhelm environmental or social 'carrying capacity' to withstand or recover from the changes because:²⁷⁰

- **Institutionally** – the accumulated impacts overwhelm the local capacity to provide services, including protection or fulfilment of the population's human rights, provision of remedies, or managing or changing the course of events;
- **Socially** – the rapid onset and acceleration of the changes overwhelms societal structures and capacity to manage change, which may eventually lead to a rise in tensions or violence and a potential breakdown of law and order; and
- **Environmentally** – the biophysical impact surpasses the environment's carrying capacity.

Cumulative impacts are areas of concern from a **human rights point of view** for a number of reasons:

- Cumulative impacts are often much **harder to predict** than singular impacts from one project. Unless businesses and authorities previously sought to assess the potential for such impacts, it is also **harder to prevent** the consequent environmental and social changes. These often have long-term impacts on human rights, such as the rights to life and security of person, health, education, and an adequate standard of living.
- Cumulative impacts **can be severe**. This can be because of the type of impact (e.g. the cumulative burden on poor infrastructure causes it to collapse) or its widespread nature (e.g. cumulative water use due to mining development reduces the water table, resulting in drought with widespread effect on water and food security in local communities). It can also be because repetition increases the severity (e.g. a singularly-occurring, minor impact may not pose a risk to human rights, but a series of minor impacts may add up to a human rights impact).

²⁶⁹ IFC, [Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets](#), 2013, pp. 640-647

²⁷⁰ Daniel M. Franks, David Brereton and Chris J. Moran, pp. 202-220

- Even where a duty-bearer/responsible party can be identified in the case of a singular negative human rights impact, there are often **challenges in holding the duty-bearer/responsible party accountable**. Where cumulative impacts are involved, responsibility for impacts is even more dispersed, making it even harder to identify parties responsible for prevention, mitigation and remediation, and hold them accountable. Ultimately, the Government has the responsibility to protect against human rights violations. When it comes to cumulative impacts this is particularly relevant, given the difficulty of holding individual businesses to account.
- Companies **may not consider themselves responsible** for cumulative impacts as they make only a *contribution* to these impacts. This may especially be the case where their activities individually fit within acceptable regulatory limits, but the regulatory regime is not advanced enough to take account of accumulation of impacts over time or space.
- Populations **most at risk** are affected by cumulative impacts, as they are likely to have the least resilience to respond and the least capacity to demand a response from the authorities or businesses.
- Cumulative impacts are sometimes slow to develop and may build up incrementally over time. Accordingly, it may be more **difficult to draw attention** to the issues or to **obtain action** from responsible parties.

Project-level impacts

Project-level impacts are those impacts associated with a particular mining operation. This can include impacts such as working conditions of employees and contracted staff on the mine site, as well as impacts in local communities such as when mining operations cause adverse effects on the environment, land or community wellbeing.

For the purposes of the SWIA, the term project-level impacts includes impacts in the formal parts of the sector, such as those associated with large-scale and small-scale mining operations, as well as impacts caused by subsistence mines or mining activities.

It is important to remember that according to the UNGPs (Box 2), businesses are expected to take into consideration impacts that they cause and contribute to, as well as impacts that are directly linked to their operations, products or services through business relationships.

Cumulative & Project-Level Impacts

Community Engagement and Grievance Mechanisms



Part 5.1

Community Engagement and Grievance Mechanisms

In this section:

- A. National Context
 - Freedom of expression, assembly and association
 - Community consultation and the right to information
 - Access to remedy and operational-level grievance mechanisms
- B. Field Assessment Findings
 - Community consultation, engagement and information sharing
 - Consultation for environmental and social impact assessment (EIA)
 - Land-related conflicts and grievances
 - Operational-level grievance mechanisms
- C. Relevant International Standards, Guidance and Initiatives

A. National Context

Stakeholder engagement, consultation and grievance resolution are complex in Myanmar, given its recent history of repression by the Government and the military. While this is slowly changing, many communities may still be reluctant to voice their views regarding mining projects and activities. Furthermore, community consultation and engagement as part of mining operations is currently not generally practiced in the mining sector, meaning that both companies and communities are, by and large, unfamiliar with such processes. This applies to both participation in ESIA processes and ongoing community-company engagement.

Freedom of expression, assembly and association

Since the reforms began in 2011 there have been significant improvements regarding the right to freedom of expression, including loosening of restrictions on the media, and the right to peaceful assembly and the ability to stage peaceful protests.²⁷¹ Article 354 of the 2008 Constitution guarantees the rights to freedom of expression, peaceful assembly and association, albeit with significant restrictions. Exercising such rights must not contravene “community peace and tranquillity,” which permits expansive interpretations. Laws which restrict these freedoms have not been repealed and remain available to the authorities to use them to arrest and imprison people for resistance activities.²⁷² However, the

²⁷¹ E.g., in January 2013 the President abolished Order No. 2/88 of 18 September 1988, which had banned gatherings of five people or more. See, The Republic of the Union of Myanmar President’s Office, [Order No. 3/2013](#), 28 January 2013, and [Order No 2/88](#), 18 September 1988.

²⁷² These include but are not limited to the [1908 Unlawful Associations Law](#), the [1950 Emergency Provisions Act](#), and various articles of the [Penal Code](#), especially Article 505(b). For a discussion of these and other laws see, ICJ, [Myanmar: Briefing Paper on Criminal Defamation Laws](#), 2015.

Government elected in 2015, being made up of many of those who themselves were political prisoners, is less likely to make use of these provisions.

In December 2011, the Parliament enacted the Law Relating to Peaceful Assembly and Peaceful Procession, which permits peaceful assembly for the first time in several decades. However, prior permission from the Government (in this case the township police) is still required for an assembly/procession of more than one person and the requirements for seeking such permission are onerous. Article 18 of the current Law has often been used to target activists and human rights defenders, many of whom have been arrested and imprisoned under its provisions.²⁷³ Parliament amended the Law on 19 June 2014 and these amendments reportedly oblige the authorities to now grant permission for peaceful demonstrations unless there are 'valid reasons' not to do so. Punishment for failing to seek prior permission and holding a demonstration without such permission was reduced from one year to six months.²⁷⁴ However, the amended Law still provides for the arrest and imprisonment of peaceful protesters, a provision that has been met with calls for reform by NGOs such as Human Rights Watch²⁷⁵ and Amnesty International.²⁷⁶

Furthermore, in 2016 the newly elected NLD-led Government initiated a reform to again amend the Peaceful Assembly and Peaceful Procession Bill. While this does illustrate the Government's positive intention to reform laws that may restrict human rights, concerns remain that the proposed reform is still too narrow and restrictive in scope.²⁷⁷ For example, Amnesty International noted that "the proposed amendments fall far short of bringing the Act into line with international human rights law and standards."²⁷⁸

Protests against mining projects have been suppressed in the past, with participants arrested and subjected to ill-treatment in many cases.²⁷⁹ For example, during November 2012 the police violently broke up a peaceful protest against the Letpadaung Copper Mine near Monywa, Sagaing Region.²⁸⁰ Conflicts surrounding the same mine erupted again in 2014, resulting in a woman's death caused by either police forces or the mine's security personnel.²⁸¹ In the same year, more than 50 gold miners were arrested during the police raid of a protest camp in Yamethin.²⁸² The punishments that peaceful protestors received for publicly opposing or demonstrating against mining projects were raised with Government by civil society members of the EITI Multi-Stakeholder Group in 2014. This appeared to lead to a lessening of arrests.

²⁷³ [2011 Right to Peaceful Assembly and Peaceful Procession Act](#)

²⁷⁴ DVB, [Peaceful Assembly Bill passed, now awaits President's signature](#), 19 June 2014

²⁷⁵ Human Rights Watch, [Burma: "Peaceful Assembly Law" Fails to End Repression](#)

²⁷⁶ Amnesty International, [Myanmar: Open Letter on Amending the Peaceful Assembly and Peaceful Procession Act](#), 13 May 2016

²⁷⁷ Article 19, [Myanmar: Peaceful Assembly and Peaceful Procession Bill](#), 16 May 2016, p. 3

²⁷⁸ Amnesty International, [Open Letter on Amending the Peaceful Assembly and Peaceful Procession Act in Line with International Human Rights Law and Standards](#), 12 May 2016, p. 1

²⁷⁹ Norwegian Council on Ethics, Pension Fund Global, [Recommendation on the exclusion of Daewoo International Corporation, Oil and Natural Gas Corporation Ltd., GAIL India and Korea Gas Corporation from the investment universe of the Government Pension Fund Global](#), 2012; see also, the [2013 Recommendation](#) concerning the post-construction phase of the project.

²⁸⁰ Amnesty International, [Open for Business? Corporate Crime and Abuses at Myanmar Copper Mine](#), 2015; Human Rights Watch, [Burma: Investigate Violent Crackdown on Mine Protesters](#)

²⁸¹ NPR, [1 Dead In Protest At Chinese-Backed Copper Mine In Myanmar](#)

²⁸² Ricochet, [In Myanmar's Gold Rush, Not All That Glitters Is Gold](#)

In October 2016, President Htin Kyaw signed legislation abolishing the 1950 Emergency Provisions Act, which had allowed the Government to impose seven-year prison terms for simply reading foreign newspapers or listening to mass-media broadcasters.²⁸³ U Aung Kyi Nyunt, the chairman of a panel in Parliament's upper house that helped draft the legislation, stated "We have abolished the Emergency Provisions Act because it was the tool used by military regimes to suppress political dissidents, and the law does not fit with the current situation of democratization in the country."²⁸⁴

Community consultation and the right to information

Interactions between the Government and the people of Myanmar have been marked by a lack of transparency on the part of the authorities, including about business operations. There is currently no freedom of information law in Myanmar, although civil society is advocating for such legislation and there is a draft bill in place.²⁸⁵ Furthermore, the field research indicated that local government does not systematically or regularly provide information to communities about business operations in their areas.

Neither the 1996 Myanmar Mines Law nor its 2015 amendment contain provisions for consultation with local communities. Pursuant to the 2015 amended Myanmar Mines Law MoM (now MoNREC) is charged with granting mining permits based on information in a feasibility study. However, the exploration activities and feasibility study do not require consultation and engagement with local communities, or an IEE/EIA process, and there is no requirement on the Ministry to consider community and civil society views when making decisions on permits. There are no provisions for community appeal regarding permitting decisions, or requirements for operational-level grievance mechanisms for large projects. Lastly, the 2015 amended Myanmar Mines Law makes no mention of permit-holder responsibility in the event of land-related conflicts or complaints.

Article 5 of the 2015 Protection of the Rights of National Races Law states that *hta-nay tain-yin-tha* (the phrase used by civil society to refer to Indigenous Peoples although not defined in the Law) "should receive complete and precise information about extractive industry projects and other business activities in their areas before project implementation so that negotiations between the groups and the Government/companies can take place." While not a formal legal requirement or framework for FPIC, Indigenous Peoples and CSOs working with them are increasingly aware of the concept.²⁸⁶

The 2015 EIA Procedure contains provisions for consultation and engagement, and requires application of international standards where resettlement and Indigenous Peoples are involved. Feedback suggests that few EIAs, even those conducted in 2016, are implementing this properly; and field research findings indicate significant challenges associated with consultation and engagement in mining EIA processes prior to 2016.

²⁸³ New York Times, [Myanmar Repeals 1950 Law Long Used to Silence Dissidents](#), 5 October 2016

²⁸⁴ Ibid

²⁸⁵ There is still currently no law. There is a draft bill – [unofficial English translation from the Commonwealth Human Rights Initiative here](#)

²⁸⁶ MCRB, [Briefing Paper: Indigenous Peoples' Rights and Business in Myanmar](#), February 2016

Access to remedy and operational-level grievance mechanisms

Overall, there is a clear lack of access to effective avenues for individuals and communities to express their grievances, engage with responsible parties in the Government or to seek redress if harms have occurred – especially at the local-level. In terms of access to judicial remedy, it is well documented that the Myanmar legal system does not reliably provide access to justice.²⁸⁷ Myanmar has no publicly available legal databases, making it difficult to understand laws, regulations, and rights. Furthermore, there is no free, government-funded legal aid system for the poor, so many cannot find adequate legal representation to help voice their grievances.²⁸⁸ In addition to its lack of legal services, the Myanmar judiciary is plagued with high rates of corruption.²⁸⁹ The NLD-led Government has committed to improve the rule of law but it will take time.

In terms of access to non-judicial remedy, it is worth noting that currently none of the laws or rules applicable to mining projects require companies to have in place operational-level grievance mechanisms, although this may become formalised through the EIA/EMP process. Since the endorsement of the UNGPs, such mechanisms have become an integral part of company human rights due diligence, in particular for large-scale projects.²⁹⁰ Furthermore, there are currently no other types of third-party non-judicial grievance mechanisms in place that might deal with mining-related complaints, such as a national contact point or ombudsman, other than the Myanmar National Human Rights Commission which is yet to fully demonstrate its capacity to play this role. Lack of access to remedy is exacerbated even further in the informal mining sector, in particular in subsistence mining areas, where workers and communities are left essentially without recourse to any type of grievance resolution. The fact that informal and subsistence mining activities are often illegal is a further barrier to accessing remedy.

Land is one of the most common sources of conflict and grievances in Myanmar. As of April 2016 there were over 6,000 outstanding complaints to the Government regarding land conflicts.²⁹¹ As outlined in Part 5.3: Land, most of the laws and regulation regarding land provide only limited and weak options for appeal of decisions or raising of grievances regarding land-related decisions. The former Parliament's Farmland Commission and the Land Utilisation Management Central Committee, the two regulatory bodies responsible for providing remedy in cases of land disputes, faced capacity issues in the face of the high volume of complaints.²⁹² When regulations and organisations do offer protection theoretically, they often fail in reality due to lack of access to legal assistance, lack of confidence and corruption in the judiciary, and time constraints.²⁹³ In the event that an individual secures access to remedy, there is still no guarantee of adequate compensation because there are no detailed regulations defining compensation levels for land, assets, or cultivation.²⁹⁴

²⁸⁷ See e.g. The Jacob Blaustein Institute for the Advancement of Human Rights, [Myanmar Rule of Law Assessment](#), March 2013

²⁸⁸ Ibid, p. 32

²⁸⁹ Ibid, p. 31

²⁹⁰ See e.g. ICMM, [Human Rights in the Mining & Metals Sector: Handling and Resolving Local Level Concerns & Grievances](#), 2009

²⁹¹ Reliefweb, [Parliamentary committee: 6,000 land confiscation complaints yet to be addressed](#), 27 April 2016

²⁹² Displacement Solutions, [Land Acquisition Law and Practice in Myanmar](#), May 2015

²⁹³ Ibid, p. 23

²⁹⁴ MCRB, [Land Briefing Paper](#), March 2015, p.13

B. Field Assessment Findings

The field research identified a number of issues associated with community consultation, engagement and grievance resolution. The following paragraphs provide an overview.

Community consultation, engagement and information sharing

Human Rights Implicated: Right to freedom of opinion and expression; right to participation

- **Limited or no community consultation and engagement by mining companies:** None of the formal mine sites visited had in place stakeholder engagement plans or formalised procedures or strategies for regular community engagement. The companies also did not have 'community relations' staff. There was no evidence of regular information sharing with communities about company activities. Overall, the field research teams observed that companies had a limited understanding of the role of community consultation and engagement. For example, at one large-scale mine site company management was of the view that there was no need to consult with the community as the company had taken over the permit/operations from a previous operator. Another company claimed that company representatives visited local communities to find out what community members wanted and what their needs were. However, there were no records kept of such engagement or meetings, and villagers reported that such meetings did not occur.
- **Ad hoc stakeholder engagement favours community leaders and elites:** Where consultation and engagement reportedly occurred, this was on an ad hoc basis and related primarily to social or philanthropic spending. Furthermore, such engagement occurred primarily through village leaders, rather than diverse community members. At one site, for example, the company reportedly consulted with the village administration and village elders on an informal basis. According to the community members interviewed at the site, the consultation by the company had taken place only with those village elders supportive of the mine project. At another site, where there had reportedly been a total of three community meetings over the last six years, these meetings had involved the village administrator, monks and the factory communications officer, but no other community members. At several other sites, it was reported that any communication between the company and communities was between company representatives and monks or village elders.
- **Stakeholder engagement requirements at the local-level are unclear and ad hoc stakeholder engagement focuses on obtaining signatures for approvals:** At several sites, it was noted that if stakeholder engagement occurred this was in the form of one-way information provision. It was often focused on obtaining the necessary signatures from villagers or village leaders for the approval of mining activities, rather than consultation and engagement of a broad spectrum of community members to genuinely obtain and respond to their views as part of the development and implementation of mining activities. Reportedly, ME-2 has a requirement in place at the state/region-level that companies must obtain signatures from village tract leaders and community leaders signalling consent to mining activities during the permitting

process.²⁹⁵ Company stakeholders reported that a requirement for consultation is sometimes also specified by township-level administrators, without clear reference to the legal or regulatory basis for such a requirement.²⁹⁶ This indicates that stakeholder engagement requirements by the government at the local-level are inconsistent and not known by stakeholders, causing confusion for both communities and companies.

Consultation for environmental and social impact assessment (EIA)

Human Rights Implicated: Right to freedom of opinion and expression; right to participation; right to free, prior, and informed consent

- **Limited stakeholder consultation and engagement in EIA processes:** Some of the sites visited had recently undertaken EIAs. While this is a positive development, the field researchers observed several shortcomings concerning consultation and engagement. For example, in an area with one large-scale operation and two small-scale operations an EIA was conducted for the small-scale operations. However, because of complex ownership and operating structures of the large-scale mine, local community members were confused about whether the EIA consultation was intended to capture issues associated with the large-scale mine or not. These types of scenarios were further complicated by the unclear owner-operator structures at some sites. While operations – and therefore the EIA – might formally be the responsibility of one particular operator, the operations might in practice be carried out by another party, creating confusion and lack of clarity for local communities about which company and/or operator would even be responsible for the EIA process for a particular site. Field research found that some EIA processes had not involved any community consultation. For example, according to the operator at one site it was not necessary to consult with local communities as part of the EIA process as the operations were being conducted on designated mining land. At another site, both the company and local communities reported that the consultant carrying out the EIA had not visited local communities as part of the process.
- **Information provided as part of EIA consultations and engagement is too technical, not timely and not in the appropriate language(s):** Even at those sites that did include consultation and engagement as part of the EIA process, several issues remained. At one site where the EIA process included two public consultations, the EIA information was provided to participants only one day before the meeting, it was too technical for participants to understand, and the consultation meeting was in Burmese language with insufficient translation into relevant local languages. The additional interviews conducted by the consultants for the EIA focussed purely on environmental, and not social, issues. The consultants only spoke to the village leaders and heads of households. These examples illustrate that the process and purpose of meaningful consultation or consideration of social impacts as part of an EIA is not currently part of the mining operator mind-set or their operational practices; nor is it a part of the skillset of EIA practitioners carrying out assessments (all EIA consultancies who had carried out EIAs at the sites visited were Myanmar consultancies).

²⁹⁵ MCRB field research, 2016

²⁹⁶ Yangon consultations, October 2016

Land-related conflicts and grievances

Human Rights Implicated: Right to freedom of opinion and expression; right to remedy

- **Land-related conflicts and grievances:** The field research identified a number of instances of land-related conflicts and grievances. Some of these were caused by the lack of clarity regarding land boundaries (see further, Part 5.3: Land). For instance, at several sites community members were charged for trespassing onto paddy land which was the subject of a dispute as to whether the land was within the mining concession or not. These cases also illustrated common issues with the legal system. At one site the villagers charged were only informed about the nature of the charges after they had already been indicted. At the same site, but in another case, a farmer who had been charged with trespassing onto paddy land was acquitted as he could prove land ownership registration. However, this was only after using extensive financial resources to attend the township court for a reportedly 20 times. Furthermore, throughout the process the farmer was reportedly subjected to police intimidation. Despite being found not guilty, the extensive expenses related to the trial were not reimbursed, leaving him destitute. At another site, the local community sent a letter to a parliamentary committee expressing grievances regarding land acquisition and compensation. Subsequently, the military invited them to a meeting to discuss their demands but the complaint was not resolved or taken further. Overall, the field research findings demonstrate that where there is some response to land-related grievances by companies or the Government, this is usually extremely slow. At several sites where grievances had been raised – regarding issues such as chemical waste in paddy fields or damage to land, crops and waterways – responses came only months or years later. At one site the company responded with a payment for such damage but did not refer to this as compensation but as a ‘donation’, thereby essentially denying accountability, to the community’s anger.

Operational-level grievance mechanisms

Human Rights Implicated: Right to remedy; right to freedom of opinion and expression

- **No operational-level grievance mechanisms in place:** None of the formal mine sites visited had a grievance mechanism in place. At one site there was a phone number provided for pit owners to contact the mine operator. However, this was not for local community members to contact the mine. The company did not keep a record of the number or types of complaints made by pit owners. Furthermore, this would not constitute a grievance mechanism according to the UNGPs, which outline eight effectiveness criteria for such mechanisms, including one on accessibility.²⁹⁷ At another site there was reportedly a company communications officer whose role included receiving complaints from local community members. However, while the company claimed that all community members knew of this process, villagers reported that they did not know about this person or their role in grievance resolution. Furthermore, the communications officer was a member of a local EAO. At another site, the company said that was not necessary to have a formal grievance mechanism in place because

²⁹⁷ [UN Guiding Principles on Business and Human Rights](#), June 2011, Principle 31

there was an informal understanding with communities that the site was open to hearing complaints.

- **Low understanding of grievance mechanisms amongst stakeholders:** Overall, the field research teams noted that communities and companies were not aware of what a grievance mechanism is, or the role of such a mechanism in community-company relations.
- **Low responsiveness and effectiveness of response where grievances are raised:** Where communities had raised grievances with companies, the responses provided did not appear to be readily forthcoming or effective. In some cases, this was exacerbated further by conflicting and unclear roles between stakeholders. For example, one company responded to communities that it could not do anything about illegal logging in the area as this was the responsibility of the Forestry Department. At another site a village leader reportedly raised complaints associated with noise (interfering with children's schooling and sleep of people in communities) with the village tract administrator. This person, however, also worked as a security guard for the company and the complaint was not taken further or resolved.
- **Grievances are not raised:** At a number of sites, communities shared grievances with the field research teams that had not been raised with the relevant companies. This indicates a lack of trust between communities and companies and that there are only limited avenues to raise complaints. Such grievances related to a whole range of issues, including land, noise, dust and pollution, compensation and more.

C. Relevant International Standards, Guidance and Initiatives

Box 13: Relevant International Standards, Guidance and Initiatives on Community Engagement and Grievance Mechanisms

International Standards:

- [ICMM Sustainable Development Framework](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 1 – Assessment and Management of Environmental and Social Risks and Impacts](#)
 - [PS 4 – Community Health, Safety and Security](#)
 - [PS 5 – Land Acquisition and Involuntary Resettlement](#)
- [UN Guiding Principles on Business and Human Rights](#) (Principles 29-31)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)

Guidance on Stakeholder Engagement:

- CommDev, [A Strategic Approach to Early Stakeholder Engagement: A Good Practice Handbook for Junior Companies in the Extractive Industries](#)
- ICMM, [Community Development Toolkit](#)
- ICMM, [Understanding Company-Community Relations Toolkit](#)
- IFC, [Stakeholder Engagement - Good Practice Handbook for Companies Doing Business in Emerging Markets](#)
- OECD, [Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector](#)

- Oxfam Australia, [Free, Prior and Informed Consent Guides](#) and [Strengthening Community Understanding of Free, Prior and Informed Consent, Trainer's Manuals](#). These two resources work together to provide practical resources for trainers to help them plan and deliver FPIC training programmes.
- Shift, [Conducting Meaningful Stakeholder Consultation in Myanmar](#)
- World Resources Institute, [Breaking Ground: Engaging Communities in Extractive and Infrastructure Projects](#)

Guidance on Grievance Mechanisms:

- CAO, [A Guide to Designing and Implementing Grievance Mechanisms for Development Projects](#)
- ICMM, [Handling and Resolving Local Level Concerns & Grievances](#)
- IFC, [Good Practice Note: Addressing Grievances from Project-Affected Communities](#)
- IIED, [Dispute or Dialogue? Community Perspectives on Company-led Grievance Mechanisms](#)
- World Bank, [Stakeholder Engagement and Grievance Mechanisms](#)

International Initiatives:

- [AccessFacility.org/mechanisms/all](https://www.accessfacility.org/mechanisms/all). This is a database that allows users to explore available non-judicial grievance mechanisms by using a search engine navigated through searching mechanism type, country or industry.

Cumulative & Project-Level Impacts

Community Impacts and Development



Part 5.2

Community Impacts and Development

In this section:

- A. National Context
 - Poverty, social services and social protection
 - Education
 - Health
 - Infrastructure
 - Cultural heritage
 - Social investment programmes
- B. Field Assessment Findings
 - Community health and safety
 - Community development, employment and economic opportunities
 - Public and community services
 - Cultural heritage
- C. Relevant International Standards, Guidance & Initiatives

A. National Context

While economic development has recently accelerated, the rural communities who make up about 70% of the Myanmar population rely essentially on subsistence agriculture and remain poor. Amongst ASEAN countries, Myanmar has the lowest life expectancy and the second-highest rate of infant and child mortality. Just one-third of the population has access to the electricity grid.

Poverty, social services and social protection

Detailed data on socio-economic indicators is lacking in Myanmar. The 2016 UN Human Development Index ranked Myanmar at 145 out of 188 countries surveyed, putting it in the 'low human development category', with an average life expectancy of just 66.1 years of age and 4.7 mean years of schooling.²⁹⁸ The ADB has reported that 25.6% of the population lives below the national poverty line, which is a higher rate than other Southeast Asian countries including the Philippines, Cambodia, Indonesia, Thailand and Vietnam.²⁹⁹ The 2015-16 Government budget was reported at 3.3% for health and 6.07% for education.³⁰⁰

²⁹⁸ [UNDP Human Development Report](#), 2016

²⁹⁹ ADB, [Basic 2016 Statistics](#), p. 2

³⁰⁰ Irrawaddy, [Government Proposes 20% Budget Rise Boosting Education, Defence and Health](#)

Education

Official literacy rates are more than 90%, although a recent survey has indicated that 20% of households at the national level had no member of working age who could read or write a simple message.³⁰¹ Myanmar has a lower rate of expected schooling than other ASEAN countries, such as Cambodia and Laos. There are low secondary school enrolment rates, due to poverty and non-availability of schools. UNICEF indicates that between 2009 and 2013 only 46% of boys and 48% of girls enrolled in secondary school.³⁰² There is also a clear need for increased vocational training.

Spending on the education sector has increased since 2011. The budget in 2015/2016 increased spending on education to USD 1.3 billion, up from USD 1 billion in the 2014/2015 financial year.³⁰³ The latest increase is being harnessed to employ an additional 50,000 teachers, and will also be allocated to university stipends and scholarships, as well as supplementing fees at technical institutions. Furthermore, according to a report from UNICEF, newly introduced early childhood development services and improved teaching methodologies have expanded.³⁰⁴

Health

An estimated 75% of the population of Myanmar does not have access to good quality healthcare.³⁰⁵ The private sector provides healthcare that is often inadequate and unaffordable for the poor. Public health facilities that do exist often do not have basic equipment and supplies or staff.³⁰⁶ The Ministry of Health has formulated a National Health Plan (2017-2021) within a 20 year National Comprehensive Development Plan.³⁰⁷

Myanmar suffers from one of the highest tuberculosis (TB) rates in the world; a World Health Organisation (WHO) report identified a rate of 53 deaths per 100,000 people in 2014.³⁰⁸ About 70% of the population is living in malaria-endemic areas.³⁰⁹ The United Nations Development Programme (UNDP) reports that Myanmar malaria morbidity has decreased by 50% since 2007 and the TB incidence rate has been in decline since 1997.³¹⁰ The number of people living with HIV in Myanmar was 230,000 in 2016 according to UNAIDS³¹¹, with a high level of transmission through injecting drug users, sex workers and their clients, and men who have sex with men.

³⁰¹ Ministry of Labour, Employment and Social Security and Central Statistical Organisation, [Myanmar labour force, child labour and school to work transition survey](#), 2015, p. 8

³⁰² UNICEF, [The State of the World's Children 2015 Country Statistics Table](#), November 2014, p. 62

³⁰³ Oxford Business Group, [Changes to Myanmar's education sector needed](#)

³⁰⁴ UNICEF, [Annual Report 2014 Myanmar](#), 2015, p. 11

³⁰⁵ World Bank, [Power to People: Work Bank Group to invest US \\$2 billion in Myanmar, to support reforms, reduce poverty, increase energy and health access](#)

³⁰⁶ WHO, [Health Action in Crises: Myanmar](#), August 2008

³⁰⁷ [National Health Plan 2017-2021](#), Myanmar Ministry of Health and Sports

³⁰⁸ WHO, [Global Tuberculosis Report 2015](#), 2015, p. xxvi

³⁰⁹ WHO, [World Malaria Report 2015](#), 2015, p.75

³¹⁰ UNDP, [About Myanmar](#)

³¹¹ <http://www.unaids.org/en/regionscountries/countries/myanmar>

Infrastructure

In 2013, studies indicated that on average, only 69.4% of the population had access to safe drinking water.³¹² According to a report by the World Bank, 70% of the population lacked access to grid electricity in 2014.³¹³ The transport sector is considerably underdeveloped, including roads and railways, impeding economic activity and hampering the movement of goods and rural people to markets, schools, and clinics; road fatality rates are also high.³¹⁴ A report by Mastercard, with support from Myanmar think tank MDRI-CESD, notes that formal banking penetration in urban areas is 10% and considerably less in rural areas because of reliance on cash and a lack of trust in the banking system.³¹⁵

Cultural heritage

According to the definition offered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in the context of the Universal Declaration on Cultural Diversity (2001), culture is “the set of distinctive spiritual, material, intellectual and emotional features of a society or a social group that encompasses art and literature, lifestyles, ways of living together, value systems, traditions and beliefs.”³¹⁶ Myanmar is a very culturally diverse country with many spiritual and cultural sites throughout the country. Communities often attach great importance to their local temples and shrines. There are therefore likely to be areas of cultural importance to the community in areas where mining takes place.

The Revised Protection and Preservation of Ancient Monuments Law was passed in August 2015³¹⁷ to increase protection of the country’s ancient buildings that are more than 100 years old and have cultural, historical, architectural and artistic value. It introduced tougher sanctions for anyone found to have damaged, removed or destroyed heritage buildings. Myanmar ratified the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003), which entered into force in August 2014 and has now begun to inventory this. UNESCO is also working with the Ministry of Culture on the conservation and management of heritage sites, establishing cultural heritage information management systems using Geographic Information Systems (GIS), and assisting the Government to develop nominations for submissions to the World Heritage List including Bagan.³¹⁸ However, this process does not effectively identify sites of local community importance.

Social investment programmes

Myanmar has a strong tradition of giving, including corporate philanthropy, driven at least in part by the dominant Buddhist faith. This is often understood by Myanmar companies as the responsibility to make donations or contribute to social development projects. The Myanmar Investment Commission under the Thein Sein government pushed investors (in particular foreign investors) to commit to spend a certain amount of their profits on CSR

³¹² OECD, [Multidimensional Review of Myanmar, Initial Observations](#), 2013, p. 168.

³¹³ World Bank, [Achieving Universal Access to Electricity by 2030: Myanmar Electricity Plan](#)

³¹⁴ ADB, [Myanmar in Transition: Opportunities and Challenges](#), August 2012, pp. 22-24.

³¹⁵ Mastercard and MDRI-CESD, [Cash in Context: Uncovering Financial Services in Myanmar](#), January 2015, pp. 6-13.

³¹⁶ UNESCO, [Universal Declaration on Cultural Diversity](#), 2001.

³¹⁷ [2015 Protection and Preservation of Ancient Monuments Law](#).

³¹⁸ Travel Impact Newswire, [UNESCO to Launch Project for Safeguarding Cultural Heritage in Myanmar](#), 30 March 2012.

projects. However, this approach – which as outlined in Part 4B can give rise to a number of governance problems – did not, fortunately, become a general legal requirement.³¹⁹

The 2015 amended Myanmar Mines Law does not include any provisions relating to socio-economic development or employment of local communities. Nor does it make any provisions for benefit sharing or agreement making between local communities and companies. It only provides that the permit-holder shall ensure no socio-economic harm to local people.³²⁰ However, the 2018 Rules contain (identical) requirements in Rule 51c (large-scale), 67c (medium-scale) and 85c (small-scale) for the company to submit at the time of its application for a Production Permit the evidence that it has discussed with local communities on ‘social responsibility’, and obtained their agreement.

The 2016 Myanmar Investment Law does not contain requirements for local content or employment of Myanmar nationals.³²¹ The previous 2012 Foreign Investment Law contained thresholds for minimum percentage appointments of Myanmar nationals and the requirement that foreign and Myanmar workers holding the same qualifications ought to be paid the same salary.

B. Field Assessment Findings

The field research identified a number of mining-related human rights impacts on communities. The following paragraphs provide an overview.

Community health and safety

Human Rights Implicated: Right to the highest attainable standard of physical and mental health; right to life and security of person; right to non-discrimination

- **Cracks in buildings:** Close to several mine sites where blasting occurred regularly, cracks could be observed in houses, monasteries, schools and other buildings. This included a culturally important limestone cave a few miles from one of the mine sites. While community members interviewed expressed certainty that this was linked to the blasting (as they reported to have felt the vibrations in the villages), companies did not acknowledge any association or responsibility. None of the companies had assessed whether such cracks in buildings and heritage sites were caused by their activities.
- **Safety on roads and around mine sites due to falling rocks:** Close to one large-scale limestone mine site, the old road used by the community had been closed and the community, in particular school children, had to use a new (dirt) road with a lot of traffic from the mine site to the associated processing facility. Villagers expressed concern about the safety of their children due to heavy traffic, rocks potentially falling from trucks, and exposure to dust. While one company was found to have a regular time for the blasting and to announce it with a megaphone, at other sites blasting hours were unknown to villagers and the township administrator.

³¹⁹ Australia-Myanmar Chamber of Commerce Responsible Investment Working Group, [Position Paper: Incentivising Shared Value](#), September 2016.

³²⁰ Valentis Resources, [2015 amended Myanmar Mines Law \[unofficial translation and comparison\]](#), 27 January 2016, Article 16 (e) (1)

³²¹ VDB, [What Changes in Practice Under the New Investment Law](#), 8 October 2016, p. 7

- **In-migration causing changes to lifestyles and safety:** In many areas, communities felt that theft and crime had increased as a result of the presence of large numbers of mine migrant workers in the area. Women sometimes expressed that they felt unsafe due to the presence of a large male workforce in the area. Some cases of harassment and rape were reported. An increase in karaoke bars, suspected sex work, alcohol consumption and easy access to drugs, were concerns expressed by many community members, in particular those living in small-scale and subsistence gold mining areas. In several subsistence gold mining areas, drug use was said to be widespread. Local community members interviewed linked the increase in drug use to the presence of mining, as this meant money was more readily available. Community members in these areas also expressed concerns about children starting to use drugs at an early age. The possibility for local communities to raise cash by selling plots of land to subsistence miners was reported as an issue, since the money was quickly spent and the farmers were then left without long-term livelihoods.
- **Accidents:** A number of community accidents associated with mining activities were reported, including relating to children (see further, Part 5.5: Women and Children). The field research also found that most subsistence mining areas and some of the small-scale mine sites were not physically demarcated and secured, for example through the use of fences and security personnel. This raised the risk of accidents.
- **Health impacts from factory fumes and dust from mine sites and roads:** The field research teams noted large amounts of dust from the dirt roads close to villages used by company trucks and cars around limestone mine sites, as well as fumes from the associated cement factories. Dust and fumes from cement factories were a major concern of communities living around these sites. In one community area close to a cement factory, the prevalence of tuberculosis-like symptoms was high and community members suspected that there was a link with the factory. However, no proper medical investigation had been conducted.
- **Impacts of soil and water pollution on community health:** In small-scale and subsistence gold mining areas, mercury and cyanide had been released into wastewater creating serious health risks for communities.³²² As a result of excavation, some heavy metals such as lead and arsenic that are naturally present in rocks may also be liberated into the environment causing damage to the environment and human health (see Part 5.7: Environment and Ecosystem Services).
- **Noise and smells:** Constant noise from cement factories was disturbing community members, especially at night. Noise was also said to be affecting livestock. Some communities also reported being disturbed by bad smells coming from mine sites (see Part 5.7: Environment and Ecosystem Services).

Community development, employment and economic opportunities

Human Rights Implicated: Right to work; right to education; right to the highest attainable standard of physical and mental health; right to take part in the cultural life of the community

³²² See also '[Dirty Water](#)', a short film about the negative impacts of a lead mine on a Danu community in Shan State, Yangon Film School, 2016

- **Limited employment opportunities in mining for local communities:** Only one large-scale mine was found to have a practice in place for the employment of local community members. This company said that while it actually only needed 500 workers to run its operations, it had hired an additional 300 local people to maintain a positive relationship with local communities. In most of the large- and small-scale operations visited, only a few local community members were identified to be working for the companies as low-skilled workers (e.g. security guards, cooks), often on a casual daily basis. In one village close to a cement factory, people complained that they had never been offered jobs with the company. Generally, both female and male community members said that they would like more, and more permanent, jobs at the factory because of the wages and accommodation. However, many community members at this site also resented the company for land grabbing and said that they would not want to work for the company. At another site, where local subsistence miners were in conflict with a company over land issues, the few local people employed by the company as unskilled labour were considered to be 'on the side of the company'. Company representatives in turn were found to not trust local community members whom they suspected of stealing ore from the company. No training programmes for local community members were found at any of the sites visited.
- **Employment as compensation for loss of land:** According to a worker at cement factory, around 10 people from the local community had received jobs as a form of compensation for the loss of their land. In another case, community members affected by a tailings dam incident reported that they had been promised one job at the company per affected household. These jobs had not materialised.
- **Community investment or development projects are ad hoc:** All of the large-scale companies financed projects to support communities. In one case, the company said that MoM (now MoNREC) required some spending for community development. One company reported that it would devote 2% of its profit to community development projects, another mentioned 7%. Generally, the projects and donations which were supported in the area of education, infrastructure and religious institutions seemed to result from ad hoc requests from important people in the villages, i.e. village leaders or the school headmaster, and never from a systematic plan or consultations with community members. In one case, priorities for social investment spending were said to have been determined during the EIA process when consultants had talked to village leaders. In another case, the CSR budget shown to the field research team also included compensation payments for damage caused by the collapse of a tailings dam. In one subsistence gold mining area, mining in the area was claimed to have contributed to the development of the community, as people had access to more money and electricity had been installed in some of the villages.
- **Limited local procurement:** Local communities sometimes had opportunities to sell products and services to mining companies but not on a wide scale. One large-scale company was found to purchase vegetables at the local market, and at several sites local and migrant workers were running small shops or restaurants around the mine site. However, the field research found that mining companies were not sourcing goods and services from neighboring communities to an extent that meaningfully contributed to local economies. In subsistence mining areas, local community members not directly engaged in mining were found to benefit economically from mining as they sold diesel, machinery, food etc. to the miners. In places where there were conflicts between

communities and companies, it was found that there were also very few commercial relationships between them. For example, at one large-scale mine site local farmers did not want to sell their produce at the market within the company area, and at another site, the company was said to have instructed its workers not to buy anything from the local villagers.

- **Adverse impacts on agricultural and fishing activities:** In addition to livelihood impacts associated with the loss of land or damage to land (see Part 5.3: Land), farmers expressed concerns about the impacts of environmental degradation on their livelihoods. For example, farmers near cement factories complained about dust on vegetables that they were unable to clean off and were sometimes afraid to eat, and also about their need to use more fertilizers. Some farmers were also concerned about possible health impacts of dust on their livestock. In a gold mining area, where subsistence miners were discharging wastewater into creeks used for fishing, communities reported fewer fish catches (see Part 5.7: Environment and Ecosystem Services).
- **Subsistence miners losing their livelihoods:** In several gold mining areas, the granting of a permit to a large-scale mining company meant that subsistence miners who used to mine in the area lost their source of income without receiving any compensation or alternative job opportunities. This also led to conflicts (see further, Part 5.6: Security and Conflict). In one case, the mine permit-holder assisted subsistence mine owners previously operating in the area to set up a company and obtain a small-scale permit, in another case a group of miners set up a cooperative and obtained a small-scale licence for another plot of (forest) land. One large-scale gold mining permit-holder was found to have allowed subsistence miners to become shareholders of the company and to operate shafts within the concession area.
- **Mining and in-migration:** In most of the mining areas visited, a significant number of internal migrant workers had come to the area to work either at large-scale mine sites or as subsistence miners. While employees were usually accommodated in specific areas by the companies and did not have much contact with the local communities, daily workers and subsistence miners lived either in their own villages (created as a result of the in-migration) or in pre-existing villages alongside the local population. In one subsistence mining area, migrant workers from other regions were said to engage with local communities to buy land cheaply from local ethnic people and to try to register it in their own name to then lease it to gold miners. In one area where the local ethnic communities were mostly practicing Christians, the presence of migrant workers was said to disturb local religious practices, as they did not respect Sunday as a day of rest.

Public and community services

Human Rights Implicated: Right to an adequate standard of living; right to the highest attainable standard of physical and mental health; right to education; right to freedom of movement; right to life, liberty and security of person

- **Electricity and water:** Many of the communities visited did not have access to electricity. In several instances, large-scale companies had installed wires or were providing electricity to nearby communities. One company, for example, had installed electricity connections as a form of compensation to the community for using community water sources. At two sites at least, the communities paid more for electricity provided

by a company than they would if they were connected to the national grid. In a few cases, in particular where water had become scarce or was allegedly polluted as a result of mining, companies were observed to be providing water to communities or supporting the construction of deeper wells. In one such case, where communities had to pay for the service, community members reported that there was not enough water provided by the company for drinking and sanitation. In another case, communities expressed doubt about the quality of the water provided by the company.

- **Inflation and pressure on community services:** In one area where several small-scale and one large-scale mining projects were being run, increases in food prices linked to the increase of the population due to mining activities was noted by community members as an adverse impact. In the same area the local healthcare centre was reportedly overstretched, as only permanent employees of the company had access to the company's healthcare centre while the local population and most migrant workers had to access a single community hospital.
- **Roads damaged or closed down:** Local roads formerly used by communities were reported to have been closed down at two large-scale mine sites. One road was damaged as a result of heavy traffic by the company trucks and cars. At one site, the road used by local communities was closed during blasting at times which were not announced in advance to the local community, causing disturbance.
- **Education:** While in some cases large-scale mining companies as well as informal mine owners had contributed to building schools and/or accommodation for teachers, some negative effects were reported (see further, Part 5.5: Women and Children). In an ethnic area, it was reported that the local children going to the same school as children of Bamar factory workers were disadvantaged as they had less Burmese language skills.

Cultural heritage

Human Rights Implicated: Right to take part in the cultural life of the community; right to freedom of religion

- **Damage to religious buildings:** Close to quarrying sites where blasting occurs, cracks in pagodas and other culturally significant sites were observed. Close to a large-scale mine site, local community members complained about land surrounding a pagoda being damaged to the extent that the structure itself was threatened. To compensate, the company had provided construction materials to the local communities but they remained unsatisfied with the response. In general, however, companies were found to be respectful of religious sites and often made donations to the local monasteries or for religious festivals. As a result, in some mining areas, communities had built pagodas on top of limestone karst mountains to deter future mining. In one subsistence mining area, the monastery land around three very old monasteries (one over 200 years old) was being mined at night for gold.
- **Deforestation threatening medicinal plants:** In several subsistence mining areas, local communities expressed concerns that miners coming from other regions did not respect the natural environment, as local people did. In particular, concerns were noted about ancient knowledge of ethnic groups regarding medicinal plants being threatened by deforestation.

C. Relevant International Standards, Guidance & Initiatives

Box 14: International Standards, Guidance & Initiatives on Communities & Mining

International Standards:

- [ICMM Sustainable Development Framework](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 1 – Assessment and Management of Environmental and Social Risks and Impacts](#)
 - [PS 4 – Community Health, Safety and Security](#)
 - [PS 8 – Cultural Heritage](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)

Guidance on Community Investment, Development and Agreements:

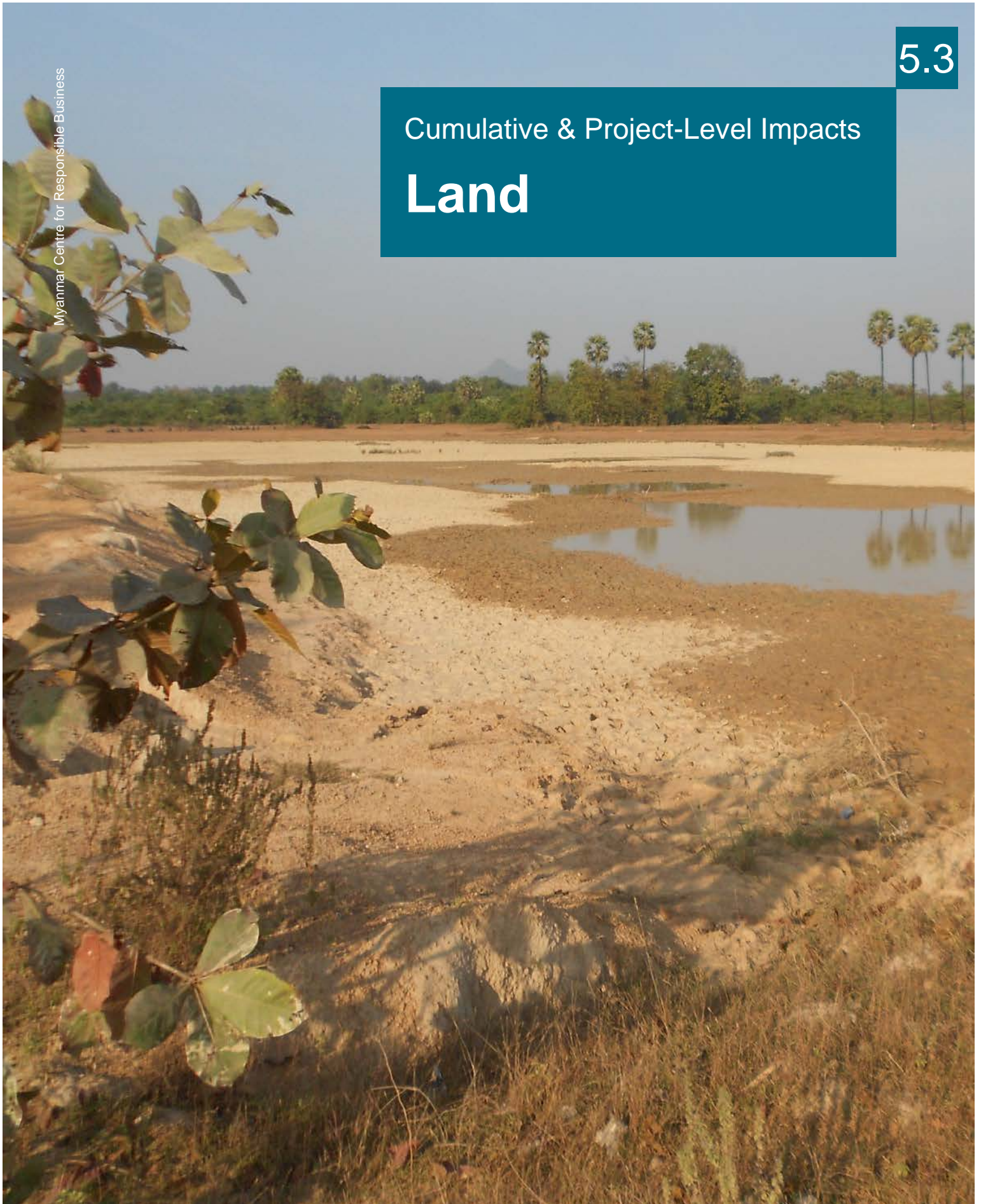
- Centre for Social Responsibility in Mining, [Good Practice Note: Community Development Agreements](#)
- EI Sourcebook, [Good Practice Note on Community Development Agreements](#)
- ICMM, [Approaches to Understanding Development Outcomes from Mining](#)
- ICMM, [Community Development Toolkit](#)
- ICMM, [Human Rights in the Mining and Metals Industry: Integrating Human Rights Due Diligence into Corporate Risk Management Processes](#)
- ICMM, [Understanding Company-Community Relations Toolkit](#)
- IFC, [Understand Project Induced In-Migration](#)
- IFC, [Strategic Community Investment: A Good Practice Handbook for Companies Doing Business in Emerging Markets](#)
- IIED, [A Guide to Applying the Spirit of Free, Prior, and Informed Consent in Industrial Projects](#)
- IIED, [Shared Value, Shared Responsibility](#)
- Oxfam, [Women, Communities and Mining: The Gender Impacts of Mining and the Role of Gender Impact Assessment](#)
- Rio Tinto, [Why Cultural Heritage Matters](#)
- UNDP, [Extractive Industries Strategy Note](#)
- World Bank, [Gender Dimensions of the Extractive Industries: Mining for Equity](#)
- World Bank, [Large Mines and Local Communities: Forging Partnerships, Building Sustainability](#)

Guidance on Local Employment and Supply Chains:

- GIZ, [Cooperative Vocational Training in the Mineral Resource Sector](#)
- ICMM, [Mining: Partnerships for Development Toolkit](#)
- IFC, [A Guide to Getting Started in Local Procurement](#)
- IFC, [Investing in People: Sustaining Communities through Improved Business Practice](#)

Cumulative & Project-Level Impacts

Land



Part 5.3

Land

In this section:

- A. National Context
 - Land ownership, access and use
 - Legal and policy framework
- B. Field Assessment Findings
 - Land ownership, access and use
 - Resettlement
 - Livelihood impacts associated with land
- C. Relevant International Standards, Guidance & Initiatives

A. National Context

Land ownership, access and use

An estimated 72% of the population live in rural areas and more than 38% of households rely on agriculture as their main source of income.³²³ Land is often the most significant asset of rural communities. Communal use of lands, including under a customary land tenure system, is common, having been established over years by custom rather than written laws.³²⁴ However, due to the complex and centralised nature of the land registration system, much rural land is not formally registered, leading to weak land rights protections for local land users and customary owners, including individuals and groups at risk of expropriation of their land by the Government for use by companies. Moreover, lack of formal written land title documentation frequently translates into uncertainties and disputes when land ownership, access and usage rights are transferred from one party to another.

Expropriation of land by the military for business and other use has a long history in Myanmar, along with associated patterns of forced evictions; including limited, unclear or no compensation for land, housing and crops seized from villagers. This has led to significant impacts on livelihoods and subsequent disputes regarding land ownership, access and usage rights.³²⁵

In the context of mining activities, disputes regarding land access and use can also be exacerbated by the interaction between formal and informal mining activities. Typically, large-and small-scale mining will have more formal land use rights, whereas subsistence mining activities take place alongside uncertain or non-existent land use rights or illegal

³²³ Myanmar Ministry of Labour, Immigration and Population, Central Statistical Organisation and ILO, [Myanmar Labour Force, Child Labour and School to Work Transition Survey](#), 2015, p. 5 and 8

³²⁴ Transnational Institute, [Access Denied: Land Rights and Ethnic Conflict in Burma](#), May 2013

³²⁵ Displacement Solutions, [Land Acquisition Law and Practice in Myanmar](#), May 2015, p. 17

usage, leading to increased risks for subsistence miners who depend on the use of land for their livelihoods.³²⁶

SWIA field research found land rights to be a fundamental issue for the mining sector. Site visits revealed significant negative impacts associated with land ownership, access and usage. These findings are outlined in further detail in section B, below.

Legal and policy framework

Land rights in Myanmar have gained increased attention since 2011, associated in part with the previous Government's political and economic reform process that included a focus on attracting foreign investment.³²⁷ Three central pieces of legislation governing land are: the 1894 Land Acquisition Act;³²⁸ the 2012 Vacant, Fallow and Virgin Land Management Law;³²⁹ and the 2012 Farmland Law.³³⁰ These laws are discussed briefly below. In addition, the 2016 National Land Use Policy (NLUP)³³¹ has been a reference point for civil society and community organisations following extensive consultations during 2014 and 2015, although the attitude of the new Government is unclear.

Despite these reforms, the legal and policy framework regarding land remains fragmented, internally inconsistent, and incomplete. Policies, laws and practices still do not adequately protect land rights. A central issue remains widespread insecurity of tenure, partly due to the inefficient and complex land registration system. This is further complicated by the fact that the cadastral (land mapping) system is out of date, meaning that land classifications and mappings used by different ministries may overlap, conflict, and not represent current land use patterns. Land tenure remains insecure for most smallholder farmers because of: "i) a complex and long registration process resulting in low land registration rates; ii) rigid land classifications that do not reflect the reality of existing land use; iii) lack of recognition of customary land use rights; iv) weak protection of registered land use rights; v) inefficient land administration; and vi) active promotion of large-scale land allocations without adequate safeguards."³³²

Land Permitting under the Mines Rules

According to Rules 150 and 151 of the 2018 Mines Rules, the holder of a permit for minerals production needs to obtain written consent from the relevant landowner, person in possession of the land, or their legal representative for the use of any land which is within 200 meters of any residential dwelling house, building or site for the construction of a residential building; any land within 100 meters of land which has been cleared or land on which agricultural crops are grown; and any land which is the site of or within 200 meters of any irrigation canals, ponds, dams or other land for the storage of water.

³²⁶ IIED, [Responding to the challenge of artisanal and small-scale mining](#), 2013, p. 6

³²⁷ MCRB, [Land Briefing Paper](#), March 2015, p. 4

³²⁸ [1894 Land Acquisition Act](#) (India Act I)

³²⁹ [2012 Vacant, Fallow and Virgin Lands Management Law](#)

³³⁰ [2012 Farmland Law](#)

³³¹ [2016 National Land Use Policy](#)

³³² OECD, [OECD Investment Policy Reviews: Myanmar 2014](#), March 2014, p. 292

Additionally written consent is needed from the relevant Ministry, Government Department or Government Organisation for use of any land reserved for a railway track or which is within 50 meters of the boundaries of any land so reserved; any land within a township or within 200 meters of the boundaries of any township;³³³ or any land within 200 meters of an area reserved for religious purposes as well as land within 200 meters of a riverbank or within 100 meters of the bank of a canal.

Obtaining permission from landowners or neighbours does not appear to be a requirement in the case of prospecting or exploration.

Land acquisition by the Myanmar Government and the 1894 Land Acquisition Act

The 2008 Constitution provides that the Government is the ultimate owner of all land in Myanmar but also provides for ownership and protection of private land and property rights.³³⁴ A private investor may acquire land or land usage rights from either the Government or from a private landowner. Foreign investors can lease land but can only obtain a lease of more than a year with a Permit or Endorsement from MIC.

The Government can carry out compulsory acquisitions in the State or public interest, which includes mining activities. Under the 1894 Land Acquisition Act, land acquisition for a company may be carried out where it is “likely to prove useful to the public.”³³⁵ In these cases the Government has the responsibility for carrying out the acquisition and distributing the compensation; however, the company acquiring the land has to provide the compensation. Compensation is based on the market value of the land and also possible damage incurred by the private landowner, such as loss of crops and firewood or the cost of changing residence and place of business. Land in-kind can also be provided in place of monetary compensation (Art 6). These losses should take place “in consideration of the compulsory nature of the acquisition” (Art 23).

The Law sets out basic procedures governing land acquisition, including a preliminary investigation, and a procedure for notification of persons interested in the land. The Law also includes provision for objections to the land acquisition, in which the objector is granted the ‘opportunity of being heard’, where the objections raised may be further explained. However, the President’s decision on the objection is final, in practice giving him/her wide discretionary powers (Art 5). As of 2018, this Law was being prepared for revision by a Parliamentary Committee.

2012 Vacant, Fallow and Virgin (VfV) Lands Management Law and Rules

Details in these sections are taken from MCRB’s 2015 Briefing Paper on Land, currently under revision.³³⁶

The VfV Law and the associated Rules facilitate the implementation of Government land policies in a manner that maximises the use of land as a resource for generating agricultural

³³³ Use of the word *myo-neh* meaning township is confusing in this instance, as all land is within a township, which is one of the main geographical administrative units in Myanmar.

³³⁴ [2008 Myanmar Constitution](#), Articles 35, 37, 356 and 372

³³⁵ [1894 Land Acquisition Act](#) Article 40(1) (b)

³³⁶ MCRB, [Land Briefing Paper](#), March 2015

income and concomitant tax revenues. The Law and Rules do not recognise informal land rights and the land tenure provisions are weak, essentially allowing the Government to classify land as vacant, fallow and virgin (VFV) where it may in fact be occupied by people or used for seasonal cultivation by farmers. The land registration procedure under the Law and Rules are complicated, meaning that smallholder farmers have struggled to register their land tenure claims.

Investors can acquire land by applying to the Government for land rights over VFV lands. Foreign investors need to hold an MIC permit or be in a joint venture with a Government body or Myanmar national in order to apply to the Central Committee for the Management of VFV Lands for rights to cultivate and use such lands. VFV land rights are temporary and not transferable.

The Central Committee for the Management of VFV Lands has the right to repossess VFV land for various reasons, including where repossession is required in the interests of the State or where natural resources are discovered on VFV lands. The VFV Rules do not contain procedural safeguards whereby individuals can object to an acquisition or the amount of compensation provided. There is no provision for judicial review. These gaps in the Law and Rules have been criticised. Moreover, the legislation has criminal provisions for persons who ‘encroach’ on the land or ‘obstruct’ the land rights-holders, which may be abused if they are used against protestors seeking to assert their interests in VFV land.

2012 Farmland Law

According to the 2012 Farmland Law, farmland can be owned and registered by Myanmar nationals or organisations, including government departments, NGOs, associations and companies. Rights applying to foreign companies should be read in conjunction with the 2016 Myanmar Investment Law.

Subject to certain restrictions (such as those relating to foreign investors), farmland under the provisions of the Farmland Law is freely transferable. Farmers groups in Myanmar have expressed that this is problematic as it contributes to instances where poor farmers sell their land because they are tempted by short-term gain, potentially leaving them landless and without a livelihood.

As with the VFV Law, the Farmland Law also allows for the repossession of farmland “for the interests of the state or the public” as long as the farmland rights-holder is compensated “without any loss,” including the value of buildings located on the farmland.³³⁷ The Law does not provide for procedures for objections to be made regarding acquisition or compensation, or for judicial review.

2016 National Land Use Policy (NLUP)

The NLUP was adopted by the Government in January 2016, after having been in development for some two years.³³⁸ The Policy is intended to guide the drafting of an umbrella land law, although it is not clear whether the Government will pursue this.

³³⁷ [2012 Farmland Law](#), Article 26

³³⁸ [2016 National Land Use Policy](#)

The NLUP addresses a number of important issues relevant to mining, including:

- Land use administration;
- Formation of the National Land Use Council;
- Determination of land types and land classifications;
- Procedures related to land acquisition, relocation and compensation; and
- Land dispute resolution and appeal.

The NLUP (Parts 8 and 9) explicitly addresses the land use rights of ethnic nationalities and the equal rights of women and men with regard to land rights.

While the NLUP is arguably an improvement, a number of criticisms voiced by CSOs and farmers groups remain. One is associated with the high number of internally displaced persons that had to leave their land either due to internal armed conflict or natural disasters in past years. Even though the NLUP acknowledges the right to return and to restitution, many believe that there is a significant lack of clarity because the NLUP only refers to land of those who lost it ‘illegally’, which does not explicitly include all individuals who lost land during armed conflict and the waves of land expropriation by previous governments.³³⁹ Some reports suggest that under the system set out by the NLUP, about half of the population of Myanmar would have recognised land titles. The other half may still be subject to forced evictions and other related human rights abuses.³⁴⁰ The International Commission of Jurists has argued that the NLUP approach to the resolution of grievances in the case of forced eviction includes neither a clear dispute resolution mechanism, nor legal accountability.³⁴¹

Foreign investors’ use of land

In most circumstances, land cannot be sold or transferred to a foreign individual or company through a private transaction. However, the Government may allow exemptions from these restrictions. Furthermore, private investors cannot acquire VFV land rights or farmland through private transactions without the permission of the Government. Under the 2016 Myanmar Investment Law, foreign investors with a Permit or Endorsement can obtain leases for up to 50 years, extendable for 10 years twice.³⁴²

Governance structures and dispute resolution

In order to tackle land disputes, the previous Government, under U Thein Sein, created two bodies: The Parliament’s Farmland Investigation Commission (established in 2012 with a mandate to accept complaints from individuals) and the Land Utilisation Management Central Committee (established in 2013), set up to implement the findings of the Commission. The Committee agreed to return land or provide compensation in some 699 cases. However, in practice there were extreme delays in returning land to farmers, due to lack of capacity within the Government to deal with the large number and complexity of land

³³⁹ [The Right to Land: At Crossroads in Myanmar](#), Transnational Institute, 5 July, 2016

³⁴⁰ Frontier Myanmar, [A Sound Basis for Land Reform](#), 19 February 2016

³⁴¹ [Implementable Action Plans from the ICJ to the new Parliament & Government](#), International Commission of Jurists, May 2016, p. 12

³⁴² VDB, [What Changes In Practice Under the New Investment Law](#), 8 October 2016, p. 2

disputes. Most complaints received by the Myanmar National Human Rights Commission also relate to land.

In May 2016, the Government announced the formation of a new committee, the Central Review Committee on Confiscated Farmlands and Other Lands, to investigate conflicts between communities and companies, and to oversee the return of land to its rightful owners.³⁴³ The Committee has adopted a policy on adequate compensation to be provided to dispossessed farmers and maintains that government ministries, SOEs and private companies should disown confiscated lands that they no longer use. It is reported that in July 2016 the Committee decided to resolve all land grab cases within six months.³⁴⁴

Concerns with the current legal framework

Concerns regarding the current legal and policy framework governing land include:³⁴⁵

- Laws governing land acquisition are outdated and do not include procedural and substantive protections for rights-holders;
- The provision that Government acquisition must be 'in the public interest' is not further circumscribed or defined, leaving this process open to abuse;
- There are no substantive legal and policy provisions governing resettlement to ensure that this is conducted in accordance with international human rights standards;
- Customary land rights or the rights of informal users or occupiers who may lack formal documentation are not sufficiently recognised;
- The Government may be declaring land to be VFFV when in reality it is not; and
- There are no detailed regulations defining compensation levels for land and other assets such as buildings, equipment and lost harvests.

B. Field Assessment Findings

The field research showed that mining activities caused significant impacts on land use, leading to human rights impacts, particularly related to livelihoods. An overview of key findings is provided below.

Land ownership, access and use

Human Rights Implicated: Right to property; right to an adequate standard of living; right to freedom of expression and information; right to an effective remedy

- **Land boundaries are not clearly demarcated:** The SWIA field research found that land boundaries were often unclear, meaning that there was uncertainty for rights-holders as to who holds ownership or usage rights over particular areas. As flagged above, this is further complicated by the fact that the land cadaster or register in Myanmar is out of date. The Government therefore lacks a clear overview of land ownership and usage which causes complications. For example, individuals or communities were accused of, or indicted for, trespassing on land that they believed

³⁴³ BurmaNet News, [The Irrawaddy: Government committee to settle all land grab cases in six months](#), 2 July 2016; Global Witness, [Myanmar's Efforts to tackle land grabbing crisis must address the role of the military in perpetuating theft and violence](#), 11 May 2016.

³⁴⁴ Ibid.

³⁴⁵ MCRB [Land Briefing Paper](#), March 2015, pp. 12-13.

belonged to them, or where they had established farms. Lack of clarity was also problematic in land purchase transactions. At one site, the land being sold was measured by a company representative and a representative from a local EAO, with no input from communities or government actors, leading to a dispute about the actual size of the land that was being sold by villagers to the company. Moreover, field research identified several instances of confusion among different government ministries as to the status of particular parcels of land. At one site the Land Records Department determined that a village could be registered with the Ministry of Home Affairs. However, a mining concession had been granted by MoM (now MoNREC) over the exact same parcel. In another instance, the land attributed to the mining area included a school, which, having been included within the fenced area was no longer available for classes.

- **People have limited legal ownership or usage rights over the land on which they live and farm:** This was particularly pronounced in the subsistence gold mining areas where communities were typically living on land owned by MoNREC (some with, and some without, a licence-holder), or land that was officially declared forestry land and owned and administered under the auspices of the Ministry of Forestry. Correspondingly, without legal ownership or usage rights people were found to be at risk of being moved off the land, without notice or compensation, for example where a concession was granted to a mining company over land where there was subsistence farming. Such settlements were also usually not officially registered with the Government and therefore not eligible for essential services such as schools, hospitals, electricity, roads, or water infrastructure (see Part 5.2: Community Impacts and Development).
- **Even with legal ownership and usage rights, people may not have title certificates or other proof of ownership or usage rights:** Even when people had legal title to the land where they lived, farmed or mined, they frequently did not hold land title certificates or other documentation that proved such ownership (e.g. land purchase contract or the like). This presented significant problems for rights-holders. For example, if a company acquired interest in a piece of land, it was the responsibility of the company to negotiate and provide compensation. At some sites, people faced restrictions in obtaining land title certificates. For example, when people were able to officially register their land and obtain land title certificates, they had to pay a per-acre fee for the registration. The official fee was already prohibitively expensive for some people, and in practice the cost was usually even higher due to the need to pay bribes to government officials to obtain the title certificates.
- **Lands are designated as VFV lands, allowing companies to gain access to these lands even where they are communally used:** At several sites, the Government granted a company access to land that was classified as VFV land, despite local communities actually using this land for farming and livestock grazing. As explained above, the VFV Law and Rules do not contain procedural safeguards whereby individuals can object to a land acquisition or the amount of compensation provided, and there is no provision for judicial review. Access to information about the designation of VFV lands and any company interests over such land was also a problem. At one site the company informed the village head that the land had been declared VFV and that it was acquiring an interest in the land. However, this information was not passed

on to villagers, who were unaware of the company's plans to take over the land until it actually happened.

- **Determination of the price for land purchases is arbitrary and ad hoc, and sale is sometimes under duress:** In several instances where companies purchased land from villagers, the determination of price and decisions about how much land was to be sold to a company were reported to have occurred under duress and without verification by a third-party of what would be a reasonable market rate price. Decisions around land sales often involved a combination of government actors and EAOs, with the armed groups reportedly putting pressure, sometimes in the form of threats, on villagers to sell their land. At one site where a company wanted to purchase land officially, the price was determined through a negotiation between the Land Records Department, the Township Administration Department, a leader from the local EAO, and the land-owning farmers. However, villagers reported that in fact they had no choice about how much land was to be sold because the local EAO told them how much land they must sell and villagers were too afraid to object. In many cases the purchase price did not reflect the real value of the land. For example, the same price was paid for an acre of genuine farmland as for one that was actually vacant or fallow. In other cases, the village head received the money from the company and retained a percentage. At one site this was said to be up to 20% of the total price. People were often paid in cash, sometimes in communities that previously did not have cash-based economies, contributing to associated community impacts (see Part 5.2: Community Impacts and Development).
- **Lack of information and documentation in land purchase transactions:** Often, where land purchases occurred farmers or other local landowners were not fully informed of the nature of the transaction and did not receive legal documentation of land purchases from the companies. At one site where farmers sold their land to a company, the farmers did not understand that they were engaging in a transaction that would involve the permanent transfer of their land title and access rights. Nor did the company provide them with a copy of the documentation for the land purchase. When the field research team asked company representatives why the villagers did not have copies of the contracts, the representatives responded that they were too busy to supply the contracts to the villagers. In a similar scenario elsewhere, the company told the field research teams that they had forgotten to provide the land sale contracts to the villagers.

Resettlement

Human Rights Implicated: Right to housing; right to an adequate standard of living; right to an effective remedy

- **Forced evictions³⁴⁶, threats to rights-holders and relocations under duress:** The field research found several instances of forced evictions and cases where individuals and communities were threatened by armed groups or companies, including companies with connections to the Myanmar military. At one site, a military-affiliated company pressured villagers to move, after a previous administrative deadline, of which villagers had been informed, had passed. When they refused to move, the police and fire brigade destroyed the houses and arrested several people, who were subsequently detained at

³⁴⁶ Defined in: UN Committee on Economic, Social and Cultural Rights, [General Comment No. 7: The right to adequate housing: forced evictions](#)

the local police station for one month. At another site, around 150 houses were destroyed by company security guards in a forced eviction during the rainy season, making it even more difficult for people to move. Those women, men and children evicted were not able to take their belongings with them and had to take temporary refuge in a monastery.

- **Limited access to information and consultation in resettlement processes:** Where resettlement occurred, those who were impacted – including new host communities – were generally not provided information or consultation. In one instance, a company planning to resettle communities in order to begin operations simply informed the village head, who then gave villagers one month to move. At another site, people were given two days advance notice of being resettled.
- **Alternative resettlement sites are often not suitable:** There were several examples of resettlement of people to unsuitable alternative sites. Frequently these sites did not have sufficient services or infrastructure to support the new community. In one instance communities were resettled to a site with only one water well located three miles away from their new homes and without decent road access, which meant that they had to build their own road. Prior to resettlement, the company had promised to build a school and roads, and to provide adequate water supplies and electricity, but it failed to do so. There were also examples of resettled people receiving unsuitable land. In one case people were resettled to land at a lower elevation subject to flooding, which was not suitable for growing the same kinds of crops that they had previously cultivated. In other cases the host communities were not consulted about the population influx caused by resettlement. There was one incident reported where people were resettled onto farming land grabbed from another village.
- **Compensation for resettlement is ad hoc and does not reflect the actual cost of economic and physical displacement:** Compensation processes and amounts were ad hoc and inconsistent. In some cases, compensation was provided for land but not for crops or houses and in other cases money was given for moving but not for replacement of land or houses. In one case affecting 50 households, compensation was provided for building new houses at the resettlement site. However, the money did not cover the actual cost of building replacement housing, which was in fact up to three times higher. At another site, farmers were offered compensation for crops but not for the land from which they had been forcibly resettled.
- **Displacement of artisanal miners through formal mining activities:** Displacement was particularly problematic for artisanal miners without any formal ownership or usage rights over the land on which they lived and mined. There were several cases where companies displaced artisanal mining communities. Such companies had acquired formal licence rights over the areas used and occupied by the artisanal miners.

Livelihood impacts associated with land

Human Rights Implicated: Right to an adequate standard of living; right to water; right to food

- **Damage to land, crops and water sources essential for agricultural activities:** At several sites visited there were examples of damage to farmland as a result of mining activities. At one site, approximately one mile away from limestone mining activities, large amounts of dust had settled on crops, and according to local farmers the rice yield

had decreased and increased use of fertilizers was necessary. The farmers earned less money from their harvests because of decreased yields. They also reported that they had to use more water to remove dust from crops and that they sometimes could not afford to buy enough seeds to replant. Similarly, at two of the gold mine sites visited, chemical waste from companies in paddy fields damaged land and crops, as well as critical water sources used for drinking, livestock and irrigation. When accidents, such as the collapse of tailings dams, occurred, these were reportedly not properly cleaned up; moreover, associated impacts on livelihoods were not mitigated or compensated (see Part 5.7: Environment and Ecosystem Services). At one site, following extensive damage caused to paddy lands as a result of a tailings dam collapse, there was no systematic approach taken by the company to assess the damage and award compensation. Those farmers who complained to the company were compensated; however, those who did not complain were not. At the same site, some farmers preferred to sell their land to the company because it had already been damaged by the company's tailings and wastewater without an effective clean-up response by the company.

- **Loss of communal grazing and farming areas when land is declared VFV:** Designating land as VFV without proper due diligence by government and company actors to establish the nature of the community's use of such land had adverse impacts not only on land rights but also on related livelihood activities. At one site, people could no longer use communal grazing areas, which meant that they had to take livestock much further away to graze. At another site, land was registered as VFV, allowing the company to acquire it despite the communal use of the land for farming.
- **People become daily workers and/or migrate as a result of having less land for farming:** The field research found that where women and men have less access to farming land, they turn to alternative ways of earning a living, including working as labourers on mine sites and on farms. At one site where people sold some of their land to a company, they could no longer farm so they began to work as daily workers on other farms. Due to an increase in the price of land, they subsequently could not afford to buy any new land for farming. At another site, which presented a similar pattern of the transition from farming to daily work due to loss of land associated with mining activities, villagers reported a preference for farming rather than daily work, noting the importance of having long-term financial security and having land to hand over to the next generation. At yet another site, people had to make the transition from farming to daily work because of the poor resettlement process.
- **Livelihood sustaining activities in ASM areas on land that is not owned by communities:** As flagged above, communities farming on land that is officially owned by the Government was particularly problematic in subsistence gold mining areas, since they have no formal claim to the land they are dependent on for a livelihood and from which they can be, and sometimes are, moved without consultation or compensation.

C. Relevant International Standards, Guidance & Initiatives

Box 15: International Standards, Guidance & Initiatives on Land & Mining

International Standards:

- [ICMM Sustainable Development Framework](#)
- [FAO Voluntary Guidelines on the Responsible Governance of Tenure](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 1 – Assessment and Management of Environmental and Social Risks and Impacts](#)
 - [PS 5 – Land Acquisition and Involuntary Resettlement](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)
- [OHCHR Basic Principles and Guidelines on Development-Based Evictions and Displacement](#)

Guidance on Resettlement:

- ADB, [Handbook on Resettlement, A Guide to Good Practice](#)
- CommDev, [Land Access and Resettlement](#)
- FAO, [Guidelines on Compulsory Acquisition of Land and Compensation](#)
- ICMM, [Land Acquisition and Resettlement: Lessons Learned](#)
- IFC, [Handbook for Preparing a Resettlement Action Plan](#)
- Gerry Reddy, Eddie Smyth and Michael Steyn, [Land Access and Resettlement: A Guide to Best Practice](#)

Guidance on Land Management:

- CommDev, [Extractive Industries and Conflict Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict](#)
- CommDev, [Women and Sustainable Land Management](#)

International Initiatives:

- [Alliance for Responsible Mining](#). The Alliance for Responsible Mining provides: technical assistance to miners in their work to implement best practices, formalise or obtain Fairmined Certification; development of standards and certification systems for responsible mineral extraction and sourcing; establishment of responsible supply chains; advisory services on legal and voluntary frameworks for ASM; and capacity building and training of trainers working with miners.

Cumulative & Project-Level Impacts

Labour



Part 5.4

Labour

In this section:

- A. National Context
 - Myanmar regulatory framework on labour
 - Occupational health impacts associated with limestone, gold and tin extraction and processing
- B. Field Assessment Findings
 - Health and safety
 - Contracts and employment status
 - Working hours, wages and leave
 - Freedom of association, collective bargaining and labour grievances
 - Workers' accommodation and restrictions on movement
 - Women workers and child labour
 - Discrimination and harassment
 - Workers' benefits
- C. Relevant International Standards, Guidance & Initiatives

A. National context

For 50 years, independent trade unions were prohibited, laws covering labour protection were antiquated and/or restrictive, forced labour of civilians by the military and civil authorities was common, and child labour was widespread. Myanmar labour laws are currently undergoing considerable reform. Many have recently been revised or rewritten (see below for an overview). However, there remains an overall lack of awareness by workers and employers of labour rights and safeguards. Enforcement of the new laws is piecemeal and inconsistent, and full-scale implementation of improved safeguards for workers will be a long-term process.

Informal labour

The economy in Myanmar is predominantly informal. A comprehensive national labour force survey undertaken in 2014-2015 by the then Ministry of Labour, Employment and Social Security (now the Ministry of Labour, Immigration and Population, MoLIP), with the support of the ILO, revealed that 75.6% of all employed persons operate in the informal sector.³⁴⁷ According to statistics from the World Bank from 2011, 73% of the workforce can be classified as informal.³⁴⁸ The OECD estimated that 83% of all businesses in Myanmar were informal in 2013.³⁴⁹

³⁴⁷ Ministry of Labour, Employment and Social Security and Central Statistical Organisation, [Myanmar labour force, child labour and school to work transition survey](#), 2015, p. 17

³⁴⁸ World Bank, [Myanmar: Ending poverty and boosting shared prosperity in a time of transition](#), 2011, p. 15

³⁴⁹ OECD, [Multi-dimensional Review of Myanmar](#), 2013, p. 104

Workers in the informal sector do not benefit from the protection of the labour laws and are therefore often at risk of discrimination, marginalisation and human rights abuses. Excessively long working hours, poor working conditions and low incomes are common problems amongst these workers. MCRB field research found that the majority of workers in the formal and informal mining sector are casual or daily workers. Casual workers make up a large part of the workforce even in the larger companies. Subcontracted mine sites only use casual workers. In subsistence mining, all labour is informal. There are, however, oral agreements between the mine owners or operators and workers about payment, working hours and other issues.

Forced labour

A major concern in Myanmar has been the widespread and systematic use of forced labour of civilians by the Myanmar army and the civilian administration for several decades, despite the Government's ratification of ILO Convention No. 29 against forced labour in 1955. Since 2011, many observers, including the ILO, have welcomed the decrease in forced labour, but note that the practice is still continuing in some areas.³⁵⁰ A new Memorandum of Understanding for the elimination of forced labour was signed between the Government and the ILO in March 2012. A complaints mechanism has been put in place to allow victims of forced labour, with the assistance of the ILO Liaison Officer, to seek redress and remedies from government authorities.³⁵¹

The ILO noted that while forced labour in Myanmar had generally been associated with the Government, complaints are now being received about the use of forced labour in the private sector.³⁵² Exploitative labour conditions – including in the mining sector – may in some cases amount to forced labour; where work is exacted from a person under the threat of a penalty or where the freedom of workers to leave their employer is restricted.

Myanmar regulatory framework on labour

Myanmar is a party to three of the eight fundamental ILO Conventions: the Forced Labour Convention (ratified March 1955); the Freedom of Association and Protection of the Right to Organise Convention (ratified March 1955); and the Worst Forms of Child Labour Convention (ratified December 2013).³⁵³

Freedom of association and the right to collective bargaining

Trade union activities were prohibited for several decades. However, the 2008 Constitution affirms the right of every citizen to form and participate in associations and organisations and the 2011 Labour Organisation Law permits the exercise of freedom of association. The 2012 Settlement of Labour Disputes Law provides for dispute resolution institutions and mechanisms. Since 2011, hundreds of enterprise-level trade unions have been formed and

³⁵⁰ ILO Committee on the Application of Standards, [Extract from Record of Proceedings](#), 18 June 2012, p7-10

³⁵¹ ILO, Forced Labour Complaint Mechanism

³⁵² ILO, [Report on progress in the implementation of the Memorandum of Understanding and associated action plans for the elimination of forced labour in Myanmar](#), 13 June 2014, Article 7

³⁵³ ILO, [Ratifications for Myanmar](#)

registered.³⁵⁴ The Mining Workers Federation of Myanmar, said to have 4000 members, is one of the five registered trade union federations.³⁵⁵

Although Myanmar has been a party to ILO Convention No. 87 on Freedom of Association and Protection of the Right to Organise since 1955, gaps remain in protecting freedom of association in both the Constitution and labour laws. The current law sets a relatively high threshold for forming a union at company level³⁵⁶ and makes it difficult for unions to establish themselves beyond this level. Moreover, the lack of protection for trade union members and leaders is a concern.³⁵⁷ The ILO has recommended a number of amendments to the new laws on freedom of association to improve the way they function, including the creation of an obligation on parties to engage in collective bargaining in good faith, and to strengthen the enforceability of decisions of the labour arbitration bodies.³⁵⁸

The Settlement of Labour Disputes Law also prescribes that employers of more than 30 employees must form a Workplace Coordinating Committee (WCC). This must include representatives of both workers and the employer. The Committee is intended to promote a good relationship between the employer and the worker and/or their labour organisation, through negotiation and coordination on the terms conditions of employment, OSH, welfare, and productivity.³⁵⁹ Most businesses are unaware of this requirement.

Details of legal provisions on contracts, minimum wage, working hours and leave are outlined in Box 16. The ILO's 2017 Guide to Myanmar Labour Law is also a useful reference, particularly where legal provisions are unclear. It has partly been used to draw up this table.³⁶⁰

Box 16: Legal Provisions on Contracts, Wages, Working Hours and Leave

Issue	Legal source(s)	Content
Contracts	2013 Skills and Development Law	■ A written contract should be drawn up within 30 days of the beginning of an employment relationship.
Leave	2013 Minimum Wage Act 1951 Factories Act	■ The number of public holidays is 14 days. ■ Earned paid leave is 10 days in a year. ■ Casual leave with wages is 6 days in a year.
Working Hours	1951 Factories Act, Amended 2016	■ 8 hours per day and 44 hours per week (maximum six days per week).

³⁵⁴ ITUC, Myanmar: [National Trade Union Centre Officially Registered](#), 28 July 2015

³⁵⁵ Industrial Union, [Myanmar mining unions set safety goal](#)

³⁵⁶ International Labour Conference, [Observation \(CEACR\) – adopted 2014, published 104th session](#) 2015

³⁵⁷ ITUC, [Foreign direct investment in Myanmar: What impact on human rights?](#), October 2015, p. 15

³⁵⁸ ITUC, [An ILO Commission of Inquiry on Freedom of Association in Burma \(Myanmar\)](#), 2011

³⁵⁹ [2012 Settlement of Disputes Labour Law](#), Chapter II (3)

³⁶⁰ [Guide to Myanmar Labour Law](#), ILO September 2017

	2018 Mines Rules ³⁶¹	<ul style="list-style-type: none"> ■ Maximum five days per week, or no more than 8 hours a day (40 hours a week), and exceptionally 48 hours a week (Art 174a & b) ■ A one hour break should be given after 5 consecutive hours, which is counted as a part of working hours (Art 174c). ■ Moreover, the Rules state that no women are allowed to be employed in underground work sites of any mine, except for in health and social services (Rule 168).
Overtime	1951 Factories Act 2018 Mines Rules	<ul style="list-style-type: none"> ■ Factory workers: no more than 20 hours per week for workers who engage in non-continuous work; no more than 12 hours per week for workers who engage in continuous work. ■ No more than 8 hours overtime per week. (Mines Rule 174d) ■ Overtime payment is twice the normal wage (Mines Rule 172a)
Minimum Wage	2013 Minimum Wage Act	<ul style="list-style-type: none"> ■ Current minimum wage came into force on 1 September 2015, defined at MMK 3,600 per 8-hour working day, or MMK 450 per hour (Art 1e). A new minimum wage of 4,800 kyats was set in March 2018. ■ The law covers part-time work, hourly jobs and piecework³⁶² and provides that both women and men should receive the minimum wage without discrimination (Art 14h). ■ Newly hired workers engaged in a training/induction programme for up to a maximum of three months can receive 50% of the minimum wage, while during the probation period (2nd or 3rd month of employment), workers should receive at least 75% of the minimum. ■ There is predictably less protection for daily workers (often day labourers). However, if a worker in a daily wage job works less than the set hours per day not because of the worker, but because of the employer, the worker should still receive the full wage for the day (Art 14g).

³⁶¹ 2018 Mines Rules (held with MCRB)

³⁶² [2013 Minimum Wages Act](#)

Occupational Safety and Health (OSH)

Some OSH provisions were included in the 1996 Rules which have been taken into the 2018 Rules and expanded on. Rule 176 of the 2018 Mines Rules contains some provisions on health and safety measures, as did the 1996 Rules. The permit-holder must provide all necessary measures for the safety in the mines, e.g. by ensuring the proper design, construction and electrical (communication) equipment needed. The Rules also require monitoring and regular inspection and maintenance of the working environment, tools and equipment in order to determine any potential dangers for workers. This includes adequate ventilation in all underground operations, fire prevention emergency rescue teams, and providing at least two (separate) emergency exits. All medical treatment of injured workers should be provided for free. The permit-holder is also required to appoint adequate supervisory personnel, and provide a system whereby the names and locations of persons entering underground work sites can be determined at any time, and to draw up and implement disaster prevention measures and keep safety records.³⁶³ Rule 177 requires an emergency plan to be drawn up. Rule 178 requires the company to ensure all workers exposed to chemical or biological hazards are properly informed of the risks, to minimise the exposure to such hazards, and provide suitable personal protective equipment free of charge, and to arrange for free medical treatment, and treatment in accordance with the Social Security Law (see below).

There is a draft OSH Law, but it has not yet been adopted by Parliament.³⁶⁴

The 1951 Factories Act also includes provisions regarding workplace safety. The provisions of the Act include, inter alia: adequate ventilation and lighting of workplaces; removal of dust and fumes harmful to health; the avoidance of overcrowding; provision of safe drinking water; provision of adequate number of latrines for workers; and proper disposal of factory waste.³⁶⁵ The welfare provisions include: first aid facilities; washing facilities; and places for taking meals. The Factories Act also provides that any accident inside or outside an industrial establishment above a threshold number of workers must be reported to the Factories and General Labour Laws Inspection Department (Art 53). According to the Factories Act, employers shall pay for medical treatment for workplace injuries caused by an employer's failure to keep OSH plans and protections. Employers must report deaths from workplace accidents or any injuries that prevent workers from working for 48 hours or more to the Factories Inspectorate of MoLIP (Art 53).

Social security

The 2012 Social Security Law³⁶⁶ provides for: a health and social care insurance system; a family assistance insurance system; invalidity benefit, superannuation benefit and survivors' benefit insurance system; and an unemployment benefit insurance system from a social security fund, which both employers and workers pay into (Art 2(c) and (e)). Companies with five or more employees in the extractive industries (among others) are required to pay

³⁶³ Ibid, Chapter XVII, Article 98 and 99

³⁶⁴ An unofficial translation of the draft OSH Law is available on the MCRB [website](#).

³⁶⁵ [1951 Factories Act](#), Chapter III, Articles 14, 15, 16, 17, 18, and 21

³⁶⁶ [2012 Social Security Law](#)

social security (Art 11). Casual workers are not covered by the social security scheme. According to the 2012 Social Security Law, victims of workplace accidents are entitled to 12 months pay at 70% of their last four months' average salary (Art 55 and 56(a) and (c)). In case of permanent disability, the employee is entitled to the same cash benefits for five, seven or nine years depending on the severity of the injury (Art 58). In case of the death of a worker, her or his dependants are entitled to receive her/his invalidity or pension fund benefits for 36 months.

Discrimination

Article 348 of the 2008 Constitution prohibits discrimination by the Union against any citizen on grounds of race, birth, religion, official position, status, culture, sex and wealth.³⁶⁷ However, the internationally recognised grounds of discrimination based on colour, language, political or other opinion, and national origin are not included in the Constitution, leaving significant gaps in protection against discrimination. There are also no provisions in the Constitution or laws prohibiting discrimination on the basis of sexuality. The 2013 Minimum Wage Act provides that both women and men should receive the minimum wage without discrimination, which is the first time that a labour law has prohibited discrimination on the basis of sex.³⁶⁸

Groups particularly at risk of being discriminated against include people with disabilities, women (see also Part 5.5: Women and Children), ethnic and religious minorities as well as lesbian, gay, bisexual and trans-gender (LGBT) people.

Occupational health impacts associated with limestone, gold and tin extraction and processing

In general, mining is considered to be one of the most hazardous industries, with a high rate of accidents and occupational diseases. There are a number of specific health risks associated with the commodities researched in this SWIA.

Health impacts associated with limestone mining

One of the main health hazards in limestone mining is the presence of limestone dust, containing free crystalline silica (SiO₂). With sufficient exposure, silica may cause silicosis, which is a pneumoconiosis that often develops progressively after years of exposure.³⁶⁹ The chronic over-exposure to free crystalline silica dust is often associated with widespread occupational lung diseases, such as tuberculosis – also known as 'silico-tuberculosis'.³⁷⁰ Although the direct link between exposure to silica and tuberculosis is sometimes contested, several scientific studies conducted in different regions of the world have documented the relationship between the exposure to silica dust in mining and developing tuberculosis.³⁷¹

³⁶⁷ [2008 Constitution](#), Chapter VIII, Article 348

³⁶⁸ [2013 Minimum Wage Act](#), Chapter VIII, Article 14(h)

³⁶⁹ ILO, [Health Hazards of Mining and Quarrying](#), March 2011

³⁷⁰ WHO, [Hazard Prevention and Control in the Work Environment: Airborne Dust](#), 1999, p. 23

³⁷¹ Sanjay Basu et al, [The production of consumption: addressing the impact of mineral mining on tuberculosis in southern Africa](#) (2009) 5:11 *Globalization and health* pp. 1-8; David Stuckler et al, [Mining and risk of tuberculosis in Sub-Saharan Africa](#) (2011) 101:3 *American journal of public health* pp. 524-530; Aliakbar Yaramadhi et al, [Correlation between silica exposure and risk of tuberculosis in Lorestan province of Iran](#) (2013) 12:2 *Tanaffos* pp. 34-40; ILO, [Clinical cases of silicosis in Thailand](#), 1997

Health impacts associated with gold mining

Mercury

As mentioned elsewhere, mercury is commonly used in gold processing in Myanmar. The effects of mercury on human health have been well documented. According to WHO, there are generally two susceptible sub-populations: those who are more sensitive to the effects of mercury, including foetuses, new-borns and children; and those who are exposed to higher levels of mercury. Once mercury has been released, it remains in the environment and has the ability to circulate between soil, water, air and sediments.³⁷² The substance may thus affect entire communities.³⁷³

Subsistence miners are generally the most directly exposed, by breathing the mercury vapour generated during the burning of the gold-mercury amalgam,³⁷⁴ which in Myanmar takes place inside houses and without the use of retorts or ventilation systems.³⁷⁵ The most common health problem observed in studies on artisanal gold miners are neurological effects, such as tremors, ataxia (movement disorders), memory problems and disorders affecting the eyes.³⁷⁶ Other health problems include skin rashes, vision and respiratory problems, kidney failure, cardiovascular problems and even death.³⁷⁷

While the SWIA did not measure mercury contamination, previous studies in Myanmar report that mercury concentrations in the air close to artisanal gold mine sites to be as high as 60 µg/m³.³⁷⁸ According to WHO, tremors have been observed in workers exposed to 30 µg/m³, and renal tubular effects and changes in plasma enzymes have been estimated to occur at 15 µg/m³.³⁷⁹ Consistent with findings in other areas of the world, the Myanmar study further observed that women in charge of heating the gold amalgam frequently do this in their indoor kitchen, filling the living area with mercury vapour. As a consequence, mercury concentrations in female miners may be higher than those in male miners. Infants, who are usually near their mothers, are also more at risk of exposure to mercury vapour than male miners.³⁸⁰ MCRB field research also observed the use of acid to remove the last impurities from the gold recovered by the amalgamation process and noted that this practice was shared by subsistence gold miners in Bago, Sagaing and Kachin.³⁸¹

Cyanide

Cyanide leaching, or cyanidation, is a common process used in gold extraction technology to dissolve and separate the gold from the ore. The use of cyanidation in mining is officially

³⁷² UNIDO, [UNIDO & Mercury](#), 2013

³⁷³ Herman Gibb and Keri G. O'Leary, [Mercury Exposure and Health Impacts among Individuals in the Artisanal and Small-Scale Gold Mining Community: A Comprehensive Review](#) (2014) 122:7 *Environmental Health Perspectives (Online)* pp. 667-672

³⁷⁴ WHO, [Guidance for Identifying Populations at Risk from Mercury Exposure](#), 2008.

³⁷⁵ MCRB field research 2016

³⁷⁶ Herman Gibb, Keri G. O'Leary, [Mercury Exposure and Health Impacts among Individuals in the Artisanal and Small-Scale Gold Mining Community: A Comprehensive Review](#) (2014) 122:7 *Environmental Health Perspectives (Online)* pp. 667-672

³⁷⁷ UNIDO, [UNIDO & Mercury](#), 2013

³⁷⁸ Takahito Osawa and Yuichi Hatsukawa, [Artisanal and small-scale gold mining in Myanmar: preliminary research for environmental mercury contamination](#) (2015) *人間生活文化研究* pp. 221-230

³⁷⁹ WHO, [Air Quality Guidelines for Europe](#), 2000, p. 158

³⁸⁰ Takahito Osawa and Yuichi Hatsukawa, [Artisanal and small-scale gold mining in Myanmar: preliminary research for environmental mercury contamination](#) (2015) *人間生活文化研究* pp. 221-230

³⁸¹ MCRB field research, 2016

banned in Myanmar, although the authorities sometimes grant exemptions. The field teams observed cyanide use in gold mining areas. Sodium cyanide is one of two 'Other chemicals' together with mercury, regulated as one of 29 Restricted Chemicals under section 5, sub-section (h) of the Prevention of Hazard from Chemical and Related Substances Law.³⁸²

While cyanide leaching may present a technical risk to miners, it generally does not pose environmental and health problems to the degree that mercury does. The toxins contained in cyanide will break down relatively quickly when exposed to air and sunlight. Thus it does not, as mercury, bio-accumulate in the natural environment.³⁸³ Safe handling, storage and waste management is, however, essential. Even in favourable conditions, cyanide often will not naturally decompose into harmless elements quickly enough to prevent pollution.³⁸⁴ Cyanide can persist in underground water systems. MCRB field research found community wells polluted with cyanide in sites near gold mining projects.³⁸⁵ Field research also indicated that mines using cyanide in their gold recovery process did so in a manner which may threaten the health of staff.³⁸⁶

Occupational exposure often takes place via inhalation and skin absorption of cyanide. The general population may also be exposed to the substance via the air, drinking water and food.³⁸⁷ Cyanide is an acutely toxic chemical and may be lethal if ingested, inhaled or absorbed through the skin in sufficient amounts.³⁸⁸ Acute symptoms of cyanide toxicity can occur within seconds of inhalation of hydrogen cyanide, or within minutes of ingestion of cyanide salts.³⁸⁹ Symptoms occurring within 14 days or less include skin and eye irritation, asphyxiation and mortality. Chronic health hazards occurring within a year or more, include carcinogenicity, effects on the reproductive system, effects on the nervous system, and effects on other organs.³⁹⁰ Studies have shown that individuals with nutritional inadequacy are particularly at risk.

Health impacts associated with tin mining

Exposure to tin mineral has limited impacts on human health. The exposure to chemicals which makes gold mining very damaging to the natural environment and human health are not replicated in the country's tin sector.³⁹¹ In Myanmar, tin processing is carried out by gravity separation, a process which uses water and no chemicals to separate the mineral from the ore. Tin smelting operations are limited in Myanmar. As a result, tin fumes, which may have an adverse impact on human health, are not currently being produced in the domestic tin industry. Some studies have shown that there is a positive exposure-response relationship between exposure of tin miners to dust and the risk of developing silicosis³⁹²

³⁸² Ministry of Industry, Central Leading Board on Prevention of Hazard from Chemical and Related Substances Notification No: 2/2016 Issuing the List of Restricted Chemical, 30 June 2016

³⁸³ Images Asia and Pan Kachin Development Society, [At What Price](#), November 2004, p. 30

³⁸⁴ Ibid

³⁸⁵ MCRB field research, 2016

³⁸⁶ MCRB field research, 2016

³⁸⁷ WHO, [Guidelines for Drinking-water Quality](#), 2004

³⁸⁸ ICMM, [The Management of Cyanide in Gold Extraction](#), 1999

³⁸⁹ WHO, [Cyanide in Drinking Water](#), 2007

³⁹⁰ ICMM, [The Management of Cyanide in Gold Extraction](#), 1999

³⁹¹ MCRB field research 2016; MCRB interviews, 2015

³⁹² Weihong Chen et al, [Risk of Silicosis in Cohorts of Chinese Tin and Tungsten Miners, and Pottery Workers \(I\): An Epidemiological Study](#) (2005) 48:1 *American Journal of Industrial Medicine* pp. 1-9

and lung cancer.³⁹³ However, this is debated.³⁹⁴ The development of silicosis in tin miners is thought to be related to the quartz content in the ore, released during extraction, processing and transportation, and not to the tin itself.

The Molo Women Mining Watch Network reported that many tin mine workers suffer from arthritis and that women collecting and washing tin nuggets often suffer from pain and numbness in their hands and legs.³⁹⁵ This study indicates the poor conditions in which tin miners work, which were seen during the field work carried out by MCRB to be exacerbated by working in water.

Drug use in mining in Myanmar

There is limited independent data available on the number of drug users in Myanmar. According to the latest UN Office on Drugs and Crime Southeast Asia Opium Survey (2015), the prevalence of drug use among Myanmar's total adult population was: opium 0.9%; Ya-ba (a methamphetamine common in Southeast Asia) 0.7%; and heroin 0.1%.³⁹⁶ Drug use is most prevalent in Shan State.

A number of recent studies have reported a high prevalence of drug use in relation to mining activities in Myanmar.³⁹⁷ The harsh working conditions reportedly encourage drug use among many male miners. In the jade mining area in Kachin State, locals estimated that 90% of the workers in the Hpakant jade mine were using drugs.³⁹⁸ Health workers in Hpakant reported that about 40% of injecting drug users in the area were HIV positive, twice the national average.³⁹⁹ Some cases of mining companies handing out drugs in order to encourage miners to work longer hours have also been reported.⁴⁰⁰

B. Field assessment findings

Health and safety

Human Rights Implicated: Right to the highest attainable standard of physical and mental health; right to life, liberty and security of person

- **Adverse health impacts:** MCRB field teams gathered testimonies from mine workers, former workers and medical personal about health symptoms. These included:
 - Respiratory problems in limestone processing and tin mining;
 - Dizziness, headaches and body aches and pains in gold mining; and
 - Skin problems in tin and gold mining.

³⁹³ Weihong Chen, [Nested case-control study of lung cancer in four Chinese tin-mines](#) (2002) 59:2 *Occupational and Environmental Medicine* pp. 113-118

³⁹⁴ Agency for Toxic Substance and Disease Registry, [Public Health Statement: Tin and Tin Compounds](#), 2005

³⁹⁵ Molo Women Mining Watch Network, [Lost Paradise: Damaging Impact of Mawchi Tin Mines in Burma's Karenni State](#), 11 December 2012, p. 12

³⁹⁶ UN Office on Drugs and Crime, [Southeast Asia Opium Survey 2015: Lao PDR, Myanmar](#), 2015, p. 70

³⁹⁷ Kyi Htun, [Sustainable Mining in Myanmar](#) (2014) 36:1 *Applied Environmental Research* pp. 25-35; Reuters, [Myanmar's Old Guard Runs a Jade Empire](#), 29 September 2013

³⁹⁸ Kachin Women's Association Thailand, [Silent Offensive: How Burma Army Strategies are fuelling the Kachin drug crisis](#), 2014, p. 6

³⁹⁹ Reuters, [Myanmar's Old Guard Runs a Jade Empire](#), 29 September 2013, p. 6

⁴⁰⁰ All Kachin Students and Youth Union, [Blood Jade: Burmese Gemstones and the Beijing Games](#), 2008

At one of the cement factories workers reported that they suffered from acute respiratory diseases or tuberculosis, which may be linked to their exposure to dust from limestone. Workers told the field teams that they felt sick; as they did not have access to proper medical care or a physician's diagnosis, they did not know the cause of their symptoms. Underground miners in small-scale gold mines reported that they suffered from headaches. The field teams also observed that the ventilation in the shafts was particularly poor, except in cases where there were two exits for each tunnel. Workers also complained about rashes from staying in water for many hours underground. In one village, community members told the team about several women involved in gold processing at a large-scale gold mine having had miscarriages or difficulties conceiving. In tin mining, workers staying in water all day were found to have skin diseases and infections, especially on their hands. Tin mining workers also reported acute respiratory problems.

- **Inadequate health and safety procedures and training:** Overall, the field research found that OSH training was ad hoc and insufficient. Only two of the large-scale mine sites visited had an OSH Policy and only one had dedicated OSH personnel. One mine had received ISO 9001 certification and OSH training was given to workers, including through their training centre. At one site supervisors had received OSH training, which they in turn were supposed to give to workers, but that did not in fact happen. At most of the small-scale sites, workers had received no OSH training at all. Several companies had procedures for using explosives, which were reportedly handled by experienced workers only. At a large-scale gold mine site management told field teams that only senior staff were allowed to handle cyanide, but the team observed differently. At several large-scale sites, workers were found to drink unfiltered water and sometimes dripping water in underground mines, mostly because of ignorance of the dangers or because the workers were not provided with enough clean drinking water.
- **Personal Protective Equipment (PPE) is not used systematically:** Overall, PPE provision and use was found to be better and more systematic at large-scale sites than at small-scale operations or in subsistence mining areas. That said, the team found problems at all sites. Employees at large-scale operations were usually provided with free PPE except in one instance. At two of these sites, rules and regulations for staff included the compulsory use of PPE and the field teams observed that staff were in fact wearing it, including daily workers. However, at three other large-scale sites workers reportedly did not always use PPE and management was found to be lax about requiring it. At one site, where top management and government authorities conducted checks on whether workers wear PPE, workers reported that they were usually told by their supervisor when those checks occurred so that they could prepare for them. Several problems were found with regard to the quality of PPE. At one site underground miners were found to have helmets but no uniforms, boots or masks, and the helmets were not replaced on a regular basis. At some small-scale sites and in subsistence mining areas, those processing gold were found to wear gloves but no mask, instead using a cloth to cover their nose and mouth while working. Similarly, at one large-scale gold mine site, workers processing gold were seen not to use any masks, while the field team found the smell to be intolerable. At most of the gold mine sites, whether large or small-scale, no specific arrangements were found in place for pregnant women working with mercury in gold processing.

- **Limited record keeping of Health, Safety and Environment (HSE) data and workplace accidents:** Although all mines have to report accidents and fatalities to MoNREC, only one company said that they had an incident registry in place. It is thus difficult if not impossible to assess the accident rate. The one registry revealed 30 serious accidents and three deaths recorded for the year 2015. At some of the large-scale mine sites, management claimed that there had been no serious accidents in their operations. However, they talked about frequent accidents in subcontracted mines on their site. Fatal accidents reported by workers included: falling rocks; accidents linked to improper use of explosives; tunnels collapsing on workers; electrocution; suffocation; and accidents during construction (e.g. pipe falling on and killing worker); and transportation. Other reported accidents included: injuries caused by falling rocks; fingers cut off by machines; and women's hair being caught in processing machines. At one site, a worker reported that after several accidents where fingers were cut off, the company established safety procedures. With regard to small-scale underground mines, it was reported that accidents occur because there are no systematic plans for building the shafts, which sometimes merge into one and may then collapse.
- **Subcontracted mine operators have very poor health and safety practices:** Subcontracted operators generally had to follow a set of rules and regulations imposed by the permit-holder. Some of these rules and regulations pertained to OSH, for example: regulating the use of explosives (which have to be bought from the permit-holder who has to be informed when blasting will occur); the way in which shafts are built and ventilated; and where waste can be disposed. Some subcontracted operators were found to provide PPE to workers for free or against a deduction on their salary; in other instances workers had to buy their own PPE. While the subcontracted mine operator might have received training, workers told the SWIA field research teams that they had never received any systematic OSH training. They often seemed not to follow the most basic safety instructions, for example exiting shafts when blasting occurs. The rate of accidents was reportedly high, in particular amongst inexperienced migrant workers from elsewhere in Myanmar. The field teams were told at one small-scale site that according to audits of subcontractors at the site 30-40 people were injured every year and 1-2 workers died each year. At another site, medical personnel said that accidents were much more frequent at subcontracted mines. According to rules and regulations imposed on subcontractors by permit-holders, subcontracted operators have to report accidents to the permit-holder. However, they sometimes admitted they did not do so regularly to avoid being closed down. Some permit-holders reportedly had an inspection team to inspect accidents at subcontracted mines.
- **Only a few companies pay social security for their employees:** Only four of the large-scale mines paid into the social security fund for their employees as required by the 2012 Social Security Law. Many of the large companies visited provided a medical centre within their compound with free treatment for employees. One company said that it did not pay the social security contribution because it had its own healthcare fund. At another site, workers reported that they could choose to participate in the social security scheme or not, but they chose not to because the social security hospital was located in another state. At another site, where workers were part of the social security scheme, they told the research team that they would have preferred a company-led scheme, as the public social security benefits were too low and the hospital too far away.

- **Companies cover some medical expenses:** At one site, the company would pay up to a certain amount of medical expenses per month depending on the position of the workers. The amount would vary between USD 8 for a basic worker and up to USD 340 for managers. At one site, workers were reportedly offered a yearly medical check; at another they received a medical check-up at the start of their employment. At other sites, workers only went to the medical facility if they were sick. At some sites, a medical doctor was present, whereas at others, a non-certified doctor or a nurse was in charge. In a few cases, the team observed that there was not enough medication and necessary medical supplies and workers sometimes had to pay for medication. The field research also indicated that contract workers and daily workers never had social security cards and usually had no access to the company-provided health facilities. In one case, contracted workers had their own welfare fund that they contributed to, to support medical treatment or funeral services. At another site, casual workers had access to health facilities of the company in case of an accident.
- **Compensation amounts for accidents and fatalities vary:** Large companies generally provided monetary compensation in cases of serious work-related injuries or death. However, the level of compensation was inconsistent and not transparent. At one site, where a worker died as a result of a pipe falling on him during the construction phase, the company paid for the funeral and compensated the family. Another large-scale company said that it had paid between 15 and 30 lakh compensation for deaths linked to mining activities and that it usually negotiated with families to avoid legal fees and the justice system. Another company said it had given 35 lakh to the family of a deceased worker and 45 lakh in another instance. Subcontracted mine operators also reported that they paid compensation to families in cases of workplace-related death, one company noting that it had paid 50 lakh for one incident.
- **Drug use and HIV:** Drug use amongst mine workers was common in certain regions, especially in gold mining regions. Miners in one small-scale gold mining area were reportedly using ya-ba and heroin. According to a local NGO, miners get tired because of the hard work and are thus more likely to use illegal stimulants such as methamphetamines. The fact that miners may have more cash than others in the community was also cited as a factor contributing to increased drug use. The prevalence of HIV/AIDS is reportedly very high in the area. The team could not establish with certainty in one subsistence gold-mining area whether prevalence of drug use was much higher amongst miners than in the general population. However, they may be more at risk of becoming drug users because they have the available cash and because their work is very demanding and difficult.

Box 17: Health and Safety in Subsistence Mining

Subsistence miners in Myanmar operate under particularly dangerous conditions. This is an overview of the most common issues identified by the field research.

- **Health and safety procedures and training are non-existent and there are no healthcare facilities:** Not even first aid equipment was available. Workers would generally have to go to the local village healthcare centre, which was often poorly equipped. At one limestone processing site, workers extracted the limestone with basic equipment, crushed it and burnt it in an artisanal oven

without any protection. The area where the oven was located was not fenced in, although it was close to a village. Workers and their families lived in small huts near the oven, without any sanitation.

■ **Use of mercury and other dangerous products with no appropriate care:**

Mercury – said to be imported from China or India – was being sold over the counter in shops in gold mining areas. In one area, women of all ages, including those who were pregnant, were panning for gold and were observed using mercury without any protection. Interviews with panners revealed that they were not aware of the adverse health impacts associated with mercury. Sometimes they chose to ignore the risks because they had no alternative livelihoods. At one site, miners thought that mercury would only be dangerous if ingested and would usually store mercury out of reach of children. At another site, processing with mercury was only done at the mine owners' house. In one subsistence gold mining area, village administrators claimed that they invited workers to a meeting once a year to inform them about mercury use and safe processing. However, no subsistence miners interviewed by the team were aware of such events. In subsistence shaft mining in one village, dynamite was stored in the houses and both mercury and cyanide were used without adequate protection.

■ **Small children are present on the mine sites:** The field research teams observed that children, including small babies, were taken to the mine sites where their parents were working. In one area, the shafts were located in the village itself, under houses where families lived.

■ **Adverse health impacts from mining:** Female gold panners complained about being in water all day and falling sick as a result. Some reported that they felt dizzy. Hands and fingernails were affected by the work and many also had cuts, abrasions, and contusions. A health officer said that headaches were common amongst gold miners and also reported that many underground miners had respiratory problems, with symptoms resembling tuberculosis. In several areas malaria was reported to be common amongst miners, as well as hepatitis B. Tin miners working in water were found to have skin diseases. There was often no proper sanitation in the subsistence mining areas. Older workers, estimated to be over 60, were panning, which meant remaining in water the entire day.

■ **Accidents, with no systematic compensation:** One case was reported to the field team about a landslide at a mine site where 20 people were affected and one person died. No compensation was paid, but the EAO controlling the area shut down the site. In one gold mining area, it was reported that landslides had been frequent in the past. In one village it was reported that there were approximately 10 fatalities per year. Such accidents had significantly decreased since 2015 as mine owners now had access to excavators and could dig more systematically with large equipment. Several cases of accidents were reported because of the absence of rehabilitation of old pits, which are often located close to villages, without fencing or warning signs. In one case, a 17 year old boy had gone to an old mine site with his friends to collect ore but got caught in a landslide and was now disabled. No compensation was given, and the family did not know who the old pit owner was.

Contracts and employment status

Human Rights Implicated: Right to just and favourable conditions of work; right to equal pay for equal work

- **Only employees of larger companies have signed contracts:** At two large-scale mine sites all workers were directly employed by the company. At all of the other large-scale sites workers included employees, contract labour obtained through a third-party, and casual or daily workers. Most employees at large-scale mine sites had signed a written contract or an appointment letter specifying the salary, working hours, leave entitlements and sometimes other benefits. However, they did not have a copy of the contract, which was kept by the company. Only at one site did permanent staff report that they had a copy of their contract. In several cases the Labour Department had recently ordered companies to put in place contracts. The length of contracts was generally found to vary from six months to five years. At one site, workers from the local community reported they were hired as 'trainees' for 10 years without any salary but were compensated in-kind with diesel that they sold at the market before getting a 5-year contract. At smaller licensed operations, workers had no contracts but an oral understanding with the owner. At one small-scale mine site, the 300 permanent employees had no written contracts, only oral agreements which entailed a commitment that they would remain on the job for the first three months. The same pattern was observed at other small-scale mines in the same region. At several sites there were also problems with subcontracting. At one large-scale site, the permit-holder only employed eight people, with all mining operations subcontracted to other operators, which were hiring daily workers. At another large-scale mine with over 3000 workers, less than 5% were found to be directly employed by the main company, with 100 subcontracted mine operators recruiting daily workers to perform the actual mining work. No daily workers at any of the sites had contracts.

Working hours, wages and leave

Human Rights Implicated: Right to just and favourable conditions of work; right to an adequate standard of living

- **Long hours:** None of the sites visited fully respected labour law which prescribes a 44-hour week for general workers, and 40-hours a week with two days of consecutive rest for five days of work for mine workers (1996 Mines Rules). At most of the large-scale sites, workers worked six days a week, or about 48 hours, with one day of leave per week. At one small-scale mine site, underground miners would work six days a week and office workers seven days a week, with an additional MMK 3,000 for working on Sunday. At another small-scale site overtime work on Sundays was remunerated at double rate. At other sites, overtime work on a leave day or after normal working hours would not be compensated. At one small-scale mine, workers usually worked from 6am to 5pm with a one-hour break. At some small-scale mine sites, workers worked every day and had no leave except public holidays. Security guards generally had the longest shifts and were granted less leave, many working seven days a week (3 days casual and 10 days of annual leave at one site).

- **Wages:** Although employees at large-scale sites were reportedly paid the minimum wage or higher, which provides a higher income than farming, entry-level employees said that their salary only covered basic expenses and did not allow them to save. Security guards at one site received a salary significantly lower than the minimum wage. Delays in payments of up to 10 days were reported at several sites. None of the companies provided payslips to workers. Small-scale companies sometimes paid a wage according to a system of redistribution of revenues amongst workers. At one small-scale site, it was reported that workers received their share of the production only after having worked for six months.
- **Daily workers have an insecure income:** Daily workers, at both large- and small-scale mine sites, were engaged in cleaning, construction and packing work, among other tasks. They usually received a fixed payment per day. At one site, contract workers employed by a third-party were paid on a piecework basis, by the number of cement bags they carried per day. At a large tin mine site, the daily workers engaged in carrying ore to the surface and women washing ore were reportedly paid by the ton, whereas miners working underground extracting the ore had a fixed daily wage. Even at those locations where daily rates were the highest, daily workers reported that their income barely covered their basic needs.
- **Withholding of wages:** At several sites instances of the company withholding a part of the salary were reported. At one site, the company opened a bank account for each employee into which the company paid USD 20 from their salary each month; however, workers could only access this money after three years of employment. At one small-scale site, the company retained part of the salary, reportedly in agreement with the workers, to allow them to save some money. At one large-scale site, in order to keep workers with the company for a long time, workers had to compensate the company if they left within the first five years of employment. At another large-scale site, employees were requested to stay with the company for at least two years.
- **Leave:** Employees at large- and small-scale sites were generally given annual leave (10 days), as well as casual leave and maternity leave, as per the labour laws. Casual workers and subcontracted mine workers were not granted any formal leave. Some smaller companies reported that they had no policy for maternity leave as they had had no cases of women requiring it. At one site, management said that they recognised different public holidays for different religions.

Box 18: Working Conditions in Subsistence Mining

The field research found working conditions in subsistence mining areas to be particularly poor. Key findings are outlined in the points below.

- **Living conditions:** In one gold mining area, subsistence miners were mostly internal migrants who had settled with their families in the area to earn a living. Some would stay in the area for many years, while others would migrate seasonally to take part in mining for only part of the year. The settlements of subsistence miners were not registered with the Ministry of Home Affairs and were very poor, with no available healthcare or transportation. In another gold mining area, most migrant workers lived in huts close to the mine sites, while local miners would live in the village.

- **Working hours and daily wages:** Workers were usually recruited by a mine/pit-owner with whom they had an oral agreement about their terms and conditions. Conditions at nearby mine sites were found to be equivalent. In one gold mining area, workers reported that they usually worked 12 hours with a one-hour break. Male workers made a fixed daily amount (MMK 5,000) and a higher rate at night (MMK 8,000). Women, who often performed different functions than men, were paid around MMK 4,000 to 5,000 a day. Wages were paid every 10 days. Some workers, including female cooks, would sometimes be paid on a monthly basis (MMK 60-100,000). Workers usually received three meals per day and additional snacks for night-time work. In these areas there were no provisions for paid leave days, so when a worker was sick, s/he received no payment. In one area, it was reported that typically wages were not paid on time because of cash flow problems when gold production was low. In the same area, when the mine owner had to buy new machinery, workers had to work very long shifts (up to 24 hours at a time) to contribute to paying the cost of the equipment back to the mine owner. Some mine owners had a profit sharing agreement with workers. In one village where people were mining in shafts within the village itself, there was a production sharing system, where the 'owner' paid for the equipment etc. and then received 60% of whatever was mined, and workers shared the remaining amount among themselves.
- **Fees paid to mine owners:** Informal pit owners may allow individuals to pan on the site or collect ore from waste against a daily fee, e.g. MMK 5,000. Other pit owners do not allow such activity on their site and may call the army to chase these subsistence miners from the site. In one gold mining area, village leaders played the role of labour broker. This included organising accommodation for migrant workers on land which they owned, paying a fee to a pit owner to allow the community to mine there, bearing responsibility for the tools if they were lost or damaged, and possibly buying the gold from the workers. Large-scale or small-scale permit-holders could also authorize subsistence miners to operate in some designated places within the mine area. At one large-scale tin mine site, a village leader paid a fee to the mining company to get permission for villagers to pan in the creek, and villagers then had to sell back a part of their product to the villager leader who then sold it back to the company. At two large-scale tin mines, individuals had a card for which they paid a one-off fee, allowing them to collect ore in the waste area within the concession. Then they had to sell back the mineral to the permit-holder at less than market price. The income of individual panners or those collecting waste was insecure because it was entirely dependent on how much mineral they were able to recover and sell.
- **Grievance resolution in informal mining:** In one area, if there was a dispute between a worker and a mine owner about payment of wages the village administrator could act as a mediator. In one instance, the village administrator admitted to the field team that he felt awkward playing that role since the mines were illegal.
- **Discrimination:** As in formally licensed mines, women in subsistence mining areas were usually confined to certain functions (panning, cooking, carrying rocks, washing the ore, and not underground mining). They were not perceived as true

miners by male workers, and were generally paid less. No cases of sexual harassment were reported. Overall, workers, including young ones, felt that they were treated equally by the mine owners or their fellow workers and all of them shared their meals.

Freedom of association, collective bargaining and labour grievances

- **No independent representation of workers:** One site had two unions – one for casual workers employed through a recruitment committee and the other for workers recruited directly by the company. After the casual worker union had made demands for higher wages, three leaders were blacklisted and could not work for three months.
- **Dysfunctional grievance mechanisms:** No legally established Workplace Coordinating Committee existed at any of the sites visited. However, at two sites a committee to deal with labour problems and grievances had been established. However, no workers were represented on these committees and workers were not always aware of its existence or functions. At one site, the committee had reportedly been set up at the request of ME-2. At another site, the committee had never received any grievances. Suggestion boxes were found to exist at several sites but were reportedly not used because grievances were brought directly to managers by workers.
- **Local authorities or State-owned joint venture partner act as mediators in labour disputes:** At one large-scale mine site, after the take-over of a state-owned mine by a private company, local workers who had informally organised complained to local authorities about no longer having proper contracts and being paid below the minimum wage. As a result, the local labour department visited the site, mediated between the parties and supported the company to draw up the contracts, thereby meeting the demands of the workers. In another instance, the joint venture partner was called upon to intervene in a case of harassment by a foreign supervisor who was then dismissed as a result of the intervention.

Workers' accommodation and restrictions on movement

Human Rights Implicated: Right to an adequate standard of living; right to just and favourable conditions of work; right to non-discrimination; right to housing

- **Variable housing standards for employees:** Employees at large-scale sites were generally housed by the company on the mine site itself or nearby. Where worker accommodation was provided, it was divided into different categories depending on the status of the employees. Family accommodation was sometimes available for a fixed rent, e.g. MMK 10,000 which included electricity and water. At one site, the shared accommodation (two people per room in 12-room apartments) was spacious and of a good standard, with electricity, drinking water, sanitation, a hall for entertainment, and Wi-Fi at night. At other sites the standards were very poor. At one site during the dry season, water storage basins (storing water for workers) remained empty for 2-3 days at a time, which was not addressed in spite of complaints by workers. Sanitation facilities were also scarce at several sites, e.g. only 32 toilets for a workers camp with over 1500 people. Accommodation for security staff was particularly poor. At one large-

scale site, security guards did not even have a fixed place to live and usually slept at the different security posts where they were on duty. At another site, security guards stayed in a hut with leaking water and only two hours of electricity per night.

- **Restrictions on freedom of movement:** All worker accommodation sites (except one) were closed at night, usually between 7pm and 7am, with no one able to leave or enter the area during this time. At one of the sites, the housing area for female workers was fenced in separately, reportedly for their safety. Management at one site said that the area was closed at night to prevent disputes or violence between workers and local people, although there were no reports of this. At two small-scale mine sites original identity documents of workers were kept by the general manager to ensure workers did not leave without notice.
- **Poor accommodation for daily workers and subcontracted mine site workers:** At one site, migrant daily workers lived in two villages close to the mine site where they paid a monthly rent (MMK 1,000) for the land on which they had built their houses. The field research team observed overcrowded and dirty housing with poor sanitation. Villagers had some small livestock around their houses. According to residents living in that area, out of 20 migrant worker households, three had children suffering from TB. At another large-scale site, (migrant) daily workers were housed for free in houses outside the mine site. They reported that they did not feel safe in the house, which the field team observed looked close to collapse. The company sometimes provided water in the summer, but no electricity. Workers in subcontracted mines did not stay in the same place but moved around, usually in areas close to the shaft where they worked in poor conditions; with no sanitation, bad quality food and large quantities of dust.

Women workers and child labour

See part 5.5: Women and Children.

Discrimination and harassment

Human Rights Implicated: Right to non-discrimination; right to work; right to just and favourable conditions of work

- **Women daily workers are generally paid less than their male colleagues:** Women daily workers were found to generally receive less money, often below the legal minimum wage of MMK 3,600. In one mine, men received MMK 2,500 and women MMK 2,000. At another site the pay differential was MMK 4,000 for men and MMK 3,000 for women; and at another MMK 5,000 for men and MMK 3,500 for women. At another large-scale site, women in gold processing received a monthly salary of MMK 120,000, whereas men were paid MMK 150,000. Male daily workers in construction earned around MMK 6,000-7,000 a day while women would only earn MMK 4,000, supposedly because they had less work to do.
- **No anti-discrimination policies in place, some cases of discrimination reported:** None of the sites had anti-discrimination or harassment policies and procedures in place. At two sites the company reported that they had an unwritten policy of non-discrimination. However, it was unclear what this entailed or how it functioned. Both workers and management were generally not sensitised to the issues of discrimination and harassment. One case of discrimination was reported against labour union leaders

representing casual workers. After they had asked for an increase in salary, three union leaders were then not given any more work. At another site, dozens of workers who had joined the NLD in 2012 were not allowed to work anymore because the company they worked for was believed to be supporting the then ruling party, the Union Solidarity and Development Party. At yet another site, local communities from an ethnic nationality group told field teams that they had less employment opportunities than Bamar migrant workers. Myanmar workers at another site reported that they were subject to oral abuse by their foreign supervisors.

Workers' benefits

Human Rights Implicated: Right to an adequate standard of living; right to just and favourable conditions of work

- **Some benefits provided to workers as part of their employment terms and conditions:** Sometimes workers benefitted from free transportation from their accommodation to their workplace, although in one case, workers had to stand up on the truck beds and felt it was very dangerous. This transportation was only provided from one nearby village to the site. At one site, the company provided a childcare facility for workers for MMK 10,000/month. Most of the large- or small-scale companies provided three free meals a day to workers or a food allowance (MMK 1,500 for basic workers and MMK 3,000 for higher level employees). Different types of bonuses were given at some large-scale sites but not systematically. These included bonuses for working every day, bonuses for working during a religious festival, and bonuses for working on a leave day. Some employers also gave money for a wedding or a child being born. In two instances, the companies would encourage their staff, in particular young people, to study through granting a bonus or paid leave for exams. One company provided free transportation to the closest township for workers when they were on leave. At one site, the company provided loans to workers. According to the management these were interest-free; according to a worker, at a 10% interest rate.

C. Relevant International Standards, Guidance & Initiatives

Box 19: International Standards, Guidance & Initiatives on Labour Rights, Safety & Mining

International Standards:

Fundamental ILO Conventions

*Those ratified by Myanmar are in **Bold***

- **C29 Forced Labour Convention, 1930**
- **C87 Freedom of Association and Protection of the Right to Organise Convention, 1948**
- **C182 Worst Forms of Child Labour Convention, 1999**

Not Ratified by Myanmar

- C98 Right to Organise and Collective Bargaining Convention, 1949

- [C100 Equal Remuneration Convention, 1951](#)
- [C105 Abolition of Forced Labour Convention, 1957](#)
- [C111 Discrimination \(Employment and Occupation\) Convention, 1958](#)
- [C138 Minimum Age Convention, 1973](#)

ILO Mining Convention and Recommendation

- [C176 Safety and Health in Mines Convention, 1995](#)
- [R183 Safety and Health in Mines Recommendation, 1995](#)

Other relevant international standards

- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)
- [ICMM Sustainable Development Framework](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 1 – Assessment and Management of Environmental and Social Risks and Impacts](#)
 - [PS 2 – Labour and Working Conditions](#)

Guidance:

- ICMM, [Health and Safety](#)
- ICMM, [Health and Safety Performance Indicators](#)
- IFC, [Environmental, Health and Safety Guidelines for Mining](#)
- IFC, [Good Practice Note: Non-Discrimination and Equal Opportunity](#)
- IFC, [Good Practice Note: Workers' Accommodation: Processes and Standards](#)
- IFC, [Measure & Improve Your Labor Standards Performance: Performance Standard 2 Handbook for Labor and Working Conditions](#)
- IFC, [Women in Mining: A Guide to Integrating Women Into the Workforce](#)
- ILO, [Safety and health in small-scale surface mines: a handbook, 2001](#)
- ILO, [Safety and health in opencast mines: an ILO code of practice, 1991](#)
- [International Cyanide Management Code for the Manufacture, Transport, and Use of Cyanide in the Production of Gold](#)

International Initiatives:

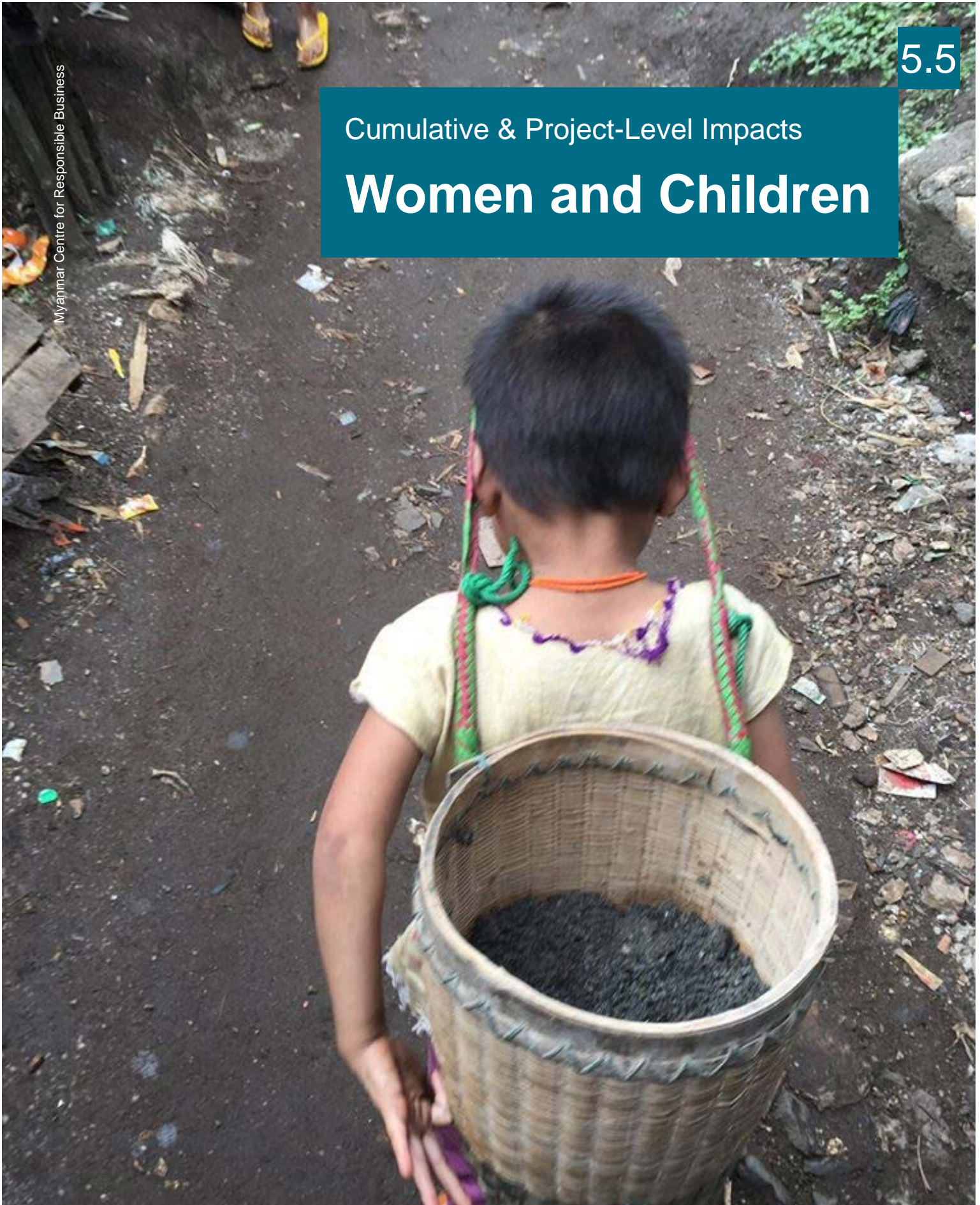
- Pure Earth, [Teaching Artisanal Gold Miners to Extract Gold without Mercury](#). Pure Earth has been testing and teaching a century-old, traditional method of Mercury-free gold mining. So far, Pure Earth has worked with miners in Bolivia, Mongolia, and Peru. This document provides a step-by-step guide as to the process of mercury free mining as well as describes in detail the organisation's work.
- UNDP, [Guidance: Developing a National Strategic Plan to Reduce Mercury Use in Artisanal and Small Scale Gold Mining](#). This document guides governments in the development of a national strategic plan relating to improving practices and working conditions in ASM gold mining and reducing the impact of mining on the environment.
- US Environmental Protection Agency (EPA), [Reducing Mercury Pollution from Artisanal and Small-Scale Gold Mining](#). EPA has partnered with Argonne National Laboratory to design a low-cost, easily constructible technology called the Gold

Shop Mercury Capture System, which was piloted and tested in Amazonian gold producing regions in Brazil and Peru.

- Artisanal Gold Council, [Sustainable Development of Artisanal and Small-Scale Gold Mining in Indonesia](#). This project aims to improve incomes, health, and the environment of the vulnerable and marginalised women and men dependent on the ASM gold mining economy. The project supports the introduction and popularization of non-chemical alternatives to mercury in gold processing.
- The Ban Mercury Working Group, [Ending Mercury Use in Artisanal Gold Mining](#). This report is about the general use of mercury as well as communities at risk, and the mercury alternatives that exist.

Cumulative & Project-Level Impacts

Women and Children



Part 5.5

Women and Children

In this section:

- A. National Context
 - Women
 - Children
- B. Field Assessment Findings
 - Impacts of mining activities on women
 - Impacts of mining activities on children
- C. Relevant International Standards, Guidance & Initiatives

A. National Context

Women

The impacts of mining operations are not gender neutral. Women can experience the direct and indirect consequences of mining operations in different, and often more pronounced, ways than men (Box 20).

Myanmar acceded to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1997. However, a legal definition of discrimination against women has not been adopted in the 2008 Constitution or other legislation, which ultimately hinders the formulation, interpretation, and dissemination of laws and policies impacting women's rights.⁴⁰¹ For example, Article 350 of the 2008 Constitution guarantees that women shall be entitled to equal pay for equal work. This is contradicted in other provisions within the Constitution that clearly constitute discrimination against women. Article 352, for example, states that although there may be no discrimination on the basis of sex "in appointing or assigning duties to civil service personnel [...] nothing in this section shall prevent appointment of men to the positions that are suitable for men only." Myanmar has not ratified the ILO Conventions on discrimination, equal remuneration or maternity protection. However, the 2013 Minimum Wage Act provides that a worker has the right to enjoy the minimum wage without discrimination between women and men, prior to which civil service salaries were levelled.⁴⁰²

Inequality is also illustrated within political processes and representation. The proportion of women Members of Parliament has increased since the 2015 general elections. From 2010-2015, only 5.9% of Union Parliament were represented by women, a number that has increased to 14.5% since the recent elections. Regardless of such progress, however,

⁴⁰¹ Gender Equality Network & Global Justice Center, [Shadow Report on Myanmar for the 64th Session of the Committee on the Elimination of Discrimination Against Women](#), July 2016, p. 2

⁴⁰² [2013 Minimum Wage Law](#), Article 14(h)

women remain vastly underrepresented in politics. Out of the 29 Ethnic Affairs Ministers elected, for example, only five were women.⁴⁰³

CSOs have pointed to a general lack of political will to implement the National Strategic Plan for the Advancement of Women. This ten year Plan unveiled by the Government in October 2013 embodies a commitment to promoting and protecting the human rights of women in Myanmar.⁴⁰⁴ There are some legal provisions, however, that are designed to protect the personal security of women. For example, the Penal Code contains provision for crimes against women including rape, abuse, and seduction and sex with under-age women. Trafficking or trading women for prostitution, or enticing for sexual purpose is a crime punishable by imprisonment.

Many domestic laws and policies incorporate restrictive gender stereotypes and are thus inconsistent with CEDAW which aims to promote and protect gender equality. For example, Rule 168 of the 2018 Mines Rules maintains the provision in the 1996 Rules that women shall not be employed to work underground except for health and social services functions. In local culture, it is believed that if a woman were to enter a quarry or a mine, the said quarry will stop producing minerals or collapse.⁴⁰⁵ Such a superstition exists in other cultures but some have managed to overcome it.⁴⁰⁶

It has been documented that women face discrimination and barriers in accessing or owning land, and participating in consultation and decision-making processes regarding land.⁴⁰⁷ At the same time, research indicates that security over land can help to stabilise society and create security for women and their families, as well as contributing to their economic and political independence. Studies also demonstrate that women who own land are less vulnerable to domestic violence.⁴⁰⁸

Box 20: The Gendered Impacts of Mining

Globally, the gendered impacts of mining are well documented. Some of the common ways in which mining may affect women and men differently are outlined below.⁴⁰⁹

- **Socio-economic aspects:** While mining can provide positive benefits and create economic opportunities for family units, evidence suggests that mining can also increase the level and extent of economic inequality through redistribution of financial resources. For example, the sudden influx of cash compensation from

⁴⁰³ Asia Foundation, [Myanmar Elections Usher in Unprecedented Number of Women Parliamentarians](#), 2016

⁴⁰⁴ Gender Equality Network & Global Justice Center, [Shadow Report on Myanmar for the 64th Session of the Committee on the Elimination of Discrimination Against Women](#), July 2016, p. 7

⁴⁰⁵ [Debating with Data: A response to the 'The Myth Myanmar can Afford to Ditch'](#), Shin Saw Aung, Teacircles, August 2017

⁴⁰⁶ [Women miners blast through barriers in Chile](#), InterPress Service, 11 April 2013

⁴⁰⁷ Transnational Institute, [Linking Women and Land in Myanmar: Recognising Gender in the National Land Use Policy](#), February 2015, p. 7

⁴⁰⁸ Ibid p. 4

⁴⁰⁹ This box is based on: Oxfam Australia, [The Gender Impacts of Mining and the Role of Gender Impact Assessment](#), 2009; Oxfam Australia, [Tunnel Vision-Women, Mining and Communities](#), 2011; Rio Tinto, [Why Gender Matters](#), 2009

direct or indirect employment (usually of men) can result in significant changes to community life, with women often bearing the negative impacts. Mining may also result in adverse social and health impacts for women, including an increase in alcohol related abuse, domestic violence and general social disruption. The implications of the influx of large male populations on local communities, for instance, can include an increased likelihood of early sexual activity, HIV and other sexually transmitted infections, exploitation, and prostitution.

- **Local employment:** One of the most obvious benefits of the mining industry for local communities is the direct and indirect employment opportunities it can provide. As it is mostly men that gain such employment, areas of domestic life can be significantly altered for women through the presence of mining activities. When women are employed in mining, they are often expected to maintain their traditional domestic role as well as their new role as an income earner. Within the workplace itself, women may face issues of sexual harassment and abuse, salary inequity, and other types of discrimination.
- **Environmental impacts:** Women are often in charge of household tasks like food production and preparation. Environmental problems, such as reduced access to water or loss of agricultural land, can have a direct and negative effect on a family's access to food. When a community suddenly becomes a centre for mining, the cost of living usually goes up and food becomes more expensive, creating more stress for the women who are responsible for feeding a family. Women and girls may also bear the responsibility of collecting water, of which the quality and availability becomes compromised after a mining project is underway.
- **Resettlement and relocation:** Resettlement and relocation for the purposes of mining often disproportionately affect women, resulting in negative physical, social, cultural, and economic displacement. For instance, in many subsistence societies, women do not have recognised land rights and are therefore excluded from most land-based compensation schemes. In Myanmar it has been noted that rural communities are especially dependent upon women for tasks ranging from raising families to tending to crops and animals. The important contribution of women to generational and societal reproduction can only be realised through securing their access to land. The critical role that women play needs to be supported by ensuring their access to resources, such as land, in order to create a healthy society.⁴¹⁰
- **Negotiations and engagement:** The disproportionate manner in which women are treated often starts at the initial negotiation and engagement stages of mining developments, as women are often excluded from such processes. Women may be excluded due to cultural or work related factors, including domestic responsibilities. Failure to adequately engage women means that their knowledge is not accessed and considered in project planning, an exclusion that can exacerbate resentment and conflict.

⁴¹⁰ Transnational Institute, [Linking Women and Land in Myanmar: Recognising Gender in the National Land Use Policy](#), February 2015, p. 4

Children

Children involved in or affected by mining activities are often unseen and uncounted as they lack a public voice to speak up for themselves in their communities and with local governments. While child labour in mining is a critical issue, the impacts of mining on children extend well beyond the issue of labour. Issues such as land acquisition and resettlement, health and safety, educational opportunities and working conditions also impact directly on children (Box 21).

The Government ratified the Convention on the Rights of the Child (CRC) in 1991, and acceded to the CRC Optional Protocol on the Sale of Children, Child Prostitution, and Child Pornography in January 2012. The 2008 Constitution reaffirms the State's responsibility to provide free basic education and healthcare for children. While most children attend primary school the net completion rate is only 54%, and only 58.3% of children of secondary school age attend secondary school.⁴¹¹ Due to widespread poverty, many children drop out of school and work to help earn money for their families. A 2015 report issued by ILO, for which parents and children were interviewed throughout various regions in Myanmar, found that poverty is considered to be the main driving factor behind child labour.⁴¹²

Currently, Myanmar lacks a specific child labour law, although existing related laws, including the 1993 Child Law, are under review to comply with international labour standards. Myanmar law diverges from the CRC in some significant areas. With the amendment of the Factories Act in May 2016, and the Shops and Establishments Act in January 2015, the minimum age for the employment of children in Myanmar is set at 14 years which is in line with international standards for light work, but not in line with the international standard of 15 years for regular work.⁴¹³ The 1993 Child Law defines a child as a person under 16 years of age, and classifies children between the age of 14 and 17 as youths. It allows them to engage in 'light duties', although, 'light duties' is not defined.⁴¹⁴ MCRB's May 2017 Briefing Paper on Children's Rights and Business in Myanmar provides further background.⁴¹⁵

The ILO Convention No.182 on the Worst Forms of Child Labour was ratified by the Government in December 2013. Nevertheless, child labour is widespread and visible throughout Myanmar in various sectors, including in mining. In a recent study on child labour in the Mon areas, civil society members and child protection officers described child labour in Myanmar as vastly under-researched, and said that accurate data from the country's peripheral areas is almost non-existent.⁴¹⁶ The Government is working with the ILO and UNICEF to reform laws and end the worst forms of child labour.⁴¹⁷ One initiative launched by the ILO has been a training programme for workers, employers, and CSOs to learn about child labour and identify potential interventions to be carried out by their own

⁴¹¹ UNICEF, [Situation Analysis of Children in Myanmar](#), July 2012, p. 116

⁴¹² ILO, [Knowledge, Attitudes and Practices \(KAP\) Study on Child Labour in Yangon, Ayeyarwady Region and Mon State](#), January 2016, p. 11

⁴¹³ Freedom House, [The Global State of Workers Rights](#), 31 August 2010, pp. 14-15

⁴¹⁴ US Department of State, Bureau of Democracy, Human Rights and Labor, [2015 Country reports on Human Rights practices: Burma](#), 2015

⁴¹⁵ Briefing paper on [Children's Rights and Business](#), Myanmar Centre for Responsible Business, May 2017

⁴¹⁶ The Woman and Child Rights Project, [Children for Hire](#), November 2013, p. 8

⁴¹⁷ US Department of State, Bureau of Democracy, Human Rights and Labor, [2013 Country reports on Human Rights practices: Burma](#), 2015

organisations.⁴¹⁸ However, it appears that no dedicated initiatives, research studies or interventions related to the prevalence of child labour in the mining sector in Myanmar have been undertaken.

Rule 146 of the 2018 Mines Rules (replacing Rule 94 of the 1996 Rules) states that no person shall be employed to work in a mine unless he is in possession of a certificate issued by the relevant Health Department certifying his fitness and that he is at least 18.

Box 21: Impacts of Mining on Children's Rights⁴¹⁹

- **Socio-economic aspects:** In-migration associated with mining activities often increases the exposure of children to the risk of sexual exploitation and violence and the rate of child pregnancy. Such sexual exploitation can continue throughout the lifespan of the mining project and may expose children to risks of contracting sexually transmitted infections, including HIV.
- **Child labour:** Because large-scale mining operations do not directly hire children, the greatest risk of child labour in the sector is within the supply chain, particularly during construction, or in the informal mining sector where children might work in subsistence mining with their parents, siblings and communities.
- **Decent work:** Children are also negatively affected when mining companies or their contractors do not provide their employees with a living wage, potentially leading to parents not having enough income to sustain a family; or where housing provided for employees and their families does not meet adequate standards.
- **Environmental impacts:** Localised environmental impacts of mining can include dust, erosion, adverse effects on ecology and biodiversity, and the contamination of soil, ground and surface water by chemicals from the mining process, including cyanide, arsenic, sulphuric acid, mercury and heavy metals. Children are more vulnerable to the localised environmental impacts of mining activities than adults, particularly water, air and soil pollution, due to their progressive and incomplete physical development, among other factors.
- **Resettlement and relocation:** Land acquisition and/or access are vital for mining, often creating significant socio-economic impacts to which children may be most vulnerable. Land acquisition and use can affect community members whose homes are located either within the mine site or adjacent to it. Not only can this lead to the loss of a child's home, but displacement and relocation can cause fundamental changes in family structures and social dynamics.
- **Safety and security of children:** As traffic increases on roads due to mining activities, there is an increased likelihood that children will be injured or killed in accidents. Additionally, children could be adversely impacted through their interaction with private or public security personnel of mining companies.
- **Artisanal and small-scale mining:** ASM activities involve the use of basic methods and processes to extract minerals. Worldwide, one million children aged 5–17 are estimated to be engaged in ASM and quarrying activities, working in

⁴¹⁸ ILO, [Project Updates: Myanmar Programme on the Elimination of Child Labour](#), Volume 4, 2016

⁴¹⁹ This box is based on: Stop Child Labor, The Child Labor Coalition, [Child Mining: 10 Facts](#); UNICEF, [Children's Rights and the Mining Sector: UNICEF Extractive Pilot](#), 2015

dangerous conditions, with no access to basic necessities, schools or health clinics. ASM poses critical risks to children, including:

- Use of child labour, and loss of education, when children need to contribute to the family income.
- Significant health and safety risks, including increases in communicable disease and the impacts of the use of chemicals such as mercury and cyanide, which affect children differently than adults. Mercury poisoning can affect the brain, heart, kidneys, and lungs and is extremely detrimental to children, affecting their nervous system development, which can lead to long-term developmental disabilities (Minamata disease).
- Increased risk of sexual exploitation and violence towards children, including forced marriage, rape and prostitution.
- Links to armed militant groups, particularly in conflict zones or conflict-affected areas, which increases the risk that children are recruited into militias.

B. Field Assessment Findings

Some of the key impacts and concerns concerning mining projects and activities on women's and children's rights that were noted during the field research are outlined below.

Impacts of mining activities on women

Human Rights Implicated: Right to non-discrimination; women's rights; right to the highest attainable standard of physical and mental health

- **Women and men engage in different types of mining work, and experience differences in average pay:** Overall, the field research found that women were more predominantly engaged in mine processing, whereas men worked predominantly in ore extraction. In some of the tin mining areas, for example, most of the women were working in washing the tin and collecting hard rock, pounding, and working in the open pit areas. While equal pay for equal work was observed to be practiced at some of the mine sites visited, by virtue of being engaged in different parts of mining and processing, notable pay gaps between women and men were identified in practice. For example, at one site where men worked primarily in the formal and underground operations for approximately MMK 7,000-10,000 per day, women were engaged in the informal/illegal open pit activities, earning only around MMK 5,000 per day for these activities. In some subsistence mining areas there were also instances reported of women getting paid less for doing the same work as men. An exception to these differences in types of work and pay was in the area of creek tin mining, which was found to be primarily a family-based activity involving women, men and children all performing similar activities. Almost no women were found to be working at the formal large-scale and small-scale mine sites. Furthermore, for the types of jobs that women did perform at these sites the salary was significantly lower than that for positions held by men.
- **Limited job opportunities for women and discrimination in hiring:** At several sites women reported that they would be interested to work in mining if there were jobs available to match their skills. However, women said that they had little information

about the roles and skills needed and that most jobs filled by local staff would be taken by men. Furthermore, there were also some incidents identified where the actual job descriptions posted by the company specified the required gender and age, to women's disadvantage.

- **Women not working in underground mines:** The field research found that at formal and informal sites, women were not working in underground mines. At one site, according to local beliefs women were not allowed to go underground because they might have accidents; but also because it was believed that women's presence in the underground mines would reduce the quality and abundance of the tin deposits.
- **Maternity leave:** As outlined in Part 5.4: Labour, the larger companies said that they followed the law regarding maternity leave but did not have any specific policy provisions for the protection of pregnant women from hazardous work. In subsistence mining areas it appeared to be usual practice that women stop working when they become pregnant and that there was no financial security during this leave. However, in some subsistence mining areas it was also observed that women were working while pregnant, including using mercury for gold processing.
- **Women often work in the informal sector and as daily workers:** In areas where there were both formal and informal mining activities it was reported that women worked predominantly in the informal sector. For example, at one site it was reported that men tended to work in the small-scale underground operations, whereas the women predominantly practiced illegal subsistence mining in open pit mining areas on existing concessions. Overall, the field research found that most women working in the mining sector were employed in casual labour, cooking, panning and collecting and processing ore. In one subsistence gold mining area, from talking to villagers it was observed that women working in mining were not perceived as miners but as acting in a 'supporting role' to male miners, i.e. performing less heavy mining work, cooking, cleaning, and taking care of childcare responsibilities.
- **Double workload:** In the subsistence gold mining areas the responsibilities of women included the double workload of getting up early to cook, arranging for children to go to school, managing the camp, getting food supplies and collecting firewood, as well as mining work.
- **Exposure to mercury and chemicals:** In addition to the insecurity associated with working in the informal sector or as daily workers, the field research also observed that the types of work that women were engaged in can be associated with a higher exposure to mercury and other processing chemicals. For example, at one site, panning and mercury use was described as 'a woman's job'. Furthermore, from speaking with gold miners in the area, it appeared that women were not aware of the adverse health impacts of mercury.
- **Sex work:** Sex work was found to be more prevalent in the subsistence gold mining areas than in the tin mining areas. While prostitution was observed and reported in these areas it was difficult to obtain precise or conclusive data.
- **Women are underrepresented in community and institutional leadership structures:** Bar a few exceptions, women were found not to be represented in leadership positions and structures, such as the 10 or '100 household heads' or mine management. This means that where engagement or consultation occurred between mining companies and community leaders, women would not have been consulted.

Impacts of mining activities on children

Child health and safety

Human Rights Implicated: Right to non-discrimination; children's right to health and health services; children's right to an adequate standard of living; children's right to play; children's right to protection from the use of harmful drugs; children's right to protection from all forms of sexual exploitation and abuse

- **Safety of children on roads and around mine sites:** Close to one large-scale mine site, the old road used by the community had been closed down and school children therefore had to use a new (dirt) road with a lot of traffic from the quarrying site to the processing factory. Villagers expressed concern about the safety of their children because of this heavy traffic, with rocks potentially falling from trucks and the exposure to a lot of dust. While one company was found to have a regular time for the blasting and to announce it with a megaphone, at other sites blasting hours were unknown to villagers and the township administrator. It was also reported that children play in and around mine sites, including in deep pits that fill up with water during the rainy season, leading to dangerous situations.
- **Accidents in and near mine sites:** Several accidents involving children near mine sites were reported during the field research. At one site, a 13-year old boy employed to bring lunchboxes to mine workers died as a result of rocks falling on him while he was walking on a road close to a limestone mountain. Several drowning accidents were also reported. At one site for instance, it was reported that a child drowned while swimming in the ponds created by topsoil removal. Several accidents related to children or young people searching for gold in abandoned pits in subsistence mining areas were also reported. For example, at one site a 17-year old boy was disabled due to a landslide while panning at a former subsistence mine site. Due to lack of information regarding the ownership of the site, nobody could be held responsible and medical costs to treat the boy were not compensated. At another site, a 12-year old boy died in his home near to a tin and tungsten mine site, when the tailings dam collapsed.
- **Noise and air pollution:** At one site near a processing plant, schoolchildren reported that even though they were getting used to the noise and smell, it interfered with their schooling. In one gold mining area, four villages reported that smells from the mine site kept children awake at night.
- **Adverse health impacts from mining:** It was reported that a number of children in villages close to one mine site suffered from tuberculosis-like symptoms and acute respiratory distress syndrome (ARDS). While villagers and doctors could not verify what the cause of these diseases is, villagers suspected that there may be a link between the illnesses and the mining activities. At subsistence mine sites, young children bought and used mercury for panning activities (see further, Part 5.4: Labour). In some panning areas mercury and other chemicals were used and disposed of near to the creek, the main water source for the village that is also used for bathing, swimming and catching fish for consumption. Additionally, children lived, played and bathed close to areas where mercury and other chemicals were used for panning. Food was also prepared close by. Children at a small-scale gold mine site were engaged in various activities causing adverse health impacts, including carrying residue of cyanide without the use of protective equipment and often going barefoot, unaware of the harmful impacts of

cyanide. In another mining area women would bring their small children of two or three years old to mine site. Parents mentioned that they were not aware of the potential (long-term) health impacts of the use of mercury and other chemicals on children.

- **In-migration and safety concerns:** Communities in a number of mining areas expressed safety concerns and reported increases in crime and theft due to in-migration of mineworkers from other parts of Myanmar. At one site, for example, youth attending tuition classes in the evening mentioned they felt unsafe and parents had to accompany their children. In a tin mining area, a girl was reportedly raped by a migrant worker. While no other specific incidents were shared, it was mentioned that this was not an isolated case and parents expressed concerns about their children going to school on their own.
- **Increased drug use among youth:** In several subsistence gold mining areas, drug use (ya-ba and heroin) was reportedly widespread. It was observed that children of parents who use drugs left school at the age of 12-14 years to work on mine sites. Local community members interviewed were concerned about children starting to use drugs at an early age. During the season that mine were closed, children reportedly resorted to drugs because they had no other activities to keep themselves occupied.

Access to education

Human Rights Implicated: Right to non-discrimination; children's right to education

- **Impacts of in-migration:** Community members, including villagers and a school master, mentioned that the influx of Burmese speaking migrant workers and their children near a cement plant in an ethnic area has impacted the education of local ethnic school children. Local children encountered language challenges in school because classes were taught in Burmese language, which is the native language of migrant children but not of the local children who had therefore dropped out of school.
- **Landlessness:** The confiscation of farmers' land for gold mining has led to farmers becoming casual labourers (see further, Part 5.3: Land). Interviews with farmers, village leaders and migrant workers demonstrated that children have had to drop out of school after primary school to work in and around the mine sites, for example as panners. In one mining village, only around 10% of the children went further than primary education.
- **Access to schools:** While in some cases large-scale mining companies, as well as informal mine owners, had contributed to building schools and/or accommodation for teachers, some negative effects were reported. In one area, education of children was not prioritised by parents as they predicted that mining would be the only opportunity for their children and thus concluded that the children did not need to go to high school. In another instance, after a landslide near a tin mine site, four schools had to be closed as they were declared hazardous zones and as a result children had to travel further to attend other schools. The nearest high school was too far away and therefore children as young as 10 years old did not attend school and instead joined their parents on the mine site, for example by helping them to carry tin.

Human Rights Implicated: Right to non-discrimination; children's right to leisure, play and culture; children's right to freedom from child labour

- **Child labour in formal mining:** Child labour was not widespread at large-scale mine sites, but some cases were reported. The field research found that in spite of rules and regulations being in place prohibiting children under the age of 18 years from working, some children were employed in a cement factory. A number of workers mentioned that they had lied about their age to obtain employment at the factory and started working at the age of 14-15 years. Even though the mining companies the field team spoke with said that they did not employ children below the age of 18 and checked identity cards of all new employees, children with an average age of 13, but as young as 10-11 years old, if physically strong enough, were found to work at small-scale gold mine sites, especially during the summer when schools were closed. In one tin mining area, community members reported that although before 2014, there were several cases of children aged 13-16 working for a tin mining company, since the increased monitoring of labour laws and inspections, children had been dismissed. At one site, children would not be allowed in the tunnels but would be occupied with planting or watering trees, carrying residue of cyanide to a waste place without any protective equipment or supporting the CSR projects of the company, such as building a school or other projects. The children reported that if they were found to be playing instead of working they would be warned by the general manager.
- **Child labour in subsistence mining areas:** The field research found that migrant children as young as six or seven years old worked in subsistence gold mining areas as panners. Some children worked from 5 or 6am until 5pm. Others attended school during the day and worked a few hours in the evening, earning MMK 700-1500 per day. The money earned with panning paid for their school fees. When working as independent panners on a mine owner's site, children had to pay MMK 5000 per day to the owner to obtain the right to pan. Children were also found to be involved in quarrying, collecting hard rocks and pounding and mixing of limestone and soil. Girls earned MMK 3500-4000 per day and boys MMK 4000-5000 per day, the reasoning being that boys performed heavier duties than girls. In another region, pit owners would not allow children younger than 16 years to work on the mine site as they were not considered strong enough to perform the work. However, children of 16-18 years of age would be engaged in mining activities, including hazardous activities such as high-pressure hosing for hydraulic mining and the use of dynamite to blast hard rock. In another area, young workers under the age of 18 were involved in washing ore and cleaning and pounding rocks. However, they were not involved in underground mining activities.

C. International Standards, Guidance & Initiatives

Box 22: International Standards, Guidance & Initiatives on Women and Mining

International Standards:

- [ICMM Sustainable Development Framework](#)
- [IFC Performance Standards and Guidance Notes](#)
- ILO Conventions:
 - [C111 Discrimination \(Employment and Occupation\) Convention, 1958](#)
 - [C100 Equal Remuneration Convention, 1951](#)
 - [C156 Workers with Family Responsibility Convention, 1981](#)
 - [C183 Maternity Protection Convention, 2000](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#), in particular [UN Convention on the Elimination of all Forms of Discrimination against Women \(CEDAW\), 1979](#)

Guidance and Initiatives:

- CSR, [Mining and Local-Level Development: Examining the Gender Dimensions of Agreement Making and Benefit Sharing](#)
- IFC, [Good Practice Note: Non-Discrimination and Equal Opportunity](#)
- IFC, [Women in Mining: A Guide to Integrating Women Into the Workforce](#)
- Oxfam Australia, [Tunnel Vision-Women, Mining and Communities](#)
- Oxfam Australia, [Women, Communities and Mining: The Gender Impacts of Mining and the Role of Gender Impact Assessment](#)
- Rio Tinto, [Why Gender Matters](#)
- UNIFEM and United Nations Global Compact, [Women's Empowerment Principles](#)
- [UN Women](#) focus on promoting leadership and political participation of women, economic empowerment, and ending violence against women.
- World Bank, [Gender Dimensions of Artisanal and Small-scale Mining: A Rapid Assessment Toolkit](#)
- World Bank, [Gender Dimensions of the Extractive Industries](#)
- World Bank, [Women and Artisanal and Small-scale Mining](#)

Box 23: International Standards, Guidance & Initiatives on Children's Rights and Mining

International Standards:

- [IFC Performance Standards and Guidance Notes](#)
- ILO Conventions:
 - [C182 Worst Forms of Child Labour Convention, 1999](#)
 - [C138 Minimum Age for Admission to Employment and Work Convention, 1973](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#), in particular [UN Convention on the Rights of the Child, 1989](#)
- [UN Committee on the Rights of the Child, General Comment No.16 on State Obligations regarding the impacts of the business sector on children's rights, 2013.](#)

Guidance and Initiatives:

- UNICEF, [Children's Rights and the Mining Sector project and pilot study report](#)
- UNICEF, UN Global Compact & Save the Children, [Children's Rights and Business Principles](#)
- UNICEF & Save the Children, [Children's Rights in Policies and Codes of Conduct](#)
- UNICEF & DIHR, [Children's Rights in Impact Assessment](#)
- UNICEF, [Children's Rights in Sustainability Reporting](#)
- UNICEF, [Engaging Stakeholders on Children's Rights](#)
- UNICEF, DIHR and ICAR, [Children's Rights in National Action Plans on Business and Human Rights](#)
- Save the Children, [Children as Stakeholders: The Business Benefits of Investing in Children](#)

Cumulative & Project-Level Impacts

Conflict and Security



Part 5.6

Conflict and Security

In this section:

- A. National Context
 - Ethnic armed conflict
 - The Nationwide Ceasefire Agreement (NCA)
 - EAO governance of mining activities
 - Conflict minerals
 - Legal framework relevant to illegal mining, trespassing and peaceful protests
- B. Field Assessment Findings
 - Company-community conflict and influence of armed groups
 - Community insecurity near mine sites
 - Conflict between formal mining operations and informal subsistence miners
 - Illicit payments and trading flows
 - Security forces
- C. Relevant International Standards, Guidance & Initiatives

A. National Context

A significant part of Myanmar's mineral wealth, and of its natural resources generally, is located in the borderlands, where ethnic conflict has been frequent. If such resources are not governed effectively, natural resource wealth may exacerbate conflict and undermine sustainable development.

Insecurity surrounds individual mine sites and the mining sector as a whole in Myanmar. This takes the form of armed conflict between ethnic groups and State security forces in mineral-rich border areas; and the governance (and intimidation) of civilian populations by armed groups, including the management of large, informal mining areas. In central areas of the country, with the progressive opening of Myanmar's political and economic system, community protests against impacts of mine sites and ancillary infrastructure, such as power plants fuelling cement factories, have been observed throughout the country. This has included violations such as Myanmar police officers using white phosphorus to quell a peaceful community protest against the Letpadaung mine in Sagaing Region in 2012, and the death of civilian protester Daw Khin Win at the same site in 2014.⁴²⁰

Ethnic armed conflict

Armed conflict between ethnic minority armed opposition groups in the border areas and the central Bamar-dominated Government broke out shortly after independence in 1948.⁴²¹ In its decades-long counter-insurgency campaigns against various ethnic minority armed

⁴²⁰ Amnesty International, [Open for Business](#), 2015

⁴²¹ Simultaneously, armed conflict began between the Government and the Burma Communist Party.

opposition groups, the Myanmar army has committed a wide range of human rights violations and violations of international humanitarian law. As troops entered ethnic minority villages, they used civilians for forced labour (particularly portering), requisitioned food and supplies, killed and tortured civilians, and forcibly displaced them. Armed ethnic minority opposition groups have also committed abuses, although to a lesser degree.⁴²² Ethnic grievances have centered on these abuses, as well as the lack of self-governance and resource sharing with the central Government, discrimination and marginalisation, lack of freedom of religion, and lack of education in ethnic minority languages.

Conflict and isolation has greatly inhibited economic development in already impoverished ethnic border areas. For example, 73% of the population in Chin State lives below the poverty line, 44% in Rakhine State (though the World Bank's reinterpretation of the data suggests a rate of 77.9%) and 33% in Shan State. The national poverty rate is 26% (the World Bank's 2014 reinterpretation of the data recalculated this to 37.5%).⁴²³

The Nationwide Ceasefire Agreement (NCA)

The NCA between the Union Government and eight EAOs was signed in October 2015; ten other groups declined to sign.⁴²⁴ The NCA aimed to consolidate 15 bilateral ceasefires and introduced a political roadmap and set of principles for the subsequent stage of the peace process, 'political dialogue'. It also provided for a mechanism to jointly monitor and address ceasefire violations, which incorporates civilian monitors.⁴²⁵ A key concern and preoccupation of EAOs – including those signatories to the NCA, those who hold bilateral ceasefire agreements but did not sign the NCA, and those still currently fighting government forces – is the need for a fair agreement on how to manage the natural resources held within their territory. The NLD Government has convened two summits under its 21st Century Panglong Initiative in 2016 and 2017 but continued peace talks remain difficult for a variety of reasons.⁴²⁶ However two further groups, the Mon and Lahu, signed the NCA in February 2018, bringing the total number of signatories to 10.⁴²⁷

Article 25(a) of the NCA also recognises for a transitional period, the *de facto* authority of armed groups in their respective – but undefined – areas, including in the areas of social and economic development. Signatories commit to work together to jointly achieve better development outcomes related to civilian health and education, environmental conservation, the preservation of ethnic cultures, and eradicate illicit drug use.

While the NCA does not mention resource sharing or the devolution of resource governance, it states that the Union Government and the individual EAO shall coordinate the implementation of tasks which are specific to the areas of the respective ethnic group in a joint manner. This may be understood as giving the EAOs greater influence over

⁴²² For a full discussion of the human rights situation in the counter-insurgency context, see reports from Amnesty International from 1988 – 2008, Human Rights Watch and the OHCHR [Reports of the Special Rapporteur on the situation of human rights in Myanmar](#)

⁴²³ ADB, [Interim Country Partnership Strategy: Myanmar 2012 – 2014, Poverty Analysis \(Summary\)](#), 2012; Myanmar Times, [Data tweaks change face of poverty](#), 19 May 2014

⁴²⁴ [2015 Nationwide Ceasefire Agreement](#)

⁴²⁵ International Crisis Group, [Myanmar's Peace Process: Getting to a Political Dialogue](#), October 2016, p. 2

⁴²⁶ [Fresh fighting another setback to the peace process](#), VOA 10 January 2018

⁴²⁷ [Analysis: A Win for the Peace Commission as Mon and Lahu groups sign the NCA](#), Irrawaddy, 13 Feb 2018

policies that affect their respective areas of influence, not just the areas that they have military control over. Article 25(b) of the NCA states that where projects may have a major impact on civilians living in ceasefire areas, their planning should be undertaken in consultation with local communities in accordance with the EITI Standard (sic).

EAO governance of mining activities

During the field research, MCRB observed the resource management practices of more than 10 different EAOs as well as the Union national armed forces. The approaches EAOs took to mining governance were mixed, ranging from sophisticated and systematic rules and requirements, to ad hoc approaches. Overall, EAO governance tended to focus more on fiscal arrangements than environmental and social safeguards. However, as illustrated in Box 24, there were some systematic approaches, where EAOs clearly included environmental and social aspects in their natural resources governance practices.

Box 24: Karen National Union (KNU) Mining Licensing Rules and Regulations

The Karen National Union (KNU) has a number of rules and regulations that apply in the KNU-controlled areas⁴²⁸. These include rules applicable to individuals and companies that hold a mine permit granted by the KNU. Points relevant to the management of environmental, social and human rights aspects include:

- Before initiating gold extraction activities, the permit-holder shall report to the relevant township administration office and shall extract the mineral only within the permitted/defined area;
- If other mineral resources or ancient heritage objects are found on the concession, the permit-holder shall inform the KNU Mining Department immediately;
- The permit-holder must submit a report stating the names, ages, NRC numbers and addresses of all workers employed to the KNU township administration office;
- If serious injuries or fatalities occur, the permit-holder shall inform the KNU Mining Department. Compensation must be paid by the permit-holder in accordance with labour compensation rules stipulated by KNU;
- The permit-holder must receive prior approval from the relevant KNU forestry department where any trees are to be cut on forest land;
- Any trees cut from the concession must be purchased at a price set by the KNU forestry department;
- During production, all commitments made to implement the necessary environmental conservation and protection measures, and measures preventing fire and environmental pollution, must be carried out systematically;
- The permit-holder shall pay tax to the KNU township mining committee; and
- In cases of violation of the rules, penalties will be imposed.

Conflict minerals

A 2015 report by the NGO Global Witness estimated that Myanmar's jade industry may have been worth up to USD 31 billion in 2014 alone.⁴²⁹ According to the report, this sum,

⁴²⁸ MCRB Field research 2016

⁴²⁹ Global Witness, [Jade: Myanmar's "Big State Secret"](#), 23 October 2015

equivalent to nearly half the GDP for the whole country, is currently funding conflict groups and actors, particularly in Kachin State, rather than contributing to local and national development.

While research has linked Myanmar's jade trade to conflict and corruption, there is less clarity on the links between other minerals and conflict. Significant amounts of tin are being produced in the autonomous United Wa State Army (UWSA)-controlled enclave in Shan State, although the exact amounts are not known. There are no licences issued by Naypyidaw for the area. The production originating from this area is thought to be transported directly to refineries in China.⁴³⁰

Industrial minerals are generally thought to have a lesser impact on, and weaker link to, conflict situations than conventional 'conflict minerals' such as gold, tin and tungsten. Metals with a higher value-to-weight ratio, such as limestone, are not as easy to exploit and smuggle.⁴³¹ Even so, the use of limestone products (CaO) as part of the cyanidation process for processing gold ore may mean that the exploitation of the mineral is still, ultimately, one part of a revenue stream which contributes to funding armed conflict. The limestone quarrying sector is also growing in certain post-conflict areas, particularly the karst mountains of Karen and Mon States, often with the involvement of companies linked to EAOs.⁴³²

Military-affiliated companies UMEHL and MEC are formally involved in the limestone/cement industry and tin mining, as well as other mining commodities not covered in this SWIA.⁴³³

Legal framework relevant to illegal mining, trespassing and peaceful protests

The 2015 amended Myanmar Mines Law sharpened penalties for subsistence miners found to be operating without a formal mine permit, resulting in longer prison terms and larger fines (see Part 2: Mining in Myanmar). In addition, the Mines Law includes provisions on trespassing onto mine concession land.

Myanmar's criminal defamation laws were also observed to have led to violations of basic rights at more than one site visited. According to the International Commission of Jurists, the prospect of arrests, detentions, criminal trials and prison time related to the fact that defamation is a criminal, not a civil, offence in Myanmar could chill the exercise of free expression of opinion and exchange of information. In addition, the risks of violations are amplified by the fact that the Myanmar judiciary currently struggles to adjudicate such criminal defamation cases with impartiality and competence.⁴³⁴

Section 143 of the Penal Code pertains to unlawful assembly, section 145 to joining or continuing in unlawful assembly, and section 147 to rioting. As such, the Myanmar Penal

⁴³⁰ Irrawaddy, [Production Slowing at Wa Tin Mine](#), 18 October 2016. [Statement of Yunnan Tin Company Limited on Tin from Myanmar](#), 15 December 2016

⁴³¹ United Nations University, [The Inequality-Resource Curse of Conflict](#), April, 2016

⁴³² [Karen villagers pray for mountain's protection](#), Karen News 29 March 2016

⁴³³ Myanmar Times, [Military Makes Telecoms Move](#), 31 July 2013

⁴³⁴ ICJ, [Myanmar: Briefing Paper on Criminal Defamation Laws](#), 26 November 2015, p. 1

Code limits the right to protest. This provision was also previously applied to charge around 70 students for protesting against the operations of the Chinese-owned Wanbao Company at the Letpadaung site.⁴³⁵

B. Field Assessment Findings

Conflict and security related themes from the field research are outlined below.

Company-community conflict and influence of armed groups

Human Rights Implicated: Right to life, liberty and security of person; right to freedom of expression and information; right to freedom of assembly and association

- **Company-community conflict:** At the majority of sites visited, community members reported that there had been no company-community conflict. This was in spite of frequent reports of land seizures and community landlessness related to company operations, environmental damage and low levels of local community employment at mining companies. Company management often maintained good relationships with village leaders and elders, which appeared to contribute to maintaining peaceful relationships with communities at-large. However, at several sites, especially in villages located near large-scale mines, community members reported that they felt village leaders had too close a relationship to company management, sometimes to the point of favouring interests of the company over those of the wider community. Village leaders also often personally benefitted financially from such relationships. Mining companies were found to have aligned themselves with EAOs to gain access to mining land in conflict-affected areas. At one site, villagers reported feeling intimidated by the company due its ties with EAOs. At one large-scale processing site, the company had bought the land on which the factory was built directly from an EAO. Local communities claimed that the land that was confiscated was previously farmland.
- **Control and presence of EAOs and/or the military:** More than half of the sites visited were either entirely or partially controlled by EAOs and/or had substantial military presence in the form of military-affiliated mining companies. This created fear of these entities amongst local community members. It also reinforced a culture of commercial-EAO alliances that made villagers hesitant to voice dissent for fear of reprisal. The field research found that this also created barriers to the effective implementation of grievance mechanisms and community participation and consultation. Several instances were reported of villagers being threatened by members of armed groups. MCRB field research included visits to military-affiliated and operated companies. Near such sites, community members reported being unable to protest against, or otherwise voice dissent with regard to, company operations, due to company ties with the Myanmar army. Such concerns were especially pronounced amongst stakeholders belonging to ethnic minority groups.
- **Mine workers are unable to report concerns or disagreement with their employers:** In areas where Myanmar military troops were stationed or EAOs were active, mine workers reported that they were unable to report concerns or disagreement with their employers as such actors interacted with and protected the interests of

⁴³⁵ RFA, [Myanmar Court Charges Nearly 70 Students Under Penal Law for Letpadan Protest](#)

companies. Company representatives also indicated that they complied with the requests of armed actors out of fear of reprisals.

- **Communities are frightened of military-affiliated companies operating in joint venture partnerships with ME-2:** In one area a gold mining company operating in a joint venture with ME-2 had polluted the community water source. Villagers reported that they preferred moving away from their homes rather than raise a complaint about the pollution, which had led to illness in the community. They said this was due to a fear of ME-2, as the enterprise often recruited security staff from the Myanmar army. Community members were scared of violent reprisals if they voiced grievances. At this specific site, the security staff on-site included five soldiers who, according to community stakeholders, had intimidated local villagers living near the mine and processing sites. At another site, community stakeholders reported not understanding the relationship between operator and regulator ME-2 and the military-affiliated companies with which it operates in mining joint ventures. Small-scale companies operating in this area reported confusion about contractual relations and the split in responsibilities between mining SOEs and military-affiliated companies, pointing to a need for greater transparency as well as a clearer delineation of the responsibilities of the mining SOEs.
- **Community protests against large-scale mining companies centre on grievances over environmental damage:** In Myanmar, protesters have to apply for prior authorisation to hold a lawful public protest. MCRB field research found examples where prior authorisation was given by the township police as well as examples where such authorisation was not granted. In one case, police authorisation was given for a community affected by environmental damage caused by a mining company to organise a protest during which approximately three hundred community members participated. Community members reported that during the protest, company representatives were present and shouted at protest participants and took photos of them, but did not engage with protesters' demands. Demands included the remediation of adverse impacts on community drinking water and demands for the systematic disposal of mine waste. In most cases, community members reported that companies had not responded to the demands made during protests.

Community insecurity near mine sites

Human Rights Implicated: Right to freedom of expression and information; right to freedom of assembly and association; right to freedom from torture, cruel, inhuman and degrading treatment or punishment

- **Drug use leading to increased insecurity of the person – especially pronounced for vulnerable groups – and elevated levels of crime:** MCRB field research included visits to several areas plagued by high levels of drug abuse. In one such location, community members reported having apprehended and 'arrested' at least ten individual drug users over a two-year period. These 'community arrests' of drug users were reportedly carried out because community members had been unable to arrest the drug dealers. Following a community arrest, the apprehended person is handed over to the police. One village indicated that in one year, four residents were arrested, charged and sentenced for drug use, though the exact grounds on which this occurred could not be determined. As numbers of both drug users and dealers increase, community members reported that it was increasingly harder to carry out such community arrests,

especially as the price of drugs such as ya-ba (methamphetamines) and heroin had decreased. In one village tract visited, reportedly 30% of villagers were drug users and community representatives indicated that drug use had begun at the time of mining activity in the area, and increased concurrently. Many villagers were members of a minority ethnic group and the area was reportedly plagued by suicides.

- **Few reports of violent crime linked to company operations or staff:** In many communities which had experienced a large influx of migrant mine workers, there were tensions between locals and migrants, but reportedly this rarely escalated into violence. At such sites, community members reported increased incidents of theft in the area since the arrival of migrant workers. At a few sites, increased incomes related to mine labour had reportedly led to increased levels of discretionary spending, the opening of karaoke bars and more drinking of alcohol and drug consumption. In one location near a large-scale mine site, women reported feeling less safe due to the influx of male migrant workers and the recent assault of a local woman. This led the women to travel in groups to fetch water and firewood.

Conflict between formal mining operations and informal subsistence miners

Human Rights Implicated: Right to freedom of expression and information; right to freedom of assembly and association; right to freedom from torture, cruel, inhuman and degrading treatment or punishment

- **Theft of mineral concentrate creates security risks for mine staff, children and subsistence miners:** In Myanmar, tin is processed more effectively during the rainy season when water supplies do not limit companies' ability to concentrate the ore. MCRB field research indicated that the large stockpiles which had been accumulated in the lead-up to this time led to increased rates of theft of tin concentrate near some large-scale mine sites. The operations manager of one tin mining company reported to have requested additional help from the township police department during the rainy season for this reason. Children aged 13-14 were found to have trespassed onto mine sites of large-scale mines to steal tin concentrate. At one mine, the ME-2 production monitor stationed at the mine requested the mine company security staff to not report underage trespassers to the police, due to their young age. This company instead instituted a policy whereby children had to sign a note admitting to having trespassed and attempted theft and promising not to do so again in the future. If the same children were to attempt to trespass onto the site again, however, a police report would be made. One subsistence tin miner who had been allowed to mine on the main company site in a subcontracting agreement with the company was arrested after being found to operate outside of the agreed-upon area, thereby having trespassed. The miner reported having been subject to threats and intimidation by police while being held in custody at the district court. According to the subsistence miner, the mining company was exerting pressure on the district judge to increase her sentence and to force the miner to reveal the names of other subsistence miners operating illegally on the company concession area. MCRB research found several accounts of the apprehension and arrest of children at gold mine sites. At one mine, two boys aged 13-14 trespassed onto the mine concession to sort through mine waste still containing recoverable gold. The children were apprehended by mine security staff, which according to community interviews were recruited from 'local gangsters'. The boys were brought to the police station where

they were arrested. They were subsequently charged with theft and sentenced to one year and six months in prison, respectively. According to community members, the boys were serving their prison sentences at a regular facility housing adult prisoners, rather than a juvenile detention centre.

- **Raids on subsistence miners:** In areas with many informal subsistence miners, the township GAD was found to work in collaboration with other government agencies, including the police and ME-2, to conduct raids on subsistence miners. Stakeholders, including ME-2 staff working in a regional office, indicated that such raids were only effective at apprehending the most vulnerable groups of subsistence miners as larger-scale operators working informally were never found on the site at the time of the raid. Stakeholders attributed this to more powerful miners having been tipped off in advance by the authorities. Tools would be confiscated from poor subsistence miners and excavators might be confiscated from small-scale informal operations, but according to stakeholder interviews, machinery belonging to miners with state/region and/or Union-level connection would not be confiscated, and no fines imposed. By contrast, mines inspections, as opposed to raids on informal mines, are carried out only at mines holding permits. This is because the inspector, employed with DoM, will choose sites for inspection from a list of mines holding permits. According to industry stakeholder interviews, conducting inspections at permitted mines often entails Department staff knowingly travelling past several mines identified as not holding mine permits. The management at one large-scale site visited reported that the ME-2 mines production monitor receives a monthly bribe. In one township visited by MCRB field researchers there were several hundred informal miners but only three policemen. Field research findings indicated that a similar ratio can be found in many townships where informal mining is widespread. This illustrates the significant challenges related to the enforcement of permitting regulations, even in areas without EAO involvement in the informal mining sector.

Illicit payments and trading flows

Human Rights Implicated: Right to property; right to life, liberty and security of person

- **Insecurity of tenure and lack of access to public services is particularly prevalent in conflict-affected or post-conflict areas:** Some MCRB field research was carried out in villages in areas affected by ethnic armed conflict, where the inability of central government agencies to access locations controlled by EAOs had resulted in these villages not being 'gazetted' by the Ministry of Home Affairs, even following ceasefire agreements between armed groups and the Union Government. The lack of official gazetting led to such villages not receiving the same public services as other communities, since government agencies usually only provide services to gazetted villages. Lack of access to healthcare and primary education were cited as key concerns by community members. In two such villages, both subsistence mining communities, villagers had funded and organised schooling themselves as no access to public education was provided.
- **Unofficial taxes levied on subsistence and small-scale mine operations in at least three regions:** In these areas, there were no violent confrontations between the armed groups, miners and community members. In some areas, unofficial payments were standardised and informal taxes were paid according to the size of the operation, the

profits or production generated and the use of excavators and other machinery. In one of these states, miners were taxed on their mining activity and villagers were also asked to pay taxes on their homes and for owning a car or motorbike. In several areas, EAOs reportedly charged miners in a haphazard way, with fees and payment structures varying from year to year.

- **EAO management of mining activities in their area:** The field research found that in some areas EAOs took a systematic approach to managing mining activities (Box 24), whereas in other areas this did not appear to be the case. In one subsistence mining area controlled by an EAO, villagers had recommended to the EAO that they should establish an environmental management wing of the organisation. The villagers' logic was that if the EAO were to impose taxes on miners in the area, some of this income should be redirected to address some of the adverse impacts of the mining activities. In this area, government agencies were not able to inspect mines or environmental conditions due to EAO control. In another state, it was found that the local EAO awarded its own mine permits and calculated a mine tax based on the size of the permitted plot. There appeared to be no systematic management or assessment prior to granting such a permit and if a group of informal miners was already mining a plot, the EAO might grant them a retroactive permit for the area and subsequently tax their activity.
- **In areas outside government control, adverse impacts of mining, including environmental damage, occur undetected:** Where EAOs were active and exercising *de facto* control, Myanmar police reported being unable to enforce any Union-level regulation of the mining industry. Mining generates an important revenue stream for EAOs and this contributes to corruption of public officials. The functioning of border checkpoints was similarly undermined by corruption, with state authorities receiving illicit payments and EAOs exerting control over commodity flows through these points.

Security forces

Human Rights Implicated: Right to freedom from arbitrary arrest; right to freedom from torture, cruel, inhuman and degrading treatment or punishment; right to just and favourable conditions of work

- **Arbitrary arrests and detention:** According to interviews conducted by MCRB, violations by security forces occurring in the context of mining operations included cases of arbitrary arrests and detention, including the incarceration of children with adults and irregular trial proceedings. At the judicial level, security officers enforced Myanmar laws which limit the right to public protest. This affected communities impacted by environmental damage, and loss of land and livelihoods. There were also cases of criminal defamation levied against community members who wrote about mining-induced environmental damage, and many accounts of threats to community members challenging land seizures by companies.
- **Some companies rely on public security forces - the Myanmar military and/or police – to provide security for their operations:** Security staff at company operations frequently included retired and active military personnel, police officers, and members of EAOs. Public security provision was observed both in and outside of ethnic regions and areas, and such security staff were not always provided in response to the presence of EAOs. One company employed someone who had previously worked in security investigations for the military. Employing members of public security forces in

a private function while they are still publicly employed may jeopardise their impartiality and contribute to corruption risks. Where the security function at a company was organised via a subcontractor, the subcontracting party was always the Myanmar military, police or an EAO. Although they exist in Myanmar, no private security providers were encountered at any of the sites visited.

- **Limited planning and professionalisation of the security function in companies:** At the majority of sites visited, security staff were recruited from local communities. At nearly all sites, security staff were not given training and no site had a security management plan in place. There were accounts of security staff being drunk during working hours. As a professional group, labour conditions, rights, benefits and protections of security staff were found to be especially precarious at nearly all sites. No female security staff were encountered at any site.

C. Relevant International Standards, Guidance & Initiatives

Box 25: International Standards, Guidance & Initiatives on Security and Conflict in the Context of Mining

International Standards:

- [ICMM Sustainable Development Framework](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 1 - Assessment and Management of Environmental and Social Risks and Impacts](#)
 - [PS 4 - Community Health, Safety and Security](#)
- [International Code of Conduct for Private Security Service Providers](#)
- [The Voluntary Principles on Security and Human Rights](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)
- [World Gold Council Conflict-Free Gold Standard](#)

Guidance:

- Communities and Small-Scale Mining, World Bank, CommDev (2009), [Mining Together: Large-Scale Mining meets Artisanal Mining \(Guide for Action\)](#)
- IHRB, [From Red to Green Flags: The Corporate Responsibility to Respect Human Rights in High-Risk Countries.](#)
- International Alert, [Conflict-Sensitive Business Practice: Guidance for Extractive Industries.](#)
- OECD, [Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.](#)
- OECD, [Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones.](#)
- ICMM, ICRC, IFC and IPIECA, [The Voluntary Principles on Security and Human Rights Implementation Guidance Tools.](#)
- UN Global Compact, [Business for Peace.](#)
- UN Global Compact, [Guidance on Responsible Business in Conflict-Affected and High-Risk Areas: A Resource for Companies and Investors.](#)

- UNDP, [Women and Natural Resources](#)
- World Vision Canada, [Preventing Conflict in Exploration: A Toolkit for Explorers and Developers](#).
- Geneva Center for Democratic Control of Armed Forces and the International Committee of the Red Cross, Addressing.
- IFC Good Practice Handbook (2017): [Use of Security Forces: Assessing and Managing Risks and Impacts](#), Guidance for the Private Sector in Emerging Markets

Initiatives:

- European Union, [Crowd Management Training of Myanmar Police Force programme](#). This is a programme aimed at improving the human rights performance of the Myanmar Police Force and initiate the development of a police service that both respects and protects democratic rights of citizens.
- ICMM, [Research on Company-Community Conflict](#). ICMM undertook research which focused on reported incidents of company-community conflict between 2002-2013 in order to gain more knowledge of trends related to conflict between companies and communities.
- ICMM Seminar, [The Challenges of Security Provision and Respecting Human Rights when Mining in Conflict or High Risk Countries](#). This is an audio seminar available online.
- UN Global Compact, [Responsible Business Advancing Peace: Examples from Companies, Investors and Global Compact Local Networks](#). This document presents case study examples of how companies, investors and Global Compact Local Networks have used the 'Guidance on Responsible Business in Conflict-Affected and High-Risk Areas'.
- Geneva Center for Democratic Control of Armed Forces and the International Committee of the Red Cross, [Knowledge Hub](#). A free-access website collecting guidance documents and practical tools in support to implementation of good practices on security and human rights challenges.

Cumulative & Project-Level Impacts

Environment and Ecosystem Services



Part 5.7

Environment and Ecosystem Services

In this section:

- A. National Context
 - Legal and policy framework
- B. Field Assessment Findings
 - Environmental Management Plans
 - Air pollution
 - Water and waste management
 - Land degradation
 - Noise and vibration
 - Degradation and depletion of forest resources
 - Site rehabilitation and mine closure
- C. Relevant International Standards, Guidance & Initiatives

A. National Context

At the national level, important environmental challenges include air pollution, water stress and contamination, land degradation, waste management and the depletion and degradation of forest resources. These mirror the mining-related environmental and ecosystem challenges evidenced by MCRB's field research on and nearby mine sites throughout the country.

Legal and policy framework

See Chapter 3 for a detailed explanation of the existing framework for environmental protection. For mining, this is complex, overlapping and also has gaps. The framework derives from Art7 of the 2012 Environmental Conservation Law (ECL) which introduces the requirement for EIA and Environmental Management Plans (EMPs), other laws and directives adopted under the ECL such as the National Quality (Emissions) Standards, cross cutting laws, and sectoral laws relating to Mining. Details of additional laws not covered in Chapter 3 are provided below. A separate online Appendix contains a full list of relevant laws. MCRB will also publish a SWIA supplement on mining and biodiversity in 2018.

Waste management

The 2012 Environmental Conservation Law (Art13c) tasks MoNREC, guided by the National Environmental Conservation Committee, to maintain a comprehensive monitoring system of the disposal of waste generated by mineral exploration, production and treatment. According to the Law, companies are required to install or use on-site equipment in order to monitor, control, manage, reduce or eliminate environmental pollution, and are expected

to discharge polluting substances in accordance with the 2015 Environmental Quality Guidelines (Art14 & 15.). Waste management treatments and precautions may include: infrastructure to collect waste; rendering the operation of other equipment more effective; indicating and recording pollution levels; issuing warnings when levels become excessive; and others. However, the Law also notes that if these solutions are impracticable, it may be arranged to dispose of the waste causing a point source of pollution in accordance with environmentally sound methods, which are not specifically defined but may be understood to be less stringent than the Environmental Quality Guidelines.

Chemicals, including Mercury and Cyanide

The 1919 Myanmar Poisons Act grants the President of the Union the authority to regulate the terms of possession and sale of any specified poison.⁴³⁶ According to the 2012 Environmental Conservation Law (Art30), permission from the Ministry is required in order to import, export, produce, store, carry or trade any material which causes an adverse impact on the environment prohibited by the Ministry. Myanmar has not signed the Minamata Convention on Mercury. Currently none of the companies in Myanmar are a part of the International Cyanide Management Code (Box 26).

Box 26: International Frameworks on Mercury and Cyanide

Minamata Convention

In 2013, the [Minamata Convention on Mercury](#) was adopted under the auspices of the United Nations Environment Programme (UNEP) and entered into force on 16 August 2017. This legally binding instrument is aimed at preventing global environmental pollution and health hazards due to anthropogenic emissions and release of mercury. By becoming members, governments agree to draw up strategies to reduce the amount of mercury used by artisanal and small-scale miners and to facilitate research and monitoring of activities relating to mercury use. Currently, the document has 128 signatures and 74 ratifications. Myanmar has not yet signed the Convention.

International Cyanide Management Code

The [International Cyanide Management Code](#) deals specifically with the use of cyanide in the mining industry. The Code was developed by a multi-stakeholder steering committee under the auspices of UNEP and the former Council on Metals and the Environment. It is a voluntary initiative for the gold mining industry and is intended to complement existing regulatory requirements. Companies that adopt the Code commit to follow its principles and standards in the use of cyanide and those operations that meet the requirements are certified and authorised to use its trademark symbol. None of the mining companies operating in Myanmar are currently part of the initiative.

Dynamite and blasting regulation

Use of explosives and blasting is regulated by the 1908 Explosive Substances Act, part of the India Act, and amended by a set of 2001 amendments, as well as Rule 181 of the Mines Rules (previously Rule 105 of the almost identical 1996 Rules). The Ministry of Defence

⁴³⁶ [1919 Poisons Act](#), Article 2

(MoD) regulates the storage and use of gun powder on mine sites. Dynamite is not allowed in mine or quarry operations without written permission from DoM or one of the SOEs. ME-2 reports permissions granted to MoD. If the request is approved, ME-2 will issue an approval letter authorising the company to procure explosives from a military storage facility in a nearby township. Army personnel and vehicles will provide security for the company during transportation of explosives from the military to the company storage unit located on the mine site.

According to Mines Rule 181a, explosives may only be stored in accordance with the recommendations of the Magazine Location Selection Committee of the MoD. Companies have to submit monthly records of their use of explosives to ME-2 or other relevant authority or SOE. Mines Rule 181 require a mine permit-holder to ensure that anyone in the vicinity is given due warning prior to any blasting being carried out underground. This also includes a requirement to guard the entries to sites at which blasting is being undertaken.

Regulation of water use by mining

Rapid growth in demand for water due to population growth, urbanisation and industry use pose serious challenges to water security in Myanmar.⁴³⁷ The Myanmar National Water Resources Committee was established in 2013 to ensure a coordinated national approach to water resource issues.⁴³⁸ In 2014, the Committee adopted a policy framework entitled, the National Water Framework Directive, modelled on the EU Water Framework Directive. The Myanmar National Water Framework Directive includes issues such as sustainable river-basin management, the ecological status of water bodies, and principles for stakeholder inclusion.⁴³⁹ It also sets a target for Myanmar to become a water efficient nation based on the International Water Resources Management principles by 2020.⁴⁴⁰

Rule 153 of the 2018 Myanmar Mines Rules imposes an obligation for mining permit-holders to take precautions not to deprive “*any other person of the water [to which] he is accustomed.*”⁴⁴¹ Permit-holders need to obtain permission to use a public water source from the DoM Regional or State Plot Scrutiny and Issuing Team. They must not alter any water course without obtaining prior permission from the relevant government department or agency (see below). Where a permit-holder needs to use public water for mineral production, DoM needs to approve this through a separate application process and the applicant must indicate daily and yearly volumes of public water needed.⁴⁴² A definition of ‘public water’ was not included in the 1996 Mines Rules or the 2018 update, and no definitions contained in other laws are referenced.

Rule 154a (unchanged from 1996 Rule 73a) allows mining licence-holders to take and use water that is not ‘public water’ within the Permit area without charge. It requires them not to pollute the environment (Rule 154b) and to maintain water quality above and below ground (Rule 154c).

⁴³⁷ FAO, [Assessment of the National Water Policy of Myanmar](#)

⁴³⁸ Water Solutions, [Myanmar: Pilot introducing the National Water Framework Directive](#), 2016

⁴³⁹ Ibid, p. 1

⁴⁴⁰ Ibid, p. 22

⁴⁴¹ Rule 72 of the 1996 Rules

⁴⁴² 1996 Mining Rule 71(a) and (b)

It was not clear from MCRB field research and desk review of law and policy that the Department requires and reviews any hydrological study prior to approving requests to use 'public water' from mining companies. Without such studies, it is not clear on which basis permits are granted. The extent to which the water extraction of projects may affect communities' access to water, or the consequences of water usage for downstream users, also appear not be thoroughly evaluated by the relevant authorities. These impacts should be evaluated under an effective IEE/EIA process.

Mining near and in waterways and rivers

The 2006 Conservation of Water Resources and Rivers Law⁴⁴³ grants the Directorate of Water Resources and Improvement of River Systems of the Ministry of Transport the authority to review whether rivers or creeks could be adversely affected by mineral extraction and issue recommendations to the relevant government department (Art 5g). Sand suction, sand dredging, sand excavating, river shingle suction, panning for gold, gold mineral dredging or resource production are prohibited from sandbanks or channels which are used for controlling river flow, or at other prohibited places in a river, creek or the watercourse (Article 14). Anyone wanting to do those activities for commercial purposes near watercourses must seek permission from the Directorate (Article 13). Breaches of Article 13 and 14 may be penalised with a fine of between 300,000 and 700,000 kyats as well as up to two years imprisonment (Art 26, as amended in 2017).

The 2018 Mines Rules also contain provisions regarding use of land for mineral production at the site of, or within 200 metres of, any irrigation canals, ponds, dams or other land for storage of water. According to Rule 151(b) (3), the mining permit-holder must secure permission from the relevant public authority if this is public land, or the landowner if privately owned.⁴⁴⁴ However there appears to be no prohibition per se in Union Law.

For forest land and land on which there are freshwater fisheries or which is otherwise designated under the law, approval is required from the Ministry of Forestry.

Disaster preparedness

In case of an environmental emergency, a natural or man-made disaster, the 2012 Environmental Conservation Law (Art 37) stipulates that individuals or organisations who incur expenses due to the declaration of an environmental emergency are entitled to reclaim these from a national environmental management fund. This Fund has not yet been established. The wording of the law does not make clear whether the right to receive compensation will apply in cases where an environmental disaster occurs but is not formally declared by a government body. Provisions in the 2018 Mines Rules (Rules 176 and 177) also cover disaster prevention.

⁴⁴³ [The Conservation of Water Resources and Rivers Law](#) 8/2006. An Amending Law No 11/2017 was promulgated on 11 July 2017 but it did not change the relevant sections.

⁴⁴⁴ Previously 100 metres in the 1996 Mining Rule 70(b) (4)

B. Field Assessment Findings

Field research showed notable environmental impacts from mining activities in all locations visited. Such impacts often had important consequences for access to ecosystem services and the livelihoods of local communities. An overview of key findings is provided below.

Environmental Management Plans

Human Rights Implicated: Right to participation

MCRB was able to review several EMPs which mining companies shared. These were all produced before the adoption of the EIA Procedure in December 2015. The scope of the EMPs varied widely between mines, even between projects of a similar size and permit producing the same mineral. EMPs numbered between 2 and 80 pages for similar-scale projects led by different operators, and covered a range of environmental, labour and social impacts. It is clear that these plans are not produced according to a standardised template or set of issues across the sector, causing difficulties for review and comparison.

While some EMPs reviewed were found to address the full range of impacts covered by the corresponding EIA, others assumed a much narrower focus, e.g. exclusively detailing the company's strategy to support reforestation of the mine area by planting trees and seedlings. It was not clear – but seems unlikely – that such EMPs had been approved by ECD. None of the projects had been issued with an ECC.

The EMPs which addressed and planned for observed or anticipated impacts flagged by the EIA were found to be of a higher quality than those which were developed for mines which had not yet undertaken an EIA. Even so, an EMP can only be as robust as the EIA process and report which precedes it. Where impacts are not identified they cannot be addressed effectively. EMPs which followed a more thorough EIA were found to offer much more information about company plans, systems implemented to address noise and light pollution, impacts on wildlife and biodiversity, and social and labour issues and impacts during all phases of the mine lifecycle.

Based on the sample of EIAs and EMPs reviewed by MCRB, large mines, unsurprisingly, tended to produce better assessments and plans. However, across the range of reports reviewed, there was significant room for improvement. None of them had been publicly disclosed on company websites, now a legal requirement.

Air pollution

Human Rights Implicated: Right to the highest attainable standard of physical and mental health; right to an adequate standard of living

- **Airborne dust from limestone and gold extraction and processing:** Based on community statements, dust was found to pose an issue especially during exploration blasting, limestone excavation, processing, and transportation by road. Unpaved roads were typically not sealed or watered to reduce dust disturbance as a result of overland traffic and transportation. None of the companies visited had processes in place to

measure or monitor dust levels. One cement factory had installed a dust filtering machine to reduce dust emissions. The machine was reportedly cleaned on a monthly basis, which according to community members released a huge amount of dust, which the company did not take any further steps to dispose of.

- **Dust from limestone quarries and cement factories decreases crop yield and quality:** In communities located near cement factories farmers reported that their fields were covered by dust which had caused the productivity of the paddy to decrease for several consecutive harvests. Due to the lower quality, farmers were receiving a lower price for their crops at market. Based on community measurements and perceptions of crop yield, rice paddy and pumpkin harvests were less bountiful, while eggplant seeds could no longer germinate the following season. At several sites, farmers responded by increasing the use of fertilizer to compensate for lower yields and by using more water to irrigate their fields. Such increased use may also pose an adverse impact on health if crops are not properly washed prior to consumption.
- **Fumes and noxious smells cause concern for communities living near mine sites:** Odourless fumes as well as strong-smelling emissions from cement manufacturing and noxious smells related to blasting in limestone quarries were cited as causing concern or a nuisance to communities living near sites. Residents of several villages near a large-scale gold site reported experiencing bad smells all year around, but particularly on cloudy days. Here, smells from mine emissions were reported to occasionally be so bad that children would be unable to sleep. Residents also told of two cases in 2016 of smoke blowing onto paddy fields, drying out the paddy land and colouring the fields red. Two farmers, who reported that they thought the smoke was toxic, were compensated by the company operating the gold refinery emitting the red smoke and dust.

Water and waste management

Human Rights Implicated: Right to safe drinking water and sanitation; right to an adequate standard of living; right to the highest attainable standard of physical and mental health

- **Chemical waste and industrial effluents contaminate rivers and groundwater:** Gold operations of all scales were found to have contaminated water sources, including groundwater, community wells, rivers, creeks and ponds. Creeks and rivers were found to be polluted by mercury and cyanide from gold operations, as well as untreated acid run-off in tin mining areas, where lead deposits exposed by mining activities were thought to have contaminated community water sources. Both formal as well as informal mining operations were found to be a source of such water pollution. In subsistence mining areas, villagers and/or miners reported that pits were dug reaching the aquifer, allowing ground water to flow into the mine pit. As mercury and sometimes other chemicals are used in the pit and washed out with mine run-off, the tailings were thought to have polluted the groundwater. Cyanide and arsenic was found in several community wells tested by public authorities, in several cases in concentrations vastly exceeding the maximum amounts allowed in the National Environmental Quality (Emissions) Standards.⁴⁴⁵ According to affected communities, none of the mining

⁴⁴⁵ Due to a lack of data, MCRB was not able to independently verify whether high levels of arsenic were a direct result of company activity or partly or entirely caused by high natural concentrations in the area's soil.

companies identified as being responsible for the contamination followed up to remediate the impact within specified timelines. In the case of one company, there was no follow up at all. At one large-scale mine site, cyanide wastewater resulting from processing was running off onto paddy land, causing suspected cyanide poisoning of cattle. The farmers directly impacted by the pollution complained to the company, which threatened to destroy the villages in which they lived. In some cases, where drinking water was found by government authorities to have been contaminated by company operations and contain cyanide or arsenic, alternative water sources were not provided.

- **Mining operations are too close to waterways:** MCRB field research found both permitted and informal mining activities operating in and near waterways, basins and rivers. For example, field research identified extensive river-based mining in some of the subsistence and small-scale gold mining areas. There appears to be no absolute prohibition in either the 1996 or 2018 Mines Rules. However in Sagaing Region, the pre-2016 regional government had stipulated that all mining projects should be carried out at least 1000 feet from river banks and creeks and 800 feet from paddy land⁴⁴⁶. However, MCRB research identified widespread non-compliance with these provisions in three townships. Examples were also observed in some regions where local authorities had issued permits to mine creek areas in contravention of the 1996 Myanmar Mines Rules. In other areas there were examples of regional notifications banning river-based mining. Mining in waterways existed outside the scope of regulation and was seen to lead to unsustainable water-based mining practices. In one example, dredging and the use of mercury and cyanide in two large ponds covering an alluvial gold deposit had led to water pollution and the complete depletion of the ponds' fish stocks. ME-2 representatives reported being powerless to curb gold extraction from ponds because, as opposed to rivers and creeks, there is no regulation against mining from ponds.
- **Sediment discharged from tin mining activities causes siltation of waterways:** According to community testimonies, waterways had narrowed and creeks had been redirected by siltation in several locations. In addition, in several regions with river-based mining of alluvial gold deposits, water blasting was reported to repeatedly stir up sediment from the riverbed, making water inhospitable to aquatic life. Community members remarked that the creeks had become 'dirty'. In several locations, villagers reported previously being able to catch fish in streams but due to mine waste and siltation, fish stocks had been depleted. In one case, this had happened within one year of a large-scale tin mine starting to operate. One community located near a large-scale gold mine also reported that the flow of a creek used for paddy field irrigation, fishing and a source of drinking water for livestock had been redirected due to company operations. While this did not decrease the availability of water in the area, community members found the sudden changes to the natural features in the landscape distressing. The company was subsequently able to redress this issue and remediate the impact to some extent.
- **Inadequate waste management:** In several areas, waste management was found to be an issue. Especially in areas which had experienced a large influx of migrant mine workers, sanitation problems were observed. In local communities surrounding mine sites and in worker accommodation provided by mining companies, many people did not have access to rubbish disposal systems, leading to ineffective waste management.

⁴⁴⁶ MCRB interview with Sagaing government officials, 2016

Some communities reported that they suspected inadequate waste management practices to have contaminated their drinking water, but without testing of water sources they could not be sure whether and to what extent this was true. Some communities turned to bottled water as an alternative to community wells previously used; for less well-off communities this was not an option and people continued to drink water thought to be contaminated. Instances where a build-up of solid wastes led to an obstruction of natural water courses by siltation was observed at many sites. During monsoon season, the narrowing of waterways may increase the risk and severity of flooding.

- **Water stress, particularly pronounced in the dry season, is exacerbated by mining:** Field research indicated that both tin and gold mining companies frequently relied on the same water sources for mineral extraction and processing that communities used for drinking water, sanitation and irrigation. This practice reportedly amplified water-related conflict during the dry season; between companies, communities and subsistence miners. In relation to both gold and tin mining, inadequate water supply was found to be a long-term issue facing communities, sometimes for many years. In one tin mining area, for example, the surrounding communities had previously relied on creek water for irrigation and to rear livestock. However, mining activity in the creek meant that it could no longer be used as a water source and so local farmers instead began to rely on mountain stream water. However, as a larger mining company was also relying on the stream water for its operations, its supply had to be shared and this was one factor contributing to the cumulative impact of water shortages in the dry season. Many companies were found to supply drinking water to communities, which may indicate an awareness of the potential for water scarcity. Where companies supplied drinking water to communities, reports were uniformly that communities still did not have access to enough drinking water and water for sanitation.
- **Non-compliance with regulation to disclose public water use and pay water tax:** Several large-scale operations were found to not disclose their source of water for operations to the local authorities for permissions, presumably to avoid being taxed on their water consumption. This constitutes a breach of the 2015 amended Myanmar Mines Law requirement to inform the relevant public authority of water source and usage, and complicates the ability of government authorities to monitor and govern water usage.

Land degradation

Human Rights Implicated: Right to an adequate standard of living; right to the highest attainable standard of physical and mental health

- **Soil erosion and pollution is widespread causing significant damage to farmland:** At several sites visited there were examples of damage to farmland as a result of mining activities. At one site, a farmer had leased a part of his plantation land to a small informal mining operation and attempted to regrow lemons on the land after the small mine closed. However, he reported that the soil was left eroded and that he was now unable to make anything grow. Cumulative impacts were also observed with communities reporting an exacerbation of landslide risk due to piles of waste rock and soil, as well as many open-cut or shaft mines being clustered close together in subsistence mining areas. Such factors were reportedly exacerbated by heavy rains during the monsoon season as well as the regular occurrence of earthquakes and tremors.

- **Topsoil management:** Impacts to topsoil may include compaction, loss of soil structure, nutrient degradation and soil salinity, all of which will make the soil less fertile. Removal of topsoil was found at several sites to have created soil, crop and land damage as well as ponds where soil was removed and dumped on top of farmland, making it unfit for crop cultivation in the future. Only one of the large-scale gold mining companies was seen by the field research team to be watering and managing topsoil, but the effectiveness of this initiative was unknown. According to the township-level forestry department in one gold mining area, while mining companies should rehabilitate land and replant trees, most companies did not follow instructions.
- **Short length of mining lease leads to unsustainable exploration practices:** In one region, small-scale gold mining permits were found to be issued for 20 acres of land with a one-year validity. Here, permitted small-scale miners reported that this was a larger area than they could effectively exploit within the time of the permit. The short duration of permits and the relatively large plots granted to small-scale companies has, according to such companies, led to exploration on the entire plot causing damage to the soil covering the entire concession. According to small-scale gold mining companies operating in some regions, a lack of exploration data makes it hard for small companies to extract minerals effectively, leading them to adversely impact on larger areas than if they could obtain prior data on the size, shape and location of deposits.

Noise and vibration

Human Rights Implicated: Right to the highest attainable standard of physical and mental health

- **Noise and vibration as a result of blasting and use of machinery:** At nearly all small-scale mine sites visited, MCRB field researchers either witnessed or suspected use of heavy machinery exceeding the legal specifications. In addition to the noise created by digging, blasting and crushing operations, communities cited noise from increased road traffic and the loading and unloading of vehicles as having adverse impacts. At several sites, community members reported that they were either not notified in advance of surface or underground blasting, or that a schedule for blasting had been published by the company but not adhered to. Villagers also reported concerns that their houses might collapse due to mine site blasting.

Degradation and depletion of forest resources

Human Rights Implicated: Right to an adequate standard of living

- **Forest clearance for mining activities contributes to loss of forest cover:** At several sites visited, deforestation was reportedly caused by forest clearing for mine and processing sites, as well as unsustainable and often illegal logging of wood for project use. One mining company estimated that 70% of the forest cover had been lost in the area in which the company operated. In another area, extensive logging to fuel mineral processing operations and related forest degradation was found to have limited community access to traditional medicinal plants. Logging for mine shaft construction was reported by communities to contribute to deforestation in heavily mined areas. In addition, the burning of limestone for gold processing or cement production was found

to consume huge amounts of forest timber, often felled illegally. Charcoal for energy production was frequently purchased by unlicensed sellers and also by large-scale mines found to be operating in accordance with other regulations. Communities expressed concern with logging for fuel and charcoal and noted that forest was being felled at an increased rate. In many of the communities visited by the MCRB field research teams, forest provided ecosystem services and benefits such as fuel for cooking, hunting grounds, medicinal plants and inputs to products consumed and sold, such as cigars. Community members interviewed noted that several types of ecosystem services, including availability and accessibility of fuel sources and medicinal plants, had either decreased or been depleted.

- **Lime powder production for gold processing contributes to deforestation by requiring large amounts of firewood:** In one area, a business supplying lime used for processing by a large-scale gold mine had operated illegally since 1991. Owned and managed by a former MoM employee, the business had been granted permission for integrated limestone quarrying and firewood logging by the district GAD with the permission of the township Forestry Department. Operating five large kilns, the owner was reported to be extracting 200 tonnes of limestone and felling 500 tonnes of wood per year. The business owner said he paid 'permitting costs' to GAD. MCRB was unable to ascertain specific amounts. The owner was reported to have a close relationship with a senior Mining Department official who occasionally reaches out to the owner to see whether he is still operating his project without standard permits and helps him to ensure that the operations can continue. The business owner said finding enough firewood to fuel ovens was increasingly becoming a challenge and within a couple of years, he expected to be unable to continue his business due to deforestation in area.
- **Recent large-scale industrial miners also have a large footprint in terms of forest clearance:** According to interviewees, impacts on forest used to be less pronounced, despite widespread artisanal extraction, with much larger impacts being caused as a result of larger scale operations. Community and civil society groups reported military-affiliated companies as having a worse environmental impact. According to MCRB interviews, these companies only employ retired military personnel who have very limited knowledge of environmental management, exacerbating the adverse environmental impacts of their operations.
- **Forestry Law violations occur unchecked due to lack of oversight by the Forestry Department:** Mine permits were observed to be granted for forest land on which mining is prohibited. One example was an area of dense or old forest, for which tree cover was deliberately reported inaccurately by the Forestry Department to leave the plot off Forestry Department lists for protection. Elsewhere, large trees in a mine site area were damaged by mining operations but the Forestry Department did not fine the permit-holder, reportedly due to corruption. In another region, villagers reported that they bribed township-level Forestry Department officials to be able to continue illegal mining activities. In a tin mining area, the Forestry Department told the MCRB field research team that they did not have any knowledge about the level of deforestation because the land on which mining occurs is under the jurisdiction of the Mines Departments. The effectiveness of Forestry Department efforts to support companies in rehabilitating land is also uncertain. Several companies reported having received free seeds and plants from the township-level Forestry Department near mines to encourage replanting in cleared areas. Some companies reported that they were authorised to fell the trees

planted and use them as a source of wood at their own discretion. In some cases it was indicated that the seeds were provided at no cost to the company as a matter of policy, whereas in others companies reported that they were receiving seeds for free due to having a special relationship with the township-level forestry department.

Site rehabilitation and mine closure

Human Rights Implicated: Right to an adequate standard of living; right to property

- **No site rehabilitation and mine closure plans or practices in place by companies:** None of the mine sites visited had rehabilitation plans in place for mine closure. The field research also did not find any examples of systematic rehabilitation of the land on concessions that was no longer being used for mining activities. This included rehabilitation of areas that had been stripped of topsoil. At one site, extensive land areas had been stripped of topsoil for mining activities. According to the Land Record Department, the area is owned by the company but local people were not aware of this.
- **Unclear plans for reclamation of community land after mining activities:** Field research found no structured planning or practices regarding reclamation of land by communities after mining activities. For example, at one site villagers had been informed by a local politician that if the land that had been granted to the company was not used within the first five years of it being granted then villagers would be entitled to reclaim it. Subsequently, when villagers went onto their old land to cut down some trees they were charged with trespassing.
- **No site rehabilitation in subsistence mining areas:** The absence of site rehabilitation practices in subsistence mining areas presents a particular problem. While post-closure mine site rehabilitation is a legal requirement for companies, in the informal sector there is no such equivalent resulting in loss of soil productivity, biodiversity loss, deforestation, soil erosion, the creation of moonscapes and persistent pollution.

C. International Standards, Guidance & Initiatives

Box 27: International Standards, Guidance & Initiatives on Environment and Ecosystem Services and Mining

International Standards:

- [ICMM Sustainable Development Framework](#)
- IFC Performance Standards and Guidance Notes:
 - [PS 3 – Resource Efficiency and Pollution Prevention](#)
 - [PS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources](#)
- [Minamata Convention on Mercury](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [UN International Bill of Human Rights and Core Human Rights Instruments](#)
- World Bank:
 - [General Environmental, Health and Safety Guidelines](#)
 - [Environmental Health and Safety Guidelines for Mining](#)

Guidance:

- BirdLife/FFI/IUCN/WW, 2014, [Joint Briefing Paper on Extraction and Biodiversity in Limestone Areas](#), Cambridge, UK
- Elaw.org [Mining EIA Review Checklist](#)
- ICMM, [Health and Safety Critical Control Management: Good Practice Guidance and Critical Control Management Implementation Guide](#)
- ICMM, [Health Impact Assessment: Summary of the Good Practice Guidance](#)
- ICMM, [Metals Environment Risk Assessment Guidance \(MERAG\)](#)
- ICMM, [Mining and Protected Areas Position Statement](#)
- ICMM, [Planning for Integrated Mine Closure: Toolkit](#)
- ICMM, [Statement on Climate Change and Principles for Climate Change Policy Design](#)
- ICMM, [Water Stewardship Framework](#)
- Myanmar Centre for Responsible Business [Briefing Paper on Biodiversity, Business and Human Rights in Myanmar](#), 2018 and separate Mining annex
- Mining Association of Canada, [Tailings Management Assessment Protocol](#)
- UNEP and ICME, [International Cyanide Management Code](#)
- UN Global Compact, [CEO Water Mandate](#)
- UNECE, [Safety Guidelines and Good Practices for Tailings Management Facilities](#)
- UNEP, [A Practical Guide: Reducing Mercury Use in Artisanal and Small-scale Gold Mining](#)
- WRI, [Ecosystem Services Review for Impact Assessment](#)

International Initiatives:

- [Alliance for Responsible Mining Certification Process for ASM Practices](#). This initiative seeks to raise the standards of ASM practices by reducing links to conflict, lowering environmental impact, and improving rates of OSH through certification and technical assistance.
- ICMM, IPIECA and Equator Principles, [Cross-Sector Biodiversity Initiative](#). This initiative is aimed at developing and sharing good practices related to biodiversity and ecosystem services in the extractive industries. The initiative supports the broader goals of innovative and transparent application of the mitigation hierarchy in relation to biodiversity and ecosystem services. The programme of work is divided into two main workstreams: tools and guidance; and knowledge sharing.
- UNEP, [Global Mercury Partnership](#). The overall goal of this Partnership is to protect human health and the global environment from the release of mercury and its compounds. The Partnership works closely with stakeholders to assist in the timely ratification and implementation of the Minamata Convention on Mercury.