Sector Wide Impact Assessment of Limestone, Gold and Tin Mining in Myanmar
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All findings and recommendations in this SWIA are the sole responsibility of the partner organisations.
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List of Abbreviations

ADB  Asian Development Bank
ARDS  Acute Respiratory Distress Syndrome
ASEAN  Association of Southeast Asian Nations
ASM  Artisanal and Small-scale Mining
BGR  German Federal Institute for Geosciences and Natural Resources
CCCMC  China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters
CDA  Community Development Agreement
CEDAW  Convention on the Elimination of All Forms of Discrimination Against Women
CPB  Communist Party of Burma
CRC  Convention on the Rights of the Child
CSO  Civil Society Organisation
CSR  Corporate Social Responsibility
DICA  Directorate of Investment and Company Administration
DGSME  Department of Geological Survey and Mineral Exploration
DIHR  Danish Institute for Human Rights
DoM  Department of Mines
EAO  Ethnic Armed Organisation
ECC  Environmental Compliance Certificate
ECD  Environmental Conservation Department
EHS  Environment, Health and Safety
EIA  Environmental Impact Assessment
Note: This SWIA reflects the preference of ECD by using ‘EIA’ to refer to what may elsewhere be referred to as ESIA or ESHIA.
EMP  Environmental Management Plan
ESIA  Environmental and Social Impact Assessment
ESHIA  Environmental, Social and Health Impact Assessment
ESMS  Environmental and Social Management System
EITI  Extractive Industries Transparency Initiative
ESMP  Environmental and Social Management Plan
EU  European Union
FDI  Foreign Direct Investment
FPIC  Free, Prior, and Informed Consent
GAD  General Administration Department
HRIA  Human Rights Impact Assessment
HSE  Health, Safety and Environment
ICJ  International Commission of Jurists
ICMM  International Council on Mining and Metals
IHRB  Institute for Human Rights and Business
IFC  International Finance Corporation
IEE  Initial Environmental Examination
ILO  International Labour Organisation
JV  Joint Venture
KIO  Kachin Independence Organisation
KNSO  Karenni National Solidarity Organisation
KNU  Karen National Union
LGBT  Lesbian, Gay, Bisexual and Trans-gender people
MCRB  Myanmar Centre for Responsible Business
ME-1  Mining Enterprise No.1
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>ME-2</td>
<td>Mining Enterprise No.2</td>
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<tr>
<td>ME-3</td>
<td>Mining Enterprise No.3</td>
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<tr>
<td>MEC</td>
<td>Myanmar Economic Corporation</td>
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<tr>
<td>MEITI</td>
<td>Myanmar Extractives Industries Transparency Initiative</td>
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<td>ME Observers</td>
<td>Mining Enterprise Production Monitors</td>
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<td>MFMA</td>
<td>Myanmar Federation of Mining Associations</td>
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<td>MGE</td>
<td>Myanmar Gems Enterprise</td>
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<tr>
<td>MIC</td>
<td>Myanmar Investment Commission</td>
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<td>MoD</td>
<td>Ministry of Defence</td>
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<td>MoECAF</td>
<td>Ministry of Environmental Conservation and Forestry</td>
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<td>MoLIP</td>
<td>Ministry of Labour, Immigration and Population</td>
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<td>MoM</td>
<td>Ministry of Mines</td>
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<td>MoNREC</td>
<td>Ministry of Natural Resources and Environmental Conservation</td>
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<td>MPE</td>
<td>Myanmar Pearl Enterprise</td>
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<td>NCA</td>
<td>Nationwide Ceasefire Agreement</td>
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<td>NDA-K</td>
<td>New Democratic Army-Kachin</td>
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<td>NGO</td>
<td>Non-government Organisation</td>
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<td>NLD</td>
<td>National League for Democracy</td>
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<td>NLUP</td>
<td>National Land Use Policy</td>
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<td>NRGI</td>
<td>Natural Resources Governance Institute</td>
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<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>OSH</td>
<td>Occupational Safety and Health</td>
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<td>PNO</td>
<td>Pa-O National Organisation</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>PSC</td>
<td>Production Sharing Contract</td>
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<td>RBC</td>
<td>Responsible Business Conduct</td>
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<td>SECP</td>
<td>Stakeholder Engagement and Communications Plan</td>
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<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
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<td>SOE</td>
<td>State-owned Economic Enterprise</td>
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<td>SWIA</td>
<td>Sector Wide Impact Assessment</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>UMEHL</td>
<td>Union of Myanmar Economic Holdings</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
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<td>UNGPs</td>
<td>United Nations Guiding Principles on Business and Human Rights</td>
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<td>UWSP</td>
<td>United Wa State Party</td>
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<td>VFV</td>
<td>Vacant, Fallow and Virgin Lands</td>
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<td>VPSHR</td>
<td>Voluntary Principles on Security and Human Rights</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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<tr>
<td>3Ts</td>
<td>Tin, Tantalum and Tungsten</td>
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Box 1: Terms used in the report

**Formal mining sector**

- **Formal operations:** Mines that have been granted a minerals permit from the central Union Government or its representatives will be referred to as *permitted or licensed operations*. According to the Myanmar Mines Law and Rules, permits can be granted for a range of mining activities, including *large-scale*, *medium-scale* (category introduced in the 2015 Amended Law but not yet defined), *small-scale* or *subsistence* mines.

- **Large-scale mine:** A large-scale mine, permitted according to the Myanmar Mines Law and Rules, is an operation of industrial mineral production with substantial investment, using sophisticated technology and know-how. A *large-scale mine site* connotes the area surrounding a permitted, large-scale industrial mine, including ancillary infrastructure, such as processing facilities or factories, that are on the site. On a large-scale mine site, there might also be several subcontracted, smaller operations. These operations are not licensed for independent mineral production by the central authorities.

- **Small-scale mine:** A small-scale mine, permitted according to the Myanmar Mines Law and Rules, is an operation involving the commercial extraction of minerals, requiring small investments and a comparatively lower possibility of mineral productivity. In practice, some permitted small-scale mines are larger, as sites may consist of several, adjacent small-scale concessions. A ‘small-scale mine site’ may therefore be larger than the size specified by the above regulations. As with large-scale mine sites, there might also be several subcontracted, smaller operations on a small-scale mine site. These are not permitted for mineral production by the central authorities.

**Informal mining sector**

- **Informal operations:** Mines which have been granted permissions by an ethnic armed organisation (EAO), or mining activities that take place on land leased by a company but for which the company does not hold a government-issued minerals production permit, are referred to in the SWIA as *informal operations*.

- **Subsistence mine:** According to the 2015 Amended Myanmar Mines Law, a permitted subsistence operation carries out mineral production by using either hand tools or machinery equipment of limited horse power. However, all subsistence mines encountered during SWIA field research operated without a permit and periodically relied on machinery which exceeded the specification. Therefore, subsistence mines are included in the report as part of the informal mining sector.

- **Artisanal and Small-scale Mining (ASM)** is a term frequently used to refer to mining that relies on simple techniques and physical labour, which is often performed without formal mining permits, has a low productivity, lacks safety measures, health or environmental protections, may be practiced seasonally, and is characterised by economic insecurity.

- **Subcontracted mine operation:** On a licensed large- or small-scale mine site, the operation of an adit (an entrance to an underground mine, which is horizontal or nearly horizontal, for the purpose of entering, draining water and ventilating the mine) or pit may be subcontracted out to individuals or smaller companies, called...
subcontracted mine operators in this report. Such arrangements most frequently function on the basis of production sharing between the permit-holder and the subcontractor. The subcontractor has to respect the rules set by the permit-holder.

Subsistence mining area: Where many very small mines operating at subsistence-level with limited investment are clustered close together geographically, it is referred to in this report as a subsistence mining area. Such areas were frequently found to include informal small-scale and subsistence mines, miners working on waste piles, cooperatives of panners and, in some areas, small-scale mines that had been granted permissions to mine by a local ethnic armed organisation (EAO). An alluvial or hard rock subsistence mine site is usually structured around a ‘pit owner’ who has established control of a small area, often by having raised the capital to invest in machinery.

Workers

Workers: Workers in the formal mining sector include employees who are directly employed by the licensed operator. These workers usually, but not always, have a formal, written employment contract and a fixed monthly wage. Such operations may also employ contract labour, workers contracted by a third-party to work for the main company, as well as daily workers or casual workers who are employed on a day-by-day basis, subject to availability of work. Such workers are paid only for the days they work and the pay may vary according to the type of work carried out on a particular day. Subcontracted mine operations also employ daily workers. Individuals and groups, sometimes family units, may also pay a fee to a permit-holder to pan or sort through mine waste on the permit-holder’s concession and usually have to share their production with the permit-holder. These workers are referred to as subsistence miners.

On subsistence mine sites, usually the pit owner operates the pit helped by workers employed on a daily basis or a production sharing basis. On gold mine sites, there may also be panners. Panners are more often self-employed and many adult gold panners work in groups of three to five, splitting their production evenly.

NB: The definitions and examples given above are based on practices observed during field research carried out by MCRB from December 2015 to May 2016 and as they relate to the production of limestone, gold and tin. It is to be expected that there are several other operational arrangements used in Myanmar’s mining industry, not least in the large informal sector.