

Human Rights Risks in Mining A Baseline Study

Prepared by



Commissioned by











Acknowledgements

The research leading to the present study has been carried out as part of the research project "Human Rights Risks in Mining" by the German Federal Institute for Geosciences and Natural Resources (BGR) and the Max-Planck-Foundation for International Peace and the Rule of Law (MPFPR). This publication was produced on behalf of and financed by the German Federal Ministry for Economic Cooperation and Decvelopment (BMZ).

Author

Dr. Maximilian Spohr, MPFPR

With contributions by

Prof. Dr. Rüdiger Wolfrum of MPFPR and Åsa Borssén, Johannes Danz and Dr. Sven Renner of BGR.

With thanks to

Dr. Michael Priester, Viola Bölscher, Uwe Näher, Ludwig Feldhaus, Dr. Rolf Muff, Dr. Lothar Winkelmann, Dr. Rudolf Mauer, Peter Weis and Anna von Harnier

Photo credits

Title photo: © Mr. Tsvangirayi Mukwazhi

Disclaimer

The views expressed in this publication are the sole responsibility of the author/s and do not necessarily reflect the views of the German Federal Institute for Geosciences and Natural Resources. The cases described solely serve as examples of possible human rights risks in certain scenarios and do not express any final legal opinion.

Geographical Maps. The geographical maps in this publication are for informational purposes only and do not constitute recognition of international boundaries or regions; BGR and MPFPR makes no claims concerning the validity, accuracy or completeness of the maps nor assumes any liability resulting from the use of the information therein.

Manuscript completed in January 2016. This document is available online at: www.bmz.de/rue

© 2016 Bundesanstalt für Geowissenschaften und Rohstoffe

Human Rights Risks in Mining - A Baseline Study

All rights reserved.

For permission to reproduce please contact: RuE@bgr.de





Human Rights Risks in Mining A Baseline Study

Prepared by



Commissioned by



Abbreviations and Acronyms

AMD	Acid Mine Drainage	ICCPR	International Covenant on Civil and Political
ASM	Artisanal and Small-Scale Mining		Rights
	Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punish- ment	ICERD	International Convention on the Elimination of All Forms of Racial Discrimination
		ICESCR	International Covenant on Economic, Social and Cultural Rights
CEACR	Committee of Experts on the Application of Conventions and Recommendations	ICJ	International Court of Justice
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women	ICMW	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
CPED	International Convention for the Protection of All Persons from Enforced Disappearance		
		IIED	International Institute for Environment and
CRC	Convention on the Rights of the Child		Development
CRPD	Convention on the Rights of Persons with Disabilities	ILO	International Labour Organization
		IPEC	International Programme on the Elimination of Child Labour
DRC	Democratic Republic of the Congo		
ECHR	European Convention on Human Rights	LSM	Industrial and Large-Scale Mining
ECPMM	Environmental Code of Practice for Metal Mines	MMSD	Mining, Minerals and Sustainable Develop- ment
EC+UD	European Court for Human Rights	OHCHR	Office of the High Commissioner for Human
			Rights
EMGAC	Exploration and Mining Guide for Aboriginal Communities		United Nations Environmental Programme
HRC	Human Rights Committee	UNIDO	United Nations Industrial Development Organization
HRW	Human Rights Watch	VDLT	Vienna Declaration of the Law of Treaties
IACHR	Inter-American Court of Human Rights	:	

Contents

Chapter 1: Introduction	6
Chapter 2: International Human Rights Law	8
A. Substantive Basis of the Study	9
I. International Human Rights Treaties	
II. International Labor Rights	
III. Rights of Indigenous Peoples	
B. State Obligations under International Human Rights Law	
I. Legal basis of the State Obligations	13
1. Duty to Respect	14
2. Duty to Protect	15
3. Duty to Fulfill	15
II. Territorial Scope of Application	
C. Human Rights Obligations of Business Enterprises and Transnational Corporations	
D. Scope of the Legal Analysis	
I. Interpretation of International Human Rights Norms	
II. Absolute and Limited Human Rights	19
Chapter 3: Human Rights Risk Areas in the Context of Industrial and Large-Scale Mining	21
A. Licensing & Exploration	
I. Description of the Mining Phase	22
II. Risk Areas and Human Rights Analysis	23
1. Indigenous Peoples – Right to Free, Prior and Informed Consent	23
2. Right to Participation and Information	
B. Construction	33
I. Description of Mining Phase	33
II. Risk Areas and Human Rights Analysis	
1. Area Clearing	
2. Area Clearing/Resettlement and Indigenous People	42
C. Operations	
I. Description of Mining Phase	
II. Risk Areas and Human Rights Analysis	
1. Environmental Impact	
2. Fatal Mud- and Landslides / Tailings Dam Failures	
3. Labor-Occupational Health and Safety	
4 Labor Unions / Freedom of Association	
D. Closure & Abandoned Mines	
I. Description of Mining Phase	
II. Risk Areas and Human Rights Analysis	
1. Environmental Destruction and Contamination	
Fatal Mud- and Landslide/Tailings Dam Failures / Subsidence	77
Chapter 4: Human Rights Risk Areas in the Context of Artisanal and Small-Scale Mining	81
A. Description of Artisanal and Small-Scale Mining	82
B. Risk Areas and Human Rights Analysis	85
I. Loss of ASM as a Means of Livelihood	85
II. Environmental Impact	89
III. Occupational Health and Safety	97
IV. Child Labor	
V. Violation of Indigenous Rights	112
Chapter 5: Special Situations	116
A. Special Situations of Conflict, Authoritarian and Weak Governance	
B. Risk Areas and Human Rights Analysis	
I. Situations of Armed Conflict	
II. Violent Conflict, Protest and Clashes	120
III. Forced Evictions	133
IV. Forced Labor	137
V. Corruption	140
Chapter 6: Conclusions	146
Bibliography	1/12
PIVIVEINDING	170



Chapter 1: Introduction

In light of the ongoing debate on human rights in the extractive industries, the present study contributes to the related discussion on human rights in the mining sector. In constituting the results of a project cooperation of the Federal Institute for Geosciences and Natural Resources (BGR) and the Max-Planck-Foundation for International Peace and the Rule of Law (MPFPR), it combines the expertise of the aforementioned organizations in the fields of mining, development cooperation, and human rights law. Through these means, it attempts to close a gap in the related discussion by providing an impartial analysis that adequately considers the technical and legal correlations.

In order to avoid an excessively broad analysis, the present study focuses on the minerals, metals, and coal sector, leaving aside oil and gas, which would require a stand-alone study. The scope of the study must further be limited to the most important general human rights risk areas. The vast field of particularly affected groups, such as women or children, can only be covered with regard to particular aspects, such as child labor, and certainly requires further attention.¹

While analyzing mining in all of its forms, ranging from industrial and large-scale to artisanal and

small-scale, the study aims to identify general areas where the risk of adverse human rights impacts is most significant ("human rights Risk Areas"). Therefore, the "cases" described in each of these risk areas do not contain any statement of facts but are rather to be seen as past and present examples, which suggest the existence of a specific human rights risk area. In three separate chapters (3-5), the study looks at such human rights Risk Areas in Industrial and Large-Scale mining (LSM), Artisanal and Small-Scale Mining (ASM), and other exceptional situations. In each chapter, the respective mining sector is described in detail first, after which the risk areas are outlined and legally analyzed. Where appropriate, the analysis follows the different phases of the mine life cycle to make the paper as instructive as possible to readers with different backgrounds.

The present paper is conceptualized as a desktop study, mainly analyzing the relevant technical and academic literature. It further draws from consultations with BGR, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and MPFPR experts, particularly with BGR project managers in the field (experts working in, inter alia, Mongolia, DRC, Namibia, the Great Lakes and the Andean region).

Women and child-specific aspects are mentioned within the respective 'risk areas'. See generally, in this regard, A. Eftimie (et al.), 'Gender Dimensions of the Extractive Industries: Mining for Equity', Extractive Industries and Development Series #8, World Bank, August 2009; J. Lamber, 'Girls in mining: Research findings from Ghana, Niger, Peru and the United Republic of Tanzania', Bureau for Gender Equality, International Programme on the Elimination of Child Labour, International Labour Organization (ILO) 2007, 1; K. Ayassou Sawadogo (et al.), 'Women's Perspectives on the Impact of Mining on the Right to Food – The Human Right to Adequate Food and Nutrition of Women and Children of Communities Affected by Mining and Displacement in Essakane, Burkina Faso', Food First Information and Action Network (FIAN), March 2015, http://www.fian.org/fileadmin/media/media publications2015/FIAN Essakane 270315 Ansicht.pdf.



Chapter 2: International Human Rights Law

A. Substantive Basis of the Study

As mentioned above, the present study aims at not only identifying the most important human rights Risk Areas related to the mining sector but also at putting them in a more legal context.

I. International Human Rights Treaties

The basis of the legal analysis undertaken in this study utilizes the most important international human rights treaties, also referred to as the "core human rights instruments."2 These human rights instruments comprise the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). These two covenants, together with its Optional Protocols, form part of the so-called "International Bill of Human Rights" and are to be understood as the materialization of one of the core objectives of the United Nations Organization (UN), namely to promote and encourage "respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion" (Art. 1 (3) UN Charter (UNC). At the 1945 San Francisco Conference, held to draft the Charter of the UN, a proposal to embody a "Declaration on the Essential Rights of Man" was put forward but was not examined because it required more detailed consideration than was possible at the time.3 Therefore, a UN Human Rights Commission was established immediately after the conference as envisaged in Art. 68 UNC that was tasked to draft such an "international bill of human rights." 4 As the first part of this international bill of human rights, the commission drafted the Universal Declaration of Human Rights (UDHR), which was subsequently adopted by the UN General Assembly on 10th October 1948.5 Due to a much more controversial political atmosphere, it wasn't until 1966 that the second part to this international bill of human rights was adopted in the form of two covenants. While the General Assembly acknowledged that "the enjoyment of civic and political freedoms and of economic, social and cultural rights are interconnected and interdependent"6, it was eventually decided to draft two covenants: one to contain the civil and political rights and one to contain the economic, social and cultural rights.7

The two covenants contain the most important and comprehensive set of international human rights standards and have been ratified or signed by the vast majority of States. The UDHR, established as a legally non-binding UN resolution, reflects mostly international customary law (ICL). ICL, thereby, can be conceived as custom as evidenced by a general practice accepted as law and is formed by such practice

- See UN Office of the High Commissioner for Human Rights (OHCHR) Fact Sheet No.2 (Rev.1), 'The International Bill of Human Rights', 1.
- See UN-Doc. E/RES/5 (I) of 16 February 1946, para. 2 (a). See further on this, the closing remarks to the San Francisco Conference by US President Harry S. Truman on 26 June 1945, see at http://www.trumanlibrary.org/publicpapers/index.php?pid=73&st=&st1.
- 5 See UN Doc. A/RES/217 (III), adopted on 10 October 1948 by 48 to 0 votes and 8 abstentions.
- 6 UN Doc. A/RES/421 (V), sect. E of 4 December 1952.
- 7 UN Doc. A/RES/543 (VI) of 5 February 1952.
- The ICCPR has currently 168 State parties and 7 Signatories, see at https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=TREATY&mtdsg_no=IV-3&chapter=4&lang=en.aspx.src=IV-3&chapter=4&lang=en.aspx.src=IV-3&chapter=4&lang=en.aspx.src=IV-3&chapter=4&lang=en.aspx.src=IV

See the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) of 21 Dec. 1965; International Covenant on Civil and Political Rights (ICCPR) of 16 Dec. 1966; International Covenant on Economic, Social and Cultural Rights (ICESCR) of 16 Dec. 1966; Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) of 18 Dec. 1979; Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) of 10 Dec. 1984; Convention on the Rights of the Child (CRC) of 20 Nov. 1989; International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (ICMW) of 18 Dec. 1990; International Convention for the Protection of All Persons from Enforced Disappearance (CPED) of 20 Dec. 2006; Convention on the Rights of Persons with Disabilities (CRPD) of 13 Dec. 2006. Furthermore, the Optimal Protocols to these treaties are mentioned as part of the core human rights instruments. See for an overview at http://www.ohchr.org/EN/ ProfessionalInterest/Pages/CoreInstruments.aspx.

of States, which they accept as binding upon them.⁹ Consequently, international customary rules require two elements: First, actions by States must amount to a settled practice; second, there must exist a subjective element, called *opinio iuris*, i.e. a belief that this practice is obligatory.¹⁰

The question to what extent the UDHR constitutes ICL is still subject to scholarly debate, with some calling for a general distinction between UDHR rights that have the status of customary rules (such as the right to freedom from torture) and others that do not (such as the right to property); others have suggested that those norms are better understood as general principles of law rather than as customary international law. Against the backdrop of the potential state obligations evolving from the UDHR, applicable provisions are mentioned in the legal analysis of the risk areas in chapters 3-6 below.

The core international human rights instruments mentioned above are international treaties in the sense of the Vienna Convention on the Law of the Treaties. However, international human rights law is of a sui generis character. Other than international treaties of the traditional type, which are concluded to accomplish the reciprocal exchange of rights for the mutual benefit of concluding States, international human rights treaties' object and purpose

is the protection of the basic rights of individual human beings. ¹⁴ In concluding these human rights treaties, States submit themselves to a legal order within which they, for the common good, assume various obligations, not in relation to other States, but for the general good of all individuals within their jurisdiction. ¹⁵

II. International Labor Rights

Where applicable, international labor law is included in the legal analysis of the Risk Areas in chapters 3-5. Labor rights in the field of mining mainly come into play in the field of forced or compulsory labor, child labor, freedom of association, and with regard to the right to work, particularly concerning safe and healthy working conditions. Furthermore, International Labor Organization (ILO) conventions play an important role in the interpretation of the content of the right to work,16 particularly with regard to the "fundamental ILO conventions." The Committee on Economic, Social and Cultural Rights (see generally: treaty bodies, below [D.][I.]), in this context, seems to consider the key ILO conventions as basic standards defining the obligations of the States under Art. 6 ICESCR (Right to Work).18 Regardless of the fact that, contrary to the rights-based ICESCR, the ILO approach is based on standard setting, is social justice

- C. Treves, 'Customary International Law', in: R. Wolfrum (ed.), MPEPIL, 2006, para. 16; see also Art. 38 (1) (b) of the State of the International Court of Justice. Accordingly, international customary law is recognized as a general source of international law. See generally on this, J. Crawford, 'Brownlie's Principles of Public International Law', 8th ed., 2012, pp. 23 et seq.
- C. Treves, 'Customary International Law', in: R. Wolfrum (ed.), MPEPIL, 2006, para. 17; International Court of Justice (ICJ), North Sea Continental Shelf Cases, ICJ Report 3 (1969), para. 77.
- See H. Charlesworth, 'Universal Declaration of Human Rights', in: R. Wolfrum (ed.), MPEPIL, 2008, para. 16.
- According to Art. 2 (a) of the Convention, "Treaty" means an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation.
- See J. Rahman, 'International Human Rights Law', 2nd Edition, 2003, 14 et seq.

- See 'Effects of Reservation on the Entry into force of the American Convention on Human Rights (Art. 74 and 75)', Inter-American Court of Human Rights Advisory Opinion OC-2/82 of 24 September 1982, Ser. A, No. 2, para. 29.
- 15 Thic
- See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 275 et seq.
- The fundamental conventions comprise the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87); Right to Organise and Collective; Bargaining Convention, 1949 (No. 98); Forced Labour Convention, 1930 (No. 29); Abolition of Forced Labour Convention, 1957 (No. 105); Minimum Age Convention, 1973 (No. 138); Worst Forms of Child Labour Convention, 1999 (No. 182); Equal Remuneration Convention, 1951 (No. 100); and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111).
- B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 277.

focused and policy oriented,¹⁹ the CESCR regularly draws upon the key ILO conventions No 2 on Unemployment, No 29 on Forced or Compulsory Labor, No. 81 on Labor Inspection, No. 87 on Trade Unions, No. 98 on the Right to Organize, No. 105 on Forced Labor, No. 111 on Discrimination (Employment and Occupation), No. 122 on Employment Policy, No. 138 on Minimum Age, No. 158 on Termination of Employment, No. 159 on Disabled Persons, and No. 169 on Indigenous and Tribal Peoples.

The question whether labor rights constitute "human rights" is subject to an ongoing scholarly debate.²⁰ The labor rights cited above, however, can be included in the present human rights analysis of the mining sector. Either they are recognized as human rights or are part of international human rights treaties: freedom from forced or compulsory labor, freedom from child labor, and freedom of association have been endorsed as human rights by the ILO;²¹ the right to work is enshrined in Art. 23 UDHR and Art. 7 ICESCR.

III. Rights of Indigenous Peoples

The ILO has further had an historical focus on indigenous rights,²² which led to the adoption of ILO Convention 107 in 1957.²³ Indigenous peoples are among

- 19 Ibid., 275.
- See V. Mantouvalou, 'Are Labour Rights Human Rights?', European Labour Law Journal, vol. 3, issue 2, 2012, 151-172; see further H. Collins, 'Theories of Rights as Justifications for Labour Law', in: G. Davidov/B. Langille (eds.), The Idea of Labour Law, 2011, p. 137.
- See ILO 'Declaration of Fundamental Principles and Rights at Work' of 1998, see http://www.ilo.org/declaration/lang--en/index.htm.
- See for example the ILO Committee of Experts on Native labor (established 1926); the Recruiting of Indigenous Workers Convention 1936 (ILO Convention 50); the Contracts of Employment (Indigenous Workers) Convention 1939 (ILO Convention 64); the Penal Sanctions (Indigenous Workers) Convention 1940 (ILO Convention 65) and the Contracts of Employment (Indigenous Workers) Convention 1947 (ILO Convention 86), as summarized by J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, p. 484.
- ILO convention 107 is still governed by the philosophy of 'integration' or 'assimilation'. According to the definition of 'indige-

the most affected groups in connection with development projects in general and mining activities in particular: The severe environmental impact of many of the typically performed activities bear the risk of affecting and destroying their ancestral territories, thereby depriving them of the right to use these lands and natural resources to maintain and develop their identities and cultures. While international law increasingly responded to indigenous peoples' demands, a universally accepted definition of the term 'indigenous people' has not yet been established. ILO Convention 169 of 1989 ("Indigenous and Tribal Peoples Convention"), which is to be seen as "international law's most concrete manifestation of the growing responsiveness to indigenous peoples' demands",24 merely provides criteria for describing the people it aims to protect.25 Furthermore, the UN milestone Declaration on the Rights of Indigenous Peoples of September 13 2007 (UNDRIP) also does not contain any specific definition of "indigenous people."26 This question had led to controversial discussions during the drafting process. The prevailing view among States was that no formal definition was necessary for the recognition and protection of indigenous peoples' rights.27 It was argued that a uni-

- nous people' in Art. 1 (1)(a) of ILO convention 107, these are populations "whose social and economic conditions are at a less advanced stage than the stage reached by the other sections of the national community", see J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, pp. 484 et seq.
- See J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, p. 485.
- According to Art. 1 ILO Convention 169 it protects: "(a) tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; (b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions." This, however, constituted the abandonment of the philosophy of 'integration' or 'assimilation' proposed by ILO convention 107. See on the issue of definition J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, pp. 480 et seq.
- ²⁶ See UN Doc. A/RES/61/295 of 13 September 2007.
- 27 United Nations Development Group Guidelines on Indigenous Peoples Rights (February 2008) http://www2.ohchr.org/english/

versal concept would lead to dilution of the issue and would thus harm indigenous peoples' rights.28 Others favored the flexibility that would be retained by allowing for facts, law, and history of each case to be taken into account. Several other States were of the opinion that a definition was an essential feature of the declaration. They believed that the lack of definition would be debilitating to the effective application thereof and would lead to endless debate, especially if entities not properly entitled to such status would seek to enjoy the rights contained in the declaration.²⁹ As a minimum consensus, the following factors are considered relevant to the understanding of the concept of "indigenous" by international organizations and legal experts: Priority in time, with respect to the occupation and use of a specific territory; Cultural Distinctiveness, which may include aspects of language, social organization, religion and spiritual values, modes of production, laws and institutions; Self-identification as well as recognition by other groups or by state authorities; and Experience of subjugation, marginalization, exclusion or discrimination.30

issues/indigenous/docs/guidelines.pdf

- Report on the 1st Session of the WGDD, UN Doc. E/ Cn.4/1996/84, 7.
- Explanation of the vote by Robert Hagan, US Advisor, on the Declaration on the Rights of Indigenous Peoples to the UN General Assembly, < www.twn.side.org.sg/titel2/resurgence/206/cover3doc.
- See working paper on the concept of 'indigenous people' of the Working Group on Indigenous People, UN Doc. E/CN.4/Sub.2/ AC.4/1996/2. See generally, B. Kingsburg, 'Indigenous Peoples', in: R. Wolfrum (ed.), MPEPIL, 2006; G. Alfredsson, 'Treaties with Indigenous Peoples', in: R. Wolfrum (ed.), MPEPIL, 2011; R. Wolfrum, 'The Protection of Indigenous Peoples in International Law' ZaöRV 59 (1999) 369-382; P. Frickey, 'The Status and Rights of Indigenous Peoples in the United States ZaöRV 59 (1999) 383-405; C. G. Benedict, 'The Status and Rights of Indigenous Peoples in Canada' ZaöRV 59 (1999) 405-442; K. Schillhorn, 'The Status and Rights of Indigenous Peoples in the Australia' ZaöRV 59 (1999) 443-462; Rainer Grote, 'The Status and Rights of Indigenous Peoples in Latin America' ZaöRV 59 (1999) 592-542; A. Yupsanis, 'The International Labour Organisation and its contribution to the protection of the rights of indigenous peoples' Annuaire International des Droits de l'Homme 6 (2011) 347-398; D. Kugelmann, 'The Protection of Minorities and Indigenous Peoples Respecting Cultural Diversity' Max Planck Yearbook of United Nations Law 11 (2007), 233-263.

For the purpose of the present study, the above-mentioned criteria will be applied in the analysis regarding how mining activities affect indigenous rights. The inclusion of indigenous rights as contained in ILO Convention 169 in the present analysis thereby reflects the overall trend of discussing indigenous rights in a human rights context. This is best demonstrated by the UNDRIP of 2007, which was drafted by the UN Human Rights Council³¹³². UN-DRIP's provisions cover all areas of ILO Convention 169 and are compatible with and mutually reinforce the provisions of the convention.33 The convention, however, has been criticized from the outset for not including indigenous people in the drafting process.34Additionally, there are still a number of issues in the convention where there is very little international consensus, including land rights, the right to autonomy, self-determination, and international personality.35 This, among other reasons, has led to only 22 ratifications so far.36 Against this backdrop, the present study not only applies the provisions of ILO convention 169 but also reflects the corresponding articles of the UNDRIP. The latter, however, constitutes only a legally non-binding UN resolution presently. Nevertheless, it can contribute to the emergence of international customary law (see

- http://www.ilo.org/indigenous/Resources/Publications/WCMS 100792/lang--en/index.htm
- This is also demonstrated, e.g., by the creation of a mandate in the UN Human Rights Special Procedures System for a 'UN Special Rapporteur on the Rights of Indigenous Peoples' in 2001 by the UN Commission on Human Rights, see at www.ohchr.org/EN/Issues/IPeoples/SRIndigenousPeoples/Pages/SRIPeoples-Index.asp.
- 33 See 'ILO standards and the UN Declaration on the Rights of Indigenous Peoples Information note for ILO staff and partners', available at http://www.ilo.org/indigenous/Resources/Publications/WCMS 100792/lang--en/index.htm.
- T. Ward, 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law', 10 Northwestern Journal of International Human Rights, 54 (2011), p. 60.
- J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, p. 486
- Ratified by Argentina, Bolivia, Brazil, Central African Republic, Chile, Colombia, Costa Rica Denmark, Dominica, Ecuador, Fiji, Guatemala, Honduras, Mexico, Nepal, Netherlands, Nicaragua, Norway, Paraguay, Peru, Spain, Venezuela, see at http://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:P11300
 INSTRUMENT ID:31231.

above,[A.][1.]) and is therefore included in the human rights analysis of the respective Risk Areas below.

B. State Obligations under International Human Rights Law

The nature and exact meaning of state obligations under international human rights law is a complex matter and is therefore the subject of an ongoing scholarly debate. In order to promote the realization and justiciability of international human rights standards, certain theoretical frameworks have been developed. One of the most recognized ones distinguishes state obligations into three categories: a responsibility to respect, protect and fulfill human rights.37 While this approach was first developed in the doctrinal analysis of economic, social and cultural rights, namely the right to food, its application to civil and political rights remains a matter of debate.38 However, a universal application of this framework to all human rights, including civil and political rights, is convincingly promoted by leading scholars and practitioners³⁹ and can also be derived from the wording of Art. 2 (1) ICCPR. This provision obliges State Parties to "respect and to ensure (...) the rights

This framework was developed by the former Special Rapporteur of the UN Sub-Commission on Prevention of Discrimination and Protection of Minorities, Asbjorn Eide in his 1983 report on the Right to Food 'The Right to Adequate Food as a Human Right', UN-Doc. E/CN.4/Sub.2/1983/25 of 25 July 1983 and his 1987 report on the same topic, UN-Doc. E/CN.4/Sub.2/1987/23 of 7 July 1987. See further the work of political philosopher Henry Shue in 'The Interdependence of Duties', in: P. Alston/K. Tomasevski (eds.), The Right to Food', Netherlands Institute of Human Rights, 1984, pp. 83-95. See further on this, the former UN Special Rapporteur on the Right to Food (2008-2014), Olivier de Schutter, 'International Human Rights Law-Cases, Materials, Commentary', 2010, pp. 242 et seq.

- 38 See Olivier de Schutter, 'International Human Rights Law-Cases, Materials, Commentary', 2010, pp. 252 et seq.
- See, e.g., the 2005 'Principles and Guidelines for a Human Rights Approach to Poverty Reduction Strategies' of the UN Office of the High Commissioner for Human Rights (OHCHR), paras. 47-48, as prepared by Paul Hunt, Manfred Nowak and Siddiq Osmania.

recognized in the present Covenant."⁴⁰ The "UN Framework on Business and Human Rights" ("Ruggie-Principles," see below, [C.]) further supports this view in applying the same legal reasoning to describe a "state duty to protect."⁴¹ For these reasons, it will be equally applied for the purposes of the present study.

I. Legal basis of the State Obligations

The specific duties of States Parties in the realization of the civil, political, economic, social and cultural rights as enshrined in the two covenants are generally codified in Art. 2. The above-mentioned Art. 2 (1) IC-CPR obligates States Parties to "respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." This provision can be interpreted to contain the negative and positive obligations as described by the respect, protect and fulfill framework.⁴² The positive obligation to protect thereby also comprises horizontal effects that require the States Parties to take positive measures to protect against private interference.43 This is of particular importance for the present study, since the analyzed mining activities are not only performed by State-owned but also by private sector mining companies (see below: [C.]).

- See the interpretation by M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 37 et seq.
- 43 Ibid., 39. See further on this Human Rights Committee (HRC), General Comment No. 31 (2004) on Art. 2 ICCPR, 'The Nature of the General Legal Obligation Imposed on States Parties to the Covenant', UN Doc. CCPR/C/21/Rev.1/Add.13 of 29 March 2004, para. 8.

See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 37 et seq.

See the 2009 report of the Special Representative on Business and Human Rights, John Ruggie, UN Doc. A/HRC/11/13 of 22 April 2009, para. 13. Furthermore, as stated in prior reports by the Special Representative, the 'duty to protect' is well established under international law, see UN Doc. A/HRC/4/35 and UN Doc. A/HRC/4/35/Add.1. Here it is also mentioned that some States, however, hold that this duty is limited to protecting persons who are both within their territory and jurisdiction.

The State obligations under economic, social and cultural rights, on the other hand, particularly regarding the positive dimension, are somewhat more complex. Taking into account the existing differences between States in their available resources,44 Art. 2 (1) ICESCR obligates all States Parties to "take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures." While the exact meaning of each element of this provision is subject of an ongoing debate, 45 several characteristics can be concluded for the purpose of the present study. The obligations under the ICESCR can be categorized as obligations of result and obligations of conduct. 46 The obligation of conduct "to take steps," which is of "immediate effect," includes the adoption of legislation⁴⁷ as specifically mentioned in Art. 2 (1) ICESCR. Furthermore, as part of the positive obligations under Art. 2 (1) ICE-SCR, States Parties also have to respect, protect and fulfill the covenant rights in the context of activities undertaken by state-owned or private enterprises.48

In light of the inequality among State Parties in their available resources, the principle of "minimum core obligation" was developed, which obliges States to ensure the satisfaction of a minimum essential level of each of the covenant rights.⁴⁹ In order to be able to

- See the related discussions during the drafting process of the ICESCR in the 3rd Committee of the UN General Assembly, UN Doc. A/5365 of 17 December 1962, para. 49 et seq.
- See generally B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 136 et seq.
- See Committee on Economic, Social and Cultural Rights (CE-SCR), General Comment No. 3 (1990), 'The Nature of State Parties Obligations (Art. 2, Para. 1 of the Covenant)', UN Doc. E/1991/23 of 14 December 1990, para. 1.
- 47 Ibid., para. 3.
- See CESCR 'Statement on the Obligations of States Parties Regarding the Corporate Sector and Economic, Social and Cultural Rights', UN Doc. E/C.12/2011/1 of 20 May 2011, para. 3.
- See CESCR, GC No. 3, 'The Nature of State Parties' Obligations' (Art. 2, Para. 1 of the Covenant)', UN Doc. E/1991/23 of 14 December 1990, para. 10.

attribute its failure to meet at least these minimum core obligations to a lack of available resources, State Parties must demonstrate "that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations." The burden of proof therefore lies with the respective State Party when claiming that it did not have the available resources to meet minimum core obligations. The minimum core obligations play their most important role in specifying the extent of the duty to fulfill (see below). However, the burden of proof described applies whenever a State Party claims that it was unable to fully comply with its human rights obligations due to resource limitations

1. Duty to Respect

From its content, the **duty to respect** is negative in nature and arises not only from economic, social and cultural rights, but also in civil and political rights.⁵² It requires states, according to its negative nature, to refrain from interfering with the enjoyment of any human right.⁵³ The content of this duty of forbearance depends on the formulation of each right.⁵⁴ In this context it is important to note that some human

- 50 Ibid., para. 10.
- See also the 2007 CESCR Statement, 'An evaluation of the obligation to take steps to the 'maximum available resources' under an Optional Protocol to the Covenant', UN Doc. E/C.12/2007/1 of 10 May 2007. See further the 1986 'Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights', UN Commission on Human Rights, Note Verbale of 5 December 1986 to the UN Centre for Human Rights, UN Doc. E/CN.4/1987/17 of 8 January 1987; see also the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights of 26 January 1997, as contained in UN Doc. E/C.12/2000/13 of 2 October 2000, para. 16.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 39.
- 53 See the OHCHR 'Principles and Guidelines for a Human Rights Approach to Poverty Reduction Strategies' (2005), para. 48; HRC, General Comment No. 31 (2004) on Art. 2 ICCPR, 'The Nature of the General Legal Obligation Imposed on States Parties to the Covenant', UN Doc. CCPR/C/21/Rev.1/Add.13 of 29 March 2004, para. 6.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 37.

rights can be lawfully be restricted by the State, while others, such as the right to life (Art. 6 (1) ICCPR), only prohibit arbitrary interference or can be limited under certain circumstances. This general principle will be further explained below (see [C.][II.]).

2. Duty to Protect

The **duty to protect** requires States to take measures to prevent violations of any human right by third parties. State responsibility can therefore be triggered as a result of State Parties' failing to take appropriate measures or to act with due diligence to prevent a violation, or to at least respond to such a violation by punishing or investigating the private persons or entities concerned.⁵⁶ This is of particular importance for the present study, since the analyzed mining activities are not only performed by state-owned but also by private sector mining companies.

In order to avoid an impossible or disproportionate burden imposed on the public authorities to prevent any claimed risk on the part of private parties, it must also be assessed whether the particular human rights violation should have been reasonably foreseeable in the given case. It must therefore be established that the public authorities knew or ought to have known of the existence of a real and immediate risk to a human right.⁵⁷ Predictability, not positive knowledge,

is therefore the crucial condition.⁵⁸ In addition, it is worth noting that in international law it is generally accepted that a state may be found to have violated an obligation to prevent even though it had no certainty about the respective serious danger.⁵⁹

3. Duty to Fulfill

In contrast to the **duty to respect**, the **duty to fulfill** is positive in nature and requires States to adopt appropriate legislative, administrative, and other measures towards the full realization of human rights, ⁶⁰ instead of simply abstaining from interference. The obligation to fulfill incorporates both an obligation to facilitate the enjoyment of human rights and an obligation to provide services. ⁶¹ However, it needs to be noted that the **duty to fulfill** is relative, since States Parties are provided with broad discretion commensurate with their financial and socio-economic abilities. ⁶²

- See J. Salmon, 'Dictionnaire de Droit International Public', 2011, p. 771; A. Kees, 'Responsibility of States for Private Actors', in R. Wolfrum (ed.), MPEPIL, 2011; A. Epiney, 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992, pp. 250 et seq.
- See ICJ, 'Application of the Convention on the Prevention and Punishment of the Crime of Genocide', (26 February 2007) ICJ Reports 2007, p. 43, para. 432. Furthermore, the International Tribunal for the Laws of the Sea (Ip.) analyzed State liability for the damages caused by private actors in the context of deep seabed mining in 'Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area', Advisory Opinion (1 February 2011), Case No. A17. With a view to the responsibilities stemming from Art. 139 (1) and 153 (4) UN Convention of the Law of the Sea it was found that liability of the State only arises from its failure to meet its obligation of due diligence (para. 189). Reversely, no liability arises, when the State has taken all necessary and appropriate measures to secure effective compliance (para. 186).
- Maastricht Guidelines on Violations of Economic, Social and Cultural Rights of January 1997, para. 6 as contained in UN Doc. E/C.12/2000/13 of 2 October 2000, para. 16; the CESCR General Comment No. 12 (1999), 'The Right to Food, Art. 11', UN Doc. E/C.12/1999/5 of 12 May 1999, paras. 14-20; and the report by A. Eide, 'The Right to Adequate Food and the be Free from Hunger. Updated Study on the Rights to Food' on the basis of Sub-Commission decision UN Doc. E/CN.4/Sub.2/1999 of 28 June 1999, para. 52.
- See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 38.
- ⁵² Ibid., p. 39.

See HRC, General Comment No. 31 (2004) on Art. 2 ICCPR, 'The Nature of the General Legal Obligation Imposed on States Parties to the Covenant', UN Doc. CCPR/C/21/Rev.1/Add.13 of 29 March 2004, para. 8; Inter-American Court of Human Rights (IACHR), Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4, para. 172.

.....

See ICJ, Application of the Convention on the Prevention and Punishment of the Crime of Genocide (26 February 2007) ICJ Reports 2007, 43, para. 432; IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4, para 173; ECtHR (28 October 1998) Osman vs. UK, No. 23452/94, para. 116

⁵⁵ Ibid.

II. Territorial Scope of Application

The question of the territorial scope of application of a human rights treaty is generally answered by its jurisdiction clause. Most of the human rights treaties stipulate that a State owes human rights obligations towards all persons subject to its jurisdiction.⁶³ As for the ICCPR, the jurisdiction clause differs significantly from that of other human rights treaties⁶⁴ by providing a seemingly conjunctive territorial requirement. ⁶⁵ Consequently, state obligations under Article 2 (1) of the ICCPR extend to all individuals "within its territory and subject to its jurisdiction." In this regard, it is worth noting that the notion of "jurisdiction" refers to the jurisdiction of a state, and not to the jurisdiction of a court. 66 Rather, "jurisdiction" is to be understood as a sort of factual power that a state exercises over persons or territory. 67 Thus, jurisdiction is the authority of the state to regulate the conduct of persons, both natural and legal, by means of its own domestic law.68

It is widely acknowledged that the jurisdictional competence of a State is in any case primarily territorial, since a state jurisdiction generally covers its own territory under its control.⁶⁹ Accordingly, a State owes obligations under a human rights treaty primarily towards individuals located inside its territory. A State may not, in general, exercise jurisdiction on the territory of another without the latter's consent, invitation or acquiescence.⁷⁰ However, international law

does not exclude a State's exercise of jurisdiction extraterritorially.⁷¹ For instance, the State's competence to exercise jurisdiction over its nationals abroad is subordinate to that State's and the other respective State's territorial competence.⁷²

The issue of extraterritorial application of human rights treaties is, however, far more contentious.73 States are increasingly asserting their power abroad in a way that adversely affects the rights of individuals beyond national borders.74 From a general point of view, the extraterritorial application of human rights treaties deals with the question as to when a State owes obligations under a human rights treaty towards an individual located outside its territory.75 Discussions on this legal issue mainly center on civil and political rights; general conclusions in this regard may, however, also apply in the context of economic, social and cultural rights.76 Since States are unable to secure human rights for persons all over the world, obliging them to secure human rights without any territorial limitation would amount to legally oblig-

63 See for instance Art. 1 ECHR and Art. 1 (1) ACHR.

- 65 See C. Milanovic, 'From Compromise to Principle: Clarifying the Concept of State Jurisdiction in Human Rights Treaties' Human Rights Law Review 8 (2008), 3.
- 66 Ibid., p. 5.
- 67 Ibid., p. 7.
- 58 Ibid., p. 10; see also M. Shaw, 'International Law', 5th ed., 2003, p. 527
- Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion (9 July 2004), ICJ Reports 2004, p. 136, para. 109; W. Kälin/J. Künzli, 'Universeller Menschenrechtsschutz', 2013, para. 355.
- ⁷⁰ See J. Crawford, 'Brownlie's Principles of Public International

- Law', 8th ed., 2012, p. 313
- ⁷¹ Ibid., 287, 301, 312-314.
- See A. Cassese, 'International Law', 2001, p. 89.
- Pesides international human rights law, the question of extraterritorial application of human right standards particularly arises in the field of the law of occupation; See C. Ralph Wilde, 'Triggering State Obligations Extraterritorially: The Spatial Test in Certain Human Rights Treaties', International Law forum of the Hebrew University of Jerusalem Research Paper No. 17-07 (December 2007) p. 504
- Examples of the leading scholarship in this area are M. Milanovic, 'Extraterritorial Application of Human Rights Treaties: Law, Principles and Policy', Oxford Monographs in International Law, 2011 and K. da Costa, 'The Extraterritorial Application of Selected Human Rights Treaties', 2013. See for more information N. Wenzel, 'Human Rights, Treaties, Extraterritorial Application and Effects', in: Wolfrum (ed.), MPEPIL, 2008; D. Lorenz, 'Der territorial Anwendungsbereich der Grund- und Menschenrechte', 2005; S. Skogly / M. Gibney, 'Transnational Human Rights Obligations', Human Rights Quarterly 24 (2002), pp. 781-798.
- M. Milanovic, 'From Compromise to Principle: Clarifying the Concept of State Jurisdiction in Human Rights Treaties' Human Rights Law Review 8 (2008), p. 1.
- 76 See N. Wenzel, 'Human Rights, Treaties, Extraterritorial Application and Effects', in: R. Wolfrum (ed.), MPEPIL, 2008, para. 2; see also ETO, 'Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights' (Heidelberg 2013).

Including the Second Optional Protocol to the ICCPR abolishing the death penalty, which provides in its Article 1 protection for individuals subject to a State's jurisdiction.

ing States to do the impossible. 77 Therefore, the restriction of human rights treaties' extraterritorial reach inherent in the term jurisdiction has the aim of introducing a reasonable limit to States' responsibility under the treaties.78 The Human Rights Council states in its General Comment No. 31 that a State party must respect and ensure the rights as enshrined in the ICCPR "to anyone within the power of effective control of that State Party, even if not situated within the territory of the State Party."79 In the case law and other authoritative statements on human rights treaties like the ICCPR, the ECHR and the ACHR, "jurisdiction" has been understood in the extraterritorial context in terms of the existence of a factual connection between the State and either the territory in which the relevant acts occurred or the person affected by these acts.80 However, it is worth noting that some states categorically oppose the concept of extraterritorial application of the international human rights treaties. The most prominent example thereof is the United States in its reports to the human rights bodies starting in 1995; in particular, during the Bush administration, the United States advanced a categorical and contrarian position to extraterritorial application.81

- 77 N. Wenzel, 'Human Rights, Treaties, Extraterritorial Application and Effects', in: R. Wolfrum (ed.), MPEPIL, 2008, para. 5.
- 78 Ibid.
- 79 See HRC, General Comment No. 31 (2004) on Art. 2 ICCPR, 'The Nature of the General Legal Obligation Imposed on States Parties to the Covenant', UN Doc. CCPR/C/21/Rev.1/Add.13 of 29 March 2004, para. 10.
- See C. Wilde, 'Triggering State Obligations Extraterritorially: The Spatial Test in Certain Human Rights Treaties', International Law forum of the Hebrew University of Jerusalem Research Paper No. 17-07 (December 2007), 508; available at: <www.ssrn.com/abstractid=1043981; HRC, General Comment No. 31 (2004) on Art. 2 ICCPR, 'The Nature of the General Legal Obligation Imposed on States Parties to the Covenant', UN Doc. CCPR/C/21/Rev.1/Add.13 of 29 March 2004, para. 10.
- B. Van Schaak, 'The United States' Position on the Extraterritorial Application of Human Rights Obligations: Now is the Time for Change' International Law Studies (20) vol. 90 (2014), pp. 20, 22, 23; most recently in the face of a proposal by Brazil and German regarding the international right to privacy and the question of 'extraterritorial surveillance', see C. Lynch, 'Inside America's Plan to Kill Online Privacy Rights', Foreign Policy (20 November 2013) available at: http://foreignpolicy.com/2013/11/20/exclusive-inside-americas-plan-to-kill-online-privacy-rights-everywhere; see also http://columlynch.tumblr.com/post/67588682409/

C. Human Rights Obligations of Business Enterprises and Transnational Corporations

In the context of the discussion on state obligations and duties under international human rights law, related corporate responsibilities have been increasingly discussed. Considering the fact that corporate activities, particularly in the extractives sector,82 often directly or at least indirectly lead to human rights violations, the Sub-Commission of the former UN Human Rights Commission drafted a set of "Norms on the Responsibilities of Transnational Corporations and other Business Enterprises" in 2003.83 However, criticism on these draft norms as being too far-reaching and lacking legal standing led the UN Commission on Human Rights to, appoint an independent expert on the matter instead of pursuing the further development of the these draft norms. 84 In its initial report, the newly appointed "UN Special Representative of the General-Secretary on the Issue of Human Rights and Transnational Corporations and other Business Enterprises," John Ruggie, fundamentally criticized the draft norms.85 Following extensive research in the subsequent year, he then developed a new framework for business and human rights as presented in its well-received report of 2008.86 The special representative lastly designed guidelines for the implementation of this framework, which were presented in its final report to the UN Human Rights Council in 2011.87 The Human Rights Council endorsed the Guiding Principles in its resolution 17/4 of June 16 2011.

right-to-privacy-in-the-digital-age-us.

- About 28% of all corporate-related human rights violations are connected to the extractives sector as found by a 2008 survey of the UN Special Representative of the General-Secretary on the Issue of Human Rights and transnational corporations and other business enterprises, John Ruggie, UN Doc. A/HRC/8/5/Add.2 of 23 May 2008, para. 8.
- 83 See UN Doc. E/CN.4/Sub.2/2003/12 of 30 May 2003.
- See P. Alston / R. Goodman, 'International Human Rights', 2013, p. 1477.
- 85 See UN Doc. E/CN.4/2006/97 of 22 February 2006.
- 86 See UN Doc. A/HRC/8/5 of 7 April 2008.
- 87 See UN Doc. A/HRC/17/31 of 21 March 2011, Annex.

The framework comprises three pillars, namely the "State duty to protect" against human rights abuses by third parties, including business; the "corporate responsibility to respect" human rights; and the need for more effective "access to remedies".88 The "State duty to protect" is congruent with the second dimension of the respect, protect and fulfill framework for state obligations described above.89 The implementation guidelines further detail that

"States are not per se responsible for human rights abuse by private actors. However, States may breach their international human rights law obligations where such abuse can be attributed to them, or where they fail to take appropriate steps to prevent, investigate, punish and redress private actors' abuse. While States generally have discretion in deciding upon these steps, they should consider the full range of permissible preventative and remedial measures, including policies, legislation, regulations and adjudication. States also have the duty to protect and promote the rule of law, including by taking measures to ensure equality before the law, fairness in its application, and by providing for adequate accountability, legal certainty, and procedural and legal transparency"90

The second pillar, on the other hand, addresses the corporate responsibility to respect human rights, which is to be found in soft law instruments, such as the Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy,⁹¹ the Guidelines of the Organization for Economic Co-operation and Development (OECD) for Multination-

al Enterprises92 and the Global Compact93. Finally, as part of their duty to protect against business-related human rights abuse, States must take appropriate steps to ensure, through judicial, administrative, legislative or other appropriate means, that when such abuses occur within their territory and/or jurisdiction that those affected have access to effective remedy94. Therefore, the "state duty to protect" and the "access to remedy" principle of the Ruggie-Framework add to the "respect, protect and fulfill" framework described above and will be taken into account in the human rights analysis in chapters 3-5. The question of human rights obligations of business enterprises and the private sector, however, is not being discussed, since this would go well beyond the scope of the present study.

D. Scope of the Legal Analysis

I. Interpretation of International Human Rights Norms

In the interpretation of the specific norms of the international human rights treaties analyzed in the present study, general rules of treaty interpretation will be applied. These can be found in the Vienna Declaration of the Law of the Treaties (VCLT).95 The interpretation rules of the VCLT focus on objective criteria rather than on the subjective will of the parties as established in the light of historic data.96 On the basis of Art. 31 (1) VCLT,97 this primarily

See UN Doc. A/HRC/8/5 of 7 April 2008, paras. 27 et seq., UN Doc. A/HRC/11/13 of 22 April 2009, para. 12 et seq. and the 'Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework', UN Doc. A/HRC/17/31 of 21 March 2011, Annex, para. 1

See 'Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework', Sec. I., A., 1., Commentary, UN Doc. A/HRC/17/31 of 21 March 2011, Annex, para. 1 et seq.

⁹⁰ Ibid

⁹¹ See ILO Official Bulletin, Series A, No. 3 (2000).

⁹² See Organization for Economic Co-operation and Development, DAFFE/IME/WPG(2000)15/FINAL.

⁹³ See https://www.unglobalcompact.org/what-is-gc/our-work/ social/human-rights.

See 'Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework', UN Doc. A/HRC/17/31 of 21 March 2011, Annex, para. 26 et seq.

⁹⁵ See at https://treaties.un.org/doc/Publication/UNTS/Volume%201155/volume-1155-I-18232-English.pdf.

M. Herdegen, 'Interpretation in International Law', in: R. Wolfrum, MPEPIL, 2013, para 7.

⁹⁷ Art. 31 (1) VCLT reads "A treaty shall be interpreted in good faith

comprises textual, contextual, systematic and teleological interpretation.⁹⁸ Human rights texts are often characterized by a high degree of abstraction and vagueness, leaving their meaning ambiguous and obscure.⁹⁹ In these cases, Art. 32 VCLT allows for additional tools to be drawn upon: in particular, the preparatory work of the treaty ("travaux preparatoires") or the circumstances of the conclusion of a treaty.¹⁰⁰ These supplementary means of interpretation reflect customary law but remain of ancillary relevance.¹⁰¹

Another important source of interpretation are the consensus decisions and other resolutions of the so-called "treaty bodies." These are committees of independent experts that monitor implementation of the core international human rights treaties. ¹⁰² In receiving and considering reports submitted by States Parties, treaty bodies interpret treaty provisions, both substantively as well as procedurally, through issuing concluding observations or recommendations and the development of General Comments or recommendations. ¹⁰³ Furthermore, some treaty bodies are mandated to consider individual communications or inter-state complaints. ¹⁰⁴ However, these interpretations of the treaty bodies are not legally binding and States Parties can reject these findings. ¹⁰⁵ Neverthe-

- in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose".
- See, on the ICCPR, M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. XXVI.
- 99 Ibid.
- 100 Ibid.
- 101 See M. Herdegen, 'Interpretation of International Law', in: R. Wolfrum, MPEPIL, 2013, para 10.
- 102 See http://www.ohchr.org/EN/HRBodies/Pages/TreatyBodies. aspx.
- 103 See 'Simple Guide to the UN Treaty Bodies', International Service for Human Rights, Geneva, 2010, 11 et seq.
- **104** Ibid.
- See H. Keller/L. Grover, 'General Comments of the Human Rights Committee and their Legitimacy', in: H. Keller/G. Ulfstein (eds.), UN Human Rights Treaty Bodies: Law and Legitimacy, 2012, p. 129; G. Ulfstein, 'Individual Complaints', in: H. Keller G. Ulfstein (eds.), UN Human Rights Treaty Bodies: Law and Legitimacy, 2012, pp. 115, 129; ILA, Committee on International Human Rights Law and Practice, Final Report on the Impact of the Findings of the United Nations Human Rights Treaty Bodies, (Berlin Conference 2004), para. 16.

less, States Parties have a legal obligation to give them great legal weight¹⁰⁶ and they have a "norm-generating character," through which they sometimes contribute to the emergence of customary international legal norms.¹⁰⁷ The creation of the treaty bodies has therefore promoted the principle of effectiveness (effet utile), a most influential version of the teleological approach of interpretation.¹⁰⁸ On these grounds, the case law of the individual communications, the General Comments, and the country-specific concluding observations of the treaty bodies are being used as an "authoritative interpretation" of the relevant provisions of the human rights treaties analyzed throughout the present study.¹⁰⁹

II. Absolute and Limited Human Rights

The scope of the analysis of the Risk Areas described below encompasses "absolute" and "limited" human rights. While rights of an absolute character, such as the freedom from torture (Art. 7 ICCPR), allow no limitation and restriction at all, limited right may be restricted under certain circumstances. While absolute rights are the exception, most human rights can be restricted under three conditions: First, any interference should be prescribed by law (condition of legality); second, it must be justified by pursuance of a legitimate aim (condition of legitimacy); and third, the restriction must be limited to what is necessary for the fulfillment of that aim (condition of

- See also ICJ, Case Concerning Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of Congo) 30 November 2010, ICJ Reports 2010, pp. 639, 664, para. 66.
- See H. Keller/L. Grover, 'General Comments of the Human Rights Committee and their Legitimacy', in: H. Keller/G. Ulfstein (eds.), UN Human Rights Treaty Bodies: Law and Legitimacy, 2012, p. 129.
- See M. Herdegen, Interpretation of International Law, in: R. Wolfrum, MPEPIL, 2013, para. 6.
- 109 See for the same use of the treaty body interpretations of the ICCPR, M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. XXVII.
- See Olivier de Schutter, 'International Human Rights Law-Cases, Materials, Commentary', 2010, pp. 257 et seq.

proportionality).¹¹¹ The condition of legality and legitimate aims are often specifically mentioned in the human rights provisions of the treaties.¹¹² The question whether the restriction of a human right was

justified, particularly with a view to the condition of proportionality, can therefore only be answered on a case-by-case basis, taking into account the circumstances of the specific case.

.....

See Olivier de Schutter, 'International Human Rights Law-Cases, Materials, Commentary', 2010, pp. 288 et seq. See further the 'Siracusa Principles on the Limitation and Derogation of Provisions in the ICCPR', UN Doc. E/CN.4/1984/4 of 28 September 1984, Annex, see also Human Rights Quarterly, vol. 9 (1987), pp.

¹¹² See in this context Art. 4 (1), (2) ICCPR and Art. 12 (3), 19 (3) IC-CPR; see further Art. 8 (2) ICESCR.



Chapter 3: Human Rights Risk Areas in the Context of Industrial and Large-Scale Mining

A. Licensing & Exploration

I. Description of the Mining Phase

The phase prior to any exploration or extraction activities is equally important to understand when assessing the human rights implications of mining activities. Governments grant minerals exploration and production rights in defined areas by means of concessions, leases, licenses, or contracts, depending on their legal systems.¹¹³

Typically, these rights are granted in several steps. This means that every step in the development of a mine requires specific mining licenses and concessions, which will only be granted if the respective requirements are met. Initially, an exploration license is issued, which only allows for measures described under [B] below. However, it normally contains further development and production rights (right to mine), in the eventuality that exploration is successful.

Exploration constitutes the first phase of a mine's life cycle and generally concludes with the abandonment of the project or the decision to initiate more intensive exploration and ultimately with a feasibility study for a mining project. In industrial or large-scale mining, a very efficient division of labor has been established along the mining value chain, from specialized junior companies focusing exclusively on prospecting to mid-size mining companies and finally to corporate giants of the industry. The early phase of exploration generally comprises methods like geophysical surveys, Top prospecting and geolog-

ical mapping,¹¹⁶ geochemical surveys,¹¹⁷ diamond drilling,¹¹⁸ and trenching.¹¹⁹ If initial exploration leads to positive results, advanced measures can take place. However, the success-rates of exploration projects is quite low.¹²⁰

During advanced exploration, the quantity and quality of the potential ore and the geometry of the deposit are defined and appropriate mining and processing methods are determined. This often requires small-scale underground or open pit mine workings, the removal of larger amount of rock for bulk sampling, and diamond drilling. The results of these activities provide information on rock quality, mineralogy and geochemistry of the mineral deposit, as well as the quantity, characteristics, and delineation of the identified ore body.

If the quantity and quality of the ore and its location indicate that it might be feasible to mine the ore economically, a process to determine the actual feasibility of developing a mine at the site is launched. This includes preliminary planning of mine layout, ore processing design, and estimating the cost of developments.

- This can involve the mapping and sampling of targets identified in airborne geophysical surveys, regional-scale mapping and more detailed mapping of areas of particular interest. The objective is to provide a preliminary assessment of the potential for mineralization over a relatively large area, see ECPMM, p. 26.
- A range of materials may be sampled, most commonly rocks and soil. Samples are sent for chemical analysis for metals of interest. Results of the analyses are compiled and compared with the results obtained from other exploration methods, see ECPMM, p. 26.
- Diamond drills recover a core of rock, and cores from several holes allow geologists to build a three-dimensional picture of the local geology. Core samples are also subjected to chemical analysis, see ECPMM, p. 26.
- Trenches may be dug or areas of outcrop stripped of vegetation and soil to enable mapping of near-surface geology and for bulk sampling where ore and other geologic units may be very near the surface, see ECPMM, p. 26.
- About one out of ten initial exploration or prospecting projects is successful, while the same approximate success-rate can be described for advanced exploration projects (expert consultation, M. Priester).
- 121 See ECPMM, p. 26.
- Ibid.

See E. Alba, 'Extractive Industries Value Chain', World Bank Working Paper, March 2009, 4.

¹¹⁴ Expert consultation, M. Priester.

¹¹⁵ Geophysical survey techniques include magnetic, electromagnetic, electrical, radiometric and gravity techniques, and surveys can be conducted from the air or on the ground. These surveys provide information on potential targets for ground-based exploration, see the Environmental Code of Practice for Metal Mines (ECPMM), p. 26.

oping and operating a mine.123 This is also a crucial prerequisite to obtain financing.

II. Risk Areas and Human Rights Analysis

1. Indigenous Peoples - Right to Free, **Prior and Informed Consent**

a. Description of Risk Area and Case **Studies**

Indigenous peoples are among the most affected groups in connection with mining activities. The severe environmental impact of many of the typically performed activities bear the risk of affecting and destroying their ancestral territories, thereby depriving them of the right to use these lands to maintain and develop their identities and cultures. To prevent such negative effects, indigenous peoples and groups need to be included in the process of any activities that may later negatively affect their standard of living. Therefore, the principle of a right to "free, prior and informed consent" (FPIC)124 has been developed, which creates an obligation to consult and cooperate with indigenous peoples prior to the implementation of any measures affecting them. FPIC rights thereby apply as early as in the phase of consideration regarding legislative or administrative measures that may affect indigenous groups. With a view to the mining sector, this not only means that FPIC rights have to be respected prior to the issuance of any prospecting or exploration licenses but even during the process of drafting any mining legislation, which forms the legal basis to licensing. This often stands in stark contrast to profitability calculations of exploration projects. As described above, only one out of ten prospecting projects is successful and, equally, only one out of ten exploration projects leads to further development of a deposit.

Shortcomings in granting such FPIC rights are regularly raised in the UN human rights system through treaty bodies (Case 1-2) or Special Procedures (Case 3) and through ILO monitoring bodies (Case 4) and civil society organizations (Case 5-6) in many parts of the world. While FPIC rights technically apply to mining activities in all phases of the mine life cycle, the case examples below demonstrate that this constitutes a human rights problem, which mainly occurs in the early phases of the mine life cycle. In cases where FPIC rights violations are raised with regard to a later stage of a mining project, the rights in question mostly had already been infringed upon during one of the prior phases of the mining project or in the phase of licensing. Furthermore, the legal analysis of later cases leads to the same results. Therefore, these human rights violations are analyzed in the present Risk Area.

¹²³ Ibid.

While 'Free' implies that there is no coercion, intimidation or manipulation, 'Prior' implies that consent is to be sought sufficiently in advance of any authorization or commencement of activities and respect is shown to time requirements of indigenous consultation/consensus processes. 'Informed' implies that information is provided that covers a range of aspects, including the nature, size, pace, reversibility and scope of any proposed project or activity; the purpose of the project as well as its duration; locality and areas affected; a preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks; personnel likely to be involved in the execution of the project; and procedures the project may entail, see 'Free, 'Prior and Informed Consent, OHCHR Facts Sheet', Indigenous Peoples and Minorities Section, OHCHR Rule of Law, Equality and Non-Discrimination Branch, at: http://www.ohchr. org/Documents/Issues/IPeoples/FreePriorandInformedConsent.pdf.



Case 1: Suriname Shortcomings in consulting and informing indigenous groups are regularly raised by the treaty bodies in their country-specific concluding observations on the State Parties' compliance with the international human rights treaties. Several treaty bodies criticized the government of Suriname for not consulting with the Maroon and Amerindian communities before awarding mining concessions. This was observed by the Committee against Racial Discrimination (CERD)¹²⁶ and the Human Rights Committee (HRC)¹²⁶ in 2004.

Case 2: Guatemala As reported to CERD by the member state, the "granting of mining licenses by the Ministry of Energy and Mines to concession enterprises is causing the Government serious problems. Such activities are considered a grave violation of the rights of thousands of indigenous and non-indigenous Guatemalans, who were not duly consulted and informed that the subsoil of their territory would be licensed to mining companies. It should be emphasized that most of the population in 9 of the 16 departments affected is indigenous and that various small groups (Chuj, Sipakapense, Chorti, Mam, Kaqchikel) will be faced with ethnocide if the mining projects are not handled appropriately". 127

Case 3: Peru Shortcomings in the granting of FPIC rights by state institutions were observed by the UN Special Rapporteur on the rights of indigenous peoples, James Anaya, in 2014: "State institutions must: apply the Prior Consultation Act, No. 29785, and its implementing regulations, in a manner that is compatible with the international standards established in ILO Convention 169, the United Nations Declaration on the Rights of Indigenous Peoples and other relevant sources of international law or authority; fully adhere to the principle of free, prior and

informed consent; and ensure that the agreements arrived at through consultation are fair and such as to promote the enjoyment by indigenous peoples of their fundamental rights. The agreements should include, amongst others, provisions concerning safeguard and mitigation, compensation, profit-sharing and dispute settlement mechanisms." ¹²⁸

Case 4: Colombia Violations of FPIC rights prior to mining related exploration and exploitation are also regularly observed by ILO convention compliance monitoring bodies like the ILO Committee of Experts on the Application of Conventions and Recommendations (CEACR) with a view to ILO convention 169. With regard to Colombia, CEACR criticized FPIC violations in the context of mining exploration and later exploitation of deposits in the lands of Embera Katío and Embera Dóbida peoples in the Chidima and Pescadito reservations in 2009. 129

Case 5: Uganda Violations of FPIC rights through mining activities are also often criticized by human rights NGOs. In a recent field report, it was alleged that indigenous landowners in the Kaabong and Kotido districts of the Karamoja region of Uganda haven not been properly consulted prior to exploration activities on their lands in 2012. The affected communities reportedly only learned about the planned exploration project when employees of the mining company, guarded by Ugandan soldiers, entered their lands and began taking soil samples from their lands.¹³⁰

See the recommendations by the Special Rapporteur in its 2014 report, UN Doc. A/HRC/27/52/Add.3 of 3 July 2014, para. 72.

¹²⁹ CEACR Observation, 2009/80th Session, as cited in ILO, 'Monitoring Indigenous and Tribal Peoples' Rights through ILO Conventions' – A Compilation of ILO supervisory bodies' comments 2009-2010, p. 56

¹³⁰ See 'How Can We Survive Here? The Impact of Mining on Human Rights in Karamoja, Uganda', Human Rights Watch (HRW) report 2014, 69-70 and 73-74. See, on the other hand, the response to this HRW report by one of the mining companies involved in this project in Karamoja (East African Mining Ltd.) at http://www.hrw.org/sites/default/files/related_material/A%20

¹²⁵ UN Doc. CERD/C/64/CO/9 of 28 April 2004, para. 13.

¹²⁶ UN Doc. CCPR/CO/80/SUR of 4 May 2004, para 21.

¹²⁷ UN Doc. CERD/C/469/Add.1 of 6 May 2005, para. 31.

Case 6: Ecuador A Lack of consultation with 2010.131 While public presentations were held bursed, as was reported. 132

b. Human Rights Analysis

aa. Art. 6 (2) ILO Convention 169

ILO convention 169 establishes, as a cornerstone and basic principle of the convention, a mechanism for the appropriate and effective consultation of indigenous and tribal peoples regarding matters concerning them.133 With this regard, Art. 6 and 7 on consultation and participation are the key provisions and the "basis for applying all the others." 134 Additionally, specific consultation obligations are especially emphasized in a number of articles throughout the convention.135 All of these consultation provisions have to be read in conjunction with the key provisions, which establish, particularly through Art. 6, minimum requirements for consultation and participation of affected peoples. These comprise consultation "through appropriate procedures and in particular through their representative institutions" (Art. 6 (1) (a)). Furthermore, consultations "shall be undertaken, in good faith and in a form appropriate to the circumstances" (Art. 6 (2)) and finally "with the objective of achieving agreement or consent to the proposed measures" (Art. 6 (2)). Additionally, the ILO Governing Body observed in a representation procedure¹³⁶ in 2001 that "sufficient time must be given to allow the country's indigenous peoples to engage their own decision-making processes and participate effectively in decisions taken in a manner consistent with their cultural and social traditions."137 A simple information meeting cannot, therefore, be considered as complying with the provisions of the Convention. 138

Art. 6 (1)(a) further stipulates that governments shall "consult the peoples concerned [...] whenever consideration is being given to legislative or administrative measures which may affect them directly." Generally, it is to be noted that Art. 6 does not stipulate that the achievement of consent is mandatory for the consul-

- Statement%20on%20Behalf%20of%20East%20African%20Mining%20Ltd.pdf.
- 131 Ecuadorian Ecumenical Commission for Human Rights & International Federation for Human Rights, 'Large-Scale Mining in Ecuador and Human Rights Abuses: The Case of Corriente Resources', Report 0f 2010, executive summary, p. 16.
- 132 Ibid.
- See ILO Committee of Experts on the Application of Conventions and Recommendations (Committee of Experts), General Observation on Convention Nol. 169, 79th Session, 2008, published 2009.
- 134 See Committee of Experts, 76th Session, 2005, Observation, Guatemala, published 2006, para. 6.
- 135 When considering legislative or administrative measures (Article 6(1)(a)); Prior to exploration or exploitation of sub-surface resources (Article 15(2)); When consideration is given to alienating indigenous peoples' lands or transmitting them outside their own communities (Article 17); Prior to relocation, which should take place only with the free and informed consent of indigenous peoples (Article 16); On the organization and operation of special vocational training programmes (Article 22); On measures aimed at children being taught to read and write in their own indigenous language (Article 28), see 'Indigenous & Tribal Peoples' Rights in Practice - A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169),

- International Labour Standards Department, 2009, p. 61.
- A representation procedure is established under Art. 24, 25 of the ILO Constitution, which grants an industrial association of employers or of workers the right to present to the ILO Governing Body a representation against any member state which, in its view, "has failed to secure in any respect the effective observance within its jurisdiction of any Convention to which it is a party". A three-member tripartite committee of the Governing Body may be set up to examine the representation and the government's response. The report that the committee submits to the Governing Body states the legal and practical aspects of the case, examines the information submitted, and concludes with recommendations; see on this http://www.ilo.org/global/standards/applying-and-promoting-international-labour-standards/ representations/lang--en/index.htm.
- See Governing Body, 282nd Session, November 2001, Representation under article 24 of the ILO Constitution, Colombia, GB.282/14/3, para. 46.
- See Governing Body, 282nd Session, November 2001, Representation under article 24 of the ILO Constitution, Ecuador, GB.282/14/2 as cited in 'Indigenous & Tribal Peoples' Rights in Practice - A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, p. 111.

tations to be valid but that it requires the pursuit of achieving consent.¹³⁹ Furthermore, the consultation has to be conducted beforehand, which implies that the communities affected should participate as early as possible in the process.¹⁴⁰

On these grounds, states have to respect Art. 6 ILO 169 not only when granting mining licenses and concession, which are to be qualified as administrative measures in the sense of Art. 6 (1)(a). Information and consultation duties can also arise as early as in the process of creating mining legislation. In this context, the question often arises concerning at what point in the development of a mining project FPIC rights have to be granted, particularly in light of the minimal invasiveness and low success rate of early prospecting measures (see above, [A.][I.]).141 Ultimately, this question should be answered through the application of the basic principle of Art. 6 (2) to conduct consultations "in good faith and in a form appropriate to the circumstances." In the case of minimal invasive prospecting, for example, consultation and information measures of a smaller scale could be "appropriate."

Communities considered consisting of "indigenous people" and which are affected by planned mining activities can collectively invoke FPIC rights, if no prior consultation process was conducted that meets the minimum requirements described above. While

Report of the Committee set up to examine the representation alleging non-observance by Argentina of the Indigenous and Tribal Peoples Convention, 1989 (No. 169), made under article 24 of the ILO Constitution by the Education Workers Union of Río Negro (UNTER), local section affiliated to the Confederation of Education Workers of Argentina (GB.297/20/1) (GB.303/19/7), para. 81.

See Governing Body, 282nd Session, November 2001, Representation under article 24 of the ILO Constitution, Ecuador, GB.282/14/2 as cited in 'Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, p. 111.

See on this, e.g., the case of a exploration project near the Bulgarian town of Chepelare in the Smolyan District, which led to protest even before "anything even remotely resembling a mineral resource was found, see the company's response to protest at http://www.reports-and-materials.org/Dundee-response-re-Sofia-News-Agency-article-21-Dec-2009.doc.

the achievement of consent is not mandatory for the consultation to be consistent with Art. 6., the minimum requirements must be met. A simple information meeting (Case 6) is therefore not sufficient.

bb. Art. 15 (2) ILO Convention 169

FPIC rights regarding natural resources are further enshrined in Art. 15 (2), which needs to be read in conjunction with the provisions of Art. 6 above. Art. 15 forms part of the land rights regime of ILO convention 169 enshrined in Art. 13 and 14 of the convention, which will be analyzed with regard to the construction phase below (see below, [B.][II.][2.]). Art. 15 (1) specifically protects the rights of indigenous peoples to participate in the use, management and conservation of resources pertaining to their lands. "Natural resources" comprise both renewable and non-renewable resources and therefore include minerals.142 The "use" of these natural resources further comprises "exploration and exploitation" so that mining activities fall within its scope of application.¹⁴³ While Art. 14 (2) requires governments to take necessary steps to "identify the lands which the peoples concerned traditionally occupy, and to guarantee effective protection of their rights of ownership and possession," Art. 15 (2) recognizes the oftenoccurring situation that states retain ownership of all minerals and sub-surface resources through their constitutions.¹⁴⁴ In reconciling interests, Art. 15 (2) recognizes a number of rights:

In cases in which the State retains the ownership of mineral or sub-surface resources or rights to other resources pertaining to lands, governments

^{&#}x27;Indigenous & Tribal Peoples' Rights in Practice - A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, p. 108.

¹⁴³ This also follows from Art. 15 (2), which stipulates that indigenous people have a right to compensation, when 'states retain the ownership of minerals and sub-surface resources'. See also 'Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, 107.

¹⁴⁴ Ibic

shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands. [...]

Accordingly, Art. 15 (2) enshrines the right of indigenous communities concerned to be consulted before natural resources on their lands are explored or exploited. This does not only apply when concrete decisions for such activities are taken but also arises on a general level, throughout the process, requiring consultation and participation in the formulation, implementation and evaluation of development plans affecting these peoples. 145

Furthermore, Art. 15 (2) provides for the right to ascertain the impact of exploration and exploitation. This provision needs to be interpreted as requiring a full assessment, in cooperation with indigenous peoples, of the social, spiritual, cultural and environmental impact of all development activities affecting them. 146 Therefore, an assessment that meets these requirements has to be conducted before any mining activity is realized. The results of these assessments then form the fundamental criteria for the implementation of these activities.147

Art. 15 (2) thus establishes FPIC rights with regard to the exploitation and exploration of minerals and sub-surface resources pertaining to the lands of indigenous peoples in cases where the state retains the ownership of these resources. It therefore contains special FPIC rights related to the general FPIC rights stemming from Art. 6 of the convention. The term "lands" in Art. 15 (2) is to be understood as including "the concept of territories, which covers the total environment of the areas which the peoples concerned occupy or otherwise use," as defined in Art. 13 (2).148 Furthermore, it is important to note that Art. 15 (2) does not require indigenous peoples to be in possession of ownership title for the purposes of the consultations envisaged.149 Lastly, it must also be specifically noted that the responsibility for ensuring that the rights enshrined in Art. 15 (2) are respected lies with the concerned governments and not with the private companies or entities that are licensed to undertake the exploration or exploitation. 150

cc. Art. 16 (2) ILO Convention 169

Further FPIC rights are enshrined in Art. 16 (2). These participatory and information rights are to be granted in exceptional cases where the removal of indigenous peoples from the their lands is necessary, as analyzed below (see below, [B.][II.][2.]). While these rights apply to a special case, they nevertheless have to fulfill the general minimum requirements as set out by Art. 6, when granted.

dd. Art. 27 ICCPR

FPIC rights have increasingly found recognition in the jurisprudence of several treaty bodies. As a legal basis, somewhat inconsistently, cultural minority rights as well as the right to an economic self-determination (see below, [f.]), have been applied. The UN Human Rights Committee (HRC), for example, has derived FPIC rights from Art. 27 ICCPR, which stipulates "ethnic, religious or linguistic minorities (...) shall not be denied the right, in community with the other members of their group, to enjoy their own

.....

¹⁴⁵ 'Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, 108.

¹⁴⁶ Thid.

¹⁴⁷ Ibid.

¹⁴⁸ Committee of Experts, Observation 2009/80th Session, as cited in ILO, 'Monitoring Indigenous and Tribal Peoples' Rights through ILO Conventions' - A Compilation of ILO supervisory bodies' comments 2009-2010, p. 94.

Report of the Committee set up to examine the representation alleging non-observance by Guatemala of the Indigenous and Tribal Peoples Convention, 1989 (No. 169), made under article 24 of the ILO Constitution by the Federation of Country and City Workers (FTCC), (GB.294/17/1):(GB.299/6/1), para. 48.

See 'Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, 107.

culture (...)" The right to enjoy its own culture has been further interpreted by the HRC as consisting in a way of life, which is closely associated with territory and use of its resources, particularly with a view to members of indigenous communities constituting a minority.¹⁵¹ Furthermore, the committee found that the enjoyment of the cultural rights under Art. 27 by indigenous peoples "may require positive legal measures of protection and measures to ensure the effective participation of members of minority communities in decisions which affect them."152 The HRC consistently recognizes this "effective participation" as comprising the obligation for states to "conduct consultations with indigenous peoples before granting licenses for the economic exploitation of the lands where they live."153 Mining activities logically fall within the scope of "economic exploitation of lands;" thereby, a lack of consultation in the context of mining, following the reasoning of the HRC, can constitute a violation of Art. 27 ICCPR.

ee. Art. 15 (1)(a) ICESCR

The Committee on Economic, Social and Cultural rights (CESCR) has based its recognition of FPIC rights on Art. 15 (1)(a) ICESCR, which provides "the right to everyone to take part in cultural life." In interpreting this provision, the CESCR has recognized that indigenous peoples' cultural life "includes the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired." Furthermore, in citing the provisions of ILO convention 169, discussed above, and the UNDRIP, the CESCR underlines the need for the spe-

See HRC, General Comment No. 23 (1994), 'The rights of minorities (Art. 27)', UN Doc. CCPR/C/21/Rev.1/Add.5 of 8 April 1994, para. 3.2 and 7.

152 Ibid., para. 7.

- 153 See, e.g., HRC, Concluding observations on Chile, UN Doc. CCPR/C/CHL/CO/5 of 18 May 2007, para. 19; HRC, Concluding observations-Panama, UN Doc. CCPR/C/PAN/CO/3 of 17 April 2008, para. 21; HRC, Concluding observations-Nicaragua, UN Doc. CCPR/C/NIC/CO/3 of 12 December 2008, para. 21.
- 154 See CESCR, General comment No. 21 (2009), 'Right of everyone to take part in cultural life (art. 15, para. 1 (a), of the International Covenant on Economic, Social and Cultural Rights)', UN Doc. E/C.12/GC/21 of 21 December 2009, para. 36.

cial protection of "indigenous peoples' cultural values and rights associated with their ancestral lands and their relationship with nature." It therefore calls on States parties to protect the rights of indigenous peoples to own, develop, control and use their communal lands, territories and resources. The CE-SCR recognizes the right to FPIC as an integral part of indigenous land right by determining that all lands, which have been inhabited or used without such prior consultation have to be returned. Following this interpretation, mining activities described in this section's can violate Art. 15 (1)(a) ICESCR.

ff. Art. 1(2) ICESCR

The CESCR has further, in a more general and non-indigenous-specific context, found that the granting of new contracts to foreign mining companies, which were "surrounded by a significant lack of transparency or mismanagement," constituted a violation of the right to economic self-determination as enshrined in Art. 1 (2) ICESCR. ¹⁵⁷ It further called upon States Parties to seek, prior to any contracts with foreign companies, the free and informed consent of the persons concerned. ¹⁵⁸ Therefore, Art. 2 (1) ICESCR can also serve as a legal basis for consultation and participation rights as shown below (see below, [2.]).

gg. Art. 5 (d)(v) and Art. 5 (e)(vi) ICERD

FPIC rights can further be based on Art. 5 (d)(v), (e)(vi) International Convention against Racial Discrimination (ICERD). Art. 5 ICERD, apart from requiring a guarantee that the exercise of human rights shall be free from racial discrimination, does not in itself create civil, political, economic, social or cultural rights, but assumes the existence and recognition of these rights. ¹⁵⁹ Instead, it provides a non-exhaustive list

¹⁵⁵ Ibid.

¹⁵⁶ Ibid

¹⁵⁷ See CESCR, Concluding Observations: DRC, UN Doc. E/C.12/ COD/CO/4 of 20 November 2009, para. 13.

¹⁵⁸ CESCR, Concluding Observations: Madagascar, E/C.12/MDG/ CO/2 para. 12 (16 December 2009).

¹⁵⁹ CERD, General Recommendation XX (48) on Article 5, CERD/48/ Misc. 6/Rev. 2 (8 March 1996) para. 1.

of human rights, to which the non-discrimination principle applies. The ICERD thereby does not define these rights, thus opening out their interpretation to developments in the human rights canon. 160 This is an important point especially in areas where there have been fresh elaborations of rights such as those pertaining to minorities and indigenous peoples.¹⁶¹ Accordingly, the Committee (CERD) has utilized fresh and developing standards in its recommendations and observations, particularly through its Recommendation XXIII on indigenous peoples. 162 In acknowledging the particular vulnerability of Indigenous Peoples to discrimination, the CERD generally recognized the applicability of the provisions of ICERD to Indigenous Peoples in this recommendation.163 It further clearly distinguishes between a "general" right of effective participation in public life and a narrower principle of informed consent regarding "decisions" directly relating to the rights and interests of indigenous people.164

As with the CESCR, CERD recognizes a right to FPIC through calling for a return of indigenous lands and territories, which have been inhabited or used without such prior consultation.165 On the basis of this General Recommendation, CERD consistently derives FPIC rights in the context of the exploitation of lands and natural resources of indigenous peoples from ICERD provisions protecting property rights and cultural rights from Art. 5 (d)(v) and Art. 5 (e)(vi) ICERD.¹⁶⁶ Cases like the ones described herein can therefore also amount to a violation of the ICERD.

hh. International Customary Law - Art. 19 and 32 **UNDRIP**

ILO convention 169 has so far only been ratified by 22 states and the interpretation of the provisions of the international human rights treaties through their treaty bodies (see above, [d.]-[g.]) creates no legallybinding effect for state parties (see above, [Ch. 2][A.] [III.]); moreover, additional human rights obligations have to be taken into consideration. As described above ([Ch. 2][A.][I.]), states can further be bound by customary international law (ICL). While a full-size analysis of the question as to what extent FPIC rights of indigenous rights form part of ICL would go beyond the scope of the present study,167 the most important developments in this context, notably the UNDRIP, will be analyzed. The practice of international organs and their resolutions, notably the resolutions of the UN General Assembly, are an important material source of ICL.168

¹⁶⁰ P. Thronberry, 'Confronting Racial Discrimination: A CERD Perspective', Human Rights Law Review 5 (2005) 2, pp. 239, 254.

¹⁶¹ Ibid.

¹⁶² Ibid. See General recommendation XXIII on the rights of indigenous peoples of 18 August 1997, UN Doc. A/52/18 of 26 September 1997, Annex V. During the drafting process of the recommendation the latest draft of the then proposed UN declaration on the rights of indigenous peoples, a similar declaration and respective national legislation developed at the time in Latin America, particularly Argentina were consulted, see CERD, Summary Record of the 1235th Meeting, CERD/C/SR.1235 (5 August 1997) para, 93.

¹⁶³ CERD, General recommendation XXIII on the rights of indigenous peoples of 18 August 1997, UN Doc. A/52/18 of 26 September 1997, Annex V.

¹⁶⁴ P. Thronberry, 'Confronting Racial Discrimination: A CERD Perspective', Human Rights Law Review 5 (2005) 2, pp. 239, 260. See CERD, General recommendation XXIII on the rights of indigenous peoples of 18 August 1997, UN Doc. A/52/18 of 26 September 1997, para. 4 (d). See further on the respective interpretation of Committee member R. Wolfrum, at CERD, Summary Record of the 1235th Meeting, CERD/C/SR.1235 (5 August 1997) para. 67.

¹⁶⁵ Ibid., para. 5.

See, e.g., CERD, Concluding observations-Ecuador, UN Doc. CERD/C/ECU/CO/19 of 22 September 2008, para. 16; CERD, Concluding observations-Namibia, UN Doc. CERD/C/NAM/ CO/12 of 22 September 2008, para. 18; CERD, Concluding observations-USA, UN Doc. CERD/C/USA/CO/6 of 8 May 2008, para. 29 and CERD, Concluding Observations: Australia, UN Doc. CERD/C/AUS/CO/14 of 14 April 2005, para. 11.

See in this regard, inter alia, C. Doyle, 'Indigenous Peoples, Title to Territory, Rights and Resources - The transformative role of free prior and informed consent', 2015; T. Ward, 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law', 10 Northwestern Journal of International Human Rights, vol. 54, 2011.

See J. Crawford, 'Brownlie's Principles of Public International Law', 8th ed., 2012, p. 24.

The UNDRIP,¹⁶⁹ while not yet constituting ICL in its entirety, can at least in some respects be seen as declaratory of customary international law.¹⁷⁰ It has also, at least in certain parts, already been invoked as reflecting ICL and binding upon domestic courts.¹⁷¹ Additionally, the declaration as a whole serves as a guide for interpretation for other international human rights obligations. This is illustrated by the CERD, which promotes the UNDRIP as a "guide to interpret" obligations under the Convention on the Elimination of all Forms of Racial Discrimination relating to indigenous peoples.¹⁷²

Art. 19 UNDRIP enshrines a general FPIC right, adopting the wording of Art. 6 ILO Convention 169. The UNDRIP therefore equally calls for consultation with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them. A more specific FPIC right, which draws from Art. 15 ILO Convention 169, is contained in Art. 32 UNDRIP. Hereafter, the free and informed consent of the affected peoples has to be obtained "prior to the approval of any project affecting their lands or territories and other re-

- by a majority of 144 states in favor, 4 votes against (Australia, Canada, New Zealand and the United States) and 11 abstentions (Azerbaijan, Bangladesh, Bhutan, Burundi, Colombia, Georgia, Kenya, Nigeria, Russian Federation, Samoa and Ukraine). Interestingly, Colombia abstained regardless of the fact that its has ratified ILO Convention 169 in 1991. Explaining its abstention, Colombia's representative stated that in spite of the fact that the Declaration was not legally binding for the State, some aspects of the Declaration were in direct contradiction with Colombia's internal legal system, including provisions of articles 30, 19 and 32, forcing Colombia to abstain on the text.
- 170 See P. Oldham / M. Frank, "We the Peoples...' the United Nations Declaration on the Rights of Indigenous Peoples', Anthropology Today, 2008, 24 (2), p. 5.
- 171 See particularly the 2007 landmark decision of the Belize Supreme Court Cal (on behalf of the Maya Village of Santa Cruz) and others & Coy (on behalf of the Maya Village of Conejo) and others v. Attorney-General of Belize and Minister of Natural Resources and Environment Claims Nos. 171 and 172 of 2007, Supreme Court of Belize, Judgment of 18 October 2007, unreported, as cited by J. Rehmann, in 'International Human Rights Law', 2nd ed., 2010, p. 490.
- 172 See UN Doc. CERD/C/USA/CO/6 of 8 May 2008, para. 29.

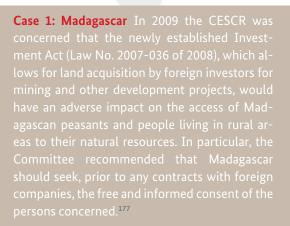
sources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources." Therefore, states that voted "yes" on General Assembly resolution 61/295¹⁷³ adopting the UNDRIP have at least a strong political obligation to the rights enshrined in the declaration.

2. Right to Participation and Information

a. Description of Risk Area and Case Studies

Apart from the specific situation of indigenous peoples, especially relating to the effect the mining projects have on their "special relationship" 174 to their lands, non-indigenous peoples are often comparably affected.175 Therefore, as a principle of international human rights law, affected individuals and communities have to have access to information and need to be included in the planning and implementation of decisions and development projects affecting their own fundamental interests. 176 LSM projects, as other major development projects in, for example, the energy sector, often intensively affect the environment, as will be shown below. This regularly affects the interests of a large number of individuals and communities so that interference in these rights often occurs.

- See above, note 169.
- 174 See UN Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, 'Study on the Problem of Discrimination Against Indigenous Populations', UN Doc. E/CN.4/Sub.2/1986/7/Add.1, 1986, para. 196.
- 175 See, e.g., 'The Rights of Non-Indigenous 'Forest Peoples' with a focus on Land and Related Rights - Existing International Legal Mechanisms and Strategic Options', Forest Peoples Program, November 2013.
- 176 See L. Collins/P. Simons, 'Participatory Rights in the Ontario Mining Sector: An International Human Rights Perspective', McGill International Journal of Sustainable Development Law and Policy, Vol. 6, Issue 2 (2010), 177-216 (186 et seq.).



Case 2: DRC The CESCR expressed its deep concluded in a transparent and public way.¹⁷⁸

ber of regional human rights treaties, 180 more specific "procedural rights" are recognized under international environmental law. Here, a general principle of public participation and information in decisionmaking about public resources emerged from the 1970s. 181 Principle 10 of the UN Rio Declaration on Environment and Development from 1992 stipulates that environmental issues are best handled with the participation of all concerned citizens, so that each individual shall have appropriate access to relevant information and the opportunity to participate in decision-making processes.¹⁸² By stating that "the international human rights normative framework includes the right of those affected by key decisions to participate in the relevant decision-making processes,"183 the CESCR has now explicitly endorsed public participation as part of human rights law.184 On the regional level, Art. 24 of the African Charter of Human Rights, which establishes the right of all peoples to have a general satisfactory environment, is to be noted. This provision requires the performance of environmental and social impacts studies prior to all major industrial development projects, providing information to those communities exposed to hazardous materials and activities and giving individuals the opportunity to be heard and to participate in decisions affecting their communities.185

b. Human Rights Analysis

aa. Participatory Rights under Human Rights Law

Participatory rights are a well-established principle under international human rights law. 179 While basic participatory rights are to be found in a num-

- See CESCR, Poverty and the ICESCR, UN Doc. E/C.12/2001/10 of 10 May 2001, para 12.
- B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014,
- See the interpretation of the African Commission on Human and Peoples' in Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria, Communication No. 155/96 of 27 October 2001, para. 53; available at: http:// www.achpr.org/files/sessions/30th/comunications/155.96/ achpr30 155 96 eng.pdf.

¹⁷⁷ CESCR, Concluding Observations: Madagascar, UN Doc. E/C.12/ MDG/CO/2 of 16 December 2009, para. 12.

CESCR, Concluding Observations: DRC, UN Doc. E/C.12/COD/ CO/4 of 20 November 2009, para. 13, 14.

¹⁷⁹ See L. Collins/P. Simons, 'Participatory Rights in the Ontario Mining Sector: An International Human Rights Perspective', McGill International Journal of Sustainable Development Law and Policy, Vol. 6, Issue 2 (2010), 177-216 (186 et seq.)

See, inter alia, Art. 9 and 10 ACHPR, Art. 13 und 23 ACHR and Art. 10-11 ECHPR.

See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials',

See UN Doc. A/CONF.151/26 (Vol. I) of 12 August 1992, Princi-

bb. Art. 1(2) ICESCR

The right to economic self-determination is enshrined in Art. 1 (2) ICESCR, which reads:

"All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence."

This right comprises the State's continuing procedural obligations to ensure transparency in disposing of public resources.186 This is, as recognized by the CESCR, indispensable for the realization of economic, social, and cultural rights, which highly depends on the availability of public information.187 On these grounds, the CESCR has considered the granting of new contracts to foreign mining companies a violation right to economic self-determination as enshrined in Art. 1 (2) ICESCR, because it was "surrounded by a significant lack of transparency or mismanagement."188 Furthermore, it has called upon States Parties to seek, prior to any contracts with foreign companies, the free and informed consent of the persons concerned. 189 Shortcomings in the information and inclusion of the communities and individuals affected by a mining project can therefore constitute a violation of Art. 1 (2) ICESCR – to indigenous but also to non-indigenous peoples and individuals.

cc. Right to Information, Art. 19, 25 ICCPR

The right to information is a right in and of itself and one of the rights upon which free and democratic societies depend.190 It derives from the right to freedom of expression and the right to take part in public affairs, stipulated in articles 19 and 25, respectively, of the ICCPR.¹⁹¹ Art. 19 (2) ICCPR further covers the right of access to information regarding the Covenants rights in general that are held by public bodies or other entities which carry out public functions.192 It encompasses the right of individuals to seek, request and receive information of public interest as well as information concerning themselves that may affect their individual rights.¹⁹³ In the latter case, the individual concerned has a more extensive right to be informed of specific information.¹⁹⁴ The higher the risk of harm deriving from a States party's decision is, the more important the right to information becomes.195 If a State party's decision-making may essentially compromise even the way of life and culture of a minority group, it should be undertaken in a process of information-sharing and consultation with the affected communities (Art. 27 ICCPR). 196

- UN Doc. E/CN.4/2000/63 of 18 January 2000, para. 42.
- See the 2015 report of the UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, UN Doc. A/HRC/30/40 of 8 July 2015, para. 22.
- 192 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 18.
- 193 See the 2013 report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, UN Doc. A/68/362 of 4 September 2013, para. 19 and more extensively, set out a general right of access to 'environmental information for individuals and NGOs', Art. 4 Aarhus Convention, see for more details J. Ebbesson, 'Access to Information on Environmental Matters', in: R. Wolfrum (ed.), MPEPIL, 2009, para. 18.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 446.
- See UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/ HRC/30/40, para. 29; e.g. workers have the right to remove themselves from situations they believe are hazardous which is contingent on information about the risks, see para. 31.
- 196 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 18; See also Principle 10 of the Rio Declara-

B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 67.

¹⁸⁷ See CESCR, Concluding Observations: Azerbaijan, UN Doc. E/C.12/1/Add.20 of 22 December 1997, para. 29.

¹⁸⁸ CESCR, Concluding Observations: DRC, E/C.12/COD/CO/4 para. 13 (20 November 2009).

¹⁸⁹ CESCR, Concluding Observations: Madagascar, E/C.12/MDG/ CO/2 para. 12 (16 December 2009).

The right to information is limited insofar as it is opposed by grave interests of secrecy on the part of the State or a private data bank, in accordance with Art. 19 (3) ICCPR.197 In cases of serious violations of human rights, it is generally acknowledged that there is an overriding public interest in the revelation of information.198

To give an effect to the right to information, States parties should make every effort to ensure easy, prompt, effective, and practical access to information.199 Beyond the obligation of States to refrain from interfering with the distribution of information, they also have the duty to provide information with or without request.²⁰⁰ Therefore, States parties should enact necessary positive measures, such as clear rules and procedures concerning the timely processing of requests for information.²⁰¹

Potentially affected individuals therefore have the right to seek, request and receive information on planned mining projects. While the right to information applies in all situations of mining-induced effects on individual rights, this becomes particularly important with a view to the many environmental effects of mining activities that can lead to numerous human rights violations, as will be shown below.

- tion on Environment and Development.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 446; See UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para. 38.
- 198
- See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19.
- ²⁰⁰ UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para. 48, 63.
- See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19; M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 448.

B. Construction

I. Description of Mining Phase

Following a positive assessment of the feasibility of developing an ore body and further planning, the next phase in a mine life cycle is the construction of the mine. The most significant activity during this phase is the construction of underground or surface mine workings to provide direct access to the ore body.²⁰² This comprises clearing of the area, the construction of mine and ore processing facilities, waste management areas, and other site infrastructure.

While construction activities vary considerably from project to project, common elements are site preparation activities such as the stripping and stockpiling of overburden for reclamation (if suitable) and the construction of mine infrastructure.203 Depending on a number of factors, including the size of the operation, the location, and the proposed mining and milling processes to be used, infrastructure may include: transportation facilities, including access roads to the site, on-site roads, and in some cases an airstrip, rail line or port facility; ore handling and processing facilities; mine waste disposal facilities; industrial water supply, management and wastewater treatment systems; power infrastructure, including power distribution system and any on-site generation facilities; shops, offices, warehouses and accommodations; fuel supply and storage; vehicle storage and maintenance facilities; explosives storage facility; potable water supply, distribution and treatment system; and sewage and waste disposal (including incinerators, landfill and land farm).204

As a last step in the construction stage, which could also be seen as already being part of the operations phase, underground or surface mine workings are built to directly access the ore body. While open pit mines are constructed to extract ore close to the surface, deeper or more irregularly shaped ore bodies

²⁰² See ECPMM, p. 27.

²⁰³ Ibid.

²⁰⁴ Ibid.

are generally mined by underground methods. Underground methods include drilling and blasting to fragment the rock. Once the rock is crushed, it is removed from the mine. Most of the material removed during the construction phase is waste rock. Ore that is removed is stockpiled for later processing.²⁰⁵

II. Risk Areas and Human Rights Analysis

1. Area Clearing

a. Description of Risk Area and Case Studies

As described above, area clearing constitutes one of the most essential activities during the construction of a mine. This step is necessary to perform further site preparation, like the stripping of overburden, but also to build the mine infrastructure. Area clearing therefore requires the removal and destruction of all settlements in the area. Mining projects, as other major development projects, are therefore the cause to some of the most extensive resettlements and displacements (Case 1-2) and thus are often discussed in the broader context of development-induced displacements and resettlements.²⁰⁶ Since communities are not very likely to just abandon their lands, mining-induced dispossessions and evictions regularly cause human rights conflict, which often leads to vi-

olence (Case 3 and [Ch. 5][B.][I.]). However, it is widely recognized that such area clearing measures, including evictions and resettlements, can be justified under particular circumstances, as will be illustrated below. Thus, even cases of forced violence can ultimately be justified and therefore do not constitute a violation of the specific human rights (Case 4). Such "Forced evictions" are defined as "the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/ or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection."207 While unjustified forced evictions occur under different mining-related circumstances, they predominately arise in situations of authoritarian governance and are therefore dealt with under the respective section below ([Ch. 5][B.][II.]). Another less visible but more pervasive problem of LSM-related area clearing measures is inappropriate resettlement. Affected individuals and communities are left without adequate housings and access to food, water and work (Case 5-8). Such resettlements especially affect indigenous groups and peoples who maintain a special relationship to their traditional lands and territories. This particular risk area will be separately analyzed in the following section. The human rights problems described in the present risk area mainly occur in the constructions phase and are therefore analyzed here. However, they, of course, sometimes occur in later phases of the mine life cycle, such as during the operations phase. Finally, it is noteworthy that comparable human rights implications can occur from the environmental impact of LSM projects, forcing individuals and communities out of the area. For the related human rights analysis please refer to section [C.][II.][1.] below.

.....

²⁰⁵ Ibid.

The majority of academic case studies on mining-induced displacements and resettlements (MIDR) are located within the broader literature on development-induced displacements and resettlements (DIDR), see B. Terminski, 'Development-induced Displacement and Resettlement: Theoretical Frameworks and Current Challenges', Revista Europea de Derecho de la Navegacion Maritima y Aeronautica, vol. 30, 2013 or Bennett, O./Mac-Dowell, C. 'Our fields are gone, our lifestyle has changed: coal mining in India', in: O. Bennett / C. MacDowell (eds.), Displaced: the Human Cost of Development and Resettlement, 2012, pp. 123-150. For specific literature on MIDR see T. Downing, 'Avoiding New Poverty: Mining-Induced Displacement and Resettlement', MMSD / IIED, Working Paper No. 58, 2002, p. 7. See further J. Owen/D. Kemp, 'Mining-induced displacement and resettlement: a critical appraisal', Journal of Cleaner Production, vol. 87, 15 January 2015, pp. 478-488 with further references.

²⁰⁷ CESRC General Comment No. 7 (1997), 'The right to adequate housing (art. 11.1 of the Covenant): forced evictions , UN Doc. E/1998/22 of 20 May 1997, para. 3.



Case 1: India Development-induced displaceeconomic recovery since the Nehru-era.208 Min-Jharkhand, West Bengal, and Andhra Pradesh.²⁰⁹ Pradesh 100541 (1980-95).²¹⁰ Rough estimations people between 1947 and 2000.211

Case 2: Brazil Mining projects sometimes indiwas to provide power for aluminum smelting.212

See generally on DIDR in India S. Somayaji/S. Talwar (eds.), 'Development-induced Displacement, Rehabilitation and Resettlement in India: Current issues and challenges', 2011.

See M. Areeparampil, 'Displacement Due to Mining in Jharkhand', Economic and Political Weekly, Vol. 31, No. 24 (1996), pp. 1524-1528 (1524 et seq.).

See W. Fernandes, 'Mines, Mining and Displacement in India', in: G. Singh / D. Laurence / K. Lahiri-Dutt (eds), Proceedings of 1st International Conference on Managing the Social and Environmental Consequences of Coal Mining in India, November 19-21, 2007, New Delhi, India, Indian School of Mines University, Dhanbad, pp. 333-344 (343).

²¹¹ Ibid. Fernandes considers earlier estimates arriving at 2.55 million between 1950 and 1990 (see, e.g., M. Singh, 'Mining and Its Impact on Tribals in India: Socio-Economic and Environmental Risks', International Journal of Social Science and Humanities Research, Vol. 3, Issue 2, April - June 2015, 429-439 (431) and T. Downing, 'Avoiding New Poverty: Mining-Induced Displacement and Resettlement', MMSD/IIED, Working Paper No. 58, 2002, p. 3 as too low.

²¹² See the feasibility report of the Tucurí Dam Project as cited by E. La Rovere / F. Mendes, 'Tucurui Hydropower Complex Brazil', final report prepared for the World Commission on Dams (WCD), WCD Case Study, November 2000, p. 43.

nização e Reforma Agrária)²¹³ and two Indian reserves.²¹⁴ See also the Suriname case below.

Case 3: Suriname The Maroon village of Nieuw were forced off their lands.²¹⁵ In 1995, they again

Case 4: Germany The case of the Sorban Village fied by the European Court of Human Rights.²¹⁶

Case 5: Mozambique Tete province coal mine

- 213 See at http://www.incra.gov.br.
- See J. Tundisi / M. Santos / C. Menezes, 'Tucurí Reservoir and Hydroelectric Power Plant Management Experience Brief', available at http://www.worldlakes.org/uploads/Tucurui_15Jun03.pdf.
- E. Kambel/F. MacKay, 'The Rights of Indigenous Peoples and Maroons in Suriname', International Work Group for Indigenous Affairs / The Forest People Program (1999), p. 105.
- See ECtHR, Noack u. a./. Deutschland, Decision of 25 May 2000 (Complaint No.: 46346/99), see Menschen Rechts Magazin, Heft 3/20, 192 et Seq.

away to a site with agricultural land of deeply uneven quality, unreliable access to water, and diminished access to key sources of non-farming income. Many resettled households reportedly experienced periods of food insecurity, or when available, dependence on food assistance financed by the companies that resettled them.²¹⁷

Case 6: Bangladesh Phulbari coal mining project. Severe human rights concerns arose from the resettlement planning of the proposed open pit coal mining project in the northwest of Bangladesh. While 80 percent of the land that would be taken for this project is agricultural, there would not be enough adequate land to meet replacement needs.²¹⁸ Therefore, neither land nor cash compensations would adequately mitigate the impact of the mining project on local communities.²¹⁹ The implementation of the Phulbari coal mining project is currently halted (since 2006/07) due to "political and social uncertainty," according to the mining company.²²⁰

Case 7: Mongolia In the Omnogovi Aimag (province) in the Southern Gobi Desert region, the Oyu Tolgoi copper/silver/gold mine has caused several environmental and social concerns. The semi-nomadic herders of the region are pastoralists as a consequence of the environment they have lived in for centuries and are tied

217 See 'What is a House without Food? - Mozambique's Coal Mining Boom and Resettlements', 2013, HRW Report of 2013, pp. 48 et seq.

See 'The Phulbari Coal Project: An Assessment of the Draft Resettlement Plan Prepared by Global Coal Management/ Asia Energy Corporation', report by the International Accountability Project, commissioned by the Bank Information Center, August 2008, 8 et seq, available at https://www.evb.ch/fileadmin/files/documents/BankenundMenschenrechte/Phulbari RP Assessment August 08.pdf. See further the company's response at http://business-humanrights.org/sites/default/files/media/documents/gcm-response-un-statement-phulbarimar-20-2012.pdf.

219 See 'The Phulbari Coal Project: An Assessment of the Draft Resettlement Plan Prepared by Global Coal Management/Asia Energy Corporation', report by the International Accountability Project, commissioned by the Bank Information Center, August 2008, p. 9.

See at http://www.gcmplc.com/project-status.

to their winter camp-sites and water sources The license area of the Oyu Tolgoi mining project is 10 km x 10 km, which overlays traditiona pasture and water sources of a group of 11 herder families who were involuntarily resettled.²²¹

b. Human Rights Analysis

aa. Right to Adequate Housing, Art. 11 ICESCR

Art. 11 ICESCR stipulates that States parties "recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions." The human right to adequate housing is thus directly derived from the right to an adequate standard of living.²²² From its content, it guarantees the right to live somewhere in security, peace and dignity.223 Adequacy, with regard to housing, comprises legal security of tenure, availability of services, materials, facilities and infrastructure, affordability, habitability, and accessibility; the location must be adequate in terms of access to employment options, health-care services, schools, child-care centers and other social facilities; finally, housing must be culturally adequately constructed.224 With regard to the security of tenure, it is important to note that the protected tenure under the right to adequate housing can take a variety of forms, including rental (public and private) accommodation, cooperative housing, lease, owner-occupation, emergency housing, and informal settlements, including occupation of land or property.²²⁵

However, the right to adequate housing is not guaranteed as an absolute right. Following the general framework outline above, restrictions need to be

²²¹ See L. Johnston, Mongolia – 'Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report', USAID report, May-June 2011, EGAT/ FSP 16

²²² See CESCR General Comment No. 4 (1991), 'The Right to Adequate Housing (Art. 11 (1) of the Covenant)', UN Doc. E/1992/23 of 13 December 1991, para. 1.

²²³ Ibid., para. 7.

²²⁴ Ibid., para. 8.

²²⁵ Ibid., para. 8 (a).

prescribed by law, pursue a legitimate aim, and apply only those measures necessary to reach that aim. As mentioned above, it is recognized that forced evictions can be justified if prescribed by law²²⁶ and when they are "unavoidable and necessary for the general welfare of a state."227

The cases outlined for the present risk area therefore fall within the scope of protection of the right to housing under Art. 11 (1) ICESCR. As stated above, this is the case regardless of the type of tenure, so that forced evictions cannot simply be justified by claiming that the affected individuals or communities did not legally hold the required property or tenure rights.²²⁸ However, evictions and resettlements can be justified if they meet the requirements described. This means that, in principal, states are obliged to respect the right to housing by refraining from any forced evictions and resettlements in the context of LSM projects, if these are not justified. This means that they not only have to use their control over their administrative and police organs but also over state-owned mining companies to prevent unjustified forced evictions and also inappropriate resettlements. As part of the duty to protect, they are further obligated to enact and enforce appropriate legislation.²²⁹ Appropriate legislation is thereby not only required to prohibit such interference in the right to housing, but also has to precisely regulate under which circumstances forced evictions can be justified and which measures have to be taken to mitigate any negative effects of area clearings and resettlements. For cases in which these requirements are not met (Case 5-7), the right to adequate housing as enshrined in Art. 11 ICESCR can be violated. If, on the other hand, all requirements are met, even forced evictions against the will of the affected individuals and communities ultimately do not constitute a violation of Art. 11 (1) ICESCR (Case 4).

bb. Right to Privacy, Art. 17 ICCPR

The protection against forced evictions under Art. 11 (1) ICESCR is reinforced by Art. 17 (1) ICCPR, which complements the right not to be forcefully evicted without adequate protection.230 According to this provision, "no one shall be subjected to arbitrary or unlawful interference with his privacy, family [and] home." The protection of the "home" under Art. 17 (1) ICCPR extends not only to dwellings in the true sense but to all types of houses regardless of legal title or nature of use²³¹ and indicates the place where a person resides.232 Any invasion of that sphere that occurs without the consent of the individuals affected constitutes an interference with Art. 17 ICCPR.²³³ Moreover, this right is not only guaranteed against interferences emanating from State authorities but also from natural or legal persons.²³⁴ It is further important to note that Art. 17 ICCPR does not contain a limitation clause, which allows for restrictions in the interest of public order or similar purposes.²³⁵ Instead, the provision provides merely the prohibition of unlawful or arbitrary interference. The prohibition of arbitrary interference aims at guaranteeing that even interference provided for by law must be reasonable in the particular circumstances.²³⁶ More-

See, in this vein, CESRC General Comment No. 7 (1997), 'The right to adequate housing (art. 11.1 of the Covenant): forced evictions, UN Doc. E/1998/22 of 20 May 1997, para. 3.

²²⁷ See the 'Basic Principles and Guidelines on Development-Based Evictions and Displacement' of the UN Special Rapporteur on adequate housing, see UN Doc. A/HRC/4/18 of 5 February 2007, Annex I, para. 60.

²²⁸ See South African Constitutional Court in Port Elizabeth Municipality v. Various Occupiers in 2004 ('Forced Evictions', OHCHR Fact Sheet No. 25 / Rev. 1, Geneva, 2014, 5) and in Occupiers of 51 Olivia Road v. City of Johannesburg and Others in 2008, Judgment of 19 February 2008.

See on this on the regional level: IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4; African Commission on Human Rights v. Federal Republic of Nigeria, Judgment of May 27, 2002, para. 57.

²³⁰ Ibid.

²³¹ M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 399.

HRC, General Comment No 16 (1988) 'Article 17 (Right to Privacy)', 8 April 1988, para. 5.

See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 400.

HRC, General Comment No 16 (1988) 'Article 17 (Right to Privacy)', 8 April 1988, para. 1.

See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 381.

See HRC, General Comment No 16 (1988) 'Article 17 (Right to Privacy)', 8 April 1988, para. 4.

over, arbitrary interference comprises elements of injustice and unpredictability. ²³⁷ On these grounds, structured according to the general framework described above ([Ch.2][D.][II.]), restrictions on the right to privacy have to be prescribed by law, pursue a legitimate aim, and shall only include the measures that are necessary to reach that aim. A legitimate aim, in this context, has been recognized in "the general welfare of a state." Forced evictions can therefore be justified if they are unavoidable and necessary for this aim. However, it is to be noted that relevant legislation that allows for such encroachment upon the right to privacy must specify in detail the precise circumstances in which such interferences may be permitted. ²³⁹

In light of the foregoing, forced evictions clearly fall within the scope of protection of Art. 17 ICCPR. State Parties therefore have to respect the right to privacy by refraining from any unjustified forced evictions through their security and police forces or their state-owned mining companies. They further have to protect the right to privacy from third party interventions through enacting and enforcing appropriate legislation. As mentioned above, this includes clear regulation, under which circumstances the right to privacy can lawfully be restricted. In cases in which states fall short of fulfilling these obligations, violations of the right to privacy occur. Furthermore, with a view to protecting this right from third party interference, the due diligence obligations described above need to be fulfilled by the state (see above, [Ch.2][B.][I.][2.]).

cc. Right to Food, Art. 11 (1) ICESCR

Another core human right, derived from the right to an adequate standard of living in Art. 11 ICESCR, is

237 See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 383. the right to adequate food. Based on art. 25 (1) UDHR, the right to food is enshrined in many other international and regional instruments.240 The right to food is indivisibly linked to the inherent principle of human dignity. A violation of the right to food often also constitutes a violation of other human rights, since the fulfillment of the right to food is a precondition for the enjoyment of other human rights.²⁴¹ The right to food guarantees the right to feed oneself in dignity. 242 The State has to provide for conditions that enable people, through their own efforts, to buy or to produce food.²⁴³ It is thereby not simply the right to a minimum of calories but the right to nutrition that enables a person to live a healthy, active life. As defined by the CESCR, "The right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement."244

As described above (see above, [Ch.2][B.][I.]), the "respect, protect, fulfill" framework for human rights

- 240 See right to food is further enshrined in several international and regional instruments, see inter alia, art. 24 (2)(c) and 27(3) CRC, art 12(2) CEDAW, art. 25(f) and 28(1) CRPD; art. 2 Genocide Conventions and art 20 and 23 of the 1951 Convention relating to the Status of Refugees; art 12. Additional Protocol to the American Convention on Human Rights in the area of Economic, Social, and Cultural Rights or "Protocol of San Salvador"; art. 15 Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa or "Maputo Protocol".
- 241 CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 4.
- 242 Ibid.
- 243 OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 1, see at http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf; B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, pp. 869 et seq.
- CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 6. The UN Special Rapporteur on the right to food defines further: "The right to have regular, permanent and free access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear", see at http://www.ohchr.org/EN/Issues/Food/Pages/FoodIndex.aspx.

See the 'Basic Principles and Guidelines on Development-Based Evictions and Displacement' of the UN Special Rapporteur on adequate housing, see UN Doc. A/HRC/4/18 of 5 February 2007, Annex I, para. 60.

²³⁹ HRC, GC No 16: Article 17 (Right to Privacy) para. 8 (8 April 1988)

obligations was first developed for the right to food. On the basis of Art. 2 (1) ICESCR, States have to re**spect** the right to food by not interfering with this right and its scope of protection as outlined above. They further have to abstain from suspending legislation or policies providing access to food.245 Furthermore, States have to **protect** the right to food through preventing third parties from the destruction of food sources.²⁴⁶ Finally, as part of their duty to fulfill, states have to meet minimum core obligations (see above, [Ch.2][B.][I.][3.]). These stipulate that food must be available, accessible, and adequate: Available means from natural resources and for sale in markets and shops.247 In this sense, Accessible means economic and physical access, while economic access is to be understood as "affordable," which can also include sufficient wages and social security.248 Adequate means that the food is available, accessible, and must satisfy dietary needs; it must be safe for human consumption and free from contamination. Finally, it must be culturally adequate, i.e. be in line with cultural and religious eating habits.249 The right to food, however, does not obligate a State party to feed its population. Only in extreme situations, such as an armed conflict, can the State be exceptionally obligated to actively provide for food resources.²⁵⁰ Nevertheless, a state unable to fulfill its obligation for reasons beyond its control has the burden of proving that this is the case and that it has done all foreseeably possible to obtain international support without success.251

245 OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 3, http://www.ohchr.org/Documents/Publications/ FactSheet34en.pdf (last visited: 09/09/2015), p. 18.

- **246** Ibid.
- 247 CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 12.
- ²⁴⁸ Ibid., para. 13.
- 249 Ibid., paras. 8-11; OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 3, see at http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf.
- B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 870
- 251 CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 17.

Applied to the cases of the present risk area, relocating individuals in the construction phase of a mine to a place where they no longer have longer access to food, due to a lack of arable land or access to local markets (Case 5), violates Art. 11 (1) ICESCR. States directly involved through their organs or a state-owned mining company would fall short of fulfilling their respective obligations to respect the right to food under art. 11 (1) ICESCR. As part of their obligation to protect, States further have to enact and enforce adequate legislation to prevent third parties, such as private mining companies or their security forces, from violating the right to food through mining-related area clearing measures.²⁵²

dd. Right to Water, Art. 11 (1) ICESCR

As with the right to housing and the right to food, the right to water is derived from Art. 11 (1) ICESR. Other than housing and food, however, water is not specifically mentioned in Art. 11 (1) ICESR. Nevertheless, the CESCR has found that "Article 11, paragraph 1, of the Covenant specifies a number of rights emanating from, and indispensable for, the realization of the right to an adequate standard of living "including adequate food, clothing and housing". The use of the word "including" indicates that this catalogue of rights was not intended to be exhaustive. The right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival."253 The human right to water and sanitation was subsequently recognized by General Assembly Resolution 64/292 of 28 July 2010, which acknowledged that clean drinking water and sanitation are essential to the realization of all human rights. Furthermore, the right to water is recognized in Art. 14 (2)(h) CEDAW and Art. 24 (2)(c) CRC.

²⁵² Ibid., para. 19.

²⁵³ See CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 3. See further, CESCR, General Comment No. 6 (1995), 'The Economic, Social and Cultural Rights of Older Persons', UN Doc. E/1996/22 of 8 December 1995, para. 32.

From its normative content, the right to water contains both freedoms and entitlements. This comprises the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as the arbitrary disconnections or contamination of water supplies.254 By contrast, the entitlements include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.255 These elements of the right to water need to be adequate for human dignity, life and health.256 This includes availability - sufficient water supply for drinking, personal sanitation, washing of clothes, food preparation, personal and household hygiene;257 a sufficient quality must be insured - water must be safe;258 and accessibility. The latter comprises physical accessibility, which is to be understood as access in reach, without danger or threat; economic accessibility, meaning affordable water sources and access in a non-discriminatory manner to all - particularly to marginalized groups.²⁵⁹ This comprises the denial to access to water, arbitrary water allocation, diminishing or polluting water, and limiting or destroying water service infrastructure.²⁶⁰

Mining-induced resettlements of individuals to a location where they have no adequate access to water therefore falls within the scope of protection of the right to water. Thus, States Parties must respect the right to water by refraining from mining-related evictions and resettlements that lead to such encroachment of the right to water. Furthermore, they have to prevent third parties, mainly private sector companies, from interfering in the right to water of individuals. This comprises, as usual, the enacting and enforcing of appropriate legislation.²⁶¹

- 254 See CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 10.
- 255 Ibid.
- 256 Ibid., para. 11.
- 257 Ibid., para. 12 (a).
- 258 Ibid., para. 12 (b).
- 259 Ibid, para. 12 (c).
- 260 Ibid, paras. 21, 44 (a).
- ²⁶¹ Ibid, paras. 22, 44 (b).

ee. Right to Health, Art. 12 ICESCR

Similar to the right to food and the right to water, the right to health is indispensable for the exercise of other human rights.²⁶² An important link exists especially to the right to water,²⁶³ because unsafe water, lack of sanitation, and poor water management are major threats to health.²⁶⁴ While the right to health is enshrined in many international human rights instruments,²⁶⁵ its most important basis is Art. 12 ICESR.

While Art. 12 (1) ICESCR establishes the general right to health, Art. 12 (2) provides guidance to States as to which actions should be taken. The enumeration in Art. 12 (2) ICESCR, however, is not exhaustive. ²⁶⁶ Art. 12 (1) defines the right to health as the "right of everyone to the enjoyment of the highest attainable standard of physical and mental health." The scope of the right to health under Article 12 ICESCR is broad and is not confined to the right to health care. It is neither

- 262 CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 1.
- 263 See CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 3 and CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, paras. 11, 12 (a), (b) and (d), 15, 34, 36, 40, 43 and 51.
- This becomes most visible when looking at worldwide statistics. In 2002, approximately 2,7 per cent of deaths were attributable to these water related issues, see World Health Organization, 'Water, sanitation and hygiene: Quantifying the health impact at national and local levels in countries with incomplete water supply and sanitation coverage', Environmental Burden and Disease Series, No. 15 (Geneva, 2007).
- 265 See art. 24 (1) UDHR, art. 5 (e)(iv) CERD, art 11 (1)(f), 12 CEDAW, Art. 1 as well as Art. 2 ECHR on the regional level.
- CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 13. Art. 12 (2) ICE-SCR lists steps to be taken for States parties to reach full realization of the right to health, which comprise: (a) The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child; (b) The improvement of all aspects of environmental and industrial hygiene; (c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases; (d) The creation of conditions which would assure to all medical service and medical attention in the event of sickness.

defined negatively as the absence of disease, but positively extends to all elements necessary to a physical, mental and social state of well-being.267 The right to health is not a right to be healthy but contains freedoms and entitlement.268 It provides for the right to be free from interference and entitlement to health protection, prevention of diseases and equal access to medicines.²⁶⁹ The right to health contains the following interrelated and essential elements: Availability of functioning public health and health-care facilities, goods and services, as well as programs;²⁷⁰ Accessibility of health facilities, goods and services to everyone without discrimination, including the four overlapping dimensions of non-discrimination, physical accessibility, economic accessibility (affordability) and information accessibility to information and ideas concerning health issues;²⁷¹ and finally, acceptability of all health facilities, goods and services, which must be respectful of medical ethics and culturally appropriate.²⁷²

With a view to the cases outlined for the present risk area, it needs to be noted that the right to health is closely linked to the rights described above. Therefore, the right to health is defined as an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health, such as access to safe and potable water and adequate sanitation and an adequate supply of safe food, nutrition, and housing.²⁷³ Thus, when individuals and communities are being deprived of these determinants of health, notably safe water, food and housing, through resettlements and relocation as described in the cases above, the right to health is affected, too. Along with their obligations under the right to housing, food and water, states can violate their obligations under Art. 12 ICESCR in the present risk area.

ff. Right to Work, Art. 6 (1) ICESCR

Art. 6 (1) ICESCR stipulates that the States Parties recognize "the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right." The right to work is essential to human survival and to life with dignity.²⁷⁴ It contributes, at the same time, to the survival of the individual and to that of his/her family, and insofar as work is freely chosen or accepted, to his/her development and recognition within the community.²⁷⁵ The right to work is therefore closely linked to the other subsistence rights, namely the right to food. The right to work is an individual right that belongs to each person and is at the same time a collective right.²⁷⁶

"Work" in the sense of Art. 6 is to be understood as "decent work," respecting fundamental human rights and rights of workers and providing an income allowing workers to support themselves and their families as highlighted in article 7.277 Furthermore, subsistence agriculture, hunting and fishing can be defined as "work," thus falling within the scope of the definition of Art. 6 ICESCR. 278 The right to work guar-

- Ibid., para. 8.
- 269 Ibid.

- 271 Ibid., 12 (b).
- 272 Ibid., 12 (c).
- 273 Ibid., 11.

- ²⁷⁴ CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant), UN Doc. E/C.12/GC/18 of 6 February 2006,
- ²⁷⁵ See the preamble to ILO Convention No. 168, 1988: "... the importance of work and productive employment in any society not only because of the resources which they create for the community, but also because of the income which they bring to workers, the social role which they confer and the feeling of self-esteem which workers derive from them", as cited by the CESCR in General Comment No. 18, para. 1.
- CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant), UN Doc. E/C.12/GC/18 of 6 February 2006, para, 1.
- 277
- See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials',

²⁶⁷ CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 4.

The precise nature of the facilities, goods and services will vary depending on numerous factors, including the State party's developmental level, see CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 12 (a).

antees the freedom to choose and accept work where it is available and not to be deprived of work unfairly.²⁷⁹ The States Parties' obligation to respect the right to work contains the prohibition of forced work and interference with equal access.²⁸⁰

As illustrated by Case 5 and 6, mining-induced resettlements often leave relocated communities in a place where there is not enough appropriate land for farming or not enough means to perform the previous work. Since Art. 6 ICESCR is to be interpreted as including subsistence activities, such as farming, fishing, and hunting, resettlements in the present Risk Areas also affect the right to work, along with the other subsistence rights analyzed above. States are therefore equally obligated, as described above, to respect and protect the right to work.

2. Area Clearing/Resettlement and Indigenous People

a. Description of Risk Area and Case Studies

The loss of land and territory particularly affects Indigenous peoples and groups (Case 1-3), since they often maintain what was described as a "deeply spiritual special relationship" between themselves and their land "as basic to their existence as such and to all their beliefs, customs, traditions and culture." Most indigenous groups do not simply rely on the natural resources of their lands as a basis for their livelihoods

as subsistence farmers or fishermen. Their lands are essential to their very survival as distinct cultures with distinct languages, institutions, beliefs, etc.²⁸² Mining-induced land loss therefore threatens the livelihoods of indigenous peoples (Case 4-5). Sacred sites, relics and artifacts, essential to indigenous cultures, are being lost due to mining-induced destruction of the environment (Case 6-7). Cases 5 and 7 further demonstrate that the present human rights risk area also comprises scenarios in which indigenous lands and territories that are not constantly inhabited are lost. Furthermore, an indirect loss of indigenous land can occur through environmental pollution, destroying their natural habitat and forcing and them to leave their territories. While in the cases outlined below individual members of indigenous communities suffer from violations of the same general human rights analyzed above, this section solely looks at specific indigenous rights.

Case 1: India Mining-inducted displacements and resettlements in India particularly affect indigenous groups. In East-Indian Jharkhand, one of the countries' most important mining regions, indigenous groups known as Adivasis (literal meaning "original settlers," mainly Santals, Mundas, Oraons, Hos, Gonds, Kharias, Bhuiyas, Bhumij, Birhors, Turi, Sadans, Kamar, Kl'mharsa and Kurmis) form 85 to 90 per cent of the local population and were almost exclusively affected by mining-induced displacements.²⁸³ Total estimates arrive at 83543 displaced individuals belonging to tribal and indigenous groups in Jharkhand between 1980 and 1995 alone.²⁸⁴

2014, p. 311.

.....

²⁷⁹ CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 4.

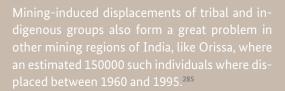
²⁸⁰ Ibid., para. 23.

²⁸¹ See UN Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, 'Study on the Problem of Discrimination Against Indigenous Populations', UN Doc. E/CN.4/Sub.2/1986/7/Add.1, para. 196. See further Art. 13 (1) of the ILO Convention No. 169, which recognizes the special importance for the cultures and spiritual values of indigenous peoples regarding the relationship with lands and territories which indigenous peoples occupy or use otherwise.

²⁸² See 'Indigenous & Tribal Peoples' Rights in Practice - A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, p. 97.

²⁸³ See M. Areeparampil, 'Displacement Due to Mining in Jharkhand', Economic and Political Weekly, Vol. 31, No. 24 (Jun. 15, 1996), 1524-1528 (1524 and 1526 et seq.).

W. Fernandes, 'Mines, Mining and Displacement in India', in: G. Singh/D. Laurence/K. Lahiri-Dutt (eds), Proceedings of 1st International Conference on Managing the Social and Environmental Consequences of Coal Mining in India, November 19-21, 2007, New Delhi, India, Indian School of Mines University, Dhanbad, pp. 333-344 (343).



Case 2: Indonesia The Grasberg Gold and Copplacement of about 15000 people.²⁸⁶ The project give up their lands for the mining project.²⁸⁷

Case 3: Philippines The B'laans, an indigenous B'laans, would have to relocate.²⁸⁸

Case 4: Bangladesh Phulbari coal mining pro-

meet replacement needs.²⁸⁹ Therefore, neither local communities.²⁹⁰ The implementation of the certainty," according to the mining company.²⁹¹

Case 5: Mongolia Regarding the Oyu Tolgoi as indigenous people.292 The Mongolian herd-

- See 'The Phulbari Coal Project: An Assessment of the Draft Resettlement Plan Prepared by Global Coal Management/Asia Energy Corporation', report by the International Accountability Project, commissioned by the Bank Information Center, August 2008, pp. 8 et seq., available at https://www.evb.ch/fileadmin/ files/documents/BankenundMenschenrechte/Phulbari RP Assessment August 08.pdf. See further the company's response http://business-humanrights.org/sites/default/files/media/documents/gcm-response-un-statement-phulbari-
- See 'The Phulbari Coal Project: An Assessment of the Draft Resettlement Plan Prepared by Global Coal Management/Asia Energy Corporation', report by the International Accountability Project, commissioned by the Bank Information Center, August
- See at http://www.gcmplc.com/project-status.
- Investors and Owners do not consider the herders as an 'indigenous people', which is disputed by civil-society organizations, as demonstrated by a related complaint procedure with the European Bank for Reconstruction and Development (EBRD) (see at http://www.ebrd.com/downloads/integrity/OT_addition_to_ the complaint 4.2014.pdf). The discussion revolves around the question, if the herders fall within the definition of 'indigenous people' arising from EBRD Performance Requirements and Guideline No. 7 (see at http://www.ebrd.com/who-we-are/ourvalues/environmental-and-social-policy/performance-requirements.html), which is disputed by EBRD (see the EBRD, Project Complaint Mechanism, Eligibility Report, p. 67, para. 60.

- 285 Ibid.
- T. Downing, 'Avoiding New Poverty: Mining-Induced Displacement and Resettlement', MMSD/IIED, Working Paper No. 58,
- See C. Ballard, Human Rights and the Mining Sector in Indonesia-A Baseline Study, report of October 2001, commissioned by the MMSD by the IIED.
- ²⁸⁸ See M. Wetzlmaier, 'Cultural Impacts of Mining in Indigenous Peoples' Ancestral Domains in the Philippines', Austrian Journal of Southeast Asian Studies, 5 (2) (2012), pp. 335-344 (341).

ject is 10 km x 10 km, which overlays traditional pasture and water sources of a group of 11 herder families who were involuntarily resettled in 2004.²⁹³ These resettlements have not been fully successful. According to a fact-finding mission conducted in 2011, only 4-5 of the resettled families still continue their tradition of semi-nomadic pastoralism.²⁹⁴

Case 6: Australia The gold mining project at Lake Cowal in New South Wales, which was launched in 1999, threatens significant cultural and spiritual sites of the local Indigenous nation, the Wiradjuri. Many of their relics and artifacts are located around the lake and could be destroyed by the open-pit mine, which could grow to approximately 100 hectare on the surface, and 325 meter deep.²⁹⁵

Case 7: Mexico Mining projects for precious metals in the Zacatecas state threaten to destroy Wirikuta, an important sacred zone to the indigenous group of the Wixaritari. Wixaritarian traditional lands cover four states in the center of the country: Zacatecas, Jalisco, Nayarit and Durango. They regularly perform pilgrimages to Wirikuta, which lies in the heart of the desert of San Luis Postosí. Furthermore, a species of cactus known as jikuri (peyote) grows only here in Wirikuta. This hallucinogenic cactus, which is consumed raw by the Wixaritari, is used by their shamans to retell the story of the creation of the universe according to the their tradition.²⁹⁶

293 See L. Johnston, 'Mongolia-Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report', USAID report, May-June 2011, EGAT/ESP, 16.

²⁹⁴ Ibid., 17.

295 See I. Hammer, 'Indigenous Human Rights and the Mining Industry', Indigenous Law Bulletin, Vol. 7, Issue 30, May / June 2012, 26-29 (28). See further the related trail Williams v The Director General of the Department of Environment and Conservation (formerly National Parks and Wildlife Service) v (2) Ors [2004] New South Wales Land and Environment Court, 613 (5 November 2004), in which traditional owner and native title claimant, Neville Chappy Williams, successfully claimed, that the consent for the mining project was invalid because he was not adequately consulted.

296 I. Hammer, 'Indigenous Human Rights and the Mining Industry', Indigenous Law Bulletin, Vol. 7, Issue 30, May/June 2012, 26Case 8: Bolivia The most famous example of involuntary resettlement in Bolivia concerns the Ayllu Jesús de Machaca indigenous community in the La Paz Department (about 300 inhabitants in 2005). In 2005, Coeur d'Alene Mines Corporation resettled several families in this village in order to construct a tailings facility for its silver mine. Resettlement took place without the provisions of World Bank guidelines for the involuntary resettlement of indigenous people. The problem for indigenous peoples was particularly the privatization of pastoral lands they had previously used. In July 2008, affected people took to protests, demanding an independent evaluation of the environmental consequences of the project, thereby protecting the rights of indigenous peoples to bigger participation in local development.

Case 9: Germany The case of the Sorban Village of Horno, which was resettled to make way for a lignite mining project, constitutes a case of evictions against the will of the affected individuals, which was ultimately recognized as being justified by the European Court of Human Rights.²⁹⁷

b. Human Rights Analysis

aa. Art. 14 ILO Convention 169 (ILO 169)

Art. 14 of the Convention stipulates that the rights of ownership and possessions of indigenous people over the lands which they traditionally occupy or the lands to which they have traditionally had access for their subsistence and traditional activities shall be recognized. Art. 13 (1) ILO No. 169 recognizes the special importance for the cultures and spiritual values of indigenous peoples regarding the relationship with lands and territories indigenous peoples occu-

^{29 (27);} Kurt Hollander, 'Batalla en el desierto: La lucha entre la plata y el peyote en Wirikuta' [Battle in the desert: The fight between silver and peyote in Wirikuta], *Letras Libres* (Mexico) Febrero 2012, p. 44.

²⁹⁷ See ECtHR, Noack u. a./. Deutschland, Decision of 25 May 2000 (Complaint No.: 46346/99), see Menschen Rechts Magazin, Heft 3/20. 192 et Sea.

py or otherwise use. In this context, it must be understood that when the Convention talks about "lands," the concept embraces the whole territory they use, including forests, rivers, mountains, coastal sea, the surface, and the sub-surface.298 Governments are obliged to take necessary steps to identify - or in other words to demarcate - these lands.²⁹⁹ Art. 14 (3) requires the establishment of adequate procedures within national legal systems to allow indigenous people to claim recognition of their rights or compensation for land of which they were deprived.³⁰⁰ States Parties, in cases that fall within the scope of the present risk area, have to respect and protect indigenous land rights on several levels. First, they must present a general recognition of these lands, which includes an obligation to actively identify these lands, including non-exclusively used lands. Secondly, they must effectively protect the ownership and possession of these lands. This includes protection against encroachments through third parties, including mining companies. Finally, States Parties have to guarantee access to remedy procedures for indigenous groups that have been deprived of their lands.

bb. Art. 15 (1) ILO 169

Besides the general land rights portrayed above, indigenous peoples' rights to the natural resources pertaining to their lands is safeguarded by Art. 15 (1). This right comprises the right to participate in the use, management and conservation of these resources. As shown above, Art. 15 (1) is applicable to the exploitation of minerals and sub-surface resources. Indigenous people are therefore first of all entitled to profit from the mineral deposits pertaining to their lands themselves. However, in cases where states retain the ownership of mineral or sub-surface, they are at least entitled to the participation and information rights described above. In addition to these rights, affected indigenous peoples shall, "wherever possible," participate in the benefits of resource exploitation Additionally, they "shall receive fair compensation for any damages which they may sustain as a result of such activities" (Art. 15 (2)).

cc. Art. 16 ILO 169

While Art. 13-15 establish the land rights regime under ILO convention 169, Art. 16 specifically deals with the removal of indigenous peoples from their lands. As a basic principle, Art. 16 (1) stipulates that indigenous people shall not be removed from the lands they occupy. However, as with the rights analyzed with regard to general area clearing measures above, this protection against evictions and removal is not guaranteed as an absolute right. According to Art. 16 (2), it can be restricted "where the relocation of these peoples is considered necessary as an exceptional measure." While the definition of a case where the removal of indigenous peoples from their land is "necessary" thus falls within the discretion of the States Parties, this discretion is limited. Such removals are only allows as "exceptional measures." Therefore, they can only be performed as an exception. This further limits the scope of what can constitute a legitimate aim. While evictions can be justified when they are unavoidable and necessary for the general welfare of the state, as described above (see [1][a]), it seems questionable whether or not this equally applies to evictions of indigenous people. Considering the special relationship of indigenous communities to their land, Art. 16 (1) establishes the general principle that they shall not be removed. Necessary exceptions can comprise situations in which a removal is unavoidable due to drastic climate change, for example.301 General welfare considerations, if applicable at all as a legitimate aim, would have to meet much

²⁹⁸ See 'Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, p. 91

See Art. 14 (2); Yupsanis A., 'ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989-2009; An Overview' Nordic Journal of International Law 79 (2010) 441.

A. Yupsanis, 'ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989-2009; An Overview', Nordic Journal of International Law, 79 (2010), p. 441.

See 'Indigenous & Tribal Peoples' Rights in Practice - A Guide to ILO Convention No. 169', ILO Programme to Promote ILO Convention no. 169 (PRO 169), International Labour Standards Department, 2009, 98.

higher requirements than in normal cases of evictions, making the removal of indigenous groups the ultima ratio.

Art. 16 further guarantees a set of rights if the removal of indigenous peoples has to be performed. These comprise FPIC rights (Art. 16 (2)) and further procedural and information rights when no agreement has been reached. Most importantly, Art. 16 (3) enshrines a right to return to the lands when the reasons for removal are no longer valid. In cases where the removal becomes a permanent situation, indigenous people have a right to "lands of equal quality and legal status" according to Art. 16 (4). Finally, Art. 16 (5) stipulates that indigenous peoples have the right to receive full compensation for any loss or injury the relocation may have caused, such as loss of house or property or adverse health impacts due to change of climate.³⁰²

dd. Art. 27 ICCPR

Although this provision is primarily concerned with the rights of members of minority groups, the Human Rights Committee protects individuals from indigenous peoples under Art. 27 ICCPR.³⁰³

This provision stipulates that persons belonging to ethnic, religious or linguistic minorities shall not be denied the right to enjoy their own culture in community with the other members of their group.³⁰⁴ Some aspects of these rights protected under that article may consist in a way of life that is closely associated with territory and use of its resources, which is particularly true of members of indigenous communities.³⁰⁵ The full enjoyment of the rights enshrined in Art. 27 ICCPR requires positive legal measures of protection.³⁰⁶

302 Thid

ee. Customary International Law

As with indigenous FPIC rights, it is worth analyzing to what extent indigenous land rights are emerging as universally binding rules of customary international law. In this context, the UNDRIP needs to be analyzed again. The practice of international organs and resolutions relating to legal questions in UN organs, notably the General Assembly, from an important part of the material source of such customary international law.³⁰⁷ UNDRIP is not a legally binding instrument but is in some respects declaratory of customary international law.³⁰⁸ The rights recognized in this declaration, however, constitute the minimum standards for the survival, dignity, and well-being of the indigenous peoples of the world.³⁰⁹

(1) Art. 8 (b) UNDRIP

This provision stipulates that States shall provide effective mechanisms for prevention of, and redress for, any action, which has the aim or effect of dispossessing indigenous people of their lands, territories or resources.

(2) Art. 25 UNDRIP

Art. 25 UNDRIP enshrines the right of indigenous people to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.

(3) Art. 26 UNDRIP

This article entitles indigenous people with the right to the lands, territories and resources, which they have traditionally owned, occupied or otherwise

³⁰³ See HRC, Chief Bernard Ominayak and the Lubicon Lake Band v. Canada, 167/1984 (1990), Ziff. 33.

HRC, General Comment No. 23, 'The rights of minorities (Art. 27)', UN Doc. CCPR/C/21/Rev.1/Add.5 of 26 April 1994, para. 1.

³⁰⁵ Ibid., para. 3.2, 7.

³⁰⁶ Ibid., para. 7.

J. Crawford, 'Brownlie's Principles of Public International Law', 8th ed., 2012, p. 24.

³⁰⁸ See P. Oldham / M. Frank, "We the Peoples...' the United Nations Declaration on the Rights of Indigenous Peoples', Anthropology Today, 2008, 24 (2), p. 5.

³⁰⁹ See Art. 43 of the Declaration.

used or acquired. By virtue of this article, States are obliged to give legal recognition and protection to these lands, territories and resources.

(4) Art. 29 UNDRIP

Moreover, Art. 29 guarantees the right of indigenous people to the conservation and protection of the environment and productive capacity of their lands. States shall therefore ensure that no storage or disposal of hazardous materials shall take place in the lands of indigenous people without their free, prior, and informed consent.

C. Operations

Description of Mining Phase

While the different initial phases overlap and exploration and construction activities often proceed together, the operations phase represents the period during which ore is recovered and processed to obtain a product for market.310 Such operations can generally be subdivided into three main activities: ore extraction, processing and residue management. Extraction activities can be best characterized by the most important extraction methods - open pit and underground mining.

Open-pit mining is the method of choice to extract deposits that are close to the surface. Apart from a number of other factors like the ore grade, the geometry of the deposit and other physical and site characteristics, it is the preferred method; since lead times are shorter, production can be awarded to subcontractors, thereby reducing investment costs and overall energy costs, which are often lower than in underground mining. Therefore, the cost per ton of ore mined is generally lower, too.311 This, of course, changes with a certain depth of the ore deposit that makes underground mining more economical.

Open pits must usually be much wider than they are deep to ensure stability of the pit walls. The stripping ratio (the ratio of waste rock to ore) of an open pit mine depends on the geometry of the ore body, ore grades, slope stability, and site geology. It gradually increases significantly as the mine expands into greater depths; thereafter, more waste rock needs to be removed to secure access to the ore body.312

In underground mines, on the other hand, the ore is extracted through a series of vertical shafts and ramps and horizontal drifts and adits. Extraction is more selective than in open-pit mining, and the ratio of waste rock to ore generated is much lower. Waste rock is mostly used as backfill to provide roof and wall support underground. Waste rock that is not used for construction or as backfill is disposed of on the surface.313

Extracted ore is processed to recover the valuable minerals. Ore typically consists of small amounts of valuable minerals in close association with much larger amounts of waste minerals of no economic value (gangue material). These valuable minerals are separated (liberated) from the gangue through milling and concentration, which produces higher purity/grade of the residual material. The most important steps in ore processing include crushing, grinding and chemical or physical separation.

To separate valuable metals from the gangue, the ore must be ground fine enough to apply physical, chemical and biological separation methods. Crushing is done dry to roughly break up the ore before a finer size reduction is achieved through grinding.314 The most important physical separation process-

312 Ibid.

³¹³ Ibid., p. 28.

³¹⁴ Ibid.

es include Gravity,³¹⁵ Magnetic³¹⁶ and Flotation Separation.³¹⁷ Chemical separation methods include heap-leaching, *in-situ* leaching or tank-leaching with alkaline cyanide solutions (precious metals) or sulphuric acid solutions (copper uranium and nickel ores).

Gangue material and mire waste are very important when assessing not only the environmental but also the human rights implications of mining activities. They are an inevitable result of ore separation.

Unwanted products of mining include overburden (the soil and rock that must be removed to gain access to a mineral resource)³¹⁸ and waste rock (rock that does not contain enough mineral to be of economic interest),³¹⁹ which is then deposited into designated waste sites. Although of no economic interest, waste rocks contain low-grade mineralization. If sulfide minerals are exposed to oxygen and water, they start to oxidize via a well-known set of autocatalytic reactions to give high concentrations of

Minerals can be separated on the basis of differences in density, particularly for iron ore and gold, as well as tungsten, tantalum and niobium. Gravity separation may also be used to pre-concentrate metallic minerals prior to further processing. Gravity separation tends to require the use of smaller amounts of process re-agents than some other ore separation methods, see ECPMM, p. 30.

Minerals can be separated on the basis of differences in magnetic susceptibility. Magnetic separation has been used in Canada to separate iron ore from waste minerals, to remove magnetite (iron oxide) and pyrrhotite (iron sulphide) from base metal ores prior to flotation, and to recover magnetite from copper concentrates. Like gravity separation, magnetic separation tends to require the use of smaller amounts of process reagents than some other ore separation methods, see ECPMM, p. 30.

Flotation is used for the separation of a wide variety of minerals on the basis of differences in surface properties of minerals in contact with air and water. It is the dominant process for the recovery of base metal ores and is also used in uranium and gold processing operations. To separate minerals using flotation, fine air bubbles are introduced into a mixture of ground ore in water, known as a slurry. In this slurry, mineral particles collide with air bubbles, and minerals that favor contact with air attach to the air bubbles and float to the surface of the flotation cell. As air bubbles accumulate at the surface, a froth forms and eventually overflows as the flotation cell tailings. A number of chemical reagents are used to aid the process, see ECPMM, p. 30.

³¹⁸ Ibid, p. 234.

319 Ibid.

total dissolved salts (particularly sulfates), low pH values, and high concentrations of dissolved metal ions (especially iron).³²⁰ The resulting solution is toxic to most forms of aquatic life and can lead to dramatic changes in ecosystem functioning as well as to changes in the structure and chemical composition of soils.³²¹ This phenomenon, which also occurs in nature as "acid rock drainage",³²² constitutes one of the greatest mining-induced environmental problems³²³ ("acid mine drainage"), particularly in areas with high precipitation.³²⁴

As a residue of ore separation, tailings are produced, which consist of finely ground rock, from which most of the valuable minerals have been removed using chemical reagents.³²⁵ This waste material is usually discharged into storage facilities and retained by dams or embankments. These retaining structures are constructed of the tailings themselves, mine waste, or earth or rock fill.³²⁶ Since the tailings contain residual chemicals and elevated levels of metals and storage facilities are prone to seepage, they can result in ground and surface water contamination and other environmental damage.³²⁷ Additionally, a lot of tailings contain very high concentrations of sulfides, which lead to acid drainage and the relat-

- P. Ashton / D. Love / H. Mahachi, 'An Overview of the Impact of Mining and Mineral Processing Operations on Water Resources and Water Quality in the Zambezi, Limpopo and Olifants Catchments in Southern Africa', CSIR-Environmentek, Pretoria, South Africaand Geology Department, University of Zimbabwe, Harare, Zimbabwe, contract report to the MMSD (SOUTHERN AFRICA) (2001).
- **321** Ibid.
- 322 See B. Downing, 'Natural Rock Drainage and its Impact on Background Metal Concentrations', see at http://technology.info-mine.com/enviromine/ard/Introduction/Natural.htm.
- This problems was once even described as the "most persistent industrial pollution problem in the United States" by the United States Department of the Interior, see C. Henrich, 'Acid Mine Drainage: Common Law, SMCRA, and the Clean Water Act', Journal of Natural Resources & Environmental Law, Vol. 10, Issue 2 (1994-1995), 235-260 (235).
- 324 See 'Breaking New Ground Mining, Minerals and Sustainable Development', MMSD/IIED Project Report, 2002, p. 238.
- 325 Thid p 235
- 326 Ibid
- 327 Ibid.

Another type of waste produced during mining operations is the residue of heap leaching. Here, the crushed ore is placed on a membrane-lined "pad" and irrigated with the appropriate reagent - cyanide in the case of gold or silver, and sulfuric acid in the case of copper or uranium.³²⁹ The leach solutions are then collected in channels around the pad and pumped to the processing plant, where the effluent is then re-charged with reagent and reused.330 This system, even if operated carefully, is prone to leaking,³³¹ which can lead to ground and surface water contamination. Furthermore, facilities need to be designed to control surface drainage to prevent erosion, seepage, or failure of the heap after recovery of the metals from the ore, because even after it is rinsed, some of the chemicals and elevated levels of metals may remain.332

II. Risk Areas and Human Rights **Analysis**

1. Environmental Impact

a. Description of Risk Area and Case Studies

LSM projects have one of the biggest environmental impacts in the entire industrial world, often only surpassed by gigantic hydropower projects. Large areas are needed to construct mines, notably in the field of open-pit mining, leading to the devastation and transformation of entire regions. Environmental contamination of soil, water and air occur and water resources are prone to depletion. These effects se-

..... 333 See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation Inter-

national, (2000), p. 28.

Expert consultation, M. Priester.

329 Ibid., p. 235.

330 Thid.

331 Thid.

332 Ibid.

ed environmental problems described above.328 Apart from environmental damage, catastrophic tailings dam failures occur with a certain frequency (see the respective risk area below, [II.][2.]).

shown below. Additionally, these environmental effects often lead to the irreversible loss of the lands of local communities, including tribal and indigenous people. This can lead to the displacement of affected communities. The related human rights implications, however, are comparable to the ones caused by inappropriate evictions and resettlements (see above, [B.] [1.]) and are therefore not separately analyzed. Cases of mining-related environmental effects can, for the purpose of the present study, be grouped as follows:

verely affect many of the most basic human rights, as

aa. Environmental Contamination

Mining-induced environmental contamination has many different sources. Chemicals like mercury or cyanide, which are being used in mineral processing, are often a source of contamination. Traditionally, this was mainly related to the pervasive mercury use, which was largely replaced by cyanide in modern LSM in the beginning of the 20th century.333 While cyanide is much more environmentally friendly than mercury, since it decomposes into harmless substances through oxidation,334 it can still cause environmental damage.335 Mercury pollution today still constitutes a major problem in the context of informal ASM (see below...).

Another important source of environmental contamination are mine wastes, such as waste rock, tailings, and mine water. Mine effluents, can be acidic and contain heavy metals (metal and coal mining), grease and oil (coal mining) or other pollutants.³³⁶ Comparable pollutants are found in tailings containing residual chemicals and elevated levels of metals

Expert consultation, Sven Renner, BGR.

See R. Moran, 'Cyanide in Mining: Some Observations on the Chemistry, Toxicity and Analysis of Mining-Related Waters', Invited Paper, Central Asia Ecology-99 Meeting, Lake Issyk Kul, Kyrgyzstan, June 1999.

R. Tiwary, 'Environmental Impact of Coal Mining on Water Regime and Its Management', Water, Air, and Soil Pollution, Vol. 132, Issue 1, November 2001, pp. 185-199 (185).

(See above, mining phases).³³⁷ These pollutants and the high level of metals can lead to the contamination of local environments and to the degradation of water quality of the region. Pollutants and dissolved metals reach the environment when untreated mine waters and tailings are directly dispersed into the open (Case 1) instead of being properly stored or treated. The latter often occurs through improperly constructed tailings storage facilities, which are prone to seepage, spillage (Case 3) or even collapse (Case 4, 5). Tailings facility failures sometimes even inundate entire villages through mudslides, causing additional human rights violations. Besides, tailings dam failures also constitute a risk area in the field of mine closure and abandoned mines.

Furthermore, contamination is caused by Acid Mine Drainage (AMD), which occurs if sulfide minerals are exposed to oxygen and water (see above, [I.], p. 67). Mining-induced AMD often occurs at waste rock piles, pit walls, or mine openings.³³⁸ The sulfuric acid and solution resulting from AMD is toxic to most forms of aquatic life and can lead to dramatic changes in ecosystem functioning as well as to changes in the structure and chemical composition of soils³³⁹ (Case 2)

Case 1: Papua New Guinea At the Porgera Joint Venture (PJV) gold mine in the Porgera valley, a remote region in the Enga Province in the highlands of Papua New Guinea, it was alleged in 2011 that the mine disposes approximately 6.05 million tons of tailings and 12.5 million tons of suspended sediment from erodible waste dumps annually into the downstream Porgera, Lagaip, and Strickland river systems, thereby pollut-

ing the river and endangering public health and safety of communities along the shores.³⁴⁰

Case 2: Kyrgyzstan - The Kumtor open pit gold mine, located in the Issyk Kul Province of Kyrgyzstan, produces 17,66 tons of gold (2010) and generates approximately 10 per cent of Kyrgyzstan's GDP.³⁴¹ At the same time, it reportedly poses severe environmental threats to the region. According to a study conducted in 2011, local ground and surface waters are contaminated by releasing elevated concentrations of numerous contaminants (uranium, arsenic, aluminum, iron, copper, molybdenum, manganese, nickel, zinc, chloride, sulfate, nitrate, ammonia, cyanides) into the environment.³⁴² Contamination sources include: natural rock contaminants from the waste rock, open pit walls and floor, tailings impoundment (both "treated" discharges and indirect seepage); and fuels and greases (mechanical equipment), process chemical spills, explosives, antifreeze and other chemicals.³⁴³ Local citizens reported that fish populations in the Kumtor River downstream of the mine were greatly depleted since operations began.³⁴⁴ Additionally, the Kumtor operations use roughly 4.38 billion liters of water per year, which increases the competition for water in the arid region with other downstream users (much of this water has degraded water quality once returned to the hydrogeologic system).³⁴⁵ Furthermore, Kumtor is said to use roughly 8 to 10 tons per day of cyanide to remove gold and silver from the ores (roughly 3650 tons of cyanide per year) without providing adequate data

³³⁷ See 'Breaking New Ground – Mining, Minerals and Sustainable Development', MMSD/IIED Project Report, 2002, p. 235.

P. Ashton/D. Love/H. Mahachi, 'An Overview of the Impact of Mining and Mineral Processing Operations on Water Resources and Water Quality in the Zambezi, Limpopo and Olifants Catchments in Southern Africa', CSIR-Environmentek, Pretoria, South Africaand Geology Department, University of Zimbabwe, Harare, Zimbabwe, contract report to the MMSD (SOUTHERN AFRICA) (2001), p. 337.

³³⁹ Ibid.

³⁴⁰ See the complaint filed with Mining Watch Canada in 2011 http://oecdwatch.org/cases/Case 210 and http://www.miningwatch.ca/categories/Porgera%20Mine%20-%20BarrickA.

³⁴¹ See http://bankwatch.org/our-work/projects/kumtor-gold-mine-kyrgyzstan.

³⁴² See R. Moran, 'Kumtor Gold Facilities, Kyrgyzstan: Comments on Water, Environmental and Related Issues', CEE Bankwatch Network Report, September 2011, p. 1.

³⁴³ Thid

³⁴⁴ Ibid.

³⁴⁵ Ibid., 2.

into the environment.³⁴⁶ Finally, waters of Lake eralized rock.347

Case 3: Tanzania The gold mining project in the the mine.348 This situation occurred when heavy ter into the near Tigithe River.349 Following this tamination.350

Case 4: Canada On August 4 2014, due to a environment.351 The breach of the tailings dam rimeter embankment foundation.352 Water tests

tory" by mine safety experts.353

Case 5: Sweden On September 8 2000, the repairs.354

bb. Water Depletion

Use of water in the mining industry shares many of the characteristics of other industrial uses but has some distinctive features: LSM projects are often realized in arid or semi-arid regions of the world (Case 7), and water is used in many different operational activities.355 These include:

- transport of ore and waste in slurries and suspen-
- separation of minerals through chemical pro-
- physical separation of material such as in centrifugal separation
- cooling systems around power generation

- 346 Ibid.
- 347 Thid.
- P. Mlowe / O. Olengurumwa, 'Fact Finding Mission Report, North Mara Mine, Tanzania', Legal and Human Rights Centre, 2011, p. 6.
- 349 Ibid.
- 350
- http://www.wise-uranium.org/mdaf.html. See also Independent Expert Engineering Investigation and Review Panel, 'Report on Mount Polley Tailings Storage Facility Breach' (30 January 2015), available at https://www.mountpolleyreviewpanel.ca/ final-report.
- See at http://www.wise-uranium.org/mdafmp.html.
- See 'Breach of tailings pond results in 'Largest environmental disaster in modern Canadian history", Australian Mine Safety Journal (12 August 2014) available at: http://www.amsj.com. au/news/breach-tailings-pond-results-largest-environmentaldisaster-modern-canadian-history.
- See at http://www.wise-uranium.org/mdafai.html.
- See I. Prosser (et al.), 'Water in mining and industry', in: Water: Science and Solutions for Australia, Commonwealth Scientific and Industrial Research Organization (CSIRO), CSIRO 2011, p.

- suppression of dust, both during mineral processing and around conveyors and roads
- washing equipment
- dewatering of mines.³⁵⁶

The dewatering of mines often leads to further problems. Mines that operate below the water table have to continuously pump out vast quantities of water in order to keep the mine pits dry.357 If the water is not reinjected into the ground to help regenerate the resource, effective extraction becomes high. Water extraction for mine draining purposes or the production process therefore can result in the damaging of aquifers and lowering groundwater tables.358 Ultimately, this water consumption can cause the drying up of springs and wells, which are needed for irrigation or for livestock and pastoralism (Case 8, 9) and permanently damage fragile eco-systems. Furthermore, LSM projects can lead to an indirect conflict over water resources when large numbers of mine workers are brought into remote arid or semi-arid regions, establishing settlements and also drawing from the scarce water resources of the region (Case 8).

Case 7: Kyrgyzstan The Kumtor open pit gold mine, located in the Issyk Kul Province of Kyrgyzstan, produces 17,66 tons of gold (2010) and generates approximately 10 per cent of Kyrgyzstan's GDP.³⁵⁹ At the same time, it reportedly poses severe environmental threats to the region. Besides other environmental impacts, the Kumtor operations use roughly 4.38 billion liters of water per year, which increases the competition for water in the arid region with other

downstream users.³⁶⁰ Much of this water has degraded water quality once returned to the hydrogeologic system.³⁶¹

Case 8: India The around 90 working iron ore mines in Goa have led to numerous problems, particularly related to water use and consumption. Most Goan mines operate below the water table and have to continually pump out mine pits. In some Goan villages, like Rivona and Caurem, this has reportedly led to the destruction of springs and wells that were polluted or dried out and therefore cannot be used to irrigate fields anymore. Mining projects have further caused water scarcity near the Sirigaon village in north Goa through puncturing the water table and reducing the area available for groundwater recharge by rain. Mining projects have further caused water scarcity near the Sirigaon village in north Goa through puncturing the water table and reducing the area available for groundwater recharge by rain.

Case 9: Mongolia In the Omnogovi Aimag (province) in the Southern Gobi Desert region, the development of the Oyu Tolgoi copper/silver/gold and particularly the Tavan Tolgoi coal deposits could potentially cause severe environmental problems due to the enormous need for water in the arid region.³⁶⁴ First mining projects, notably in the Tavan Tolgoi coal deposit, have reportedly already led to the drying up of shallow, manual wells, which are being used by the traditional herders of the region.³⁶⁵ The growing mining sector further increases the population in the region, with local soum centers doubling and tripling their population in last couple

³⁵⁶ Ibid.

³⁵⁷ See 'Out of Control – Mining, Regulatory Failure, and Human Rights in India', HRW report, 2012, p. 25.

³⁵⁸ Ibid. See further P. Ashton/D. Love/H. Mahachi, 'An Overview of the Impact of Mining and Mineral Processing Operations on Water Resources and Water Quality in the Zambezi, Limpopo and Olifants Catchments in Southern Africa', CSIR-Environmentek, Pretoria, South Africaand Geology Department, University of Zimbabwe, Harare, Zimbabwe, contract report to the MMSD (SOUTHERN AFRICA) (2001), I.

³⁵⁹ See http://bankwatch.org/our-work/projects/kumtor-gold-mine-kyrgyzstan.

³⁶⁰ R. Moran, 'Kumtor Gold Facilities, Kyrgyzstan: Comments on Water, Environmental and Related Issues', CEE Bankwatch Network Report, September 2011, p. 1.

³⁶¹ Ibid., p. 2.

³⁶² See 'Out of Control - Mining, Regulatory Failure, and Human Rights in India', HRW report, 2012, p. 25.

³⁶³ Ibid., p. 26.

³⁶⁴ See L. Johnston, 'Mongolia – Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report', USAID report, May-June 2011, EGAT/ ESP, p. 16.

³⁶⁵ See F. McGrath, 'Spirited away – Mongolia's mining boom and the people that development left behind', Fact-Finding Report, CEE Bankwatch Network, December 2011, p. 16.

of years.366 This, however, further increases the conflict over the scarce water resources.367 Waing activities.368

cc. Air Pollution

Dust and particulate matter are the most visible atmospheric effects and present another important environmental impact of mining activities. The building of roads and facilities, exploratory drilling, ore extraction and processing plants generate dust and particulate matter that not only affect visibility and respiration, but also pollute local streams and vegetation.369 Particulate matter is solid material suspended in the atmosphere, including road dust, soot, smoke particles, and suspended soil.370 If not properly controlled, these particulates can threaten human respiratory health by lodging in the lungs, causing problems ranging from minor irritation to deadly exacerbation of symptoms in chronic asthma sufferers371 or even silicosis.372 Fallout of particulate matter may also contaminate soils, vegetation and water (see above), and, if extensive and continuous, can lead to habitat destruction and species mortality.³⁷³ Finally, potentially harmful gases like carbon monoxide (CO), sulfur dioxide (SO2) and nitrous oxides (NOx) are generated manly during metal ore processing by metal smelters and refineries.374

Case 10: India Dust from trucks transportrectly through settlements.375 Later reports obprojects and their supportive infrastructure.³⁷⁶

Case 11: Mongolia Dust produced by, or relattechniques.³⁷⁷ Local herders reported that their to the dust that polluted their pastures.378 Sim-

- 367 Ibid.
- See S. Dugersuren (et al.), 'When the dust settles The Tayan Nuur iron ore mine's impacts on nomadic herders', Report of the second fact-finding mission to Tseel soum, Gobi Altai aimag, Mongolia, CEE Bankwatch Network, December 2014, p. 17.
- See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 29.
- 370 Ibid
- 371
- Silicosis is one of the severest health issues in mining as a consequence of air pollution, mostly within the mine (see below, ...) but also outside of it, expert consultation, Sven Renner, BGR.
- C. Down/J. Stocks, 'Environmental Impact of Mining', Applied Science Publishers Ltd., March 1977, 65.

- See A. Rosenfeld-Sweeting / A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 29. See further < http://www.miningfacts. org/Environment/How-are-waste-materials-managed-atmine-sites/#sthash.oKm4rAXc.dpuf.
- L. Noronha, 'Designing Tools to track health and well-being', Natural Resources Forum, Vol. 25, Issue 1, February 2001, pp. 53-65 (60).
- See 'Out of Control Mining, Regulatory Failure, and Human Rights in India', HRW report, 2012, p. 23. The report details that the respiratory problems observed by many locals could be related to silica in the iron ore dust.
- See S. Dugersuren (et al.), 'When the dust settles The Tayan Nuur iron ore mine's impacts on nomadic herders', Report of the second fact-finding mission to Tseel soum, Gobi Altai aimag, Mongolia, CEE Bankwatch Network, December 2014, p. 7 et seq.
- Thid.

³⁶⁶ See L. Johnston, 'Mongolia – Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report', USAID report, May-June 2011, EGAT/ ESP, p. 9.

of environmental implications of the Tavan Tolgoi coal-mining project.³⁷⁹

Case 12: United States/Canada The Trail Smelter Arbitration was a transboundary pollution case submitted to an arbitral tribunal by the United States and Canada and settled in 1941. A smelter in Trail, British Columbia, Canada, processed lead and zinc since 1896. The smelter emitted sulfur dioxide smoke, causing damage to forests and crops resulting in forest loss, lower food value, and declining soil productivity both in the surrounding area and across the Canada-US border in Washington, which eventually led American residents to complain. 381

b. Human Rights Analysis

aa. Right to Water, Art. 11 (1) ICESCR

As described above, the right to water, as derived from Art. 11 (1) ICESCR, can be interpreted as comprising the right to maintain access to existing water supplies and the right to be free from interference, such as disconnections from or contamination of water supplies. Furthermore, the availability and accessibility of a sufficient water supply for drinking, personal sanitation, washing of clothes, food preparation, personal and household hygiene, as well as a sufficient water quality can be understood as elements of the right to water. The described cases

of mining-induced water contamination (Cases 1-5) and water depletion (Cases 6-8) therefore fall within the scope of protection of the right to water. The right to water is thereby also affected if ground water tables are being lowered due to dewatering or punctuation (Case 8-9), since this leads to lower ground water tables and the drying up of wells and springs, making water resources no longer physically accessible.³⁸⁴

On the basis of the framework for state obligations described above (see above, [Ch.2][B.][I.]), states are obligated to respect the right to water by abstaining from all such activities that interfere with this right. More specifically, they are prohibited from implementing mining projects through state-controlled mining companies that negatively affect water resources, as outlined above. As found by the CESCR, this includes refraining from "unlawfully diminishing or polluting water, for example through waste from state-owned facilities." ³⁸⁵

The duty to protect further comprises the enactment and enforcement of adequate legislation, prohibiting water pollution and depletion.386 This, most importantly, includes the regulation of private sector mining companies. As described above, state obligations to prevent third party intervention cannot be unlimited, particularly with a view to environmental effects of mining activities. However, it has to be assessed if the state fulfilled its due diligence in this regard. Therefore, it has to be assessed on a case-bycases basis in the present risk area if the particular human rights violations stemming from the mining-related environmental effects should have been reasonably foreseeable. Such is the case if the public authorities knew or ought to have known of the existence of a real and immediate risk to a human right.387 Predictability, not positive knowledge, is

L. Johnston, 'Mongolia – Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report', USAID report, May-June 2011, EGAT/ESP, p. 4.

³⁸⁰ See the 'Trail Smelter Case' (US vs. Canada), UN 3 RIAA (1941) 1905, available at: http://legal.un.org/riaa/cases/vol_III/1905-1982.pdf.

³⁸¹ See M. Dixon / R. McCorquodale / S. Williams, 'Cases & Materials on International Law', 5th ed., 2011, p. 453; 'Trail Smelter Case' (US vs. Canada), UN 3 RIAA (1941) 1917. As for environmental law, the arbitral decision established the so-called polluter pays principle regarding transboundary pollution, see 'Trail Smelter Case' (US vs. Canada), UN 3 RIAA (1941) 1965, 1966.

³⁸² CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 10.

³⁸³ Ibid., para. 12 (a) and (b).

³⁸⁴ Ibid.

³⁸⁵ Ibid., paras. 21.

³⁸⁶ Ibid, paras. 44 (b).

³⁸⁷ See ICJ, Application of the Convention on the Prevention and Punishment of the Crime of Genocide (26 February 2007) ICJ Reports 2007, p. 43, para. 432; IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4, para 173;

therefore the crucial condition.³⁸⁸ Such foreseeability should be given in the cases of the present Risk Area, since these environmental effects are obvious and well-known as being one of the effects of such mining practice.

Furthermore, according to Art. 2 (1) ICESCR, limited state resources are taken into account with regard to State Parties' obligations under the covenant (see above, [Ch.2][B.][I.]). Nevertheless, they are obliged to use their available resources "to the maximum." On these grounds, the CESCR has found, with a view to the right to water, that "a state which is unwilling to use the maximum of its available resources for the realization of the right to water is in violation of its obligations under the Covenant."389 Furthermore, it stated that "if resource constraints render it impossible for a State Party to comply fully with its Covenant obligations, it has the burden of justifying that every effort has nevertheless been made to use all available resources at its disposal in order to satisfy, as a matter of priority, the obligations outlined above."390

bb. Right to Health, Art. 12 ICESCR

As described above, Art. 12 (1) defines the right to health as the "right of everyone to the enjoyment of the highest attainable standard of physical and mental health." This broad scope of the right to health comprises all elements necessary to a physical, mental and social state of well-being.391 Along with several entitlements, the right to health also provides for the freedom from interference in one's physical health.392 Water contamination, as described in the cases above, not only interferes with one of the determinants for the right to health per se, being clean and potable water,393 but may also cause severe health problems (Case 3). In line with their human rights obligations analyzed above, States can violate Art. 12 ICESCR if they implement mining activities that lead to the environmental effects described above. They equally have to take all necessary steps to the maximum of their available resources. Furthermore, they have the burden of justifying that every effort has nevertheless been made, if resource constraints render it impossible to comply fully with their obligations under the right to health.394

cc. Right to Food, Art. 11 (1) ICESCR

As described above, the right to food as enshrined in Art. 11 (1) ICESCR obliges State Parties to provide for conditions that enable people, through their own efforts, to buy or produce food. 395 Elements of the right to food include physical and economical availability and accessibility, as well as the adequacy of the food.396 It further must be safe for human consumption and free from contamination.³⁹⁷As shown by the cases above, mining-induced environmental contamination and pollution often has detrimental effects on local food sources, such as fish populations (Case 2) or agricultural products (Cases 10-12). These effects are exacerbated by the "mobility" of contaminations. They are disseminated through air and water and enter the food chain through bioaccumulation, notably in fish. This leads to negative effects on local but also other communities, which exist downstream or in the region (Case 2, 10-12).

- ECtHR (28 October 1998) Osman vs. UK, No. 23452/94, para.
- See J. Salmon, 'Dictionnaire de Droit International Public', 2011, p. 771; A. Kees, 'Responsibility of States for Private Actors', in R. Wolfrum (ed.), MPEPIL, 2011; A. Epiney, 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992, pp. 250 et seq.
- CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 41.
- 391 CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 4.

- ³⁹² Ibid., para. 8.
- ³⁹³ Ibid., para. 4.
- 394 CESCR GC 14, para. 28.
- OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 1, http://www.ohchr.org/Documents/Publications/ FactSheet34en.pdf (last visited: 09/09/2015), 3; B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, 869 et seq.
- CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 7 et seq.
- Ibid., para. 10.

As with the right to water, States, in this context, are obligated to respect the right to food by abstaining from all activities, under their control or influence, that interfere with this right. More specifically, they are prohibited from implementing mining projects to this effect.

Furthermore, as part of their duty to protect, they have to sufficiently regulate responsible third parties.³⁹⁸ This includes the sufficient control of mining projects implemented by the private sector through enacting and enforcing appropriate legislation. As described above, they thereby have to fulfill their due diligence in preventing mining-related environmental impacts that foreseeably lead to the violations of the right to food. In the same vein, the CESCR has found that a state "unable to fulfill its obligation for reasons beyond his control, has the burden of proving that this is the case and that it has done all possible to obtain international support without success."³⁹⁹

dd. Right to Housing, Art. 11 (1) ICESCR

The mining-induced environmental effects outlined above can further violate the right to housing, as derived from Art. 11 (1) ICESCR. As shown above, this right is inextricably linked to the right to water and food, which are all part of the right to an adequate standard of living as enshrined in Art. 11 (1) ICESCR and Art. 25 UDHR. The encroachments on the above-mentioned rights are therefore equally affecting the right to adequate housing, which comprises – as part of its adequacy dimension – sustainable access to natural and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, as well as means of food. Mining-induced environmental contamina-

tion as described above, leaving the housings of individuals and local communities with inadequate access to food or water (Cases 2, 3, 8, 10) can therefore also constitute a violation of the right to housing.

ee. Right to Remedy

The right to an effective remedy as embodied in Art. 2 (3) ICCPR ensures an accessory right to remedy against violations of the Covenant. 401 This means that, beyond the statutory implementation of human rights, the protection of the individual against violations of the guaranteed civil and political rights are primarily domestic concerns. 402 Art. 2 (3) (a) ICCPR states that the remedy must be effective. When a State Party provides ineffective remedies, even though effective remedies are available, it has not fulfilled its obligations under Art. 2.403 The nature of an effective remedy can be diverse and depend on the relevant circumstances of the concrete case, the respective national legal system, and the right concerned. 404 In consequence, an appropriate effective remedy can be the formal chain of judicial appeals as well as informal, preventive measures or criminal investigations. 405 Furthermore, a remedy can only be deemed effective when it is implemented and not only provided de jure (Art. 2 (3) (c) ICPPR). 406 The type of enforcement depends on the character of the violated right and the remedy afforded - either by the execution of an enforceable judgment, by an order, an administrative act, or by some other action of the responsible organ.407 In any case, the access to justice requires the existence of independent and impartial bodies.408

- **402** Ibid
- ⁴⁰³ Ibid, 63, 65 f.
- ⁴⁰⁴ Ibid, 65 f.

- 406 M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 72 et seq.
- **407** Ibid, 73.

³⁹⁸ Ibid., para. 19. See further OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 1, http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf (last visited: 09/09/2015), 18.

³⁹⁹ CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 17.

⁴⁰⁰ See CESCR General Comment No. 4 (1991), 'The Right to Adequate Housing (Art. 11 (1) of the Covenant)', UN Doc. E/1992/23 of 13 December 1991, para. 8 (c).

⁴⁰¹ M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 62, 67.

Ose also the Guiding Principles on Business and Human Rights (Principle No. 25), p. 27 accessible at http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.

⁴⁰⁸ See the 2008 report of the UN Special Rapporteur on Hazardous Waste, UN Doc. A/HRC/7/21, Para 30.

Even though the ICESCR has no provision comparable to Art. 2 (3) ICCPR, it can be argued that the recognized rights in the ICESCR also require that remedies be available for victims of violations. 409 As a consequence, the access to effective judicial or other appropriate remedies can be applied to the violations of rights of both Covenants.410

Within the "respect, protect and fulfill" framework (see above, [Ch.2][B.][I.]), it is the duty of the State to adopt appropriate legislative, administrative and other measures towards the full realization of the right to remedy. This right, thereby, has two aspects: access to justice and substantive redress, which require the existence of independent and impartial bodies with the capacity to afford redress after a hearing, thereby respecting due process guarantees.411 Therefore, the right to remedy becomes particularly important in the field of environment-related human rights violations through mining activities: The causes for these negative effects are often very hard to determine so that related human rights violations cannot be easily attributed to the respective state (Case 8). In these situations, as a consequence of the right to remedy, affected individuals and groups, in any event, have the right to a full and effective investigation into the causes for such events.412

Right to Information, Art. 19, 25 ICCPR

Furthermore, the right to information can be affected. As described above, it encompasses the right of individuals to seek, request, and receive information

- **409** Ibid.
- ⁴¹⁰ For example regarding a violation of the right to health (Art. 12 ICESCR), see CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 59.
- 411 See the 2008 report of the UN Special Rapporteur on Hazardous Waste, UN Doc. A/HRC/7/21, para 30.
- ⁴¹² Ibid. The CESCR has further noted, in its General Comment No. 14, that any person or group victim of a violation of the right to health should have access to effective judicial or other appropriate remedies at both the national and international levels and should be entitled to adequate reparation, see CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 59.

of public interest as well as information that concerns them that may affect their individual rights.413 In the latter case, the individual concerned has a more extensive right to be informed of specific information.414 The importance of the right to information increases equivalently with risk of harm deriving from a States Party's decision.415 In addition to the availability and accessibility of relevant information, it has to be ensured that people who may be exposed to hazardous substances and wastes, for instance, are aware that they have a right to information and understand its relevance. 416 If this awareness is not given, the information provided does not prevent harm, enable democratic decision-making, or ensure accountability, and thus is not functional.417 Another important aspect that is closely linked to the functionality of information is the access to justice as well as an effective remedy (see (5) above).418

The right to information is limited insofar as it is opposed by grave interests of secrecy on the part of the State or a private data bank, in accordance with Art. 19 (3) ICCPR.419 In cases of serious violations of human rights, it is generally acknowledged that there is

- See the 2013 report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, UN Doc. A/68/362 of 4 September 2013, para. 19 and more extensively, setting out a general right of access to 'environmental information for individuals and NGOs', Art. 4 Aarhus Convention, see for more details J. Ebbesson, 'Access to Information on Environmental Matters', in: R. Wolfrum, MPEPIL, 2009, para. 18.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 446.
- See UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/ HRC/30/40, para. 29; e.g. workers have the right to remove themselves from situations they believe are hazardous which is contingent on information about the risks, see para. 31.
- See UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/ HRC/30/40, para. 32.
- Ibid, paras. 26, 35.
- 418 Ibid, para. 35.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 446; See UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report, UN Doc A/HRC/30/40, para. 38.

an overriding public interest in the revelation of information.420 Furthermore, information about systematic or widespread human rights violations as well as information about violations of other human rights that would prevent accountability or access to an effective remedy should never be confidential.421 The same applies for public health and safety information on hazardous substances. 422 Consequently, information concerning commercial secrets and the value of intellectual property cannot be legitimately claimed confidential if the planned activities described therein bear the potential for the mismanagement of hazardous substances and waste, which could result in widespread human rights violations, thereby affecting matters of public interest like, inter alia, public health or.423

To give an effect to the right to information, States Parties should make every effort to ensure easy, prompt, effective, and practical access to information. Perfective and practical access to information. He also have the distribution of information, they also have the duty to provide information with or without request. Therefore, States Parties should enact necessary positive measures, such as clear rules and procedures concerning the timely processing of requests for information. In the case of the use of hazardous substances and wastes, States have the duty to investigate actual and poten-

- 420 Ibid, para, 40.
- 421 Ibid, para. 41; for more details, see 2013 UN Doc A/68/362, paras. 37, 38.
- 422 Minamata Convention on Mercury, Art. 17; UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para. 42.
- 423 Ibid, paras. 40-45; See also the Agreement on Trade-Related Aspects of Intellectual Property Rights, Art. 7 and 8.
- 424 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19.
- 425 UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para. 48, 63.
- 426 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19; M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 448.

tial impacts in order to respect, protect and fulfill human rights.⁴²⁷ As such, States have to generate, collect, assess and update information on these substances with a special focus on the risk of harm and options available to prevent harm.⁴²⁸ Any refusal to provide access to information should be justified with reasons, the aim being to improve transparency and public participation.⁴²⁹ Furthermore, arrangements should be put in place for appeals from refusals to provide access to information.⁴³⁰

In addition to the right to remedy, individuals affected by the negative effects on the environment have, at least, a right to receive all necessary information, particularly on all hazardous substances mining companies apply in their projects.

gg. International Customary Law – Right to a Clean Environment

The evolving "human right to a clean and healthy environment"⁴³¹ has not been internationally recognized so far.⁴³² Nevertheless, such a right has been in-

- 427 UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para, 50, 75.
- 428 Ibid; See also Art. 13 of the ILC Draft articles on Prevention of Trasboundary Harm from Hazardous Activities, 2001 UN Doc A/56/10.370.
- 429 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19; see also principle 10 of the Rio Declaration on Environment and Development; the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters; the Kiev Protocol on Pollutant Release and Transfer Register; and GA Resolution 66/288, para. 43; UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, 2015 report UN Doc A/HRC/30/40, para. 56.
- 430 See HRC General Comment No. 34 (2011), 'Article 19: Freedoms of opinion and expression', UN Doc. CCPR/C/GC/34 of 12 September 2011, para. 19.
- 431 See the terminology chosen by D. Bollier/B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University Of Iowa College Of Law and Center For Human Rights, September 2011, p. 1.
- 432 See the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14.

creasingly codified on the regional⁴³³ and national level.434 This is accompanied by a vivid scholarly debate, with many authors advocating in favor of such a right.435

2. Fatal Mud- and Landslides / Tailings **Dam Failures**

a. Description of Risk Area and Case Studies

One of the most catastrophic possible consequences of LSM operations are mudslides produced by major tailings dam failures (Case 1-6). Disastrous landslides were also triggered by destabilization of the area around the mine through deforestation (Case 7) and poor mine construction (Case 8).

While the main reasons for tailings dam failures are meteorological causes (e.g. unusual rainfall events/ periods and snow - 25 % of worldwide cases) or earthquakes, "seismic liquefaction" (Case 1), other reasons are poor management and inadequate human activities at the tailings dam sites (10% of worldwide incidents) as well as failures of the dam foundations, which in most of the reported cases was linked to poor choice of dam placement and dam construction (6% of all cases registered globally). 436 This is illustrat-

433 Art. 24 of the African Charter on Human and Peoples' Rights states "All peoples shall have the right to a general satisfactory environment favorable to their development"; see further the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 13.

434 In 1976, Portugal became the first country to adopt a constitutional "right to a healthy and ecologically balanced human environment" whereupon more than 90 States have adopted similar rights in their national constitutions, see 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 12.

435 See the terminology chosen by D. Bollier/B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University of Iowa College of Law and Center For Human Rights, September 2011, p. 1. See further on this discussion the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14-17.

M. Rico (et al.), 'Reported tailings dam failures. A review of the European incidents in the worldwide context', Journal of Hazed, for example, by the case of the tailings dam failure in Shanxi Province in China (Case 2), where the waste reservoir was reportedly built only 50 meters above and 100 meters away from some residences and a marketplace. Furthermore, the failure was reportedly caused by waste sand that was dumped into the tailings dam. Human rights violations can therefore occur where states fall short of preventing or at least limiting the negative effects of such mud- and landslides and tailings dam failure through effective regulation of the causal mining activities.437

Case 1: Chile On March 28, 1965, a liquefacsand tailings dams.)438

Case 2: China On September 8, 2008, in Taoshi, mining license expired. 439 At least 254 people

ardous Materials, Vol. 152, Issue 2, April 2008, pp. 846-852.

- See on shortcomings in this context F. Luino/J. De Graff, 'The Stava mudflow of 19 July 1985 (Northern Italy): a disaster that effective regulation might have prevented', Natural Hazards Earth System Science, 12, 2012, pp. 1029-1044.
- Case described by T. Rudolph/W. Coldewey, 'Implications of Earthquakes on the Stability of Tailings Dams', p. 1, available at http://pebblescience.org/pdfs/Tailings_dam.pdf.
- See 'Arrests after China landslide', BBC (12 September 2008), see at http://news.bbc.co.uk/2/hi/asia-pacific/7611958.stm.

waste sand into a mine tailings dam; heavy rair only accelerated the process of failure.⁴⁴⁰

Case 3: United States In 1972, a tailings dam in West Virginia burst. As a result, approx. 500,000 cubic meters of black waste water flooded 16 coal towns along Buffalo Creek Hollow. 125 people died, 1121 were injured, and over 4000 were left homeless.⁴⁴¹

Case 4: Italy On July 19, 1985, the failure of two tailings dams located just upstream from the village of Stava in the municipality of Tesero (Trento province, Italy) triggered a vast mudflow (180 000 m3) that flowed down-channel through Stava, a small village of 20 buildings. The mudflow rapidly traveled over 4.2 km along the Stava Valley and passed through Tesero, before flowing into the Avisio River. The mudflow destroyed many buildings and resulted in 268 fatalities and 20 injuries. 442

Case 5: Hungary On October 4, 2010, a tailings dam failure at Ajkai Timföldgyár alumina plant in Ajka, Veszprém County, in western Hungary, killed ten people and injured 150. After the walls of the residue reservoir ruptured, one million m3 of liquid waste was released as a 1-2 m wave of red, poisonous sludge, flooding three villages and affecting some 15 square miles. 443 Such sludge contains heavy metals. It is considered hazardous and toxic if ingested and burns

on contact.⁴⁴⁴ 390 residents had to be temporarily relocated and 110 people were rescued from flooded areas.⁴⁴⁵

Case 6: Brazil The collapse of two tailings dams in the Herculano mine, Itabirito, Região Central, state of Minas Gerais in November 2015, after two light seismic shocks (strength 3 at the Richter scale), led to a slow-moving tide of 50 cubic meter toxic iron-ore residue, which swept away the town of Bento Rodrigues. At the end of November 2015, 9 people were confirmed dead, and a further 19 remain unaccounted for.⁴⁴⁶ Inquiries into the incident were started by the state prosecutor's office of Minas Gerais as well as the affected companies, but the reasons for the dam's failure have not been provided yet.⁴⁴⁷ The Brazilian Government has filed a civil lawsuit against the mining company on November 30, 2015, seeking \$ 5.2 billion in damages for the burst of the tailings dams.⁴⁴⁸

Case 7: China In 2010, a devastating mudslide in Zhouqu, northwest China, caused the death of more than 1.000 people. There had been warnings of the dangers resulting from the destruction of the forests around Zhouqu for mining, causing soil erosion and destabilizing hillsides. The region has already suffered around ten major landslides since 1823, but experts asserted that the risk increased drastically after the felling of more than 126.000 hectares of forest between 1952 and 1990.⁴⁴⁹

⁴⁴⁰ T. Branigan, "Negligence, not rain' caused deadly China mudslide", *The Guardian* (10 September 2008), see at http://www. theguardian.com/world/2008/sep/10/china.

See at http://www.wvculture.org/history/buffcreek/buff1.html.

F. Luino/J. De Graff, 'The Stava mudflow of 19 July 1985 (Northern Italy): a disaster that effective regulation might have prevented, Natural Hazards Earth System Science, 12, 2012, pp. 1029–1044 (1029).

⁴⁴³ M. Day, 'Hungary threatened by 'ecological catastrophe' as toxic sludge escapes factory', The Telegraph (5 October 2010), http://www.telegraph.co.uk/news/worldnews/europe/hungary/8043969/Hungary-threatened-by-ecological-catastropheas-toxic-sludge-escapes-factory.html; 'Hungary declares a state of emergency after sludge disaster' The Guardian (5 October 2010) available at http://www.theguardian.com/world/2010/oct/05/hungary-sludge-disaster-state-of-emergency.

⁴⁴⁴ Ibid.

⁴⁴⁵ See 'Hungary battles to stem torrent of toxic sludge' BBC (5 October 2010) available at http://www.bbc.com/news/worldeurope-11475361.

⁴⁴⁶ See at http://www.theguardian.com/business/2015/nov/13/brazils-slow-motion-environmental-catastrophe-unfolds; http://www.handelsblatt.com/panorama/aus-aller-welt/bhpund-vale-in-der-krise-fataler-dammbruch-schockt-brasilien/12554958.html, last accessed 23rd of November 2015.

⁴⁴⁷ See at http://www.ft.com/cms/s/0/88aadd52-882d-11e5-8a12-b0ce506400af.html.

See at http://www.wsj.com/articles/brazil-files-civil-suit-against-samarco-vale-bhp-over-dam-disaster-1448931967.

P. Foster, 'China's deadly landslide 'not an accident', The Telegraph (11 August 2010), available at http://www.telegraph.

Case 8: South Africa In 1996, a mining disasup to a sufficient standard. 450

Case 9: Myanmar On November 22, 2015, a mar buried more than 110 miners. 451 According still missing.452 Most of the victims were reportstones in the company's waste piles.453

b. Human Rights Analysis

aa. Right to Life, Art. 6 ICCPR

The right to life is perceived as the most fundamental human right. It is therefore protected by all international and regional human rights instruments. 454

- co.uk/news/worldnews/asia/china/7938784/Chinas-deadlylandslide-not-an-accident.html.
- See 'Diamonds of Death', Mining Weekly (5 February 1999), available at http://www.miningweekly.com/article/diamonds-ofdeath-1999-02-05. See for more information about the criminal liability of the mine authorities H. Oosthuizen, 'Mining disaster in South Africa: the Rovic Diamond Mine disaster and the criminal liability of the mine authorities', Medical Law Review 22/1 (2003), pp. 11-28.
- 451 See at http://www.tagesspiegel.de/weltspiegel/myanmarmehr-als-110-tote-nach-erdrutsch-nahe-jade-mine/12628028.
- **452** Ibid.
- See at http://www.stuttgarter-nachrichten.de/inhalt.in-<u>der-naehe-einer-jade-mine-in-myanmar-bereits-mehr-</u> <u>als-110-tote-nach-erdrutsch.290b6f46-9905-404d-bd41-</u> f330eacdbd60.html.
- See Art. 3 UDHR, Art. 2 ECHR, Art. 1 ADHR, Art. 4 ACHR and Art. 4 AFCHPR.

Art. 6 (1) ICCPR states that "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life." The HRC describes the right to life as the supreme right and the provisions of the treaty establish firmly that no derogations are permissible from this right, even in times of public emergency. 455 Based on the wording of Art. 6 (1), describing the right as "inherent," a positive and broad obligation is derived, including the prevention of war or the reduction of infant mortality.456

While the wording of Art. 6 (1) directly obliges States Parties to take positive measures to protect the right to life "by law," this is not limited to only arbitrary deprivation of life.457 The HRC has extended the scope of protection of the right to life to include other threats to human life, such as malnutrition, life-threatening illness, nuclear energy, or armed conflict.458 Art. 6 (1) therefore not only creates the obligation to enact legislation prohibiting arbitrary killings through a prohibition of homicide offences. In conjunction with Art. 2 (1) ICCPR, it obliges States to take positive measures to protect the lives of individuals against other threats.459

In light of the foregoing, it can be concluded that States can violate their obligation to respect and ensure the right to life as enshrined in Art. 6 (1) ICCPR if they implement or fail to prevent mining activities that lead to the loss of lives. Therefore, the realization of mining projects through state-controlled mining companies that lead to fatal mud- and landslides and tailings dams failures, because of insufficient construction or monitoring, could be interpreted as a violation of a State Party's obligation to respect the right to life.

- See Art. 4 (2) ICCPR; HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982; HRC General Comment No. 14 (1985), 'Nuclear Weapons and the Right to Life', 1 January 1985, para. 1.
- Ibid., para. 2.
- M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 123.
- Ibid, referencing HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 5.
- Ibid., with regard to malnutrition and epidemics.

The obligation to ensure and protect, in this context, requires particular attention, since mud- and landslides and tailings dam failure are not always predictable. Nevertheless, states have to enact and to enforce appropriate legislation to prevent third party mining activities that lead to such encroachment on the right to life. On a case-by-case basis, it has to be assessed if the state has fulfilled its due diligence in monitoring mining projects. Here, once again, the principle of foreseeability comes into play. It is given if the public authorities knew or ought to have known of the existence of a real and immediate risk to a human right.460 Predictability, not positive knowledge, is therefore the crucial condition.461 While mud- and landslides, as tailings dam failures, can be caused by unforeseeable natural disasters or other cases of "force major," many of such accidents can be foreseen, applying upto-date technical methods. Furthermore, in unclear situations, state should also be obliged to take appropriate precautions through their institutions.462

Furthermore, limited resources of a state to fulfill its human rights obligations can be taken into account. As mentioned above, they carry a burden of proof when claiming that they were unable to fulfill their human rights obligations (see above, [Ch.2][B.][I.]).

bb. Right to Housing, Water, Food, Health and Work, Art. 6, 11, 12 ICESCR

Mud- and Landslides as well as tailings dam failures further severely affect a number of other human rights, which have been analyzed in comparable scenarios above. The right to housing is equally affected in cases of area clearing (see above, [B.][II.][1.]) if individuals are deprived of their houses due to mining-induced mud- and landslides. Furthermore, soil and water contamination can occur, often in cases of tailings dam failure, since the tailings contain chemical residues. This can lead to violations of the right to water, food, and health, as in the cases of environmental contamination analyzed above (see above [1.]). Finally, the right to food, water, and work can be affected if mining-induced mud- and landslides lead to displacement, as in the cases of area clearing described above.

cc. Right to Remedy, Art. 2 (3) ICCPR

The right to an effective remedy, as described above, plays an important role in the field of environment-related human rights violations through mining activities. Affected individuals and groups have, at least, the right to an effective investigation when the causes for the negative environmental effects that led to the violation of their rights are unclear. Such uncertainty pertaining to the reasons of environment-related human rights violations is a particular problem of mud- and landslides and tailings dam failures, since these are often caused by meteorological phenomena or seismic liquefaction. Hence, the responsibility and liability and ultimately the attribution of related human rights violations become contentious issues (Case 8).

dd. Right to Information, Art. 19, 25 ICCPR

Furthermore, affected individuals hold the right to information as described above. Regarding the present risk area, this becomes particularly important,

- 460 See. ICJ, Application of the Convention on the Prevention and Punishment of the Crime of Genocide (26 February 2007) ICJ Reports 2007, 43, para. 432. IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4, para 173; ECtHR (28 October 1998) Osman vs. UK, No. 23452/94, para. 116.
- 461 See J. Salmon, 'Dictionnaire de Droit International Public', 2011, p. 771; A. Kees, 'Responsibility of States for Private Actors', in: R. Wolfrum, MPEPIL, 2011; A. Epiney, 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992, pp. 250 et seq.
- See on this also the 'precautionary principle' as established under international environmental law. See Principle 15 of the 1992 Rio Declaration: " (\ldots) the precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation": see further Southern Bluefin Tuna (Provisional Measures)(1999) ITLOS Nos. 3&4, paras. 77-9; Judges Laing at paras. 16-9 and Treves at para. 9; A. Nollkaemper, 'What You Risk Reveals What You Value', in: D. Freestone / E. Hey (eds), The Precautionary Principle and International Law: The Challenge of Implementation, 1996, p. 80. In Tatar v. Romania, 27 January 2009, 67021/01, para. 120, the ECHR noted that the precautionary principle was part of European Community law, "qui « a vocation à s'appliquer en vue d'assurer un niveau de protection élevée de la santé, de la sécurité des consommateurs et de l'environnement, dans l'ensemble des activités de la Communauté»".

since timely information on the potential hazards can save lives and the livestock of potentially affected individuals and communities.

3. Labor-Occupational Health and Safety

a. Description of Risk Area and Case Studies

The improvement of the abysmal and hazardous working conditions of miners around the world has historically been one of the very first subjects of the international discussions pertaining to labor rights. Therefore, the first International Conference on Labor Rights (1890 in Berlin) focused on labor in factories and mines.463 Over the course of the following decades, however, the development of modern LSM techniques and the Workers Rights Movement led to much better conditions for miners in most of the industrialized countries.464 Therefore, occupational health and safety problems today rather occur in developing countries, where adequate legislation is either not enacted or poorly enforced.465 At the same time, many LSM projects are realized in such countries with the goal of further developing the national minerals sector. 466 Furthermore, occupational health and safety, as with child labor, play an important role in ASM (see below, [Ch.4][B.][III.]). Most visibly, inappropriate and insufficient application of safety standards leads to mine accidents, which regularly costs the lives of many miners (Case 1-3). As for land- and mudslides or tailings dam failures, mine accidents can not always be prevented and are sometimes the result of force major (Case 1). Furthermore, up until today, miners suffer from detrimental working conditions, negatively affecting their health and well-being (Case 4-9). While labor issues like the right to adequate working conditions were first discussed and established as international labor rights standards, as will be described below, they can, by now, also be analyzed under international human rights law.

⁴⁶³ See A. Nussberger, 'Right to Social Security, International Protection', in: R. Wolfrum, MPEPIL, 2009, para. 16.

K. Elgstrand / E. Vingård (eds.), 'Occupational Safety and Health in Mining Anthology on the situation in 16 mining countries', Arbete och Hälsa (Work and Health), Occupational and Environmental Medicine at Sahlgrenska Academy, University of Gothenburg, 2013, 4.

See the case of Zambia as reported by HRW, 'You'll Be Fired if You Refuse - Labor Abuses in Zambia's Chinese State-owned Copper Mines', HRW Report (2011), p. 2.

⁴⁶⁶ See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 11.

Case 1: Indonesia The collapse of the tunnel of the Big Gossan training facility of the Grasberg Gold mine in the Indonesian Papua Province killed 28 miners in May 2013. 467 After that incident, all operations were stopped for a month in order to focus on the rescue and investigation work. 468 Nevertheless, the investigations arrived at diverging results: The tunnel collapse could have been caused by natural factors (e.g. cracks caused by erosion in the limestone of the tunnel's ceiling). 469 On the other hand, a report of the National Commission on Human Rights, published in February 2014, found that this accident could have been prevented if the mining company had applied safety standards. However, the company responded to this report immediately, stating that the incident was an isolated and unprecedented event, which was not caused by insufficient safety measures. This appraisal corresponds with the findings of the Department of Energy and Mineral Resources (DEMR), mine inspectors, and the government-appointed Special Committee. 470 In this context, however, it was pointed out that the mining companies in the Papua Province are important taxpayers and that the one-month suspension of operation at the Grasberg gold mine had led to a daily loss in tax revenue in the amount of millions of US dollars. 471

Case 2: Turkey The explosion at Soma Coal Mine in Turkey in 2014, killing 311 people, constituted the country's worst mining and perhaps the worst industrial disaster. The bad security conditions in the mine had been the subject

of miner protests in 2013 already. Furthermore, the demand by the main opposition party, the Republican People's Party, to investigate the mine's safety was rejected in the Grand National Assembly of Turkey, with votes from the ruling Justice and Development Party only weeks before the disaster.⁴⁷²

Case 3: South Africa In 1996, a mining disaster occurred at the Rovic Diamond Mine between Boshof and Dealsville. First, the mining site was an opencast operation, but soon it became an underground operation, since the sides of the open pit became too steep. Following a mudslide, 20 miners were trapped at about 1000 meters underground. While rescue workers only retrieved four bodies, 16 miners were later declared dead. After having conducted an inquest, a judge reached the conclusion that three mine authorities should be charged with culpable homicide, stating that the mine plans were not up to a sufficient standard.⁴⁷³

Case 4: Zambia While Chinese run mining projects in the central Zambian copper belt constitute an enormously important investment in the country, creating jobs and driving economical development forward, labor rights abuses are being reported. Poor health and safety standards have been observed, including poor ventilation that can lead to serious lung diseases, hours of work in excess of Zambian law, the failure to replace workers' personal protective equipment that is damaged while at work, and the threat of being fired, should workers refuse to work in un-

⁴⁶⁷ See at http://www.reuters.com/article/2013/05/22/us-indo-nesia-freeport-idUSBRE94L03420130522#BkG8DfCPHv4lovzg.97.

See http://www.australianmining.com.au/features/picking-up-the-pieces-indonesian-mine-collapse.

See http://www.thejakartapost.com/news/2013/05/28/police-focus-negligence-deadly-big-gossan-collapse.html

⁴⁷⁰ See http://business-humanrights.org/sites/default/files/me-dia/freeport-response-feb-28-2014.pdf

⁴⁷¹ See http://www.thejakartapost.com/news/2013/05/28/policefocus-negligence-deadly-big-gossan-collapse.html.

J. Ensor, 'Hundreds of miners trapped after explosion in Turkish coal mine', The Daily Telegraph (13 May 2014); H. Saul, 'Turkey coal mine explosion: Protests erupt in Soma after PM claims 'explosions like these happen all the time", The Independent (14 May 2014).

⁴⁷³ See 'Diamonds of Death' Mining Weekly (5 February 1999), available at http://www.miningweekly.com/article/diamonds-of-death-1999-02-05. See for more information about the criminal liability of the mine authorities H. H. Oosthuizen, 'Mining disaster in South Africa: the Rovic Diamond Mine disaster and the criminal liability of the mine authorities', Medical Law Review 22/1 (2003), pp. 11-28.

safe places. 474 Mine accidents appear frequently,

with at least 15 fatalities recorded every year. 475

Case 5: Honduras Occupational health can aling company.476 According to the Nevada (Unit-305 meters.⁴⁷⁷ Within the last years, reportedly as grave health problems.478 They were allegedproject.479

Case 6: Bolivia In April 1996, workers of the due to bad labor conditions and paltry wage.480

Case 7: Namibia Miners who had worked in the and cancer years later.481 These long-term conny.482 However, it has to be noted that working since the opening of the mine in 1976.483 A new to radiation or not.484

Case 8: Germany (East) Long-term health con-

- See 'You'll Be Fired if You Refuse Labor Abuses in Zambia's Chinese State-owned Copper Mines', HRW Report (2011), p. 2.
- 475 Ibid., p. 32.
- See CESR (2000) Gold Mining & Human Rights Violations in Honduras, Center for Economic and Social Rights-Fact Finding Mission, 2001, p. 14, retrievable at http://www.cesr.org/downloads/Complete%20Honduras%20Report%20Revised.pdf.
- **477** Ibid., p. 22, 28.
- See 'Ficha de Registro Impactos Negativos de la minería en Centroamérica: San Martín', p. 3, see at < www.conflictosmineros.net. bid. e'der of the judge, a charge being cted communitiesmunities.ining us Activities, 2001, ev Protocol on Pollutant Release a
- Ibid; See further http://www.movimientom4.org/wp-content/ docs/informe-mina-san%20martin-honduras.pdf, p.28.
- See at http://www.cidh.org/countryrep/bolivia-eng/ii.facts. htm..

- See H. Shindondola-Mote, 'Uranium mining in Namibia The mystery behind 'low level radiation", Labour Resource & Research Institute (LaRRI), 2009, pp. 36 et seq.
- Ibid., http://somo.nl/news-en/uranium-workers-namibia-unaware-of-severe-health-risks; see also the company's statement: http://business-humanrights.org/sites/default/files/media/ bhr/files/Rossing-Uranium-response-LaRRI-9-Jun-2009.pdf
- See J. Vidal, 'Uranium workers dying after time at Namibia mine, report warns', The Guardian (15 April 2014), see at http://www. theguardian.com/environment/2014/apr/15/uranium-workersdying-cancer-rio-tinto-namibia-mine.
- B. Kohrs/P. Kafuka, 'Study on low-level radiation of Rio Tinto's Rössing Uranium mine workers', Environmental Justice Organisations, Liabilities and Trade Project (EJOLT) & Earthlife Namibia Report, pp. 16 et seq.

lung cancer, 120 cases of cancer of the larynx and 2750 cases of black lungs. 485

Case 9: South Africa Silicosis constitutes one of the most pervasive occupational health problems in LSM, 486 notably in the South African gold mining industry. Silicosis is a form of pneumoconiosis caused by inhalation of crystalline silica dust, and is marked by inflammation and scarring in forms of nodular lesions in the upper lobes of the lungs. Silicosis (especially the acute form) is characterized by shortness of breath, fever, and cyanosis (bluish skin).487 In 2006, the case of gold miner Thembekile Mankayi attracted a lot of attention, who filed a lawsuit against his former employer because he had developed the lung disease silicosis while working in Vaal Reefs mine.488 On 3 March 2010, the Constitutional Court of South Africa ruled in favor of Mankayi on 3 March 2011, allowing him to make this claim under the South African Occupational Diseases in Mines and Works Act (ODMWA).489 While Mr. Mankayi died of lung disease on 25 February 2011,490 the groundbreaking judgment of the Constitutional Court sparked further claims of other affected miners. On 21 December 2012 a motion was filed seeking class cer-

- 485 See 'Mehr Wismut-Mitarbeiter an Lungenkrebs erkrankt', Die Welt (27 April 2012), see at http://www.welt.de/gesundheit/ article106234136/Mehr-Wismut-Mitarbeiter-an-Lungenkrebserkrankt.html; http://www.ippnw.de/atomenergie/hibakushaweltweit/wismut-region.html.
- 486 See on this, inter alia, M. James 'The Struggle against Silicosis in the Australian Mining Industry: The Role of the Commonwealth Government, 1920-1950', *Labour History*, No. 65 (Nov., 1993), pp. 75-95.
- 487 See 'Elimination of Silicosis', The ILO/WHO Global Occupational Health Network Newsletter (GOHNET), GOHNET Newsletter, Issue No. 12 (2007), p. 1. See generally, ILO/WHO Global Programme for the Elimination of Silicosis (GPES), see at http://www.ilo.org/safework/areasofwork/occupational-health/ WCMS 108566/lang--en/index.htm.
- 488 See 'AngloGold Ashanti silicosis lawsuit (So. Africa)', see at http:// business-humanrights.org/en/anglogold-ashanti-silicosis-lawsuit-so-africa.
- 489 Ibid. See also Constitutional Court of South Africa, Mankayi v AngloGold Ashanti Ltd (CCT 40/10) [2011] ZACC 3, see at http:// www.saflii.org/za/cases/ZACC/2011/3.pdf.
- 490 See 'AngloGold Ashanti silicosis lawsuit (So. Africa)', see at http://business-humanrights.org/en/anglogold-ashanti-silicosis-lawsuit-so-africa

tification for as many as 17,000 ex-gold miners suffering from the lung disease silicosis.⁴⁹¹ The plaintiffs allege that the defendant companies knew of the dangers posed to the miners by exposing them to silica dust and that defendants failed to take adequate measures to protect the workers from this exposure.⁴⁹² On 31 October 2013 the High Court of Johannesburg ruled that all of the pending lawsuits against gold mining companies regarding silicosis may be consolidated into one action and then started hearing the class certification motion on 12 October 2015.⁴⁹³

Case 10: Namibia In October 2015, workers at the Rössing Uranium mine hand over a petition to the management of the company, alleging unjustified distinctions regarding the employees' salary. According to the worker's petition, the salary of one permanent employee is equal to the salary of seven contract workers, even though they do the same work.⁴⁹⁴ The petition was accepted by the mine's acting managing director.⁴⁹⁵ A reply is still anticipated.

b. Human Rights Analysis

aa. Right to Just and Favorable Conditions of Work
 Safe and healthy Working Conditions, Art. 7
 (b) ICESCR

Art. 7 (b) ICESCR states: "States Parties to the present Covenant recognize the right of everyone to the enjoyment of just and favorable conditions of work, which ensure, in particular: Safe and healthy working conditions." While Art. 6 ICESCR contains the gener-

- 491 See 'Gold miner silicosis litigation (re So. Africa)', see at http:// business-humanrights.org/en/gold-miner-silicosis-litigationre-so-africa.
- **492** Ibid.
- **493** Ibid
- See A. Hartman, 'Rössing contract workers feel exploited and abused', The Namibian (9 October 2015), see at http://www.namibian.com.na/index.php?page=archive-read&id=142848.
- 495 See at http://www.rossing.com/bullet/rossing-media-release-MUN-petition-handover_8Oct2015.pdf.

al principle of the right to work, Art. 7 ICESCR protects the right "in" work (that is, conditions to work) and Art. 8 addresses the "collective dimension" of the right to work (trade-union related rights). 496 All of these rights are regarded as "interdependent" by the CESCR. 497

Since many of the provisions in Art. 6, 7 and 8 ICE-SCR are equally broad in their wording, further interpretation of the rights emerging from these norms is necessary. As described above (see above, [Ch.2][A.] [II.]), the CESCR seems to consider the key ILO conventions as basic standards defining the obligations of the States under Art. 6 ICESCR. 498 In the same vein, CESCR has looked to ILO conventions to define its understanding of obligations under Art. 7 (b) ICESCR, mainly ILO Conventions No. 155 on Occupational Safety and Health and the Working Environment, No. 174 on the Prevention of Major Industrial Accidents, and No. 176 on Safety and Health in Mines. 499 With regard to the present risk area, the provisions of ILO Convention 176 (ILO 176) on Safety and Health in Mines are of particular interest. Art. 2 (1) ILO 176 establishes a broad applicability to all "mines" as defined by Art. 1 (1) ILO 176. Art. 5 (3) ILO 176 requires signatory states to enact laws that only allow competent and authorized persons to handle explosives at a mine. Art. 7 notably requires "employers" (as defined by Art. 1 (2)) to construct safe mines, to hold to proper commissioning and decommissioning standards, and to take measures to protect ground stability. Art. 9 ILO 176 obliges employers to not expose workers to physical, chemical and biological hazards. Furthermore, Art. 10 ILO 176 calls for proper training of workers.

In light of the foregoing, it can be concluded that the cases outlined for the present risk area fall within the scope of protection of Art. 7 (b) ICESCR.⁵⁰⁰ Art. 7 (b) in conjunction with Art. 7 ILO 176 guarantees safe working conditions through safe construction and proper ground stability of mines and the safe handling of explosives. Non-compliance with such safety requirements can lead to mine accidents as described above (Case 1-3). Furthermore, Art. 7 (b) in conjunction with Art. 9 ILO 176 obliges employers to not expose workers to physical, chemical and biological hazards (Case 4-8).

State obligations under Art. 7 (b) comprise the duty to respect the right to safe and healthy working conditions, particularly by abstaining from creating unsafe and unhealthy working conditions through statecontrolled mining companies. Furthermore, State Parties have the duty to prevent third parties, particularly private sector mining companies, from creating such working conditions to protect the related rights of the individual miners. This includes the enactment and enforcement of appropriate legislation, which should comply with the ILO standards described above. The enforcement of the created standards thereby requires compliance monitoring of the private sector. While such monitoring resources of the states are of course limited, they have to use their resources to the "maximum," in light of Art. 2 (1) ICE-SCR. Furthermore, when invoking resource scarcity to exculpate for shortcomings, they carry the related burden of proof). As part of their protection of the right to safe and healthy working conditions, minimum standards of implementation of this protection could be based on the related implementation guidelines of the ILO.501

⁴⁹⁶ B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 273

⁴⁹⁷ See CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 8.

⁴⁹⁸ B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 277

⁴⁹⁹ Ibid., pp. 445 et seq. See further, e.g., CESCR Concluding Observations: Democratic Republic of Congo, UN Doc. E/C.12/COD/CO/4, para. 22.

See, in the same vein, Maastricht Guidelines on Violations of Economic, Social and Cultural Rights (1997), para. 6, concluding that "failure to ensure that private employers comply with basic labor standards may amount to a violation of the right to work or the right to just and favorable conditions of work".

⁵⁰¹ See, inter alia, ILO Guidelines on Occupational Safety and Health Management Systems, ILO-OSH, Second Edition (2009), see http://www.ilo.org/wcmsp5/groups/public/@ed_pro-tect/@protrav/@safework/documents/normativeinstrument/wcms_107727.pdf.

bb. Right to Just and Favorable Conditions of Work – Just and Fair Payment, Art. 7 (a) ICESCR

The right to just and fair payment is closely linked to Art. 11 (adequate standard of living), Art. 10 (protection of the family), Art. 9 (social security) and Art. 12 (right to health). The "fairness" of wages is to be seen as an autonomous notion of justice for the "value" of their work performed.502 In monitoring the implication of Art. 7 (a) ICESCR, the CESCR has mainly focused on whether wages allow decent living rather than being appropriate for the work.503 It considered wages too low, which did not enable people to live above the poverty line,504 to cover subsistence costs of a household,505 to meet their family's basic needs,506 nor to secure a standard of living in dignity.507 Therefore, the States should implement a minimum wage, which meets essential needs of the workers and their families.508 As with Art. 7 (b) ICESCR, States are obliged to respect the right to just and fair payment, particularly by abstaining from underpaying workers at state-controlled mining companies. Furthermore, State Parties have the duty to prevent third parties, particularly private sector mining companies, from exploiting their miners through underpayment. This includes the enactment and enforcement of appropriate legislation, which should comply with the ILO standards described above. As in the case of the Right to Safe and Healthy Working Conditions above, states have to realize this right to the maximum to their available resources (Art. 2 (1) ICESCR) and have

a burden of proof if they invoke resource scarcity. Regarding the determination of just and fair wages, in addition the implementation guidance of the CESCR cited above, ILO conventions and publications can further support states in fulfilling their obligations under Art. 7 (a) ICESCR.⁵⁰⁹

cc. Right to Work, Art. 6 ICESCR

While the cases outlined above fall within the scope of protection of the more specific, right "in" work as enshrined in Art. 7 ICESCR, Art. 6 ICESCR can be violated at the same time. As stated above, "work," in the sense of Art. 6, is to be understood as "decent work," respecting fundamental human rights and the rights of workers, providing for an income allowing workers to support themselves and their families as highlighted in article 7.510 Failure to pay minimum wages under Art. 7 (Case 10) could therefore be regarded as forced or compulsory labor under Art. 6 ICESCR.511

dd. Right to Health, Art. 12 ICESCR

Art. 12 (1) defines the right to health as the "right of everyone to the enjoyment of the highest attainable standard of physical and mental health." The scope of the right to health under Art. 12 ICESCR is broad and is not confined to the right to health care. The right to health is not defined negatively as the absence of disease, but positively extends to all elements necessary to a physical, mental and social state of well-being. 512 It provides for the right to be free from interference

⁵⁰² B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 395.

⁵⁰³ B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 406.

⁵⁰⁴ CESCR, Concluding Observations: Mexico, UN Doc. E/C.12/1993/16, para. 6.

⁵⁰⁵ CESCR, Concluding Observations: El Salvador, UN Doc. E/C.12/1/Add.4, para. 18.

⁵⁰⁶ CESCR, Concluding Observations: Benin, UN Doc. E/C.12/1/ Add.78, para. 34.

⁵⁰⁷ CESCR, Concluding Observations: Bolivia, UN Doc. E/C.12/1/ Add.31, para. 17.

⁵⁰⁸ CESCR, Concluding Observations: Afghanistan, UN Doc. E/C.12/ AFG/CO/24, para. 23.

⁵⁰⁹ See, inter alia, Minimum Wage Fixing Convention, 1970 (No. 131); Protection of Workers' Claims (Employer's Insolvency) Convention, 1992 (No. 173); Equal Remuneration Convention, 1951 (No. 100).

⁵¹⁰ Ibid., para. 7.

⁵¹¹ See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014 citing Supreme Court of India decision People's Union for Democratic Rights v Union of India ('Asiad Workers Case'), which found a violation of Art. 23 Constitution of India (freedom from forced labor) through the failure to pay minimum wages in construction projects.

⁵¹² CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 4.

and provides for the entitlement to health protection, prevention of diseases, and equal access.⁵¹³

On these grounds, the cases outlined for the present risk area can also be seen as falling within the scope of protection of the right to health. In line with the conclusions under (a.), states have to respect and protect the right to health through preventing working environments that interfere with the health of individual miners – either in state-controlled or private sector mining companies.

ee. Right to Life, Art. 6 (1) ICCPR

As described above, based on the wording of Art. 6 (1) ICCPR, a positive and broad obligation is derived, including the prevention of war or the reduction of infant mortality.514 The obligation of States Parties to take positive measures to protect the right to life is not limited to arbitrary deprivation of life,515 but has been extended to include other threats to human life, such as malnutrition, life-threatening illness, nuclear energy or armed conflict.516 Read in conjunction with Art. 2 (1) ICCPR, Art. 6 ICCPR therefore creates broad obligations for states to take positive measures to protect the life of individuals against threats.517 Following this interpretation, working conditions that pose a threat to life, for example through the exposure to poisonous or radiant materials (Case 5, 7-8), could also fall within the scope of the duty to protect under Art. 6 (1) ICCPR. States would then be obliged, as with the rights analyzed above, to prevent such working conditions.

513 Ibid., para. 8.

4. Labor Unions / Freedom of Association

a. Description of Risk Area and Case Studies

Another labor-related risk area occurs through violations of the collective dimension of the right to work, namely to form or to join a union. Union membership is either inhibited (Case 1) or sanctioned (Case 2-3). Punitive measures comprise verbal harassment, cuts to payment, transfer to less attractive jobs, or ultimately, to the termination of employment. LSM projects are often the only employer in remote, underdeveloped regions, so that losing employment at a mine often means the loss of the only source of income for entire families, increasing the pressure on workers to succumb to such working conditions.

Case 1: Zambia Besides poor adherence to occupational health and safety standards (see above), it has been reported that Chinese copper mining operations in Zambia have only allowed workers to join the National Union of Miners and Allied Workers (NUMAW, est. 2003), but inhibited them from joining Zambia's oldest mining union, the Mineworkers Union of Zambia (MUZ) (established in 1948). Furthermore, prejudicial acts against union representatives have been reported, such as verbal threats to fire an employee, transfer to jobs that are outside a union representative's training and expertise, and "charges"—which can lead to deductions of monthly pay and even termination of employment—for attending union meetings. Union leaders at several non-Chinese mines also reported problems, indicating a broader failure by the Zambian government to protect union representatives as required under Zambian and international law. 520

⁵¹⁴ Ibid., para. 2.

⁵¹⁵ M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 123.

⁵¹⁶ Ibid, referencing HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 5.

⁵¹⁷ Ibid., with regard to malnutrition and epidemics.

⁵¹⁸ See 'You'll Be Fired if You Refuse - Labor Abuses in Zambia's Chinese State-owned Copper Mines', HRW Report (2011), p. 85.

⁵¹⁹ Ibid.

⁵²⁰ Ibid.

Case 2: Mexico Labor rights violations were reported in 2010 from La Platosa Mine in La Sierrita, Durango State, which is the country's highest grade silver mine. After a number of workers joined a Union, threats and harassments were reported, which were particularly directed against the General-Secretary of the Union. Two complaints were filed against the mining company under the OECD Guidelines for Multinational Corporations.

Case 3: Peru In November 2013, mine workers of the Antapaccay Copper mine in the province of Espinar founded a labor union due to continuously worsening working conditions (SITRAMINA).⁵²³ Reportedly, as a consequence, all 35 founding members were fired in December 2013.⁵²⁴ Afterwards, the company offered to take the employees back on the condition that they would leave the newly founded labor union and sign a letter written by the company's lawyers for that purpose.⁵²⁵ 28 workers agreed to the proposal, two workers quit, and five workers refused to sign the letter and thus, as a consequence, were not reinstated.⁵²⁶ The ministry of labor declared these dismissals as illegal (in March and again in July 2014).⁵²⁷

Case 4: Colombia In 2001, workers of a Coal Mine near La Loma in the Cuenca del Cesar went on strike twice, protesting against the murder of two consecutive presidents as well as the vice president of the National Labor Union for Mining and Energy (Sintramienergetica), which rep-

resents Colombian Cole miners.⁵²⁸ In April 2003, the Court of the North District of Alabama (USA) pronounced that Sintramienergetica has the right to continue the lawsuit against the company, which had been pending for a year, concerning the three murders.⁵²⁹ The Court argued that there existed a link between the extrajudicial executions and the company's culpability.⁵³⁰ In accordance with the Alien Tort Claims Act (ATCA), the Court recognized violations of Labor Union Rights as violations of international law (Art. 20, 23 UDHR; Art. 22 ICCPR; ILO Conventions 87, 98).⁵³¹

Case 5: Namibia Mine workers of the Rössing Uranium mine are allegedly victimized systematically if they belong to a union. According to the Mine Workers Union of Namibia (MUN), six cases of mistreatment of mine workers have been reported to the union within two years; most of these employees represent others in the work place. A systematic victimization does not match with the company's code of business conduct, which recognizes the right of all employees to choose to belong to a union or not and to seek to bargain collectively.

- 521 See the first complaint filed with OECD at http://www.prodesc. org.mx/wp-content/uploads/2010/12/URGENT_ACTION_Excellon.pdf.
- See at http://business-humanrights.org/sites/default/files/media/documents/escr-net-excellon-response-4-aug-Art2011.pdf.
- See at http://www.multiwatch.ch/de/p97001560.html.
- See at http://www.industriall-union.org/es/glencore-xstratano-cambia-su-injusta-politica-antisindical-en-el-peru.
- 525 Ibid
- See at http://www.multiwatch.ch/de/p97001560.html.
- **527** Ibid

- 528 CINEP/PPP (Centro de Investigación y Educación Popular / Programa por la Paz), 'Informe Especial Minería, Conflictos Sociales y Violación de DDHH en Colombia, 2012, p. 14 et seq., see at http://www.alainet.org/images/IE_CINEP_octubre_2012.pdf).
- 529 Ibid.; See also http://old.laborrights.org/end-violence-against-trade-unions/colombia/news/11404?lang=spanish.
- 530 Ibid.
- **531** Ibid.
- 532 See A. Hartman, 'Rössing contract workers feel exploited and abused', The Namibian (9 October 2015), see at http://www.namibian.com.na/index.php?page=archive-read&id=142848
- 533 See M. Chipepo, 'Namibia: Employee representatives are targeted and mistreated by companies, claims union leader', Business & Human Rights Resource Centre (26 June 2015), see at http://business-humanrights.org/en/namibia-employee-representatives-are-targeted-and-mistreated-by-companies-claims-union-leader.
- 534 See hires21.pdf and Rio Tinto 'The Way We Work', p. 8, see at http://www.riotinto.com/documents/RT_The_way_we_work_ENG.pdf.

Human Rights Analysis

Freedom of Association, Art. 22 ICCPR

Art. 22 ICCPR stipulates that "Everyone shall have the right to freedom of association with others, including the right to form and join trade unions for the protection of his interests." The freedom of association535 contains the right to found associations with other, like-minded people or to join an existing association. The question, whether Art. 22 ICCPR further guarantees the right to exercise trade union rights, in particular the right to strike, is the subject of an ongoing debate.536 Further interpretation of the scope of this right could be derived from ILO conventions, such as Convention No. 87 (Freedom of Association and Protection of the Right to Organise Convention), 1948. Regarding the relationship between Art. 22 IC-CPR and ILO conventions, Art. 22 (3) ICCPR, as Art. 8 (3) ICESCR, specifically stipulates that "Nothing in this article shall authorize States Parties to the International Labour Organisation Convention of 1948 concerning Freedom of Association and Protection of the Right to Organize to take legislative measures which would prejudice, or to apply the law in such a manner as to prejudice, the guarantees provided for in that Convention." Further ILO Conventions that could contribute to the interpretation of Art. 22 IC-CPR are Conventions No. 98 (Right to Organise and Collective Bargaining Convention, 1949); No. 135 (Workers' Representatives Convention, 1971); and Art. 5 (a) ILO Convention 158 (Termination of Employment Convention).

However, the right to freedom of association is not guaranteed as an absolute right but can be limited, according to Art. 22 (2) ICCPR, by restrictions "which are prescribed by law and which are necessary in a democratic society in the interests of national security or public safety, public order (ordre public), the protection of public health or morals or the protection of the rights and freedoms of others." A parallel provision is to be found in Art. 8 (1)(a) ICESCR (see below).

State obligations, in this context, comprise the obligations to respect the right to freedom of association by refraining from interference in any way with the founding and the activities of the association.537 In protecting this right, States further have to ensure that this freedom is guaranteed by providing a legal framework, which allows for the establishment of associations. 538 Furthermore, protection has to be guaranteed against interference by third parties.539

Situations, as described above, in which workers are prohibited from joining a union therefore fall within the scope of protection of Art. 22 (1) ICCPR. The right to join a union thereby is to be understood as the freedom of workers to "join organizations of their own choosing without previous authorization," as stated by Art. 2 ILO Convention 87 (ILO 87). Prohibition to join a specific union while allowing the joining of a different one (Case 1) therefore violates the right to freedom of assembly just the same. Furthermore, interference in the freedom of associations can stem from sanctions, threats, harassment and other punishment for exercising these rights (Case 1-2), since in these cases the right can no longer be "freely exercised."540 Restrictions are only justified under Art. 22 (2) ICCPR, which contains the conditions of legality, legitimacy, and proportionality (see above, [Ch.2] [D.][II.]).

bb. Freedom of Association / to form Unions, Art. 8 **ICESCR**

The right to freedom of association is further protected under the ICESCR under Art. 8 (1)(a). This provision, in its entirety, is a hybrid of individual and col-

⁵³⁵ See further Art. 20 (1) UDHR, Art. 11 (1) ECHR, Art. 16 (1) IACHR and Art. 10 African Charter of Human Rights.

M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 499 et seq.

Ibid, p. 498.

⁵³⁸ Ibid.

⁵³⁹ Ibid.

See, in this context, the wording of Art. 12 ILO 87, which obliges signatories to "undertakes to take all necessary and appropriate measures to ensure that workers and employers may exercise freely the right to organise".

lective rights: it protects the individual right to form and to join a union but also "operational" rights of the unions. ⁵⁴¹ Other than in Art. 22 ICCPR, the right to strike is explicitly protected in Art. 8 (1)(d) ICESCR. Restrictions of the individual right to association, however, are justified under the same conditions as set out by Art. 22 (2) ICCPR (Art. 8 (1)(a) ICESCR).

The cases outlined for the present risk area therefore also fall within the scope of protection of Art. 8 (1)(a) ICESCR. State parties are further obliged to respect the formation and free functioning of trade unions and to take measures to prevent third parties from interfering.⁵⁴².

D. Closure & Abandoned Mines

I. Description of Mining Phase

Mine closure constitutes the final phase in the mine life cycle. Mining operations will cease and the mine will close when the ore deposit is exhausted, or when it becomes uneconomic. While some deposits are very large and may generate a mine life of 50 years or more, other deposits may only produce a mine life of a few years. In some instances, mines are closed temporarily and put into a status called "care and maintenance." This might occur during periods of low commodity prices in the expectation that higher prices in the future will make further commercial operations financially viable. Common

and post-closure.550 Reclamation thereby constitutes a particularly important task, since inappropriately reclaimed mines can have negative environmental and social effects for many years after mine was closed, as is illustrated by the cases below. The objective of mine reclamation is to return the land and watercourses to an acceptable standard of productive use, ensuring that any landforms and structures are stable, and any watercourses are of acceptable water quality.551 Reclamation typically involves a number of activities such as removing any hazardous materials, reshaping the land, restoring topsoil, and planting native grasses, trees, or ground cover.552 "Postclosure" measures are monitoring programs used to assess the effectiveness of the reclamation measures and to identify any corrective action that may be needed.553 In addition, mines may require long-term care and maintenance after mine closure, such as ongoing treatment of mine discharge water, periodic monitoring, and maintenance of tailings containment structures.554

steps in mine closure546 comprise shutting down,547

remediation/reclamation,549

decommissioning,548

- Common mine closure steps according to the EMGAC, p. 68.
- Once production stops, the number of workers is reduced, and only a small labour force is retained to permanently shut down the mining equipment. In some cases, the mining company may provide re-training or early retirement options to their workers before the mine is closed, see, based on the EMGAC, at <<u>www.miningfacts.org/environment/what-happens-to-mine-sites-after-a-mine-is-closed</u>.
- 548 Small crews or contractors decommission or take apart the mining processing facilities and equipment. Pipelines are drained, equipment and parts are cleaned and sold, buildings are repurposed or demolished, warehouse materials are recovered, and waste is disposed of, see, based on the EMGAC, at <www.miningfacts.org/environment/what-happens-to-mine-sites-after-a-mine-is-closed.
- See EMGAC, 66 et seq.
- 550 See the summary of EMGAC mine closure steps at <<u>www.min-ingfacts.org/environment/what-happens-to-mine-sites-after-a-mine-is-closed.</u>
- See, based in the 'Exploration and Mining Guide for Aboriginal Communities', at <www.miningfacts.org/environment/what-happens-to-mine-sites-after-a-mine-is-closed.
- 552 See, based on the EMGAC, at <<u>www.miningfacts.org/environ-ment/what-happens-to-mine-sites-after-a-mine-is-closed.</u>
- 553 Ibid.
- 54 Ibid.

B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 488.

⁵⁴² Ibid., p. 496

⁵⁴³ See 'Exploration and Mining Guide for Aboriginal Communities' (EMGAC), National Resources Canada, 2013, p. 66, at https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/mineralsmetals/files/pdf/abor-auto/mining-guide-eng.pdf.

⁵⁴⁴ See ECPMM, p. 31.

⁵⁴⁵ Ibid.



Great efforts are being made to legislate and enforce mine closure and land reclamation according to international standards, even in developing countries. In traditional mining countries there is, however a large number of "abandoned" or "orphaned" mines, to which the owner or operator is unknown and that were left behind without any precautions. These mines often lead to negative environmental effects such as contamination through acidic drainage and metal leaching as well as public health and safety hazards resulting from mine openings, abandoned infrastructure, subsidence, and mine wastes. These problems are often referred to as "legacy issues." These

II. Risk Areas and Human Rights Analysis

1. Environmental Destruction and Contamination

a. Description of Risk Area and Case Studies

aa. Water and Soil Contamination – Acid Mine Drainage (AMD)

One of the most serious environmental problems related to abandoned mines is environmental contamination through AMD (see above. p. 48). AMD mostly occurs at underground workings, open pit mine faces, waste rock piles, and tailings storage areas⁵⁵⁷ that were left exposed to the elements or inadequately reclaimed. AMD often results in the contamination of

water with dissolved metals and acidity.⁵⁵⁸ While this problem also occurs in earlier mining phases, it particularly constitutes a problem of abandoned mines. This is mainly caused by the problem that appropriate reclamation measures have often not been performed at the abandoned mine site – either because owners were unwilling or unable or because modern mine site reclamation was simply unknown at the time.

Case 1: Sweden AMD occurred at sulfide-rich mine tailings at abandoned mine sites at Adak, Västerbotten district, leading to higher concentrations of As, Cu, Fe and Zn in surface water, sediment and soil, as found by studies in 2006. Furthermore, high concentrations of trace elements constitute a problem of surface waters, where they stay dissolved due to low pH levels. Finally, bioaccumulation of several elements (As, Al, Cu, Fe and Zn) were found in surrounding vegetation. 559

Case 2: Canada Britannia Mine is a historic copper mine located on the coast of British Columbia, approximately 51.5 kilometers north of Vancouver. The mine started producing copper in 1904, and by 1929 it was the largest copper producer in the British Empire. The ore at Britannia Mine is largely comprised of metal sulphides, which were probably producing AMD naturally before the construction of the mine. However, the excavation of 210 kilometers of tunnels in the mine greatly increased the surface area available for oxidation and AMD generation. In 1930, it was known that the water coming

⁵⁵⁵ See National Orphaned/Abandoned Mines Initiative, 2002-2008 Performance Report, 2009, p. 5, available at http://www.abandoned-mines.org/pdfs/NOAMIPerformanceReport2002-2008-e.pdf. Subsidence problems, inter alia, have occurred in Raniganj Coalfields of India after decades of uncontrolled mining, see http://business-humanrights.org/en/india-coal-india-allegedly-failing-to-address-dangerous-subsidence.

⁵⁵⁶ See EMGAC, p. 66.

See National Orphaned/Abandoned Mines Initiative, 2002-2008 Performance Report, 2009, p. 5, available at http://www. abandoned-mines.org/pdfs/NOAMIPerformanceReport2002-2008-e.pdf.

P. Whitbread-Abrutat, 'Mining Legacy: Informing the Background Paper', 2008 [cited 2012 August 7]; Post-Mining Alliance, Eden Project. Available from: http://www.postmining.org/documents/surveysummaryreportFINAL25Feb08.pdf; National Orphaned/Abandoned Mine Initiative. National Orphaned/Abandoned Mines Initiative 2002-2008 Performance Report, 2009 [cited 2012 July 30]; Available from: http://www.abandonedmines.org/pdfs/NOAMIPerformanceReport2002-2008-e.pdf.

⁵⁵⁹ Case described by A. Bhattacharya (et al.), 'Environmental assessment of abandoned mine tailings in Adak, Västerbotten district (northern Sweden)', Applied Geochemistry, Vol. 21, Issue 10, 2006, p. 1760–1780 (1760).



out of the mine was acidic and contained metals, but the environmental impacts of the mine water were not well understood, and the pollution was not tackled during the life of the mine. When the mine was closed, the owners at the time followed the environmental standards of the day, and took steps to divert the mine water away from the most sensitive environments. A dam was built to prevent water from entering Britannia Creek, and untreated mine water was released into Howe Sound via an outflow pipe 50 meters underwater. However, these measures did not adequately control the AMD, and the dam failed sometime in the 1980s or 1990s, resulting in the severe pollution of Britannia Creek and other associated impacts on aquatic life in the area.

Case 3: Romania As a result of historical mining activities in the "Golden Quadrilateral" district in the South Apuseni Mountains of Transylvania, abandoned waste dumps and tailings ponds scar the Rosia Montana area, leaving an environmental legacy of high levels of metals including zinc, iron, arsenic, lead, and cadmium discharged, untreated, into local streams, soils and water. In addition, around 7 km of non-continuous ancient mining works (galleries) have been identified from the 140km of underground workings, most of which date from modern times. The ancient workings were mostly destroyed by mining during the communist regime and those that survived were left abandoned and decaying and have remained so since the cessation of mining in 2006. 560

Case 4: Romania Historical Gold Mining in the Roşia Montană district have led to the problem of AMD in the streams surrounding the area. ⁵⁶¹

bb. Other Land and Soil Contamination

Another legacy problem related to abandoned mines is general contamination of soil and water around the mine site, mainly caused by chemical residues stemming from tailings, other mine wastes, or radiant mine wastes (Case 5).

Case 5: United States In the States of Utah, New Mexico, and Arizona, which is also territory to the Navajo Nation, approximately four million tons of uranium ore were extracted during 1944 and 1986. The legacy of these mining activities comprise more than 500 abandoned uranium mine claims with thousands of mine features such as pits, trenches, holes, etc. Furthermore, there are uranium contaminations of drinking water, which can cause severe health damage, like lung cancer and impaired kidney function. 562

cc. Air Pollution

Mine wastes, particularly tailings, can further lead to air pollution through the generation of dust and particulate matter. Tailings ponds often dry out unless arrangements are made to keep them permanently wet, which renders the fine material susceptible to spreading across the neighboring area. ⁵⁶³ Besides lowering the overall air quality around the abandoned mine, this can lead to detrimental effects on the local agricultural production. In modern mining operations, upon closure, remedial action such as isolation of the tailings material by covering serves to limit subsequent environmental pollution.

Case 6 Cyprus Abandoned copper mine tailings in the Lefke region, situated in northern Cyprus, have produced mine dust that had detrimental effects on the local agriculture, notably citrus

⁵⁶⁰ See 'Case study of the CSR strategy adopted by Rosia Montana Gold Corporation Romania', see https://www.csr-company.com/ sites/default/files/public/imce-proc-images/rmgc - case study.pdf.

⁵⁶¹ See R. Florea (et al.), 'Water pollution in gold mining industry: a case study in Roşia Montană district, Romania', Environmental Geology, Vol. 48, Issue 8, 2005, p. 1132-1136 (1134).

⁵⁶² See 'Federal Actions to Address Impacts of Uranium Contamination in the Navajo Nation', United States Environmental Protection Agency, Five Year Action Plan, 2014, available at http://www.epa.gov/region9/superfund/navajo-nation.

See O. Sellinus (et al., eds.), 'Essentials of Medical Geology: Revised Edition', 2005, p. 61.

to complete crop failure.564

b. Human Rights Analysis

aa. Right to Water, Art. 11 (1) ICESCR

Most of the environmental effects described in the cases above (Case 1-5) led to water contamination. As described in the corresponding risk area in the operations phase above, the scope of protection of the right to water, as derived from Art. 11 (1) ICESCR, encompasses right to be free from interference, such as disconnections or contamination of water supplies.565 The guarantee of "environmental hygiene" thereby comprises an element of the right to water. 566 States are obligated to respect the right to water by abstaining from all activities that interfere with this right. For the present risk area, this means that if they are implementing mining projects through state-controlled mining companies 567 they have to ensure appropriate measures to prevent negative effects of legacy problems as described above. The duty to protect, however, is somewhat more complex, since abandoned mines are sometimes not even known until they negatively affect the environment. Nevertheless, States are obliged to prevent third parties from interfering in the right to water of individuals. This includes, inter alia, the enactment of necessary and effective legislative and other measures to refrain, for example, third parties from polluting water resources, including natural sources, wells, and other water distribution systems.⁵⁶⁸ States, therefore, have more obligations than to just adopt and enforce legislation

..... See F. Doğan, 'The Environmental And Public Health Problems Due To Tailing Ponds Of Copper Mine In Lefke, Cyprus', Proceeding of the International Conference On European Environmental Policy and The Case Of Cyprus Mines, November 1999, p. 2.

obliging mining companies to perform all measures necessary to prevent mine legacy problems.

The duty to protect, as described in the corresponding risk area in the operations phase, comprises the enactment and enforcement of adequate legislation, prohibiting water pollution and depletion.⁵⁶⁹ This, most importantly, includes the regulation of private sector mining companies. Particularly with a view to human rights violations caused by abandoned mines, it is to be noted that this duty to protect cannot be unlimited. States, however, have to fulfill their due diligence with this regard. On a case-by-cases basis, it must, therefore, be assessed if the human rights violations stemming from the mining activities described above had been foreseeable. This is the case if the public authorities knew or ought to have known of the existence of a real and immediate risk to a human right.570 Predictability, not positive knowledge, is therefore the crucial condition.⁵⁷¹ Such foreseeability is obviously put into question when abandoned mines have not even been discovered prior to the environmental effects causing the violations. However, if it is generally known that many abandoned mines exist in a specific area, which possibly can cause the described problems, the development of an abandoned mines survey-system could be part of this due diligence.572

- 569 Ibid. paras. 44 (b).
- See ICJ, Application of the Convention on the Prevention and Punishment of the Crime of Genocide (26 February 2007) ICJ Reports 2007, p. 43, para. 432; IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4, para 173; ECtHR (28 October 1998) Osman vs. UK, No. 23452/94, para.
- See J. Salmon, 'Dictionnaire de Droit International Public', 2011, p. 771; A. Kees, 'Responsibility of States for Private Actors', in R. Wolfrum (ed.), MPEPIL, 2011; A. Epiney, 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992, pp. 250 et seq.
- See in this context, e.g., the Canadian 'National Orphaned/ Abandoned Mines Initiative' (NAOMI), see at http://www.abandoned-mines.org/home-e.htm. See further the five-year plan of the US Environmental Protection Agency to tackle mainly mining-induced uranium contamination in the Navajo Nation (mainly in Utah, New Mexico and Arizona), see at http://www. epa.gov/region9/superfund/navajo-nation; and the Abandoned Mine Lands Program (AMLP), Department of Natural Resources and Mines, Government of Queensland/Australia, which progressively assesses abandoned mine sites and reduces significant

CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 10.

⁵⁶⁷ Ibid., paras. 21, which underlines that states have to refrain from "unlawfully diminishing or polluting water, for example through waste from state-owned facilities".

⁵⁶⁸ Ibid., para. 23, 44 (b).

bb. Right to Health, Art. 12 (1) ICESCR

As shown above, the right to health provides for the freedom from interference in one's physical health.⁵⁷³ Water contamination, as described in the cases above, not only interferes with one of the determinants for the right to health per se, being clean and potable water,⁵⁷⁴ but may also cause severe health problems. In line with the State obligations described above pertaining to the right to water, shortcomings in protecting individuals from water contamination caused by abandoned mines can also violate the obligations of State Parties under Art. 12 (1) ICESCR.

cc. Right to Food, Art. 11 (1) ICESCR

Art. 11 (1) ICESCR obliges State Parties to provide for conditions that enable people, through own efforts, to buy or to produce food. 575 Elements of the right to food comprise the physical and economical availability and accessibility, as well as the adequacy, of the food.⁵⁷⁶ Further, it must be safe for human consumption and free from contamination.577 As with the risk area above, environmental contamination caused by legacy problems can fall within the scope of protection of the right to food, thus triggering the parallel obligations for States as described pertaining to the right to water above. Once again, it is important to note that CESCR has found that a State "unable to fulfill its obligation for reasons beyond his control, has the burden of proving that this is the case and that it has done all possible to obtain international support without success."578

- public health and safety risks identified, see at https://www.qld.gov.au/environment/land/abandoned-mines/program.
- **573** Ibid., para. 8.
- **574** Ibid., para. 4.
- 575 OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 1, http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf (last visited: 09/09/2015), p. 3; B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, pp. 869f.
- 576 CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 7 et seq.
- 577 Ibid., para. 10.
- 578 Ibid., 17.

dd. Right to Housing, Art. 11 (1) ICESCR

Finally, environmental contamination caused by abandoned mines can also affect the right to adequate housing, if it causes displacement (see above, [B.][1.]).

ee. Right to Remedy

As described above, the right to remedy plays an important role in the field of environment-related human rights violations, since the reasons for the mining-induced environmental effects that lead to the human rights violations are often not easily attributable to the state. Hence, affected individuals and groups have, at least, the right to an effective investigation concerning the causes for the negative environmental effects that led to the violation of their rights.

This becomes even more important after mine closure and in regard to abandoned mines, since these are often not even known. In this context, responsibility and liability for the negative effects on the environment, and ultimately human rights, are often very hard to determine.

ff. Right to Information, Art. 19, 25 ICCPR

Complementary to the right to remedy, affected individuals have the right to information as described above. Sufficient Information in the present risk area can be of the utmost importance for individuals to take precautions in cases of mining-induced contamination of water and food resources.

gg. International Customary Law -Right to a Clean and Healthy Environment

The evolving "human right to a clean and healthy environment" 579 has not been internationally recog-

⁵⁷⁹ See the terminology chosen by D. Bollier/B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University Of Iowa College Of Law and Center For Human Rights, September 2011, p. 1.



nized, so far.⁵⁸⁰ Nevertheless, such a right has been increasingly codified on the regional⁵⁸¹ and national level.⁵⁸² This is accompanied by a vivid scholarly debate, with many authors advocating in favor of such a right.⁵⁸³

2. Fatal Mud- and Landslide / Tailings Dam Failures / Subsidence

a. Description of Risk Area and Case Studies

Besides the contamination problems caused by AMD, other mine legacy problems comprise public health and safety hazards resulting from mine openings, abandoned infrastructure and subsidence.⁵⁸⁴ Mine subsidence thereby is described as the movement of

- 580 See the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14.
- 581 Art. 24 of the African Charter on Human and Peoples' Rights states "All peoples shall have the right to a general satisfactory environment favorable to their development"; see further the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 13.
- 582 In 1976, Portugal became the first country to adopt a constitutional "right to a healthy and ecologically balanced human environment" whereupon more than 90 States have adopted similar rights in their national constitutions, see 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 12.
- See the terminology chosen by D. Bollier / B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University of Iowa College of Law and Center For Human Rights, September 2011, p. 1. See further on this discussion the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14-17.
- 584 See National Orphaned/Abandoned Mines Initiative, 2002-2008 Performance Report, 2009, p. 5, available at http://www.abandoned-mines.org/pdfs/NOAMIPerformanceReport2002-2008-e.pdf. National Orphaned/Abandoned Mines Initiative, 2002-2008 Performance Report, 2009, 5, available at http://www.abandoned-mines.org/pdfs/NOAMIPerformanceReport2002-2008-e.pdf.

the earth's surface caused by the collapse of underground mine voids or entries (Case 1). Furthermore, as in the earlier phases of the mine life cycle, mud- and landslides and tailings dam failures occur after mine closure. These are mainly caused by environmental destruction and deformation (Case 2-3), the saturation of slopes with mine water, (Case 4) or by tailings dam failures. While most tailings dam failures occur in active mines as was described in the respective risk area above, they also frequently occur after mine closure, at abandoned mines (Case 5), or even during reclamation (Case 6).

Case 1: United States The state of Colorado has a rich legacy of gold and coal mining. While hard-rock mining has diminished in Colorado, its citizens and government agencies continue to wrestle with legacy problems of these mining activities, which comprise contamination through AMD and subsidence. Subsidence holes open often unpredictably, as happened on I-70 west of the mining town of Idaho Springs in 2006. Furthermore, mineshafts collapse as in the case of the Graden Coal Mine shaft south of Dacono in Weld County in 2007. 588

- Over time, gravity and the weight of the rock overlying the mine cause the layers of rock to shift and fall downward into the mine area. As one layer falls down, the void moves upward toward the ground surface where it can cause holes, cracks, tilting, and sags. Even a few inches of settlement can cause significant damage to structures, roads, and utilities. Mine subsidence can occur abruptly or gradually over many years, see *Colorado Geological Survey*, at http://coloradogeologicalsurvey.org/geologic-hazards/subsidence-mine.
- 586 See 'Surface Coal Mining Reclamation: 15 Years of Progress, 1977-1992', Report on the protection and restoration of the Nation's land and water resources under Titles IV and V of the Surface Mining Control and Reclamation Act of 1977, Part1, United States Department of the Interior 1992, 44.
- 587 Studies show that about 83% tailings dam failures occur when the dam is active, 15% in inactive and abandoned dams and only 2% of failures occurred in inactive but maintained dams, see M. Rico (et al.), 'Reported tailings dam failures. A review of the European incidents in the worldwide context', Journal of Hazardous Materials, Vol. 152, Issue 2, April 2008, pp. 846–852.
- See the description of these cases by the Colorado Geological Survey, at http://coloradogeologicalsurvey.org/geologic-haz-ards/subsidence-mine. See further the Abandoned Mines Program by the Division of Reclamation of Mining and Safety of the Colorado Geological Survey at http://mining.state.co.us/Pages/Home.aspx.

Case 2: Canada Historic Slides, like the Frank rockslide that buried part of the mining town of Frank, Northwest Territories, Canada, on April 29, 1903. Over 90 million tons of limestone rock slid down Turtle Mountain within 100 seconds, obliterating the eastern edge of Frank, the Canadian Pacific Railway line and the coal mine. Overall death toll is uncertain and lies between 70 and 90 lives lost. See Following a study conducted by Geological Survey of Canada right after the disaster, coal mining contributed to the collapse of the Turtle Mountain, which was disputed by the owners of the mine. Seo

Case 3: Philippines In Libay, located on the coast of Sibutad, Zamboanga del Norte, Mindanao LSM projects were launched in 1997, stripping the surface of mountainside and exposing it to erosion. Following protests and falling mineral prices, project operations were suspended in 2002. According to a 2006 fact-finding mission, local residents reported tailings dam overflows and mudslides between 1997 and 2002, which destroyed rice fields and filled the bay with mud, thus killing mangroves and corals. They further described that, owing to toxicity and massive siltation of Murcellagos Bay, fishing was no longer viable. They claimed that rice production had fallen by up to 50 percent. The effects were said to be felt by surrounding communities up to 30 kilometers away, affecting up to 15,000 people. ⁵⁹¹

Case 4: United States While coal mining is relatively unimportant in Tennessee today, the state was once one of the largest coal producers in the United States. ⁵⁹² Legacy problems of this long history of extensive coal mining comprise regu-

larly occurring landslides at abandoned coalmines, often caused by the saturation of slopes by mine water. 593

Case 5: Philippines On September 11, 2002, a spillway failure of two abandoned tailings dams occurred in San Marcelino, Zamabales after heavy rain. On September 5, 2002, despite inspections revealing that heavy rains impounded water on the dams and spillways, the Department of Environment and Natural Resources considered the failure of the dams "unlikely." The tailings spilled into Mapanuepe Lake and eventually into the Santo Tomas River. 250 families were evacuated after low-lying villages were flooded with mine waste and other chemicals. 594 Furthermore, in Marinduque, concerns were raised over the possible collapse of the Makulapnit tailings dam, which had been abandoned by the Marcopper Mining Corporation following massive spills in 1996. Due to its rapid deterioration, the dam is considered to be in imminent danger of collapse. The aging dam may not be able to hold additional water volume and may burst from future heavy rains. 595

Case 6: Canada In November 2004, a 100-meter long and 12-meter high tailings dam collapsed during reclamation work at the Lake Pinchi Mercury mine in British Columbia, Canada. 6,000 to 8,000 m3 of rock, dirt, and wastewater were reportedly spilled into the 5500 ha Pinchi Lake. 596

⁵⁸⁹ See http://www.history.alberta.ca/frankslide/slidefacts/slide-facts.aspx.

⁵⁹⁰ See W. Kerr, 'Frank Slide', 1990, pp. 38 et seq.

⁵⁹¹ See C. Doyle (et al.), 'Mining in the Philippines Concerns and conflicts - Report of a Fact-Finding Trip to the Philippines July-August 2006', Society of St. Columban, 2007, p. 5.

⁵⁹² See http://www.sourcewatch.org/index.php/Tennessee and coal#History.

See 'Surface Coal Mining Reclamation: 15 Years of Progress, 1977-1992', Report on the protection and restoration of the Nation's land and water resources under Titles IV and V of the Surface Mining Control and Reclamation Act of 1977, Part1, United States Department of the Interior 1992, p. 44.

See http://www.wise-uranium.org/mdafsm.html#CAUSES.

See http://www.wise-uranium.org/mdiss.html.

See the chronology of major tailings dam failures at http://www.wise-uranium.org/mdaf.html.

b. Human Rights Analysis

aa. Right to Life, Art. 6 ICCPR

As described above, the scope of protection of the right to life not only includes the freedom from arbitrary deprivation, but also the protection from other threats to human life, such as malnutrition, life-threatening illness, nuclear energy, or armed conflict.597 Art. 6 (1) therefore obliges States to take positive measures to protect the life of individuals against other threats. 598 Therefore, as concluded above, for the corresponding environmental impacts during the operations phase, States can violate their obligation to respect, ensure, and protect the right to life by implementing or not preventing mining activities that lead to fatal mud- and landslide or tailings dam failures.

The obligation to ensure and protect, in this context, requires particular attention, since mud- and landslides and tailings dam failures are not always predictable - particularly when stemming from abandoned mines. Nevertheless, states have to enact and to enforce appropriate legislation to prevent third party mining activities that lead to such encroachment on the right to life. On a case-by-case basis, it has to be assessed if the State has fulfilled its due diligence in the protection of this right against third party intervention. The decisive point, once again, is foreseeability. If the public authorities knew or ought to have known of the threat of a mud- or landslide or a tailings dam failure caused by, or at, an abandoned mine, such foreseeability would be given. However, predictability, not positive knowledge, is the crucial condition in this context.599 While mudand landslides, as tailings dam failure, can be caused by unforeseeable natural disasters or other cases of "force major," many of such accidences can be foreseen through the application of up-to-date technical methods. Furthermore, in unclear situations, States should also be obliged to take appropriate precautions through their institutions. 600 Such precautions could also comprise the setting up of a respective survey service.

bb. Right to Housing, Water, Food, Health and Work

In line with the results of the analysis in the corresponding section above (see [C.][II.][2.]), the legacy problems described in this section can further touch upon State obligations under Art. 6, 11 and 12 ICE-SCR, guaranteeing the rights to work, housing, food, water, and health.

cc. Right to Remedy

As analyzed above, particularly in the phase after mine closure and in the context of abandoned mines, attributing the negative effects on the environment, and ultimately on human rights, to the State is often very difficult. Hence, the right to remedy, and as a consequence the right to an effective investigation into the reasons for the negative environmental effects, is of the utmost importance in giving effect to the rights of affected individuals and communities.

⁵⁹⁷ See HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 5 with regard to malnutrition and epidemics.

See J. Salmon, 'Dictionnaire de Droit International Public', 2011, p. 771; A. Kees, 'Responsibility of States for Private Actors', in R. Wolfrum (ed.), MPEPIL, 2011; A. Epiney, 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992, pp. 250 et seq.

See on this also the 'precautionary principle' as established under international environmental law. See Principle 15 of the 1992 Rio Declaration: "(...) the precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"; see further Southern Bluefin Tuna (Provisional Measures)(1999) ITLOS Nos. 3&4, paras. 77-9; Judges Laing at paras. 16-9 and Treves at para.9; A. Nollkaemper, 'What You Risk Reveals What You Value', in: D. Freestone/E. Hey (eds), The Precautionary Principle and International Law: The Challenge of Implementation, 1996, p. 80. In Tatar v. Romania, 27 January 2009, 67021/01, para. 120, the ECHR noted that the precautionary principle was part of European Community law, "qui « a vocation à s'appliquer en vue d'assurer un niveau de protection élevée de la santé, de la sécurité des consommateurs et de l'environnement, dans l'ensemble des activités de la Com-

dd. Right to Information, Art. 19, 25 ICCPR

Complementary to the right to remedy, affected individuals have the right to information as described above. As mentioned, sufficient and timely information can be crucial, particularly in the present risk area, to save lives and livestock.



Chapter 4: Human Rights Risk Areas in the Context of Artisanal and Small-Scale Mining

A. Description of Artisanal and Small-Scale Mining

Mining is as old as humankind and enabled the development of civilization by providing materials like flint stone, copper, bronze and precious metals such as gold and silver, which were sacred to many ancient cultures. While this form of artisanal and small-scale mining (ASM) disappeared in the industrialized economies during the 19th century due to its lack of competitiveness to LSM, it remained a predominant means of livelihood in the developing world. Currently, an estimated 20-30 million artisanal miners are working in ASM worldwide with about 100 million related livelihoods. Therefore, ASM forms an equally important sector when analyzing mining-related human rights Risk Areas.

Considering its complex and diverse nature, which occurs under many different socio-economic and cultural contexts, commonly defining ASM is difficult.⁶⁰⁴ For the purpose of this study, ASM will be described as follows: Mining performed by individuals, groups, families or co-operatives with minimal or no mechanization, often in the informal (illegal) sector of the market.⁶⁰⁵ Drawing from the ASM definitions adopted in some countries⁶⁰⁶ and the criteria most

used to describe ASM,⁶⁰⁷ a number of distinctive conditions can be summarized:

- Great amount of physically demanding work;
- Low level of occupational safety and health care;
- Deficient qualification of the personnel on all levels of the operation;
- Inefficiency in the exploitation and processing of the mineral production (low recovery of values);
- Exploitation of marginal and/or very small deposits, which are not economically exploitable by mechanized mining;
- Low level of productivity;
- Low level of salaries and income;
- Periodical operation by local peasants or according to the market price development;
- Lack of social security;
- Insufficient consideration of environmental issues;
- ▶ Chronic lack of working and investment capital.

While many definitions further subdivide ASM according to the grade of mechanization⁶⁰⁸ or the level of productivity,⁶⁰⁹ for the purpose of this study, the term "artisanal and small-scale mining" will be used to describe all lower segments of mining (non-mechanized and mechanized) that are not conventional, industrial mining operations.⁶¹⁰

- 601 See F. Hruschka / C. Echavarría, 'Rock-Solid Chances for Responsible Artisanal Mining', Alliance for Responsible Mining (ARM), ARM Series on Responsible ASM No. 3, January 2011, 1.
- 602 Ibid
- 603 See A. Buxton, 'Mining, Minerals and Sustainable Development + 10', IIED Discussion Paper, 2012, p. 23.
- See on this, F. Hruschka / C. Echavarría, 'Rock-Solid Chances for Responsible Artisanal Mining, Alliance for Responsible Mining (ARM)', ARM Series on Responsible ASM No. 3, January 2011, p. 2. See further T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD / IIED, Working Paper No. 70, 2002, p. 4.
- 605 See T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 4.
- See for an overview E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 11.

- The criteria are: Production volume, number of persons per productive unit intensity (volume) of capital employed, labor productivity, size of mine claim, quantity of reserves, sales volume, operational continuity, operational reliability and duration of the mining cycle, see T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 5.
- See, e.g., S. Kambani, who describes three levels: artisanal mining (micro-scale), traditional small-scale mining (non-mechanized/semi-mechanized) and highly mechanized small-scale mining, see S. Kambani, 'Illegal Mining and Marketing', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 46.
- See, e.g., the definition by the United Nations (UN) Department of Economic and Social Affairs (Resources and Transport Division), see 'Small-scale Mining in the Developing Countries', UN Doc. ST/ECA/155 (1972).
- 610 Compare the use of this term by F. Hruschka/C. Echavarría, 'Rock-Solid Chances for Responsible Artisanal Mining, Alliance for Responsible Mining (ARM)', ARM Series on Responsible ASM No. 3, January 2011, 2.

Furthermore, when describing ASM, it is important to note that it is, in many countries, part of the informal or illegal sector. 611 Common reasons for informal or illegal ASM include limited access to mining titles; a lack of knowledge of the legal requirements; demanding bureaucratic procedures; local traditional and cultural behaviors; a high tax burden and sometimes a limited danger of sanctions in combination with the possibilities to evade the imposition of the law by corruption. 612 Furthermore, there is sometimes little political will to formalize the ASM sector because of the number of people benefiting from corruption and money laundering. These and similar illegal practices⁶¹³ are more easily conducted if the sector has not been formalized. These and other factors lead to the situation that in some countries, ASM forms a considerable part of the entire mining sector614. Additionally, illegal mining has become a major funding source for illegal armed groups or organized crime (see below, [Ch.5][B.][I.][1.]).

ASM has many negative ramifications on the social, environmental, and fiscal regimes of a region or country.615 At the same time, several human rights Risk Areas arise, as described below. Many of these negative effects particularly occur in informal or illegal settings, as described above. Therefore, information on the current legal status of the ASM sector of the respective countries is included in the case studies below. However, given the data scarcity on ASM, particularly on its informal or illegal sector, generally applicable conclusions are sometimes difficult to draw.

- 611 See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 7.
- 612 Ibid. See further on this S. Kambani, 'Illegal Mining and Marketing', in: G. Hilson, The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 46.
- 613 See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 7.
- 614 In Colombia, for example, ASM activity accounts for the bigger part of the entire gold production, see C. Echavarria, 'What is legal?' Formalising artisanal and small-scale mining in Colombia', ARM/IIED, September 2014, p. 8, who cites the latest census of 2014.
- 615 Ibid.

While LSM, as done in chapter 4, can be aptly described following the different phases of the mine life cycle, this is rather inappropriate for ASM. Considering its diverse and multifaceted nature, many of the typical phases often differ considerably or are simply not performed in ASM: Licensing procedures, according to the level of formalization, are often specifically designed for the characteristics and needs of the ASM sector. ASM licensing systems are thereby mostly set up on a regional level, while LSM is more regulated on the national level. 616 The most common ASM licenses are informal or undocumented licenses,617 strata licensing,618 group permitting,619 licensing by type or name of minerals,620 single license,621 and lo-

- Expert consultation, M. Priester.
- This form of "informal licensing" does not feature any written document or formal procedure for application but is mostly in the form of a pronouncement or part of the specific mining legislation. It is often used to accommodate specific groups like indigenous peoples. Example countries are Venezuela (libre approvechamiento); Papua New Guinea; Dominican republic and also Zambia, Uganda and Philippines), see E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 14.
- This system provides mining rights over a certain vertical extent/depth of a mineral deposit or a given area (Ethiopia; Indonesia; Papua New Guinea; Guinea and Philippines), see E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003.
- Provides a permit over a specific area for a group of individuals, simplifies procedure and monitoring and encourages grouping of small-scale miners into cooperatives and similar associations (Zimbabwe [Alluvial Gold Mining Act]; Philippines [People's Small-Scale Mining Law]), see E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003.
- This is the most common designation of small-scale mining licenses, which is often drawn up as a three-part categorization like, e.g., in Mongolia (categories: "strategic", "specific" and "common" minerals) or Indonesia ("strategic", "vital" and "others"), see E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 15.
- Single licensing means that only one license is issued to cover all mining related activities. Even though, single licensing is considered most appropriate for ASM, staggered licensing is applied in some countries nevertheless, see E. Bugnosen, 'Small-Scale Min-

cal government license.⁶²² Furthermore, most ASM sectors are regulated through licensing systems that issue licenses according to name or types of minerals as opposed to the staggered licensing systems generally applied in LSM, which provide separate licenses for the different mining stages.⁶²³ Given the often very complex structure of ASM sectors, which makes monitoring very difficult, single licensing systems are deemed the most appropriate for ASM.⁶²⁴ These provide a single license to cover all mining-related activities.

Even though artisanal miners weigh production costs against market prices as well, they do not have either the capital nor the time to invest in exploration or geological and feasibility studies, which are often very expensive. Instead, they rely more on local knowledge and experience and start to exploit as soon as they find a likely deposit. Furthermore, commodities suitable for ASM are often easily accessible and available on the earth's surface, like alluvial, elluvial, or colluvial formations, created by erosion and sedimentation (e.g. gold-bearing river beds). This allows artisanal miners to usually skip the exploration phase and to proceed with extraction im-

ing Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*, 2003, p. 15.

- 622 A case exclusive to Brazil, where ASM (garimpagem) is regulated by the national government via the National Department of Mineral Production that creates one licensing system for the whole country (except for licensing systems developed by states under their own jurisdiction), see E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 15.
- 623 Ibid., p. 15.
- 624 Ibid
- 625 See 'Breaking New Ground Mining, Minerals and Sustainable Development', MMSD/IIED Project Report, 2002, p. 318; see also T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 51.
- 626 See 'Breaking New Ground Mining, Minerals and Sustainable Development', MMSD/IIED Project Report, 2002, p. 318.
- 627 F. Hruschka/C. Medellín, 'Rock-Solid Chances for responsible artisanal mining', Alliance for Responsible Mining (ARM), ARM Series on Responsible ASM No. 3, (January 2011), p. 3.

mediately after discovery.⁶²⁸ This often leaves small-scale miners with very little knowledge of the deposit and its reserves, which makes it very hard to obtain financing.⁶²⁹ Furthermore, the lack of planning can often lead to problems with exploration measures of large-scale mining projects and often causes damage to the environment.⁶³⁰

Furthermore, a very low level of mechanization, particularly in the informal and illegal sector, is typical for ASM. Construction measures in ASM, therefore, often just comprise the set-up of what little is needed to start exploitation. The "construction" of a mine in ASM is therefore often not a separate mining stage.

ASM operations differ considerably. Other than LSM operations, it is commonly characterized by a lack or very reduced degree of mechanization, a low level of occupational safety and health care, and deficient qualification of the personnel on all levels of the operation. Furthermore there exists an inefficiency in the exploitation and processing of the mineral production (low recovery of values) and an exploitation of marginal and/or very small deposits, which are not economically exploitable by mechanized mining and a low level of productivity. Broadly speaking, ASM can be observed in four different types:

Permanent artisanal mining as a fulltime, year-round activity. This type of ASM is frequently the only economic activity and is sometimes accompanied by

- 628 Ibid. See also T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 45.
- **629** Expert consultation, M. Priester.
- 630 See the case study on Bolivia, T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 57.
- 631 See T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 5.
- 632 Ibid
- 633 Description of ASM types according to F. Hruschka / C. Echavarría, 'Rock-Solid Chances for Responsible Artisanal Mining', Alliance for Responsible Mining (ARM), ARM Series on Responsible ASM No. 3, January 2011, pp. 3 et seq.

other activities like farming, herding or other extractive tasks of indigenous groups

Seasonal artisanal mining, where ASM is performed according to the seasons or seasonal migration into artisanal mining areas is performed during idle agricultural periods to supplement annual incomes

Rush-type artisanal mining. Massive migration based on the perception that the expected income opportunity from a recently discovered deposit far exceeds the current actual income. It is not uncommon to observe former rush areas converting into new communities and rush miners converting into settlers (FN on connection to rising commodity prices (gold) / examples of rush scenarios)

Shock-push artisanal mining, which is poverty driven, often emerging after recent loss of employment in other sectors, conflicts, or natural disasters.

The exploitation of a deposit by ASM ceases after its exhaustion, when decreasing commodity prices make it uneconomical or if the deposit can no longer be exploited with the limited technical means of ASM. This low level of mechanization, formalization, and the lack of investment capital and time for proper planning of mine exploitation often prevent small-scale miners from performing appropriate mine closure and reclamation. While this is mainly a problem of illegal or informal ASM, many simple regulatory systems in semi-formalized ASM sectors often do not provide for mine closure planning either.634 ASM legacy problems are less problematic with a view to overburden of waste rock and tailings, which are far less produced in ASM than in LSM. More problematic in the context of ASM legacy issues are environmental contamination and destruction. 635 Human rights violations in this context occur where States fall short of protecting the individual and col-

B. Risk Areas and **Human Rights Analysis**

I. Loss of ASM as a Means of Livelihood

1. Description of Risk Area and Case Studies

A first Risk Area that is to be described in the present chapter is, different from the following ones, not directly caused by ASM activities but is nevertheless causing severe human rights problems. ASM, while performed for a number of reasons and in different scenarios, is mainly poverty driven and often constitutes the only available source of employment and livelihood for entire communities. ASM currently employs an estimated 20-30 million artisanal and small-scale miners worldwide with about 100 million related livelihoods. 636 However, minerals deposits that can be economically exploited also attract attention by other parties. While ASM, due to its generally much lower level of mechanization and extraction efficacy, normally does not target the same mineral deposits as LSM, wide-ranging LSM activities can lead to a repression of ASM. This mainly occurs where governments, in aiming at increasing foreign direct investment in their minerals sector, issue land titles and concessions for LSM projects in areas that were previously used for ASM⁶³⁷ (Case 1-2). While

.....

lective rights of individuals and groups that are affected by these environmental implications.

Expert consultation, M. Priester.

See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 37.

See A. Buxton, 'Mining, Minerals and Sustainable Development + 10', IIED Discussion Paper, 2012, p. 23. See further N. Jennings, 'Addressing Labour and Social Issues in Small-Scale Mining', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, pp. 151-160 (151); see further M. Hansson, 'Ending child labour in mining -Field experience and analysis of interventions from Mongolia', International Programme on the Elimination of Child Labour (IPEC), International Labor Office, Geneva, June 2006, 2.

See J. Andrew/G. Hilson, 'Land Use Disputes between Small-

the present risk area corresponds to the risk area of "area clearing and resettlements" analyzed in chapter 3 above, LSM-related displacements often affect artisanal and small-scale miners. This is mainly due to the fact that the loss of their source of livelihoods. namely the exploitation of the respective mineral deposit, can often not be appropriately mitigated: Even if they are entitled to apply for mining concessions, they hardly stand a chance against LSM investors, given their limited skills and financial resources. 638 Furthermore, while employment of former artisanal miners in the newly established LSM project bears the potential for such mitigation,639 it is hardly ever possible to employ all affected small-scale miners. 640 The conflicting interests of LSM projects and smallscale miners often lead to violent conflict, as shown in the risk area on "control of the resource or resource area" below (see below, [Ch.5][B.][I.][1.]).

Case 1: Colombia The expansion of large gold mining projects and titling processes, particularly in the cases of Aluviones del Pacífico in the Chocó region and Gran Colombia gold in the Andean region, has generated tension in rural areas between small and large-scale miners as well as the government. From 2005 to 2013, more than eight thousand new titles have been issued, while legalization processes have not moved for-

and Large-Scale Miners: Improving Conflict Management', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, 25-44 (26).

- 638 See, e.g., the conflict over gold mining in Colombia, see M. Sarmiento et al., 'Characteristics and Challenges of Small-Scale Gold Mining in Colombia', in: L. Cremers et al (eds), 'Small-Scale Gold Mining in the Amazon The Cases of Bolivia, Brazil, Colombia, Peru and Suriname', 46-68 (61).
- 639 See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 54.
- 640 M. Miranda et al., 'All that All That Glitters is Not Gold: Balancing Conservation and Development in Venezuela's Frontier Forests', World Resources Institute-Forest Frontiers Initiative, 1998, p. 36.
- 641 See M. Sarmiento (et al.), 'Characteristics and Challenges of Small-Scale Gold Mining in Colombia', in: L. Cremers/J. Kolen/M. de (eds), 'Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 46-67 (61).

ward. 642 Consequently, small-scale miners that have been working in an area for decades cannot legalize their practices, since a title was already awarded to a multinational corporation. 643 This has led to an equity problem, where small-scale miners are at a disadvantage because of their limited skills, financial resources, and access to government services. 644 While efforts to formalize the ASM sector in the country had not been successful until 2010, drastic measures were taken in the following years to respond to the uncontrolled continuing expansion of illegal mining, including severe penalties on illegal mining and the confiscation and destruction of machinery (Decree 2235 of 2012). 645 In 2013, the "National Formalization Policy 2013" was launched, aiming to achieve 40 percent formalization by 2019 and full formalization by 2032 including occupational training and education for mine workers as well as technical organizational strengthening of ASM. 646 Most recently, Mercury Law No. 1658 (July 15, 2013) introduced incentives for the formalization of small-scale mining and regulating inter alia use, final disposal, and release of mercury into the environment. 647 Furthermore, a new draft mining law is awaiting approval from the National Assembly.

Case 2: Suriname The Maroon villagers of Nieuw Koffiekamp in the district of Brokopondo were highly dependent on ASM as a means of livelihood and experienced mining-induced displacement twice. In 1963-64, it had already

- 642 Ibid.
- 643 Ibid.
- **644** Ibid.
- 645 C. Echavarria, 'What is legal?' Formalising artisanal and small-scale mining in Colombia', ARM/IIED, September 2014, pp. 41-42.
- 646 Ibid, pp. 48-49.
 - Moreover, Mining Formalization Decree 480 (6 March 2014) orders differentiated auditing by authorities for ASM under formalization sub contracts based on an approved mining plan and application of simplified mining environmental guidelines, see C. Echavarria, 'What is legal?' Formalising artisanal and small-scale mining in Colombia', ARM / IIED, September 2014, pp. 128 et seq., 136.

Maroons were forced off their lands. 648 In 1995, rooon tribal group. 649 This led to violent conflict

tribal group. 650 This led to violent conflict with

were forced off their lands. 651 Suriname's ASM scale mining is limited to max. 200 ha. 652 Since ing taxation.653

Case 3: China In June 2001, the central govforcing them into illegal mining activities. 654 It

- E. Kambel / F. MacKay, 'The Rights of Indigenous Peoples and Maroons in Suriname', International Work Group for Indigenous Affairs / The Forest People Program (1999), p. 105.
- M. Heemskerk/C. Duijves, 'Small-Scale Gold Mining And Conflict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100 (94).
- 650 Thid.

- E. Kambel/F. MacKay, 'The Rights of Indigenous Peoples and Maroons in Suriname', International Work Group for Indigenous Affairs / The Forest People Program (1999), p. 105.
- See 'Small scale gold mining in Suriname' (11 June 2011), p. 3, see at http://www.gomiam.org/wp-content/uploads/2014/11/ factsheet-suriname.pdf.
- See L. Cremers/M. de Theije, 'Small-Scale Gold Mining in the Amazon', in: L. Cremers / J. Kolen / M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 14 et
- See the case study by See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD / IIED, Working Paper No. 70, 2002, p. 32. See further P. Andrews-Speed (et al.), 'The Impact of, and Response to, the Closure of Small-Scale Coal Mines in China: A Preliminary Account', in: G. Hilson

must be noted that in China ASM is often regulated by the same legislation as the formal mining industry. But since the above-mentioned State Council Order from June 2001, the current legal position for artisanal and small-scale miners in China is generally precarious and in flux. Some observers speculate that all artisanal and small-scale mining operations could be targeted in the medium term. 656

2. Human Rights Analysis

a. Right to Work, Art. 6 ICESCR

Art. 6 (1) ICESCR stipulates that the States Parties recognize "the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right." The right to work is essential to human survival and to life with dignity. 657 It contributes, at the same time, to the survival of the individual and to that of his/her family, and insofar as work is freely chosen or accepted, to his/her development and recognition within the community. 658 The right to work is therefore closely linked to the other subsistence rights, namely the right to food. The right to work is an individu-

- (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, 511-532, who discuss this case in the wider context of socio-economic Impact of LSM and ASM project closure.
- 655 See L. Shen/A. Gunson, 'The role of artisanal and small-scale mining in China's economy', *Journal of Cleaner Production*, Vol. 14, 2006, p. 428, see at http://www.understandchinaenergy.org/wp-content/uploads/2014/01/role-of-Artisanal-and-Small-scale-Mining-China.pdf.
- 656 See A. Gunson / Y. Jian, 'Artisanal Mining in the People's Republic of China', MMSD / IIED, Working Paper No. 74, 2001, pp. 17-18.
- 657 CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 1.
- 658 See the preamble to ILO Convention No. 168, 1988: "... the importance of work and productive employment in any society not only because of the resources which they create for the community, but also because of the income which they bring to workers, the social role which they confer and the feeling of self-esteem which workers derive from them", as cited by the CESCR in General Comment No. 18, para. 1.

al right that belongs to each person and is at the same time a collective right. 659

"Work" in the sense of Art. 6 is to be understood as "decent work," respecting fundamental human rights and the rights of workers, providing an income allowing workers to support themselves and their families as highlighted in article 7.660 Furthermore, subsistence agriculture, hunting, and fishing can be defined as "work," thus falling within the scope of the definition of Art. 6 ICESCR.661 The right to work guarantees the freedom to choose and to accept work where it is available and not to be deprived of work unfairly.662 The State Parties' obligation to respect the right to work contains the prohibition of forced work and interference with equal access.663

In light of the foregoing, ASM can be understood as "work" in the cases outlined above, since comparable subsistence activities, such as agriculture or fishing, are considered as "work" under Art. 6 (1) ICESCR. If individuals who permanently or periodically (see above) have no other accessible work other than ASM are being deprived of this work opportunity, their right to work is violated. In contrast, ASM which is merely performed on occasion, notably in rush scenarios, while other work opportunities exist, would thus not fall within the scope of the right to work.

State Parties have to respect this right by refraining from interfering with this right.⁶⁶⁴ With regard to the present risk area, this would mean that States have to respect the right to work through abstaining from actively displacing artisanal and small-scale miners through state-controlled security or police forces

- 659 CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 1.
- 660 Ibid., para. 7.
- 661 See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 311.
- 662 CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 4.
- 663 Ibid., para. 23.
- 664 Ibid., para. 22.

or in the context of LSM projects by state-controlled mining companies. Furthermore, in protecting the right to work, 665 they have to enact and enforce appropriate legislation, taking into account the special needs of artisanal and small-scale miners. This duty to protect thereby has to be diligently fulfilled. A violation of the rights analyzed in the present section therefore arises if violations had been foreseeable in the respective case. This would mean that States that implement mining projects or award concessions for mining projects while aware that such would repress ASM as a source of livelihoods are violating their obligations under Art. 6 ICESCR. Furthermore, since data and knowledge on ASM sectors is often very scarce, due diligence obligations could also comprise a thorough analysis of ASM sectors to prevent such violations.

b. Right to Food, Water, Health, Housing and privacy

The displacement of ASM can further lead to encroachments upon other subsistence rights such as the right to food, water, health, housing and privacy of the individual small-scale miners. The human rights implications of the present risk area, in so far, match those observed in the analysis of "area clearing" measures above (see [Ch.3][B.][II.][1.]).

II. Environmental Impact

1. Description of Risk Area and Case Studies

One of the most visible problems of ASM, mainly in informal ASM, is its often disastrous environmental impact. While LSM projects have a massive environmental impact, "environmental costs" of ASM are in general higher than those of other types of mining.666 This means that ASM is dirtier per unit of output than medium, large, and modern mining operations.667 The main reasons for this phenomenon is the great number of individual polluters in ASM, which are often concentrated in one particular spot and inefficient, outdated and polluting technology. Additionally, many mine sites are in remote regions and areas, which are difficult to access. Thus, controlling and monitoring of ASM activities is very difficult⁶⁶⁸ and environmental regulations are hard to enforce. The most important environmental problems connected to ASM comprise:669

- Mercury pollution/Cyanide pollution
- Direct dumping of tailings and effluents into rivers
- Improperly constructed tailings dams
- Acid rock drainage
- Improper closure
- River damage in alluvial areas
- River siltation
- Erosion damage and deforestation
- Landscape destruction
- Garbage and solid waste
- Tropical diseases (malaria)
- Induction of subsequent colonization
- Cultural damage due to invasion of sensitive tribal land
- Uncontrolled ASM activities in protected areas

The following can be listed as the most relevant reasons for these problems:670

- Lack of knowledge, education and training (technical and environmental)
- Inefficient technology and limited techniques
- Inefficient administrative management
- Errors in human control
- **Economic limitations**
- Lack of access to better techniques
- Lack of information about good practice
- Lack of control and enforcement
- Non-adequate environmental legislation

⁶⁶⁵ Ibid.

See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, pp. 36 et seq.

⁶⁶⁷ Ibid.

⁶⁶⁸ Ibid.

⁶⁶⁹ Ibid.

⁶⁷⁰ Ibid.

As with LSM projects, ASM also bears the risk of contaminating soil and water: However, in ASM this is mainly caused to a greater extent by the use of archaic methods (Case 1-6) and the direct disposal of the used chemicals and tailings into surface waters (Case 7-9). While the environmental impact of LSM projects has further extensive socio-economic and health problems, this can also be observed in ASM: The destruction and pollution of forests, rivers and lakes deprive local communities, particularly tribal and indigenous ones, of their home territories and means of livelihood. Health problems arise not only from ASM-related mercury poisoning⁶⁷¹ but also from the spread of tropical diseases like malaria or dengue fever (Case 10). Further, ASM also leads to indirect environmental problems (Case 11). Finally, while ASM projects normally produce a much less amount of mine waste than LSM projects,672 legacy problems also occur in ASM, since mine closure and reclamation is often not performed. Many former mine sites and the surrounding environments remain destructed, contaminated, and prone to subsidence (Case 12) and accidents such as people falling into open shafts.

Case 1: Brazil 12 percent of the Brazilian gold production comes from the so-called garimpeiros (small-scale miners).⁶⁷³ Small-scale mining is legally formalized as an economic activity, for which people can obtain a license.⁶⁷⁴ Brazil is considered to have the most elaborate set of regulations regarding ASM gold mining.⁶⁷⁵ However, many miners continue to work illegal-

671 The environmental problem of mercury pollution is closely linked to problems of occupational health and safety in ASM, see N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 16.

672 Expert consultation, Sven Renner, BGR.

673 J. Kolen (et al.), 'Formalized Small-Scale Gold Mining in The Brazilian Amazon: An Activity surrounded by Informality', in: L. Cremers / J. Kolen / M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 31 et seq.

674 Ibid.

675 Ibid.

ly, without a license and without paying taxes, and in particular by ignoring rules and environmental regulations. ⁶⁷⁶ Mercury, which is used to concentrate gold (see below) in ASM operations, notably in the Brazilian Amazonas region, is the biggest source of anthropogenic mercury pollution. The metal is either directly dispersed into surface waters or reaches surface ecosystems through atmospheric deposition of oxidizing mercury vapors that arise when the amalgam is heated. After reaching surface ecosystems, biological entities within soils and aquatic ecosystems begin cycling the metal, which leads to Mercury contamination of fish that is consumed by local communities. ⁶⁷⁷

Case 2: Peru The Madre de Dios region of Peru is one of the world's most bio diverse ecosystems and is located in the headwaters of the tropical Amazon.⁶⁷⁸ Artisanal and small-scale gold mining has occurred in the Madre de Dios Region since the 1970's and has grown significantly since 2000.⁶⁷⁹ A study of 2015 found particularly high mercury levels in fish consumed in the Madre de Dios Region. This dietary mercury exposure affects not only communities that are involved in ASM but also all other communities living off the resources of the river basin.⁵⁸⁰ Moreover, artisanal and small-scale gold mining activities led to more than 50,000 hectares of deforestation in the Madre de Dios region, which exceeds forest loss from ranching, agri-

676 Ibid.

See L. Drude de Lacerda, 'Human Health Implications of Mercury Usage in Small-Scale Gold Mining Activities in the Brazilian Amazon' in: G. Hilson (ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*, 2003, 679-700 (690 et seq.). See further R. Villas Boas (et al.), 'Mercury in the Tapajos Basin', Report of the UNIDO Workshop in Belém, Pará, Brazil, on Project EG/GLO/97/G43, December 2001.

678 S. Diringer (et al.), 'River transport of mercury from artisanal and small-scale gold mining and risks for dietary mercury exposure in Madre de Dios, Peru', Environmental Science: Processes & Impacts, vol. 2, 2015, p. 479.

679 Ibid.

680 Ibid. See further E. Yard (et al.), 'Mercury Exposure Among Artisanal Gold Miners in Madre de Dios, Peru: A Cross-sectional Study', Journal of Medical Toxicology, Vol. 8, 2012, pp. 441–448. culture, and logging combined. 681 The ASM sec-

Case 3: Suriname In his communication of Sepdren and adults.682

Case 4: Mongolia Mercury is also used to prohazards.683 The Regulation on Extraction of Min-ASM continues to exist. 684

681 Ibid, p. 483.

See 'Case no. SUR 1/2012: Alleged situation of health, environmental problems and land rights issues affecting Wayana indigenous communities in southeastern Suriname', in: Report of the Special Rapporteur on the rights of indigenous peoples, UN-Doc. A/HRC/24/41/Add.4 of 2 September 2013, para. 143.

683 Thid.

See M. Heemskerk, 'Gender Assessment of Small-Scale Mining

Case 5: Ghana Artisanal gold mining activities are increasing in Ghana.685 The Minerals ic small-scale mining legislation.686 Besides the a lack of formality still remains.687 The legalizaployment to over one million people. 688 In addities. 689 Most of these activities are undertaken rich in alluvial gold. 690 A survey study on mercuination. 691 The values raise great concern, since exposure via food intake. 692

in Mongolia', (October 2013), pp. 6, 9, at https://www.eda.admin. ch/content/dam/countries/countries-content/mongolia/en/ resource en 229028.pdf.

See A. K. Donkor et al. 'Artisanal Mining of Gold with Mercury in Ghana', West Africa Journal of Applied Ecology, vol. 9, 2006, p. 1.

E. Bugnosen, 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 9.

D. Lynas, 'Investigating the Occupational Health and Safety Issues Associated with Small-Scale and Artisanal Mining in Ghana', (February 2014), p. 2, see at http://im4dc.org/wp-content/uploads/2014/09/Lynas-Comm-FR-Completed-Report.pdf.

688 See A. Donkor (et al.), 'Artisanal Mining of Gold with Mercury in Ghana', West Africa Journal of Applied Ecology (2006), pp. 3, 9.

689 Thid.

690 Ibid.

691 Thid.

692 Ibid, 4. Case 6: Tanzania In 2011, Tanzania was the fourth largest gold producer in Africa. The ASM sector of Tanzania saw steps towards formalization following the implementation of a mineral trade liberalization policy in the late 1980s that led to the development of a consistent and holistic sector in this regard. Consequently, the legally traded gold production increased from 0.5 million US-dollar in 1985 to 38 million US-Dollar in 1992. To conduct small-scale mining legally, Tanzanian citizens must apply for a renewable so-called Primary Mining License, authorizing them to mine an area of 10 hectares for 7 years. Under the Tanzanian mining regulations, an owner of a licensed mine must use a retort as a device to capture up to 95% of the mercury emissions and provide employees with protective gear. But even though Tanzania has laws and institutions in place to regulate the mercury trade and promote safer mercury use in mining, the government has done little to put these laws and policies into action. Consequently, mercury use in small-scale mining continues unabated. A study of 2006 of the Geita District in the north of the country near Lake Victoria, where most of the recent

693 Ministry of Energy and Minerals, Tanzania Minerals Audit Agency, "Annual Report" (2011), p. 16 see at http://www.tmaa.go.tz/uploads/TMAA Annual Report 2011F.pdf.

- 694 See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD / IIED, Working Paper No. 70, 2002, pp. 30, 31.
- 695 See the Mining (Mineral Rights) Regulations, Government Notice No. 405 (2010) Art. 5 (1) and the Mining Act No. 14 (2010).
- 696 See 'Analysis of formalization approaches in the artisanal and small-scale gold mining sector based on experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda', UN Environmental Program (UNEP), 2012, p. 7, available at: http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/ASGM/Formalization ARM/Case%20Study%20Tanzania%20June%202012.pdf; See 'Child Labor and Mercury Exposure in Tanzania's Small-Scale Gold Mines', HRW report 2013, p. 16.
- 697 See for instance the National Strategic Plan for Mercury Management, which includes inter alia strategies to raise awareness on the hazards of mercury and introduce mercury-free technology to extract gold.
- 698 See 'Child Labor and Mercury Exposure in Tanzania's Small-Scale Gold Mines', HRW report 2013, p. 16.
- 699 Ibid., p. 12.

gold mining production in Tanzania has taken place, estimated that 27 kg of mercury is released into the environment each year, while atmospheric emissions from other amalgamation burning is about 14 kg from the Blue Reef mine site and 7 kg from the other nearby mine sites, including Nyakagwe and Nyamtondo. Mercury contamination caused by the amalgamation of gold has been further observed in Mgusu and Mlimajiwa, raising serious concerns. Another study showed that the mercury levels in some fish in the Rwamagasa mining area exceeded international quality guidelines.

Case 7: Ecuador ASM formalization in Ecuador was mainly tackled during the 1990s: The General Regulation Substituting the General Regulation of the Mining Law (April 17, 2001) established the parameters for the definition of small-scale mining in its Art. 48. Accordingly, Small-scale Mining is limited to a maximum concession area of 150 mining hectares, to an extraction of 100 metric tons per day and a total amount of investment of up to one million US-Dollar. The growth of the sector gave place to conflicts of socio-environmental nature like air contamination by mercury burning and contamination of rivers by the free disposal of cyanide and heavy metals. The region of Portove-

- See 'Analysis of formalization approaches in the artisanal and small-scale gold mining sector based on experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda', UN Environmental Program (UNEP), 2012, pp. 7-8, available at: http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/ASGM/Formalization ARM/Case%20Study%20Tanzania%20June%202012.pdf; UNIDO, 'A Report for Assessment of the Environment and Health in the Rwamagasa area, Tanzania', Project EG/GLO/01/G34 (November 2007); available at: http://projects.inweh.unu.edu/inweh/display.php?ID=2506.
- 701 See 'Tanzania, Children Labour in Mining', IPEC, p. 39, available at: https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi416O7ub JAhXHFywKHSehDnkQFggdMAA&url=http%3A%2F%2Fwww.ilo.org%2Fipecinfo%2Fproduct%2Fdownload.do%3Ftype%3Ddocument%26id%3D1259&usg=AFQjCNEfMSTAmRZrO-zJASpaRfzqprJqAA&cad=rja.
- 702 H. Taylor et al. 'Environmental Assessment of Mercury Contamination from the Rwamagasa Artisanal Gold Mining Centre, Geita district, Tanzania', Science of the Total Environment, Vol. 343, 2005, pp. 111-133 (126 et seq.).

mining communities in Ecuador. 703 The majority the banks of the Puyango-Tumbes River.704 The watershed per year. 705 These mineral processing Tumbes River and into Peru.706 The waste disestimated to be up to 35 billion US Dollar.707

Case 8: Bolivia At the Cerro Rico mine in the lead/silver/zinc ore per day. Of this, about 200 cent of which is made up of pyrite. 709 The waste for many years.710 This is also affecting downity has ceased.711 In the Bolivian ASM sector, le-

Case 9: Sudan In Gugub and the surrounding ing/panning extraction site.714 Conspicuous tailtivities.715 Around Gugub, it is estimated that Khor Neiwi and other localized areas. 716 Seasontends as far as the Blue Nile. 717 The ASM sector

- 704 Ibid, 43.
- 705 Thid. 43
- 706 Ibid, 41.
- 707 Thid. 41.

- 709 Thid.
- 710 Ibid.

- 713 Thid. 28
- 714 J. Hinton / M. Veiga, 'Summary Report - Technical and socio economic profiles of global mercury project sites', 2004, p. 27.
- 715 Thid.
- 716 Ibid.
- 717 Ibid.

⁷⁰³ B. Nichols et al. 'Closure of Artisanal Small Scale Gold Mining Processing Plants in Ecuador', Journal of Management and Sustainability, vol. 5, 2015, p. 42.

D. Bocangel 'Small-Scale Mining in Bolivia: National Study, Mining Minerals and Sustainable Development', MMSD/IIED, Working Paper No. 71, 2001, p. 7.

See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 61.

T. Salman (et al.), 'Cooperative Organization and Balsa Mining in Bolivia', in: L. Cremers / J. Kolen / M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 23 et sea.

Case 10: Brazil In Brazil there are about 600,000 cases of malaria reported annually, 99 % of which occur in the Amazon River basin. This parasitic disease is spread easily through ASM activities in the region, due to diggings filled with water where mosquitoes breed, poor sanitation, and infected miners that move frequently from one region to another spreading the disease. The same case of the

Case 11: Madagascar The Mining Code of 1999 (Law No. 99-022) represents the juridical framework for small-scale mining in Madagascar and provides technical assistance to ASM. Accordingly, small-scale miners can possess a permit, which is annually renewable and issued by the commune. Issuance is conditional on the committal of the titleholder to observe the commune's environmental, health, and safety regulations. As for Madagascar, it has been stated that due to a lack of human and financial resources combined with the complexity of ASM activities and the lack of political will to act, it is difficult to control and monitor environmental violations associated with ASM. Deforestation, soil erosion, and disturbance of aquatic biodiversity are considered to be direct illicit environmental damages directly arising from ASM. Near Zombitse-Vohibasia, pit and tunnel constructions for small-scale mining activities have encouraged mass surface clearance of mangroves to allow access for people and equipment. Activities such as open cast mining on the banks of watercourses or sieving processes in water bodies, as seen at Ranomafana and Antsirabe, led to in-site soil erosion and suspended solids in water. This can result in the clogging of waterways as rocks and soil build up in the watercourse, disturbing the dynamics of streams and

rivers. Finally, charcoal production is seen as the major threat indirectly resulting from ASM in Madagascar. Following the ASM rush, near Antetezambato a considerable increase in charcoal production has been observed. Mangrove trees were used as firewood and construction materials for mine shaft and homes. The impact on the biodiversity is immediate and very damaging. Moreover, the clearance will expose mining areas and could provoke serious soil erosion. 721

Case 12: India There are no specific legal codes concerning small-scale mines in India. Instead, all legal codes applicable to mining in general are also generally applicable to small-scale mining, except such legal provisions giving exemptions on the size and nature of activities. The Raniganj Coalfields, mining started over two centuries ago and was for the first 100 years mainly haphazard, meaning that there was no legislation in force to ensure orderly mining. Subsidence became such a big problem on this coalfield that a subsidence committee was established in 1922. Underground voids are still numerous today in the area, where extractive activities are still ongoing (both by large and illegal small-scale mining), threatening entire villages. In recent years, the problem of ground stability has been aggravated in some areas due to illegal mining. As is typical for abandoned mines, here responsibilities are unclear, since present operators and owners were not responsible for the inappropriate mine closure that occurred over the centuries.

.....

⁷¹⁸ See R. Eisler, 'Health risks of gold miners: A synoptic review', Environmental Geochemistry and Health, Vol. 25, Issue 3, 2003, pp. 325-345.

⁷¹⁹ See J. Kolen (et al.), 'Formalized Small-Scale Gold Mining In The Brazilian Amazon: An Activity Surrounded By Informality', in: L Cremers (et al.), Small-Scale Gold Mining in the Amazon - The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, pp. 31-46 (42).

⁷²⁰ Ibid, 81.

⁷²¹ See the case described by R. Cook/T. Healy, 'Madagascar case study: artisanal mining rushes in protected areas and a response toolkit', 2012, pp. 14, 30, available at: http://www.estellelevin.com/wp-content/uploads/2013/11/ASM-Madagascar-Report-Toolkit.pdf.

⁷²² S. Chakravorty, 'Artisanal and Small-Scale Mining in India', MMSD/IIED, Working Paper No. 78, 2001, pp. 12 et seq., 50; e.g. the Mines Act (1952) does not apply to mines which do not use explosives, do not employ more than 50 persons and are not more than 20 ft. deep, see ibid 75.

⁷²³ See http://business-humanrights.org/en/india-coal-india-al-legedly-failing-to-address-dangerous-subsidence.

2. Human Rights Analysis

a. Right to Water, Art. 11 (1) ICESCR

As described above, the right to water, as derived from Art. 11 (1) ICESCR, can be interpreted as comprising the right to maintain access to existing water supplies and the right to be free from interference, such as disconnections or contamination of water supplies.⁷²⁴ Furthermore, the availability and accessibility of a sufficient water supply for drinking, personal sanitation, washing of clothes, food preparation, personal and household hygiene, as well as a sufficient water quality are to be understood as elements of the right to water. ⁷²⁵ ASM-related environmental contamination (Cases 1-11) therefore falls within the scope of protection of the rights to water as enshrined in Art. 11 (1) ICESCR.

As in the corresponding section pertaining to the LSM sector above (see [Ch.3][C.][II.][1.]), the duties to protect deserve particular attention. This can be attributed to the fact that States hardly ever conduct ASM themselves. The duty to protect comprises the enactment and enforcement of adequate legislation,726 thereby regulating the private sector. Here it is further noted that in the interpretation of their duty to protect under Art. 11 (1) ICESCR, States further have to take into account other applicable rules of international law between the parties,727 such as the "Minamata Convention on Mercury Use."728 Art. 7 (2) of the convention states that "Each Party that has artisanal and small-scale gold mining and processing subject to this Article within its territory shall take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, such mining and processing." Other than in the LSM, however, the regulation of third party interference can be very difficult, particularly with a view to artisanal mining and informal or even illegal ASM. Given the limited data and information on this part of the ASM sector, foreseeability and predictability of related human rights violations, as described above, are not always given. However, gaining additional data on such an informal sector can sometimes form part of a diligent fulfillment of human rights obligation.

According to Art. 2 (1) ICESCR, limited State resources are taken into account with regard to their obligations under the covenant (see above, [Ch.2][B.][I.]). Nevertheless, it obliges States Parties to use their available resources "to the maximum." On these grounds, the CESCR has found, with a view to the right to water, that "a state which is unwilling to use the maximum of its available resources for the realization of the right to water is in violation of its obligations under the Covenant."729 Furthermore, it stated that "if resource constraints render it impossible for a State party to comply fully with its Covenant obligations, it has the burden of justifying that every effort has nevertheless been made to use all available resources at its disposal in order to satisfy, as a matter of priority, the obligations outlined above."730

b. Right to Health, Art. 12 ICESCR

Art. 12 (1) defines the right to health as the "right of everyone to the enjoyment of the highest attainable standard of physical and mental health." This broad scope of the right to health comprises all elements necessary to a physical, mental and social state of well-being.⁷³¹ Along with several entitlements, the right to health also provides for the freedom from in-

⁷²⁴ CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 10.

⁷²⁵ Ibid., para. 12 (a) and (b).

⁷²⁶ Ibid, paras. 44 (b).

⁷²⁷ See Art. 31 (3)(c) Vienna Declaration of the Law of Treaties (VDLT).

⁷²⁸ See 'Minamata Convention On Mercury' of 19 January 2013, see at http://www.mercuryconvention.org.

⁷²⁹ CESCR General Comment No. 15 (2002), 'The Right to Water (Arts. 11 and 12 of the Covenant)', UN Doc. E/C.12/2002/11 of 20 January 2003, para. 41.

⁷³⁰ Thio

⁷³¹ See CESCR, General Comment No 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000.

terference in one's physical health.⁷³² Water contamination, especially in the cases of mercury pollution (Case 1-7), not only interferes with one of the determinants for the right to health per se, being clean and potable water,⁷³³ but may also cause severe health problems (Case 3).

State Parties' obligations, particularly to protect the right to health as guaranteed by Art. 12 ICE-SCR, match the ones described for the right to water above. States equally have to take all necessary steps to the maximum of their available resources. Furthermore, they have the burden of justifying that every effort has nevertheless been made, if resource constraints render it impossible to comply fully with its obligations under the right to health.⁷³⁴

c. Right to Food, Art. 11 (1) ICESCR

As described above, the right to food as enshrined in Art. 11 (1) ICESCR obliges State Parties to provide for conditions that enable people, through own efforts, to buy or to produce food.⁷³⁵ Elements of the right to food comprise the physical and economical availability and accessibility, as well as, adequacy of the food.⁷³⁶ It further must be safe for human consumption and free from contamination.⁷³⁷

The cases outlined above show how ASM, notably through mercury pollution, leads to contamination of water and soil (Case 1-7). This negatively affects several food sources, especially fish (Case 2-3), and therefore encroaches upon the right to food under Art. 11 (1) ICESCR. ASM-induced pollution and contamination, notably through mercury, often affects

entire regions, since it is disseminated through water, air (Case 1), and through bioaccumulation (Case 2-3). State obligations to protect the right to food resemble those under the right to water and health. Equally, they cannot simply claim that they had no resources to regulate the ASM activities causing the environmental effects. As found by the CESCR on the basis of Art. 2 (1) ICESCR, a State "unable to fulfill its obligation for reasons beyond his control, has the burden of proving that this is the case and that it has done all possible to obtain international support without success."⁷³⁸

d. Right to Housing, Art. 11 (1) ICESCR

Finally, the ASM-induced environmental effects outlined above violate the right to housing, as derived from Art. 11 (1) ICESCR (see above). This right, which is inextricably linked to the right to water and food, provides for a sustainable access of these natural and common resources. States Parties falling short of preventing environmental effects caused by ASM as described above, leaving the housings of individuals and local communities with inadequate access to food or water, can therefore also constitute a violation of the right to housing.

e. Right to Remedy

As described above, the right to remedy plays an important role in the field of environment-related human rights violations, since the reasons for the mining-induced environmental effects that lead to the human rights violations are often not easily attributable to the State. Hence, affected individuals and groups have at least the right that the causes for these environmental effects are effectively investigated.

f. Right to Information, Art. 19, 25 ICCPR

As described in chapter 4 above, the right to information applies, complementary to the right to remedy, in the field of environmental effects of ASM, too. Since ASM activities are rarely conducted through an

⁷³² Ibid., para. 8.

⁷³³ Ibid., para. 4.

⁷³⁴ CESCR GC 14, para. 28.

⁷³⁵ OHCHR Fact Sheet No. 34: The Right to Adequate Food, p. 3, see at http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf; B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, pp. 869f.

⁷³⁶ CESCR, General Comment No. 12 (1999), 'The Right to Adequate Food (Art. 11 of the Covenant)', UN Doc. E/C.12/1999/5 of 12 May 1999, para. 7 et seq.

⁷³⁷ Ibid., para. 10.

organ of the State, States Parties in the ASM sector are rather obliged to generate, collect, assess, and update information to enable potentially affected individuals to realize the rights described for this risk area.

g. International Customary Law -Right to a Clean and Healthy **Environment**

The evolving "human right to a clean and healthy environment"739 has not been internationally recognized so far.740 Nevertheless, such a right has been increasingly codified on the regional741 and national level.742 This is accompanied by a vivid scholarly debate, with many authors advocating in favor of such a right.743

- 739 See the terminology chosen by D. Bollier/B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University Of Iowa College Of Law and Center For Human Rights, September 2011, p. 1.
- See the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14.
- 741 Art. 24 of the African Charter on Human and Peoples' Rights states "All peoples shall have the right to a general satisfactory environment favorable to their development"; see further the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 13.
- 742 In 1976, Portugal became the first country to adopt a constitutional "right to a healthy and ecologically balanced human environment" whereupon more than 90 States have adopted similar rights in their national constitutions, see 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 12.
- ⁷⁴³ See the terminology chosen by D. Bollier/B. Weston, 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University of Iowa College of Law and Center For Human Rights, September 2011, 1. See further on this discussion the 'Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment', UN Doc. A/HRC/22/43 of 24 December 2012, para. 14-17.

III. Occupational Health and Safety

1. Description of Risk Area and Case Studies

One of the often-discussed problems of ASM is occupational health and safety. Like many of the Risk Areas discussed below, this is mainly a problem of informal and illegal ASM. This leads to a scarcity of data, since illegal operations have no wish to draw attention to them, and to a frequent lack of compensation or social security provision for injury and even for death.744 Lack of resources, lack of or non-application of safety regulations, lack of awareness and training, illiteracy, inadequate equipment, and remote location can be identified as the main reasons for a number of health risks connected to ASM.745 Hazards differ considerably according to the type and location of ASM. While underground coal mining, for example, frequently leads to fatal casualties through gas or coal dust explosions and cave-ins⁷⁴⁶ (Case 1-3, 6), surface ASM, such as gold mining, often leads to casualties when alluvial miners burrow into uncompact riverbanks⁷⁴⁷ (Case 4-5). The most common ASM accidents comprise trips or falls (at the same level, or from one level to another); hits by machines or moving objects (including rocks, stone chips, tools); or effects of cave-ins or rock falls (e.g. fractures, sprains, contusions).748 Frequent causes of these accidents are rock falls/subsidence; lack of ventilation; misuse of explosives; lack of knowledge; lack of training; vio-

- 744 N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 16.
- Ibid., 16. See further T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, pp. 42 et seq.
- See generally on the health issues of underground mining, R. Eisler, 'Health risks of gold miners: A synoptic review', Environmental Geochemistry and Health, Vol. 25, Issue 3, 2003, pp. 325-345
- See the example of Zimbabwe at N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 20.
- Ibid., p. 19.

lation of regulations; and obsolete or poorly maintained equipment.⁷⁴⁹

In general, some of the most important health risks in ASM comprise: Exposure to dust (silicosis) (Case 6); exposure to mercury and other chemicals (Case 6-12); effects of noise and vibration (Case 1-3); effects of poor ventilation (heat, humidity, lack of oxygen) (Case 1-3); and effects of over-exertion, inadequate work space, and inappropriate equipment.750 These health risks thereby not only affect individuals directly involved in mining and processing but also those living in the nearby ASM communities. This is most notably demonstrated by the use of mercury in ASM to produce gold.⁷⁵¹ Mercury is used to concentrate gold through amalgamation, a technique applied for thousands of years.752 Today, this method is applied by 13 to 15 million artisanal miners in at least 70 countries around the world. 753 However, the metal can cause severe damage to human health, causing colic, vomiting and gastroenteritis; complaints of the kidneys and urinary tract; acute enteritis; and finally ulceration of the gums combined with extreme sensitivity to light.⁷⁵⁴ If mercury vapor is inhaled over

a long period, chronic mercury poisoning occurs, affecting the brain, causing tremors, speech disturbances, lack of concentration, and mood swings.755 Mercury is easily absorbed through the skin, respiratory, and gastrointestinal tissues⁷⁵⁶ by miners. Mercury vapor, which is released when mercury-gold amalgam is heated in an open cycle, is further ingested through the lungs.757 This often affects entire ASM communities, since amalgam furnaces are often dispersed throughout the village, exposing everybody around to mercury vapors when amalgams are heated.758 Finally, mercury is dispersed in surface water and soil, thereby affecting downstream communities through contamination of fishing resources, which are later consumed⁷⁵⁹ (Case 13). Worldwide, an estimated 1,000 tons of mercury are released from artisanal miners each year - around 400 tons go into the atmosphere, and around 600 tons are discharged into rivers, lakes and soil.760 Finally, ASM can also indirectly cause health problems, mainly through the spread of tropical diseases like malaria (Case 14).

⁷⁴⁹ Ibid.

⁷⁵⁰ Ibid., p. 21.

⁷⁵¹ See the examples of Mercury use in artisanal and small-scale gold mining in Mongolia, M. Hansson, 'Ending child labour in mining - Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, 9. See further the detailed description by N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, 24 et seq.

⁷⁵² The first known usage of amalgamation in gold mining occurred in Spain as early as 700 BC and the process was subsequently used extensively by the Romans around 50 BC, see A. Donkor (et al.), 'Artisanal Mining of Gold with Mercury in Ghana', West Africa Journal of Applied Ecology Volume 9 (Jan – Jun 2006), 1-8 (2). See further L. Drude de Lacerda, 'Human Health Implications of Mercury Usage in Small-Scale Gold Mining Activities in the Brazilian Amazon', G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, 679-700 (679); L. Lacerda / W. Salomons, 'Mercury from Gold and Silver Mining: A chemical Time Bomb?', 1998.

⁷⁵³ See 'Child Labour, Mercury, and Artisanal Gold Mining in Mali', HRW Report (2011), 38.

⁷⁵⁴ N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, 24.

⁷⁵⁵ Ibid.

⁷⁵⁶ M. Hansson, 'Ending child labour in mining - Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, p. 9.

⁷⁵⁷ The vapor, which is ingested through the lungs (up to 80 per cent of what is inhaled remains) becomes a soluble as methyl mercury and is absorbed into the bloodstream, see N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 24.

⁷⁵⁸ See E. Yard (et al.), 'Mercury Exposure Among Artisanal Gold Miners in Madre de Dios, Peru: A Cross-sectional Study', *Journal* of Medical Toxicology, Vol. 8, 2012, pp. 441–448 (445).

⁷⁵⁹ See S. Diringer (et al.), 'River transport of mercury from artisanal and small-scale gold mining and risks for dietary mercury exposure in Madre de Dios, Peru', Environmental Science: Processes & Impacts, Issue 2, 2015, pp. 478-487.

⁷⁶⁰ See 'Child Labour, Mercury, and Artisanal Gold Mining in Mali', HRW Report (2011), p. 38.

Case 1: China In the Hunan Province, underdust.⁷⁶¹ Accordingly, data showed that countries fatal accidents. 762 In the Hunan Province, where sions.763 It has been argued that many smalland a lack of safety equipment.764 Accounting of the world's coal. 765

Case 2: Pakistan As with China, Pakistan is ines.766 Accordingly, Pakistan also shows a sigines in 1997.767 In response to these incidents,

mine workers, and rescue teams.⁷⁶⁸

Case 3: China In June 2001, the central governcoalmines.⁷⁶⁹

Case 4: Zimbabwe In Zimbabwe, the reputation.⁷⁷⁰ Since many such deaths are believed to

Case 5: Niger In the Liptako Gourma region,

- 762 Thid.
- 763 Ibid.
- 764
- P. Dozolme, 'Common Mining Accidents', available at: http:// mining.about.com/od/Accidents/a/Common-Mining-Accidents.htm.
- N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999. p. 16.
- Ibid, p. 17.

⁷⁶¹ N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999. p. 16.

⁷⁶⁸ Ibid, p. 77.

See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD / IIED, Working Paper No. 70, 2002, p. 32.

J. Hollaway, 'The Button gold mine, Zimbabwe', 1997, p. 15; see at http://www.unites.ugam.ca/gmf/globalmercuryforum/files/ articles/africa/Zimbabwe%20ILO%20ASM.pdf.

Thid.

women and children, especially during the rainy season, when the risk of accidents is greater.⁷⁷² Methods of work are straight out of the Middle Ages and therefore involve enormous risks and low productivity, since they are performed without any additional source of electrical, mechanical or pneumatic power.⁷⁷³ In addition, the risks of blocks of ore being dropped, of tunnels collapsing due to the soil types, which are fractured and unstable, are prevalent, as well as the risk of workers falling from ladders.⁷⁷⁴ Generally, the ASM sector in Niger is regulated by the mining law (ordinance number 93-16) of 1993 and its recent amendment Law No 2006-27 of 2006.⁷⁷⁵

Case 6: Mongolia Artisanal miners in Mongolia use simple tools and rely on their own strength and endurance in what is laborious work. Mining activities vary depending on the mineral being mined but the operation often involves digging pits and tunnels, draining, excavating soil and evacuating water, drilling and blasting, and crushing and processing. All of these tasks confront the artisanal miners with a range of risks and hazards: weak geological structures that are prone to collapse; dangerous overhangs; limited oxygen; unstable ground; rock falls during excavation; rock dust; and explosives. Other risks arise from burning rubber tires, working long hours in narrow tunnels, crushing and milling and exposure to metallic mercury through the skin, inhalation of mercury vapor, and through food and the drinking of water. The unorganized nature of the operations, the lack of personal

protective equipment, and the extreme climate exacerbate these hazards.⁷⁷⁶

Case 7: Mali Small-scale mining in Mali is extremely tough and dangerous work, for both children and adults. Mine pits sometimes collapse, the hours are long, the labor is physically demanding, and use of mercury is unregulated, with no local knowledge of its dangers. According to Order No. 099-032, small-scale mining requires the acquisition of a mining title referred to as "small-scale mining development license." Regarding the closure of a small-scale mine, the order provides that any license holder shall rehabilitate the site and make sure that it complies with directives related to site rehabilitation after closure and ensures a good ending of the site and its related work.

Case 8: Papua-New-Guinea Mercury is also widely used in ASM gold mining in the Milne Bay province of Papua New Guinea. Surveys conducted in the late 1990s found evidence of people burning amalgam cakes in their huts, or even on the blades of knives that were subsequently used to prepare food, or sitting downwind in smoke fumes to keep warm. Moreover, in 1999, it has been observed that in Bisario, near the headwaters of the Crossamarie River, people had been given mercury but not been told of the dangers. The New Guinean Mining Act of 1992 and the Mining Safety Act provide administrative and regulatory mechanisms for small-

- 773 Ibid., p. 27.
- **774** Ibid., p 28.

- 778 S. Keita, 'Study on Artisanal and Small-Scale Mining in Mali', MMSD/IIED, Working Paper No. 80, 2001, p. 28.
- 779 See T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, pp. 38 et seq.
- 780 B. Susapu/G. Crispin, 'Report on Small-scale Mining in Papua New Guinea', MMSD/IIED, Working Paper No. 81, p. 22.

N. Jennings, 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 21.

⁷⁷⁵ N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 8.

⁷⁷⁶ M. Hansson, 'Ending child labour in mining - Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, p. 2. See further W. Murray, 'Informal Gold Mining in Mongolia', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, pp. 531-544 (538).

F. Johannison, 'Child Labour mined gold in your gadgets?', Dan-Watch Report 2013, p. 17.

generating economic activity.⁷⁸¹ Mercury has al-

Case 9: Tanzania The majority of the local popty.782 The ASM sector of Tanzania saw steps tomillion US-Dollar in 1992.⁷⁸³

Case 10: Peru The mining town La Rinconada is ach and digestion problems.⁷⁸⁴

Case 11: Suriname In his communication of and adults.785

Case 12: East Java Miners at the sulfur minthem injuries and leaving them with scars.⁷⁸⁶

Case 13: Peru The Madre de Dios region of Petropical Amazon.⁷⁸⁷ Artisanal and small-scale

- 785 See 'Case no. SUR 1/2012: Alleged situation of health, environmental problems and land rights issues affecting Wayana indigenous communities in southeastern Suriname', in: Report of the Special Rapporteur on the rights of indigenous peoples, UN-Doc. A/HRC/24/41/Add.4 of 2 September 2013, para. 143.
- See at http://www.boston.com/bigpicture/2009/06/sulfur mining in kawah ijen.html; http://www.news.com.au/finance/ work/photos-from-inside-the-volcanic-sulphur-mines-ofindonesia/news-story/27daa23f607d4358314fd0a4c5335985; http://www.thejakartapost.com/news/2011/12/19/kawah-<u>ijen-between-potential-threat.html</u>.
- S. Diringer (et al.), 'River transport of mercury from artisanal and small-scale gold mining and risks for dietary mercury exposure in Madre de Dios, Peru', Environmental Science: Processes & Impacts, Issue 2, 2015, p. 479.

⁷⁸² See J. Hinton / M. Veiga, 'Summary Report: Technical and socioeconomic profiles of Global Mercury Project Sites', Global Mercury Project, UNEP/UNIDO, 2004, pp. 3, 38.

⁷⁸³ See T. Hentschel / F. Hruschka / M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD / IIED, Working Paper No. 70, 2002, pp. 30, 31.

⁷⁸⁴ Peru Support Group, 'Artisanal and Small-Scale Gold Mining in Peru: A Blessing or a Curse?', 2012, p. 11.



os Region since the 1970's and has grown significantly since 2000.⁷⁸⁸ The use of mercury for gold mining is widespread. A study of 2015 identified an increasing mercury contamination, resulting both from gold amalgam burning and direct releases of mercury to rivers as an immediate threat to local communities. ⁷⁸⁹ Particularly high mercury levels have been detected in fish that is consumed. This dietary mercury exposure affects not only communities that are involved in ASM but also all other communities living off the resources of the river basin.⁷⁹⁰

Case 14: Brazil In Brazil, there are about 600,000 cases of malaria reported annually, 99% of which occur in the Amazon River basin. This parasitic disease is spread easily through ASM activities in the region, due to diggings filled with water where mosquitoes breed, poor sanitation, and infected miners that move frequently from one region to another spreading the disease.

- **788** Ibid.
- **789** Ibid, 486.
- 790 See S. Diringer (et al.), 'River transport of mercury from artisanal and small-scale gold mining and risks for dietary mercury exposure in Madre de Dios, Peru', Environmental Science: Processes & Impacts, Issue 2, 2015, pp. 478-487. See further E. Yard (et al.), 'Mercury Exposure Among Artisanal Gold Miners in Madre de Dios, Peru: A Cross-sectional Study', Journal of Medical Toxicology, Vol. 8, 2012, pp. 441-448.
- 791 See R. Eisler, 'Health risks of gold miners: A synoptic review', Environmental Geochemistry and Health, Vol. 25, Issue 3, 2003, pp. 325-345
- 792 See J. Kolen (et al.), 'Formalized Small-Scale Gold Mining In The Brazilian Amazon: An Activity Surrounded By Informality', in: L Cremers (et al.), Small-Scale Gold Mining in the Amazon - The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, pp. 31-46 (42).

2. Human Rights Analysis

a. Right to Just and Favorable Conditions of Work - Safe and healthy Working Conditions, Art. 7 (b) ICESCR

According to Art. 7 (b) ICESCR, "States Parties to the present Covenant recognize the right of everyone to the enjoyment of just and favourable conditions of work," which ensure, in particular: Safe and healthy working conditions. As described above, State obligations under Art. 7 (b) ICESCR can be further defined by drawing from ILO standards like convention 176 on Safety and Health in Mines (ILO 176). Art. 2 (1) and 1 (1) ILO 176 establish a broad applicability to all "mines," which comprises all kinds of artisanal and small-scale mines. Art. 5 (3) ILO 176 requires signatory States to enact laws that only allow competent and authorized persons to handle explosives at a mine. Art. 7 notably requires "employers" to construct safe mines, proper commissioning and decommissioning, and to take measures to protect ground stability. Art. 9 ILO 176 obliges employers to not expose workers to physical, chemical, and biological hazards. Furthermore, Art. 10 ILO 176 calls for proper training of workers. The term "employer" is thereby defined by Art. 1 (2) ILO 176 as "any physical or legal person who employs one or more workers in a mine and, as the context requires, the operator, the principal contractor, contractor or subcontractor." This broad definition therefore covers all forms of ASM that include an employment relationship. Furthermore, smallscale or artisanal miners who function as mere "operators" of a mine can also be subsumed under this definition.

While Art. 7 (b) ICESCR therefore equally applies to ASM, State obligations to respect and protect this right differ from LSM cases. States mostly do not perform ASM themselves through State-controlled companies. Therefore, they most importantly have to protect the right under Art. 7 (b) ICESCR through the prevention of third party interference. This, first of all, includes the enactment of adequate legislation. Since inadequate occupational health and safety conditions are predominantly a problem of infor-

mal or illegal ASM, this can include a certain level of formalization of the sector. Here it is to be noted that the CESCR, with a view to Art. 6 ICESCR, has found a general obligation of states to "take the requisite measures, legislative or otherwise, to reduce to the fullest extent possible the number of workers outside the formal economy."793 As in other ASM Risk areas, States' resources and abilities to enforce such legislation and monitor all the individual small-scale and artisanal miners is limited. Nevertheless, as repeatedly described, according to Art. 2 (1) ICESCR, every State party has "to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources" to progressively realize the rights of the ICESCR. This means, not only, that States have to use their own resources to prevent violations of the right to just and favorable working conditions, but to, if necessary, seek international assistance to achieve this goal. If States invoke limited resources to exculpate from violating their obligations under Art. 7 (b) ICESCR, they have the related burden of proof.

Another particularity of the ASM sector can further be determined with regard to the problem that some self-employed artisanal or small-scale miners, at first glace, voluntarily accept certain unhealthy and hazardous working conditions. However, the root causes to this acceptance are predominantly poverty and the lack of knowledge, awareness, and training. Therefore, the States are also obliged to enable such artisanal and small-scale miners to fully realize their right to safe and healthy working conditions.

Right to Just and Favorable Conditions of Work - Just and fair payment, Art. 7 (a) ICESCR

The right to just and fair payment is closely linked to Art. 11 (adequate standard of living), Art. 10 (protection of the family), Art. 9 (social security) and Art. 12

793 See CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 10.

(right to health). The "fairness" of wages is to be seen as an autonomous notion of justice for the "value" of their work performed.⁷⁹⁴ In monitoring Art. 7 (a), CE-SCR has mainly focused on whether wages allow for decent living, rather than if they are appropriate for the work.⁷⁹⁵ It considered wages too low, which did not enable people to live above the poverty line,⁷⁹⁶ to cover subsistence costs of a household,⁷⁹⁷ to meet their families' basic needs,⁷⁹⁸ and to secure a standard of living in dignity.⁷⁹⁹ Therefore, the States should implement a minimum wage, which meets essential needs of the workers and their families.⁸⁰⁰

The right enshrined in Art. 7 (a) ICESCR therefore generally applies to all ASM projects that include employment relationships. As observed in Art. 7 (b) ICESCR above, State obligations to protect the right to just and fair payment are structured somewhat differently. Artisanal and small-scale miners are often self-employed and therefore do not receive normal "wages." However, they very often depend on intermediaries or distributors. State obligations under the right to just and fair payment can therefore also comprise preventing such intermediaries or distributors to exploit artisanal and small-scale miners. State obligations, with a view to their available resources, are to be defined as illustrated with a view to Art. 7 (b) ICESCR above.

⁷⁹⁴ See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014,, p. 395.

⁷⁹⁵ See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 406.

⁷⁹⁶ CESCR, Concluding Observations: Mexico, UN Doc. E/C.12/1993/16, para. 6.

⁷⁹⁷ CESCR, Concluding Observations: El Salvador, UN Doc. E/C.12/1/Add.4, para. 18.

⁷⁹⁸ CESCR, Concluding Observations: Benin, UN Doc. E/C.12/1/ Add.78, para. 34.

⁷⁹⁹ CESCR, Concluding Observations: Bolivia, UN Doc. E/C.12/1/ Add.31, para. 17.

⁸⁰⁰ CESCR, Concluding Observations: Afghanistan, UN Doc. E/C.12/ AFG/CO/24, para. 23.

This is to be observed, inter alia, in the DRC (expert interview Mr. Näher/BGR) or Namibia (expert interview Mr. Feldhaus/BGR).

c. Right to Work, Art. 6 ICESCR

As stated above, the cases outlined above fall within the scope of protection of the more specific, right "in" work as enshrined in Art. 7 ICESCR; however, Art. 6 ICESCR can be violated at the same time. "Work" in the sense of Art. 6 is to be understood as "decent work," respecting fundamental human rights and the rights of workers, providing an income allowing workers to support themselves and their families, as highlighted in article 7.802 Failure to pay minimum wages under Art. 7 could therefore also be regarded as forced or compulsory labor under Art. 6 ICESCR.803

d. Right to Health, Art. 12 ICESCR

As with LSM (see above), the cases described can encroach upon Art. 12 (1) ICESCR, too. The right to health is defined as the "right of everyone to the enjoyment of the highest attainable standard of physical and mental health." The scope of the right to health under Article 12 ICESCR is broad and is not confined to the right to health care. The right to health is not defined negatively as absence of disease, but positively extends to all elements necessary to a physical, mental, and social state of well-being. ⁸⁰⁴ It provides for the right to be free from interference and entitlement to health protection, prevention of diseases, and equal access. ⁸⁰⁵

Considering the pervasive health problems of, for example, mercury use, in ASM, States particularly have to protect individuals from related interference with their right to health. Applying the same line of argumentation as above (1.), this is also valid, with a view

to artisanal and small-scale miners "voluntarily" applying mining techniques like mercury amalgamation.

e. Right to Life, Art. 6 (1) ICCPR

Finally, as described for LSM above, life-threatening mining-techniques can also encroach upon the right to life and therefore trigger the obligation of States to protect the right as enshrined in Art. 6 (1) ICCPR.

IV. Child Labor

1. Description of Risk Area and Case Studies

Child labor ⁸⁰⁶ constitutes a human rights issue, which occurs in many countries and industries. The ILO differentiates between "children in employment" (approx. 264 million children ages 5 to 17 worldwide) ⁸⁰⁷ and "child labor" (approx. 168 million children aged 5-17 years worldwide), a more restricted category, which excludes all children working legally in accordance with ILO Conventions Nos. 138 and 182: ⁸⁰⁸ "Hazardous work is a subcategory of child labor. The number of children in this worst form of child labor accounts for almost half of all child laborers (85.3 million)."

- **802** Ibid., para. 7.
- See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014 citing Supreme Court of India decision People's Union for Democratic Rights v Union of India ('Asiad Workers Case'), which found a violation of Art. 23 Constitution of India (freedom from forced labor) through the failure to pay minimum wages in construction projects.
- 804 CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 4.
- 805 Ibid., para. 8.

- According to Art. 1 of the UN Convention on the Rights of the Child (UN-Doc. A/RES/44/25 of 20 November 1989; entry into force 02. September 1990) defines a child as "every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier". Art. 2 (3) of ILO Convention No. 138 concerning the Minimum Age for Admission to Employment (entered into force 19 June 1976) defines the minimum employment age as no "less than the age of completion of compulsory schooling and, in any case, shall not be less than 15 years".
- Y. Diallo (et al.), 'Global child labour trends 2008 to 2012', Governance and Tripartism Department, IPEC, International Labour Office, Geneva 2013, p. vii. Boys continue to be more exposed to employment than girls (18.1 per cent against 15.2 per cent).
- 808 Ibic
- 809 Ibid., p. viii. Boys outnumber girls in hazardous work (55 million and 30.3 million, respectively). Regional distribution of child laborers and children in hazardous work: Asia-Pacific region (77.7 million ages 5-17), as compared to 59 million in Sub-Saharan Africa and 12.5 million in Latin America and the Caribbean.

Child labor in the mining sector, as illustrated by the cases below, almost exclusively arises in ASM operations in Africa, Asia, and Latin America, with more than one million children working in this field.⁸¹⁰ Most cases of child labor occur in unregulated and informal settings.⁸¹¹ The more remote and more informal a small-scale mining activity, the more likely children are to be involved.⁸¹²

Children start washing gold from 3 years on; from 6 years on they can be seen breaking rocks with hammers or washing ore; at the age of 9 they can be observed underground, and at 12 boys are working underground in many countries and do the same work as adults (see e.g. Bolivia, Cerro Rico / Potosi). 813 Children participate in all aspects of the mining process, lifting heavy loads, digging, crushing, and processing the ore to extract the valuable minerals. 814 They are engaged in digging tunnels, drilling and blasting, and work long hours in narrow, dusty unsupported tunnels as far as 100 meters deep, sometimes in water with little oxygen and light. 815

Yet Sub-Saharan Africa region has the highest incidence of child labor, with one in five children involved. About one in twelve of the total child population in Middle East and North Africa (9 million) was in child labor in 2012. It is estimated that 60 per cent of child labour occurs in agriculture, fishing, hunting, and forestry. Children have been found harvesting bananas in Ecuador, cotton in Egypt and Benin, cut flowers in Colombia, oranges in Brazil, cocoa in the Ivory Coast and Ghana, tea in Argentina and Bangladesh, fruits and vegetables in the U.S, see Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', August 2013, p. 18.

- 810 Ibid. See also M. Priester, 'Action against Child Labour in Small-Scale Mining & Quarrying A Thematic Evaluation', Joint Thematic evaluation by an independent Evaluator, ILO/IPEC and ILO/SECTOR, Geneva, May 2004.
- 811 See, e.g., 'Girls in mining: Research findings from Ghana, Niger, Peru and the United Republic of Tanzania', Working paper, Bureau for Gender Equality, IPEC, ILO 2007, p. 10.
- 812 N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 2
- M. Hansson, 'Ending child labour in mining Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, p. 2.
- 814 Ibid.
- 815 Ibid.

The many direct hazards stemming form these mining activities (inundation, cave-in, asphyxiation, overexertion, malnutrition, TB, malaria, diarrhea, trips and falls, lack of hygiene, dust, noise, vibration, mercury and other chemicals) are the same as those for adult miners (see above) but the risks to immature bodies are much more severe. See Activities like carrying heavy loads or repetitively working in awkward positions as, for example, during gold panning, can lead to life-long skeletal and posture damage. Furthermore, mining has a negative impact on children's intellectual development and education. Similar to other child laborers, child miners have difficulties balancing work and school and often drop out, only to remain permanently on the mine/quarry sites.

Children in mining communities are also involved in mining-related or other services in the mining area, e.g. processing ore, food selling, cleaning, cooking, and looking after younger children. 820 These children are sometimes involved in drug trafficking and prostitution, which are often side effects of mining activities, particularly in unregulated ASM. 821

The main causes of child labor in ASM are: poverty; lack of opportunities or incentives to go to school; no

- 816 N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 2. See also See 'Girls in mining: Research findings from Ghana, Niger, Peru and the United Republic of Tanzania', Working paper, Bureau for Gender Equality, IPEC, ILO 2007, p. 7.
- 817 See 'Precious Metal, Cheap Labor Child Labor and Corporate Responsibility in Ghana's Artisanal Gold Mines', HRW report, 2015, p. 7.
- This has been observed, e.g., in Mollehuaca, Peru, see N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 55.
- This can be observed, e.g., in Ghana, see Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', August 2013, p. 30.
- 820 See M. Hansson, 'Ending child labour in mining Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, p. 2.
- See Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', 2013, p. 17.

prospects for regular employment; the lack of a coordinated policy to stop child labor; the lack of law enforcement; a reluctance to invest in small-scale mining to improve its performance; and a reluctance or inability to make the social investments necessary to stop child labor.⁸²²

Finally, girls appear to be a particularly vulnerable group in the context of child labor in ASM. Girls often carry a double burden of increasingly working in hazardous fields like ASM while still being responsible for burdensome chores at home.⁸²³

Case 1: DRC

The ASM-sector in DRC is governed by Mining Law No. 007/2002 of 2002, regulating artisanal, small-scale, and even tailings exploitation. It has been observed that the government is increasingly issuing artisanal licenses to promote this sector. 824 The Committee on the Rights of the Child has, on many occasions, considered the issue of children working in mines and quarries in the DRC. For example, in 2009, it expressed its concern at the presence of child workers as young as 5 years working in dangerous conditions in the mining industry, particularly the Katanga region. 825 Though artisanal mining is still widespread in this region, industrial mining is indeed on the increase, including emerging Chinese mining companies. 826

- 822 Ibid.
- See, inter alia, J. Lamber, 'Girls in mining: Research findings from Ghana, Niger, Peru and the United Republic of Tanzania', Bureau for Gender Equality, International Programme on the Elimination of Child Labour, ILO 2007, p. 1; see further A. Eftimie (et al.), 'Gender Dimensions of the Extractive Industries: Mining for Equity', Extractive Industries and Development Series No. 8, World Bank, 2009.
- KMPG Global Mining Institute, "DRC, Country Mining Guide" (2014), p. 18; available at https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/mining-country-guides/Documents/democratic-republic-congo-mining-guide.pdf
- 825 See CRC, Concluding Observations: Democratic Republic Of Congo, UN Doc. CRC/C/COD/CO/2, para. 80.
- 826 Amnesty International (AI), 'Profits and Loss Mining and human rights in Katanga, Democratic Republic of the Congo' (June 2013), p. 8, available at http://www.amnestyusa.org/sites/default/files/afr620012013en.pdf.

Case 2: Mali In Mali, child labor is reported to be a widespread problem: With immense poverty and poor quality of schooling in rural areas, many families have no choice but to take their children along when they seek for means of survival at the informal mining sites. An estimated 20,000 to 40,000 children are engaged in gold mining in Mali. Some are travelling to mining sites by themselves, though most are taken along by their families when moving in order to live at a mining site. At the sites, children as young as 7 are either working in the mines, digging tunnels, washing sand or crushing ore, or are selling food or water. The younger children will sometimes tend to the babies. Child prostitution is also a growing problem in the informal mining communities. Many of the children are taken out of school to work in the mines, while others never went to school in the first place. Small-scale mining in Mali is extremely tough and dangerous work, for both children and adults. Mine pits sometimes collapse, the hours are long, the labor is physically demanding, and use of mercury is unregulated, with no local knowledge of its dangers. The income from working in gold mining is entirely dependent on what is found, and thus the daily wage can vary a lot: Children earn from 500 2500 CFA (0,76€ - 3,8€) per day. The daily income is most likely to be about 1000 cfa (1,5€). The children work from 8 to 16 or 18, with a break at midday. The mines are closed on either Mondays or Fridays.^{\$27}

Case 3: Mongolia According to estimates of 2006, children under 18 years comprised 20 percent of the 100,000 artisanal gold miners; other studies documented 7,309 in gold mining and 687 children in fluorspar mining. There are no reliable estimates of the number of children working in coal mining, but based on local authorities' estimate of around 20-30 children working in Nalaikh, it would suggest that the to-

Case described by F. Johannisson, 'Child mined gold in your gadgets? Child labour in Ghana and Mali and sourcing policies of IT brands', DanWatch Investigative Report, 2013, 17.

tal number of children currently working in coal mining was around one hundred at most. A majority of the child miners are adolescent boys, but also girls are involved in mining and mining support services and work at home. The average age is 14, with most children starting at the age of 12. ASM labor has multiple negative and lifethreatening effects on the children's health and development. They are losing school years and are trapped in risky, labor-intensive and lowpaid work. Children in fluorspar mining earn MNT 250,000 MNT (USD 212.77) per month and children in gold mining earn MNT 75,655 (USD 64.39) per month.⁸²⁸

Case 4: Niger Bearing in mind that about 73% of the population in Niger lives below the poverty line and that approximately 50% of the population in Niger are children under 15, the high poverty rate is the main reason for the development of the small-scale mining sector and the emergence of child labor in this sector. Bear Following studies of 1999, full-time employment in small-scale mining in Niger was about 15,000, 2,500 of whom were under 18 years old. Parttime employment, however, was about 132,000, including about 67,000 children. When small-scale quarries are included, the total small-scale mining workforce amounted to about 442,000, of whom 250,000 are estimated to be children under 18. There were 40-50 mining sites in Niger, including about 5,100 children. An estimated number of 10,000 children was said to be involved in trona production in Niger. For example, 360 children under 18 were working at

of Ghana's GDP) comes from artisanal and small-scale gold mining. State stimates put the number of artisanal and small-scale miners in Ghana between 500,000 and 1 million. The Ghanaian government requires small-scale miners to obtain a license. In November 2014, Ghana had about 1,300 active licenses for small-scale mining law of which at least

90 percent were for gold mining.839 However, the

Case 5: Ghana In 2013, about one-third (34 per-

- See M. Hansson, 'Ending child labour in mining Field experience and analysis of interventions from Mongolia', IPEC, International Labor Office, Geneva, June 2006, p. 11.
- N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 6.
- 830 N. Jennings, 'Social and Labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 45.
- **831** Ibid., p. 47.

the trona site in Birni Ngaouré, Boboye region. 832 The children were forced by their parents to take part in trona production. Since their work is considered family assistance, the children do not receive cash remuneration. 833 There are pupils taking part in the trona production at the weekend as well as children who do not attend or have left school to work every day at the trona site. 834 Moreover, some side effects of small-scale mining, like prostitution and drug trafficking, are common at some gold mining sites in Niger. 835

- N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 10.
- 833 Ibid, p. 14.
- 834 Ibid.
- See N. Jennings, 'Social and Labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 47.
- 836 See 'Precious Metal, Cheap Labor Child Labor and Corporate Responsibility in Ghana's Artisanal Gold Mines', Human Rights Watch Report, June 2015, p. 16.
- 837 See 'Second Global Forum on Artisanal and Small-Scale Gold Mining', UNDP, 3-5 September 2013, Lima, Peru, final report, p. 16, available at http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/GF2/NewFolder/Global%20Forum II meeting%20report.pdf; Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', August 2013, p. ix; K. Kessey/B. Arko, 'Small Scale Gold Mining and Environmental Degradation in Ghana: Issues of Mining Policy Implementation and Challenges', Journal of Studies in Social Sciences, Vol. 5 (2013), p. 15.
- 838 Minerals and Mining Act, No. 703 of 2006, Art. 82.
- See 'Precious Metal, Cheap Labor Child Labor and Corporate Responsibility in Ghana's Artisanal Gold Mines', HRW report, 2015, p. 17.

majority of miners work without a valid license, effectively mining illegally. It is estimated that several thousand children work in Ghana's artisanal and small-scale gold mining sector, though data is scarce. In There are many more boys than girls working in mining. While the majority of child laborers are between the ages of 15 and 17, younger children work in gold mining too. Of 44 child miners interviewed by Human Rights Watch, 20 had started working at the age of 12 or younger. The youngest child miner Human Rights Watch interviewed was 9 years old. A survey by the International Labour Organization (ILO) of 400 child miners found that most child miners—61 percent—were adolescents between the ages of 15 and 17.842 One-third of miners were between the ages of 10 and 14, and nearly 6 percent of children were between 5 and 9 years old. Artisanal and small-scale gold mining takes place in many parts of Ghana—including in Western, Central, Ashanti, Eastern, Brong Ahafo, Northern, and Upper East Regions. Child labor in mining occurs in all of these areas. 143

Case 6: Colombia At approximately 70%, a remarkable part of the national gold production of Colombia comes from small-scale mining operations.⁸⁴⁴ In Colombia, small-scale mining primarily takes place in the Chocó region, where mostly Afro-Colombian communities, as well as Indigenous communities, live.⁸⁴⁵ In this region, the participation of children in gold mining builds part of the traditional practices and

activities of such communities.⁸⁴⁶ Consequently, many children start washing gold at the age of 3 and breaking and washing rocks at the age of 6.⁸⁴⁷

Case 7: Peru In Mollehuaca, in the south of Peru, child labor is generally part of community life and seen as part of the children's family responsibilities. Of the about 1,000 inhabitants, 104 children are working in the small-scale mining sector. Besides the harsh working conditions for children, like working underground for one or two weeks at a time and therefore eating and sleeping at the mine entrance, the main issue originates from the contact with the mercury children are exposed to when removing amalgam from the mill and burning it to recover gold. Accordingly, high levels of mercury were found in the blood of 62% and in the hair of 39% of a group of 102 people, 54% of whom were children between the ages of 7 to 17. On whom were children between the ages of 7 to 17. Moreover, the majority of these children showed a low average intellectual capacity and difficulties in performing visual motor functions.

Case 8: Philippines A survey at the small-scale mining site at Sibutad in the south of the Philippines revealed that 116 children worked at the site, of whom half were still at school. Their ages ranged from 7 to 18 years. The major hazards for these child workers stem from the effects of carrying heavy loads and the contamination by mercury. A survey showed that about 80% of the children working at the site suffered from respiratory ailments and about 70% from muscu-

- 840 Ibid.
- 841 Ibid.
- 60 Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', August 2013, p. 26.
- 643 Government of Ghana and ILO, 'Analytical Studies on Child Labour in Mining and Quarrying in Ghana', August 2013, ix; G. Hilson, 'Child Labour in African Artisanal Mining Communities: Experiences from Northern Ghana', Development and Change, Vol. 41 (3), 2010, pp. 445-473.
- M. Sarmiento et al., Characteristics and Challenges of Small-Scale Gold Mining in Colombia, in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, p. 54.
- 845 Ibid, 55.

- 846 Ibid, 56.
- 847 Ibid.
- 848 See N. Jennings, 'Social and Labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 49.
- 849 Ibid.
- 850 Ibid, 50.
- N. Jennings, 'Child labour in small-scale mining: Examples from Niger, Peru & Philippines', preliminary working paper for the tripartite meeting on Social and labour issues in small-scale mines, Geneva 17-21 May 1999, International Labour Office, Geneva 1999, p. 40.

lo-skeletal disorders. 60% of them had a restricted lung function. 852 Regarding ASM regulation, there are several legal provisions, safety rules and legislation relating to small-scale mining in the Philippines. 853 Republic Act No. 7076 defines ASM as mining activities which rely heavily on manual labor using simple implements and methods and do not use explosives or heavy mining equipment.

Case 9: Burkina Faso Child labor in the gold mines of Burkina Faso is so obvious and prevalent that the U.S. government prohibits its contractors and agencies from buying gold directly from Burkina Faso. State It has been reported, for example, that in the Kollo mining village near the border between Burkina Faso and Ghana, around 30 children are working in a gold mine. They are in charge of smashing boulders into pebbles and pebbles into grit with primitive hammers. Furthermore, they haul buckets of well water up the hillside, pouring it into shallow pans filled with rock and dirt. Moreover, at a recently discovered mining site in the Bilbalé region, where overnight about 200 people had shown up, it has been observed that little children squatted on the ground to claw dirt and rocks into shallow bowls. The ASM sector was legally formalized through the Mining Code of 1997 in Burkina Faso. The new mining code (June 26, 2015) includes, inter alia, provisions for the creation of a fund to rehabilitate artisa-

nal mining sites and prohibits the use of harmful chemicals.⁸⁵⁸ While mineral exploitation must generally be authorized by obtaining a mining title, artisanal miners are exempt from that rule, as they only require a basic administrative authorization.⁸⁵⁹

Case 10: Zambia In 2006, villagers discovered diamonds in the remote Chiadzwa area of the Marange district. By mid-November 2008, Marange diamond fields had come under control of the military occupying the area. It has been reported that at least 300 children were forced to work for soldiers in the diamond fields. 60 Children carried diamond ore from the fields and assisted women to sieve and select the precious stones, working up to 11 hours each day. 61 Efforts to formalize the ASM sector in Zambia resulted in the Mines and Minerals Development Act from 2008, which provides the granting of mining licenses to small-scale and artisanal miners. 862

2. Human Rights Analysis

a. Art. 32 CRC

The CRC is the most specialized human rights instrument regarding the protection of children. Following its Art. 1, "a child means every human being below the age of eighteen years unless under the law appli-

- N. Jennings, 'Social and Labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 52.
- 853 General Mining Law RA 7942 (1995); RA 7076 (1991); RD 97-30 (1997).
- Larry C. Price, 'Burkina Faso: Childhoods Lost in the Gold Mines' Pulitzer Center on Crisis Reporting (28 April 2013), available at http://pulitzercenter.org/reporting/gold-mining-child-laborburkina-faso-kollo-ILO-labor-rights-commodities.
- 855 Ibid.
- 856 Thid
- 857 Ibid; see also N. Jennings, 'Social and Labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Small-scale Mines, Geneva, 17-21 May 1999, p. 42.
- 858 C. Mathieu Bonkoungou, ,Burkina Faso parliament adopts new mining code' Reuters (26.6.2015); available at http://www. reuters.com/article/2015/06/26/burkina-mining-regulationsidUSL8N0ZC48G20150626.
- 859 D. Gueye, 'Small-Scale Mining in Burkina Faso' (October 2001), 10; available at: http://pubs.iied.org/pdfs/G00717.pdf.
- 860 See 'Diamonds in the Rough Human Rights Abuses in the Marange Diamond Fields of Zimbabwe' HRW report (2009), p. 39.
- 861 Ibid
- See for more information DLA Piper, "Mining in Africa A Legal Overview", (2012) 62; available at: https://www.dlapiper.com/~/media/Files/Insights/Publications/2012/11/Mining%20in%20Africa%20A%20Legal%20Overview/Files/mininginafrica/File-Attachment/mininginafrica.PDF.

cable to the child, majority is attained earlier". Child labor is tackled by Art. 32 CRC which reads:

- "1. States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.
- 2. States Parties shall take legislative, administrative, social and educational measures to ensure the implementation of the present article. To this end, and having regard to the relevant provisions of other international instruments, States Parties shall in particular:
- (a) Provide for a minimum age or minimum ages for admission to employment; (b) Provide for appropriate regulation of the hours and conditions of employment; (c) Provide for appropriate penalties or other sanctions to ensure the effective enforcement of the present article."

While this provision comprises a number of precise obligations on States Parties to take measures, in some respects it leaves the specific content of those measures to the ratifying States. States, Art. 32 CRC, therefore, needs to be read together with provisions of other, more detailed, international standards on aspects of child labor. States

From its normative content, Art. 32 provides for the right of the child to be protected from economic exploitation as well as from any work that is likely to be hazardous or to interfere with the child's educa-

tion, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. States Parties shall, in particular, provide for a minimum age to employment, ⁸⁶⁵ an appropriate regulation of the hours and conditions of employment, as well as appropriate penalties and sanctions.

It is to be noted that the concept of work as referred to in paragraph 1 is broader than the concept of "employment" as referred to in paragraph 2 of the provision, the former covering not only work within the confines of an employment relationship. See Regarding work likely to interfere with the child's education, the Committee on the Rights of the Child has indicated that some flexibility is permitted in regard to "seasonal work," rendering possible children's support for families. Fut it is required that children receive at least primary education and are not required to do hazardous work. The right to education is further enshrined in Art. 13 and 28 CRC (see below).

As with the other international human rights treaties, States have the duty to respect and, most importantly, to protect the rights enshrined in Art. 32 CRC. This includes preventing third parties from interfering in these rights.

b. Art. 10 (3) ICESCR

Children's rights, under the ICESCR, are mainly protected by Art. 10 (3) ICESCR. It stipulates that "Spe-

L. Swepston, 'Art. 32 Protection from Economic Exploitation', in:
A. Alen et al. (eds.), A Commentary on the United Nations Convention on the Rights of the Child, 2012, para. 1. See with this regard especially the ILO conventions on Minimum Age Convention (No. 138) and 'Worst forms of Child Labor' (No. 182).

⁸⁶⁴ L. Swepston, 'Art. 32 Protection from Economic Exploitation', in: A. Alen et al. (eds.), A Commentary on the United Nations Convention on the Rights of the Child, 2012, para. 55.

⁸⁶⁵ Such ages should be established in particular in light of the ILO Minimum Age Convention No. 138, which set the minimum age at 14 or 15 years, subject to some exceptions. More generally, the text of the CRC should be read together with provisions of other more detailed international standards on aspects of child labour, See L. Swepston, 'Art. 32 Protection from Economic Exploitation', in: A. Alen et al. (eds.), A Commentary on the United Nations Convention on the Rights of the Child, 2012, para. 55.

⁸⁶⁶ L. Swepston, 'Art. 32 Protection from Economic Exploitation', in: A. Alen et al. (eds.), A Commentary on the United Nations Convention on the Rights of the Child, 2012, para. 63.

⁸⁶⁷ R. Hodgkin / P. Newell, 'Implementation Handbook for the Convention on the Rights of the Child'. 3rd ed., 2007, p. 496.

See CRC, Concluding Observations: Egypt, UN Doc. CRC/C/SR. 68, para. 44; see also R. Hodgkin/P. Newell, 'Implementation Handbook for the Convention on the Rights of the Child'. 3rd ed., 2007, p. 496.

cial measures of protection and assistance should be taken on behalf of all children and young persons (...)." In demanding that children and young persons should be protected from economic and social exploitation, it specifically states, "their employment in work harmful to their morals or health or dangerous to life or likely to hamper their normal development should be punishable by law." Furthermore, it calls on States to "set age-limits below which the paid employment of child labour should be prohibited and punishable by law," Art. 10 (3) ICESCR, therefore, equally addresses the economic exploitation and protection from hard and hazardous labor as to be found in Art. 32 CRC. However, Art. 10 (3) ICE-SCR was still much more conservatively formulated, merely stating that protective measures "should" be taken. Art. 32 CRC, in contrast, stipulates that states "shall" take legislative and administrative measures to ensure the implementation of the provision. Considering the fact that the CRC is almost universally ratified and that other "relevant rules of international law" have to be respected in the interpretation of the treaty,869 it can be said that State Parties are equally bound with a view to the prohibition of child labor under Art. 10 (3) ICESCR as under the CRC.

Art. 12 ICESCR

While the protection of children through prohibition of the sale of children, child prostitution, child pornography and child sex tourism under the ICE-SCR is guaranteed under Art. 10, child labor particularly leads to encroachment on the right to health as enshrined in Art. 12 ICESCR. The special need for the protection of children's health is reflected by Art. 12 (2) (a) ICESCR, which highlights the need to take measures to promote the healthy development of children.870 Child labor particularly affects children's healthy development, which suffers from such hard and hazardous work.871 Therefore, this falls within the scope of protection of the right to health. Child labor, however, is often a phenomenon deeply rooted in local traditions and systems of subsistence. Regulation can therefore constitute a major challenge. However, States are obliged, as mentioned, to progressively realize the ICESCR rights to the maximum of their available resources (Art. 2 (1) ICESCR). This means that States have to take the appropriate steps to prevent child labor through enacting and enforcing appropriate legislation. This also includes preventing third parties from violating the right to health in this context.872 "Appropriate" steps under Art. 2 (1) have, in this context, to be understood as taking into account any cultural or socio-economic particularities connected to child labor.

d. Right to Education, Art. 13, 28 CRC

Child labor further constitutes an encroachment on children's right to education, as enshrined in the CRC. Education is both a human right in itself and an indispensable precondition for the full realization of other human rights.873 Education plays a vital role in safeguarding children from exploitative and hazardous labor exploitation and allows them the opportunity to lift themselves out of poverty.874 As for the ICESCR, it is Art. 13 which stipulates "the right of everyone to education" and which is considered to be the most wide-ranging article on the right to education.875 Art. 28 CRC establishes the child's right to education as well.

The right to education guarantees the right to primary, secondary, and higher education. In particular, primary education has to be compulsory and free

⁸⁶⁹ See Art. 31 (3)(c) VDLT.

CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 22-23.

⁸⁷¹ This is acknowledged by the CESCR, which reiterates these particular needs for protection of children's health in the context of

the right to work in its CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/ GC/18 of 6 February 2006, para. 15.

CESCR, General Comment No. 14 (2000), 'The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)', UN Doc. E/C.12/2000/4 of 11 August 2000, para. 51.

CESCR, General Comment No. 13 The Right to Education, Art. 13 para. 1.

⁸⁷⁴ Ibid.

⁸⁷⁵ Ibid., para. 2.

to all.⁸⁷⁶ Secondary education must be made available and accessible.⁸⁷⁷ Since education is expensive, elements of the right may only need to be achieved "progressively."⁸⁷⁸ However, States have minimum core obligations that have to be fulfilled immediately.⁸⁷⁹ Reflecting the fact that many children suffer discrimination in access to education, for example those stemming from rural communities,⁸⁸⁰ both the CRC and the ICESCR require primary education to be free without discrimination, as well as to be compulsory.⁸⁸¹ Irrespective of their legal status, the principle of non-discrimination extends to all persons of school age residing in the territory of a State Party, including non-nationals.⁸⁸²

The obligation to protect requires States to avoid measures that hinder or prevent the enjoyment of the right to education. The duty to protect obliges States to take measures that prevent third parties from interfering with the enjoyment of the right to education. In particular, States are bound to protect children from work that interferes with their education. Additionally, a State has an obligation to ensure that communities and families are not dependent on child labor.

Violations of Art. 13 may occur through acts of omission of the States Parties or through their failure to

take steps required by the Covenant, e.g. the failure to introduce primary education, which is compulsory and free to all.⁸⁸⁷ Furthermore, a State violates its obligation to protect by omission when it fails to ensure that employers stop children from going to school.⁸⁸⁸ Against this backdrop and as with the right to health, States have to take the required measures to prevent child labor to the best of their available resources (Art. 2 (1) ICESCR).

e. Art. 6 (2) ICESCR

Finally, child labor can touch upon Art. 6 (2) ICE-SCR, which requires State Parties to provide "technical and vocational guidance and training programs, policies and techniques to achieve steady economic, social and cultural development (...)" to achieve the realization of the right to work. The CESCR, in its General Comment No. 15, reaffirmed the "need to protect children from economic exploitation, to enable them to pursue their full development and acquire technical and vocational education as indicated in article 6, paragraph 2."889

V. Violation of Indigenous Rights

1. Description of Risk Area and Case Studies

Indigenous and tribal communities, as from LSM projects, often suffer from ASM activities, resulting in the violation of many of their fundamental rights. Apart from the violent conflicts with artisanal and small-scale miners entering their lands, and the pollution and destruction of their territories by the environmental damage caused by ASM, they also suffer from foreign diseases imported by small-scale miners and, ultimately, have to give up traditional practices, constituting the core of their cultural existence.

- 876 Art. 13 (2) b ICESCR.
- 877 Art. 28 (1) b CRC; Art. 13 (2) b ICESCR.
- 878 R. Hodgkin / P. Newell, 'Implementation Handbook for the Convention on the Rights of the Child', 3rd ed., 2007, p. 408.
- 879 See for the CRC, R. Hodgkin / P. Newell, 'Implementation Handbook for the Convention on the Rights of the Child'. 3rd ed., 2007, p. 408 and for the ICESCR, CESCR, General Comment No. 13 The Right to Education, Art. 13 para. 43.
- 880 R. Hodgkin / P. Newell, 'Implementation Handbook for the Convention on the Rights of the Child'. 3rd ed., 2007, p. 407.
- Art. 28 (1) a CRC; Art. 13 (2) a ICESCR; CESCR, General Comment No. 13, art. 13. The Right to Education, UN Doc. E/C.12/1999/10 (1999), para. 57; see also Art. 7 Worst Forms of Child Labor Convention.
- 882 CESCR, General Comment No. 13 The Right to Education, Art. 13 para. 34.
- 883 Ibid., para. 47.
- 884 Ibid.
- 885 Art. 32 CRC.
- 886 CESCR, General Comment No. 13 The Right to Education, Art. 13 para. 55.
- 887 Ibid., para, 58-59.
- 888 Ibid., para. 50.
- CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 15. See further General Comment No. 13 (1999), paras. 15 and 16 on the definition of technical and vocational education as a component of general education.

These problems, as in most of the other human rights Risk Areas described, occur most drastically in rush scenarios.

Case 1: Brazil/Venezuela Apart from the problem of violent conflict with Yanomami dees for the Indians;890 it has caused the break-up others.891

Case 2: Suriname In his communication of Sep-

tion.892

Case 3: Philippines The Philippines is considple.893 In addition to the Mining Law of 1995, Ex-

See Resolution Nº 12/85, Case Nº 7615, Brazil of the Inter-American Commission on Human Rights on alleged violations of the human rights of the Yanomami Indians (5 March 1985) para. 3a; available at: http://www.cidh.org/annualrep/84.85eng/ brazil7615.htm.

Ibid.

See 'Case no. SUR 1/2012: Alleged situation of health, environmental problems and land rights issues affecting Wayana indigenous communities in southeastern Suriname', in: Report of the Special Rapporteur on the rights of indigenous peoples, UN-Doc. A/HRC/24/41/Add.4 of 2 September 2013, para. 143.

M. Wetzlmaier, 'Cultural Impacts of Mining in Indigenous Peoples' Ancestral Domains in the Philippines' Australian Journal of Southeast Asian Studies, vol. 5, Issue 2, p. 336.

2. Human Rights Analysis

a. Art. 14 ILO Convention 169 (ILO 169)

Art. 14 of the Convention stipulates that the rights of ownership and possessions of indigenous people over the lands which they traditionally occupy or the lands to which they have traditionally had access for their subsistence and traditional activities shall be recognized. As shown above, Governments are obliged to take necessary steps to identify – or in other words: to demarcate - these lands. 894 Art. 14 (3) requires the establishment of adequate procedures within national legal systems, which allow indigenous people to claim recognition of their rights or compensation for land of which they were deprived. 895

b. Art. 15 (1) ILO 169

The right of indigenous people to the natural resources pertaining to their lands is safeguarded by Art. 15 (1). This right comprises the right to participate in the use, management, and conservation of these resources. Paragraph 2 requires governments, in cases in which the State retains the ownership of mineral or sub-surface resources, to establish or maintain procedures through which indigenous peoples are consulted as to whether and to what degree their interests would be prejudiced (see above, [Ch.3][A.][II.][1.]).

c. Art. 27 ICCPR

Although this provision is primarily concerned with the rights of members of minority groups, the Human Rights Committee protects individuals from indigenous peoples under Art. 27 ICCPR.⁸⁹⁷

This provision stipulates that persons belonging to ethnic, religious or linguistic minorities shall not be denied the right to enjoy their own culture in community with the other members of their group.⁸⁹⁸ Some aspects of these rights protected under that article may consist in a way of life closely associated with territory and use of its resources, which is particularly true of members of indigenous communities.⁸⁹⁹ The full enjoyment of the rights enshrined in Art. 27 ICCPR requires positive legal measures of protection.⁹⁰⁰

In the cases of this risk area, the deprivation of land and resources of indigenous groups leads to encroachment on their right to have and develop a culture, too.

d. Customary International Law

As with respect to indigenous FPIC rights, it is worth analyzing to what extent indigenous land rights form part of, or are emerging as, universally binding rules of customary international law. In this context, the UNDRIP needs to be analyzed, again. The practice of international organs and resolutions relating to legal questions in UN organs, notably the General Assembly, form an important part of the material source of such customary international law.⁹⁰¹ UNDRIP is not a legally binding instrument but is in some respect

See Art. 14 (2); A. Yupsanis, 'ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989-2009-An Overview', Nordic Journal of International Law, Vol. 79, 2010, p. 441.

⁸⁹⁵ Ibid.

⁸⁹⁶ It has been criticized that the provision only imposes a merely formalistic procedural obligation without requiring the real consent of indigenous people (right of veto), See A. Yupsanis, 'ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989-2009-An Overview', Nordic Journal of International Law, Vol. 79, 2010, p. 445.

⁸⁹⁷ See HRC, Chief Bernard Ominayak and the Lubicon Lake Band v. Canada, 167/1984 (1990), Ziff. 33.

⁸⁹⁸ HRC, General Comment No. 23 (1994), 'The rights of minorities (Art. 27)', UN Doc. CCPR/C/21/Rev.1/Add.5 of 8 April 1994, para.

 1.

⁸⁹⁹ Ibid., para. 3.2, 7.

⁹⁰⁰ Ibid., para. 7.

J. Crawford, 'Brownlie's Principles of Public International Law', 8th ed., 2012, p. 24.

declaratory of customary international law.902 The rights recognized in this declaration, however, constitute the minimum standards for the survival, dignity, and well-being of the indigenous peoples of the world.903

aa. Art. 8 (b) UNDRIP

This provision stipulates that States shall provide effective mechanisms for prevention of, and redress for, any action, which has the aim or effect of dispossessing indigenous people of their lands, territories, or resources.

bb. Art. 25 UNDRIP

Art. 25 UNDRIP enshrines the right of indigenous people to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas, and other resources, and to uphold their responsibilities to future generations in this regard.

cc. Art. 26 UNDRIP

This article entitles indigenous people with the right to the lands, territories and resources, which they have traditionally owned, occupied or otherwise used or acquired. By virtue of this article, States are obliged to give legal recognition and protection to these lands, territories and resources.

dd. Art. 29 UNDRIP

Moreover, Art. 29 guarantees the right of indigenous people to the conservation and protection of the environment and productive capacity of their lands. States shall therefore ensure that no storage or disposal of hazardous materials shall take place in the lands of indigenous people without their free, prior and informed consent.

⁹⁰² See P. Oldham/M. Frank, "We the Peoples..." the United Nations Declaration on the Rights of Indigenous Peoples', Anthropology Today, 2008, 24 (2), p. 5.

⁹⁰³ See Art. 43 of the Declaration.



Chapter 5: Special Situations

A. Special Situations of Conflict, Authoritarian and Weak Governance

Some of the most noticed mining-related human rights violations occur in special scenarios, which are particularly prone to the deprivation of some essential rights. These scenarios comprise situations of conflict, situations of authoritarian governance and situations of weak governance.904 Mining-related human rights violations occur in the context of armed conflict, with mining revenue used to finance such conflict (see [B.][1.] below). Different forms of mining-related conflict arise over poor community involvement and the massive environmental and social impact of mining projects (see [B.][2.]). In scenarios of weak or authoritarian governance, where governments are unwilling or unable to meet their human rights obligations, mining-related conflict is particularly pervasive. In this context, certain governments may act aggressively to realize mining projects or to react against opposition. In these scenarios, public protest is often answered with exceeding violence and ensuing human rights violations such as mining-related forced evictions and forced labor are often to be observed.

904 See the description of 'human rights risk situations' in 'Promotion and Protection of Human Rights –Report of The United Nations High Commissioner for Human Rights on the Sectoral Consultation entitled "Human Rights And The Extractive Industry", 10-11 November 2005, UN-Doc. E/CN.4/2006/92 of 19 December 2005, para. 6. See further P. Alston and R. Goodman, who state that "some of the worst human rights abuses involving business occur amid conflict over the control of territory, resources or a government itself – where the human rights regime cannot be expected to function as intended", see P. Alston/R. Goodman, 'International Human Rights', 2013, p. 1481.

B. Risk Areas and Human Rights Analysis

I. Situations of Armed Conflict

1. Description of Risk Area and Case Studies

One of the most recognized human rights problems in the public perception of the extractive industry arises where extractive activities are related to situations of conflict. Companies can be caught up in local conflicts and associated violations of human rights, particularly where the company has to rely on public or private security forces (Case 1-2), mining revenue is used to finance conflict905 (Case 3-4) and mines, in this context, are often controlled by armed (illegal) actors.906 Strictly speaking, the human rights violations in these cases are not directly caused907 by the mining activities but rather through the conflict over the deposits. Such "indirect' human rights violations,"908 however, have to be included in the present study considering their massive impact on human rights.

⁹⁰⁵ See also A. Grzybowski, 'Extractive Industries and Conflict', Guide and Toolkit, UN Interagency Framework Team for Preventive Action, 2012, p. 19.

OHCHR in 'Promotion of 'human rights risk situations' by the OHCHR in 'Promotion And Protection Of Human Rights-Report Of The United Nations High Commissioner For Human Rights on the Sectoral Consultation entitled "Human Rights And The Extractive Industry", 10-11 November 2005, UN-Doc. E/CN.4/2006/92 of 19 December 2005, para. 6, which further cites T. Bekefi, 'Human rights policy implementation in the oil and gas sector: Translating policy to practice', a working paper, International Petroleum Industry Environmental Conservation Association, available on the IPIECA website http://www.ipieca.org; several AI and HRW reports and the World Bank publication, 'Striking a better balance - The World Bank Group and Extractive Industries: The final report of the Extractive Industries Review', World Bank Group Management Response, available on the World Bank website http://www.worldbank.org.

⁹⁰⁷ See on the 'causal link' and 'attribution' to state conduct in the context of human rights violations, below, p. 159.

⁹⁰⁸ See below, the concept of assessing corruption as a human rights violations, based on M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, 27 et seq.

Mining-related cases of conflict can sometimes touch upon the field of international humanitarian law⁹⁰⁹ (Case 2-3).⁹¹⁰ While analyzing the respective cases under international humanitarian law would go beyond the scope of the present study, the application of international human rights law is not precluded in those situations. As is increasingly recognized, human rights, including economic, social and cultural rights, cannot be entirely displaced, but should be applicable during times of armed conflict and emergencies.⁹¹¹ Therefore, these cases can be included in an analysis of international human rights law.

International Humanitarian Law is applicable, when cases develop into an 'international armed conflict' or an 'armed conflict of a non-international character', see common Art. 3 of the Geneva Conventions; see further Additional Protocol II to the Geneva Conventions (https://www.icrc.org/applic/ihl/ihl.nsf/xsp/.ibmmodres/domino/OpenAttachment/applic/ihl/ihl.nsf/AAOCSB-CBAB5C4A85C12563CD002D6D09/FULLTEXT/AP-II-EN.pdf); see also the field of 'Customary International Humanitarian Law' (see for a commentary: https://www.icrc.org/customary-ihl/eng/docs/home).

See further, in this context, in relation to quarrying products from the West Bank, the judgment of the Israeli High Court of Justice in the case of Yesh Din v The Commander of the Israeli Forces in the West Bank et al., HCJ 2164/09 (see at http://www. yesh-din.org/userfiles/file/%D7%94%D7%9B%D7%A8%D7% A2%D7%95%D7%AA%20%D7%93%D7%99%D7%9F/psak.pdf [Unofficial English translation]) and the critical scholarly discussion by, inter alia, A. Pacheco, 'The Israeli Supreme Court Case on Israeli Quarrying Licenses in the West Bank: Why a Second ICJ Advisory Opinion on Palestine is Needed', The Palestine yearbook of international law (2014) 17 (1), 57-82; V. Azarov, 'Exploiting a 'Dynamic' Interpretation? The Israeli High Court of Justice Accepts the Legality of Israel's Quarrying Activities in the Occupied Palestinian Territory', EJIL Talk!, 07 February 2012, see at http://www.ejiltalk.org/exploiting-a-dynamic-interpretation-the-israeli-high-court-of-justice-accepts-the-legalityof-israels-quarrying-activities-in-the-occupied-palestinianterritory. See, in the wider context, the 'Interpretative Notice on indication of origin of goods from the territories occupied by Israel since June 1967' (C(2015) 7834 final, November 2015) by the European Commission, on cosmetic and agricultural products, see at http://eeas.europa.eu/delegations/israel/documents/ news/20151111 interpretative notice indication of origin of goods en.pdf.

911 See J. Rehmann, 'International Human Rights Law', 2nd ed., 2010, p. 806; see further ICJ, 'Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory (2004', ICJ Reports 136, para. 134.

Case 1: DRC In October 2004, the town of Kilwa in DRC was the site of fighting between the Congolese Armed Forces and a small group of rebels. During this fighting, the soldiers committed serious human rights violations against civilians (summary executions, arbitrary arrest, rape, and torture.) A Canadian mining company operated the Dikulushi copper mine near Kilwa. The company did confirm that its vehicles and planes were used in the operation, but it said that they were requisitioned "under the force of law" by the security forces.⁹¹²

Case 2: Papua New Guinea In the well-known case of the copper-mining project at the island of Bougainville, protests over environmental and socio-economic impacts of the mining activities led to protests, which gradually escalated and eventually merged with an independence movement that had its roots in the colonial history of the island. Violent attacks on the development infrastructure quickly transformed into a civil war that took over a decade to end, leaving some 15,000 people dead. The mine has yet to reopen and Bougainville is now a semi-autonomous region with the option of becoming fully independent of Papua New Guinea by way of a referendum.⁹¹³

Case 3: Liberia/Sierra Leone In 1991, Liberian warlord Charles Taylor sponsored the invasion of Sierra Leone by the Revolutionary United Front (RUF), a rebel group whose brutal military campaign was characterized by mass amputations and systematic rape. Taylor not only provided material support to the RUF, but also sent his own troops to fight alongside them,

⁹¹² See A. McBeth, 'Crushed by an Anvil: A Case Study on Responsibility for Human Rights in the Extractive Sector', Yale Human Rights and Development Journal, Vol. 11, Issue 1, 2014; see further 'Anvil Mining Limited and the Kilwa Incident Unanswered Questions', Joint Report ASADHO, RAID, ACIDH, 20 October 2005, available at http://www.raid-uk.org/sites/default/files/qq-anvil.pdf.

⁹¹³ See A. Grzybowski, 'Extractive Industries and Conflict', Guide and Toolkit, UN Interagency Framework Team for Preventive Action, 2012, p. 13 et seq.

both before and after he assumed the Liberian presidency in 1997. Taylor's support of the RUF was motivated at least in part by his desire to gain control of lucrative Sierra Leonean diamond fields less than 100 miles from the Liberian border. This interest undermined peace in Sierra Leone until 2001, and the Special Court for Sierra Leone later indicted Taylor for participating in a joint criminal enterprise "to take any actions necessary to gain and exercise political power and control over the territory of Sierra Leone, in particular the diamond mining areas. In response to the role of the diamond trade in financing Charles Taylor and the RUF, the UN Security Council imposed sanctions on diamond exports from Liberia in March 2001. This increased pressure on the RUF, which laid down arms the following year, leaving over 200,000 people dead, more than two million displaced, and thousands maimed. As an unintended side effect of the sanctions, however, Charles Taylor switched to another natural resource – Liberian timber – as his main source of revenue. Reflecting the lack of coherence in the UN approach to natural resource-fuelled conflicts, it was another two years before sanctions were imposed on Liberian timber exports in July 2003. The following month, with his key funding source cut and rebel groups advancing on Monrovia, Charles Taylor went into exile in Nigeria. 914

Case 4: Colombia Mining revenue reportedly plays an important role in the internal armed conflict in Colombia. In May 2015, 600 troops of Colombia's armed forces raided 63 illegal Gold, Tungsten and Cobalt mines operated by Revolutionary Armed Forces of Colombia (FARC) guerillas, reportedly destroying machinery (pumps and dredging equipment) with explosives and arresting 59 people.⁹¹⁵ The defense minister Juan

Carlos Pinzon justified the attack with the argument that illegal mining generates illicit finances for illegal groups (approx.. \$9 million a month) and that it destroys the environment. Illegal mining has allegedly become one of the main sources of income for the FARC. The affected mines are located in protected areas in the departments of Guainía and Vichada near the border with Brazil and Venezuela in the Amazon. Sis

2. Human Rights Analysis

a. Right to Life, Art. 6 ICCPR

The right to life is perceived as the most fundamental human right. It is therefore protected by all international and regional human rights instruments.919 Art. 6 (1) ICCPR states that "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life." The HRC describes the right to life as the supreme right of the treaty, emphasizing that according to Art. 4 (2) ICCPR, no derogations are permissible from this right, even in times of public emergency. 920 Furthermore, with a view to armed conflict, the HRC has recognized a relationship between the right to life and war and other forms of violence.921 It thus derived from Art. 6 the "supreme duty" on States to prevent war, genocide and other acts of mass violence causing arbitrary loss of life.922 Furthermore, the scope of protection of the right to life has been further ex-

- 917 See at http://dialogo-americas.com/en_GB/articles/rmisa/features/2015/06/05/feature-02.
- 918 Ibid; see also http://www.upi.com/Top News/World-News/2015/05/12/Colombia-shuts-down-63-illegal-minesarrests-59-in-anti-FARC-raids/4431431443594.
- 919 See Art. 3 UDHR, Art. 2 ECHR, Art. 1 ADHR, Art. 4 ACHR and Art. 4 AFCHPR.
- 920 HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 1; HRC General Comment No. 14 (1985), 'Nuclear Weapons and the Right to Life', 1 January 1985, para. 1.
- 921 M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 125.
- See HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 16.

⁹¹⁴ R. Matthew (et al.), 'From Conflict to Peace Building: The Role of Natural Resources and the Environment', UNEP, Geneva, 2009, p. 10

See at http://www.bbc.com/news/world-latin-america-32700288; and http://www.bbc.com/news/world-latin-america-32700288; and http://www.bbc.com/news/world-latin-america-32700288; and http://www.reuters.com/article/us-colom-bia-mining-illegal-idUSKBN0NW27220150511.

⁹¹⁶ Thic

tended to include other threats to human life, such as malnutrition, life-threatening illness, and nuclear energy.⁹²³

The essence of the obligation of States to respect the right to life is reflected in the third sentence of Art. 6 (1) ICCPR, stipulating that "No one shall be arbitrarily deprived of his life."924 This obligation, however, is not absolute, since only "arbitrary" deprivation of life is prohibited. The HRC has interpreted this obligation and exemptions to it in such a way that "States parties should take measures not only to prevent and punish deprivation of life by criminal acts, but also to prevent arbitrary killing by their own security forces. The deprivation of life by the authorities of the State is a matter of the utmost gravity. Therefore, the law must strictly control and limit the circumstances in which a person may be deprived of his life by such authorities."925 Therefore, the State obligations to respect and protect, in this context, comprise the duty to not only refrain from such arbitrary interference on the right to life but also to prevent third parties therefrom.

With a view to the present risk area, it can be concluded that States are generally not only obliged, under Art. 6 ICCPR, to abstain from arbitrary killings through their state agents and to prevent third parties form committing such killings in the context of mining activities. Furthermore, drawing from the "supreme duty" of States to prevent war, genocide, and other acts of mass violence, they also have to prevent mining-related conflict that leads to such killings, as is the case with armed conflict. While the possibilities to protect the right to life in the often very complex situations of conflict are sometimes limited, there are various ways to positively influence such conflict scenarios. One example is the elimination of

revenue streams that support violent conflicts,⁹²⁶ as markets can usually identify the origin of the commodity in the process of determining its quality.⁹²⁷

Furthermore, it must be noted that actions by their state agents, including law enforcement officials, even if they act outside their authority or against instructions, can be attributable to the state, as long as the agent acts within its capacity.⁹²⁸

b. Art. 7, 9, 21 ICCPR; Art. 1 (1), 2 (1) Convention against Torture; Art. 2, 3 UN Genocide Convention

Besides the right to life, several of the above-mentioned rights can further be violated in mining-related situations of conflict. The legal analysis, however, corresponds with the risk area of "protest and violent clashes" and is therefore described in the respective section below.

II. Violent Conflict, Protest and Clashes

1. Description of Risk Area and Case Studies

The exploitation of non-renewable natural resources, including oil, gas, minerals, and timber has often

⁹²³ Ibid., para. 5.

See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 123

⁹²⁵ See HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 3. See for the vividly discussed exemption of the death penalty, M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 133 et seq.

⁹²⁶ As observed by J. Switzer, "Most of the international markets in commodities are, at some point along the marketing chain, fairly narrow. The successful establishment of a 'conflict diamond' certification scheme depended on a bottleneck in the marketing chain (the near-monopoly power of DeBeers as buyer of uncut diamonds), physical characteristics of diamonds that facilitate determination of origin, and retail consumer demand for diamonds that did not contribute to war", see J. Switzer, 'Armed Conflict and Natural Resources: The Case of the Minerals Sector', MMSD working paper No. 12, July 2001, p. 21.

P. Collier, 'Economic Causes of Civil Conflict and their Implications for Policy' in: C. Crocker/F. Hampson/P. Aall (eds.), Turbulent Peace: The Challenges of Managing International Conflict, U.S. Institute of Peace Press, 2001, pp. 143-163.

⁹²⁸ See Art. 7 Draft Articles of State Responsibility for Internationally Wrongful Acts.

been cited as a key factor in triggering, escalating, or sustaining violent conflicts around the globe. 929 As illustrated above and in the present risk area, this is also one of the most pervasive problems in the context of mining. The massive social and environmental impacts of mining projects – and their implications on human rights - as illustrated in chapter 3 and 4, are very likely to cause protest, which often turns violent. While this is typical for many sectors of the extractive industries, the mining sector has a somewhat unique situation with the important stakeholder groups of small-scale and artisanal miners. 930 Unlike oil or gas, for instance, which can only be extracted with large inputs of capital and equipment, many minerals can be extracted by single miners with little means, notably gold and precious stones.931 This leads to additional conflict scenarios, since more parties depend on, or try to benefit from, exploitation: Local communities often rely on ASM as a means of livelihood, seasonally performing it as part of the agricultural cycle. 932 Indigenous communities perform ASM not only as a means of livelihood but also as part of their culture. 933 Finally, economic recession or the discovery of new deposits can temporarily lead to a strong increase of ASM activities, most notably during "shock-push"⁹³⁴ or "rush-type" ASM.⁹³⁵ At the same time, ASM activities are sometimes very hard to control.

As with the "situations of conflict" above, the human rights violations in the context of the present study are only indirectly caused by mining activities, 936 since the violations occur through protest that is aggressively repressed. Given the pervasiveness of this human rights problem in relation to mining activities worldwide, it needs to be included in the present study. Given the complex and manifold reasons for mining-related violence, the cases falling within the scope of the present risk area are further structured into three groups:

- 929 See A. Grzybowski, 'Extractive Industries and Conflict', Guide and Toolkit, UN Interagency Framework Team for Preventive Action, 2012, 6.
- 930 See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 54.
- 931 Ibid.
- 932 See T. Hentschel/F. Hruschka/M. Priester, 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002, p. 15. See for example the example of the gold panners of Madagascar, who perform ASM as part of the R. Cook/T. Healy, 'Madagascar Case Study: Artisanal Mining Rushes in Protected Areas and a Response Toolkit', Protected Areas and Critical Ecosystems Project (ASM-Pace), Final Report, 30 June 2012, 15.
- 933 See the case of the Huli and Paiela Peoples of the Papua New Guinea Highlands at Mt. Kare. Mt. Kare in the Enga Province, today a large-scale gold mining site, was traditionally a ritual site to the Paielas, where pigs were sacrificed to Taiyundika, a totemic python, to promote the fertility of plant, animal, and human species. Although sacrifices are no longer conducted at Mt. Kare, the Python Still has some salience for Paielas, who consider the gold to be the flesh of the totemic python, see A. Biersack, 'The Mount Kare Python and His Gold: Totemism and Ecology in the Papua New Guinea Highlands', *American Anthropologist*, vol. 101, No. 1, 1999, pp. 68-87 (68).
- See for example the dramatic upsurge in ASM in Mongolia, an illegal upsurge that caught the Government, local people, mining industry, media and international donors completely by surprise. Known as the 'ninjas', in 2003 the informal gold miners were estimated to be in excess of 100,000 individuals whose livelihoods depend on the illegal mining, but Government estimates are less than half this figure. This 'gold rush' was essentially poverty driven, due to urban and rural unemployment, and semi-nomadic herders losing their livestock over repeated natural calamities, see R. Grayson (et al.), 'The People's Gold Rush in Mongolia-the Rise of the 'Ninja' Phenomenon', World Placer Journal, vol. 4, 2004, pp. 1-112 (1). Another example are the gold panners of Madagascar, which grew from approximately 200.000 in 2001 to around 350.000-500.000 in 2012, see R. Cook/T. Healy, 'Madagascar Case Study: Artisanal Mining Rushes in Protected Areas and a Response Toolkit', Protected Areas and Critical Ecosystems Project (ASM-Pace), Final Report, 30 June 2012, p. 14.
- 935 See the historic gold rushes in the United States (Georgia, 1829; California 1849; Alaska, 1900; and during the Great Depression on the 1930s, see http://www.goldprospector.org/gold-rushes/), in Brazil's Serra Pelada, (1980s); in the Nambija Region in Ecuador in the 1980s, see N. Tarras-Wahlberg (et al.), 'How Beautiful is Small-Scale Mining? Evidence from Small-Scale and Artisanal Gold Mining in Ecuador', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, pp. 701-716 (703); or in the Peruvian Madre de Dios (1990s), see C. Cremers / M. de Theije, 'Small-Scale Gold Mining in the Amazon', in: L. Cremers et al (eds), Small-Scale Gold Mining in the Amazon The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, pp. 1- 16 (5).
- 936 See on the 'causal link' and 'attribution' to state conduct in the context of human rights violations, below, [V][2.][a.].

a. Violent Conflict over Profits from Exploitation

Profits from the exploitation of mineral deposits, particularly in countries and regions with little other sources of revenue, often lead to violent conflict. This can be observed on the local (Case 1), regional (Case 2) and even international level (Case 3). Further scenarios of violent conflict occur when LSM and ASM activities conflict over the same deposit. This comprises cases where LSM projects are being realized in areas formerly used for ASM (Case 4) or where artisanal miners enter LSM concessions, sometimes in rush-type situations, where they often face exceeding violence by security personnel (Case 5-7). Similar conflict arises between LSM and indigenous groups (Case 8) and between ASM and indigenous groups (Case 9).

Case 1: Sudan In Dafur, fighting between rival tribes over the Jebel Amer gold mine that stretches for some 10 km beneath the sandy hills of North Darfur has killed more than 800 people and displaced some 150,000 in 2013. Arab tribes, once heavily armed by the government to suppress insurgents, have turned their guns on each other to get their hands on the mines. Rebel groups that oppose the government also want the metal.⁹³⁷

Case 2: Zimbabwe In October 2008, more than 200 artisanal miners in Chiadzwa, a diamond zone located in Mutare West, were reportedly massacred by the Zimbabwean infantry, supported by helicopters, without giving any warning. 938 Afterwards, soldiers have been observed searching the bodies of dead miners on the field

Case 3: Liberia/Sierra Leone In 1991, Liberian warlord Charles Taylor sponsored the invasion of Sierra Leone by the Revolutionary United Front (RUF), a rebel group whose brutal military campaign was characterized by mass amputations and systematic rape. Taylor not only provided material support to the RUF, but also sent his own troops to fight alongside them, both before and after he assumed the Liberian presidency in 1997. Taylor's support of the RUF was motivated at least in part by his desire to gain control of lucrative Sierra Leonean diamond fields less than 100 miles from the Liberian border. This interest undermined peace in Sierra Leone until 2001, and the Special Court for Sierra Leone later indicted Taylor for participating in a joint criminal enterprise "to take any actions necessary to gain and exercise political power and control over the territory of Sierra Leone, in particular the diamond mining areas." In response to the role of the diamond trade in financing Charles Taylor and the RUF, the UN Security Council imposed sanctions on diamond exports from Liberia in March 2001. This increased pressure on the RUF, which laid down arms the following year, leaving over 200,000 people dead, more than two million displaced, and thousands maimed. As an unintended side

⁹³⁷ See U. Laessing, 'Special Report: The Darfur conflict's deadly gold rush', Reuters (8 October 2013), at https://www.reu-ters.com/article/2013/10/08/us-sudan-darfur-gold-idUS-BRE99707G20131008.

⁹³⁸ See 'Diamonds in the Rough – Human Rights Abuses in the Marange Diamond Fields of Zimbabwe', HRW report (2009), p. 30; and S. Goodley, 'Death, sanctions and big business in the struggle for Zimbabwe's diamonds', *The Guardian* (17 February 2013), see at http://www.theguardian.com/business/2013/feb/17/zimbabwe-death-sanctions-business-diamonds.

⁹³⁹ See 'Diamonds in the Rough – Human Rights Abuses in the Marange Diamond Fields of Zimbabwe', HRW report (2009), p. 30.

⁹⁴⁰ Ibid.

⁹⁴¹ Ibid. p. 34.



Taylor went into exile in Nigeria. 942

Case 4: Brazil In the Carajás mining district of until their demands were met.943

Case 5: Tanzania The North Mara Mine, situatcommencement in the early 2000s. 944 Between rity personnel of the mine or by police officers. 945 mine site.946 Traditionally, local communities and

hood.947

Case 6: DRC Exceeding violence against smallevery night, was reported in the early 2000s.948 human rights organizations.949

Case 7: Bolivia The extent of small-scale mintal impacts.950

⁹⁴² R. Matthew (et al.), 'From Conflict to Peace Building: The Role of Natural Resources and the Environment', UNEP, Geneva, 2009, p.

⁹⁴³ See A. Rosenfeld-Sweeting/A. Clarke, 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, (2000), p. 54.

⁹⁴⁴ P. Mlowe / O. Olengurumwa, 'Fact Finding Mission Report, North Mara Mine, Tanzania', Legal and Human Rights Centre, (May 2011), pp. 7 et seq.

⁹⁴⁵ Ibid., 8 et seq.

⁹⁴⁶ Ibid., 9 et seq.

⁹⁴⁸ AI, 'Democratic Republic of Congo, Making a killing - The diamond trade in government-controlled DRC', report of 22 October2002, 7.

Ibid., 9 et seq.

Case described by T. Hentschel (et al.), 'Small-scale gold mining at San Simón, Bolivia', in: N. Jennings (ed.), Small-scale gold mining: Examples from Bolivia, Philippines & Zimbabwe, Working Paper, ILO Sectoral Activities Programme/Industrial Activities



Case 8: Suriname The Maroon village of Nieuw Koffiekamp in the district of Brokopondo experienced mining-induced displacement twice. In 1963-64 it had already been entirely relocated and the traditional settlements were flooded when a hydroelectric dam was build to provide electricity for a bauxite refinery. An area of 600 square miles was flooded and approximately 6000 Saramanka and Ndjuka Maroons were forced off their lands. 11 1995, they again faced relocation due to a gold mining project. Their new settlement of 500-800 people was situated at the center of the Rosebel concession. The Nieuw Koffiekamp community refused the second resettlement, since the new territory was too far away from their village and situated in the traditional territory of another Marooon tribal group. 152 The conflict grew increasingly violent, with community members being intimidated and shot at by company guards and police units. 153 Furthermore, their subsistence activity, notably ASM, was restricted. 154 These allegations were corroborated by Suriname's main human rights organization. 155 In response, villagers built roadblocks to prevent access to the company plant. The conflict was never resolved but withered away in the late 1990s, when gold prices reached a low point and it became unprofitable to further invest in the mine. 154 After the

Branch (2003), pp. 1, 5.

- 951 E. Kambel/F. MacKay, 'The Rights of Indigenous Peoples and Maroons in Suriname', International Work Group for Indigenous Affairs/The Forest People Program (1999), p. 105.
- 952 M. Heemskerk/C. Duijves, 'Small-Scale Gold Mining And Conflict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100 (94).
- 953 M. de Theije (et al.), 'Engaging Legal Systems in Small-Scale Goldmining Conflicts in Three South American Countries', in: M. Bavinck et al. (eds.), Conflicts over Natural Resources in the Global South: Conceptual Approaches, 2014, pp. 128-143 (135).
- 954 Ibid.
- 955 Thic
- 956 M. Heemskerk/C. Duijves, 'Small-Scale Gold Mining And Conflict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American

gold price recovered, production started again in 2005.⁹⁵⁷

Case 9: Brazil/Venezuela The high price of gold the 1980s were between 300,000 and 500,000.958 miners had worked.959 Thereafter, many small-

- Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100 (94).
- 957 Ibid.
- 958 E. Larreta, 'Gold is illusion The Garimpeiros of Tapajos Valley in the Brazilian Amazonia', Department of Social Anthropology, Stockholm University (2002), p. 12.
- 959 J. Kolen (et al.), 'Formalized Small-Scale Gold Mining In The Brazilian Amazon: An Activity Surrounded By Informality', in: L. Cremers et al (eds), Small-Scale Gold Mining in the Amazon - The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, pp. 31-45 (34).



ed for the crime of genocide.960 The Federal Suruling in 2001.961 Clashes between small-scale miners and Yanomami continue to occur. 962

b. Conflict over the right to participate in decision-making over management of a resource and the sharing of benefits

Poor engagement of local communities and stakeholders is regularly identified as one of the most important sources for mining-induced conflict.963 The dramatic environmental and social impacts on local communities, notably by LSM projects, require the cooperation with all stakeholders from the very beginning of a mining project. Equally, revenue and benefits from the exploitation need to be distributed in a way that leaves no party or individual disadvantaged or exploited. Otherwise, violent conflict (Case 10-12) is often inevitable. Such conflict can further merge with already existing political movements and evolve to become a full-size civil war (Case 13).

Case 10: Colombia In 2012, 150 persons bework.964 The reason for this demand is the excoal are being exported yearly).965 The continubeen destroyed.966 Moreover, the peninsula's dynamic (regarding it's size and water quality).967

Case 11: Ecuador In 1995, a mining compation of the affected communities.968 This open ing what remained.969 Consequently, three per-

- See Recurso Especial No. 222,653 (Roraima) (1999/0061733-9), Brazil, Superior Tribunal of Justice, 22 May 2001.
- 961
- 962 See, 'Further garimpeiros-Yanomami clashes killing 80 indigenous', The Guardian (30 August 2012), see at http://www.theguardian.com/world/2012/aug/30/amazon-tribe-massacrealleged-venezuela.
- See also A. Grzybowski, 'Extractive Industries and Conflict', Guide and Toolkit, UN Interagency Framework Team for Preventive Action, 2012, p. 7.
- See at http://www.eltiempo.com/archivo/documento/CMS-12119115.

- Ibid.; http://www.zeit.de/wirtschaft/2012-09/kolumbien-steinkohle-el-cerrejon/komplettansicht; http://olca.cl/articulo/nota. php?id=102899.
- See at http://www.es.lapluma.net/index.php?option=com_cont ent&view=article&id=4913:2013-06-10-10-33-13&catid=91:mu ltinacionales&Itemid=423
- See at http://www.ecoosfera.com/2015/08/pueblo-wayuu-elcarbon-o-la-vida.
- See at http://intag-ev.de/de/node/6.
- Case described by J. Switzer, 'Armed Conflict and Natural Resources: The Case of the Minerals Sector', MMSD working paper No. 12, July 2001, p. 11. See also at http://intag-ev.de/de/ node/6.

up its concessions in Intag.⁹⁷⁰ The conflict regarding the extraction of Copper in Intag became complex during the last decades and continues until today, culminating in recent imprisonments (in 2015) and a grave division of the local population.⁹⁷¹

Case 12: Guatemala LSM projects in Guatemala have repeatedly led to violent conflict and remain a source of conflict and destabilization in a country that is only slowly recovering from its internal armed conflict. Protests, injuries, and deaths have occurred in various sites and affected anti- and pro-mining groups, as well as police and mining company security personnel. As stated by the UN Special Rapporteur on the Rights of Indigenous peoples, in 2011 the presence of LSM has "generated a highly unstable atmosphere of social conflict which is having a serious impact on the rights of the indigenous people and threatening the country's governance and economic development." Industrial-scale mining of metals in Guatemala is predominantly based in rural areas. As such, mining has a disproportionate impact on indigenous peoples, who tend to live in rural areas on their lands. One of the most frequently cited causes of mining-related conflicts is a lack of meaningful consultation with communities about mining projects. Cases of violent conflict and killings of anti-mining activists and mine guards have particularly been reported from the Marlin gold mine, San Miguel Ixtahuacán and sipacapa, de-

partment of San Marcos.⁹⁷³ Similar problems are reported from the mining projects in San Rafael Las Flores, Department of Santa Rosa, which led to the declaration of the state of emergency in May 2013, the gold mining project in San Jose Del Golfo and San Pedro Ayampuc, department of Guatemala and the nickel mining project of El Estor, Department of Izabal.⁹⁷⁴

Case 13: Papua New Guinea The development of a large copper deposit in Bougainville generated significant environmental and socio-economic impacts, and distributed benefits in a manner that was perceived as unfair to the local population. When these concerns were not adequately addressed, the conflict escalated and merged with an independence movement that had its roots in the colonial history of the island. Violent attacks on the development infrastructure quickly transformed into a civil war that took over a decade to end, leaving some 15,000 people dead. The mine has yet to reopen and Bougainville is now a semi-autonomous region with the option of becoming fully independent of Papua New Guinea by way of a referendum. 975

c. Conflict over environmental, social and cultural impact

The environmental, social, and cultural impact of LSM and ASM activities – and their human rights implications as analyzed in chapter 4 and 5 above – often lead to protest, which then turns violent. Such scenarios are mainly triggered through LSM (Case 14) but do also occur in the context of ASM (Case 15). Area clearing and forced evictions are among the most frequent causes of social impact leading to violence (Case 16-17). Furthermore, massive environmental impact (Case 18) or inadequate working conditions

⁹⁷⁰ Ibio

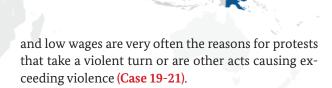
⁹⁷¹ See at http://www.intagsolidarity.com/#!miningconflict/c14e3; http://www.earthisland.org/journal/index.php/elist/eListRead/twenty years of resistance come to a climax in intag ecuador as community g; http://upsidedownworld.org/main/ecuador-archives-49/5318-intags-recurrent-nightmare-adding-up-the-costs-of-ecuadors-mineral-wars-; http://www.intagnewspaper.org/static/pdfs/INTAG 75.pdf (p.15).

⁹⁷² See the report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people, J. Anaya, 'Observations on the situation of the rights of the indigenous people of Guatemala with relation to the extraction projects, and other types of projects, in their traditional territories', UN Doc. A/HRC/18/35/Add.3 of 7 June 2011, p. 1.

⁹⁷³ See 'Guatemala: Mining in Guatemala: Rights at Risk', AI report 2014, p. 9.

⁹⁷⁴ Ibid., 12, 17, 18.

⁹⁷⁵ See A. Grzybowski, 'Extractive Industries and Conflict', Guide and Toolkit, UN Interagency Framework Team for Preventive Action, 2012, pp. 13 et seq.



Case 14: Suriname The Maroon village of Nieuw Koffiekamp in the district of Brokopondo experienced mining-induced displacement twice. In 1963-64 it had already been entirely relocated and its traditional settlements were flooded when a hydroelectric dam was build to provide electricity for a bauxite refinery. An area of 600 square miles was flooded and approximately 6000 Saramanka and Ndjuka Maroons were forced off their lands. Fin 1995, they again faced relocation due to a gold mining project. Their new settlement of 500-800 people was situated at the center of the Rosebel concession. The Nieuw Koffiekamp community refused the a second resettlement, since the new territory was too far away from their village and situated in the traditional territory of another Marooon tribal group. The conflict grew increasingly violent with community members being intimidated and shot at by company guards and police units. Furthermore, their subsistence activity, notably ASM, was restricted. These allegations were corroborated by Suriname's main human rights organization. In response, villagers built roadblocks to prevent access to the company plant. The conflict was never resolved but withered away in the late 1990s, when gold prices reached a low point and it became unprofitable to further invest in the mine.

976 E. Kambel/F. MacKay, 'The Rights of Indigenous Peoples and Maroons in Suriname', International Work Group for Indigenous Affairs/The Forest People Program (1999), p. 105. gold price recovered, production started again in 2005.982

Case 15: Brazil/Venezuela The high price of gold on the international market in 1979 sparked off a real Gold Rush in the Brazilian Amazon. Gold mining became the most important economic activity in the region. It has been estimated that the number of people working directly in the small-scale gold mining sector in the first half of the 1980s counted between 300,000 and 500,000.983 The influx of small-scale miners ("garimpeiros") particularly affected the Yanomami, a group of approximately 35,000 indigenous people who live in some 200–250 villages in the Amazon rainforest on the border between Venezuela and Brazil. Besides environmental damage and newly introduced diseases by the invading small-scale miners ("garimpeiros"), violent clashes arose, notably in the State of Amazonas and the Territory of Roraima. These dramatic impacts of ASM led the Federal Government to ban all mining activities in indigenous areas, especially in the area of the Yanomami reserve in the Northern Amazon (especially Roraima), where between 1987 and 1990 nearly 40,000 miners had worked.984 Many small-scale gold miners thereafter left for neighboring countries such as Venezuela, Suriname, and French Guyana to try their fortune there. This only led to similar problems across the border, as demonstrated in 1993 by the much-recognized "Haximu Massacre" on 16 Yanomami, committed by 22 garimpeiros in the Venezuelan Haximu community. This is documented in the ensuing court

flict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100 (94).

⁹⁷⁷ M. Heemskerk/C. Duijves, 'Small-Scale Gold Mining And Conflict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100 (94).

⁹⁷⁸ M. de Theije (et al.), 'Engaging Legal Systems in Small-Scale Goldmining Conflicts in Three South American Countries, in: M. Bavinck et al. (eds.), Conflicts over Natural Resources in the Global South: Conceptual Approaches, 2014, pp. 128-143 (135).

⁹⁷⁹ Ibid

⁹⁸⁰ Ibid.

⁹⁸¹ M. Heemskerk/C. Duijves, 'Small-Scale Gold Mining And Con-

⁹⁸² Ibid.

⁹⁸³ See E. Larreta, 'Gold is illusion - The Garimpeiros of Tapajos Valley in the Brazilian Amazonia', Department of Social Anthropology, Stockholm University (2002), p. 12.

J. Kolen (Et Al.), 'Formalized Small-Scale Gold Mining In The Brazilian Amazon: An Activity Surrounded By Informality', in: L. Cremers et al (eds), Small-Scale Gold Mining in the Amazon - The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, pp. 31-45 (34).

case in which 4 of the 22 garimperios were convicted for the crime of genocide. The Federal Supreme Court of Brazil ultimately upheld this ruling in 2001. Clashes between small-scale miners and Yanomami continue to occur.

Case 16: Myanmar Community protests about the Letpadaung Copper mine, mainly due to forced evictions and area clearing measures, have, on multiple occasions, been met with excessive use of force by the police. Protestors have suffered serious injuries and on December 22, 2014, a woman, Daw Khin Win, was shot and killed by the police. One of the worst incidents, involving a deliberate attack on peaceful protestors by police, occurred in November 2012. During that month, protest camps had been set up around the mine area and hundreds of monks from nearby monasteries joined the community activists. The main protest camp was located outside the Wanbao compound near the mining area. On the night of November 29, at least three trucks of police and a fire engine were seen entering the compound. Police officers asked people to leave the camps. When the protesters did not leave, the police initially used fire hoses to spray them with water at high pressure and then started throwing "fire bombs," later identified as white phosphorus incendiary munitions. White phosphorus is a toxic substance, sometimes used by the military in various types of ammunition as an incendiary agent and as a smoke screen (it spontaneously catches fire in air and produces clouds of irritating white smoke). It can lead to irreversible burnings of the human skin.⁹⁸⁸

Case 17: Colombia In the beginning of the 2000s, the town of Marmato in the department of Caldas was planned to be resettled in order to enable the construction of an open-pit gold mine. Begin Despite the region's designation as an area for small-scale mining and the reported circumstance that there had been no significant consultation process with the affected community, even though for the most part the community was against the proposal, the company announced its intentions to move the town in 2011. The consequences were massive protests all over the country. Finally, the Marmato municipal council prohibited the open-pit mining and resettlement of the town's historic cent-

Case 18: Ecuador In 1995, a mining company started exploring the Copper deposits of the cloud forest region Intag in the province Imbabura, reportedly without previous consultation of the affected communities. The results of the environmental assessment by the company included extensive clearings of wood, the resettlement of 100 families out of four communities, desertification, the pollution of sources with arsenic and lead, as well as the extinction of a dozen animal species in the region. After several unsuccessful attempts of the region's habitants to be heard by the authorities, around 200 members of the affected communities set the depot of the mining company on fire. Consequently, three persons faced charges, which were later abandoned by a judge's order, as the

.....

⁹⁸⁵ See Recurso Especial No. 222,653 (Roraima) (1999/0061733-9), Brazil, Superior Tribunal of Justice, 22 May 2001.

⁹⁸⁶ Thic

⁹⁸⁷ See, 'Further garimpeiros-Yanomami clashes killing 80 indigenous', The Guardian, 30 August 2012, see at http://www.the-guardian.com/world/2012/aug/30/amazon-tribe-massacre-alleged-venezuela.

⁹⁸⁸ Case described in 'Open For Business? Corporate Crime And Abuses At Myanmar Copper Mine', AI report, 2015, p. 4.

⁹⁸⁹ See at http://www.grancolombiagold.com/investors/press-Releases/press-releases-details/2012/Gran-Colombia-progressing-with-Marmato-resettlement1127857/default.aspx.

⁹⁹⁰ See at http://micla.ca/conflicts/marmato.

⁹⁹¹ See at http://www.miningwatch.ca/news/colombia-marmato-municipal-council-prohibits-open-pit-mining-and-resettle-ment-historic-centre.

⁹⁹² See at http://intag-ev.de/de/node/6.

⁹⁹³ See at http://www.elcomercio.com/actualidad/negocios/proyecto-minero-intag-polariza-a.html.

⁹⁹⁴ See at http://intag-ev.de/de/node/6.



the local population.996

Case 19: Bolivia In April 1996, workers of the (including wages).997 Nevertheless, the mining to come to the area. 998 After his prompt release,

could complete their mission.999 Consequences led to victims on both sides. 1000

Case 20: Sierra Leone On April 16, 2012, workcalled a "war zone." 1001

Case 21: South Africa On August 16, 2012, stration; another 78 people were injured.1002 Pre-

⁹⁹⁵ Ibid.

See at http://www.intagsolidarity.com/#!miningconflict/c14e3; http://www.earthisland.org/journal/index.php/elist/eListRead/ twenty years of resistance come to a climax in intag ecuador_as_community_g.; http://upsidedownworld.org/main/ecuador-archives-49/5318-intags-recurrent-nightmare-addingup-the-costs-of-ecuadors-mineral-wars-; see further C. Carrión, 'Minera ya Está en el Paradíso', INTAG, January/February 2012, p. 15, see at http://www.intagnewspaper.org/static/pdfs/IN-TAG 75.pdf.

See at http://www.cidh.org/countryrep/bolivia-eng/ii.facts.htm.

Thid.

⁹⁹⁹ Ibid.

¹⁰⁰⁰ Ibid; http://lateinamerika-nachrichten. see further de/?aaartikel=blutige-zusammenstoesse-in-goldminen.

¹⁰⁰¹ See 'Whose Development? Human Rights Abuses in Sierra Leone's Mining Boom', HRW report, 2014, p. 3.

¹⁰⁰² See A. Benya, 'Marikana: The Absence of Justice. Dignity, and Freedom?', in: C. Rodriguez-Garavito et al. (eds.), Human Rights in Minefields-Extractive Economies, Environmental Conflicts, and Social Justice in the Global South, Center for the Study of Law, Justice and Society, Dejusticia, Bogota, 2015, pp. 260-297 (261 et seq.). See further http://www.bbc.com/news/world-africa-19292909.

the call for a pay rise of about \$1250 a month (at the time they earned between \$484 and \$605 monthly). Workers mainly criticized that they were unable to support their families' basic needs despite working long hours under dangerous and inhumane conditions. They also felt no longer properly represented by their Union, the National Union of Mine workers. The incident at Marikana was followed by several days of violent strikes. In 2014, a "Marikana Commission of Inquiry" was established under the leadership of the retired Judge Farlam by President Jacob Zuma.

2. Human Rights Analysis

a. Right to Life – Art. 6 ICCPR

As described above, the right to life is perceived as the most fundamental human right and is therefore protected by all international and regional human rights instruments. 1007 Art. 6 (1) ICCPR states that "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life." The HRC describes the right to life as the supreme right of the treaty, emphasizing that according to Art. 4 (2) ICCPR no derogations are permissible from this right, even in times of public emergency. 1008

The essence of the state obligation to respect the right to life is reflected in the third sentence of Art. 6

(1) ICCPR, which stipulates, "No one shall be arbitrarily deprived of his life." This obligation, however, is not absolute, since only "arbitrary" deprivation of life is prohibited. The HRC has interpreted this obligation and exemptions to it in such a way that "States parties should take measures not only to prevent and punish deprivation of life by criminal acts, but also to prevent arbitrary killing by their own security forces. The deprivation of life by the authorities of the State is a matter of the utmost gravity. Therefore, the law must strictly control and limit the circumstances in which a person may be deprived of his life by such authorities." 1010

Furthermore, the scope of protection also comprises other threats to human life, such as malnutrition, life-threatening illness, war, and nuclear energy. Therefore, the State obligations to respect and protect, in this context, comprise not only to refrain from such arbitrary interference into the right to life, but also to prevent third parties therefrom. Furthermore, the duty to protect covers other threats other than the ones mentioned above.

In light of the foregoing, it can be concluded that in the cases outline above, States have to respect the right to life by refraining from arbitrary killings. The interpretation of the term arbitrary, however, which indicates that the right to life is not an absolute right, is still subject to debate. The wording of Art. 6 (1) ICCPR and the interpretation of the HRC cited above, however, show that restriction of the right to life have to be strictly controlled by the State through adequate legislation. In drawing from the literal meaning of the word "arbitrary," it can be said that killings in the fight over the control over a re-

- **1004** Ibid.
- 1005 Ibid., 268
- See at http://www.bbc.com/news/world-africa-19292909.
- 1007 See Art. 3 UDHR, Art. 2 ECHR, Art. 1 ADHR, Art. 4 ACHR and Art. 4 AFCHPR.
- 1008 HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982.1; HRC General Comment No. 14 (1985), 'Nuclear Weapons and the Right to Life', 1 January 1985, para. 1.

A. Benya, 'Marikana: The Absence of Justice. Dignity, and Freedom?', in: C. Rodriguez-Garavito et al. (eds.), Human Rights in Minefields-Extractive Economies, Environmental Conflicts, and Social Justice in the Global South, Center for the Study of Law, Justice and Society, Dejusticia, Bogota, 2015, pp. 260-297 (267). See also http://www.bbc.com/news/world-africa-19314709.

¹⁰⁰⁹ M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 123

¹⁰¹⁰ See HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982para. 3. See for the vividly discussed exemption of the death penalty, M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, pp. 133 et seq.

¹⁰¹¹ See HRC General Comment No. 6 (1982), 'The Right to Life', 30 April 1982, para. 5.

¹⁰¹² See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 127.

source or resource area, either by security personnel of a LSM project (Case 5-7) or by small-scale miners invading indigenous territory (Case 9) are very likely to be "arbitrary killings." Furthermore, the HRC has found a violation of the right to life in a case of killings in the course of a police raid, because they were intentional, without warning, and "disproportionate to the requirements of law enforcement."1013 Therefore, killings of protesters by police forces and other law enforcement state agents in the present risk area (Case 21) are to be considered "arbitrary," if they are disproportionate to the requirements of law enforcement. In such cases, States violate their obligation to respect the right to life. With a view to arbitrary killings committed by third parties, the State has to fulfill its duty to protect individuals from third party interference in this right to the best of its ability.

Furthermore, particularly in the cases of killings through law enforcement officials, it needs to be noted that actions by state agents, even if they act outside their authority or against instructions, can be attributable to the State, as long as the agent acts within its capacity. 1014

b. Right to Security of the Person, Art. 9(1) ICCPR

In scenarios described in the present risk area, the right to personal security is often violated, too. Personal security, as protected by Art. 9 (1) ICCPR, ¹⁰¹⁵ includes protection against death threats, assassination attempts, harassment and intimidation. ¹⁰¹⁶ According to Art. 9 (1) ICCPR, the State is obliged to respect the right to security of a person and to protect it against third parties. ¹⁰¹⁷ Violent conflict as de-

scribed above therefore falls within the scope of protection of Art. 9 (1), when death threats, assassination attempts, harassment and intimidation is committed against individuals.

c. Convention against Torture, Art, 1 (1), 2 (1)

Under certain circumstances, cases that fall within the present risk area can even lead to a violation of the CAT. According to Art. 1 CAT, "torture" means "any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity." Acts of excessive violence by law enforcement officials in reaction to mining related protests, like the use of "fire bombs" leading to irreversible burnings of the skin (Case 16) fall within this definition, since this severe physical pain is intentionally inflicted on protesters to punish them for not ending their protest, which law enforcement officials perceive as an act of disobedience. The character of punishment of the acts committed aimed at achieving deterrent effects is underlined by the infliction of irreversible injuries. According to Art. 2 (1) CAT, States Parties have to prevent all act of torture without exception.

d. Freedom from Torture and Cruel, Inhuman or Degrading Treatment, Art. 7 ICCPR

Art. 7 stipulates that "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific

¹⁰¹³ See Guerrero v Colombia, HRC, Communication No. 45/1979: Colombia, 31 March 1982, UN Doc. CCPR/C/15/D/45/1979 of 31 March 1982, §§ 13.2, 13.3.

¹⁰¹⁴ See Art. 7 Draft Articles of State Responsibility for Internationally Wrongful Acts.

¹⁰¹⁵ This right is further enshrined by Art. 3 UDHR, Art. 5(1) ECHR, Art. 7 (1) IACHR and Art. 6 ACHPR.

¹⁰¹⁶ See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 209.

¹⁰¹⁷ HRC, Delgado Paez v. Colombia, No. 195/1985, CCPR/

experimentation." The definition of "torture" can be drawn upon of the definition of Art. 1 (1) CAT, as outline above. Therefore, cases as the one described above (Case 16) can further constitute a violation of Art. 7 ICCPR. Furthermore, the HRC has found, in this regard, that "kicking and strangulation" and the "breaking of a jar" fall within the scope of this article. During the cases of violent clashes outlined above, such violations could occur, thus falling within the scope of protection of Art. 7 ICCPR. It is important to note that the right to freedom from torture and cruel, inhuman, or degrading treatment is an absolute right and can therefore, as with the right to life, never be restricted.

e. UN Genocide Convention, Art. 2, 3

Furthermore, cases of the present risk area may even amount to a violation of the genocide convention in extreme situations. Art 2 of the Convention defines the meaning of genocide as

"any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

- Killing members of the group;
- Causing serious bodily or mental harm to members of the group;
- Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- Imposing measures intended to prevent births within the group;
- Forcibly transferring children of the group to another group."

Situations of conflict as outlined above fall within the scope of the genocide convention, if killings, causing of bodily and mental harm, or inflicting life conditions calculated to bring physical destruction are performed with "the intent to destroy, in whole or in part, a national, ethnical, racial, or religious group, as

such."1019 The latter constitutes the mens rea or special intent (dolus specialis), which is required for determining a genocide. In the case of the "Haximu Massacre" (Case 9) on a group of Yanomami Indians, the Brazilian Supreme Court, in 2001, upheld a judgment that convicted 4 small-scale miners for a violation of the national Genocide Law, which was created in fulfilling the country's obligation under the Genocide convention. Thus, a violation of a State Party's obligation to prevent genocide under the UN Genocide Convention can materialize when States actively commit comparable killings on indigenous people through their state agents or if they fall short in protecting them from such interference by third parties. In drawing from principles of due diligence in the State duty to protect (see above, [Ch.2][B.][I.][2.]), States have a far-reaching obligation to prevent such violations as far as they are foreseeable.

f. Freedom of Assembly, Art. 21 ICCPR

Article 21 enshrines the right of peaceful assembly covering both the preparation and conduction of an assembly and the right to participate in it.1020 While purely private meetings for social purposes are evidently not protected by Art. 21, but rather by Art. 17, this does not necessarily mean that freedom of assembly may only be exercised for political purposes.¹⁰²¹ Instead, every intentional, temporary gathering of several persons for a specific purpose fall within the scope of Art. 21.1022 However, the assembly needs to aim at the discussion or proclamation of information and ideas directed at the public without having to be primarily of a political nature, but going beyond the purely private sphere. 1023 Moreover, Art. 21 ICCPR explicitly covers only peaceful assemblies. Art. 21 is not an absolute right; Art. 17 ICCPR states "No restrictions may be placed on the exercise of this right other than those imposed in conformity with the

.....

¹⁰¹⁹ Prosecutor v. Akayesu (Jean-Paul), Trial Judgment, Case No ICTR-96-4-T, ICL 90 (ICTR 1998), [1998] ICTR 44, para. 498.

¹⁰²⁰ See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 483.

¹⁰²¹ Ibid., p. 481.

¹⁰²² Ibid., p. 484.

¹⁰²³ Ibid.

¹⁰¹⁸ See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 161.

law and which are necessary in a democratic society in the interests of national security or public safety, public order (ordre public), the protection of public health or morals or the protection of the rights and freedoms of others."

Due to the fact that the focus of this right is clearly on its democratic function, States are under a strong obligation to ensure the right with positive measures like ensuring police protection against disturbances by political opponents. 1024 In addition, a State is under obligation to refrain from any interference with the freedom of assembly.

Mining-related protests as described in the cases above (Case 10-13, 17-21) mostly represent temporary gathering to collectively express concern about the public issue resulting from the mining project. As long as they are and stay peaceful, they fall within the scope of Art. 21 ICCPR. Restrictions of this right are possible, however, but must meet the requirements set out by Art. 21 ICCPR as mentioned above. Deliberate and arbitrary restrictions that do not pursue any of the legitimate aims mentioned above therefore constitute a violation of Art. 21 ICCPR.

III. Forced Evictions

1. Description of Risk Area and Case Studies

Forced evictions are defined as "the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/ or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection."1025 While in practice forced evictions occur in a variety of scenarios, they have already been analyzed in the risk area of "area clearings" during the constructions phase of LSM projects above (see Case 1: Sierra Leone Following reports, the erating activities that once sustained them. 1027 versial. 1028

Case 2: Myanmar According to urgent appeals

[[]Ch.3][B.][II.][1.]). Most prominently, however, arbitrary forced evictions occur in situations of authoritarian governance. In such situations, governments often undertake drastic measures to clear resource areas to profit from exploitation (Cases 1-3). Equally, in situations of weak governance, either due to inability, unwillingness or corruption, sufficient protection against forced evictions is not granted by the States. This leads to displacements and exceeding violence, which violates numerous human rights standards. In light of the many human rights problems arising from forced evictions, the CESCR dedicated a stand-alone General Comment to this issue in 1997.1026

¹⁰²⁴ Ibid., p. 481.

¹⁰²⁵ CESRC General Comment No. 7 (1997), 'The right to adequate housing (art. 11.1 of the Covenant): forced evictions, UN Doc. E/1998/22 of 20 May 1997, para. 3.

¹⁰²⁶ Ibid.

¹⁰²⁷ See 'Whose Development? Human Rights Abuses in Sierra Leone's Mining Boom', HRW report, 2014, p. 2.

¹⁰²⁸ See the company's response available at http://business-humanrights.org/sites/default/files/media/documents/company_responses/aml_response_to_hrw_24022014.pdf and the political backup for the company, available at http://www.newstimeafrica.com/archives/33914.

the villages of Zeedaw, Saedee, Kandaw and Wet Hme. Between 2011 and 2014, the Myanmar authorities and mining companies forcibly evicted people without genuine consultation, due process, legal remedies, adequate resettlement, or compensation. The mining company has taken over approximately half of the land required for the project from the 30 affected villages and 245 families from the four villages have been moved to resettlement sites. 1029

Case 3: Angola/DRC Forced evictions frequently occur between Angola and the DRC in connection with the expulsion of "garimpeiros," undocumented foreign miners that came to Angola as refugees during the armed conflict in the DRC. Many of these refugees, those internally displaced in DRC and those that fled over the boarder to Angola, try to make a living through artisanal mining. 1030 Angola, however, aimed at cutting down the amount of rough diamonds that are being smuggled out of the country since revenue is not accounted for with these diamonds. The so-called "Operation Brilliant,", launched by the Angolan government in 2003, led to the expulsion of a recorded 80,000 Congolese from Angola. 1031 In May 2009, the Angolan government began "Operation Crisis," which entailed the expulsion of 160,000 garimpeiros to the DRC, with 18,000 individuals expelled in one 37-day period. In response to these ongoing operations, the DRC forcibly expelled an estimated 51,000 Angolans from within its borders in 2009, in what the media has described as a "tit-for-tat expulsion." Many of the Angolans expelled were refugees from Angola's 1975-2002 civil war and had been living in the DRC for many years. In October 2009, Angola and the DRC agreed upon protocols to suspend expul-

sions and to conduct consultations before any further deportations of foreign nationals. But the most recently reported expulsions demonstrate Angola's complete lack of compliance with the terms of this agreement. 1032 Comparable problems also arose in 2014 between Tanzania and the DRC with great numbers of Congolese artisanal miners being expelled from Tanzania. 1033

Case 4: Papua New Guinea Between April and July 2009, police officers reportedly raided villages in the highlands of Papua New Guinea, forcibly evicting people from their homes, burning down houses, and destroying their belongings, gardens and livestock. These incidents took place in the "special mining lease" (SML) area within which the Porgera Joint Venture (PJV), which operates one of the largest mines in the country. 1034 It was officially claimed that the destructed homes were merely "shacks," which was disputed by reports of human rights organizations. 1035

Case 5: Indonesia The Grasberg Gold and Copper open-pit mine in the Indonesian Papua Province, the world's largest gold and third largest copper mine, has reportedly led to the displacement and forced evictions of about 15000 people.¹⁰³⁶ One of the indigenous communities around the area was the Amungme Tribe, whose region has now almost entirely become Freeport's concession area.¹⁰³⁷ After having moved

See 'Urgent action - Thousands of people are at risk of being forcibly evicted from their homes and farms to make way for the Letpadaung copper mine in central Myanmar', AI Ua: 98/15 index: asa 16/1563/2015, 5 May 2015.

¹⁰³⁰ Expert interview, Mr. Näher, BGR / DRC.

¹⁰³¹ G. Vetter, Forgotten Million: Assessing International Human Rights Abuses in the Artisanal Diamond Mining Industry, *Transnational Law & Contemporary Problems*, vol. 16, Issue 2, 2007, pp. 733-768 (753 et seq.).

¹⁰³² See C. Davies, 'Reciprocal Violence: Mass Expulsions between Angola and the DRC' (17 February 2011), at http://hrbrief. org/2011/02/reciprocal-violence-mass-expulsions-between-angola-and-the-drc.

¹⁰³³ Expert interview, Mr. Näher/BGR/DRC.

¹⁰³⁴ See 'Undermining Rights - Forced Evictions and Police Brutality Around the Porgera Gold Mine, Papua New Guinea', AI Report, 2010, p. 1. See further http://oecdwatch.org/cases/Case 210.

¹⁰³⁵ Ibid., p. 7.

¹⁰³⁶ T. Downing, 'Avoiding New Poverty: Mining-Induced Displacement and Resettlement', MMSD/IIED, Working Paper No. 58, 2002, p. 7.

¹⁰³⁷ See at http://www.amrc.org.hk/content/case-freeport-mc-morran-copper-gold-inc-indonesia's-extractive-industry.

1000 indigenous people to the coastal lowlands, 88 of them died of malaria within one month. 1038

Case 6: Ghana Tarkwa open pit gold mining project in southwest Ghana has reportedly led to the forceful displacement of 20000-30000 people since mining activities were commissioned in 1997. Day As a result, problems regarding inadequate housing, youth unemployment, family disorganization, school dropout rates, prostitution, and drug abuse have been risen to such a level that a serious adverse impact on the social organization and cultural values of the people have become obvious. Day New housing arrangements for resettled communities have disrupted long-established family networks and the size of housing units provided by the mining company were reportedly in many instances not conformed to the size of former households.

2. Human Rights Analysis

a. Right to Housing, Art. 11 (1) ICESCR

Art. 11 ICESCR stipulates that States Parties "recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions." The human right to adequate housing is thus directly derived from the right to an adequate standard of living. ¹⁰⁴² From its content, it guarantees the right to live somewhere in security, peace, and dignity. ¹⁰⁴³ Adequacy, with regard to housing, comprises legal security of tenure, availability of services, materials, facilities and infrastructure, affordability, habitability and accessibility;

the location must be adequate in terms of access to employment options, health-care services, schools, child-care centers and other social facilities; finally, housing must be culturally adequately constructed.1044 With regard to the security of tenure, it is important to note that the protected tenure under the right to adequate housing can take a variety of forms, including rental (public and private) accommodation, cooperative housing, lease, owner-occupation, emergency housing, and informal settlements, including occupation of land or property. 1045 However, the right to adequate housing is not guaranteed as an absolute right. Following the general framework outline above, restrictions need to be prescribed by law, pursue a legitimate aim, and apply only those measures that are necessary to reach that aim (see above, [Ch.2][D.][2.]). As mentioned above, it is recognized that forced evictions can be justified if prescribed by law1046 and when they are "unavoidable and necessary for the general welfare of a state".1047

The mining-related forced evictions and displacements described in the present risk area fall within the scope of protection of the right to housing, which guarantees shelter and legal security of tenure. This is the case, regardless of the type of tenure, as mentioned above. Forced evictions, therefore, cannot be simply justified by claiming that affected individuals or communities did not hold the required property, ownership, or tenure rights (Case 4). Furthermore, this means that forced evictions cannot be justified just because the evicted individuals legally hold no citizenship, as in the cases of refugees that try to make a living through artisanal mining (Case 3). While forced evictions, as shown, can be justified,

¹⁰³⁸ See at http://www.ratical.org/ratville/IPEIE/IJ_PNG.pdf.

¹⁰³⁹ Thid

See a study of the Tarkwa Mining Region (2001) at http://www.saprin.org/ghana/research/gha_mining.pdf, at p. 43.

¹⁰⁴¹ Ibid.

¹⁰⁴² See CESCR General Comment No. 4 (1991), 'The Right to Adequate Housing (Art. 11 (1) of the Covenant)', UN Doc. E/1992/23 of 13 December 1991, para. 8 (c), para. 1.

¹⁰⁴³ Ibid., para. 7.

¹⁰⁴⁴ Ibid., para. 8.

¹⁰⁴⁵ Ibid., para. 8 (a).

¹⁰⁴⁶ See, in this vein, CESRC General Comment No. 7 (1997), 'The right to adequate housing (art. 11.1 of the Covenant): forced evictions, UN Doc. E/1998/22 of 20 May 1997, para. 3.

¹⁰⁴⁷ See the 'Basic Principles and Guidelines on Development-Based Evictions and Displacement' of the UN Special Rapporteur on adequate housing, see UN Doc. A/HRC/4/18 of 5 February 2007, Annex I, para. 60.

¹⁰⁴⁸ See also 'Forced Evictions', OHCHR Fact Sheet No. 25/Rev. 1, Geneva, 2014, p. 5.

this is hardly ever the case in cases like the ones outlined above. They are often not being prescribed by law (condition of legality). They do not pursue a legitimate aim like the general welfare of the state (condition of legality), but rather aim at enriching a small group of specific individuals (Case 2). Finally, they often go beyond what is necessary to reach that aim, namely exploiting the deposit (Case 3-4). State obligations, as described in chapter 2, comprise respecting the right to housing by refraining from unjustified forced evictions in the context of LSM projects. This means preventing administrative and police organs but also state-owned mining companies from such evictions. 1049 Furthermore, States are obligated to enact and enforce appropriate legislation, 1050 which not only prohibits such interference in the right to housing but also precisely regulates under which circumstances forced evictions can be justified.

b. Right to Privacy, Art. 17 ICCPR

As shown, the protection against forced evictions under Art. 11 (1) is ICESCR reinforced by Art. 17 (1) ICCPR, which complements the right to not be forcefully evicted without adequate protection. According to this provision "no one shall be subjected to arbitrary or unlawful interference with his privacy, family [and] home." As under Art. 11 ICESCR, the protection of the "home" under Art. 17 (1) ICCPR extends not only to dwellings in the true sense but to all types of houses regardless of legal title or nature of use, loss and indicates the place where a person resides. Any invasion of that sphere that occurs without the consent of the individuals affected constitutes an in-

terference with Art. 17 ICCPR.¹⁰⁵⁴ Moreover, this right is not only guaranteed against interferences emanating from State authorities but also from natural or legal persons.¹⁰⁵⁵ As described above, the right to privacy can be restricted if prescribed by law, if in pursuit of a legitimate aim, and if only those measures are taken that are necessary to reach that aim. A legitimate aim, in this context, has been recognized in "the general welfare of a state."¹⁰⁵⁶

As found above, forced evictions clearly fall within the scope of protection of Art. 17 ICCPR. Accordingly, the alleged trespassing of land by an extractive firm despite protests of landowners may be considered as impacting the right to privacy. 1057 They can be justified if they are prescribed by law and are unavoidable and necessary for the general welfare of a State. In this context, it is to be noted that relevant legislation that allows for such encroachment upon the right to privacy must specify in detail the precise circumstances in which such interferences may be permitted. 1058The cases of forced evictions outlined for the present risk area, as with the right to housing, are most likely not justified. They are either not prescribed by law, do not pursue a legitimate aim, or go beyond what is necessary to reach that aim. State obligations under Art. 17 ICCPR comprise respecting the right to privacy by refraining from any interference in the privacy and home of individuals through

¹⁰⁴⁹ See, explicitly, the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights (1997), para. 6

¹⁰⁵⁰ See on this on the regional level: IACHR, Velásquez-Rodríguez v. Honduras, Judgment of July 19, 1988, Series C, No. 4; African Commission on Human Rights v. Federal Republic of Nigeria, Judgment of May 27, 2002, para. 57.

¹⁰⁵¹ Thid

¹⁰⁵² See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 399.

¹⁰⁵³ HRC, General Comment No 16: Article 17 (Right to Privacy) para. 5 (8 April 1988); available at: http://tbinternet.ohchr.org/layouts/treatybodyexternal/Download.aspx?symbolno=INT%2fCC PR%2fGEC%2f6624&Lang=en.

¹⁰⁵⁴ See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 400.

¹⁰⁵⁵ HRC, General Comment No 16: Article 17 (Right to Privacy) para. 1 (8 April 1988); available at: http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=INT%2fCCPR%2fGEC%2f6624&Lang=en.

¹⁰⁵⁶ See the 'Basic Principles and Guidelines on Development-Based Evictions and Displacement' of the UN Special Rapporteur on adequate housing, see UN Doc. A/HRC/4/18 of 5 February 2007, Annex I, para. 60.

¹⁰⁵⁷ See Special Representative of the Secretary General on the issue of Human Rights and Transnational Corporations and other Business and Enterprises, "Promotion and Protection of all Human Rights, Civil, Political Economic, Social and Cultural Rights, Including the Right to Development" Addendum UN Doc A/HRC/8/5/Add.2 (23 May 2008) para 74.

HRC, General Comment No 16: Article 17 (Right to Privacy) para. 8 (8 April 1988); available at: http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=INT%2fCCPR%2fGEC%2f6624&Lang=en.

their security or police forces. This further means that States also have to prevent state-owned mining companies from performing such interference, as, for example, through forced evictions in the course of LSM projects. States Parties further have to protect the right to privacy. By guaranteeing that "everyone has the right to the protection of the law against such interference," Art. 17 imposes explicitly a state obligation to take positive measures to protect the right, namely in the form of taking legislative steps, against interference by private parties. 1059 In this sense, "protection of the law" requires not only relevant measures in the area of private and administrative law, but also for a minimum of prohibitive norms. 1060 As mentioned above, this particularly requires specific regulations under which circumstances Art. 17 ICCPR can be restricted. This becomes particularly important to prevent illegal evictions in the course of major developments like LSM projects. In cases, in which States fall short of fulfilling these obligations, violations of the right to privacy occur.

c. Right to Food, Water, Health and Work

As the analysis above has shown (see [Ch.3][B.][II.][1.]), cases of mining-induced displacement of individuals and communities fall within the scope of protection of the right to food, water, health and work, if the affected individuals are being deprived of these means to an adequate standard of living. Forced evictions regularly leave affected individuals with no access to the most basic means of existence, including access to safe and clean food, water, and work. Since clean and potable water and food are also the determinants to health, the right to health is equally affected (see above). Hence, forced evictions can amount to violations of the right to food, water, work, and health in the cases outlined in the present risk area.

IV. Forced Labor

1. Description of Risk Area and Case Studies

Contrary to common perception, forced labor is not limited to certain regions, past historical events, or totalitarian regimes, but constitutes an acute contemporary problem at the global level. 1061 This is best illustrated by the mining sector. The exploitation of minerals deposits, particularly when exploited with little financial and technical means, is very labor intensive. Therefore, a very large workforce is often needed. Mainly in situations of weak and authoritarian governance or conflict situations (Zimbabwe), local communities are often forcibly used as the needed workforce. While it is widely accepted that forced labor comprises "all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily,"1062 there is no compromise as to the exceptions. 1063 One of the most discussed exceptions is punitive or prison labor, which equally occurred in the mining sector in history (Case 1), notably in colonial times (Case 2) and today (Case 3). For prison or convict work to be exempted from falling within the definition of forced labor under international law, it is to fulfill certain criteria as described below. Nevertheless, as demonstrated by Case 4, the issue of forced labor is of the utmost importance today with regard to the mining sector. Thereby, cases in which minimum wages are not paid can be interpreted as cases of forced labor (Case 5).

See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 379.

¹⁰⁶⁰ Ibid., p.380.

¹⁰⁶¹ S. Villalpando, 'Forced Labor', in: R. Wolfrum (ed.), MPEPIL, 2007, para. 1.

¹⁰⁶² See Art. 2 (1) ILO Convention No. 29.

¹⁰⁶³ A. Nussberger, 'Right to Work, International Protection', in: R. Wolfrum (ed.), MPEPIL, 2007, para. 30.

Case 1: United States Until 1928, Alabama supplied convicts to work in Mines. The coal and iron ore production was booming, but unions were attempting to organize free miners. Convicts provided an ideal captive work force: cheap, usually docile, unable to organize, and available when free laborers went on strike. 1064

Case 2: Indonesia Forced labor constituted an often-occurring phenomenon in colonial times. In the Ombilin mine (West Sumatra), for example, convict labor was used in coal mining between 1892 and 1920. 1065

Case 3: China Convict labor is further well established in China, notably through its "laogai" or "reform through labor" program. ¹⁰⁶⁶ In Chuannan Prison houses, for example, an estimated 4,000-5,000 prisoners are forced to work in coal mining under extremely hard conditions. ¹⁰⁶⁷

Case 4: Eritrea At the Bisha mine in central Eritrea, severe human rights through forced labor and torture were reported to be committed by the Eritrean contractor of the Canadian mining company owning the mine during construction phase. Former workers reported that that a large proportion of the personnel were national service conscripts, most of which had served well over the 18-month statutory limit. Some of the former conscript laborers had personally been kept as a conscript for over ten years. On November 20, 2014, former Eritrean workers

at Bisha mine filed a lawsuit against the Canadian mining company with the Supreme Court of British Columbia, claiming that the company had "aided, abetted, contributed to and became an accomplice to the use of forced labor, crimes against humanity and other human rights abuses at the Bisha mine." 1070 This lawsuit is the first in Canada where claims are based directly on violations of international law and is scheduled to go court in January 2016. 1071 The allegations of forced labor in Eritrea have been corroborated by the United Nations in 2015. A "Commission of Inquiry on human rights in Eritrea," established by the UN Human Rights Council, found that "the Government has unlawfully and consistently been using conscripts and other members of the population, including members of the militia, many beyond retirement age, as forced labourers to construct infrastructure and to pursue the aim of economic development and self-sufficiency of the State." 1072 Furthermore, it observed that "forced labour is so prevalent in Eritrea that all sectors of the economy rely on it" and that the government obtained "illegitimate financial gain when they are "lent" to foreign companies paying salaries to the Government that are considerably higher than the amounts paid by the Government to the workers." The company has reacted to these allegations with independent human rights impact assessments in April 2014 1073 and in September 2015. 1074

Case 5: Namibia In October 2015, workers at the Rössing Uranium mine handed over a petition to the management of the company, alleging unjustified distinctions regarding employ-

¹⁰⁶⁴ S. Handelsman, 'Human Rights in the Minerals Industry', MMSD/IIED, Working Paper No. 9, 2002, p. 22. See further D. Blackmon, 'From Alabama's Past, Capitalism and Racism In a Cruel Partnership', Wall Street Journal (16 July 2001), available at: http://www.wsj.com/articles/SB995228253461746936.

¹⁰⁶⁵ See C. Ballard, 'Human Rights and the Mining Sector in Indonesia', MMSD / IIED, Working Paper No. 182, 2001, pp. 18 et seq.

See 'Former Prisoners Describe Forced Labor in Chinas Coal Mines', Radio Free Asia (7 October 2004), at http://www.rfa.org/english/news/social/china inmates-20041007.html.

¹⁰⁶⁷ Ibid.

¹⁰⁶⁸ See 'Hear no Evil – Forced Labor and Corporate Responsibility in Eritrea's Mining Sector', HRW report, 2013, p. 18.

¹⁰⁶⁹ Ibid.

¹⁰⁷⁰ M. Gunn / F. Kayakiran, 'Nevsun Denies Accusations of Human-Rights Abuses at Eritrea Mine', Bloomberg-Business (21 November 2014).

¹⁰⁷¹ See at http://business-humanrights.org/en/nevsun-lawsuit-re-bisha-mine-eritrea.

¹⁰⁷² See 'Report of the commission of inquiry on human rights in Eritrea', UN-Doc. A/HRC/29/42 of June 2015, para. 78.

¹⁰⁷³ Report available at http://www.nevsun.com/responsibility/hu-man-rights/Nevsun-HRIA-Summary-April-2014.pdf.

¹⁰⁷⁴ See at http://www.tesfanews.net/human-rights-impact-assessment-bisha-mine-2015.

ees' salaries. According to the workers' petition, the salary of one permanent employee is equal to the salary of seven contract workers, even though they do the same work.¹⁰⁷⁵ The petition was accepted by the mine's acting managing director.¹⁰⁷⁶ A reply is still being expected.

2. Human Rights Analysis

a. Freedom from Forced and Compulsory Labor, Art. 8 ICCPR

Protection form forced labor, on the international level, ¹⁰⁷⁷ is most comprehensively granted under the ICCPR. Art. 8 establishes the prohibition of slavery, servitude, and forced or compulsory labor. The prohibition applies to States and private parties equally. States are obliged to prevent third parties to resort to any form of slavery-like or forced work. ¹⁰⁷⁸ Forced labor is generally defined in accordance with Art. 2 (1) ILO Convention No. 29 as "all work or service, which is extracted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily." ¹⁰⁷⁹

Contrary to the prohibition of slavery and servitude, Article 8 (3) recognizes certain exemptions to the prohibition of forced and compulsory labor. It reads:

- "No one shall be required to perform forced or compulsory labour;
- Paragraph 3 (a) shall not be held to preclude, in countries where imprisonment with hard labour may be imposed as a punishment for a crime, the performance of hard labour in pursuance of

- a sentence to such punishment by a competent court;
- For the purpose of this paragraph the term "forced or compulsory labour" shall not include:
 - Any work or service, not referred to in subparagraph (b), normally required of a person who is under detention in consequence of a lawful order of a court, or of a person during conditional release from such detention;
 - Any service of a military character and, in countries where conscientious objection is recognized, any national service required by law of conscientious objectors;
 - Any service exacted in cases of emergency or calamity threatening the life or well-being of the community;
 - Any work or service which forms part of normal civil obligations."

Accordingly, the most important exceptions are compulsory military service (Art. 8 (3)(c)(ii)) and prison labor, as stipulated by Art. 8 (3)(b) and (c).

With regard to the definition of a "crime" in the sense of Art. 8 (3)(b), it is to be noted that this should be understood as a serious offence, while the delineation between crimes and minor offences lies with the margin of discretion of the State Parties. 1080 "Detention," in the sense of Art. 8 (3)(c)(i), must be imposed in consequence of a lawful order of a court and must aim at social rehabilitation of the prisoner. 1081 "Cases of emergency or calamity," as mentioned in Art. 8 (3) (c) (iii), are interpreted in light of Art. 2 (2) lit. d ILO Convention No. 29 to include war, fire, flood, famine, earthquake, violent epidemic, or epizootic disease. 1082 The exception includes services of normal civic obligations as contained in Art. 8 (3) lit. c (iv) mirrors Art 2 (2) lit. b ILO Convention No. 29.1083 Furthermore, these exceptions stand in line with exceptions established under Art. 6 ICESCR international labor law. 1084

¹⁰⁷⁵ See http://www.namibian.com.na/index.php?page=archiveraea&id=142848.

¹⁰⁷⁶ See http://www.rossing.com/bullet/rossing-media-release-MUN-petition-handover_8Oct2015.pdf.

¹⁰⁷⁷ See further Art. 4 UDHR and the Slavery Convention of 1926; on the regional level, e.g., Art. 4 (2), (3) ECHR and Art. 6 (2) ACHR.

¹⁰⁷⁸ See M. Nowak, 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005, p. 202.

¹⁰⁷⁹ Ibid., p. 201.

¹⁰⁸⁰ Ibid.

¹⁰⁸¹ Ibid., p. 205.

¹⁰⁸² Ibid., p. 207.

¹⁰⁸³ Ibid.

¹⁰⁸⁴ See Art. 2 (2) ILO Convention No. 29, Art. 8 (3) ICCPR, Art. 6 (2), (3) IACHR.

Against this backdrop, Cases 1-3 outlined above would not fall within the definition of forced labor under Art. 8 ICCPR if they fulfill the criteria set out by Art. 8 (3) ICCPR. Case 4, however, falls within this definition. In such cases, State Parties have the urgent obligation to respect Art. 8 by not interfering in the right to freedom from forced labor. Furthermore, they have to take all measures necessary to protect this freedom, including enacting and enforcing this right.

b. Right to Work, Art. 6 ICESCR

The right to freely choose work, as enshrined in Art. 6 ICESCR, also implies the right not to be forced to work. 1085 The CESCR relies on the Slavery Convention, ILO standards on forced labor, and Art. 8 ICCPR to define forced labor. 1086 Furthermore, Art. 6, Art. 7 (just and favorable conditions of work) and Art. 8 (trade union related rights) under the ICESCR are perceived as being interdependent. 1087 On this basis, payment below the minimum wage required in Article 7 may be interpreted as forced labor prohibited under Article 6 ICESCR. 1088 As Art. 6 ICESCR only provides for the prohibition of forced labor, the CESCR applies the exceptions stipulated in Art. 8 (3) ICCPR to narrow its scope of application. 1089 The cases de-

1085 CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006,

1086 See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014,, p. 322f.

1087 CESCR General Comment No. 18 (2006), 'The Right to Work (Art. 6 of the Covenant)', UN Doc. E/C.12/GC/18 of 6 February 2006, para. 8; B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, pp. 272 et seq.

See B. Saul (et al.), 'The International Covenant on Economic, Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 273. See further, with this regard, the case of *People's Union for Democratic Rights v. Union of India* ('Asiad Workers Case') of 1983, Supreme Court of India, SCR (1), p. 456, in which unjust payment below the minimum wage for construction work in connection with the Asian Games was found to be a violation of the prohibition of forced labor under the Indian constitution, see at http://www3.lawschool.cornell.edu/AvonResources/India-People-s Union for Democratic Rights v- Union Of India-1982.pdf.

 1089 See B. Saul (et al.), 'The International Covenant on Economic,

scribed above (Case 4-5) fall within this scope, leading to the same obligations described above (b) under the ICESCR.

V. Corruption

1. Description of Risk Area and Case Studies

The Mining sector has a unique combination of characteristics, which make it especially susceptible to corruption. 1090 Locating, developing and constructing a modern mine usually requires hundreds of millions of dollars in capital investment and takes many years before the Mining company even sees any payback of external financing or return on its investment.¹⁰⁹¹ Since mine construction is so capital intensive, some sort of outside financing is usually required or desirable, which often includes the giving of guarantees to the lenders, so that the project will be built and will perform by a certain date. 1092 At the same time, the mining industry has become a heavily regulated industry, making mining projects especially susceptible to bribing underpaid or venal bureaucrats, who have the power to prevent, delay or halt the approval or construction process. 1093 Finally, available economic mineral deposits are very few, so that there is a tremendous pressure in the mining industry to proceed to explore and develop them, even if they are located in some of the most corrupt countries in the world. 1094 Only 8 of 32 leading mining countries have

Social and Cultural Rights-Commentary, Cases, and Materials', 2014, p. 333.

1090 See M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, 61, which assesses the extractives sector as a 'high risk' area, particularly prone to corruption. See further on the particular vulnerability to corruption of junior companies during the exploration phase M. Dougherty, 'By the gun or by the bribe: Firm size, environmental governance and corruption among mining companies in Guatemala', Anti Corruption Resource Center, U4 Issue, September 2015.

1091 See I. Marshall, 'A Survey of Corruption Issues in the Mining and Mineral Sector', MMSD / IIED, Working Paper No. 15, 2001, p. 9.

- 1092 Ibid., 10.
- **1093** Ibid.
- **1094** Ibid., p. 12.

a score above 50 on the 2014 Transparency International Corruption Perception Index, for which a maximum score is 100. The remaining 24 (72%) had a score of 48 or below.

In recent years, corruption has increasingly been discussed in a human rights context, particularly at the UN. 1096 This approach to the problem resulted in the 2005 United Nations Convention against Corruption (UNCAC), 1097 the most comprehensive instrument against corruption on the international level. 1098 Nevertheless, UNCAC does not establish a universal definition of "corruption." A well-known classification of corruption distinguishes grand from petty corruption. 1099 Grand corruption refers to the corruption of heads of state, ministers, and top officials and usually involves large amounts of assets 1100 (Case 3-5). Petty corruption, also called "low" and "street" corruption, indicates the kinds of corruption that people expe-

1095 Updated estimation following I. Marshall, 'A Survey of Corruption Issues in the Mining and Mineral Sector', MMSD/IIED, Working Paper No. 15, 2001, p. 49, based on the 2014 Index, see at http://www.transparency.org/cpi2014/results.

1096 See for the work of the former UN Sub-Commission on Human Rights and the UN Human Rights Council in this field since 2003, 'The Human Rights Case Against Corruption', OHCHR pamphlet, HR/NONE/2013/120, November 2013, pp. 6 et seq. See further the Opening Statement by UN High Commissioner for Human Rights, Navy Pillay, to the 22nd Session of the UN Human Rights Council on 13 March 2013, see at The Human Rights Case Against Corruption', OHCHR pamphlet, HR/NONE/2013/120, November 2013, pp. 8 et seq.

1097 See UN Doc. A/RES/58/4 on 31 October 2003, entered into force on 14 December 2005.

1098 See L. Hensgen, 'Corruption and Human Rights – Making the Connection at the United Nations', Max Planck Yearbook of United Nations Law, vol. 17, 2013, pp. 197-219 (199).

1099 See M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, p. 15.

1100 Ibid. Grand corruption plays a significant role in public procurement, construction, purchase of military equipment, and privatization exercises. The amounts involved in these transactions are extraordinarily high. The documented examples include a bribe of \$ 300,000 allegedly paid to the national security adviser of a former president of South Korea in connection with the purchase of fighter planes; and a \$1.9 million bribe paid to senior members of the Belgian socialist party in connection with a defense contract, see further 'United Nations Conference On Anti-Corruption Measures, Good Governance And Human Rights', Warsaw, 8 – 9 November 2006, OHCHR in cooperation with the Government of the Republic of Poland, paras 2-3.

rience in their encounters with public officials and when they use public services (hospitals, schools, local licensing authorities, police, tax offices, etc.).¹¹⁰¹ It generally involves modest sums of money.

For the purpose of a legal analysis, however, "corruption" is rather to be defined as a "list of acts criminalized by law under the heading "Corruption." This approach was also chosen for the UNCAC, which lists acts to be criminalized (bribery, embezzlement, trading in influence, abuse of functions or position, illicit enrichment) without, however, stipulating that such acts amount to corruption. 1103

Case 1: India In the Goan iron ore mining sector, a lot of politicians are reported to have entered the business as contractors. This enables them to influence the issuance of clearances and other permits needed by the mining companies. Police officers allegedly participate in this business through transport services. Trucks used for transporting the ore are often registered in the names of family members to circumvent Indian anti-corruption laws. 1106

Case 2: Uganda Problems of corruption are being reported in rhw Karamoja mining region, a remote region in northeastern Uganda. The weak civil society structures in Karamoja and the multiple mining operators in remote locations have favored unlawful activities such as corruption and unlawful evictions. A system of "godfathers" has been described – individu-

1101 Ibid.

M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, p. 18.

1103 See UNCAC, Chapter III. See for further convention adopting this approach M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, p. 18.

See 'Out of Control - Mining, Regulatory Failure, and Human Rights in India, HRW report, 2012, p. 44.

1105 Ibid.

1106 Ibid.

1107 See 'How Can We Survive Here - The Impact of Mining on Human Rights in Karamoja, Uganda', HRW Report, 2014, p. 92.

als in the government or very close to political elites who, in exchange for pay-offs, facilitate the work of a mining company by ensuring that paperwork is processed in a timely manner. In mid-2012, the Ministry of Energy and Mineral Development stopped issuing licenses temporarily "following revelations that a number were handed out irregularly," according to media reports, and because the process was "open to corruption and nepotism." While this system of corruption and nepotism is being perceived as exploiting local communities more generally, it increasingly became a problem for the mining companies, too, due to unforeseeable costs for such "facilitation." Illo

Case 3: DRC Corruption in the Congolese mining sector is an often-described problem, mainly stemming from the chaotic times of the conflict in the country between 1998-2004.¹¹¹¹ During these times, concessions were, on some occasions, reportedly sold for less than 0.05% of their value.¹¹¹² While some of these concessions were renegotiated after 2004, underpricing of mining concession seems to be a continuing problem in the DRC. According to a 2013 report by the Africa Progress Panel, a research organization chaired by former U.N. Secretary-General Kofi Annan, the Congolese state lost at least \$1.36 billion in revenues from underpricing of mining assets that were sold to offshore companies in a series of deals between 2010 and 2012. ¹¹¹³ Across five deals that were analyzed, assets were sold on average at one-sixth of their estimated commercial market value. In total, assets valued at US \$1.63 billion were sold for US \$275 million. The beneficial ownership structure of the companies concerned was un-

known.¹¹¹⁴ Total losses from the five deals reviewed were equivalent to almost double the combined annual budget for health and education in 2012, the report further indicated.¹¹¹⁵ While it did not infer any illegality on the part of political leaders, public officials, or the companies involved in purchasing and selling the concessions, it underlined that privatization of the DRC's minerals sector has been plagued by a culture of secrecy, informal deals, and allegations of corruption.¹¹¹⁶ The findings of the report were consistent with the outcome of a parliamentary investigation in the DRC, which identified \$450 million in lost revenue for 2008.¹¹¹⁷ Finally, the Congolese prime minister acknowledged the problem in 2012 by stating: "We must avoid situations where mining contracts are not published ... where sales of mining assets are undervalued and the government is not informed of what state mining companies are doing."¹¹¹⁸

Case 4: Guinea A widely recognized corruption scandal evolved around the Simandou iron ore Project in the Simandou Hills, Nzérékoré Region of southeastern Guinea, which is one of the biggest untapped iron ore deposits. The resources company that had secured rights to two of the giant ore deposit's four exploration blocks in 2008, after they were taken away from another mining company, was accused of having bribed former dictator Conté's wife to obtain these concessions. On April 14, 2013, the FBI arrested a former agent of the mining company that had obtained the concession in 2008 in Florida after he had a meeting with the dictator's wife at the Jacksonville airport.¹¹¹⁹

¹¹⁰⁸ Ibid.

¹¹⁰⁹ Ibid., p. 93.

¹¹¹⁰ Ibid., p. 94.

¹¹¹¹ Expert-Interview, Mr. Näher, BGR / DRC.

¹¹¹² Expert-Interview, Mr. Näher BGR / DRC.

¹¹¹³ See 'Equity in Extractives - Stewarding Africa's natural resources for all', Africa Progress Report 2013, p. 58.

¹¹¹⁴ Ibid., p. 56.

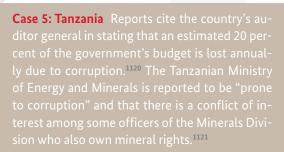
¹¹¹⁵ Ibid.

¹¹¹⁶ Ibid., p. 55.

¹¹¹⁷ See E. Smith/P. Rosenblum, 'Enforcing the Rules', Government and Citizen Oversight of mining, Revenue Watch Institute, 2011, p. 4.

¹¹¹⁸ See 'Equity in Extractives - Stewarding Africa's natural resources for all', Africa Progress Report 2013, p. 56.

See the investigation by Global Witness since 2012, see at https://www.globalwitness.org/reports/guineas-deal-century; see



Case 6: Afghanistan In 2006, the lease for the Ghori cement factory in Bahlan was allegedly granted to the Afghan Investment Company (AIC) run by Mahmud Karzai (a brother of former President Hamid Karzai), even though it was formerly granted to a state-run enterprise. 1122 In general, the Afghan legal system is reportedly lacking clear rules for a transparent and impartial bidding process, including legal sanctions against officials who favor one company over another. 1123 Consequently, the loss of government revenue holds reportedly a major risk that the natural resources might be a source of conflict and corruption, instead of providing benefits for the country. 1124

2. Human Rights Analysis

a. Acts of Corruption as a Human Rights Violation

While it is widely recognized that corruption inhibits the full enjoyment of human rights, 1125 the question as to how the nexus of corruption and human rights can be assessed from a legal standpoint is still subject to an ongoing debate, as will be shown in this section.

Describing corruption in its many forms as a human rights violation is often difficult, since the "causal link" between the many forms of corruption and the specific violation of human rights is often quite remote. Furthermore, it is often difficult to attribute acts of corruption, which potentially constitute a human rights violation, to a specific State as the human rights obligor.

aa. Causality

To determine if a specific human rights violation was caused by a State, thereby constituting a breach of its human rights obligations as described above, a sufficient causal connection to its conduct is required. While no uniform rules of causation under international law exist, ¹¹²⁶ it can, to a certain extent, be

- further 'FBI Surveillance Material Implicates Diamond Billionaire In Plan To Subvert Us Fraud Probe', Global Witness Report, April 2014.
- 1120 See M. Curtis/T. Lissu, 'A Golden Opportunity?: How Tanzania is Failing to Benefit from Gold Mining, 2nd Ed., CCT, BAKWATA, TEC Report, October 2008.
- 1121 Thid n 0
- 1122 M. Sediq Zaliq, 'Ghori Cement—A Loss-Making Goldmine', Afghanistan Analysts Network, July 7, 2011, www. afghanistan-analysts.org/guest-blog-ghori-cement-a-loss-making-goldmine/.
- 1123 See at https://www.globalwitness.org/campaigns/afghanistan/building-long-term; and further https://www.globalwitness.org/campaigns/afghanistan/shaky-foundation; and Global Witness, 'Building for the Long-Term Avoiding the Resource Curse in Afghanistan', February 2014, pp. 6 et seq.
- 1124 See at https://www.globalwitness.org/blog/can-british-government-do-more-corruption-afghanistan/; see further the investigation by the United States Institute of Peace, published in January 2015 at http://www.usip.org/sites/default/files/SR358-Afghanistan-s-Emerging-Mining-Oligarchy.pdf, pp.1, 5.
- 1125 See the statements by the CESCR that "states face serious problems of corruption, which have negative effects on the full exercise of rights covered by the Covenant", UN Doc. E/C.12/1/ ADD.91 of 12 December 2003, para. 12; and by the CRC that it "remains concerned at the negative impact corruption may have on the allocation of already limited resources to effectively improve the promotion and protection of children's rights, including their right to education and health" UN Doc. CRC/C/COG/ CO/1 of 20 October 2006, para 14. See also the statement by the UN Special Rapporteur on independence of judges and lawyers in UN Doc. E/CN.4/2006/52/Add.4. para. 96 as cited in M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, p. 23. See further D. Fuhr, 'Of Thieves and Repressors: The Interplay between Corruption and Human Rights Violations', Elon Law Review, vol. 5, Issue 2, 2013, pp. 271-300 (272); J. Ngugi, 'Making the Link between Corruption and Human Rights: Promises and Perils', American Society of International Law Proceedings, vol. 104, 2010, pp. 246-250 (246).
- 1126 See Ethiopia Eritrea Claims Commission Decision No. 7 Guidance regarding jus ad Bellum Liability, 27 July 2007, para. 13.

drawn from the Articles on State Responsibility¹¹²⁷ and from State practice.¹¹²⁸ To determine whether a chain of causation is sufficiently close and sufficient "proximity" is given in a particular situation, it should be assessed whether the particular human rights violation should have reasonably been foreseeable.¹¹²⁹ A causal link between a human rights violation and the certain conduct of a State therefore exists when sufficient "proximity" can be determined, because the violation was a normal or natural result of the conduct and therefore foreseeable.

bb. Attribution

The violations of a human right must further be attributable to a specific State. According to Art. 4 (1) of the Draft Articles of State Responsibility for Internationally Wrongful Acts (Draft Articles) "The conduct of any State organ shall be considered an act of that State under international law, whether the organ exercises legislative, executive, judicial or any other functions, whatever position it holds in the organization of the State, and whatever its character as an organ of the central Government or of a territorial unit of the State." Its paragraph (2) further states: "An organ includes any person or entity which has that status in accordance with the internal law of the State." A more complex question is, however, if actions taken ultra vires by state organs can still be attributable to the State. Art. 7 of the Draft Articles, however, states in this regard, that "The conduct of an organ of a State or of a person or entity empowered to exercise elements of the governmental authority shall be considered an act of the State under international law if the organ, person or entity acts in that capacity, even if it exceeds its authority or contravenes instructions." Thus, the decisive question is whether the state organ acted in its capacity while violating a human rights norm. If so, it is irrelevant if it exceeded its authority or even refused instructions.

1127 See Art. 31 Draft Articles of State Responsibility for Internationally Wrongful Acts (ILC Draft Articles).

b. Direct, indirect and remote Human Rights violations through Corruption

A possible approach to classifying the different ways of how corruption is linked to human right violations, in assessing its "causal link" to a specific human rights violation, could be a classification of "direct," "indirect," and "remote" violations. 1130 Cases of direct human rights violations would thereby comprise cases like the bribing of a judge; indirect violations would comprise cases where corruption is only a necessary condition for the violation, such as bribing of a public official to allow the import of toxic waste, which is then dumped close to human settlements; remote violations would describe cases, in which corruption is one factor among others, for example when corruption during an electoral process raises concerns about the accuracy of the final result, which then causes social unrest and protests that are then violently suppressed.

c. Direct, indirect and remote Human Rights violations through miningrelated Corruption

Following the framework described above, direct human rights violations caused by mining related acts of corruption are rather hard to imagine. "Indirect violations," however, could occur, for example, where state officials are being bribed to allow for mining projects to dispose untreated toxic mine water or other mine waste into surface water resources, which then encroaches upon the subsistence rights to water, health, food, and even housing and work. As in the risk areas on "situations of conflict" (see above, [A.]) and mining-related protests that lead to violence (see above, [B.][I.]), corruption in the mining-sector can constitute a "necessary condition" for human rights violations. The acceptance of the bribe in re-

¹¹²⁸ See A. Peters, 'Corruption and Human Rights', Basel Institute on Governance, Working Paper Series, No. 20, 2015, p. 19.

¹¹²⁹ Ibid.

¹¹³⁰ See for this classification M. Sepulveda, 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy, Report 2009, pp. 27 et seq.

¹¹³¹ See, inter alia, the case of corruption-related shortcoming in the enforcement of environmental regulations in Armenia and its mining sector, see C. Stefes, 'Environmental crime in Armenia - A Case Study on Mining', European Union Action to Fight Environmental Crime, Work Package 4-'Case Studies', 2015.

turn for the requested administrative act constitutes the act of corruption on the part of the state official. Since the official thereby acts in his capacity, his conduct can be attributed to the State. Cases of "remote violations" could further occur where dissatisfaction about alleged or proven acts of corruption in the awarding of mining concessions or in the planning or revenue sharing of mining projects, among other factors, lead to protest that are then aggressively repressed.

d. Art. 2 (1) ICESCR

As stated above, States, under Art. 2 (1), have to take steps "to the maximum of their available resources" to progressively realize the covenant rights. When public money goes missing, particularly through embezzlement as an act of corruption, the State is not complying with its principal human rights obligations deriving from Art. 2 (1) ICESCR. Mining-related cases of "grand corruption" often comprise cases, in which mining revenue is lost because state officials sell mining concessions under price in return for bribery payments. In this way, as through embezzlement, public money is being lost and "available resources" to realize ICESCR rights, namely the rights to health (Art. 12), and the right to education (Art. 13), are being infringed upon.

e. Right to Housing, Art. 11 (1) ICESCR

The right to housing, as described above, can further be indirectly violated through mining related corruption. Corruption can generally undermine security of tenure as protected under Art. 11 (1) when companies bribe officials to grant leases on land that is already occupied. Such acts of corruption could occur in the context of area clearing measures for mining projects and would therefore constitute a case of an indirect violation of human rights through mining-related corruption.

f. Right to Housing, Water, Food, Health Art. 11 (1), 12 ICESCR

AS mentioned above, indirect human rights violations through mining-related corruption could also occur with a view to subsistence rights deriving from Art. 11 and 12 ICESCR. This could occur where state officials are being bribed to allow for mining projects to dispose untreated toxic mine water or other mine waste into surface water resources, which then contaminate water and food resources and make housing inadequate.



Chapter 6: Conclusions

The assessment conducted for the present study demonstrates how complex and multifaceted the field of "human rights in mining" is. Attempts to comprehensively analyze this area are at risk of becoming too broad and ultimately generic.

Consequently this study focuses only on the most important human rights implications in the field of mining. It offers an approach grounded in the technical procedures and hazards within the mining cycle, and thus avoids an analysis driven by common presumptions on which human rights risks are most prevalent. The oil and gas sector is left aside; this would require a stand-alone assessment to ensure an adequate analysis.

Importantly, instead of retrospectively analyzing human rights violations, the study presents rights that could potentially be affected by mining activities. The results of the study are therefore portrayed in human rights 'Risk Areas', grouped in three main sections: the industrial LSM sector; the ASM sector; and on special situations occurring in LSM and ASM.

The analysis reveals that the most important human rights Risk Areas in mining generally revolve around certain major fields, such as "Indigenous," "Land", "Environment", "Labor", "Conflict" and "Corruption". However, certain human rights problems are more pervasive in LSM or ASM than others.

In LSM, human rights Risk Areas related to 'Land' or 'Environment' are salient. Area clearing measures and ensuing mine operations massively affect local, particularly indigenous, communities, most notably through relocations, evictions or environmental destruction and contamination.

In the ASM sector, on the other hand, labor related human rights problems stand out. This is most apparent with problems of child labor and bad working conditions, which can be observed in many parts of the world. Poverty, a low level of mechanization, inefficient extraction methods and insufficient knowledge and expertise are part of the root causes to these problems.

While some of the human rights Risk Areas in LSM and ASM occur in the same fields, such as "Environment", "Labor" or "Conflict", the nature and causes to these problems are distinctly different: In LSM environment-related human rights risks are mainly caused by extensive area clearing measures or problems with mine waste and tailings storage. In ASM, conversely, mercury contamination and environmental destruction through the mining operation itself are the most important reasons. Moreover, "Labor" related human rights risks in ASM touch upon some of the most basic rights, such as the protection from child labor and the right to life, while LSM problems in this field rather stem from inappropriate working hours, unfair payment or the interference in union rights. Additionally, human rights violations connected to "Conflict" over LSM-projects are typically caused by poor community involvement or working conditions. Conflict in the context of ASM activities, on the other hand, is rather characterized by the competition over the resource or resource area among small-scale miners or between small-scale miners and indigenous groups. Moreover, ASM often plays an important role in armed conflicts as a source of revenue.

In comparing these causes for mining-induced human rights risks in LSM and ASM, it further becomes apparent that they are often much more complex in ASM, particularly where illegal or informal ASM and 'rush-situations' play a role. This problem is in part due to the fact that in many developing countries there is still a lack of data and information on ASM, notably the illegal and informal sector. In consequence much is still unknown about how and to what extent ASM techniques impact the human rights of people living and working in exposed areas.

The analysis presented in this study brings together expertise from both the field of mining and human rights. Its attempt is to provide a comprehensive and user-friendly baseline for the most prevalent Human Rights Risks in mining. As such, it looks at the respective Risk Areas from a macro perspective. Further understanding would certainly be gained from applying a more detailed lens on a country or even a community level, leaving much space for complimentary research.

Bibliography

- Alba, E. 'Extractive Industries Value Chain', World Bank Working Paper, 2009.
- Alfredsson, G. 'Treaties with Indigenous Peoples', in: R. Wolfrum (ed.), MPEPIL, 2011.
- Alston, P./Goodman, R. 'International Human Rights', 2013.
- Andrew, J./Hilson, G. 'Land Use Disputes between Small- and Large-Scale Miners: Improving Conflict Management', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, 25.
- Areeparampil, M. 'Displacement Due to Mining in Jharkhand', Economic and Political Weekly, vol. 31, No. 24 (1996), pp. 1524-1528.
- Ballard, C. 'Human Rights an the Mining Sector in Indonesia', MMSD/IIED, Working Paper No. 182, 2001.
- Benedict, C. 'The Status and Rights of Indigenous Peoples in Canada', Zeitschrift für das ausländische öffentliche Recht und Völkerrecht (ZaöRV) 59 (1999) 405-442.
- Bennett, O./MacDowell, C. 'Our fields are gone, our lifestyle has changed: coal mining in India', in: O. Bennett/C. MacDowell (eds.), Displaced: the Human Cost of Development and Resettlement, 2012, pp. 123-150.
- Benya, A., 'Marikana: The Absence of Justice. Dignity, and Freedom?', in: C. Rodriguez-Garavito et al. (eds.), Human Rights in Minefields-Extractive Economies, Environmental Conflicts, and Social Justice in the Global South, Center for the Study of Law, Justice and Society, Dejusticia, Bogota, 2015, p. 261.
- Bhattacharya,, A. (et al.) 'Environmental assessment of abandoned mine tailings in Adak, Västerbotten district (northern Sweden)', Applied Geochemistry, vol. 21, issue 10, 2006, pp. 1760-1780.

- Biersack, A. 'The Mount Kare Python and His Gold: Totemism and Ecology in the Papua New Guinea Highlands', American Anthropologist, vol. 101, No. 1, 1999, pp. 68-87.
- Bocangel, D. 'Small-Scale Mining in Bolivia: National Study, Mining Minerals and Sustainable Development', MMSD/IIED, Working Paper No. 71, 2001.
- Bollier, D./Weston, B. 'Regenerating The Human Right to a Clean and Healthy Environment in the Commons Renaissance', The University of Iowa College of Law and Center For Human Rights, 2011.
- Bugnosen, E. 'Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 11.
- Buxton, A. 'Mining, Minerals and Sustainable Development + 10', IIED Discussion Paper, 2012.
- Cassese, A. 'International Law', 2001.
- Chakravorty, S. 'Artisanal and Small-Scale Mining in India', MMSD/IIED, Working Paper No. 78, 2001.
- Charlesworth, H. 'Universal Declaration of Human Rights', in: R. Wolfrum (ed.), MPEPIL, 2008.
- Collier, P. 'Economic Causes of Civil Conflict and their Implications for Policy', in: C. Crocker/F. Hampson/P. Aall (eds.), Turbulent Peace: The Challenges of Managing International Conflict, U.S. Institute of Peace Press, 2001, pp. 143-163.
- Collins, H. 'Theories of Rights as Justifications for Labour Law', in: G. Davidov / B. Langille (eds.), The Idea of Labour Law, 2011, 137.
- Collins, L./Simons, P. 'Participatory Rights in the Ontario Mining Sector: An International Human Rights Perspective', McGill International Journal of Sustainable Development Law and Policy, vol. 6, issue 2 (2010), 177-216.

- Crawford, J. 'Brownlie's Principles of Public International Law', 8th ed., 2012.
- Cremers, L./de Theije, M. 'Small-Scale Gold Mining in the Amazon', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), p. 1...
- Da Costa, K. 'The Extraterritorial Application of Selected Human Rights Treaties', 2013.
- De Schutter, Olivier 'International Human Rights Law-Cases, Materials, Commentary', 2010.
- De Theije, M. (et al.) 'Engaging Legal Systems in Small-Scale Goldmining Conflicts in Three South American Countries', in: M. Bavinck et al. (eds.), Conflicts over Natural Resources in the Global South: Conceptual Approaches, 2014, pp. 128-143.
- Diringer, S. (et al.) 'River transport of mercury from artisanal and small-scale gold mining and risks for dietary mercury exposure in Madre de Dios, Peru', *Environmental Science: Processes & Impacts*, vol. 2, 2015, p. 479.
- Donkor, A. (et al.) 'Artisanal Mining of Gold with Mercury in Ghana', West Africa Journal of Applied Ecology, vol. 9, 2006, p. 1.
- Downing, T. 'Avoiding New Poverty: Mining-Induced Displacement and Resettlement', MMSD/IIED, Working Paper No. 58., 2002.
- Doyle, C. 'Indigenous Peoples, Title to Territory, Rights and Resources The transformative role of free prior and informed consent', 2015.
- Drude de Lacerda, L. 'Human Health Implications of Mercury Usage in Small-Scale Gold Mining Activities in the Brazilian Amazon', in: G. Hilson (ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*, 2003, p. 679.

- Ebbesson, J. 'Access to Information on Environmental Matters', in: R. Wolfrum (ed.), MPEPIL, 2009.
- Eftimie, A. (et al.) 'Gender Dimensions of the Extractive Industries: Mining for Equity', Extractive Industries and Development Series #8, World Bank, 2009.
- Eisler, R. 'Health risks of gold miners: A synoptic review', *Environmental Geochemistry and Health*, vol. 25, issue 3, 2003, pp. 325-345.
- Elgstrand, K./Vingård, E. (eds.), 'Occupational Safety and Health in Mining Anthology on the situation in 16 mining countries', *Arbete och Hälsa* (Work and Health), 2013.
- Epiney, A. 'Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktionen Privater', 1992.
- Florea, R. (et al.) 'Water pollution in gold mining industry: a case study in Roşia Montană district, Romania', Environmental Geology, vol. 48, issue 8, 2005, p. 1132-1136.
- Frickey, P. 'The Status and Rights of Indigenous Peoples in the United States', *ZaöRV* 59 (1999) 383-405
- Fuhr, D. 'Of Thieves and Repressors: The Interplay between Corruption and Human Rights Violations', *Elon Law Review*, vol. 5, issue 2, 2013, pp. 271-300.
- Grayson, R. (et al.), 'The People's Gold Rush in Mongolia-the Rise of the 'Ninja' Phenomenon', World Placer Journal, vol. 4, 2004, pp. 1-112.
- Grote, R. 'The Status and Rights of Indigenous Peoples in Latin America' ZaöRV 59 (1999) 592-542.
- Grzybowski, A. 'Extractive Industries and Conflict', Guide and Toolkit-UN Interagency Framework Team for Preventive Action, 2012.

- Gunson, A./Jian, Y. 'Artisanal Mining in the People's Republic of China', MMSD/IIED, Working Paper No. 74, 2001.
- Hammer, I. 'Indigenous Human Rights and the Mining Industry', *Indigenous Law Bulletin*, vol. 7, issue 30, May/June 2012, pp. 26-29.
- Handelsman, S. 'Human Rights in the Minerals Industry', MMSD/IIED, Working Paper No. 9, 2002.
- Heemskerk, M./Duijves, C. 'Small-Scale Gold Mining And Conflict In Suriname', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), pp. 85-100.
- Henrich, C. 'Acid Mine Drainage: Common Law, SMCRA, and the Clean Water Act', *Journal of Natural Resources & Environmental Law*, vol. 10, issue 2, (1994-1995), p. 235-260.
- Hensgen, L. 'Corruption and Human Rights Making the Connection at the United Nations', *Max Planck Yearbook of United Nations Law*, vol. 17, 2013, pp. 197-219.
- Hentschel, T./Hruschka, F./Priester, M. 'Global Report on Artisanal & Small-Scale Mining', MMSD/IIED, Working Paper No. 70, 2002.
- Herdegen, M. 'Interpretation in International Law', in: R. Wolfrum, *MPEPIL*, 2013.
- Hilson, G. 'Child Labour in African Artisanal Mining Communities: Experiences from Northern Ghana', *Development and Change*, vol. 41, issue 3, 2010, pp. 445-473.
- Hodgkin, R./Newell, P. 'Implementation Handbook for the Convention on the Rights of the Child'. 3rd ed., 2007.

- Hollander, K. 'Batalla en el desierto: La lucha entre la plata y el peyote en Wirikuta', *Letras Libres*, Febrero 2012, p. 44.
- Hruschka, F./Echavarría, C. 'Rock-Solid Chances for Responsible Artisanal Mining', Alliance for Responsible Mining (ARM), ARM Series on Responsible ASM No. 3, January 2011, p. 2.
- James, M. 'The Struggle against Silicosis in the Australian Mining Industry: The Role of the Commonwealth Government,1920-1950', *Labour History*, No. 65 (1993), pp. 75-95.
- Jennings, N. 'Addressing Labour and Social Issues in Small-Scale Mining', in: G. Hilson (ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*, 2003, p. 151.
- Jennings, N. 'Child Labour in small-scale mining: Examples from Niger, Peru & Philippines', 1999.
- Jennings, N. 'Social and labour issues in small-scale mines', Report for discussion at the Tripartite Meeting on Social and Labour Issues in Smallscale Mines, Geneva, 17-21 May 1999.
- Kälin, W. / Künzli, J. 'Universeller Menschenrechtsschutz', 2013.
- Kambani, S. 'Illegal Mining and Marketing', in: G. Hilson (ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*, 2003, p. 46.
- Kees, A. 'Responsibility of States for Private Actors', in R. Wolfrum (ed.), *MPEPIL*, 2011.
- Keller, H./Grover, L. 'General Comments of the Human Rights Committee and their Legitimacy', in: H. Keller / G. Ulfstein (eds.), *UN Human Rights Treaty Bodies: Law and Legitimacy*, 2012, p. 129.
- Kerr, W. 'Frank Slide', 1990.

- Kessey, K./Arko, B. 'Small Scale Gold Mining and Environmental Degradation in Ghana: Issues of Mining Policy Implementation and Challenges', Journal of Studies in Social Sciences, vol. 5 (2013), p. 15.
- Kingsburg, B. 'Indigenous Peoples', in: R. Wolfrum (ed.), MPEPIL, 2006.
- Kolen, J. (et al.) 'Formalized Small-Scale Gold Mining in The Brazilian Amazon: An Activity surrounded by Informality', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), p. 31.
- Kugelmann, D. 'The Protection of Minorities and Indigenous Peoples Respecting Cultural Diversity', Max Planck Yearbook of United Nations Law 11 (2007), 233-263.
- Lamber, J. 'Girls in mining: Research findings from Ghana, Niger, Peru and the United Republic of Tanzania', Bureau for Gender Equality, International Programme on the Elimination of Child Labour (IPEC), ILO 2007.
- Larreta, E., 'Gold is illusion The Garimpeiros of Tapajos Valley in the Brazilian Amazonia', Department of Social Anthropology, Stockholm University (2002).
- Lorenz, D. 'Der territorial Anwendungsbereich der Grund- und Menschenrechte', 2005.
- Luino, F./De Graff, J. 'The Stava mudflow of 19 July 1985 (Northern Italy): a disaster that effective regulation might have prevented', Natural Hazards Earth System Science, 12, 2012, pp. 1029-1044.
- Mantouvalou, V., 'Are Labour Rights Human Rights?', European Labour Law Journal, vol. 3, issue 2, 2012, 151-172.

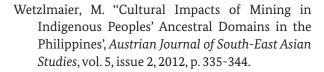
- Marshall, I. 'A Survey of Corruption Issues in the Mining and Mineral Sector', MMSD/IIED, Working Paper No. 15, 2001.
- Matthew, R. (et al.) 'From Conflict to Peace Building: The Role of Natural Resources and the Environment', UNEP, 2009.
- McBeth, A. 'Crushed by an Anvil: A Case Study on Responsibility for Human Rights in the Extractive Sector', Yale Human Rights and Development Journal, vol. 11, issue 1, 2014.
- Milanovic, M. 'From Compromise to Principle: Clarifying the Concept of State Jurisdiction in Human Rights Treaties', Human Rights Law Review 8 (2008), pp. 3.
- Milanovic, M. 'Extraterritorial Application of Human Rights Treaties: Law, Principles and Policy', Oxford Monographs in International Law, 2011.
- Mlowe, P./Olengurumwa, O. 'Fact Finding Mission Report, North Mara Mine, Tanzania', Legal and Human Rights Centre, 2011.
- Moran, R. 'Kumtor Gold Facilities, Kyrgyzstan: Comments on Water, Environmental and Related Issues', CEE Bankwatch Network Report, 2011, 1.
- Murray, W. 'Informal Gold Mining in Mongolia', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, p. 531.
- Ngugi, J. 'Making the Link between Corruption and Human Rights: Promises and Perils', American Society of International Law Proceedings, vol. 104, 2010, pp. 246-250.
- Nichols, B. (et al.) 'Closure of Artisanal Small Scale Gold Mining Processing Plants in Ecuador', Journal of Management and Sustainability, vol. 5, 2015, p. 42.

- Nollkaemper, A. 'What You Risk Reveals What You Value', in: D. Freestone/E. Hey (eds), The Precautionary Principle and International Law: The Challenge of Implementation, 1996.
- Noronha, L. 'Designing Tools to track health and wellbeing', Natural Resources Forum, vol. 25, issue 1, 2001, 53-65.
- Nowak, M. 'U.N. Covenant on Civil and Political Rights-CCPR Commentary', 2nd ed., 2005.
- Nussberger, A. 'Right to Social Security, International Protection', in: R. Wolfrum, MPEPIL, 2009.
- Nussberger, A. 'Right to Work, International Protection', in: R. Wolfrum (ed.), MPEPIL, 2007.
- Oldham, P./Frank, M. "We the Peoples...' the United Nations Declaration on the Rights of Indigenous Peoples', Anthropology Today, vol. 24, 2008.
- Oosthuizen, H. 'Mining disaster in South Africa: the Rovic Diamond Mine disaster and the criminal liability of the mine authorities', Medical Law Review 22/1 (2003) 11-28.
- Owen, J./Kemp, D. 'Mining-induced displacement and resettlement: a critical appraisal', Journal of Cleaner Production, vol. 87, 2015, pp. 478-488.
- Peters, A. 'Corruption and Human Rights', Basel Institute on Governance, Working Paper Series, No. 20, 2015.
- Prosser, I. (et al.) 'Water in mining and industry', in: Water: Science and Solutions for Australia, Commonwealth Scientific and Industrial Research Organization (CSIRO), 2011, p. 137.
- Rahman, J., 'International Human Rights Law', 2nd Edition, 2003.
- Rico, M. (et al.) 'Reported tailings dam failures. A review of the European incidents in the worldwide context', Journal of Hazardous Materials, vol. 152, issue 2, 2008, pp. 846-852.

- Rosenfeld-Sweeting, A./Clarke, A. 'Lightening the Lode: A Guide to Responsible Large-Scale Mining', Conservation International, 2000.
- Salman, T. (et al.) 'Cooperative Organization and Balsa Mining in Bolivia', in: L. Cremers/J. Kolen/M. de Theije (eds), Small-Scale Gold Mining in the Amazon-The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, Centre for Latin American Studies and Documentation, Cuadernos del Cedla, No. 26 (2013), p. 23
- Salmon, J. 'Dictionnaire de Droit International Public', 2011.
- Sarmiento, M. (et al.) 'Characteristics and Challenges of Small-Scale Gold Mining in Colombia', in: L. Cremers et al (eds), Small-Scale Gold Mining in the Amazon - The Cases of Bolivia, Brazil, Colombia, Peru and Suriname, 46-68.
- Saul, B. (et al.), 'The International Covenant on Economic, Social and Cultural Rights -Commentary, Cases, and Materials', 2014.
- Schillhorn, K. 'The Status and Rights of Indigenous Peoples in the Australia' ZaöRV 59 (1999) 443-462.
- Sellinus, O. et al. (eds.) 'Essentials of Medical Geology: Revised Edition', 2005.
- Sepulveda, M. 'Corruption and Human Rights: Making the Connection', International Council on Human Rights Policy', Report 2009.
- Shaw, M. 'International Law', 5th ed., 2003.
- Shen, L./Gunson, A. 'The role of artisanal and smallscale mining in China's economy', Journal of Cleaner Production, vol. 14, 2006, p. 428.
- Shindondola-Mote, H. 'Uranium mining in Namibia - The mystery behind 'low level radiation', Labour Resource & Research Institute (LaRRI), 2009.

- Shue, H. 'The Interdependence of Duties', in: P. Alston/K. Tomasevski (eds.), The Right to Food, Netherlands Institute of Human Rights, 1984, pp.
- Singh, M. 'Mining and Its Impact on Tribals in India: Socio-Economic and Environmental Risks', International Journal of Social Science and Humanities Research, vol. 3, issue 2, April - June 2015, p. 429-439.
- Skogly, S./Gibney, M. 'Transnational Human Rights Obligations', Human Rights Quarterly 24 (2002), pp. 781-798.
- Somayaji, S./Talwar, S. (eds.), 'Development-induced Displacement, Rehabilitation and Resettlement in India: Current issues and challenges', 2011.
- Swepston, L. 'Art. 32 Protection from Economic Exploitation', in: A. Alen et al. (eds.), A Commentary on the United Nations Convention on the Rights of the Child, 2012.
- Switzer, J. 'Armed Conflict and Natural Resources: The Case of the Minerals Sector', MMSD/IIED, Working Paper No. 12, July 2001.
- T. Ward, 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law', 10 Northwestern Journal of International Human Rights, 54 (2011).
- Tarras-Wahlberg, N. H. (et al.), 'How Beautiful is Small-Scale Mining? Evidence from Small-Scale and Artisanal Gold Mining in Ecuador', in: G. Hilson (ed.), The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, 2003, pp. 701.
- Taylor, H. (et al.) 'Environmental Assessment of Mercury Contamination from the Rwamagasa Artisanal Gold Mining Centre, Geita district, Tanzania', Science of the Total Environment, vol. 343, 2005, pp. 111-133.

- Terminski, B., 'Development-induced Displacement and Resettlement: Theoretical Frameworks and Current Challenges', Revista Europea de Derecho de la Navegacion Maritima y Aeronautica, vol. 30, 2013.
- Thornberry, P. 'Confronting Racial Discrimination: A CERD Perspective', Human Rights Law Review 5 (2005), p. 2.
- Tiwary, R. 'Environmental Impact of Coal Mining on Water Regime and Its Management', Water, Air, and Soil Pollution, vol. 132, issue 1, 2001, pp. 185-199.
- Treves, C. 'Customary International Law', in: R. Wolfrum (ed.), MPEPIL, 2006.
- Ulfstein, G. 'Individual Complaints', in: H. Keller/G. Ulfstein (eds.), UN Human Rights Treaty Bodies: Law and Legitimacy, 2012, p. 115.
- Van Schaak, B. 'The United States' Position on the Extraterritorial Application of Human Rights Obligations: Now is the Time for Change', International Law Studies, vol. 90 (2014).
- Vetter, G. 'Forgotten Million: Assessing International Human Rights Abuses in the Artisanal Diamond Industry', Transnational Law & Contemporary Problems, vol. 16, issue 2, 2007, pp. 733-768.
- Villalpando, S. 'Forced Labor', in: R. Wolfrum (ed.), MPEPIL, 2007.
- Ward, T. 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation within International Law', Northwestern Journal of International Human Rights, 54, 2011.
- Wenzel, N. 'Human Rights, Treaties, Extraterritorial Application and Effects', in: Wolfrum (ed.), MPEPIL, 2008.



Wetzlmaier, M. 'Cultural Impacts of Mining in Indigenous Peoples' Ancestral Domains in the Philippines', *Australian Journal of South-East Asian Studies*, vol. 5, issue 2, p. 336.

Wolfrum, R. 'The Protection of Indigenous Peoples in International Law', *ZaöRV*, 59 (1999), pp. 369-382.

Yard, E. (et al.) 'Mercury Exposure Among Artisanal Gold Miners in Madre de Dios, Peru: A Crosssectional Study', *Journal of Medical Toxicology*, vol. 8, 2012, pp. 441–448.

Yupsanis, A. 'ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989-2009; An Overview', *Nordic Journal of International Law*, 79 (2010), p. 441.

Yupsanis, A. 'The International Labour Organisation and its contribution to the protection of the rights of indigenous peoples', *Annuaire International des Droits de l'Homme* 6 (2011), pp. 347-398.







